

Land Acquisition and Resettlement Plan

Document stage: Draft (3th revision)

18 May 2018

PAK: 48078-003 MFF II Power Transmission Enhancement Program (PTEIP II), Tranche 3

Draft Land Acquisition and Resettlement Plan of 500 kV Lahore North Grid Station with allied Transmission Lines, totaling 194 km

Prepared by:

Environment & Social Impact Cell of National Transmission and Despatch Company (NTDC), Water and Power Development Authority, WAPDA House, Lahore.

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.

In preparing any country program or strategy, financing any project, or by making any designation of or reference to a particular territory or geographic area in this document, the Asian Development Bank does not intend to make any judgments as to the legal or other status of any territory or area.



**NATIONAL TRANSMISSION AND DESPATCH
COMPANY, PAKISTAN**

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

(Tranche 3)

**Draft Land Acquisition and Resettlement Plan (LARP)
of 500 kV Lahore North Grid Station with allied Transmission
Lines, totaling 194 km.**

18 May 2018



Prepared By:

Environment & Social Impact Cell of National Transmission and Despatch Company (NTDC), Water and Power Development Authority (WAPDA) House, Lahore.

TABLE OF CONTENTS

TABLE OF CONTENTS	ii
LIST OF TABLES.....	iv
LIST OF ANNEXES.....	vi
ABBREVIATIONS	vii
DEFINITION OF TERMS.....	viii
EXECUTIVE SUMMARY.....	1
1. Project Description.....	9
1.1. Background.....	9
1.2 Sub-project Alignment	11
1.2.1 Route alignment.....	11
1.2.2 Width of RoW	11
1.3 Alternatives for Minimizing the Sub-Project Impacts.....	12
1.4 Objectives of the LARP	13
2. SOCIOECONOMIC INFORMATION AND PROFILE	15
2.1 General	15
2.2 Administrative Setting.....	15
2.3 Settlement Pattern	15
2.4 Demographic Profile of Sample DPs.....	15
2.5 Family Size and Gender Composition.....	16
2.6 Literacy Status	16
2.7. Status of Agriculture	17
Cropping Pattern	17
Cropping Intensity	18
Crop Yield.....	19
2.8. Income Analysis	20
Occupations	20
Household Income by Source.....	20
Average Household Income.....	21
Average Household Expenditure	22
2.9. Housing Conditions	23
2.10. Availability of Basic Infrastructure.....	23
2.11. Cultural, Religious and Other Structures.....	25
3. SCOPE OF LAND ACQUISITION AND RESETTLEMENT	26
Impact Survey and Cut-off-date.....	26
3.2. Scope of Land Acquisition and Resettlement	26
3.3. Affected Trees	31
3.4. No. of AFs.....	32
3.5. Building/ Structures	34
3.6. Public Infrastructure.....	34
3.7. Impact on Business	35

3.8.	Vulnerable and Indigenous People	36
3.9.	Gender Impacts	36
3.10.	Severity of Impacts	36
4.	LEGAL FRAMEWORK	37
4.1	Telegraph Act (TA), 1885	37
4.2.	Land Acquisition Act 1894	37
4.3.	ADB's Safeguard Policy Statement 2009 - Involuntary Resettlement Policy	38
4.4.	Legislation relevant to Land Classification	40
4.5.	Comparison of Pakistan's LAA 1894, Telegraph Act 1885 and ADB's SPS 2009 ..	41
4.6.	Reconciliation between Pakistan's Acts and ADB SPS	42
5.	CONSULTATION, PARTICIPATION AND DISCLOSURE	44
5.1	Stakeholder's Consultations	44
5.2.	Public Consultations	44
5.3.	Concerns Regarding the Sub-project	56
5.4.	Information Brochure	58
6.	COMPENSATION ELIGIBILITY AND ENTITLEMENTS	59
6.1.	Eligibility	59
a.	Entitlement for Compensation	59
7.	INSTITUTIONAL ARRANGEMENTS AND IMPLEMENTATION	65
7.1.	National Transmission and Despatch Company	65
7.2.	Environment and Social Impact Cell (E&SIC)	65
7.3.	Facility Management Consultants (FMC)	66
7.4.	Project Implementation Unit (PIU)	66
7.5.	Local Government	67
7.6.	ADB	67
7.7.	LAR Coordination Committee	67
7.8.	Displaced Person Committee	68
7.9.	Grievance Redress Mechanism	68
7.10.	Organogram	71
7.	LARP IMPLEMENTATION SCHEDULE	71
8.1.	Implementation Schedule	72
8.	RESETTLEMENT BUDGET AND FINANCING	73
9.1.	Compensation Methodology	74
9.1.1.	Land Compensation	74
9.1.2.	Compensation of Wood Trees	74
9.1.3.	Compensation of Fruit trees	74
9.1.4.	Compensation of Structures	74
9.2.	Source of Financing	75
9.3.	Resettlement Budget	75

