

Draft Land Acquisition and Resettlement Plan

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Draft Land Acquisition and Resettlement Plan of 220 kV Mirpur Khas Substation with associated Transmission Line, totaling 80 km

Prepared by:

Environment & Social Impact Cell of National Transmission and Despatch Company (NTDC), WAPDA House, Lahore with Assistance of Project Preparatory Technical Assistance (PPTA) consultant (Mr. Shaukat Ali Shahid, RS) for Asian Development Bank (ADB).

This Land Acquisition and Resettlement Plan (LARP) is a document of the borrower. The views expressed herein do not necessarily represent those of ADB's Board of Directors, Management, or staff, and may be preliminary in nature.

Asian Development Bank



**NATIONAL TRANSMISSION AND DESPATCH
COMPANY, PAKISTAN**

**2nd POWER TRANSMISSION ENHANCEMENT
INVESTMENT PROGRAM** Funded by ADB through MFF 2

(Tranche 2)

**Draft Land Acquisition and Resettlement Plan (LARP)
of Mirpur Khas Substation and 80km of Associated Transmission Lines,
covering the following components:**

- a) Consturciton of New Substation at Mirpur
- b) In/Out of 220 kV D/C T/L Hala Road-Jamshoro at Mirpur Khas (70 km)
- c) 220 kV D/C T/L T.M. Khan-Hala Road (10 Km)

9 June 2017



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ABBREVIATIONS

ADB	Asian Bank Development
CAS	Compulsory Acquisition Surcharge
CCR	Community Complaint Register
DAE	Directorate of Agriculture Economics
DP	Displaced Person
DPAC	District Price Assessment Committee
DPC	Displace Person Committee
EMA	External Monitoring Agency
ESIC	Environment and Social Impact Cell
GOP	Government of Pakistan
GRC	Grievance Redress Committee
GS	Grid Station
kV	Kilo Volt
LAA	Land Acquisition Act
LAC	Land Acquisition Collector
LAR	Land Acquisition and Resettlement
LARF	Land Acquisition and Resettlement Framework.
LARP	Land Acquisition and Resettlement Plan
M&E	Monitoring & Evaluation
MFF	Multi Financing Facility
MVA	Mega Volts Ampere (Capacity)
NTDC	National Transmission and Despatch Company
PC-1	Planning Commission-1
PIU	Project Implementation Unit
PPTA	Project Preparatory Technical Assistance
PTEIP	Power Transmission Enhancement Investment Program
SPS	Safeguard Policy Statement
TA	Telegraph Act
TL	Transmission Line
TOR	Terms of Reference
WAPDA	Water and Power Development Authority

DEFINITION OF TERMS

Acre of land – acre is a unit of measurement for land and 2.471 acre is equal to one hectare of land.

Displaced Households - All members of a household residing under one roof and operating as a single economic unit, who are adversely affected by the Project, or any of its components. It may consist of a nuclear family or an extended family group.

Displaced Person - Any person affected by Project-related changes in use of land, water, natural resources, or income losses.

Compensation - Payment in cash or in kind of the replacement cost of the acquired assets.

Cut-off-date: The date on which census/ inventory assessment is made. All people affected on the date of census are considered as eligible for the payment of compensation.

Encroachers/ squatters: People who have trespassed onto private/community land to which they are not authorized. If such people arrived before the entitlements cut-off date, they are eligible for compensation for any structures, crops or land improvements that they will lose.

Entitlement: Range of measures comprising compensation, income restoration, transfer assistance, income substitution, and relocation which are due to affected people, depending on the nature of their losses, to restore their economic and social base.

Disabled Person: A disabled person is someone with physical or mental impairment which has a substantial and long-term adverse effect on his ability to carry out normal day-to-day activities (e.g. a person on wheel chair, blind, deaf etc.).

Income Restoration: Re-establishment of income sources and livelihoods of DPs.

Involuntary Resettlement: Economic and physical dislocation resulting from a development project

Land Acquisition: The process whereby a person is compelled by a government agency to alienate all or part of the land a person owns or possesses to the ownership and possession of the government agency for public purpose in return for a consideration.

Village/ Mouza: A demarcated territory, for which a separate revenue record (Cadastral map) is maintained by the Revenue Department.

Rehabilitation: Compensatory measures provided under the ADB Policy Framework on Involuntary Resettlement other than payment of the replacement cost of acquired assets.

Relocation - Rebuilding housing, assets, including productive land, and public infrastructure in another location.

Replacement Cost: The value determined to be fair compensation for various types of agricultural and residential land, crops, trees, and other commodities based on current market rates; the cost of rebuilding houses and structures at current market prices of building materials and labor, without depreciation or deductions for salvaged building material.

Vulnerable Groups: Distinct group of people who may suffer disproportionately from resettlement effects. The policy defines vulnerable groups as households below the poverty line, the elderly, those without legal title to assets, landless, women, children and indigenous people and the disabled.

EXECUTIVE SUMMARY

1. **Project Background:** The 2nd Power Transmission Enhancement Investment Programme (PTEIP 2) is planned for implementation with financial assistance of Asian Development Bank (ADB) through the 2nd multi-tranche financing facility (MFF 2). The objective of **PTEIP 2** is to improve Pakistan's Power Transmission Infrastructure and its Management. The National Transmission and Despatch Company (NTDC, the implementing agency) will implement the programme through various tranches of MFF 2. Each tranche **constitutes** a project, which, in turn, is divided into **several** sub-projects involving the construction/ upgradation of power grid stations (or sub-stations) and installation of power transmission lines.

2. **Tranche 2 Subproject:** Overall, Tranche 2 of MFF2 comprises four subprojects (Annex 1: List of Tranche Subprojects) including the 220kV Mirpur Substation (SS) and associated transmission lines (TL). This sub-project includes construction of new substation at Mirpur Khas and a combined length of 80km of transmission lines divided into two sections, i.e. (a) In/Out of 220 kV D/C TL Hala Road-Jamshoro at Mirpur Khas (70 km) and (b) 220 kV D/C TL T.M. Khan-Hala Road (10 Km). The proposed TL passes through 4 districts, namely Jamshoro, Hyderabad, Tando Allah Yar and Mirpur Khas located in Sindh province. The four districts are further divided into subdistricts comprising Kotri, Qasimabad, Latifabad, Tando M. Khan, Chamber, Jhando Mari and Shujababd.

3. **Project Design and Key Construction Activities:** Per PC-1 specifications, the subproject involves construction of SS and 80km of TL. The equipment required for construction of new SS includes auto-transformers 220/132kV, circuit breakers, bus isolators, line isolator, lightning arrester, aux / T/F 132 kV, 6.3 MVA; towers (light angles, heavy angles and suspension), conductor and optical ground wire (OPGW). Other works associated with this subproject include central room, relay room, battery room, office building, boundary wall, internal roads and residential buildings for the staff. The installation of 80km long TL are designed to be done in three phases. Phase 1 comprises construction of towers foundation footing/bases; Phase 2 comprises erection of towers; and Phase 3 comprises stringing of wires. There will be a total of 229 towers which will be installed at a distance varying from 350m to 365m. The width of Right of Way (ROW) for TL is 50m; i.e. 25m on either side from the centre of TL. In case of tower spotting the RoW¹ will be 225m² (i.e. 15m x 15m). The height of towers (220 kV) will be 30m to 40m while for 132kV TL it varies from 18m to 25m.

4. **Contract Award and Construction Milestones:** The physical activities² including deployment of consultants, preparation/finalizing of design and drawings, preparation of bidding documents and agreement/fixation of RoW will be completed in 2017. Bidding, evaluation and award of contract and commencement of civil work will be in the 2nd year, i.e. 2017-18. Manufacturing & shipment of equipment, completion of civil work will be in the 3rd year, i.e. 2018-19 and clearing for operation will be in the 4th year of the project, i.e. 2019-20. The NTDC's Project Management Unit (PMU) will be responsible to update this draft LARP based on the project design when finalized by the turn key contractor.

5. **Implementation of LARP:** The project (TL component) will be implemented in three different phases as explained in para 3 above. The PMU will be responsible to update and implement the final LARP (approved by ADB) and disburse compensation to DPs before commencing construction of any of the three phases. For all three phases of construction, payments made to DPs will need to be validated

¹ Tower spotting RoW is 225m² (15m x 15m), while it is 625 m² in case of 500 kV double circuit T/L.

² In accordance with the PC-1, physical activities were to start in 2015-16, but has been delayed by a year.

by External Monitoring Consultant (EMC) and cleared by ADB before startup of construction.

6. **Impact Assessment Survey** of the subproject was initially conducted by a team of resettlement specialists hired under the Project Preparatory Technical Assistance (PPTA) together with engineering staff of NTDC in 20 July to 19 September 2016, which was reconfirmed/updated by PPTA team during 1 – 14 April 2017 by combining the SS and TL components. The Land Acquisition and Resettlement (LAR) impacts as recorded in the survey are explained in below para.

7. **Estimated LAR impacts of Subproject:** The subproject has two components; (i) construction of 220kV SS at Mirpur Khas and 80km long TL. About 50.04 acres of private agriculture land will be permanently acquired for construction of SS which will further affect 50.04 acres of crops grown on the land, besides affecting about 625 wood and fruit trees. The TL component will not cause permanent land acquisition but will have about 988.42 acres of cropped area, temporarily affected during installation of TL. A total of 113 DPs (11 affected by SS and 102 affected by TL) will need to be compensated for the land, crops and trees. See table ES1 below for more details on impacts.

ES1: Summary of LAR Impacts of SS and TL

Sub-project Components and Impacts	Units	Quantity affected	Land ownership & use	DPs (Nos.)	Remarks
A. Construction of new 220 kV Mirpur Khas Substation					
Land permanently acquired	Acre	50.04	Pvt. Agri. Land under cultivation	11	Individual land owners
Cropped area	Acre	*50.04	Private land under cultivation	*11	*Multiple counts. These are same DPs losing land also.
Trees to be cut-down	Nos.	277	Private trees on farm land	*3	*Multiple counts. Same DPs losing land and crops.
Sub-total (A)	Acres	50.04	Private	11	11 DPs (individual land owners losing land, crops and trees).
B. Total length of Transmission lines 80km – Overall summary of Impacts					
Land permanently acquired	Acres	-	-	-	T/L component does not involve permanent land acquisition.
Tower Spotting	Acres	12.73	Pvt agri land under cultivation	102	In total, 229 towers will be installed. Each tower will affect 225m ² cropped area, totaling 12.73 acres of cropped area to be lost, which is owned by 102 DPs.
Installation of T/L	Acres	975.69	Pvt agri land under cultivation	102	TL right of way (RoW) is 50 m wide (i.e. 25m on either side). The T/L installation (80km) will affect 975.69 acres of cropped area owned by 102 DPs which includes the DPs of towers spotting also.
Trees to be cut-down	Nos.	348	Private trees on farm land	78	Multiple counts. These are same DPs who are losing their land.
Total (A+B)	Acres	1,038.46	Pvt agri land under cultivation	113	The SS and TL will affect a total of 1038.46 acres of cropped area.

8. **Analysis of Impacts** indicates that no DPs will be physically removed from housing but 8 of total 11 DPs (losing land to SS) will lose 10% or more of their productive agriculture land. Similarly, about 56 DPs of total 102 DPs of TL will be losing 10% or more of the cropped area. The survey team did not find presence of any Indigenous Peoples or any Tribal People or groups {as the Safeguard Policy Statement 2009 (SPS) describes them to be} in and around the project areas. In view of this, the subproject is categorized as B for involuntary resettlement (IR) and C for indigenous peoples (IPs).

9. **Draft LARP:** This draft LARP been prepared by PMU in accordance with Pakistan's Land Acquisition Act 1894 (LAA), the Telegraph Act 1885, the facility's Land Acquisition and Resettlement Framework (LARF) and ADB's Safeguard Policy Statement 2009 (SPS). The LARP is fully endorsed by NTDC for its updating, as and when required, and for its implementation and monitoring as needed. The LARP identifies the subproject's LAR impacts and determines the compensation package for the DPs who will be compensated at full replacement costs in line with SPS's requirement. The LARP provides a detailed assessment of the types and magnitude of LAR impacts, the eligibility for and compensation provided based on the IR principles of SPS 2009. The LARP also provides institutional arrangements and schedule for implementation of LAR activities, the LAR budget/costs; a grievance redress mechanism to address any concerns or grievances of DPs and community members living around the project areas and LARP monitoring mechanism.

10. The draft LARP in English has been disclosed on the ADB website while an Urdu summary of draft LARP and final LARP (approved by ADB will be disclosed on EA's project website and DPs with copies of LARP summary placed at PIUs, SS office, and local administrative offices.

11. **Cut-off-Date:** In accordance with SPS 2009, the compensation entitlements given in the draft LARP are limited to a cut-off-date, which has been notified to the DPs (thourhg consultation meetings) to avoid an influx of outsiders to the project area. People who settled in the vicinity of the sub-project area after the cut-off date will not be eligible for compensation. The imapcts/census survey was updated by in April 2017, therefore, 14 April 2017 was fixed as cut of date for project impacts in this subproject. This cut-of-date was informed to the DPs in consultative meetings conducted.

12. **Public Consultations:** Public/community consultations were carried out at select sites in the two TL sections and a total of 13 consultation meetings (comprising 104 participants) were carried out with DPs and local community members to share project information and record their concerns/ feedback to the project and its design. The DPs expressed their views about the rate of compensation, which they said must be at true market price. They were told that compensation will be based on the prevailing market rate of land and asstes to be determined by the land acquisition collector (LAC). In addition, the SPS's requirement of full replacement costs as standard of comensation will be fully considered while determining the compensation.

13. **Entitlement Matrix:** The compensation and rehabilitation entitlements are summarized in the Entitlement Matrix presented as follows:

Entitlement Matrix for Compensation

Asset	Specification	Entitled Persons	Compensation Entitlements
Arable Land	No restriction to access to land with existing/ current land use remaining the same.	Farmer/ Titleholder	No compensation for land provided that the land is rehabilitated/ restored to its former quality following completion of works;
		Leaseholder/ Sharecropper (registered or not)	• No compensation for land if the land is rehabilitated/ restored to its former quality following completion of works;
		Agricultural workers	• Compensation, in cash or kind, for work opportunities lost based on actual/agreed wage rate or approved government daily wages, whichever is greater.
		Squatters	• Compensation, in cash, for all damaged crops and trees
Arable Land where access is	All adverse effects on land use independent of impact severity	Farmer/ Titleholder	• Land for land compensation with plots of equal value and productivity to the plots lost; or; • Cash compensation for affected land at replacement cost based on market rate plus 15% CAS, free of taxes,

Asset	Specification	Entitled Persons	Compensation Entitlements
restricted and/or land use will be affected.			registration, and transfer costs.
		Leaseholder/ Sharecropper (registered or not)	<ul style="list-style-type: none"> • Renewal of lease/ sharecropping contract in other plots of equal value/ productivity of plots lost, or • Cash equivalent to market value of gross yield of affected land for the remaining lease/ contract period (up to a maximum of 3 years).
		Agricultural workers losing their contract	<ul style="list-style-type: none"> • Cash indemnity corresponding to their salary (including portions in kind) for the remaining part of the agricultural year.
	Additional provisions for severe impacts (More than 10% of land loss)	Squatters	<ul style="list-style-type: none"> • 1 rehabilitation allowance equal to market value of 1 gross harvest (in addition to crop compensation) for land use loss.
		Farmer/Titleholder Leaseholder	<ul style="list-style-type: none"> • 1 severe impact allowance 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).
		Sharecroppers (registered or not)	<ul style="list-style-type: none"> • 1 severe impact allowance equal to market value of share of harvest lost (additional to standard crop compensation)
Residential/ Commercial Land		Squatters	<ul style="list-style-type: none"> • 1 severe impact allowance 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).
		Titleholder	<ul style="list-style-type: none"> • Land for land compensation through provision of plots comparable in value/ location to plot lost or • Cash compensation for affected land at full replacement cost plus 15% CAS, free of taxes, registration, and transfer costs.
		Renter/ Leaseholder	<ul style="list-style-type: none"> • 1-3 months' allowance at OPL i.e. Rs. 15,000/ month) or cash compensation based on actual affect to the land use.
Houses/ Structures		Squatters	<ul style="list-style-type: none"> • Accommodation in available alternate land/ or a self-relocation allowance (Rs. 15,000).
		Owner of house structures	<ul style="list-style-type: none"> • Cash compensation at replacement rates for affected structure and other fixed assets free of salvageable materials, depreciation and transaction costs. • In case of partial impacts full cost of structure restoration provided the remaining structure is viable for purposeful use.
Crops	Crops affected	All DPs (including squatters)	<ul style="list-style-type: none"> • Crop compensation in cash at full market rate for one harvest (either winter or summer) by default for impacts caused by construction of grid/substation; tower base; towers erection; and stringing of wires. • All other crop losses will be compensated at market rates based on actual losses. • Lumpsum cash compensation at Rs. 15,000/ for crop losses being 10% or more.
Trees	Trees affected	Owner of trees	<ul style="list-style-type: none"> • For timber/ wood trees, cash compensation equivalent to prevailing market price of timber/wood tree. • Fruit trees: Cash compensation for fruit bearing trees based on annual net product market value multiply by 5 years.
Business/ Employment	Temporary or permanent loss of business or employment	All DPs suffering income losses (including squatters, agriculture workers)	<ul style="list-style-type: none"> • Business owner: i) Cash compensation equal to one year income, if loss is permanent; (ii) cash compensation for the period of business interruption, if loss is temporary. • Workers/ employees: Indemnity for lost wages for the period of business interruption up to a maximum of 3 months (at OPL level Rs. 15,000/ month).
Relocation	Transport costs	Owners of structures	<ul style="list-style-type: none"> • Provision of transport expenses (Rs. 15,000).
Community assets	Mosques, foot bridges, roads, schools, health center	Affected community	<ul style="list-style-type: none"> • Rehabilitation/ substitution of affected structures/ utilities (i.e. mosques, footbridges, roads, schools, health centers).
Vulnerable DPs	HHS below the poverty line; landless or those without title to land, elderly,	All affected vulnerable DPs	<ul style="list-style-type: none"> • Lump sum one time livelihood assistance allowance (Rs. 15,000 at OPL Punjab) because livelihood restoration support. • Temporary or permanent employment during construction or operation, wherever feasible.

Asset	Specification	Entitled Persons	Compensation Entitlements
	female headed HHs, women, children and disabled, etc.		
Major impact: 10% or more productive assets lost	Affected land and crops	All DPs	<ul style="list-style-type: none"> Lumsup amount of Rs. 15,000/DP for 10% or more of crops lost.
Unidentified Losses	Unanticipated impacts	All DPs	<ul style="list-style-type: none"> Deal appropriately during sub-project implementation per the ADB Safeguard Policy

14. **Estimated LAR Budget/Costs:** The cost of land has been proposed based on the market rate of land assessed by the PPTA team in the field using different factors including review of valuation table i.e. land prices fixed by the District Collector; registered/unregistered land transactions; and discussions with real estate people in the area, common villagers and rates demanded by the land owners. The team compared the land price of Rs. 1.5m/acre (demanded by land owners) with the land price of Rs. 1.0m/acre (provided in the PC-1) and found a price difference of about Rs. 0.5m/acre that needs to be addressed by NTDC. The land prices proposed in this draft LARP are based on Rs. 1.5m/acre as demanded by the land owners. Thus, total estimated land price for 50.04 acres of land is Rs. 75.06m (\$0.72m). Other costs considered for land based impacts (crops, trees and structure, if any) Rs. 53.1m. The amount for resettlement/rehabilitation allowances comes to around Rs 1.57 million. Thus, overall estimated cost of land, land based assets and allowances is Rs. 129.2m. NTDC is responsible to provide this cost to PIU which will be paid to the DPs based on the compensation disbursement schedule in line with construction schedule.

15. The LARP implementation will be undertaken in phases which will be monitored internally by NTDC/ESIC on quarterly basis and externally by external monitoring consultant (EMC) on a semiannual basis. In addition, each phase of construction will require a validation report of payments made to DPs before the start of construction.

1 INTRODUCTION

1.1 Background

1. The Government of Pakistan (GOP) plans to implement the PTEIP 2 with financial assistance of Asian Development Bank (ADB) through a multi tranche financing facility (MFF 2). The objective of the investment program is to improve Pakistan's power transmission infrastructure and management. The National Transmission and Despatch Company (NTDC) will implement the investment program through different tranches of MFF. Each tranche has constituted a project, which, in turn, is divided into several sub-projects involving the construction/ upgradation of power grid stations (or sub-stations) and installation of power transmission lines. The tranche 2 of PTEIP 2, MFF 2, consists of three subprojects as mentioned Annex 1.

1.2 Description of Subproject

2. The sub-project consists of three components; i) Construcion of (i) new SS at Mirpur Khas (2X220/132 kV 250 MVA transformers, and allied equipment); and (ii) two sections of TL comprising (a) 70km long In/Out of 220 kV D/C TL Hala Road-Jamshoro at Mirpur Khas, and (b) 10km long 220 kV D/C TL from T.M. Khan to Hala Road. The proposed TL route passes through 92 villages belonging to 7 subdistricts (namely Kotri, Qasimabad, Latifabad, Tando M. Khan, Chamber, Jhando Mari and Shujababd) of 4 main districts namely Jamshoro, Hyderabad, Tando Allah Yar and Mirpur Khas. A total of 229 towers will be installed at varying distance ranging from 350m to 365m.

3. **Subproject Alignment:** Based on the the transmission lines rout alignment, provided by NTDC, the field survey revealed the following:

4. **Route Alignment:** There will be a 50m wide ROW established for the proposed new 220 kV D/C TL. The TL alignment passes through 4 disctricts and 7 subdistricts and 92 villages. In total thre will be 229 towers that will be installed at distance varing from 350 m to 365 m.

5. **Width of ROW:** In consultation with the Survey & Investigation section of NTDC and the E&SIC (PMU), NTDC, the width of RoW to be established for proposed TL is 50m i.e. 25 m on either side from the centre of TL, while in case of tower spotting the area considered was 15m x 15m (i.e. 225 m²).

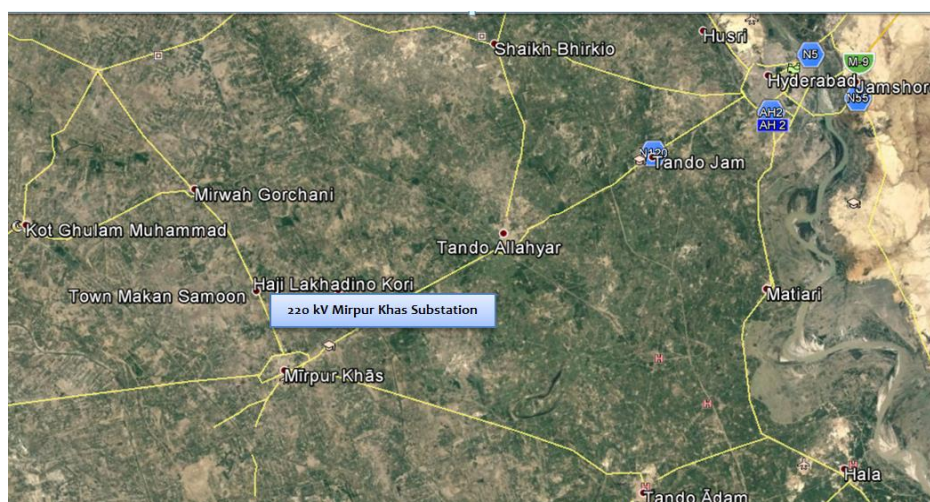
1.3 Alternatives for Minimizing the Subproject Impacts

6. In general, it was observed that the following steps were considered by NTDC in consultation with the PMU (NTDC) to minimize the social impacts of this sub-project using different alternatives:

- a. Impact on settlements/ villages was avoided, while selecting the route alignment for installation of transmission lines;
- b. Efforts were made to select an alignment, where demolishing of both private and public structures/ infrastructure could be avoided;

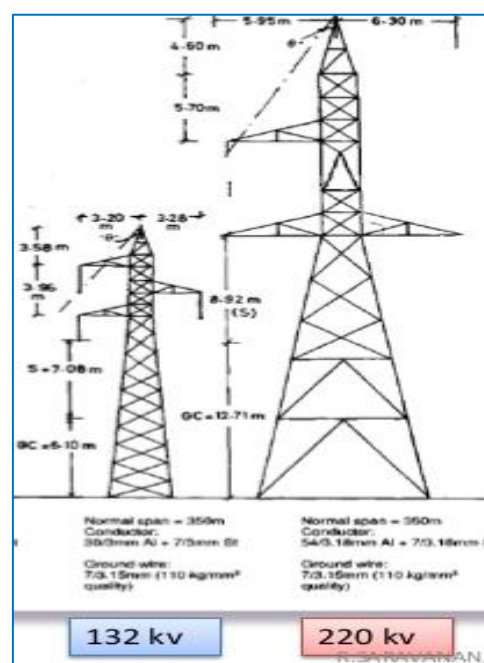
7. The location map of the proposed sub-project is illustrated in Figure 1.1.

Figure 1.1: Location Map of the proposed Sub-project



1.4 Description of Project Design

8. Per the PC-1 document, the subproject will have a new SS constructed and 80 km long TL installed. The equipment required for construction of new SS includes auto-transformers 220/132kV, circuit breakers, bus isolators, line isolator, lightning anester, aux / T/F 132 kV, 6.3 MVA; towers (light angles, heavy angles and suspension), conductor and optical ground wire (OPGW). Other works associated with SS construction includes central room, relay room, battery room, office building, boundary wall, internal roads and residential buildings for the staff. The insllalation of transmission lines (80 km) includes (i) foundation work (tower footing/ bases), (ii) erection of towers, and (iii) stringing of transmission lines. 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.



9. Total number of towers to be constructed are 229, which will be installed at a distance varying from 350m to 365m. The width of RoW for TL considered is 50m, i.e. 25m on either side from the centre of TL, while in case of tower spotting the RoW³ will be 225 m² (i.e. 15m x 15m). The height of towers (220 kV) will be 30m to 40m and it will vary from 18m to 25m in case of towers (132 kV) of transmission line. A sample towers (220 kV/ 132 kV) are illustrated through a diagram.

10. Physical activities⁴ include deployment of consultants, preparation of design/ drawings, preparation of bidding documents and agreement of RoW to be completed the 1st year (2017). Bidding, evaluation and award of contract, commencement of civil work will be in the 2nd years (2017-18). Manufacturing & shipment of equipment, completion of

³ Tower spotting RoW is 225m² (15m x 15m), while it is 625 m² in case of 500 kV double circuit T/L.

⁴ In accordance with the PC-1 of Mirpur Khas, the timelines for starting physical activities was 2015-16, while now it is 1 year late in case of respective physical activities as given above in Para 4.

civil work will be in the 3rd year (2018-19) and clearing for operation will be in the 4th year of the project (2019-20). The PMU (NTDC) will be responsible to update this draft LARP based on the project design to be finalized by the turn key contractor.

1.5 Objectives of the LARP

11. In accordance with the PPTA Terms of Reference (ToR), the objective of the assignment is the preparation of LARP for 220 kV Mirpur Khas Substation with associated TLs.

12. The key aspects of this draft LARP are the following:

- Project impacts, types and magnitude
- Socio-economic information and profile of the displaced persons
- Information disclosure, consultation, and participation
- Grievance redress mechanisms
- Entitlement of compensation
- Relocation of assets and utilities
- Resettlement budget and financing
- Institutional arrangements
- Implementation schedule
- Monitoring and evaluation

2 SOCIOECONOMIC PROFILE OF THE PROJECT AREA

2.1 General

13. The socioeconomic conditions of DPs were derived from primary data through conducting field survey, and supplemented through secondary data, i.e. data from Directorate of Agriculture, Economics & Marketing, Forest Department, District Population Census, Economic Survey of Pakistan and relevant websites.

14. The primary data include census survey of all DPs covering the nature and magnitude of the impacts and impact on the livelihood of DPs. The field survey was conducted from July-September, 2016 and was further supplemented from 1-14 April, 2017. The socioeconomic profile of the sub-project was established based on the sample survey of 30% household (20% from the DPs and 10% from the general public). This data provides the socioeconomic profile of and the baseline information of the project areas which will be used for monitoring and evaluation purpose.

2.2 Administrative Setting

16. The proposed sub-project includes construction of substation and installation of towers and transmission line. The land required for the construction of substation falls in the village Doulat Lagari of Tehsil & District Mirpur Khas. However, the proposed transmission line of 80 km passes through 92 villages⁵, 7 tehsils (Kotri, Qasimabad, Latifabad, Tando M. Khan, Chamber, Jhando Mari and Shujababd) fall in the jurisdiction of 4 districts Jamshoro, Hyderabad, Tando Allah Yar and Mirpur Khas districts of Sindh Province, Pakistan.

2.3 Profile of the Respondents

17. Table 2.1 shows that all the respondents are belonging to a mixed background, however, the respondent with rural background are in majority with the presence of 52% while the semi urban and urban area of the respondents are 22% and 26% respectively.

Table 2.1: Settlement Types

S. No	Settlement Type	HHs Surveyed	%Surveyed
1	Rural	53	52
2	Semi Urban	22	22
3	Urban	27	26
Total		102	100

2.4 Demography and Population

18. Per field survey the total population of the respondents is 868 persons. The male population is high 54% as compared to female population which is 46% of the total

⁵ Khuda Bux Gopang, Khud Bux, Tando Thoro, Long Chand, Rong Chand, Agan Khaskheli, Peroz Parhyar, Ali Bux Gopang, Haji Hadi Bux, Parho Gopang, Sukhapur, Khameso Shoro, Achar Shoro, Watto Shoro, Balochi Goth, Hosri City, Jamal Kachi, Haji Mosa Shoro, Mrtaza shorohyd, Hassan Shoro, Wali M Shoro, Pir Bux, Sahib Khan Merani, Mangsi Goth, Ditha Station, Haji Mochar, Idrees Goth, Detha Station, Akk Detho, Ranjho Khan, Khawind Bux, Rahuki, Shah Nawaz Junejo, Noor M Junejo, Dhamach, Haji Abdul Nabi Noorani, Mir Zamir Koat, Gul M Burfat, Dehli farm tando Jam, Tando jam Town, Mir goth, Razdin Mari, Sarrang Faqeer, Sarang faqeer gopang, Allah Bux magsi, Allah rakhio khoso, jamal khan kolai, Abdullah nahiyun, sabhago kabi, Sabhyo khan kalhao, haji rasheed, Suhail sahib, Dhinganro Bozdar, Shah M. Jamali, Haji Nazeer (Rashidabad), Haji Nazeer Goth, Magsi Park, Magsi Farm, Tando Allahyar, Jamali Pump, Haji Iqbal Memon, Ghulam hussain Pitafi, Qazi M. Halepoto, Metto Kalro, Bashir Ahmed Yousfani, Bhatti Hotel, A. Qadir Yousfani, Noor Ahmed, Shah Jilani, Haji Mohammad Bux Brohi, Qadir Bux Gopang, M.Soomar Kakepoto, Haji Umer Kakepoto, Hameed Farm/Kamara Shareef, Agaya Dino Dall, Shoukat Halepoto, M. Ali , Halepoto, Haji Malik, Mir M hingoro, Khuwaja Goth, Misri bheel, Jananr Hingoro, Haji M. Rahim Memon, Qasim Rangers farm, Haji Kareem Dad, Budho Khan Laghari, IslamPur, Haji Karim Dad, Nandi Mesan, Hussainabad, Yar M Laghari and Haji Jafar Hakro

population, as reflected in Table 2.2. Similarly, the children falling below 10 years of age are also present in less number compared to the elder population.

Table 2.2: Total Number of Population in Study Area

Indicator	Male		Female		Total	
	Number	Percent	Number	Percent	Number	Percent
Elders	351	54.00	301	46.00	652	100.00
Below 10 years	118	55.00	98	45.00	216	100.00
Total	469	54.00	399	46.00	868	100.00

2.5 Household Size

19. Household size may also affect the economic situation of the household. The field investigation reveals that the household's size comprised of 6.5 persons on average.

2.6 Education Level

20. The literacy rate is measured as number of literate people among the population of 10 years and above. The literacy rate in the project area is lower compared to the national level.

21. Table 2.4 shows that on the whole 30 percent of the respondents reported illiterate, however in the perspective of education distribution, 27 percent of the respondents are educated till primary level (five years of schooling), 15 percent till middle school (8 years of schoolings), 13 percent of the respondents are matriculates. The respondents 8 percent, 5 percent and 2 percent are educated up to intermediate, graduation and post graduate/master respectively. Notably, 88 percent of the respondents have had Deeni (religious) education, i.e., can read the Holy Quran.

22. In term of availability of educational infrastructure, people are not satisfied for the higher education centers. They have to travel maximum 6 km away for higher education. Hence, it becomes difficult to provide the education for the girl as due to lack of security they can't send their daughters alone for education purposes. However, all the people have the easy access on lower education center, i.e., till primary to middle.

Table 2.4: Distribution of Respondents in term of Education Level

Educational Level	Project Area	
	No.	%
▪ Illiterate	193	30
▪ Primary	178	27
▪ Middle	96	15
▪ Matriculation	85	13
▪ Intermediate	55	08
▪ Graduate	30	05
▪ Master & above	15	2
Total	652	100

2.7 Health

23. Per health perspective in the project area, 15% of the households did not suffer with any disease while 85% of the respondents spoke about the various diseases like, Diarrhea, Hepatitis, Malaria, Typhoid, Diabetes, Dengue and Heart problem as discussed in the Table 2.5. The people reported that most of the diseases are happened due to poor

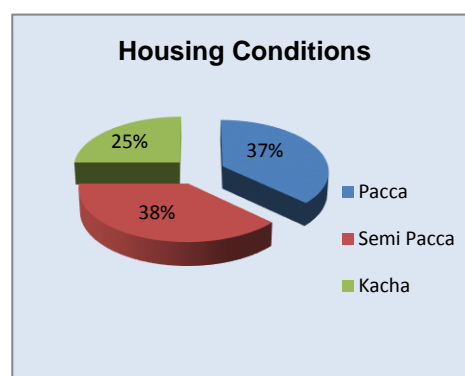
sanitation and unsafe drinking water. However, majority of the households have shown un-satisfaction on the available health facilities (from government) in the project area. On average, they are spending about Rs.618 on medical treatment on monthly basis.

Table 2.5: Prevailing of Disease in the Project Area

Sr. No.	Diseases	%
1	No Disease	15
2	Diarrhea	32
3	Diabetes & Heart Problem	16
4	Malaria	11
5	Hepatitis	09
6	Typhoid	7
7	Dengue	6
8	T.B	4
Total		100

2.8 Housing Conditions

24. Pacca houses (37%) are constructed with bricks, cement and concrete having wooden and steel doors and windows. Semi pacca houses (38%) are made of bricks (joint with mud) and their roofs are mostly of wood, iron sheet and partially bricks, whereas kacha houses (25%) are made of mud and other local material such as sticks, reeds and iron sheet. The average numbers of rooms are 3.8. The field investigation shows that 98% of the respondents are living at their own self made shelters while the 2% are living at the landlord houses and in return providing the services at their farm houses.



2.9 Household Possessions and Valuation

25. Possession of durable consumer goods is another useful indicator of household socio-economic status. Table 2.6 presents the percentages of households that possess various durable commodities, means of transportation while Table 2.7 illustrate the valuation of property.

26. The Table shows that televisions and mobile phones are common devices possessed by most households for information and communication. Approximately 90 percent of households possess mobile phones. The households are more likely to have a television (99%). Another indicator of household socioeconomic status is ownership (20%) of a computer and availability of an Internet connection. A refrigerator is available in 83% of the households, 74% have a washing machine and 55% owns the sewing machine. Motorcycles and car are the most common means of transportation in the project area and 79% of households own a motorcycle, and 46% own a car.

Table 2.6: Durable Goods / Home Appliances

Economic Assets	Available in 10 KM of TL		Available in 70 KM TL		Overall Project Area	
	Yes%	No%	Yes%	No%	Yes%	No%
Refrigerator	76.9	23.1	89.5	10.5	83.2	16.8
Television/LED TV	100	0	97.4	2.6	98.7	1.3
Washing Machine	65.4	34.6	81.6	18.4	73.5	26.5
Geyser	30.8	69.2	61.8	38.2	46.3	53.7

Electric Fan	100	0	100	0	100	0
Electric Iron	80.8	19.2	90.8	9.2	85.8	14.2
Sweing Machine	50	50	59.2	40.8	54.6	45.4
Car	30.8	69.2	61.8	38.2	46.3	53.7
Van / Pick up	7.7	92.3	6.6	93.4	7.15	92.85
Mobile	100	0	100	0	100	0
Air-condition	38.5	61.5	59.2	40.8	48.85	51.15
Computer	30.8	69.2	50	50	40.4	59.6
Motorcycle	80.8	19.2	77.6	22.4	79.2	20.8
Overall	60.9	39.1	72	28	66.45	33.55

27. Table 2.7 reveals that the people of the area are having the mixed background, as 14% of the rural area owns the property up to Rs. 2 million, 43% of semi urban area and 43% urban area also own the property up to 2 million. Contrary to this, 6%, 72% and 7% are having the property costing less than 0.5 million in rural, semi urban and urban area respectively.

Table 2.7: Residential Structure / Property Values by Settlement Type in Study Area

Property Value (Rs. In million)	Rural		Semi-Urban		Urban	
	No.	%	No.	%	No.	%
Below 0.5m	6	20.7	21	72.4	2	6.9
0.51m to 1m	4	28.6	9	64.3	1	7.1
1.1m to 2m	3	13.6	10	45.5	9	40.9
Above 2m	1	2.7	4	10.8	32	86.5
Total	14	13.7	44	43.1	44	43.1

2.10 Income Sources

28. It is useful to study the household's economic pattern that ultimately facilitates better planning and execution of the project. Numerous income generating activities are practiced in the project area as reported by the survey. These includes: employment in government and private sector, wage labor, operating own business such as running fuel station, traders, shopkeepers and transporter. Field investigation reveals that the farming is dominant profession in the area, as 92% of the households have their affiliation with the farming practices along with the livestock rearing while 08% have alternate non-farming income sources like job in government and private sector and labor work.

2.11 Household Income

29. Average household income is defined as the sum of incomes of all households' members during the month and dividing this total by the number of household. Survey data presented in Table 2.8 shows that the monthly average income of the household is Rs. 58,352/-.

30. Majority (49%) of the households fall in the high-income category (above Rs.100,000)-, followed by 14% representing the 2nd highest income level. These people are having big farm houses or involved with multiple income earning activities. Whereas, contrary to this, 3% of the households have no regular income flow, simply live in hand to mouth due to meager monthly income, less than Rs. 20,000/-. These people are living below the poverty line. Survey also reveals that 12% of the households are falling in 2nd low income category and are earning up to Rs. 30,000/-.

Table 2.8: Monthly Income in Study Area

Monthly Income	10 KM Transmission Line		70 Km Transmission Line		Overall Project	
	No.	%	No.	%	No.	%
Below 20000	1	3.8	2	2.6	3	2.9
20001 to 30000	4	15.4	8	10.5	12	11.8
30001 to 40000	7	26.9	12	15.8	19	18.6
40001 to 50000	0	0.0	4	5.3	4	3.9
50001 to 100000	4	15.4	10	13.2	14	13.7
Above 100000	10	38.5	40	52.6	50	49.0
Total	26	100.0	76	100.0	102	100.0
Other Annual Income	16	27.6	42	72.4	58	100.0

2.12 Expenditures

31. The average monthly expenditures are calculated as **Rs. 52,184/-**. These expenditures include food and non-food items like fuel, education, health, clothing, utility charges, house rent and other miscellaneous expenditures. Table 2.9 shows that the households with higher income have more saving capacity than the poor who hardly meet their expenses with meager income, as the number of poor with the lowest income category is same with the less expenditures category.

Table 2.9: Monthly Expenditure in Study Area

Monthly Expenditure	10 KM Transmission Line		70 Km Transmission Line		Overall Project	
	No.	%	No.	%	No.	%
Below 20,000	4	15.4	6	7.9	10	9.8
20,001 to 30,000	7	26.9	10	13.2	17	16.7
30,001 to 40,000	3	11.5	9	11.8	12	11.8
40,001 to 50,000	1	3.8	2	2.6	3	2.9
50,001 to 100,000	6	23.1	8	10.5	14	13.7
Above 100,000	5	19.2	41	53.9	46	45.1
Total	26	100.0	76	100.0	102	100.0

2.13 Land Holding

32. Per field survey, the average land holding size of the area is 40 acres and detail is discussed in the below Table 2.10. Table shows that majority of the respondents are having large holding size, as 45% have more than 25 acres of holding. Contrary to this, small land holdings are less, as 35% of the respondents have the holding less than 15 acres, including 15% respondents having holding up to 5 acres. Field investigation shows that feudal are also present in the project area, having holding more than 1000 acres.

Table 2.10: Detail of Land Holding Size of the Respondents

Sr. No.	Land Holding Size (Acre*)	No. of Households	(%) of Households
1	Up to 5	16	15
2	5.1 – 15	25	25
3	15.1 – 25	15	15
4	Above 25	46	45
Total		148	100

2.14 Land Use

33. The project area is enriched in agriculture. Mainly two cropping seasons are Rabi (winter) and Kharif (summer). Wheat, vegetables and fodder are mostly cultivated during Rabi season while in Kharif season cotton, rice, and fodder is more visible crops of the area. During Kharif 2016, 6500 acres of crops were cultivated while 6800 acres of Rabi area was reported during 2015-16 as per social survey.

34. Tenancy is also present in the area, as 1200 acres of land were rented out while 400 acres are rented in at the rate of Rs. 40,000/ acre on annual basis. Mostly, the big farmers employed the tenants and take their land on lease or share cropping basis. These tenants were also provided the accommodations from the landlord and get the 25%-50% of the total crop produced, depend upon the nature of agreement.

2.15 Access to Infrastructure

35. Table 2.11 depicts the picture of available social amenities in the project area. It indicates that all the houses in the project areas are electrified. However, the people are not satisfied over the power supply. They complained for the frequent power failure and low voltage; eventually leave the adverse impact on the daily life.

36. Sui Gas is available to 63.7% of the household in the project area, however, it is emerged as the need of the entire project area, and it is ranked as the top priority demand of women in the project area.

37. Potable drinking water supply is available to 50% of the houses and people are only relying on the groundwater, extracted either manually through hand pump or electrically through the electric pump. There are the cases that people bring the drinking water from the tube well, being installed for irrigation purpose.

38. Similarly, only 65.7% of the households have access on the sewerage and drainage system while 34.3% are still looking to have this facility. People complained that their life become miserable especially during the rain owing to have the muddy situation in the streets.

39. In term of health and education facilities, these are available to 96% and 97% of the households respectively. Among them 48% of the respondents complained for the poor services provided in the Government hospitals and schools, hence they are forced to get the services from the private sources, ultimately have to personally bear the expenses.

40. In addition, the roads are available to 97% of the households, however, the local people are not happy on the available road infrastructure, as mostly required the extensive maintenance.

Table 2.11: Access to Social Amenities in the Project Area (%)

Overall Project Area								
	Rural		Semi-Urban		Urban		Total	
	Available	Not Available	Available	Not Available	Available	Not Available	Available	Not Available
Electricity	100	0	100	0	100	0	100	0
Sui Gas	14.3	85.7	43.2	56.8	100	0	63.7	36.3
Water Supply	7.1	92.9	15.9	84.1	97.7	2.3	50	50
Telephone	0	100	2.3	97.7	90.9	9.1	40.2	59.8

Sewerage / Drainage	7.1	92.9	50	50	100	0	65.7	34.3
Education	100	0	95.5	4.5	100	0	98	2
Health	92.9	7.1	93.2	6.8	100	0	96.1	3.9
Road	85.7	14.3	97.7	2.3	100	0	97.1	2.9
Average of Overall Accessibility	50.9	49.1	62.2	37.8	98.6	1.4	76.3	23.7

2.16 Gender Analysis

41. The women have no recognized role in the authority structure of the villages despite representing of 46% of the population of the project area. The traditional attitude of not sending the girls to school is changing now, because the parents realized and understand that the basic education is necessary for each individual without the gender discrimination.

42. Local women pointed out the following major issues relating to this project activities;

- Women demanded the compensation as per replacement value of the affected crop and trees;
- Local women mobility will be restricted because of construction activities;
- Construction should be done as fast as can be because, in some emergencies, women and children will have to go hospitals for health care purposes; even alternate route is required under this condition.
- Women demanded the Sui Gas for the area.
- The educated women are jobless; hence jobs should be provided to these women during project execution;
- Only few women are doing the embroidery work for domestic use; their skill should be enhanced through providing training and setting up of the embroidery centers in the project area.
- Few women work on daily wages in agricultural fields and pick vegetables especially potatoes crop and involve in hoeing, sowing and harvesting, to meet their household's requirements.
- Women are emphasizing for the education infrastructures and jobs as well.

2.17 Women Participation Level

43. The women participation in different activities was assessed as part of Transmission line survey. The views of all the sectors of women including the housewives, service lady (government and private sectors), women headed household, labor women and other vulnerable groups were obtained so that the true feelings can be captured for the project implementation. The participation level is discussed as in Table 2.12.

44. Table 2.12 reveals those women are participating in the daily life however; their participation level is varied in various activities. The women participation in the child caring is 94%. Similarly, the women participation is 88% in the household activities; it is common trend that women are usually responsible for the household activities. The women participation is 64% in social obligations, though the participation is not encouraging as women prefer to take part in social events. Surprisingly, the women participation in the farming and livestock is 56% and 58% respectively although it is quite normal in the rural set up that women are mainly participating in these activities. Women participation in the local representation is 12%. Similarly, the women participation is low (1%) in the sale and purchase of the items.

45. In addition, the women participation is 0% in the business activities, similarly, their participation is very low (3%) in employment activities, revealed that women have less income earning opportunities. Notably, the field investigation shows that majority of the parents encourage the job for their daughters if they can find preferably in the government sector.

Table 2.12: Women Participation in the Various Activities

Sr. No.	Activities	Participation Level
1	- Household	88%
2	- Child caring	94%
3	- Farming	56%
4	- Livestock	58%
5	- Business Activities	0
6	- Employment	3%
7	- Sale & Purchase of Assets	1%
8	- Social obligations (marriage, birthday & other functions)	64%

3 PROJECT IMPACTS

47. The assessment of project impacts and DPs baseline information are discussed in this section of LARP. This section subdivided into; i) impact survey and cut-off date, scope of land acquisition and resettlement, number and type of affected people including indigenous people, gender (number of men and women affected).

3.1 Impact Survey and Cut-off-date

48. The sub-project impacts were assessed based on the census of 100% DPs, 30% local people (20% DPs 10% of general public) surveyed to determine the socioeconomic profile of the subproject area and 13 consultation meetings DPs and locals in different areas along the TL route. The field survey was conducted from July 20, 2016 to September 19, 2016 and updated during 5 to 14 April 2017. Thus, the “cut-off date” for project impacts was set as 14 April 2017. This refers to the people intending to settle into the project area after the cut of date will not be entitled for any compensation under this subproject.

3.2 Scope of Land Acquisition and Resettlement

49. The proposed sub-project includes, i) construction of substation and ii) installation of towers and transmission lines. A total 50.04 acres of private agricultural land will need to be acquired for the construction of substation, whereas the activity of tower spotting, erection and stringing of transmission lines will be carried on 988.42 acres of private and government land. Details are given in Table 3.1 and Annex-3.1- Annex-3.3.

Table 3.1: Sub-project Impacts

Sub-project Components and Impacts	Units	Quantity affected	Land ownership & use	DPs (Nos.)	Remarks
C. Construction of new 220 kV Mirpur Khas Substation					
Land permanently acquired	Acre	50.04	Pvt. Agri. Land under cultivation	11	Individual land owners
Cropped area	Acre	*50.04	Private land under cultivation	*11	*Multiple counts. These are same DPs losing land also.
Trees to be cut-down	Nos.	277	Private trees on farm land	*3	*Multiple counts. Same DPs losing land and crops.
Sub-total (A)	Acres	50.04	Private	11	11 DPs (individual land owners losing land, crops and trees.
D. Total length of Transmission lines 80km – Overall summary of Impacts					
Land permanently acquired	Acres	-	-	-	T/L component does not involve permanent land acquisition.

Tower Spotting	Acres	12.73	Pvt agri land under cultivation	102	In total, 229 towers will be installed. Each tower will affect 225m ² cropped area, totaling 12.73 acres of cropped area to be lost, which is owned by 102 DPs.
Installation of T/L	Acres	975.69	Pvt agri land under cultivation	*102	*TL right of way (RoW) is 50 m wide (i.e. 25m on either side). The T/L installation (80km) will affect 975.69 acres of cropped area owned by 102 DPs which includes the DPs of towers spotting also.
Trees to be cut-down	Nos.	348	Private trees on farm land	*78	*Multiple counts. These are same DPs who are losing their land.
Total (A+B)	Acres	1,038.46	Pvt agri land under cultivation	113	The SS and TL will affect a total of 1038.46 acres of cropped area.

3.2.1 Affected Area by Crop

50. There is private land acquisition of 50.04 acres under this sub-project for the construction of substation. However, for towers spotting and installation of transmission lines, crops under towers will be affected during three phases of construction. The cropped area expected to be affected temporarily as presented in the table below; Out of total 988.42 acres under transmission line and tower spotting, 975.69 acres and 12.73 acres belongs to private land respectively as shown in Table 3.2. The List of crop owners (DPs) is given in Annex 3.1 & Annex-3.3.

Table 3.2: Affected Cropped Area by the Sub-project

Sub-project Component	Area Cropped (Acres)	No. of Crop Owners/ DPs	Remarks
220 kV Mirpur Khas G/S along with allied T/L			
Construction of Substation	50.04	11	Individual land owners
Sub Total(I)	50.04	11	Permanent land is required for substation
(II) Private Temporary Land			
a) Tower Spotting	12.73	102*	Multiple counts. These are same DPs who are losing their land.
b) Installation of T/L	975.69	102	Individual land owners
Sub Total(II)	988.42	102	
Grand Total (I) & (II)	1,038.46	113	

* These 102 owners of land are included in above mentioned 113 owners.

51. The cropping pattern of the affected area was also computed to assess the value of various crops being grown in the project area as given in Table 3.3. The value of a crop per acre has been considered in estimating the crop compensation. (Table 9.1).

Table 3.3: Affected Area by Crop Type

Major Crops	Cropping Pattern %	Affected Area by Crop Type (Acre)
- Cotton	43	425.02
- Rice	32	316.29
- Fodder	7	69.19
- Wheat	18	177.92
Total	100	988.42

3.3 Affected Trees

52. The survey results shown in Table 3.4 indicate that out of total 625 private trees, 320 wood trees and 305 fruit trees were found which will need to be cut-down due to construction of substation and installation of transmission lines respectively.

53. The main types of wood/ timber trees include dalbergia sissoo (sheesham), eucalyptus, acacia, Conocarpus erectus and baken while fruit trees were guava, jaman, mango, lemon, date palm and berri. DP-wise details are given in Annex 3.4 & Annex-3.5.

Table 3.4: No of Private Trees along the T/L Route Alignment

a) Wood/ Timber Trees

Type of Tree	No.	Average Girth (Feet)
I) Construction of 220 kV Mirpur Khas Substation		
Eucalyptus (Safida)	154	0.75
Babur (Kikar-Acacia)	4	1.6
Conocarpus erectus	65	0.5
Neem	3	3.0
<i>Sub-total (I)</i>	226	-
II) In/Out of 220KV D/C T/L from Hala Road to Jamshoro at Mirpur Khas (70 km)		
Sheesham (Tali)	9	1.6
Eucalyptus (Safida)	9	1.6
Acacia (Kiker)	28	2.2
Baken	14	2.3
<i>Sub-total (II)</i>	60	-
III) 220KV D/C T/L from T. M Khan to Hala Road (10 Km)		
Sheesham (Tali)	8	2
Eucalyptus (Safida)	7	2.7
Acacia (Kiker)	11	2.7
Baken	8	1.2
<i>Sub-total (III)</i>	34	-
Grand Total (I to VI)	320	-

b) Fruit Trees

Type of Tree	No.	Average Age (Year)
(A) Construction of 220 kV Mirpur Khas Substation		
Jaman	1	30
Mango	50	12
<i>Sub-total (A)</i>	51	-
II) In/Out of 220KV D/C T/L from Hala Road to Jamshoro at Mirpur Khas (70 km)		
Mango	62	20
Guava	5	16
Date palm	43	17
Jaman	52	26
Berri	12	0
Lemon	3	5
<i>Sub-total (B)</i>	177	-
III) 220KV D/C T/L from T. M Khan to Hala Road (10 Km)		
Mango	29	30
Guava	11	19
Date palm	17	23
Jaman	18	16
Lemon	2	2
<i>Sub-total (C)</i>	77	-
Grand Total (A+B+C)	305	-

3.4 No. of DPs

54. The data regarding number of DPs by type of impact is given in Table 3.5 reveals that total 113 owners (DPs) will be affected due to the loss of land, crops, trees and structures. These are individual land owners, self cultivators. There are no any formal or informal tenants or any lease holders involved in the land under the subproject. List of all DPs is provided in Annex 3.1- Annex 3.3.