10. MONITORING AND EVALUATION	78
10.1. General	78
10.2. Internal Monitoring	78
10.3. External Monitoring.....	78
10.4. REPORTING REQUIREMENTS	79
Annexure – 1: List of Approved Subprojects Under Tranche 3	Error! Bookmark not defined.
Annexure – 2: List of Land Owners and Affected Cropped Area of Proposed T/ Lines....	Error! Bookmark not defined.
Annexure – 3.3: Inventory of Affected Trees under the Proposed GS	Error! Bookmark not defined.
Annexure – 3.4: Detail of Fruit Trees and Cost Estimation of Grid Station	Error! Bookmark not defined.
Annexure – 3.5: Inventory of Affected Trees under the proposed T/Lines	Error! Bookmark not defined.
Annexure – 3.6: Inventory of Affected Structures located with the Alignment of GS	Error! Bookmark not defined.
Annexure – 3.7: Detail of Compensation for Affected Tube Wells & Hand Pumps...	Error! Bookmark not defined.

LIST OF TABLES

Table 2.1: Average Family Size and Gender Composition of the Sample Households ...	16
Table 2.2: Average Literacy Rate of the Sample DPs.....	16
Table 2.3: Cropping Pattern at Sample Farms.....	17
Table 2.4: Average Cropping Intensity of Sample Farms.....	18
Table 2.5: Average Yield of Major Crops	19
Table 2.6: Major Occupations of the Sample DPs	20
21	
Table 2.7: Annual Households Income by Source	21
Table 2.8: Average Annual Household Income of Sample DPs	22
Table 2.9: Average Annual Expenditure on Food and Non- Food Items	22
Table 2.10: Ownership Status and Housing Conditions.....	23
Table 2.11: Availability of Social Amenities in the Vicinity of Project Area	24
Table 3.1: Sub-project Impacts.....	27
Table 3.2: Affected Cropped Area by the Sub-project.....	30
Table 3.3: Affected Area by Crop Type.....	30
Table 3.4: No of Private Trees located within T/L Route Alignment	31
Table 3.5: No. AFs by Type of Impact	33
Table 3.6: No. AFs by Type of Impact	34
Table 3.7: No. of Public Infrastructure located within T/L Route Alignment.....	34

Table 3.8: Severity of Impacts	36
Table 5.1: List of Public Consultations along the T/L Route Alignment	44
Table 8.1: Implementation Schedule of LARP	72
Table 9.1: Assessment of Value of Crops per Acre	74
Table 9.2: No. of affected structures.....	75
Table 9.3: Resettlement Budget	75

LIST OF FIGURES

Figure 1 Tower with cropping underneath after construction	13
Figure 2.1: Cropping Pattern of the Project Area	17
Figure 2.2: DPs Involvement in various Occupations.....	21

LIST OF ANNEXES

Annexure – 1: Scope of Work of T-3 Subprojects (Phase-III).....	51
Annexure – 2: Location Map of Grid Station.....	53
Annexure – 3.1: List of Land Owners of proposed 500 kV Lahore North G/S.....	54
Annexure – 3.2: List of Land Owners and Affected Cropped Area of Proposed T/ Lines.....	57
Annexure – 3.3: Inventory of Affected Trees under the Proposed GS.....	101
Annexure – 3.4: Detail of Fruit Trees and Cost Estimation of Grid Station.....	104
Annexure – 3.5: Inventory of Affected Trees under the proposed T/Lines.....	105
Annexure – 3.6: Inventory of Affected Structures located with the Alignment of GS.....	115
Annexure – 3.7: Detail of Compensation for Affected Tube Wells & Hand Pumps.....	116
Annexure – 3.8: Inventory of Infrastructures under the proposed T/Lines.....	117
Annexure – 3.9: Assessment of Land Compensation of 500 kV G/S.....	120
Annexure – 3.10: Assessment of Crop and Trees Compensation of Proposed T/Ls.....	123
Annexure – 4: Copy of latest Registry held in village Khair pur Malian.....	159
Annexure – 5.1: Price Assessment of Land as per District Collector (DC), Sheikhpura.....	160
Annexure – 5.2: Commodity Prices as per Directorate of Agriculture Punjab.....	163
Annexure – 5.3: Price Assessment of Fruit Trees.....	164
Annexure – 6: Summary Pamphlet of the Resettlement Plan.....	165