Table 3.5: No. DPs by Type of Impact

Sub-project	No. of DPs	Remarks
(I) Construction of 220 kV Mirpur Khas Substation		
a) Permanent land acquisition	11	Individual land owners
b) Affected Trees	*3	*Multiple counts. These are same DPs who are losing their land.
C) Affected Structures		
<i>Sub-total (I)</i>	11	
II) In/Out of 220KV D/C T/L from Hala Road to Jamshoro at Mirpur Khas (70 km)		
a) Affected crops due to installation of T/L (stringing)	76	Individual land owners
b) Affected crops due to tower spotting (excavation, erection & stringing)	*76	*Multiple counts. These are same DPs who are losing their land.
c) Affected trees	*54	*Multiple counts. These are same DPs who are losing their land.
<i>Sub-total (II)</i>	76	-
III) 220KV D/C T/L from T. M Khan to Hala Road (10 Km)		
a) Affected crops due to installation of T/L (stringing)	26	Individual land owners
b) Affected crops due to tower spotting (excavation, erection & stringing)	*26	*Multiple counts. These are same DPs who are losing their land.
c) Affected Trees ³	*24	Multiple counts. These are same DPs who are losing their land.
<i>Sub-total (III)</i>	26	-
Grand Total (I - III)	113	

3.5 Building/ Structures

55. Based on the survey, it was observed that there is no building/ structure (residential/ commercial) as well as other structures located within the alignment/ route alignment of transmission line.

3.6 Public Infrastructure

56. The survey did identify a water course (kacha) near the proposed 220 kV Mirpur Khas substation. All care will need to be taken to avoid causing any damage to the water course. The detail is given in Table 3.6.

Table 3.6: No. of Public Infrastructure located at Substation

Sr. No	Description	Nos.	Size (m ²)
220 kV Mirpur Khas Substation			
1	Water Course (Kacha)	1	1400
	<i>Total</i>	1	1400

3.7 Vulnerable and Indigenous People

57. Field investigations reveals that the project has some impact on the low-income people. These are 23 family members and their monthly income is less than the government fixed (labor wage) rate Rs. 15,000/ month. Hence, they are entitled to a lumpsum vulnerability allowance equal to Rs. 15,000/DP.

3.8 Gender Impacts

58. In the sub-project area, about half of the population is women. Most of them are involved in household activities. There will not be any impact on women related activities due to the implementation of this project.

3.9 Severity of Impacts

59. **Substation:** Table 3.7 shows that 8 of total 11 DPs permanently losing land to SS are losing 10% or more of their agriculture land. They will be paid a lumpsum amount of Rs. 45,000/DP to offset the effects of severe impact. This amount is over and above the cash compensation to be provided to the DPs at market rate.

60. **Transmission Lines:** Similarly, for TL, there are 102 DPs whose crops are partially affected during TL installation. However, about 56 DPs (~55%) will be losing 10% or more of their crops. They will be entitled to an allowance of Rs. 15,000/DP which is meant to offset the effect of severe impact on crops. This amount will be over and above the normal cash compensation for the lost crops payable to all DPs based on market rate. Details are given in Annex 3.1 & 3.2.

4 LEGAL AND POLICY FRAMEWORK

4.1 Telegraph Act (TA), 1885

61. In case of impacts caused by poles and towers for public facilities and transmission lines, the land acquisition is not regulated by the LAA but instead by the Telegraph Act, 1885 (amended in 1975). The original provision of this law was that the land occupied by telegraph poles was not to be compensated (only crops destroyed during the erection of the pole were compensated). This was based on the logic that a pole, covering only a negligible land area, does not cause substantial impacts to land users. This, however, is no longer the case once the same provision is extended to transmission towers.

62. The Telegraph Act (Section 11) confers powers to enter private lands and (Section 10) construct/maintain electric poles and lines without the need to acquire the land affected and paying compensation for it. However, the sub-section 10 (d) referred to avoid causing unnecessary damages to the affected land and associated assets. Finally, the Section 16 provides that if any such damage occurs (i.e. damages to crops, irrigation facilities, land quality or land income). The proponent has to provide compensation for the damages.

63. To accommodate the needs of DPs, under this Program, the NTDC has agreed to apply the Telegraphic Act liberally by i) compensating all land occupied by towers in urban areas at market rate; ii) by avoiding land impacts in rural areas through the use of towers with sufficient vertical clearance to allow the continuation of unrestricted farming and animal grazing; and iii) if the construction of such towers is impossible, by compensating the land occupied by tower bases land also in rural areas. In addition, the NTDC will compensate by default all crops **and trees or any structures** expected to be affected by the 3 major distribution lines construction phases, i.e. i) construction of tower bases; ii) tower erection; and iii) stringing.

4.2 Land Acquisition Act 1894 (LAA)

64. The Pakistan law governing land acquisition is the LAA of 1894 and successive amendments. The LAA regulates the land acquisition process and enables the provincial government to acquire private land for public purposes. Land acquisition is a provincial responsibility and provinces have also their own province specific implementation rules like Sindh Land Acquisition Rules, 1983. The LAA and its Implementation Rules require that, following an impact identification and valuation exercise, land and crops are compensated in cash at the current market rate to titled landowners. The LAA mandates that land valuation is to be based on the last 3 to 5 years average registered land-sale rates. However, in several recent cases, the median rate over the past 1 year, or even the current rates, have been applied with an added 15% Compulsory Acquisition Surcharge per the provision of the law. **The displaced persons, if not satisfied with compensation rate, can still receive the awarded amount under protest and, at the same time, approach a Court of Law (though Land Acquisition Collector) for compensation enhancement under LAA.**

65. The various sections relating to the land acquisition are briefly discussed.

- Section 4 refers to the publication of preliminary notification and power for conducting survey. The Section 5 relates to the formal notification of land for a public purpose and 5 (a) covers the need for inquiry. Section 6 refers to the Government makes a more formal declaration of intent to acquire land.
- Section 7 indicates that the Land Commissioner shall direct the Land Acquisition Collector (LAC) to take order for the acquisition of land. The LAC has then to direct

that the land required to be physically marked out measured and planned under Section 8.

- Section 9 allows the LAC to give notice to all DPs that the Government intends to take possession of the land. If they have any claims for compensation then these claims are to be made to him at an appointed time, while the Section-10 delegates power to the LAC to record statements of DPs in the land to be acquired or any part thereof as co-proprietor, sub-proprietor, mortgagee, and tenant or otherwise.
- Section 11 enables the Collector to make inquiries into the measurements, value and claim and issue the final "award". The award includes the land's marked area and the valuation of compensation and the LAC has made an award under Section 11, LAC will then take possession and the land shall thereupon vest absolutely in the Government, free from all encumbrances. The section 18 reveals that in case of dissatisfaction with the award, DPs may request the LAC to refer the case onward to the court for a decision.
- Section 23 refers to the award of compensation for the owners for acquired land is determined at its market value plus 15% in view of the compulsory nature of the acquisition for public purposes, while the Section-28 relates to the determination of compensation values and interest premium for land acquisition.
- Section 31 provides that the LAC can, instead of awarding cash compensation in respect of any land, make any arrangement with a person having an interest in such land, including the grant of other lands in exchange.
- Section 35 refers to the temporary occupation of arable or waste land subject to the provision of Part VII of the Act. The provincial government may direct the Collector to procure the occupation and use of the same for such term as it shall think fit, not exceeding three years from the commencement of such occupation.
- Section 36 provides the information relating to the power to enter and take possession, and compensation on restoration. On the payment of such compensation, or on executing such agreement or on making a reference under Section 35, the Collector may enter upon and take possession of the land, and use or permit the use thereof in accordance with the terms of the said notice.

4.3 ADB's Safeguard Policy Statement 2009 - Involuntary Resettlement Policy

66. The SPS 2009 is based on the following objectives: To avoid involuntary resettlement wherever possible; to minimize involuntary resettlement by exploring project and design alternatives; to enhance, or at least restore, the livelihoods of all displaced persons in real terms relative to pre-project levels; and to improve the standards of living of the displaced poor and other vulnerable groups. The following principles are applied to achieve these objectives:

- Screen the project** early on to identify past, present and future involuntary resettlement impacts and risks;
- Determine the scope of resettlement planning** through a survey and/or census of displaced persons, including a gender analysis, specifically related to resettlement impacts and risks;
- Carry out meaningful consultations** with affected persons, host communities, and concerned non-government 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, 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 affected persons' concerns. Support the social and cultural institutions of displaced persons 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;

- iv. **Improve, or at least restore, the livelihoods of all displaced persons** through (i) land-based resettlement strategies when affected livelihoods are land based where possible or cash compensation at replacement costs 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.
- v. **Provide physically and economically displaced persons with needed assistance**, including the following: (i) if there is relocation, secured tenure to relocation land, better housing at resettlement sites with comparable access to employment and production opportunities, integration of resettled persons economically and socially into their host communities, and extension of project benefits to host communities; (ii) transitional support and development assistance, such as land development, credit facilities, training, or employment opportunities; and (iii) civic infrastructure and community services, as required.
- vi. **Improve the standards of living** of the displaced poor and other vulnerable groups, including women, to at least national minimum standards. In rural areas provide them with legal and affordable access to land and resources, and in urban areas provide them with appropriate income sources and legal and affordable access to adequate housing.
- vii. **Develop procedures** in a transparent, consistent, and equitable manner if land acquisition is through negotiated settlement to ensure that those people who enter into negotiated settlements will maintain the same or better income and livelihood status.
- viii. **Ensure that displaced persons without titles** to land or any recognizable legal rights to land are eligible for resettlement assistance and compensation for loss of non-land assets.
- ix. **Prepare a resettlement plan** elaborating on displaced persons' entitlements, the income and livelihood restoration strategy, institutional arrangements, monitoring and reporting framework, budget, and time-bound implementation schedule.
- x. **Disclose a draft resettlement plan or** the compensation matrix, eligibility criteria or rates determined for the affected land, structures, trees etc., including documentation of the consultation process in a timely manner, before project appraisal, in an accessible place and a form and language(s) understandable to affected persons and other stakeholders. Disclose the final resettlement plan and its updates to affected persons and other stakeholders.
- xi. **Conceive and execute involuntary resettlement as part of a development project or program.** Include the full costs of resettlement in the presentation of project's costs and benefits. For a project with significant involuntary resettlement impacts, consider implementing the involuntary resettlement component of the project as a stand-alone operation.
- xii. **Pay compensation and provide other resettlement entitlements before physical or economic displacement.** Implement the resettlement plan under close supervision throughout project implementation.

- xiii. **Monitor and assess resettlement outcomes**, their impacts on the standards of living of displaced persons, and whether the objectives of the resettlement plan have been achieved by taking into account the baseline conditions and the results of resettlement monitoring.
- xiv. **Disclose monitoring reports.**

4.4 Legislation relevant to Land Classification

67. In terms of implementation of this LARP, identifying the type of land affected **is** an important step in determining eligibility for compensation for land. Jurisdiction rather than use classifies land. Rural land includes irrigated land and un-irrigated land and is governed by the Land Revenue Act (1967) which must be read in conjunction with the LAA 1894 and other legislation that may apply, including the Punjab Alienation of Land Act (1900), Colonization of Government Lands Act (1912) and the various Land Reform Regulations. Rural land falls under the jurisdiction of revenue districts.

68. Land, other than rural land, is urban and including all permutations there-under such as residential, commercial, built upon and buildable, and is governed by various regulations and ordinances including the People's Local Government Ordinance (1972) for each province, Cantonments Act (1924), and Land Control Act (1952). Urban land falls under the jurisdiction of Municipal and Local Government Authorities. While there are broad definitions of rural and urban land in the People's Local Government Ordinances, such classifications are not immutable and have been, and are, changed by the Collector of Revenues and provincial governments over time. In general, it is either the People's Local Government Ordinances or the Land Revenue Act that determines the classification of land, however there are some cases where both applies and other cases where different legislation altogether can indicate jurisdiction and classification over land. Hence there is neither a universal classification nor legislation pertaining to the land that will be potentially affected under the sub-project.

69. Therefore, during the field survey for the preparation of this LARP, the identification of land ownership was done with the assistance of local people, village headman (*Numberdar*) and official of revenue department, e.g. *Patwari*.

4.5 Comparison of Pakistan's LAA 1894, Telegraph Act 1885 and ADB's SPS 2009

70. A comparison of Pakistan's LAA 1894, TA 1885 and ADB's Policy on Involuntary Resettlement (IR) shows that these instruments are not at par with each other and have gaps to be reconciled/ addressed. The objective of this comparison is to identify if and where the two sets of procedures are in conformity with each other and more importantly where there are differences and gaps that need to be addressed. The key issue is that by following the ADB assessment procedures, the requirements of the Pakistan regulatory system are in compliance. Conversely, if **only** the Government of Pakistan systems are followed then there are likely to be the shortfalls in comparison to the ADB requirements. The key ADB Policy Principles are (i) need to screen the project for past, present and future LAR impacts and risks early in the project cycle/ planning stage (ii) carry out meaningful consultations (iii) improve or at least restore the livelihoods of DPs to the pre-project conditions and improve the livelihoods of the affected vulnerable groups (iv) pay compensation at full replacement costs and provide other resettlement entitlements to DPs before their physical or economical displacement, (v) provide DPs with adequate assistance (vi) ensure that untitled DPs are also eligible for resettlement assistance and compensation for the loss of no-land assets and (vii) disclose all reports. Table below presents a gap-analysis between the Pakistan's LAA and ADB's SPS. Comparison of LAA and ADB's SPS 2009

Pakistan's LAA 1894 and TA 1885	ADB Safeguard Policy Statement (2009)
Telegraph Act 1885: The Telegraph act (TA) provides that land for tower construction or under a transmission, line is not to be acquired or compensated if the land's permanent productive potential is not affected. Under the TA therefore only temporary impacts on crops are compensated.	Based on ADB policy all land impacts are to be compensated whether rural or urban.
LAA 1894: Only titled landowners or customary rights holders are recognized for compensation.	Lack of title should not be a bar to compensation. Requires equal treatment of those without clear land titles (e.g., squatters or other informal settlers) in terms of their entitlements for resettlement assistance and compensation for the loss of non-land assets.
Only titled landowners or customary rights holders are recognized for compensation.	Lack of title should not be a bar to compensation. Requires equal treatment of those without clear land titles (e.g., squatters or other informal settlers) in terms of their entitlements for resettlement assistance and compensation for the loss of non-land assets.
Only registered landowners, sharecroppers and leaseholders are eligible for compensation of crop losses.	Crop compensation is to be provided irrespective of the land registration status of the affected farmers/share croppers. Crops for two seasons Rabi (winter) and Kharif (summer) for full one year are to be compensated based on existing market rates and average farm produce per unit area.
Tree losses are compensated based on outdated officially fixed rates by the relevant forest and agriculture departments.	Tree losses are to be compensated according to market rates based on productive age or wood volume, depending on tree type. All the removed trees will remain the property of the owner for them to salvage.
Land valuation is based on the median registered land transfer rate over the 3 years prior to Section 4 of the LAA. 15% compulsory acquisition charges are paid over and above the assessed compensation. However, recent practice is that prices based on the average over the last one year prior to acquisition commencing is applied.	Land valuation is to be based on current replacement (market) value with an additional payment of 15%. The valuation for the acquired housing land and other assets is the full replacement costs keeping in view the fair market values, transaction costs and other applicable payments that may be required.
The valuation of structures is based on official rates, with depreciation deducted from gross value of the structure and also 15% of the value of salvaged materials,	The valuation of built-up structures is based on current market value but with consideration of the cost of new construction of the structure, with no deduction for depreciation. The DPs can salvage any of their material free of cost and irrespective of compensation payments having been paid.
The decisions regarding land acquisition and the amounts of compensation to be paid are published in the official Gazette and notified in accessible places so that the people affected are well informed.	Information related to the quantification and valuation of land, structures, other immovable assets, entitlements and amounts of compensation and financial assistance are to be disclosed to the displaced persons prior to sub-project appraisal period. This is to ensure that stakeholders are treated in a fair, transparent and efficient manner.
No provision for income and livelihood restoration rehabilitation measures. There are also no special allowances for vulnerable displaced persons including vulnerable groups such as women headed households. There are no requirements to assess opportunities for benefit sharing.	The ADB policy requires rehabilitation for lost income and any expenses by the DP during the relocation process. There are also provisions to be made for transitional period costs, and livelihood restoration. Particular attention must be paid to the poor and vulnerable groups, including women. A guiding principle is that DPs should at least be able to reach a defined minimum livelihood standard. In rural areas, DPs should be provided with legal access to replacement land and resources to the defined minimum livelihood level. In urban areas, provision should be made for appropriate income sources and the legal and affordable access to adequate housing.

Grievance redress is established through the formal land acquisition process at a point in time or through appeals to the court.	Provide a continuous mechanisms/ set-up that are accessible locally and available throughout sub-project implementation.
Only compensation is paid but not resettlement allowances, there is no mechanism to ensure payment is made before displacement.	All compensation and allowances to be paid prior to physical or economic dislocation.
No requirements to prepare and disclose monitoring reports.	Prepare and disclose monitoring reports.

4.6 Reconciliation of Gaps

71. To reconcile the differences between the LAA (1894), Telegraph Act 1885 and ADB SPS, the NTDC has prepared the facility's land acquisition and resettlement framework (LARF) and this LARP to reconcile the gaps in Pakistan's legal and regulatory system for LAR (LAA 1894, TA 1885) and ADB's IR Safeguards as in SPS 2009, and address the gaps in two set of systems by following/adopting the following LAR principles.

- a. The subprojects will avoid, minimize or mitigate involuntary LAR impacts causing physical and/or economic displacement and a LARP will be prepared to compensate all displaced persons.
- b. Displaced persons and other stakeholders will be consulted and informed as well as given an opportunity to participate in LAR planning in a form accessible and understandable to them.
- c. Each draft, final or updated LARP will be submitted to ADB for review/approval, endorsed by NTDC and disclosed on the ADB website as well as to the DPs by placing the hard copies of LARP at places of access and providing the relevant information in a manner and language understandable to them.
- d. A grievance redress mechanism with representation of all stakeholders will be established at the time of project inception.
- e. A comprehensive assessment of social impacts, involving (i) a census of all displaced persons, and an inventory of their lost assets (ii) a socio-economic survey of a sample of at least 10 percent of displaced persons, and (iii) a detailed measurement survey and valuation of all lost assets as well as an assessment of lost incomes will be carried out.
- f. An eligibility cut-off date has been declared and formalized on the date of completion of social impacts assessment survey and census of DPs.
- g. Negotiated land acquisition will be preferred. The ADB SPS SR2 requirements apply to such negotiated settlements. Nevertheless, if negotiated settlement fails, the land will be acquired through LAA but with replacement costs awarded for compensation to the DPs.
- h. All titled and non-titled DPs occupying land to be acquired by the project before the cut-off date will be eligible for compensation, relocation and rehabilitation measures, as applicable, regardless of whether the impacts are permanent or temporary, full or partial. Non-titled DPs without legally recognizable claims to land will be eligible for all compensation, relocation and rehabilitation measures, except land. The full eligibility of non-titled DPs with legally recognizable claims to land is recognized.
- i. Compensation of land and structures will be done at replacement value, either through the replacement of land or structures of equivalent or higher value and quality or through cash compensation at replacement cost. Replacement cost involves fair market value, transaction costs, interest accrued, transitional and restoration costs and other applicable payments without depreciation. For replacement of land or structures all transaction

- costs will be paid by the project or included in compensation payments to the DPs. The value of structures will not be depreciated for age.
- j. For land permanently acquired, qualified valuation experts will be engaged to assess the value of all lost assets.
 - k. In case of any conflict between applicable national laws and LAR principles, The ADB's SPS 2009 will prevail.
 - l. As agreed with DPs in consultation meetings, all lost civic infrastructure and community services will be either restored or newly provided at relocation sites.
 - m. Incomes and livelihood sources lost, including but not restricted to crops and trees or interruption of business activities and employment, will be fully compensated at replacement cost.
 - n. All DPs will be provided opportunities to share development benefits of the Project, if feasible.
 - o. Relocated DPs will receive secure tenure to replacement land, better housing, transitional support and access to civic infrastructure and services.
 - p. DPs will not be physically or economically displaced before compensation has been paid, other entitlements have been provided and an income and livelihood program is in place.
 - q. The effectiveness of the implementation of each subproject LARP and the impacts of its measures on the livelihoods of the DPs will be monitored during and evaluated after LARP implementation.
 - r. Schedule of construction and payment to DPs will be monitored internally by NTDC on a quarterly basis and externally by external monitoring consultant on a semiannual basis. The purpose of internal and external monitoring is to ensure compliance with SPS's principle of delivery of compensation to DPs before start of construction. All monitoring reports will be disclosed.

5 CONSULTATION, PARTICIPATION AND DISCLOSURE

5.1 Stakeholder's Consultations

72. There are two types of stakeholders, i.e. primary and secondary stakeholders. The primary stakeholders are the initial stakeholders, such as affected persons, general public including women residing in villages in the vicinity of the sub-project area. Total 13 consultations were made with the DPs and local community.

73. Accordingly, the consultations were made with all primary stakeholders for sharing the information regarding this sub-project, including i) 2x220/132 kV 250 MVA transformers with allied equipment; ii) In/ Out of 220 kV D/C T/L Hala Road-Jamshoro at Mirpur Khas; iii) 220 kV D/C T/L T.M. Khan – Hala Road.

5.2 Public Consultations

74. A series of 13 Nos consultations (consisting of 104 participants) were carried out with the affectees and other local community to share the information about the sub-project and record their concerns/ feedback associated with this sub-project. In this context, the DPs shared their point of view regarding payment on the loss of their land, crops and trees, as most of the local people had their concerns regarding the true assessment of compensation.

75. List of public consultations carried out in the villages of sub-project is given in Table 5.1 as follow.

Table 5.1: List of Public Consultations along the T/L Route Alignment

Consultation No.	Date	Venue	Category of Participants	Name of Participants
1	20-Jul-16	Village Khuda Bux Gopang District Hyderabad.	DPs/ Local Community	<ul style="list-style-type: none"> - Mr. Ghulam M. Gopang S/o Sher M. Gopang - Mr. Shamsher Ali S/o M. Rahim - Mr. Noor Khan S/o M. Rahim - Mr. M. Azam S/o Ali Khan - Mr. Gul Sher S/o M. Rahim - Mr. Ali Nawaz S/o Eido Khan
2	3-Sep-16	Village Hoosri District Hyderabad.	DPs/ Local Community	<ul style="list-style-type: none"> - Mr. M. Bachal Shoro S/o Ali Dino - Mr. Noor M. S/o M. Hussain - Mr. Riaz Panhwer S/o M. Murtaza - Mr. M. Ameen S/o M. Suleman - Mr. M. S/o Allah Warayo - Mr. Nadir Hussain S/o Ali Dost - Mr. Khalid Chang S/o Hoat Khan - Mr. Murtaza Shoro S/o Haji Hashim - Mr. M. Ali Shoro S/o M. Qasim - Mr. Kamran Shoro S/o Khuda Dino
3	5-Sep-16	Village Sahib Khan Marri District Hyderabad.	DPs / Local Community	<ul style="list-style-type: none"> - Mr. Abdul Majeed Detho S/o Abdullah - Haji Anwar S/o Haji Dittu - Mr. Abdul Majeed S/o Allah Bachayo - Mr. M. Rafiq S/o Abdul Majeed - Mr. Badardin S/o Abdul Majeed Detho - Mr. Abdul Sattar S/o M. Bux - Mr. Noor ul Ameen S/o M. Ameen - Mr. Shafi M. S/o M. Bux - Mr. Shahzaman S/o M. Abdul Sattar - Mr. Mubeen S/o Haji Ghulam - Mr. Nazar M. Detho S/o M. Idrees - Mr. Nawaz Detho S/o Yaseen Detho
4	6-Sep-16	Village Detha Station District Hyderabad	DPs/ Local Community	<ul style="list-style-type: none"> - Mr. Rashid Ali S/o Ali Ahmed - Mr. Afroz Zoonr S/o Bakhshal - Mr. Allah Dad S/o Meho Khan
5	7-Sep-16	Village Shahnawaz Junejo District Hyderabad	DPs/ Local Community	<ul style="list-style-type: none"> - Mr. Aftab Shah S/o Dost M. - Mr. Abdul Rehman S/o Haji Abdul Haq - Mr. Abdul Qadir S/o Haji Abdul Haq - Mr. Gulam Mustafa S/o Rasool Bakhsh - Mr. Makhdoom H. Shah S/o Jafar H. Shah
6	8-Sep-16	Village Tando Jam District Hyderabad	DPs/ Local Community	<ul style="list-style-type: none"> - Mr. Faiz M. S/o Gul Sher - Mr. Afzal Baig S/o Majeed Baig - Mr. Abdul Malik S/o M. Sabir - Mr. Abul Hassan S/o M. Sualhehen - Mr. Rizwan Khaskheli S/o Gul Hassan - Mr. Ghulam Nabi S/o Wali M. Jiskani - Mr. Nawab Marwari S/o Mitho Mal
7	9-Sep-16	Village Abri/Sarang Gopang District Hyderabad	DPs/ Local Community	<ul style="list-style-type: none"> - Mr. Mohib Ali Marri S/o Khan M. - Mr. Allah Bachayo S/o Yar M. - Mr. M. Ishaq S/o Mehmood Khan - Mr. Muharram S/o Ramzan Gopang - Mr. Rafique Khoso S/o Wadal Khodo - Mr. Rasool Bux S/o Kaloo Khaskheli - Mr. M. Ali Nahio S/o Hashim Nahio - Mr. Aslam S/o M. Jumman - Mr. Manzoor Ali S/o Kaalo Khan Kaloi - Mr. Narain Daas S/o Hari Daas
8	10-Sep-16	Village Shah Muhammad Jamali District Tando Allah Yar	DPs/ Local Community	<ul style="list-style-type: none"> - Mr. Gulam Hussain S/o Lal M. - Mr. Lal M. Jamali S/o Gulam Hussain - Mr. M. Azeem S/o Nusrat Hussain - Shah M. S/o M. Usman - Mr. Mehmood Behrani S/o Gulam Qadir - Mr. Ali Ghulam S/o Sanwan Khaskheli - Mr. M. Saleh S/o Abdul Lateef Dall
9	11-Sep-16	Village Tando Allah Yar District Tando Allah Yar	DPs/ Local Community	<ul style="list-style-type: none"> - Haji yousif Halepoto S/o Haji M. Umer - Mr. Ali Gul Kalro S/o M. Ismail - Mr. Maqbool kumbho S/o Yousif QKumbho - Mr. Zaheerullah Baroch S/o Ubedullah - Mr. Dil Jan Sangi S/o Sahib Sangi - Haji M. Ameen Unar S/o M. Raheem Unar - Mr. Qamar Deen S/o Khameeso Soomro

10	18-Sep-16	Village Agaya Dino Dal & Haji Umer Kakepoto District Tando Allah Yar	DPs/ Local Community	<ul style="list-style-type: none"> - Meer M. Hingoro S/o Darya Khan Hingoro - Haji Abdul Malik S/o Wali M. - Mr. Abdul Wahid S/o Darya Khan - Mr. Rasool Bakhsh S/o M. Dall - Mr. Khalid Ishaq S/o M. Dall - Mr. Faisal Kakepoto S/o Abdulrehman - Mr. Badul Gaffar S/o Abdul Khaliq Kakepoto - Mr. M. Umer S/o Ali Nawaz - Mr. Umed Ali Mokrani S/o Jumoo Mokrani
11	19-Sep-16	Village Misri Bheel District Tando Allah Yar	DPs/ Local Community	<ul style="list-style-type: none"> - Mr. Chetant Daas S/o Anoop Chand - Mr. Khenchand S/o Naseer Bheel - Mr. Mann S/o Misri Bheel - Mr. Tago Bheel S/o Sodho Bheel - Mr. Safullah Laghari S/o Allah Ditho - Mr. M. Jumman Samoo S/o Ali Nawaz Samoo - Mr. Qalandar Bakhsh S/o Laal M. Laghari - Mr. Suhail Akbar S/o Laal M. Laghari - Mr. Usmaan Laghari S/o M. Umer Laghari - Mr. M. Suleman S/o Sultan Laghari
12	13-Apr-2017	Village Dolat Leghari Taluka Shujabad District Mir Pur Khas	DPs/ Community	<ul style="list-style-type: none"> - Mr. Noor M. S/o M. Suleman - Mr. Ghulam M. S/o M. Suleman - Mr. Nabi Baksh S/o M. Suleman - Mr. M. Yaqoob S/o Haji Gulam M.. - Mr. M. Shafi S/o Ghulam M. - Mr. Abdul Raheem S/o Murad Ali
13	14-Apr-2017	Village Dolat Leghari Taluka Shujabad District Mir Pur Khas	DPs/ Local Community	<ul style="list-style-type: none"> - Mr. M. Shahazad S/o Nabi Bakhsh - Mr. Noor M. S/o M. Dotali - Late Ali Sher S/o M. Dotali - Mr. M. Suleman S/o Noor M. - Mr. Khair M. S/o Late Haji Sohbat - Mr. Abdul Hakim S/o Abdul Khaliq - Late Bae S/o Late Haji Sohbat - Mr. Muhammad S/o Abdul Khaliq - Mr. M. Hanif - Mr. M. Irshad - Mr. M. Zeeshan - Mr. M. Nouman

5.3 Concerns Regarding the Sub-project

76. During the field survey, people were asked about their views regarding the proposed sub-project. In general, local community has positive attitude towards the implementation of this proposed sub-project that this will help in reducing the shortage of electricity in the area.

Consultations with DPs

77. Consultation is a continuous process that started at the project preparatory stage and will continue till project completion. Based on the consultations with the displaced persons and general public, a number of concerns were highlighted and accordingly some feedback was also provided. The main concerns include the compensation of land, crops & trees at current market rates and disbursement should be made prior to the start of civil works and employment to the local peoples should be provided. RoW clearance for undertaking the project activities should be minimized at the best possible extent.

Redress of Farmers Issues

78. Compensation for the loss of land, crops and trees will be estimated by the concerned department keeping in view the current market rates and payment will be made prior to start of civil works and one-third of unskilled labor will be engaged from local community especially DPs. This will be ensured through a clause in the civil works contract, subject to internal and external monitoring.

79. The redressal of DPs/ local community concerns is tabulated as below:

DPs/ Community Concerns and their Redress

Concerns	Redress	Remarks
An employment in the project should be provided to increase the livelihood.	Preference will be given to engage local people especially DPs in the project related jobs.	A clause for employment of local/DPs added in the civil works contract.
The impact of electromagnetic induction increases during the rainy days.	It is required to avoid any field activity by the local people during rainy days to prevent accidents.	-
DPs want to avoid installation of tower in agriculture land because this reduces the price of land for future as well.	All possible measures will be taken into consideration to avoid installation of towers in agriculture land.	-
RoW clearance for installation of towers and transmission line should be minimized at the best possible extent.	All efforts and engineering practices will be adopted during final design to minimize the RoW clearance.	Design Contractors will ensure its compliance under the NTDC supervision.
Installation should be done after harvest of crops	Preference will be given to installation after harvest, but in case of any crop/ tree losses, compensation at current market rate will be given to owners of crops/ trees.	PMU (NTDC) will ensure the payment against the loss of crops/ trees.
Compensation should be made before the start of civil work.	As per ADB policy no civil work will be started before the disbursement of compensation to all DPs.	-

Information Disclosure

80. This draft LARP in English has been disclosed on the ADB website (a copy of information brochure is provided in Annex A), while the summary of LARP in local language (Urdu) will be disclosed to DPs and made available at EA website, project implementation units and in local administrative offices. Disclosure is a condition for LARP approval.

81. The PIU will keep the DPs informed about the impacts and entitlement of compensation and facilitate in addressing their grievance(s). A copy of the information brochure will also be placed at PIU at field level and in PMU at sub-project level for ready reference.

6 COMPENSATION ELIGIBILITY AND ENTITLEMENTS

6.1 Eligibility

82. In accordance with the LARF, the affected persons will be eligible for compensation or rehabilitation assistance as discussed below:

- i). All land owning affected persons losing land or non-land assets, whether covered by legal title or customary land rights, whether for temporary or permanent acquisition.
- ii). Tenants and sharecroppers, whether registered or not; for all non-land assets, based on prevailing tenancy arrangements.
- iii). Displaced persons/ parties losing the use of structures and utilities, including titled and non-titled owners, registered, unregistered, tenants and lease holders plus encroachers and squatters.
- iv). Displaced persons losing business, income and salaries of workers, or a person or business suffering temporary effects, such as disturbance to land, crops, and business operations both permanently and also temporarily during construction.
- v). Loss of communal property, lands (shamlat) and public infrastructure.
- vi). Vulnerable affected persons identified through the social impact assessment survey/ analysis
- vii). In the event of relocation, all affected persons will receive transitional and other support to re-establish their livelihoods.

83. In accordance with ADB SPS (2009) and this LARP, the compensation eligibility will be limited by a 'cut-off date' for the proposed sub-project on the day of the completion of the "census" survey for the impact assessment in order to avoid an influx of outsiders. The cut-off date of 14 April 2017 has been announced to the DPs through consultation meetings and focus group discussions.

6.2 Entitlement for Compensation

84. The following entitlements are applicable for affected persons losing land, structures, other assets and incurring income losses:

i) **Agricultural Land Impacts** will be compensated as follows:

a) Permanent Losses: legal/legalizable landowners (legalizable owners assessed by the DPAC include those who may have customary rights to their land which could be converted to statutory rights) are compensated either in cash at replacement cost plus a 15% compulsory acquisition surcharge (CAS) free of taxes and transfer costs; or through land for land compensation mechanisms with plots comparable in area, productivity and location to the plots lost. Leaseholders of public land will receive rehabilitation in cash equivalent to the market value of the gross yield of lost land for the remaining lease years (up to a maximum of three years). Encroachers will instead be rehabilitated for land use loss through a special self relocation allowance equivalent to one year of agricultural income or through the provision of a free or leased replacement plot comparable in area, productivity and location to the plots lost.

(b) Temporary Land Loss: legal/legalizable owners and tenants assessed by the DPAC or encroachers will receive cash compensation equal to the average market value of each lost harvest for the duration of the loss, and by the restoration of

both, cultivable and uncultivable land, to pre-construction conditions. Through specification in the contract agreements, contractors will be required to carry out restoration works before handing land back to the original occupiers, or DPs will be provided with sufficient cash to rehabilitate the land.

(c) Vulnerable Displaced Persons: Vulnerable DPs, legal/legalizable owners, tenants or encroachers will be entitled to one vulnerable impact allowance equal to the market value of the harvest of the lost land for one year (summer and winter), in addition to the standard crop compensation. Other options can be considered, including non-cash based livelihood support and employment, both temporary and permanent. Other additional income restoration measures can be considered based upon the findings of the Social Impact Analysis.

- ii) **Residential and Commercial Land** will be compensated at replacement value for each category of the DPs. Assessments will be conducted by the DPAC. In case an DP may not lose all of their residential and commercial land but it is significant enough to consider relocating. In such cases compensation, may need to be made for all of their land even though not all of it needs to be acquired. Residential and commercial land owners will be entitled to the following:

a) Legal/ legalizable owners will be compensated by means of either cash compensation for lost land at replacement cost based on the market value of the lost land plus a 15% CAS, free of taxes and transfer costs; or in the form of replacement land of comparable value and location as the lost asset.

(b) Renters are compensated by means of cash compensation equivalent to three months of rent or a value proportionate to the duration of the remaining lease, including any deposits they may lose.

(c) Encroachers/Squatters are compensated through either a self-relocation allowance covering six months of income or the provision of a leased replacement plot in a public owned land area. They will be compensated for the loss of immovable assets, but not for the land that they occupy.

- iii) **All other Assets and Incomes**

a) Houses, buildings and structures will be compensated for in cash at replacement cost plus 15% CAS. There will also be a 10% electrification allowance and the any transaction costs will be paid. Material that can be salvaged is allowed to be taken by the owner, even if compensation has been paid for them. For evaluation of replacement costs, a survey will be conducted to obtain the current prices for calculation of compensation. In case of partial permanent impacts full cash assistance to restore remaining structure, in addition to compensation at replacement cost for the affected part of the structure.

(b) Renters or leaseholders of a house or structure are entitled to cash compensation equivalent to three months rent or a value proportionate to the duration of the remaining lease period.

(c) Crops will be compensated for to owners, tenants and sharecroppers based on their agreed shares. The compensation will be the full market rate for one year of harvest including both rabi and kharif seasons.

(d) Fruit and other productive trees will be compensated for based on rates sufficient to cover income replacement for the time needed to re-grow a tree to the

productivity of the one lost. 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.

(e) Businesses will be compensated for 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.

(f) 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.

(g) Relocation assistance is to be paid for DPs 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 at least 1 month or based on the severity of impact as determined on a case by case basis and included in the LARP.

(h) Community structures and public utilities, including mosques and other religious sites, graveyards, schools, health centers, hospitals, roads, water supply and sewerage lines, will be fully replaced or rehabilitated to ensure their level of provision is, at a minimum, to the pre-sub-project situation.

(i) Vulnerable people are defined as households who have a per capita monthly income of below Rs.15,000/- and those who are identified as vulnerable through the SIA. This includes distinct groups of people who may suffer disproportionately from resettlement effects. The policy defines vulnerable groups as households below the poverty line, the elderly, those without legal title to assets, landless, women, children and indigenous people and the disabled.

85. It is to ensure that the compensation is reflective of appropriate rates corresponding to actual impacts, the updated rates shall be applied, if and when the delivery of compensation gets delayed. The compensation and rehabilitation entitlements are summarized in the Entitlement Matrix presented as below:

Entitlement Matrix for Compensation

Asset	Specification	Entitled Persons	Compensation Entitlements
Arable Land	No restriction to access to land with existing/ current land use remaining the same.	Farmer/ Titleholder	No compensation for land provided that the land is rehabilitated/ restored to its former quality following completion of works;
		Leaseholder/ Sharecropper (registered or not)	• No compensation for land if the land is rehabilitated/ restored to its former quality following completion of works;
		Agricultural workers	• Compensation, in cash or kind, for work opportunities lost based on actual/agreed wage rate or approved government daily wages, whichever is greater.
		Squatters	• Compensation, in cash, for all damaged crops and trees
Arable Land where access is restricted and/or land use will be affected.	All adverse effects on land use independent of impact severity	Farmer/ Titleholder	• Land for land compensation with plots of equal value and productivity to the plots lost; or; • Cash compensation for affected land at replacement cost based on market rate plus 15% CAS, free of taxes, registration, and transfer costs.
		Leaseholder/ Sharecropper (registered or not)	• Renewal of lease/ sharecropping contract in other plots of equal value/ productivity of plots lost, or • Cash equivalent to market value of gross yield of affected land for the remaining lease/ contract period (up to a maximum of 3 years).

Asset	Specification	Entitled Persons	Compensation Entitlements
	Additional provisions for severe impacts (More than 10% of land loss)	Agricultural workers losing their contract	<ul style="list-style-type: none"> Cash indemnity corresponding to their salary (including portions in kind) for the remaining part of the agricultural year.
		Squatters	<ul style="list-style-type: none"> 1 rehabilitation allowance equal to market value of 1 gross harvest (in addition to crop compensation) for land use loss.
		Farmer/Titleholder Leaseholder	<ul style="list-style-type: none"> 1 severe impact allowance 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).
		Sharecroppers (registered or not)	<ul style="list-style-type: none"> 1 severe impact allowance equal to market value of share of harvest lost (additional to standard crop compensation)
		Squatters	<ul style="list-style-type: none"> 1 severe impact allowance 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).
Residential/ Commercial Land		Titleholder	<ul style="list-style-type: none"> Land for land compensation through provision of plots comparable in value/ location to plot lost or Cash compensation for affected land at full replacement cost plus 15% CAS, free of taxes, registration, and transfer costs.
		Renter/ Leaseholder	<ul style="list-style-type: none"> 1-3 months' allowance at OPL i.e. Rs. 15,000/ month) or cash compensation based on actual affect to the land use.
		Squatters	<ul style="list-style-type: none"> Accommodation in available alternate land/ or a self-relocation allowance (Rs. 15,000).
Houses/ Structures		Owner of house structures	<ul style="list-style-type: none"> Cash compensation at replacement rates for affected structure and other fixed assets free of salvageable materials, depreciation and transaction costs. In case of partial impacts full cost of sturture restoration provided the remaining structure is viable for purposeful use.
Crops	Crops affected	All DPs (including squatters)	<ul style="list-style-type: none"> Crop compensation in cash at full market rate for one harvest (either winter or summer) by default for impacts caused by construction of grid/substation; tower base; towers erection; and stringing of wires. All other crop losses will be compensated at market rates based on actual losses. Lumpsum cash compensation at Rs. 15,000/ for crop losses being 10% or more.
Trees	Trees affected	Owner of trees	<ul style="list-style-type: none"> For timber/ wood trees, cash compensation equivalent to prevailing market price of timber/wood tree. Fruit trees: Cash compensation for fruit bearing trees based on annual net product market value multiply by 5 years.
Business/ Employment	Temporary or permanent loss of business or employment	All DPs suffering income losses (including squatters, agriculture workers)	<ul style="list-style-type: none"> Business owner: i) Cash compensation equal to one year income, if loss is permanent; (ii) cash compensation for the period of business interruption, if loss is temporary. Workers/ employees: Indemnity for lost wages for the period of business interruption up to a maximum of 3 months (at OPL level Rs. 15,000/ month).
Relocation	Transport costs	Owners of structures	<ul style="list-style-type: none"> Provision of transport expenses (Rs. 15,000).
Community assets	Mosques, foot bridges, roads, schools, health center	Affected community	<ul style="list-style-type: none"> Rehabilitation/ substitution of affected structures/ utilities (i.e. mosques, footbridges, roads, schools, health centers).
Vulnerable DPs	HHS below the poverty line; landless or those without title to land, elderly, female headed HHS, women, children and disabled, etc.	All affected vulnerable DPs	<ul style="list-style-type: none"> Lump sum one time livelihood assistance allowance (Rs. 15,000 at OPL Punjab) on account of livelihood restoration support. Temporary or permanent employment during construction or operation, wherever feasible.
Major impact: 10% or more	Affected land and crops	All DPs	<ul style="list-style-type: none"> Lumsup amount of Rs. 15,000/DP for 10% or more of crops lost.

Asset	Specification	Entitled Persons	Compensation Entitlements
productive assets lost			
Unidentified Losses	Unanticipated impacts	All DPs	<ul style="list-style-type: none">• Deal appropriately during sub-project implementation according to the ADB Safeguard Policy

7 INSTITUTIONAL ARRANGEMENTS AND IMPLEMENTATION

86. The coordination involved for various institutions for the implementation of LARP include NTDC (Executing Agency) and other line Departments, such as Revenue, Forest, Agriculture including Horticulture wing; Wapda, and other concerned.

87. The PMU (NTDC) will be responsible for the updation of this draft LARP at final detailed design and implementation of final LARP of 220 kV Mirpur Khas Substation with associated Transmission Lines. The Project Director (PMU) through the Environment and Social Impact Cell (E&SIC) will be responsible for the implementation of LARP in accordance with the procedures laid-down in this LARP and LARF.

7.1 National Transmission and Despatch Company

88. The NTDC (Executing Agency) will be responsible for the project preparation, implementation and financing of all LAR tasks and coordination with line agencies. NTDC will perform its functions through the Project Management Unit. The PMU is headed by a General Manager (Projects) will be responsible for general project execution through the Project Implementation Unit (PIU) at field level (District level), which will tasked with day to day project activities.

89. For updating, implementation and monitoring of LAR activities, the PMU (GM-Projects) will be facilitated by i) E&SIC at project level, ii) PIU at field level, iii) GRC at both field and project level to ensure timely implementation of LARP.

a) Environment and Social Impact Cell (E&SIC)

90. At project level, an E&SIC is already in place at PMU, NTDC, which needs to be strengthened by adding one position for data management/ MIS. Thus, the team composition of E&SIC includes:

i). Manager, E&SIC, NTDC	Focal Member
ii). Deputy Manager (Environment)	Member
iii). Assistant Manager (Social Safeguard)	Member
iv). Assistant Manager (Environment), NTDC	Member
v). Assistant Manager (MIS/ Data Management) ⁶	Member
vi). Surveyor	Member

91. In addition to ToR, the E&SIC will have the following functions in this sub-project:

- i). The E&SIC will be responsible for the updation, implementation and monitoring of land acquisition and resettlement plan through the assistance of PIU (Project Implementation Unit at field). The E&SIC will have regular monthly meetings to review the progress regarding LARP implementation and accordingly prepare actions in accordance with the implementation schedule given in the LARP.
- ii). The E&SIC will have close liaison and coordination with the PIU (field level) and Grievance Redress Committee (GRC).
- iii). The E&SIC will manage the updation of LARP at final design, including

6 For data management, a position of assistant manager, data management/ MIS will be added to undertake proper data management regarding, i) baseline data & impact data, ii) implementation of LARP, iii) grievances/ and redress of grievances, iv) internal & external monitoring and other relevant data.

updatation of surveys, measurements/ assessment, valuation in coordination with concerned department.

92. Some specific functions of the E&SIC through the assistance of field level PIU include:

- i). Implementation of approved LARP as per implementation schedule given in LARP.
- ii). Preparation of internal monitoring reports, initially on monthly basis and then quarterly basis and submits to ADB.
- iii). Updatation of LARP (if necessary depending upon the final design) including surveys, measurements/ assessment, valuation in coordination with concerned department and community consultations.
- iv). Disclosure of final LARP to the DPs and place at field office (PIU).
- v). Close coordination with field level PIU
- vi). Other relevant activities

93. All activities related to the LARP updatation, and implementation of LARP and preparation of internal monitoring reports will be the responsibility of Manager (E&SIC) under the overall supervision of PMU (GM Projects). While the disclosure of LARP after translating onto local language and continuous community consultations/ mobilization will be under the purview of Assistant Manager (Social Safeguard). Manager (E&SIC) will develop a close liaison with the PIU and GRC regarding a smooth and timely implementation of LARP.

b) Facility Management Consultant (FMC)

94. The ESIC's capacity to manage safeguard requirements, implement and internal monitor the LARPs and ensure compliance with safeguard requirements of the loan agreement, a Facility Management Consultant (firm) will be engaged by NTDC. FMC will have the safeguard experts in resettlement, grievance management, resettlement database and revenue expert (Patwari). They will assist NTDC/ESIC in establishing a central resettlement database, improving record keeping and grievance management and in internal monitoring of LARPs. The FMC will be hired by NTDC using the loan finds and FMC' experts will render intermittent input to NTDC/ESIC.

c) External Monitoring Consultant (EMC)

95. An independent monitoring consultant (EMC) acceptable to ADB will be engaged by NTDC who will undertake external monitoring of the implementation of LARP on a semiannual basis and provide monitoring reports to NTDC and ADB. As per SPS 2009, all monitoring reports will be disclosed to the displaced parties (DPs) including the preparation of corrective action plan (if any).

d) Project Implementation Unit (PIU)

96. The project implementation Unit (PIU) to be in place at field level and will be notified by the PMU. The composition of PIU will be as follow:

- i). Executive Engineer (NTDC)
- ii). DO (Revenue)/ LAC
- iii). Representative of E&SIC, PMU (AM, Social Safeguards)
- iv). Assistant Manager (Social Mobilization/ Social Mobilizer)
- v). Contractor
- vi). Project Management Consultant (Safeguard Implementation Specialist)

- vii). Patwari
- viii). Representative of Displaced Persons Committee (DPC).

97. The PIU to be notified at field level headed by the Executive Engineer, NTDC. The major responsibilities of PIU will include:

- Distribute the notices to the entitled DPs regarding their payment of compensation;
- Facilitate the DPs in completion of necessary documentation to receive their entitled payments;
- Develop a close interaction with the DPs/ community to address their possible concerns.
- Provide proper guidance for the submission of their requests for compensation as per eligibility & entitlement.
- Help the DPs to put their complaints (if any) in front of GRC, if still issue not resolved consult the Court of law.
- Help the DPs in other related activities.

98. The PIU will have close interaction with E&SIC especially with Manager (E&SIC) and AM (Social Safeguards).

7.2 Local Government

99. The concerns relating to the land acquisition (if any) will be dealt by the concerned District Officer (Revenue)/ LAC. Other supporting staff especially the Patwari will carry out some specific functions like titles identification as per revenue record. The functions pertaining to compensation of other assets, such as trees, crops, structures and income rehabilitation/ livelihood assistance, the assessment and valuation will be carried out by the LAC in coordination with District Officer (s) of concerned Departments.

7.3 ADB

100. Review and approval of documents, i.e. LARP, internal monitoring and external monitoring reports as well corrective action plan (if any).

7.4 LAR Coordination Committee

101. With the effective coordination of all concerned departments/ agencies, the assessment and valuation of losses will be carried out and accordingly, payment of compensation will be made to eligible and entitled DPs. Timely payment to the DPs will ensure the smooth implementation of this sub-project. This committee will be notified by the EA (PMU-NTDC) in order to coordinate for updation and implementation of this LARP.

102. The composition of the committee will include:

- i). GM Projects (PMU, NTDC)
- ii). Manager (E&SIC)
- iii). Executive Engineer (PIU)
- iv). DO (Revenue)/ LAC
- v). DO (s) of concerned Departments (such as Agriculture, Forest, C&W, PHE)

103. The LAR CC will meet preferably quarterly to ensure proper and timely implementation of the approved LARP.

7.5 Displaced Person Committee

104. The displaced person committee (DPC) will be formed at sub-project level representing the participation from each village constituting a Chairman, secretary and member (s).

105. The DPC will be responsible for the following activities:

- Interaction between the community/ affectees and the PIU
- Information disclosure and consultations
- Help in the completion of requisite documents for payment
- Ensure the payment of compensation in accordance with the entitlement matrix/ LARP.
- Redress complaints at local level
- Other

7.6 Grievance Redress Mechanism

106. This section of the LARP describes mechanism to receive and facilitates the resolution of affected party including women' concerns and grievances. A grievance mechanism will be available to allow an DP appealing any disagreeable decision, practice or activity arising from land or other assets compensation. DPs will be fully informed of their rights and of the procedures for addressing complaints whether verbally or in writing during consultation, survey, and time of compensation.

107. DPs/ local community will enter their complaints/ concerns and issues formally including the information of date, name and address of complainant, description of complain. The Assistant Manager (social mobilization) at PIU will maintain a register named as "*community complaint register (CCR)*". The register will include the information as date, name and address of complainant, description of complaints, and will enter the complaints in a date covering the minimum information of name and address of complaint, description of complaints, action taken, status of redress of complaints and reasons in case issue not resolved.

108. GRC will work at field level, while unsettled issues will be referred to the PMU at sub-project level. The field level PIU (AM Social Mobilization) will inform the affected persons about GRC and its mechanism by passing the information at known places.

109. Efforts will be made to avoid the DPs/ community concerns by implementing the sub-project in accordance with the LARP, i.e. proper information disclosure, community consultations, payments as per entitlements and coordination with DPs/ APC, PIU and PMU. However, a Grievance Redress Committees (GRC) will also be established to redress the unresolved issues.

110. The composition of GRC will as below:

GRC at PIU Level

- i). Executive Engineer (NTDC)
- ii). DO (Revenue)/ LAC
- iii). Representative of E&SIC
- iv). Assistant Manager (Social Mobilization)/ Social mobilizer
- v). Representative of Affected Person Committee (APC)

vi). Patwari

111. A comprehensive grievance redress process regarding land compensation and other compensation is described below. The grievance redress mechanism will be gender responsive, culturally appropriate, and readily accessible to the DPs at no cost and without retribution.