ABBREVIATIONS

ADB	Asian Bank Development
DP	Displaced Person
DPAC	District Price Assessment Committee
DPC	Displaced 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 and 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
PTEIP	Power Transmission Enhancement Investment Program
RADC	Review and Approval of Document
SPS	Safeguard Policy Statement
TA	Telegraph Act 1885
T/L	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. About 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 Persons. In the context of involuntary resettlement, displaced persons are those who are physically displaced (relocation, loss of residential land, or loss of shelter) and/or economically displaced (loss of land, assets, access to assets, income sources, or means of livelihoods) as a result of (i) involuntary acquisition of land, or (ii) involuntary restrictions on land use or on access to legally designated parks and protected areas.

Compensation. Payment in cash or in kind for an asset or a resource that is acquired or affected by a project at the time the asset needs to be replaced.

Cut-off date. The completion date of the census of project-displaced persons is usually considered the cut-off date. A cut-off date is normally established by the borrower government procedures that establishes the eligibility for receiving compensation and resettlement assistance by the project displaced persons. In the absence of such procedures, the borrower/client will establish a cut-off date for eligibility.

Economic Displacement. Loss of land, assets, access to assets, income sources, or means of livelihoods as a result of (i) involuntary acquisition of land, or (ii) involuntary restrictions on land use or on access to legally designated parks and protected areas.

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. Resettlement entitlements with respect to a particular eligibility category are the sum total of compensation and other forms of assistance provided to displaced persons in the respective eligibility category.

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.

Meaningful Consultation. A process that (i) begins early in the project preparation stage and is carried out on an ongoing basis throughout the project cycle; (ii) provides timely disclosure of relevant and adequate information that is understandable and readily accessible to affected people; (iii) is undertaken in an atmosphere free of intimidation or coercion; (iv) is gender inclusive and responsive, and tailored to the needs of

disadvantaged and vulnerable groups; and (v) enables the incorporation of all relevant views of affected people and other stakeholders into decision making, such as project design, mitigation measures, the sharing of development benefits and opportunities, and implementation issues.

Physical Displacement. Relocation, loss of residential land, or loss of shelter as a result of (i) involuntary acquisition of land, or (ii) involuntary restrictions on land use or on access to legally designated parks and protected areas.

Replacement Cost. Replacement cost involves replacing an asset at a cost prevailing at the time of its acquisition. This includes fair market value, transaction costs, interest accrued, transitional and restoration costs, and any other applicable payments, if any. Depreciation of assets and structures should not be taken into account for replacement cost. Where there are no active market conditions, replacement cost is equivalent to delivered cost of all building materials, labor cost for construction, and any transaction or relocation costs.

Relocation assistance. Support provided to persons who are physically displaced by a project. Relocation assistance may include transportation, food, shelter, and social services that are provided to the displaced persons during their relocation. It may also include cash allowances that compensate displaced persons for the inconvenience associated with resettlement and defray the expenses of a transition to a new locale, such as moving expenses and lost work days.

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 Asian Development Bank (ADB) approved a Multitranche Financing Facility (MFF II) to Pakistan on 23 August 2016 for an aggregate amount of up to \$810 million—comprising \$800 million from ADB's ordinary capital resources (OCR) and \$10 million equivalent from Special Funds resources (Asian Development Fund – ADF for the Second Power Transmission Enhancement Investment Program (PTEIP 2)).

2. **MFF II and its Tranches.** In line with the government's Vision 2025, 2013 National Power Policy and ADB's sector strategy, MFF II supports meeting quality and reliability of power supply standards, serving the increasing customer demand, and developing a more balanced generation mix with more renewable energy through expansion and reinforcement of a stronger, smarter and more climate resilient transmission system. It also supports policy reforms, enhance competition and transparency of the sector, and improve institutional efficiency, good governance, planning, project management, and procurement capacities of the transmission system owner and operator, the NTDC, and the sector's newly established commercial operator, the Central Power Purchasing Agency (Guarantee) Limited (CPPA-G) through the capacity development component.