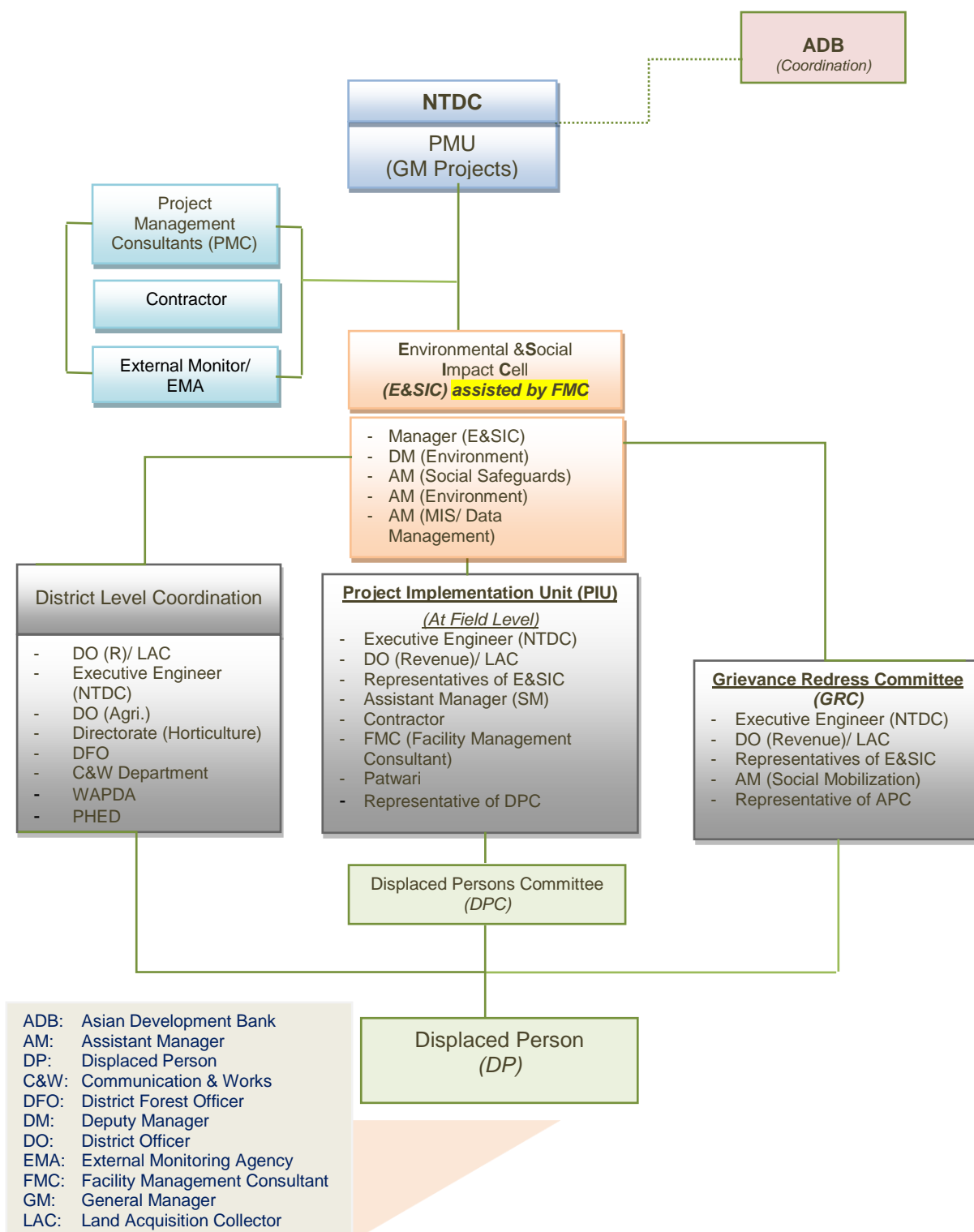
Grievance Redress Process

Land Compensation Issues	Other Items Compensation Issues
<ul style="list-style-type: none"> First, complaints will be redressed at field level through the involvement of PIU and APC as well as other local committees. 	<ul style="list-style-type: none"> First, complaints will be redressed at field level through the involvement of PIU and APC as well as other local committees.
<ul style="list-style-type: none"> If issue is unresolved, then it will be lodged to the DO (Revenue)/ LAC who will have 14 day to make decision on it. 	<ul style="list-style-type: none"> If no solution is accomplished, then grievance will be lodged to GRC. The GRC will provide the decision within 3 weeks. The GRC decision must be in compliance with this LARP and provisions given in the LARF.
<ul style="list-style-type: none"> If issue still unsettled, then grievance will be forwarded to GRC. GRC will provide decision within 3 weeks, which should be in compliance with the LARP and provisions given in the LARF. 	<ul style="list-style-type: none"> If the grievance redress system does not satisfy the DPs, then, the grievance can be submitted to the GM Projects (PMU), where decision will be made in a period of 2 weeks.
<ul style="list-style-type: none"> In case, the grievance redressal system does not satisfy the DPs, then they can pursue by submitting their case to the appropriate court of law as per the process set out in Section 18 to 22 of the LAA 1894. 	<ul style="list-style-type: none"> If still DPs are not satisfied, they can pursue their case to appropriate Court of law.

7.7 Organogram

112. An Organogram showing the institutional arrangements for the implementation of LARP has been illustrated through a diagram presented in Figure 7.1.

Figure 7.1: Institutional set-up for the Implementation of LARP



8 LARP IMPLEMENTATION SCHEDULE

8.1 Implementation Schedule

113. The commencement of civil work will be subject to the satisfactory implementation of this LARP including payment of compensation for the loss of land, crops and trees; and also redress of community concerns. Implementation of LARP will be in three phases linked with construction phases. These are (i) construction of foundation bases/footing, (ii) erection of towers, and (iii) stringing of wires. As per ADB policy, DPs will be compensated before start of any construction phase. This will also be monitored and verified by external monitoring consultant. The LAR activities of this LARP have been tentatively timed in the table 801 below, which will be updated if the activities are significantly delayed.

Table 8.1: Implementation Schedule of LARP

Sr. No.	Action	Timeline	Responsibility	Remarks/ Status
1	Establishment of PMU	Exists	NTDC	Already in place
2	Setting-up of E&SIC	Exists	NTDC	Already in place
3	Project Implementation Unit (PIU) at field level	Exist	NTDC	Already in place
4	Establish Grievance Redress Mechanism and GRC will be notified.	Dec. 2017	NTDC	GRC will be notified.
5	Submission of draft RP to ADB	31 Jan 2017	NTDC/ESIC	
6	Updated or final RP (if) required	Nov 2017	ESIC/Consultant	
7	Approval of final RP	Dec 2017	ADB	
8	Urdu translation and disclosure of RP	Dec 2017	ESIC/Consultant	
9	Facility Management Consultant (FMC), social safeguards personnel (GRM and MIS experts, Patwari and enumerators/social mobilizers)	Dec. 2017	NTDC/ ADB	To be engaged
10	Hiring of External Monitoring Consultant (EMC)	Dec 2018	ESIC/ADB	
11	Date of procurement-bidding	Sep 2017	NTDC	
12	Expected or definite dates of following			
	• Expected date of contract award(expected)	Nov 2017	NTDC	
	• Contractor Mobilization	Dec 2017	NTDC/ Contractor	
	• Commencement of Construction	Dec-2017-Jan 2018	NTDC/ Contractor	
	• Foundation work	Feb. 2019	Contractor	
	• Towers erection	Mar. 2020	Contractor	
	• Stringing of wires	June 2021	Contractor	
13	First quarterly internal monitoring report (IMR)	Mar. 2018	FMC/ESIC	
14	First external monitoring report subsequent reports	Mar 2018	FMC/ESIC	
15	Subsequent Semi-annual Reports	Six monthly	FMC/ESIC	
17	Notification of GRM/GRC	Sep. 2017	NTDC/ESIC	
18	Community Complaints Register	Oct. 2017	NTDC/PIU	
19	Central resettlement database including record of payments and management information system	Jan. 2018	ESIC/ FMC	To be continued till the completion of the project.

Figure 8.1: LARP Implementaion Schedule

Main Activities	Tentative Date	2017	2018	2019	2020	2021	Remarks
Establishment of PMU	-	-	-	-	-	-	Already in place
Setting-up the E&SIC	-	-	-	-	-	-	Already in place
Project Implementation Unit (PIU) at field level	-	-	-	-	-	-	Already in place
Establish Grievance Redress Committee (GRC).	Dec. 2017						
Submission of draft RP to ADB	31 Jan 2017						
Updated or final RP	Nov. 2017						
Approval of final RP	Dec. 2017						
Urdu translation and disclosure of RP	Dec. 2017						
Hiring of FMC	Dec 2017						
Hiring of External Monitoring Consultants (EMC)	Dec 2018						
Date of procurement-bidding	Sep 2017						
<u>Expected dates:</u>							
• Expected date of contract award(expected)	Nov 2017						
• Contractor Mobilization	Dec 2017						
• Commencement of Construction	Dec-2017-Jan 2018						
• Foundation work	Feb. 2019						
• Towers erection	Mar. 2020						
• Stringing of wires	June 2021						
First quarterly internal monitoring report (IMR)	Mar. 2018						
First external monitoring report subsequent reports	Mar 2018						
Notification of GRM/GRC	Sep. 2017						
Community Complaints Register	Oct. 2017						
Central resettlement database including record of payments and management information system	Jan. 2018						

9 RESETTLEMENT BUDGET AND FINANCING

114. The LARP preparation and implementation costs, including cost of compensation and LAR administration, will be considered an integral part of project cost. This section of LARP includes a budget including; i) methodology followed for the computation of unit compensation rates; ii) unit compensation rates for all affected items and allowances; iii) a table showing resettlement budget including administrative costs and contingencies.

9.1 Compensation Methodology

115. Based on the field survey, it was observed that due to the implementation of the proposed sub-project, there will be impact on land, crops, trees and other assets.

116. To represent the current market rates equivalent to the replacement cost, the requisite data was collected from different departments including agriculture, forest, revenue, horticulture and Directorate of Economics & Marketing.

117. The unit rate of crops and trees by type is given in Table 9.1 and 9.2 respectively.

Table 9.1: Assessment of Value of Crops per Acre

Crops	Area Sown (Acres)	Av. Yield/ Acre (kgs.)	Total Production (40 kgs)	Price(R s./ 40 kg)	Total Value of Crops Sample Farms (Rs)	Value of Crop as per Compensation (Rs./ Acre)
Wheat	177.92	32	5693.44	1338	7,617,823	42,816
Rice	316.29	34	10753.86	1450	15,593,097	49,300
Cotton	425.02	27	11475.54	2000	22,951,080	54,000
Fodder	69.19	-	35000.00	-	2,421,650	35,000
Total Value of Crops/ Acre (Rs.)	988.42	-	-	-	48,583,650	49,153

Source: <http://www.amis.pk/ViewPrices.aspx?searchType=1&commodityId=70> see annex-9.3

Table 9.2: Price Assessment of Trees

a) Wood Trees

Wood/ Timber Trees	Size of Girth			
	Upto 2 Feet (Rs./ tree)	Between 2 – 4 feet (Rs./ Tree)	Between 4 – 6 feet (Rs./ Tree)	Between 6 feet and above (Rs./ Tree)
Tali (Sheesham)	2,000	5,000	12,000	21,000
Other species (i.e Eucalyptus, Kiker, Bakin, Babur etc)	1,000	2,000	3,500	15,000

Source: Sindh Forest Department

b) Fruit trees

Sr. No.	Name of Fruit Tree	1 st Year	2 nd Year	3 rd Year	4 th Year	5 th Year	6 th Year	7 th Year	8 th Year	9 th Year	10 th Year and Above
1	Mango Grafted	500	1,800	2,200	3,000	3,500	5,000	6,500	9,000	11,000	13,500
2	Mango Desi	400	1,500	2,000	2,500	3,000	3,500	5,500	8,000	9,000	11,000
3	Ber Grafted	150	250	800	900	1,500	2,000	2,500	3,000	3,500	4,500
4	Ber Desi	100	150	350	600	1,100	1,500	2,000	2,500	3,000	3,200
5	Jaman	400	1,200	1,500	2,000	2,500	4,000	4,500	5,000	6,500	8,000
6	Date Palm	400	800	1,500	2,200	2,500	3,000	3,500	4,500	6,000	6,500
7	Citrus	300	500	700	1,200	1,800	2,200	3,000	4,000	5,000	6,000
8	Chiku	500	2,000	2,500	300	4,000	5,000	6,000	7,000	9,000	12,000
9	Guava	300	1,500	2,000	2,500	3,000	3,500	4,000	5,000	6,000	8,000

10	Papaya	1,000	1,500	1,500						
11	Banana	300	900	1,200	1,500					

Source: Horticulture Research Institute Mirpur Khas, Sindh.

9.2 Source of Financing

118. Finances for compensation, allowances, and administration of LARP preparation and implementation will be provided by the Government as counterpart funds. Costs for external monitoring tasks can be allocated under the loan. In order to ensure that sufficient funds are available for LAR tasks, the governments will have to allocate 100% of the cost of compensation at replacement cost and expected allowances estimated in LARP plus 5% of contingencies before LARP implementation.

119. The EA (NTDC) is responsible for the timely allocation of the funds needed to implement this LARP.

120. As per the flow of LAR finances it is noted that the budget for land and crop compensation will be disbursed by NTDC to the District Collector Office which in turn, through the LAC will disburse the compensation to the DPs/ or concerned department/ agency. In case of compensation funds for other assets (structures), restoration works, employment, income loss, etc. will go from NTDC to the PMU which will disburse the funds to the DPs with assistance from the PIU.

9.3 Resettlement Budget

121. The resettlement budget was estimated keeping in view the sub-project impacts including land, crops and trees as well as other assistance to the DPs. The total amount of LAR activities computed to be Rs.137.21million (\$1.29 M.) as presented in Table 9.3.

122. The compensation to individual DP is presented in Annex 9.1 and 9.2.

Table 9.3: Resettlement Budget

Sr. No.	Description	Unit	Quantity	Unit Rate (Rs.)	Amount (Rs in M.)	Remarks
A)	Permanent Land Acquired					
	Construction of Substation	Acres	50.04	1,500,000	75.06	See annex- 9.1
	Sub Total (A)				75.06	
B)	Affected Crops					
	a) Tower Installation					
	i). Tower Base	Acres	12.73	49,153	0.63	See annex-9.2 & table 9.1.
	ii). Erection	Acres	12.73	49,153	0.63	
	iii). Stringing	Acres	12.73	49,153	0.63	
	b) Transmission Line					
	i) Stringing activity	Acres	975.69	49,153	47.96	Stringing activity at T/L portion
	Sub Total (B)				49.84	
C)	Affected Trees					
	Wood Trees	Nos.	320	-	0.56	See annex-9.5
	Fruit Treess	Nos.	305	-	2.18	See annex-9.4
	Sub Total (C)				2.74	
D)	Water Course (Kacha)	Nos.	1	500,000	0.5	
E)	Livelihood Assistance					

	Vulnerable allowance to DPs below poverty line.	Nos.	23	15,000	0.35	
	Severity allowance for 10% or more of productive land lost	Nos.	8	45,000	0.36	
	Severity allowance for 10% or more of crops lost	Nos.	56	15,000	0.86	
	Sub Total E				1.57	
F)	External Monitoring Agency	-	-	-	2.0	-
	Sub-total (A+B+C+D+E+F)	-	-	-	130.71	
	Contingencies @ 5%	-	-	-	6.53	
	Grand Total (Rs. M.)	-	-	-	137.21	
	US\$ (M.)				1.29	

1 US \$= Rs. 106.2 as of April, 2017.

10 MONITORING AND EVALUATION

10.1 General

123. LAR tasks under the sub-project will be subjected to both internal and external monitoring. Internal monitoring will be conducted by the PMU. External monitoring will be assigned to an External Monitoring Consultant (EMA) to be hired by NTDC, and approved by ADB. The EMC will be selected among local consultants/ consulting firms.

124. ADB will prepare the terms of reference (TOR) for the EMC before to start the LARP implementation.

10.2 Internal Monitoring

125. Internal monitoring will be carried out by the PMU through E&SIC assisted by the FMC's safeguard experts. The results will presented in the quarterly internal monitoring reports and submitted to ADB.

126. The internal monitoring reports include the 'process' and 'output' indicators. This information will be collected directly from the field and reported monthly by PIU to the PMU in order to assess the progress and results of LARP implementation, and to adjust the work plan/ activities in accordance with the LARP requirements as well as implementation schedule.

127. The following will be the specific aspects to be covered under the internal monitoring report.

- a) Consultation with DPs and information disclosure;
- b) Disbursement of compensation for the affected items – land, structures, crops, tree and other assets;
- c) Relocation of community structures/ public utilities ;
- d) Payments for loss of income;
- e) Land for land compensation (if any);
- f) Income restoration activities;
- g) Status of grievance redressal;

128. The above information will be collected by the Manager (E&SIC) through Assistant Manager (Social Safeguard) and PIU including Assistant Manager (Social Mobilization).

10.3 External Monitoring

129. External monitoring will be carried out by the External Monitoring Consultant to be hired by the NTDC among the local consultants/ consulting firms.

130. The external monitoring activities will have short and medium term tasks. The short term tasks will occur in parallel and immediately after the delivery of LARP compensation. They will prepare a compliance report which is a condition to start civil works.

131. External monitoring reports will be prepared on semiaannual basis but additional EMRs may also prepared before start of each construction phase, as required by ADB.

132. The proposed indicators for external monitoring tasks include:

- a) Review and validate the internal monitoring reports prepared by PMU (E&SIC);

- b) Status of LARP implementation including payment of compensation to the DPs;
- c) Review the status of relocation of community structure/ public utilities;
- d) Status of redressal of community complaints and time spent to resolve the community grievances;
- e) Carry out the consultations with DPs, officials of project management and other concerned departments to share the feedback/ lessons learnt;
- f) Identify gaps regarding LARP implementation and suggest remedial measures; and also develop a corrective action plan
- g) Assess the LAR implementation efficiency, effectiveness, impact and its sustainability.

133. The EMC will also assess the status of project affected vulnerable groups such as female-headed households, disabled/elderly and families below the poverty line.

PHOTOLOG

PICTORIAL PRESENTATION

Photograph 1: A view of Proposed 220 kV Mirpur Khas Substation at village Dolat Laghari District Mirpur Khasdi



Photograph 2: Meeting with the Land Owners of the proposed 220 kV Mirpur Khas Substation at Mirpur Khas.



Photograph 3: Discussion with the one of the major land owner of the proposed 220 kV Mirpur Khas Substation at Mirpur Khas



Photograph 4: A view of consultative meeting with DPs at Dolat Laghari near proposed 220 kV Mirpur Khas Substation at Mirpur Khas.



Photograph 5: Discussion with the land woners of the of the proposed 220 kV Mirpur Khas Substation at Mirpur Khas.



Photograph 6: A view of kacha water course located in the proposed 220 kV Mirpur Khas Substation at Mirpur Khas.



Photograph 7: A view of discussion with owners of agriculture land, from where proposed T/L will pass.



Photograph 8: A view of affected agriculture land and Mango Trees from where TL will pass.



Photograph 9 : A view of discussions/ interviews with DPs



Photograph 10 : A view of discussions/ interviews with DPs



Photograph 11: A view of discussions/ interviews with DPs



Photograph 12 : A view of discussion with DP of agriculture land from where T/L will pass.



Photograph 13 : A view of discussion with DP of agriculture land from where T/L will pass.



Photograph 14 : A view of discussion with DP of agriculture land from where T/L will pass.



Photograph 15: A view of consultation with DP of agricultural land from where 220 kV D/C T/L will



Photograph 16: A view of affected trees due to proposed 220 kV D/C T/L.



Photograph 17: A view of consultative meeting with DP/ local community members.



Photograph 18: A view of consultative meeting with DP/ local community members.

ANNEXES

Annex-1: Subprojects of Tranche 2

Subproject	Status of Safeguards
Subproject 1: 220 kV Mirpur Khas Substation with associated Transmission Lines	
<ul style="list-style-type: none"> • A new 220kV Mirpur Khas New S/S with 220/132kV, 2x250 MVA transformers with allied equipment and accessories. • Extension of two line bays at 220 kV Hala Road S/S • 220 kV D/C T/L looping in/out of Hala Road - Jamshoro 220kV T/L at Mirpur Khas New S/S (70 km) • 220 kV D/C T/L looping in/out of Jamshoro – T.M. Khan Road 220 kV D/C T/L at Hala Road (10 km) 	<ul style="list-style-type: none"> • About 50 acres of private agriculture land (owned by 11 land owners) will be permanently acquired for SS. while the TL component will temporarily affect 988 acres of farm land owned by 102 DPs. • Draft LARP of IR category B prepared/reviewed in June 2017. • The draft LARP will be updated by NTDC based on the final design of subproject by turn-key contractor, expected in Q4 of 2017.
Subproject 2: D.I. Khan-Zhob Substation and 220 kV Transmission Line	
<ul style="list-style-type: none"> • 220 kV D/C T/L from D.I. Khan to Zhob S/S. (220 km). • 220kV Zhob substation consisting of two 220 kV transformer bays for 220/132kV, 2x160 MVA transformers, two 220 kV line bays and six 132 kV line bays along with allied equipment and accessories. • Extension of two line bays at 220 kV D.I Khan S/S 	<ul style="list-style-type: none"> • About 50 acres of private agriculture land (owned by 5 land owners) will be permanently acquired for SS. while the TL component will temporarily affect an estimated 1668.7 acres of farm land owned 505 DPs. • Draft LARP of IR category B prepared/reviewed in June 2017, which will be updated by NTDC based on the final design of subproject by turn-key contractor, expected in Q4 of 2017.
Subproject 3: Construction of New 220 kV Guddu- Shikarpur-Uch-Sibbi Transmission Line	
<ul style="list-style-type: none"> • 220kV S/C T/L Guddu to Interconnection point of 220kV Shikarpur (150 km) • 220kV S/C T/L Shikarpur Interconnection point to Uch power plant (100 km) • 220kV S/C T/L Uch Power Plant to 220kV Sibbi Substation (110 km) 	<ul style="list-style-type: none"> • Permanent land acquisition no involved. • TL is expected to temporarily affect an estimated 4447.9 acres of land (4027.8 acres of which is cultivated while remaining ~420 acres is barren). • A draft RP of IR category C has been prepared/reviewed in June 2017, which will be updated based on the TL route to be finalized by turn-key contractor, expected in 4th Q of 2017
Subproject 4: Supervisory Control and Data Acquisition (SCADA) and Revenue Metering System (RMS)	
<ul style="list-style-type: none"> • Renovation of a dispatch center at NPCC with updated hardware/software • Expansion of fiber optic backbone and backup microwave system • Renovation of an additional backup control center at Jamshoro • Completion of SCADA Phase 2 • Connection of all Common Delivery Points to the SCADA System • Installation of Remote Terminal Unit (RTU) interfacing with SCADA System 	<p>No LAR impacts involved. A DDR of IR category C has been prepared.</p>

D/C = double circuit, km = kilometer, kV = kilovolt, MVA = megavolt-ampere, MVAR = megavolt-ampere reactive, MW = megawatt, RMS = revenue metering system, SCADA = supervisory control and data acquisition, S/C = single circuit, S/S = substation, T/L = transmission line.

Annex-3.1: List of Land Owners of proposed 220 kV Mirpur Khas Substation

ID	Owner's Name	Father's Name	Caste	Village	Tehsil	District	Land Use Category	Khasra No./ Survey No.	Total Land Holding (Acres)	Affected Land (acres)	Extent of Impact (%)	Ownership Status	Occupation	
													Main	Secondary
1	Mr. M. Shahazad	Nabi Bakhsh	Laghari	Dolat Laghari	Shujabad	Mirpur Khas	Agricultural Land	179/181	18	6.00	33.33	Owner	Farming	Job
2	Mr. Noor M.	M. Dotali	Meo	Dolat Laghari	Shujabad	Mirpur Khas	Agricultural Land	182/183	7	7.00	100.00	Owner	Farming	Livestock
3	Late Ali Sher	M. Dotali	Meo	Dolat Laghari	Shujabad	Mirpur Khas	Agricultural Land	182/183	7	7.00	100.00	Owner	Farming	Livestock
4	Mr. M. Suleman	Noor M.	Laghari	Dolat Laghari	Shujabad	Mirpur Khas	Agricultural Land	180/297	11.5	4.00	34.78	Owner	Farming	Livestock
5	Mr. Khair M.	Late Haji Sohbat	Laghari	Dolat Laghari	Shujabad	Mirpur Khas	Agricultural Land	300/184	22	5.00	22.73	Owner	Farming	Job
6	Mr. Abdul Hakim	Abdul Khaliq	Laghari	Dolat Laghari	Shujabad	Mirpur Khas	Agricultural Land	299	32	4.00	12.50	Owner	Farming	
7	Late Bae	Late Haji Sohbat	Laghari	Dolat Laghari	Shujabad	Mirpur Khas	Agricultural Land	301	5	4.84	96.80	Owner	Farming	
8	Mr. Muhammad	Abdul Khaliq	Laghari	Dolat Laghari	Shujabad	Mirpur Khas	Agricultural Land	299/297	42	9.20	21.90	Owner	Farming	
9	Mr. Noor M.	M. Suleman	Laghari	Dolat Laghari	Shujabad	Mirpur Khas	Agricultural Land	189-A/189-B	14	1.00	7.14	Owner	Farming	Pension
10	Mr. Ghulam M.	M. Suleman	Laghari	Dolat Laghari	Shujabad	Mirpur Khas	Agricultural Land	189-A/189-B	13	1.00	7.69	Owner	Farming	Job
11	Mr. Nabi Bakhsh	M. Suleman	Laghari	Dolat Laghari	Shujabad	Mirpur Khas	Agricultural Land	189-A/189-B	14	1.00	7.14	Owner	Farming	Pension
							Total		185.5	50.04				

Annex-3.2: List of Land Owners and Affected Cropped Area of Tower Spotting

ID	Name	Father's Name	Village	District	Total Land Holding (Acres)	Affected Land (Acres)	Extent of Impact (%)
220kV D/C T/L T.M.Khan - Hala Road (10 km)							
1	Gul Sher	M. Rahim	Khuda Bux Gopang	Hyderabad	1.5	0.5	33.33
2	Ghulam M	Sher M.K	Khud Bux	Hyderabad	3.5	0.75	21.43
3	M Azam	Ali Khan	Khuda Bux Gopang	Hyderabad	0.5	0	0.00
4	Raza Ali Mirza	Abid Mirza	Tando Thoro	Hyderabad	170	3	1.76
5	Ghulam Hyder	Bilawal Chand	Long Chand	Hyderabad	6	0.5	8.33
6	M. Gulam	M. Yusuf Chand	Rong Chand	Hyderabad	12	0.75	6.25
7	Ashiq Khaskheli	Gul Muhammad	Agan Khaskheli	Hyderabad	14	0.9	6.43
8	D.r Zamin Hussain	Mirza Abid	Khuda Bux Gopang	Hyderabad	84	2	2.38
9	Khuda Bux Parhyar	Akoo Parhyar	Perozo Parhyar	Hyderabad	6	0.5	8.33
10	Khuda Dino	Adam Khan	Ali Bux Gopang	Hyderabad	20	1.25	6.25
11	M.Saleem	Allah Rakhyo	Haji Hadi Bux	Hyderabad	22	1.5	6.82
12	Safdar	Muhammad	Parho Gopang	Hyderabad	10	0.5	5.00
13	Haji Qadam Shoro	Gul.M.Shoro	Sukhapur	Hyderabad	70	0.5	0.71
14	Achar Shoro	Khameso	Khameso Shoro	Hyderabad	40	1.25	3.13
15	Adal Shoro	Muhammad	Achar Shoro	Hyderabad	8	0.25	3.13
16	Ishaque Shoro	Bachoo Shoro	Watto Shoro	Hyderabad	10	0.25	2.50
17	Bashir Balochi	G.Hussain Master Balochi	Balochi Goth	Hyderabad	5	0.5	10.00
18	M.Tufail	Aashique Ali Rajput	Hosri City	Hyderabad	4	0.1	2.50
19	Aklotar Ali	M.Rafique Rajput	Hosri City	Hyderabad	4	0.5	12.50
20	Noor Muhammad	M.Hussain Samoo	Jamal Kachi	Hyderabad	28	1.3	4.64
21	Arfat Nohani	A.Rahman Raheem Baloch	Hosri City	Hyderabad	45	0.75	1.67
22	D.r Dost M.Shoro	Haji Jam Shoro	Haji Mosa Shoro	Hyderabad	250	3.85	1.54
23	Murtaza Shoro	Haji Hashim	Mrtaza shorohyd	Hyderabad	300	2.5	0.83
24	Ramzan Shoro	M.Hassan	Hassan Shoro	Hyderabad	3	0.25	8.33
25	Wali Mohammad	M.Qasim Shoro	Wali M Shoro	Hyderabad	35	0.75	2.14
26	M. Bachal Shoro	Allah Dino	Wali M Shoro	Hyderabad	3	0.1	3.33
In/Out of 220kV D/C T/L Hala Road - Jamshoro at Mirpur Khas (70km)							
27	Shafi Muhammad	Pir Bux	Pir Bux	Hyderabad	5	0.25	5.00
28	Majeed Panjabi	Iqbal	Sahib Khan Merani	Hyderabad	7.5	0.5	6.67
29	Mubeen Detho	Haji Ghulam	Mangsi Goth	Hyderabad	5	0.25	5.00
30	Khalid Kaim Khani	Hamid Kaim Khani	Ditha Station	Hyderabad	2		
31	Mohammad Bux	M. Soomar	Haji Mochar	Hyderabad	2.5		
32	Nazar M Detho	M Idrees	Idrees Goth	Hyderabad	28.5	0.5	1.75
33	Sain Bux	Haji Hashim	Detha Station	Hyderabad	20	0.25	1.25
34	Inayat Ali	Khan Muhammad	Akk Detho	Hyderabad	50	0.25	0.50
35	Ali Ahmed Zaur	Alla Daad	Ranjho Khan	Hyderabad	7.5	1.25	16.67
36	Khawand Bux Jahejo	M Hashim	Khawind Bux	Hyderabad	200	1	0.50
37	Basheer Ahmed chandio	Haji Khair Muhammad	Rahuki	Hyderabad	80	0.75	0.94
38	Dr: Zameer Pathan	Meer M Pathan	Shah Nawaz Junejo	Hyderabad	80	0.5	0.63
39	Gulam Mustafa Junejo	Rasool Bux Junejo	Noor M Junejo	Hyderabad	150	1.5	1.00

ID	Name	Father's Name	Village	District	Total Land Holding (Acres)	Affected Land (Acres)	Extent of Impact (%)
40	Makhdoom Hussain Shah	Taffar Husain Shah	Dhamach	Hyderabad	180	0.5	0.28
41	M Nawaz Dhamach	Mohib Dhamach	Dhamach	Hyderabad	2	0.25	12.50
42	M. Hussain Noorani	H Abdul Nabi	Haji Abdul Nabi Noorani	Hyderabad	14.5	0.5	3.45
43	Mir Zamin Hussain	Mir Ghulam Hyder	Mir Zamir Koat	Hyderabad	175	0.75	0.43
44	Malik Asad	Malik Sikandar	Gul M Burfat	Hyderabad	350	2.25	0.64
45	Abdul Malik	M Sabir	Dehli farm tando Jam	Hyderabad	23	0.75	3.26
46	Abul Hassan	M Saleheen	Dehli farm tando Jam	Hyderabad	47	1.25	2.66
47	Aijaz Ali Dhamach	Muhammad	Tando jam Town	Hyderabad	66	0.25	0.38
48	Mir Manzoor Talpur	Gulam Server	Mir goth	Hyderabad	750	1.25	0.17
49	Mohib Ali Mari	Khan Muhammad	Razdin Mari	Hyderabad	70	0.5	0.71
50	Haji Ali Nawaz Gopang	Gul Hassan	Sarrang Faqeer	Hyderabad	1200	1.65	0.14
51	Ali murtaza gopang	gulam mustafa gopang	Sarang faqeer gopang	Hyderabad	16	-	-
52	Dr Raheela gul magsi	H. Allah Bux Magsi	Allah Bux magsi	Tando Allah yar	700	2.6	0.37
53	Toufeeque Khoso	Sajawal khoso	Allah rakhio khoso	Tando Allah yar	6	-	-
54	Ashraf khan kolai	jalal khan kolai	jamal khan kolai	Tando Allah yar	550	3.25	0.59
55	Ahmed nahiyun	Haji bhajhee	Abdullah nahiyun	Tando Allah yar	6	-	-
56	Mataro	Hassan Ali	sabhago kabi	Tando Allah yar	2	-	-
57	khan muhammad	Allah warayo	Sabhyo khan kalhao	Tando Allah yar	6	-	-
58	H Abdul rasheed bachari	Mohammad bachari	haji rasheed	Tando Allah yar	275	1	0.36
59	Raja Ahmed bachari	Suhail Adeeb Ahmed bachari	Suhail sahab	Tando Allah yar	130	0.75	0.58
60	Lal muhammad laghari	khair M Laghari	Dhinganro Bozdar	Tando Allah yar	60	0.25	0.42
61	Haji Ghulam Hussain Jamali	Lal Mohammad	Shah M. Jamali	Tando Allah yar	200	0.75	0.38
62	Haji Akber Memon	Haji Sadiq Memon	Haji Nazeer (Rashidabad)	Tando Allah yar	300	0.75	0.25
63	Mehmood Behrani	G.Qadir	Haji Nazeer Goth	Tando Allah yar	8	-	-
64	M. Saqib Kaimkhani	Saleem Qaimkhani	Magsi Park	Tando Allah yar	117	1.2	1.03
65	Irfan Gul Magsi	Haji Allah Bux	Magsi Farm	Tando Allah yar	110	0.5	0.45
66	Abdul Salam	Haji Mohammad	Tando Allahyar	Tando Allah yar	10	0.2	2.00
67	Amanullah Memon	Haji Saifullah	Jamali Pump	Tando Allah yar	4	-	-
68	Asif Iqbal	Haji Iqbal Memon	Haji Iqbal Memon	Tando Allah yar	250	1	0.40
69	Haji Shafi M. Pitafi	Ali Murad	Ghulam hussain Pitafi	Tando Allah yar	100	0.75	0.75
70	Tamoor Khanzada	Haji Hayat	Tando Allahyar	Tando Allah yar	23	0.5	2.17
71	Haji Yousuf Halepoto	Haji Umer Halepoto	Qazi M. Halepoto	Tando Allah yar	18	0.25	1.39
72	A. Kareem	Safdar Kalro	Metlo Kalro	Tando Allah yar	18	0.25	1.39
73	Dr. Zuber Yousfani Memon	Haji Nazir	Bashir Ahmed Yousfani	Tando Allah yar	600	1.25	0.21
74	Shair M. Kalro	Khair M. Kalro	Bhatti Hotel	Tando Allah yar	3	-	-
75	A. Hafeez Yousfani Memon	A. Qadir Yousfani	A. Qadir Yousfani	Tando Allah yar	400	0.75	0.19
76	Mushtaq Shah Jilani	Pir Gul M. Shah Jilani	Noor Ahmed Shah Jilani	Tando Allah yar	90	0.25	0.28
77	Haji Moula Bux	Haji Mohammad Bux Brohi	Haji Mohammad Bux Brohi	Tando Allah yar	56	0.25	0.45
78	Khadim Hussain Gopang	Qadir Bux Gopang	Qadir Bux Gopang	Tando Allah yar	15	0.4	2.67
79	Ali Ahmed Gopang	Mubarak Ali	Qadir Bux Gopang	Tando Allah yar	16	0.3	1.88
80	A. Shakoor Kakepoto	Abu Bakar	M.Soomar Kakepoto	Tando Allah yar	20	-	-
81	M.Siddique Kakepoto	M. Ishaque Kakepoto	Haji Umer Kakepoto	Tando Allah yar	2	-	-
82	Dr. Noor M. Kakepoto	Haji Mohammad	Haji Umer Kakepoto	Tando Allah yar	8	-	-

ID	Name	Father's Name	Village	District	Total Land Holding (Acres)	Affected Land (Acres)	Extent of Impact (%)
83	M. Zafar Kakepoto	U. Usman	Haji Umer Kakepoto	Tando Allah yar	16	0.1	0.63
84	Pir A. Hameed Qureshi	Pir Taj M. Qureshi	Hameed Farm/Kamaro Shareef	Tando Allah yar	18	0.1	0.56
85	Rasool Bux Dall	Mohammad Bux Dall	Agaya Dino Dall	Tando Allah yar	80	0.5	0.63
86	Shoukat Halepoto	M. Saleh Halepoto	Shoukat Halepoto	Tando Allah yar	36	0.25	0.69
87	Munawer Halepoto	M. Ali Halepoto	M. Ali Halepoto	Tando Allah yar	36	0.1	0.28
88	Haji A. Malik Laghari	Wali Muhammad	Haji Malik	Tando Allah yar	145	1	0.69
89	Abdul wahid hingoro	Darya khan hingoro	Mir M hingoro	Tando Allah yar	110	0.6	0.55
90	Aslam Khuwaja	Nazar Ali	Khuwaja Goth	Tando Allah yar	40	0.25	0.63
91	Sadar Tando ram	Misri bheel	Misri bheel	Tando Allah yar	10	0.1	1.00
92	Chetandas	Anopchand	Jananr Hingoro	Tando Allah yar	12	-	-
93	Haji M. Rahim Memon	Mohammad Memon	Haji M. Rahim Memon	Tando Allah yar	44	0.25	0.57
94	Gulzar Ali Samoon	Gul M Samoon	Qasim Rangers farm	Tando Allah yar	4	-	-
95	Ibraheem Laghari	Imam Bux	Haji Kareem Dad	Tando Allah yar	4	-	-
96	M. Ibrahim	Khan Muhammad	Budho Khan Laghari	Tando Allah yar	20	0.5	2.50
97	Imran Khan Zada	Iqbal	IslamPur	Tando Allah yar	5	-	-
98	Noor Ahmed Leghari	Haji Mevo	Haji Karim Dad	Tando Allah yar	4	-	-
99	Zulfiqar Mangrio	A Latif Mangrio	Nandi Mesan	Tando Allah yar	24	0.9	3.75
100	Abdullah Mevo	Rustam	Hussainabad	Tando Allah yar	134	1.25	0.93
101	Qasim Laghari	Yar Muhammad	Yar M Laghari	Tando Allah yar	6	-	-
102	Jalil Hakro	H.Nazar M Hakro	Haji Jafar Hakro	Tando Allah yar	6	-	-
Total					9543	65	

Annex-3.3: List of Land Owners and Affected Cropped Area of Proposed T/ Lines

ID	Name	Father's Name	Village	District	Total land Holding (Acres)	Land use category	Ownership Status	Total Affected Land (Acres)	Extent of Impact (%)
220kV D/C T/L T.M.Khan - Hala Road (10 km)									
1	Gul Sher	M. Rahim	Khuda Bux Gopang	Hyderabad	1.5	Agricultural Land	Owner	1	66.67
2	Ghulam M	Sher M.K	Khud Bux	Hyderabad	3.5	Agricultural Land	Owner	2.5	71.43
3	M Azam	Ali Khan	Khuda Bux Gopang	Hyderabad	0.5	Agricultural Land	Owner	0.5	100.00
4	Raza Ali Mirza	Abid Mirza	Tando Thoro	Hyderabad	170	Agricultural Land	Owner	10	5.88
5	Ghulam Hyder	Bilawal Chand	Long Chand	Hyderabad	6	Agricultural Land	Owner	3	50.00
6	M. Gulam	M. Yusuf Chand	Rong Chand	Hyderabad	12	Agricultural Land	Owner	4	33.33
7	Ashiq Khaskheli	Gul Muhammad	Agan Khaskheli	Hyderabad	14	Agricultural Land	Owner	5	35.71
8	D.r Zamin Hussain	Mirza Abid	Khuda Bux Gopang	Hyderabad	84	Agricultural Land	Owner	5	5.95
9	Khuda Bux Parhyar	Akoo Parhyar	Peroz Parhyar	Hyderabad	6	Agricultural Land	Owner	2	33.33
10	Khuda Dino	Adam Khan	Ali Bux Gopang	Hyderabad	20	Agricultural Land	Owner	4	20.00
11	M.Saleem	Allah Rakhyo	Haji Hadi Bux	Hyderabad	22	Agricultural Land	Owner	6	27.27
12	Safdar	Muhammad	Parho Gopang	Hyderabad	10	Agricultural Land	Owner	2	20.00
13	Haji Qadam Shoro	Gul.M.Shoro	Sukhapur	Hyderabad	70	Agricultural Land	Owner	5	7.14
14	Achar Shoro	Khameso	Khameso Shoro	Hyderabad	40	Agricultural Land	Owner	4	10.00
15	Adal Shoro	Muhammad	Achar Shoro	Hyderabad	8	Agricultural Land	Owner	1	12.50
16	Ishaque Shoro	Bachoo Shoro	Watto Shoro	Hyderabad	10	Agricultural Land	Owner	3	30.00
17	Bashir Balochi	G.Hussain Master Balochi	Balochi Goth	Hyderabad	5	Agricultural Land	Owner	2	40.00
18	M.Tufail	Aashique Ali Rajput	Hosri City	Hyderabad	4	Agricultural Land	Owner	1	25.00
19	Aklotar Ali	M.Rafique Rajput	Hosri City	Hyderabad	4	Agricultural Land	Owner	1	25.00
20	Noor Muhammad	M.Hussain Samoo	Jamal Kachi	Hyderabad	28	Agricultural Land	Owner	8	28.57
21	Arfat Nohani	A.Rahman Raheem Baloch	Hosri City	Hyderabad	45	Agricultural Land	Owner	7	15.56
22	D.r Dost M.Shoro	Haji Jam Shoro	Haji Mosa Shoro	Hyderabad	250	Agricultural Land	Owner	9	3.60
23	Murtaza Shoro	Haji Hashim	Mrtaza shorohyd	Hyderabad	300	Agricultural Land	Owner	12	4.00
24	Ramzan Shoro	M.Hassan	Hassan Shoro	Hyderabad	3	Agricultural Land	Owner	1	33.33
25	Wali Mohammad	M.Qasim Shoro	Wali M Shoro	Hyderabad	35	Agricultural Land	Owner	5	14.29
26	M. Bachal Shoro	Allah Dino	Wali M Shoro	Hyderabad	3	Agricultural Land	Owner	1	33.33
In/Out of 220kV D/C T/L Hala Road - Jamshoro at Mirpur Khas (70km)									
27	Shafi Muhammad	Pir Bux	Pir Bux	Hyderabad	5	Agricultural Land	Owner	0.5	10.00
28	Majeed Panjabi	Iqbal	Sahib Khan Merani	Hyderabad	7.5	Agricultural Land	Owner	0.5	6.67
29	Mubeen Detho	Haji Ghulam	Mangsi Goth	Hyderabad	5	Agricultural Land	Owner	0.5	10.00
30	Khalid Kaim Khani	Hamid Kaim Khani	Ditha Station	Hyderabad	2	Agricultural Land	Owner	0.25	12.50
31	Mohammad Bux	M. Soomar	Haji Mochar	Hyderabad	2.5	Agricultural Land	Owner	0.5	20.00
32	Nazar M Detho	M Idrees	Idrees Goth	Hyderabad	28.5	Agricultural Land	Owner	2	7.02
33	Sain Bux	Haji Hashim	Detha Station	Hyderabad	20	Agricultural Land	Owner	1	5.00
34	Inayat Ali	Khan Muhammad	Akk Detho	Hyderabad	50	Agricultural Land	Owner	2	4.00

ID	Name	Father's Name	Village	District	Total land Holding (Acres)	Land use category	Ownership Status	Total Affected Land (Acres)	Extent of Impact (%)
35	Ali Ahmed Zaur	Alla Daad	Ranjho Khan	Hyderabad	7.5	Agricultural Land	Owner	1	13.33
36	Khawand Bux Jahejo	M Hashim	Khawind Bux	Hyderabad	200	Agricultural Land	Owner	5	2.50
37	Basheer Ahmed chandio	Haji Khair Muhammad	Rahuki	Hyderabad	80	Agricultural Land	Owner	4	5.00
38	Dr. Zameer Pathan	Meer M Pathan	Shah Nawaz Junejo	Hyderabad	80	Agricultural Land	Owner	4	5.00
39	Gulam Mustafa Junejo	Rasool Bux Junejo	Noor M Junejo	Hyderabad	150	Agricultural Land	Owner	6	4.00
40	Makhdoom Hussain Shah	Taffar Husain Shah	Dhamach	Hyderabad	180	Agricultural Land	Owner	3	1.67
41	M Nawaz Dhamach	Mohib Dhamach	Dhamach	Hyderabad	2	Agricultural Land	Owner	0.25	12.50
42	M. Hussain Noorani	H Abdul Nabi	Haji Abdul Nabi Noorani	Hyderabad	14.5	Agricultural Land	Owner	1	6.90
43	Mir Zamin Hussain	Mir Ghulam Hyder	Mir Zamir Koat	Hyderabad	175	Agricultural Land	Owner	10	5.71
44	Malik Asad	Malik Sikandar	Gul M Burfat	Hyderabad	350	Agricultural Land	Owner	13	3.71
45	Abdul Malik	M Sabir	Dehli farm tando Jam	Hyderabad	23	Agricultural Land	Owner	2	8.70
46	Abul Hassan	M Saleheen	Dehli farm tando Jam	Hyderabad	47	Agricultural Land	Owner	3	6.38
47	Aijaz Ali Dhamach	Muhammad	Tando jam Town	Hyderabad	66	Agricultural Land	Owner	3	4.55
48	Mir Manzoor Talpur	Gulam Server	Mir goth	Hyderabad	750	Agricultural Land	Owner	5.5	0.73
49	Mohib Ali Mari	Khan Muhammad	Razdin Mari	Hyderabad	70	Agricultural Land	Owner	2	2.86
50	Haji Ali Nawaz Gopang	Gul Hassan	Sarang Faqeer	Hyderabad	1200	Agricultural Land	Owner	6	0.50
51	Ali murtaza gopang	gulam mustafa gopang	Sarang faqeer gopang	Hyderabad	16	Agricultural Land	Owner	1	6.25
52	Dr Raheela gul magsi	H. Allah Bux Magsi	Allah Bux magsi	Tando Allah yar	700	Agricultural Land	Owner	3	0.43
53	Toufeeqe Khoso	Sajawal khoso	Allah rakhio khoso	Tando Allah yar	6	Agricultural Land	Owner	1	16.67
54	Ashraf khan kolai	jalal khan kolai	jamal khan kolai	Tando Allah yar	550	Agricultural Land	Owner	5	0.91
55	Ahmed nahiyun	Haji bhajhee	Abdullah nahiyun	Tando Allah yar	6	Agricultural Land	Owner	1	16.67
56	Mataro	Hassan Ali	sabhago kabi	Tando Allah yar	2	Agricultural Land	Owner	0.25	12.50
57	khan muhammad	Allah warayo	Sabhyo khan kalhao	Tando Allah yar	6	Agricultural Land	Owner	1	16.67
58	H Abdul rasheed bachari	Mohammad bachari	haji rasheed	Tando Allah yar	275	Agricultural Land	Owner	4	1.45
59	Raja Ahmed bachari	Suhail Adeeb Ahmed bachari	Suhail sahab	Tando Allah yar	130	Agricultural Land	Owner	2	1.54
60	Lal muhammad laghari	khair M Laghari	Dhinganro Bozdar	Tando Allah yar	60	Agricultural Land	Owner	2	3.33
61	Haji Ghulam Hussain Jamali	Lal Mohammad	Shah M. Jamali	Tando Allah yar	200	Agricultural Land	Owner	3	1.50
62	Haji Akber Memon	Haji Sadiq Memon	Haji Nazeer (Rashidabad)	Tando Allah yar	300	Agricultural Land	Owner	3	1.00
63	Mehmood Behrani	G.Qadir	Haji Nazeer Goth	Tando Allah yar	8	Agricultural Land	Owner	1	12.50
64	M. Saqib Kaimkhani	Saleem Qaimkhani	Magsi Park	Tando Allah yar	117	Agricultural Land	Owner	7	5.98
65	Irfan Gul Magsi	Haji Allah Bux	Magsi Farm	Tando Allah yar	110	Agricultural Land	Owner	4	3.64
66	Abdul Salam	Haji Mohammad	Tando Allahyar	Tando Allah yar	10	Agricultural Land	Owner	1	10.00
67	Amanullah Memon	Haji Saifullah	Jamali Pump	Tando Allah yar	4	Agricultural Land	Owner	0.75	18.75
68	Asif Iqbal	Haji Iqbal Memon	Haji Iqbal Memon	Tando Allah yar	250	Agricultural Land	Owner	5	2.00
69	Haji Shafi M. Pitafi	Ali Murad	Ghulam hussain Pitafi	Tando Allah yar	100	Agricultural Land	Owner	2	2.00
70	Tamoor Khanzada	Haji Hayat	Tando Allahyar	Tando Allah yar	23	Agricultural Land	Owner	2	8.70
71	Haji Yousuf Halepoto	Haji Umer Halepoto	Qazi M. Halepoto	Tando Allah yar	18	Agricultural Land	Owner	2	11.11
72	A. Kareem	Safdar Kalro	Metlo Kalro	Tando Allah yar	18	Agricultural Land	Owner	2	11.11
73	Dr. Zuber Yousfani Memon	Haji Nazir	Bashir Ahmed Yousfani	Tando Allah yar	600	Agricultural Land	Owner	8	1.33

ID	Name	Father's Name	Village	District	Total land Holding (Acres)	Land use category	Ownership Status	Total Affected Land (Acres)	Extent of Impact (%)
74	Shair M. Kalro	Khair M. Kalro	Bhatti Hotel	Tando Allah yar	3	Agricultural Land	Owner	0.5	16.67
75	A. Hafeez Yousfani Memon	A. Qadir Yousfani	A. Qadir Yousfani	Tando Allah yar	400	Agricultural Land	Owner	4	1.00
76	Mushtaq Shah Jilani	Pir Gul M. Shah Jilani	Noor Ahmed Shah Jilani	Tando Allah yar	90	Agricultural Land	Owner	3	3.33
77	Haji Moula Bux	Haji Mohammad Bux Brohi	Haji Mohammad Bux Brohi	Tando Allah yar	56	Agricultural Land	Owner	2	3.57
78	Khadim Hussain Gopang	Qadir Bux Gopang	Qadir Bux Gopang	Tando Allah yar	15	Agricultural Land	Owner	1	6.67
79	Ali Ahmed Gopang	Mubarak Ali	Qadir Bux Gopang	Tando Allah yar	16	Agricultural Land	Owner	1	6.25
80	A. Shakoor Kakepoto	Abu Bakar	M.Soomar Kakepoto	Tando Allah yar	20	Agricultural Land	Owner	1	5.00
81	M.Siddique Kakepoto	M. Ishaque Kakepoto	Haji Umer Kakepoto	Tando Allah yar	2	Agricultural Land	Owner	0.5	25.00
82	Dr. Noor M. Kakepoto	Haji Mohammad	Haji Umer Kakepoto	Tando Allah yar	8	Agricultural Land	Owner	1	12.50
83	M. Zafar Kakepoto	U. Usman	Haji Umer Kakepoto	Tando Allah yar	16	Agricultural Land	Owner	1	6.25
84	Pir A. Hameed Qureshi	Pir Taj M. Qureshi	Hameed Farm/Kamaro Shareef	Tando Allah yar	18	Agricultural Land	Owner	1	5.56
85	Rasool Bux Dall	Mohammad Bux Dall	Agaya Dino Dall	Tando Allah yar	80	Agricultural Land	Owner	3	3.75
86	Shoukat Halepoto	M. Saleh Halepoto	Shoukat Halepoto	Tando Allah yar	36	Agricultural Land	Owner	1	2.78
87	Munawer Halepoto	M. Ali Halepoto	M. Ali Halepoto	Tando Allah yar	36	Agricultural Land	Owner	1	2.78
88	Haji A. Malik Laghari	Wali Muhammad	Haji Malik	Tando Allah yar	145	Agricultural Land	Owner	5	3.45
89	Abdul wahid hingoro	Darya khan hingoro	Mir M hingoro	Tando Allah yar	110	Agricultural Land	Owner	4	3.64
90	Aslam Khuwaja	Nazar Ali	Khuwaja Goth	Tando Allah yar	40	Agricultural Land	Owner	2	5.00
91	Sadar Tando ram	Misri bheel	Misri bheel	Tando Allah yar	10	Agricultural Land	Owner	1	10.00
92	Chetandas	Anopchand	Jananr Hingoro	Tando Allah yar	12	Agricultural Land	Owner	1	8.33
93	Haji M. Rahim Memon	Mohammad Memon	Haji M. Rahim Memon	Tando Allah yar	44	Agricultural Land	Owner	2	4.55
94	Gulzar Ali Samoon	Gul M Samoon	Qasim Rangers farm	Tando Allah yar	4	Agricultural Land	Owner	1	25.00
95	Ibraheem Laghari	Imam Bux	Haji Kareem Dad	Tando Allah yar	4	Agricultural Land	Owner	1	25.00
96	M. Ibrahim	Khan Muhammad	Budho Khan Laghari	Tando Allah yar	20	Agricultural Land	Owner	2	10.00
97	Imran Khan Zada	Iqbal	IslamPur	Tando Allah yar	5	Agricultural Land	Owner	0.5	10.00
98	Noor Ahmed Leghari	Haji Mevo	Haji Karim Dad	Tando Allah yar	4	Agricultural Land	Owner	0.5	12.50
99	Zulfiqar Mangrio	A Latif Mangrio	Nandi Mesan	Tando Allah yar	24	Agricultural Land	Owner	2	8.33
100	Abdullah Mevo	Rustam	Hussainabad	Tando Allah yar	134	Agricultural Land	Owner	3	2.24
101	Qasim Laghari	Yar Muhammad	Yar M Laghari	Tando Allah yar	6	Agricultural Land	Owner	1	16.67
102	Jalil Hakro	H.Nazar M Hakro	Haji Jafar Hakro	Tando Allah yar	6	Agricultural Land	Owner	1	16.67
					9543			290	

Annex-3.4: Inventory of Affected Trees under the Proposed Substation

Sr. #	ID	Owner's Name	Father's Name	Village	Tehsil	District	Type of Trees	Use	Ownership Status	No of affected Trees	Avg. Girth of Wood Trees (Feet)	Avg. age of Fruit Trees (Year)	Unit Rate as per Forest Department (Rs.)	Trees Compensation (Rs.)
1	1	Mr. M. Shahazad	Nabi Bakhsh	Dolat Laghari	Shujabad	Mirpur Khas	Eucalyptus (Safida)	Shade	Private	150	0.5	-	2,000	300,000
				Dolat Laghari	Shujabad	Mirpur Khas	Babur	Timber	Private	3	0.8	-	1,000	3,000
				Dolat Laghari	Shujabad	Mirpur Khas	ConoCarpus	Shade	Private	65	0.5	-	1,000	65,000
2	2	Mr. Noor M.	M. Dotali	Dolat Laghari	Shujabad	Mirpur Khas	Eucalyptus (Safida)	Shade	Private	4	1	-	2,000	8,000
3	5	Mr. Khair M.	Late Haji Sohbat	Dolat Laghari	Shujabad	Mirpur Khas	Mango	Fruit	Private	50	-	12	11,000	550,000
				Dolat Laghari	Shujabad	Mirpur Khas	Jamum	Fruit	Private	1	-	30	8,000	8,000
				Dolat Laghari	Shujabad	Mirpur Khas	Nim	Shade	Private	3	3	-	2,000	6,000
				Dolat Laghari	Shujabad	Mirpur Khas	Babur	Timber	Private	1	2.5	-	2,000	2,000
Total									277				942,000	

Annex-3.5: Inventory of Affected Trees under the proposed T/Lines

Sr. No.	Name	Father's Name	Village	Typ of Tree	No. of Trees	Avg. Grith (Feet)	Avg. Age (Year)	Unit Rate (Rs.)	Trees Compensation (Rs.)
220 KV Grid Station T.M. Khan Road Hyderabad to Tee-off from Tower # 102 Near Habib Farm to 220 KV Hala Road Grid Station (10KM)									
1	Gul Sher	M. Rahim	Khuda Bux Gopang	Mango	3		5	3,000	9,000
2	Ghulam M	Sher M.K	Khud Bux	Mango	4		6	3,500	14,000
				Guava	4		5	3,000	12,000
3	M Azam	Ali Khan	Khuda Bux Gopang	Mango	2		5	3,000	6,000
4	Raza Ali Mirza	Abid Mirza	Tando Thoro	Kiker	3	2'.6"		2,000	6,000
				Mango	3		6	3,500	10,500
				Tali	1	4'.2"		12,000	12,000
5	Ghulam Hyder	Bilawal Chand	Long Chand	Bakin	5	1'.2"		1,000	5,000
				Mango	6		4	2,500	15,000
6	M. Gulam	M. Yusuf Chand	Rong Chand	Date palm	2		10	6,500	13,000
				Guava	4		5	300	1,200
7	Ashiq Khaskheli	Gul Muhammad	Agan Khaskheli	Kiker	3	4'.4"		3,500	10,500
				Jaman	2		15	800	1,600
				Mango	3		7	5,500	16,500
				Tali	1	1'.4"		2,000	2,000
8	D.r Zamin Hussain	Mirza Abid	Khuda Bux Gopang	Guava	2		4	2,500	5,000
9	Khuda Bux Parhyar	Akoo Parhyar	Peroz Parhyar	Eucalyptus	1	2'.6"		2,000	2,000
10	Khuda Dino	Adam Khan	Ali Bux Gopang	Jaman	2		10	800	1,600
11	M.Saleem	Allah Rakhyo	Haji Hadi Bux	Lemon	2		5	1,800	3,600
12	Safdar	Muhammad	Parho Gopang	Bakin	2	1'.2"		1,000	2,000
13	Haji Qadam Shoro	Gul.M.Shoro	Sukhapur	Bakin	1	1'.2"		1,000	1,000
				Talhi	2	1'.2"		2,000	4,000
14	Achar Shoro	Khameso	Khameso Shoro	Talhi	4	1'.2"		2,000	8,000
15	Adal Shoro	Muhammad	Achar Shoro	Eucalyptus	3	1'.2"		1,000	3,000
16	Ishaque Shoro	Bachoo Shoro	Watto Shoro	Kiker	1	1'.2"		1,000	1,000
17	Bashir Balochi	G.Hussain Master Balochi	Balochi Goth	Date palm	4		12	6,500	26,000
				Jamun	1		9	6,500	6,500
18	M.Tufail	Aashique Ali Rajput	Hosri City	Jaman	3		14	8,000	24,000
19	Aklotar Ali	M.Rafique Rajput	Hosri City	Kiker	2	2'.2"		2,000	4,000
				Jamun	2		18	8,000	16,000
20	Noor Muhammad	M.Hussain Samoo	Jamal Kachi	Date palm	5		10	6,500	32,500
				Mango	8		8	8,000	64,000
21	Arfat Nohani	A.Rahman Raheem Baloch	Hosri City	Date palm	3		14	6,500	19,500
22	D.r Dost M.Shoro	Haji Jam Shoro	Haji Mosa Shoro	Jaman	4		9	6,500	26,000
23	Murtaza Shoro	Haji Hashim	Mrtaza shorohyd	Jaman	4		8	5,000	20,000
				Kiker	2	3'.2"		2,000	4,000
				Date palm	3		17	6,500	19,500
				Guava	1		5	3,000	3,000
24	Wali Mohammad	M.Qasim Shoro	Wali M Shoro	Eucalyptus	3	4'.2"		3,500	10,500
220 KV Transmission Line from Proposed Tower # 1 Proposed 220 KV Substation Mirpurkhas (70Km)									
1	Shafi Mohammad	Pir Bux	Tando Hyder	Mango	4		8	8,000	32,000

Sr. No.	Name	Father's Name	Village	Typ of Tree	No. of Trees	Avg. Grith (Feet)	Avg. Age (Year)	Unit Rate (Rs.)	Trees Compensation (Rs.)
2	Majeed Punjabi	M. Iqbal	Sahib Khan Mirani	Guava	1		5	3,000	3,000
3	Mubeen Detho	Haji Ghulam	Mangsi Goth	Mango	3		5	3,000	9,000
4	Khalid Kaim Khani	Hamid Kaim Khani	Ditha Station	Kiker	1	3'.2"		2,000	2,000
5	Mohammad Bux	M. Soomar	Haji Mochar	Tali	2	1'.4"		2,000	4,000
6	Nazar M Detho	M Idrees	Idrees Goth	Eucalyptus	1	1'.2"		1,000	1,000
7	Sain Bux	Haji Hashim	Detha Station	Mango	2		10	11,000	22,000
8	Inayat Ali	Khan Muhammad	Akk Detho	Guava	4		3	2,000	8,000
9	Ali Ahmed Zaur	Alla Daad	Ranjho Khan	Bakin	3	2'.6"		2,000	6,000
10	Khawand Bux Jahejo	M Hashim	Khawind Bux	Mango	6		12	11,000	66,000
11	Basheer Ahmed chandio	Haji Khair Muhammad	Rahuki	Mango	2		5	3,000	6,000
				Date palm	2		15	6,500	13,000
12	Dr. Zameer Pathan	Meer M Pathan	Shah Nawaz Junejo	Jaman	3		17	8,000	24,000
13	Gulam Mustafa Junejo	Rasool Bux Junejo	Noor M Junejo	Berr	6		4	600	3,600
14	Makhdoom Hussain Shah	Taffar Husain Shah	Dhamach	Bakin	4	1'.8"		1,000	4,000
				Berr	4		6	1,500	6,000
15	M Nawaz Dhamach	Mohib Dhamach	Dhamach	Mango	6		5	3,000	18,000
16	M. Hussain Noorani	H Abdul Nabi	Haji Abdul Nabi Noorani	Kiker	2	1'.4"		1,000	2,000
				Mango	5		11	11,000	55,000
17	Mir Zamin Hussain	Mir Ghulam Hyder	Mir Zamir Koat	Berr	1		4	600	600
18	Malik Asad	Malik Sikandar	Gul M Burfat	Date palm	3		14	6,500	19,500
19	Abdul Malik	M Sabir	Dehli farm tando Jam	Eucalyptus	1	3'.0"		2,000	2,000
				Talhi	1	2'.6"		5,000	5,000
				Jaman	1		14	8,000	8,000
20	Abul Hassan	M Saleheen	Dehli farm tando Jam	Eucalyptus	2	1'.4"		1,000	2,000
21	Aijaz Ali Dhamach	Muhammad	Tando jam Town	Tali	2	1'.6"		2,000	4,000
22	Mohib Ali Mari	Khan Muhammad	Razdin Mari	Eucalyptus	3	2'.0"		1,000	3,000
				Date palm	2		11	6,500	13,000
23	Ahmed nahiyun	Haji bhajhee	Abdullah nahiyun	Kiker	3	2'.0"		1,000	3,000
24	Mataro	Hassan Ali	sabhago kabi	Kiker	2	1'.4"		1,000	2,000
				Bakin	3	1'.6"		1,000	3,000
25	H Abdul rasheed bachari	Mohammad bachari	Haji rasheed	Kiker	6	1'.4"		1,000	6,000
26	Raja Ahmed bachari	Suhail Adeeb Ahmed bachari	Suhail sahab	Bakin	3	1'.6"		1,000	3,000
				Kiker	1	3'.4"		2,000	2,000
27	Lal muhammad laghari	khair M Laghari	Dhinganro Bozdar	Kiker	3	3'.4"		2,000	6,000
28	Irfan Gul Magsi	Haji Allah Bux	Magsi Farm	Jaman	5		19	8,000	40,000
29	Abdul Salam	Haji Mohammad	Tando Allahyar	Kiker	2	3'.0"		2,000	4,000
				Jaman	4		19	8,000	32,000
30	Amanullah Memon	Haji Saifullah	Jamali Pump	Date palm	4		14	6,500	26,000
31	Haji Shafi M. Pitafi	Ali Murad	Ghulam hussain Pitafi	Mango	13		9	9,000	117,000
32	Haji Yousuf Halepoto	Haji Umer Halepoto	Qazi M. Halepoto	Date palm	2		14	6,500	13,000
				Jaman	2		17	8,000	16,000
33	A. Kareem	Safdar Kalro	Metlo Kalro	Date palm	3		14	6,500	19,500
34	Dr. Zuber Yousfani Memon	Haji Nazir	Bashir Ahmed Yousfani	Mango	2		9	9,000	18,000

Sr. No.	Name	Father's Name	Village	Typ of Tree	No. of Trees	Avg. Grith (Feet)	Avg. Age (Year)	Unit Rate (Rs.)	Trees Compensation (Rs.)
35	Shair M. Kalro	Khair M. Kalro	Bhatti Hotel	Jaman	6		18	8,000	48,000
				Date palm	4		14	6,500	26,000
36	A. Hafeez Yousfani Memon	A. Qadir Yousfani	A. Qadir Yousfani	Jaman	6		17	8,000	48,000
37	Mushtaq Shah Jilani	Pir Gul M. Shah Jilani	Noor Ahmed Shah Jilani	Eucalyptus	2	3'4"		2,000	4,000
38	Haji Moula Bux	Haji Mohammad Bux Brohi	Haji Mohammad Bux Brohi	Lemon	2		5	1,800	3,600
				Talhi	2	2'8"		5,000	10,000
39	Khadim Hussain Gopang	Qadir Bux Gopang	Qadir Bux Gopang	Jaman	1		17	8,000	8,000
40	A. Shakoor Kakepoto	Abu Bakar	M.Soomar Kakepoto	berr	1		8	2,500	2,500
41	M. Zafar Kakepoto	U. Usman	Haji Umer Kakepoto	Jaman	4		15	8,000	32,000
				Bakin	1	3'4"		2,000	2,000
				Kiker	6	1'8"		1,000	6,000
				Date palm	5		20	6,500	32,500
42	Pir A. Hameed Qureshi	Pir Taj M. Qureshi	Hameed Farm/Kamaro Shareef	Jaman	2		12	8,000	16,000
43	Rasool Bux Dall	Mohammad Bux Dall	Agaya Dino Dall	Jamun	1		10	8,000	8,000
				jaman	4		10	8,000	32,000
44	Shoukat Halepoto	M. Saleh Halepoto	Shoukat Halepoto	Date palm	3		17	6,500	19,500
45	Munawer Halepoto	M. Ali Halepoto	M. Ali Halepoto	jamun	5		13	8,000	40,000
46	Haji A. Malik Laghari	Wali Muhammad	Haji Malik	Mango	12		10	11,000	132,000
47	Abdul wahid hingoro	Darya khan hingoro	Mir M hingoro	jamun	3		14	8,000	24,000
48	Aslam Khowaja	Nazar Ali	Khowaja Goth	Kiker	2	2'8"		2,000	4,000
49	Sadar Tando ram	Misri bheel	Misri bheel	Tali	2	3'4"		5,000	10,000
50	Chetandas	Anopchand	Jananr Hingoro	Jaman	4		16	8,000	32,000
				Date palm	13		11	6,500	84,500
51	Haji M. Rahim Memon	Mohammad Memon	Haji M. Rahim Memon	Lemon	1		4	1,200	1,200
52	Gulzar Ali Samoon	Gul M Samoon	Qasim Rangers farm	Mango	7		8	8,000	56,000
53	Ibrahim Laghari	Imam Bux	Haji Kareem Dad	Date palm	2		9	6,000	12,000
54	M. Ibrahim	Khan Muhammad	Budho Khan Laghari	Jaman	1		13	8,000	8,000
	Total				348				1,795,000

Annex-9.1: Assessment of Land Compensation to DPs at Mirpur Khas Substation

ID	Owner's Name	Father's Name	Caste	Village	Tehsil	District	Land Use Category	Ownership Status	Khasra No./ Survey No.	Total Land Holding (Acres)	Affected Land (acres)	Extent of Impact (%)	Land Compensation		Trees Compensation (Rs.)	Severity Allowances (Rs.)	Total Compensation (Rs.)
													Unit Rate (Rs./ Acre)	Compensation of Land (Rs.)			
1	Mr. M. Shahazad	Nabi Bakhsh	Laghari	Dolat Laghari	Shujabad	Mirpur Khas	Agricultural Land	Owner	179/181	18	6.00	33.33	1,500,000	9,000,000	368,000	45,000	9,413,000
2	Mr. Noor M.	M. Dotali	Meo	Dolat Laghari	Shujabad	Mirpur Khas	Agricultural Land	Owner	182/183	7	7.00	100.00	1,500,000	10,500,000	8,000	45,000	10,553,000
3	Late Ali Sher	M. Dotali	Meo	Dolat Laghari	Shujabad	Mirpur Khas	Agricultural Land	Owner	182/183	7	7.00	100.00	1,500,000	10,500,000		45,000	10,545,000
4	Mr. M. Suleman	Noor M.	Laghari	Dolat Laghari	Shujabad	Mirpur Khas	Agricultural Land	Owner	180/297	11.5	4.00	34.78	1,500,000	6,000,000		45,000	6,045,000
5	Mr. Khair M.	Late Haji Sohbat	Laghari	Dolat Laghari	Shujabad	Mirpur Khas	Agricultural Land	Owner	300/184	22	5.00	22.73	1,500,000	7,500,000	566000	45,000	8,111,000
6	Mr. Abdul Hakim	Abdul Khaliq	Laghari	Dolat Laghari	Shujabad	Mirpur Khas	Agricultural Land	Owner	299	32	4.00	12.50	1,500,000	6,000,000		45,000	6,045,000
7	Late Bae	Late Haji Sohbat	Laghari	Dolat Laghari	Shujabad	Mirpur Khas	Agricultural Land	Owner	301	5	4.84	96.80	1,500,000	7,260,000		45,000	7,305,000
8	Mr. Muhammad	Abdul Khaliq	Laghari	Dolat Laghari	Shujabad	Mirpur Khas	Agricultural Land	Owner	299/297	42	9.20	21.90	1,500,000	13,800,000		45,000	13,845,000
9	Mr. Noor M.	M. Suleman	Laghari	Dolat Laghari	Shujabad	Mirpur Khas	Agricultural Land	Owner	189-A/189-B	14	1.00	7.14	1,500,000	1,500,000		45,000	1,545,000
10	Mr. Ghulam M.	M. Suleman	Laghari	Dolat Laghari	Shujabad	Mirpur Khas	Agricultural Land	Owner	189-A/189-B	13	1.00	7.69	1,500,000	1,500,000		45,000	1,545,000
11	Mr. Nabi Bakhsh	M. Suleman	Laghari	Dolat Laghari	Shujabad	Mirpur Khas	Agricultural Land	Owner	189-A/189-B	14	1.00	7.14	1,500,000	1,500,000		45,000	1,545,000
	Total									185.5	50.04			75,060,000	942,000	495,000	76,497,000

Annex-9.2: Assessment of Crop and Tree Compensation for DPs

ID	Name	Father's Name	Village	District	Total Land Holding (Acres)	Transmission Line (Acres)	Tower Spottin g (Acres)	Total Affecte d Land (Acres)	Extent of Impact (%)	Crop Compensation		Trees Compensati on (Rs.)	Allowanc es (Rs.)	Total Compensati on (Rs.)
										Unit Rate (Rs./ Acre)	Crop Compensati on (Rs.)			
220kV D/C T/L T.M.Khan - Hala Road (10 km)														
1	Gul Sher	M. Rahim	Khuda Bux Gopang	Hyderabad	1.5	1	0.5	1.5	100.00	49,153	122,883	9,000	45,000	176,883
2	Ghulam M	Sher M.K	Khud Bux	Hyderabad	3.5	2.5	0.8	3.3	92.86	49,153	233,477	26,000	45,000	304,477
3	M Azam	Ali Khan	Khuda Bux Gopang	Hyderabad	0.5	0.5	0.0	0.5	100.00	49,153	24,577	6,000	45,000	75,577
4	Raza Ali Mirza	Abid Mirza	Tando Thoro	Hyderabad	170	10	3.0	13.0	7.65	49,153	933,907	28,500	-	962,407
5	Ghulam Hyder	Bilawal Chand	Long Chand	Hyderabad	6	3	0.5	3.5	58.33	49,153	221,189	20,000	-	241,189
6	M. Gulam	M. Yusuf Chand	Rong Chand	Hyderabad	12	4	0.8	4.8	39.58	49,153	307,206	14,200	-	321,406
7	Ashiq Khaskheli	Gul Muhammad	Agan Khaskheli	Hyderabad	14	5	0.9	5.9	42.14	49,153	378,478	30,600	-	409,078
8	D.r Zamin Hussain	Mirza Abid	Khuda Bux Gopang	Hyderabad	84	5	2.0	7.0	8.33	49,153	540,683	5,000	-	545,683
9	Khuda Bux Parhyar	Akoo Parhyar	Peroz Parhyar	Hyderabad	6	2	0.5	2.5	41.67	49,153	172,036	2,000	-	174,036
10	Khuda Dino	Adam Khan	Ali Bux Gopang	Hyderabad	20	4	1.3	5.3	26.25	49,153	380,936	1,600	-	382,536
11	M.Saleem	Allah Rakhyo	Haji Hadi Bux	Hyderabad	22	6	1.5	7.5	34.09	49,153	516,107	3,600	-	519,707
12	Safdar	Muhammad	Parho Gopang	Hyderabad	10	2	0.5	2.5	25.00	49,153	172,036	2,000	-	174,036
13	Haji Qadam Shoro	Gul.M.Shoro	Sukhapur	Hyderabad	70	5	0.5	5.5	7.86	49,153	319,495	5,000	-	324,495
14	Achar Shoro	Khameso	Khameso Shoro	Hyderabad	40	4	1.3	5.3	13.13	49,153	380,936	8,000	-	388,936
15	Adal Shoro	Muhammad	Achar Shoro	Hyderabad	8	1	0.3	1.3	15.63	49,153	86,018	3,000	-	89,018
16	Ishaque Shoro	Bachoo Shoro	Watto Shoro	Hyderabad	10	3	0.3	3.3	32.50	49,153	184,324	1,000	-	185,324
17	Bashir Balochi	G.Hussain Master Balochi	Balochi Goth	Hyderabad	5	2	0.5	2.5	50.00	49,153	172,036	32,500	-	204,536
18	M.Tufail	Aashique Ali Rajput	Hosri City	Hyderabad	4	1	0.1	1.1	27.50	49,153	63,899	24,000	-	87,899
19	Aklotar Ali	M.Rafique Rajput	Hosri City	Hyderabad	4	1	0.5	1.5	37.50	49,153	122,883	20,000	-	142,883
20	Noor Muhammad	M.Hussain Samoo	Jamal Kachi	Hyderabad	28	8	1.3	9.3	33.21	49,153	584,921	96,500	-	681,421
21	Arfat Nohani	A.Rahman Raheem Baloch	Hosri City	Hyderabad	45	7	0.8	7.8	17.22	49,153	454,665	19,500	-	474,165
22	D.r Dost M.Shoro	Haji Jam Shoro	Haji Mosa Shoro	Hyderabad	250	9	3.9	12.9	5.14	49,153	1,010,094	26,000	-	1,036,094
23	Murtaza Shoro	Haji Hashim	Mrtaza shorohyd	Hyderabad	300	12	2.5	14.5	4.83	49,153	958,484	46,500	-	1,004,984

ID	Name	Father's Name	Village	District	Total Land Holding (Acres)	Transmission Line (Acres)	Tower Spottin g (Acres)	Total Affected Land (Acres)	Extent of Impact (%)	Crop Compensation		Trees Compensation (Rs.)	Allowances (Rs.)	Total Compensation (Rs.)
										Unit Rate (Rs./ Acre)	Crop Compensation (Rs.)			
24	Ramzan Shoro	M.Hassan	Hassan Shoro	Hyderabad	3	1	0.3	1.3	41.67	49,153	86,018	-	45,000	131,018
25	Wali Mohammad	M.Qasim Shoro	Wali M Shoro	Hyderabad	35	5	0.8	5.8	16.43	49,153	356,359	10,500	-	366,859
26	M. Bachal Shoro	Allah Dino	Wali M Shoro	Hyderabad	3	1	0.1	1.1	36.67	49,153	63,899	-	45,000	108,899
In/Out of 220kV D/C T/L Hala Road - Jamshoro at Mirpur Khas (70km)														
27	Shafi Muhammad	Pir Bux	Pir Bux	Hyderabad	5	0.5	0.3	0.8	15.00	49,153	61,441	32,000	-	93,441
28	Majeed Panjabi	Iqbal	Sahib Khan Merani	Hyderabad	7.5	0.5	0.5	1.0	13.33	49,153	98,306	3,000	-	101,306
29	Mubeen Detho	Haji Ghulam	Mangsi Goth	Hyderabad	5	0.5	0.3	0.8	15.00	49,153	61,441	9,000	-	70,441
30	Khalid Kaim Khani	Hamid Kaim Khani	Ditha Station	Hyderabad	2	0.25	0.0	0.3	12.50	49,153	12,288	2,000	45,000	59,288
31	Mohammad Bux	M. Soomar	Haji Mochar	Hyderabad	2.5	0.5	0.0	0.5	20.00	49,153	24,577	4,000	45,000	73,577
32	Nazar M Detho	M Idrees	Idrees Goth	Hyderabad	28.5	2	0.5	2.5	8.77	49,153	172,036	1,000	-	173,036
33	Sain Bux	Haji Hashim	Detha Station	Hyderabad	20	1	0.3	1.3	6.25	49,153	86,018	22,000	-	108,018
34	Inayat Ali	Khan Muhammad	Akk Detho	Hyderabad	50	2	0.3	2.3	4.50	49,153	135,171	8,000	-	143,171
35	Ali Ahmed Zaur	Alla Daad	Ranjho Khan	Hyderabad	7.5	1	1.3	2.3	30.00	49,153	233,477	6,000	-	239,477
36	Khawand Bux Jahejo	M Hashim	Khawind Bux	Hyderabad	200	5	1.0	6.0	3.00	49,153	393,224	66,000	-	459,224
37	Basheer Ahmed chandio	Haji Khair Muhammad	Rahuki	Hyderabad	80	4	0.8	4.8	5.94	49,153	307,206	19,000	-	326,206
38	Dr: Zameer Pathan	Meer M Pathan	Shah Nawaz Junejo	Hyderabad	80	4	0.5	4.5	5.63	49,153	270,342	24,000	-	294,342
39	Gulam Mustafa Junejo	Rasool Bux Junejo	Noor M Junejo	Hyderabad	150	6	1.5	7.5	5.00	49,153	516,107	3,600	-	519,707
40	Makhdoom Hussain Shah	Taffar Husain Shah	Dhamach	Hyderabad	180	3	0.5	3.5	1.94	49,153	221,189	10,000	-	231,189
41	M Nawaz Dhamach	Mohib Dhamach	Dhamach	Hyderabad	2	0.25	0.3	0.5	25.00	49,153	49,153	18,000	45,000	112,153
42	M. Hussain Noorani	H Abdul Nabi	Haji Abdul Nabi Noorani	Hyderabad	14.5	1	0.5	1.5	10.34	49,153	122,883	57,000	-	179,883
43	Mir Zamin Hussain	Mir Ghulam Hyder	Mir Zamir Koat	Hyderabad	175	10	0.8	10.8	6.14	49,153	602,124	600	-	602,724
44	Malik Asad	Malik Sikandar	Gul M Burfat	Hyderabad	350	13	2.3	15.3	4.36	49,153	970,772	19,500	-	990,272
45	Abdul Malik	M Sabir	Dehli farm tando Jam	Hyderabad	23	2	0.8	2.8	11.96	49,153	208,900	15,000	-	223,900
46	Abul Hassan	M Saleheen	Dehli farm tando Jam	Hyderabad	47	3	1.3	4.3	9.04	49,153	331,783	2,000	-	333,783
47	Aijaz Ali Dhamach	Muhammad	Tando jam Town	Hyderabad	66	3	0.3	3.3	4.92	49,153	184,324	4,000	-	188,324

ID	Name	Father's Name	Village	District	Total Land Holding (Acres)	Transmission Line (Acres)	Tower Spottin g (Acres)	Total Affected Land (Acres)	Extent of Impact (%)	Crop Compensation		Trees Compensation (Rs.)	Allowances (Rs.)	Total Compensation (Rs.)
										Unit Rate (Rs./ Acre)	Crop Compensation (Rs.)			
48	Mir Manzoor Talpur	Gulam Server	Mir goth	Hyderabad	750	5.5	1.3	6.8	0.90	49,153	454,665	-	-	454,665
49	Mohib Ali Mari	Khan Muhammad	Razdin Mari	Hyderabad	70	2	0.5	2.5	3.57	49,153	172,036	16,000	-	188,036
50	Haji Ali Nawaz Gopang	Gul Hassan	Sarrang Faqeer	Hyderabad	1200	6	1.7	7.7	0.64	49,153	538,225	-	-	538,225
51	Ali murtaza gopang	gulam mustafa gopang	Sarang faqeer gopang	Hyderabad	16	1	0.0	1.0	6.25	49,153	49,153	-	-	49,153
52	Dr Raheela gul magsi	H. Allah Bux Magsi	Allah Bux magsi	Tando Allah yar	700	3	2.6	5.6	0.80	49,153	530,852	-	-	530,852
53	Toufeeque Khoso	Sajawal khoso	Allah rakhio khoso	Tando Allah yar	6	1	0.0	1.0	16.67	49,153	49,153	-	-	49,153
54	Ashraf khan kolai	jalal khan kolai	jamal khan kolai	Tando Allah yar	550	5	3.3	8.3	1.50	49,153	725,007	-	-	725,007
55	Ahmed nahiyun	Haji bhajhee	Abdullah nahiyun	Tando Allah yar	6	1	0.0	1.0	16.67	49,153	49,153	3,000	-	52,153
56	Mataro	Hassan Ali	sabhago kabi	Tando Allah yar	2	0.25	0.0	0.3	12.50	49,153	12,288	5,000	45,000	62,288
57	khan muhammad	Allah warayo	Sabhyo khan kalhao	Tando Allah yar	6	1	0.0	1.0	16.67	49,153	49,153	-	-	49,153
58	H Abdul rasheed bachari	Mohammad bachari	haji rasheed	Tando Allah yar	275	4	1.0	5.0	1.82	49,153	344,071	6,000	-	350,071
59	Raja Ahmed bachari	Suhail Adeeb Ahmed bachari	Suhail sahab	Tando Allah yar	130	2	0.8	2.8	2.12	49,153	208,900	5,000	-	213,900
60	Lal muhammad laghari	khair M Laghari	Dhinganro Bozdar	Tando Allah yar	60	2	0.3	2.3	3.75	49,153	135,171	6,000	-	141,171
61	Haji Ghulam Hussain Jamali	Lal Mohammad	Shah M. Jamali	Tando Allah yar	200	3	0.8	3.8	1.88	49,153	258,053	-	-	258,053
62	Haji Akber Memon	Haji Sadiq Memon	Haji Nazeer (Rashidabad)	Tando Allah yar	300	3	0.8	3.8	1.25	49,153	258,053	-	-	258,053
63	Mehmood Behrani	G.Qadir	Haji Nazeer Goth	Tando Allah yar	8	1	0.0	1.0	12.50	49,153	49,153	-	-	49,153
64	M. Saqib Kaimkhani	Saleem Qaimkhani	Magsi Park	Tando Allah yar	117	7	1.2	8.2	7.01	49,153	521,022	-	-	521,022
65	Irfan Gul Magsi	Haji Allah Bux	Magsi Farm	Tando Allah yar	110	4	0.5	4.5	4.09	49,153	270,342	40,000	-	310,342
66	Abdul Salam	Haji Mohammad	Tando Allahyar	Tando Allah yar	10	1	0.2	1.2	12.00	49,153	78,645	36,000	-	114,645
67	Amanullah Memon	Haji Saifullah	Jamali Pump	Tando Allah yar	4	0.75	0.0	0.8	18.75	49,153	36,865	26,000	-	62,865
68	Asif Iqbal	Haji Iqbal Memon	Haji Iqbal Memon	Tando Allah yar	250	5	1.0	6.0	2.40	49,153	393,224	-	-	393,224
69	Haji Shafi M. Pitafi	Ali Murad	Ghulam hussain Pitafi	Tando Allah yar	100	2	0.8	2.8	2.75	49,153	208,900	117,000	-	325,900
70	Tamoor Khanzada	Haji Hayat	Tando Allahyar	Tando Allah yar	23	2	0.5	2.5	10.87	49,153	172,036	-	-	172,036
71	Haji Yousuf Halepoto	Haji Umer Halepoto	Qazi M. Halepoto	Tando Allah yar	18	2	0.3	2.3	12.50	49,153	135,171	29,000	-	164,171

ID	Name	Father's Name	Village	District	Total Land Holding (Acres)	Transmission Line (Acres)	Tower Spottin g (Acres)	Total Affected Land (Acres)	Extent of Impact (%)	Crop Compensation		Trees Compensation (Rs.)	Allowances (Rs.)	Total Compensation (Rs.)
										Unit Rate (Rs./ Acre)	Crop Compensation (Rs.)			
72	A. Kareem	Safdar Kalro	Metlo Kalro	Tando Allah yar	18	2	0.3	2.3	12.50	49,153	135,171	19,500	-	154,671
73	Dr. Zuber Yousfani Memon	Haji Nazir	Bashir Ahmed Yousfani	Tando Allah yar	600	8	1.3	9.3	1.54	49,153	577,548	18,000	-	595,548
74	Shair M. Kalro	Khair M. Kalro	Bhatti Hotel	Tando Allah yar	3	0.5	0.0	0.5	16.67	49,153	24,577	74,000	45,000	143,577
75	A. Hafeez Yousfani Memon	A. Qadir Yousfani	A. Qadir Yousfani	Tando Allah yar	400	4	0.8	4.8	1.19	49,153	307,206	48,000	-	355,206
76	Mushtaq Shah Jilani	Pir Gul M. Shah Jilani	Noor Ahmed Shah Jilani	Tando Allah yar	90	3	0.3	3.3	3.61	49,153	184,324	4,000	-	188,324
77	Haji Moulia Bux	Haji Mohammad Bux Brohi	Haji Mohammad Bux Brohi	Tando Allah yar	56	2	0.3	2.3	4.02	49,153	135,171	13,600	-	148,771
78	Khadim Hussain Gopang	Qadir Bux Gopang	Qadir Bux Gopang	Tando Allah yar	15	1	0.4	1.4	9.33	49,153	108,137	8,000	-	116,137
79	Ali Ahmed Gopang	Mubarak Ali	Qadir Bux Gopang	Tando Allah yar	16	1	0.3	1.3	8.13	49,153	93,391	-	-	93,391
80	A. Shakoor Kakepoto	Abu Bakar	M.Soomar Kakepoto	Tando Allah yar	20	1	0.0	1.0	5.00	49,153	49,153	34,500	-	83,653
81	M.Siddique Kakepoto	M. Ishaque Kakepoto	Haji Umer Kakepoto	Tando Allah yar	2	0.5	0.0	0.5	25.00	49,153	24,577	-	45,000	69,577
82	Dr. Noor M. Kakepoto	Haji Mohammad	Haji Umer Kakepoto	Tando Allah yar	8	1	0.0	1.0	12.50	49,153	49,153	-	-	49,153
83	M. Zafar Kakepoto	U. Usman	Haji Umer Kakepoto	Tando Allah yar	16	1	0.1	1.1	6.88	49,153	63,899	40,500	-	104,399
84	Pir A. Hameed Qureshi	Pir Taj M. Qureshi	Hameed Farm/Kamaro Shareef	Tando Allah yar	18	1	0.1	1.1	6.11	49,153	63,899	16,000	-	79,899
85	Rasool Bux Dall	Mohammad Bux Dall	Agaya Dino Dall	Tando Allah yar	80	3	0.5	3.5	4.38	49,153	221,189	40,000	-	261,189
86	Shoukat Halepoto	M. Saleh Halepoto	Shoukat Halepoto	Tando Allah yar	36	1	0.3	1.3	3.47	49,153	86,018	19,500	-	105,518
87	Munawer Halepoto	M. Ali Halepoto	M. Ali Halepoto	Tando Allah yar	36	1	0.1	1.1	3.06	49,153	63,899	40,000	-	103,899
88	Haji A. Malik Laghari	Wali Muhammad	Haji Malik	Tando Allah yar	145	5	1.0	6.0	4.14	49,153	393,224	132,000	-	525,224
89	Abdul wahid hingoro	Darya khan hingoro	Mir M hingoro	Tando Allah yar	110	4	0.6	4.6	4.18	49,153	285,087	24,000	-	309,087
90	Aslam Khuwaja	Nazar Ali	Khuwaja Goth	Tando Allah yar	40	2	0.3	2.3	5.63	49,153	135,171	4,000	-	139,171
91	Sadar Tando ram	Misri bheel	Misri bheel	Tando Allah yar	10	1	0.1	1.1	11.00	49,153	63,899	10,000	-	73,899
92	Chetandas	Anopchand	Jananr Hingoro	Tando Allah yar	12	1	0.0	1.0	8.33	49,153	49,153	116,500	-	165,653
93	Haji M. Rahim Memon	Mohammad Memon	Haji M. Rahim Memon	Tando Allah yar	44	2	0.3	2.3	5.11	49,153	135,171	1,200	-	136,371
94	Gulzar Ali Samoon	Gul M Samoon	Qasim Rangers farm	Tando Allah yar	4	1	0.0	1.0	25.00	49,153	49,153	56,000	-	105,153
95	Ibraheem Laghari	Imam Bux	Haji Kareem Dad	Tando Allah yar	4	1	0.0	1.0	25.00	49,153	49,153	12,000	-	61,153

ID	Name	Father's Name	Village	District	Total Land Holding (Acres)	Transmission Line (Acres)	Tower Spotting (Acres)	Total Affected Land (Acres)	Extent of Impact (%)	Crop Compensation		Trees Compensation (Rs.)	Allowances (Rs.)	Total Compensation (Rs.)
										Unit Rate (Rs./ Acre)	Crop Compensation (Rs.)			
96	M. Ibrahim	Khan Muhammad	Budho Khan Laghari	Tando Allah yar	20	2	0.5	2.5	12.50	49,153	172,036	8,000	-	180,036
97	Imran Khan Zada	Iqbal	IslamPur	Tando Allah yar	5	0.5	0.0	0.5	10.00	49,153	24,577	-	-	24,577
98	Noor Ahmed Leghari	Haji Mevo	Haji Karim Dad	Tando Allah yar	4	0.5	0.0	0.5	12.50	49,153	24,577	-	-	24,577
99	Zulfiqar Mangrio	A Latif Mangrio	Nandi Mesan	Tando Allah yar	24	2	0.9	2.9	12.08	49,153	231,019	-	-	231,019
100	Abdullah Mevo	Rustam	Hussainabad	Tando Allah yar	134	3	1.3	4.3	3.17	49,153	331,783	-	-	331,783
101	Qasim Laghari	Yar Muhammad	Yar M Laghari	Tando Allah yar	6	1	0.0	1.0	16.67	49,153	49,153	-	-	49,153
102	Jalil Hakro	H.Nazar M Hakro	Haji Jafar Hakro	Tando Allah yar	6	1	0.0	1.0	16.67	49,153	49,153	-	-	49,153
	Total				9543	290	65.0			-	23839205	1,795,000	495,000	26,129,205

Annex 9.3: Comodity Prices as per Directorate of Agriculture Punjab

AMIS Home > AMIS					
amis.pk					
AMIS					
Agriculture Marketing Information Service Directorate of Agriculture (Economics & Marketing) Punjab, Lahore					
About Us Prices Weather News Discussions					
Price Date: Mar 11, 2017	Graph	Min	Max	FQP	Arrival Quantity(in Quintals)
1 Maize		2700	2800	2750	-
2 Millet		2400	2500	2450	-
3 Moong		9600	9700	9650	-
4 Moong Pulse		9900	10000	9950	-
5 RapeSeed (Torya)		13500	13800	13650	-
6 Red Chilli Whole (Dry)		20000	21000	20500	-
7 Rice Basmati Super (New)		86000	8800	8700	-
8 Rice Basmati Super (Old)		9600	9700	9650	-
9 Sugar		5800	5900	5850	-
10 Wheat		3315	3375	3345	-
11 Wheat Straw		885	900	893	-
12 Bitter Gourd (کریلا)		8800	9100	8950	-
13 Bottle Gourd (کنو)		3300	3700	3500	-
14 Brinjal		4600	4900	4750	-
15 Cabbage		1600	1800	1700	-
16 Capsicum (مرچ ٹملم)		3000	3300	3150	-
17 Carrot		1200	1400	1300	-
18 Onion		2400	2600	2500	-
19 Peas		2200	2400	2300	-
20 Potato Fresh		1900	2100	2000	-
21 Radish		800	1000	900	-
22 Spinach		900	1100	1000	-
23 Tinda		-	-	-	-
24 Tomato		4100	4500	4300	-
25 Turnip		800	1000	900	-
26 Zucchini (ٹوری گھیا)		-	-	-	-

Annex 9.4: Price Assessment of Fruit Trees

OFFICE OF THE HORTICULTURIST SINDH HORTICULTURE RESEARCH INSTITUTE MIRPURKHAS.

VALUE OF DIFFERENT STANDING FRUIT TREES YEAR WISE. VALUE IN RS. PER/TREE/PLANT

NO: HORT. SARI/TECH/21

DATE: 10-03-2015

S.NO.	NAME OF FRUIT TREE	IST YEAR	IIND YEAR	IIRD YEAR	IVTH YEAR	VTH YEAR	VITH YEAR	VIIITH YEAR	VIIIITH YEAR	IXTH YEAR	XTH YEAR AND ABOVE
1	Mango grafted	500	1800	2200	3000	3500	50000	6500	9000	11000	13500
2	Mango Desi	400	1500	2000	2500	3000	3500	5500	8000	9000	11000
3	Ber Grafted	150	250	800	900	1500	2000	2500	3000	3500	4500
4	Ber Desi	100	150	350	600	1100	1500	2000	2500	3000	3200
5	Jaman	400	1200	1500	2000	2500	4000	4500	5000	6500	8000
6	Datepalm	400	800	1500	2200	2500	3000	3500	4500	6000	6500
7	Citrus	300	500	700	1200	1800	2200	3000	4000	5000	6000
8	Chiku	500	2000	2500	3000	4000	5000	6000	7000	9000	12000
9	Guava	300	1500	2000	2500	3000	3500	4000	5000	6000	8000
10	Papaya	1000	1500	1500							
11	Banana	300	900	1200	1500						

NOTE:- This value is furnished for well maintained orchards.

Value for poor maintained orchards will range from 40% to 60% of well maintained orchards.

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SINDH HORTICULTURE RESEARCH
INSTITUTE MIRPURKHAS.

Annex 9.5: Price Assessment of Wood/ Timber Trees

(Applicable for all provinces of Pakistan as indicated by the Forest Department, Sindh)



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E-mail - deputydirector@fd.sindh.gov.pk
URL - www.sindh.gov.pk

OFFICE OF THE CHIEF CONSERVATOR OF FORESTS SINDH AT HYDERABAD

No.D.IV(a):-434 of 2012-13
Hyderabad, dated 05.12.2012

PRICE ASSESSMENT OF WOOD /TIMBER TREES IN SINDH FOREST DEPARTMENT

District	Size of Girth			
	Up to 2 feet (Rs/Tree)	Between 2 feet to 4 feet (Rs/Tree)	Between 4 feet to 6 feet (Rs/Tree)	Between 6 feet & above (Rs/Tree)
Wood / Timber Trees				
Talni	2,000/-	5,000/-	12,000/-	21,000/-
Other species (i.e. Eucalyptus, Kikar, Bakain etc)	1,000/-	2,000/-	3,500/-	15,000/-

*Per Stack Rate: (1000 cft)

Eucalyptus	22,000/-
Babul	30,000/-
Talni	35,000/-

* The abovementioned rates / prices are minimum (upset prices), however, actual rates could be higher than the abovementioned rates as open auctions are conducted to sale out wood material and maximum / higher bids are accepted

As far as question of available tree species in the specified districts & talukas is concerned, all the local species are found which includes Eucalyptus, Acacia, Kandi, Neem, Jaman, Sims, Ber, Mango trees. However, particularly in Mirpurkhas and Tando Allahyar, Mango orchards are available at large.

Chief Conservator of Forests
Sindh at Hyderabad

Annex-A: Summary Pamphlet of the Resettlement Plan

Draft Land Acquisition and Resettlement Plan of 220 kV Mirpur Khas Substation with associated Transmission Lines (80 km)

Background

This LARP for subproject has been prepared for 220 kV Mirpur Khas Substation with associated transmission line. The project involves acquisition of 50 acres of private agricultural land for the construction of substation; and installation of 80 km transmission lines, due to which, there will be loss of land, crops, trees and structures. The sub-project is located in the Jamshoro, Hyderabad, Tando Allah Yar and Mirpur Khas districts of Sindh Province, Pakistan. The Ministry of Water and Power and the National Transmission and Dispatch Company Limited (NTDCL) are the Executing Agency (EA) and the Implementing Agency (IA), respectively. The execution of the project will commence in current financial year and is envisaged to be completed in the year 2017-21.

The Government of Pakistan is implementing the "Power Transmission Enhancement Investment Program (PTEIP) under the financial assistance of ADB through a multi tranche financing facility (MFF) to meet the requirements of NTDC for financing of the sub-projects planned for implementation under short, medium and long term. This Investment Program seeks to (i) rehabilitate, augment, and expand parts of the system to meet current generation capacities; (ii) expand and augment the system to cope with future power generation stations; and (iii) ensure continued operation and maintenance in accordance with best international practices. Thus, the major aim of PTEIP is enhancement in the capacity of the transmission system by rehabilitation, extension, augmentation & expansion of existing 500 kV & 220 kV network of NTDC, to meet the growing power demand in the country.

Project Description

The sub-project includes i) construction of substation; and ii) installation of towers & feeding transmission line. There will be installation of 229 towers, i.e. each tower will be installed at average distance of 350m. No civil work has been awarded until preparation of LARP which is expected to be awarded in November 2017. LARP will be finalized in May 2017. Civil work will be started in December 2017 following the payment of compensation. The RoW is 25 m on either side from the centre of transmission line and is 15m in case of tower spotting.

Objectives of LARP

The major objective of this LARP is the assessment of type and magnitude of LAR impacts, eligibility and entitlement of compensation; institutional arrangements for the implementation of LAR activities as well as redress of community complaints, cost, implementation schedule and conducting internal and external monitoring.

Project Impacts

The project involves acquisition of 50.04 acres of private agricultural land for the construction of substation; and installation of 80 km transmission lines, due to which, there will be loss of land, crops, trees and structures. The project will be implemented in various stages, such as: i) construction of substation and installation of transmission lines (i.e. excavation/ foundation; towers and stringing). Out of total 1038.46 acres, 50.04 acres of private land will need to be acquired for the construction of grid station, whereas the activity of tower spotting, erection and stringing of transmission lines will be carried on 988.42 acres of private land. In case of private land, crops on an area of 975.69 acres and 12.73 acres will be affected due to installation of transmission lines and towers spotting respectively. Out of total affected 625 private trees, 277 trees owned by 3 DPs will need to be cut-down due to the construction G/S,

while 348 trees due the installation of transmission line owned by 78 DPs. No indigenous people/ or group of people is in the area of this sub-project or its surroundings.

Resettlement Principles

In accordance with the LAA (1894), Telegraph Act 1885 and ADB SPS (2009), land acquisition and resettlement activities of this sub-project will be carried out ensuring that compensation to be provided at replacement cost basis for all direct and indirect losses, so that no one could be worsen-off because of the sub-project. The provision of subsidies or allowances will also need to be given for affected households (AHs) that may be relocated, suffer business losses, or may be vulnerable.

In this context, the following principles will be taken into consideration:

- i). Need to screen the sub-project early on in the planning stage
- ii). Carry out meaningful consultations
- iii). At the minimum restore livelihood levels to what they were before the sub-project, improve the livelihoods of affected vulnerable groups
- iv). Prompt compensation at full replacement cost is to be paid
- v). Provide affected people with adequate assistance
- vi). Ensure that affected people who have no statutory rights to the land that they are working and eligible for resettlement assistance and compensation for the loss of non-land assets; and
- vii). Disclose all reports

Entitlement for Compensation

The “cut-off date” was set as 14 April, 2017. This refers to the people who will settle/ started any activity after the cut-off date will not be entitled for any compensation under this sub-project. In accordance with this LARP and updated LARF, the affected persons will be eligible for compensation or rehabilitation assistance as discussed below:

- i). All land owning displaced persons losing land or non-land assets, whether covered by legal title or customary land rights, whether for temporary or permanent acquisition.
- ii). Tenants and sharecroppers, whether registered or not; for all non-land assets, based on prevailing tenancy arrangements.
- iii). Displaced persons/ parties losing the use of structures and utilities, including titled and non-titled owners, registered, unregistered, tenants and lease holders plus encroachers and squatters.
- iv). Displaced persons losing business, income and salaries of workers, or a person or business suffering temporary effects, such as disturbance to land, crops, and business operations both permanently and also temporarily during construction.
- v). Loss of communal property, lands (*shamlat*) and public infrastructure.
- vi). Vulnerable displaced persons identified through the social impact assessment survey/ analysis
- vii). In the event of relocation, all affected persons will receive transitional and other support to re-establish their livelihoods.

The compensation and rehabilitation entitlements are summarized in the Entitlement Matrix presented as below:

Entitlement Matrix for Compensation

Asset	Specification	Entitled Persons	Compensation Entitlements
Arable Land	No restriction to access to land with existing/ current land use remaining the same.	Farmer/ Titleholder	No compensation for land provided that the land is rehabilitated/ restored to its former quality following completion of works;
		Leaseholder/ Sharecropper (registered or not)	• No compensation for land if the land is rehabilitated/ restored to its former quality following completion of works;
		Agricultural workers	• Compensation, in cash or kind, for work opportunities lost based on actual/agreed wage rate or approved government daily wages, whichever is greater.
		Squatters	• Compensation, in cash, for all damaged crops and trees
Arable Land where access is restricted and/or land use will be affected.	All adverse effects on land use independent of impact severity	Farmer/ Titleholder	• Land for land compensation with plots of equal value and productivity to the plots lost; or; • Cash compensation for affected land at replacement cost based on market rate plus 15% CAS, free of taxes, registration, and transfer costs.
		Leaseholder/ Sharecropper (registered or not)	• Renewal of lease/ sharecropping contract in other plots of equal value/ productivity of plots lost, or • Cash equivalent to market value of gross yield of affected land for the remaining lease/ contract period (up to a maximum of 3 years).
		Agricultural workers losing their contract	• Cash indemnity corresponding to their salary (including portions in kind) for the remaining part of the agricultural year.
		Squatters	• 1 rehabilitation allowance equal to market value of 1 gross harvest (in addition to crop compensation) for land use loss.
	Additional provisions for severe impacts (More than 10% of land loss)	Farmer/Titleholder Leaseholder	• 1 severe impact allowance 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).
		Sharecroppers (registered or not)	• 1 severe impact allowance equal to market value of share of harvest lost (additional to standard crop compensation)
		Squatters	• 1 severe impact allowance 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).
Residential/ Commercial Land		Titleholder	• Land for land compensation through provision of plots comparable in value/ location to plot lost or • Cash compensation for affected land at full replacement cost plus 15% CAS, free of taxes, registration, and transfer costs.
		Renter/ Leaseholder	• 1-3 months' allowance at OPL i.e. Rs. 15,000/ month) or cash compensation based on actual affect to the land use.
		Squatters	• Accommodation in available alternate land/ or a self-relocation allowance (Rs. 15,000).
Houses/ Structures		Owner of house structures	• Cash compensation at replacement rates for affected structure and other fixed assets free of salvageable materials, depreciation and transaction costs. • In case of partial impacts full cost of structure restoration provided the remaining structure is viable for purposeful use.
Crops	Crops affected	All DPs (including squatters)	• Crop compensation in cash at full market rate for one harvest (either winter or summer) by default for impacts caused by construction of grid/substation; tower base; towers erection; and stringing of wires. • All other crop losses will be compensated at market rates based on actual losses. • Lumpsum cash compensation at Rs. 15,000/ for crop losses being 10% or more.
Trees	Trees affected	Owner of trees	• For timber/ wood trees, cash compensation equivalent to prevailing market price of timber/wood tree. • Fruit trees: Cash compensation for fruit bearing trees based on annual net product market value multiply by 5 years.

Asset	Specification	Entitled Persons	Compensation Entitlements
Business/ Employment	Temporary or permanent loss of business or employment	All DPs suffering income losses (including squatters, agriculture workers)	<ul style="list-style-type: none"> Business owner: i) Cash compensation equal to one year income, if loss is permanent; (ii) cash compensation for the period of business interruption, if loss is temporary. Workers/ employees: Indemnity for lost wages for the period of business interruption up to a maximum of 3 months (at OPL level Rs. 15,000/ month).
Relocation	Transport costs	Owners of structures	<ul style="list-style-type: none"> Provision of transport expenses (Rs. 15,000).
Community assets	Mosques, foot bridges, roads, schools, health center	Affected community	<ul style="list-style-type: none"> Rehabilitation/ substitution of affected structures/ utilities (i.e. mosques, footbridges, roads, schools, health centers).
Vulnerability allowance	HHS below the poverty line; landless or those without title to land, elderly, female headed HHS, women, children and disabled, etc.	All affected vulnerable DPs	<ul style="list-style-type: none"> Lump sum one time livelihood assistance allowance (Rs. 15,000 at OPL Punjab) on account of livelihood restoration support. Temporary or permanent employment during construction or operation, wherever feasible.
Allowance for major impacts	10% or more of productive land and crops affected	All DPs	<ul style="list-style-type: none"> For productive land a lumpsum amount of Rs. 45000/DP For crops a lumpsum amount of Rs. 15000/DP
Unidentified Losses	Unanticipated impacts	All DPs	<ul style="list-style-type: none"> Deal appropriately during sub-project implementation according to the ADB Safeguard Policy