3. MFF II comprises of four tranches. The tranches were selected in accordance with the selection criteria that included meeting the social safeguard requirements of SPS 2009 and the facility's Land Acquisition and Resettlement Framework (LARF) in addition to technical, financial and economic viability, geographical locations and necessary approvals from the Government including PC-1. Tranche 1 (Loan 3419) focuses on rehabilitation and augmentation of 500 kilovolts (kV) transmission system in Punjab and Sindh provinces. Tranche 1 through its concessional loan from ADF (Loan 3420-SF) provides capacity development to support the NTDC's organizational restructuring, and its capacity in planning, design, operation, and assets management, throughout MFF II. Tranche 2 will expand 220 kV transmission system in Sindh and Balochistan and upgrade the supervisory control and data acquisition (SCADA) system across the national grid to enable NTDC to monitor and control the grid in real time and prevent or reduce the duration of network outages—increasing the grid stability, reliability, and resilience to accommodate more intermittent renewable energy. Tranche 3 will expand 500 kV and 220 kV transmission system to meet demand at load centers in Punjab Province. Tranche 4 will help evacuate hydropower to load centers in Punjab, Islamabad and Khyber Pakhtunkhwa (KPK).

4. **Scope of Work - New 500 kV Grid Station (GS) at Lahore North and Allied Transmission Lines (T/L):** Tranche 3 of MFF 2 comprises four subprojects (Annex 1), three of which involve construction of new GS and allied T/L at Lahore North, Jauharabad and Maira in Punjab province. All three subprojects involve permanent acquisition of private land for GS and farming area (presently under cropping) under T/L affected temporarily. This draft LARP has been prepared for GS at Lahore North and allied T/L of five different routes/sections totaling 194 km. In addition, there will be reconductoring with HTLS conductors for 220 kV New Kotlakhpat - Bund Road - Sheikhpura D/C T/L (44 m), and reconductoring with ACSR conductors for a part of 220kV Gatti - Bandala D/C T/L (5 km). However, the draft LARP currently does not cover this component (combine length of 49 km T/L for reconductoring). This component will be covered with impacts assessment and additional consultations fully reflected in the updated LARP based on the scope of work under 49 km long TL for reconductoring, and route survey of 194 km long new transmission lines is undertaken by NTDC through the turn-key contractor. The proposed 500 kV and 220 kV double circuit (D/C) combined T/L

route of 194 km passes through 93 villages located in 5 sub-districts of Sheikhpura, Muridke, Ferozwala, Nowshehra Virkan and Nankana Sahib of the Punjab province.

5. **Project Design Specifications:** According to Government's PC-1 document, the Lahore North GS and T/L involves two main components: (i) 500 kV Grid Station of 500 kV (ii) 500 kV and 220 kV Transmission lines, 194 km in length. The GS will have the following equipment installed: 500/220/132kV S/S with 4x750 MVA, 500/220kV and 3x250 MVA 220/132 kV transformers, six 500 kV line bays, six 220kV line bays, and two 132kV line bays, (v) extension at 500 kV Nokar S/S of two 500 kV line bays. The T/L will involve construction equipment and live line crew equipment, replacement with fog resistant insulators for existing transmission system at heavily polluted area. The equipment required for GS includes transformers, circuit breakers, insulators, and centres and associated works including central room, relay room, battery room, office building, boundary wall, internal roads and residential buildings for the staff. The installation of transmission lines will further involve (i) foundation work (tower footing/ bases), (ii) erection of towers, and (iii) stringing of transmission lines.

6. **Towers Specifications:** Total number of towers to be installed at an average distance of 350-365m are 520. As per section 2.6 of WAPDA Design Criteria for Transmission Lines 1997, the width of RoW of TL is 50m, i.e. 25m on either side from the centre of transmission line but in case of tower spotting, the RoW could be larger, i.e. 625m (i.e. 25m x 25m). The height of towers as per section 2.6.4 of WAPDA's Design Criteria for TL is 9m (minimum) for cultivated areas, roads and streets is minimum 9m. All towers will be self supporting type lattice steel structures, fabricated from galvanized structural steel. Foundation of towers will be designed as individual leg footings, four per tower. The following foundations types may be considered depending upon the results of soil investigations; (i) dry, (ii) semi-submerged, (iii) submerged, and (iv) piles.

7. The design of GS and TL routes will be finalized by the Turnkey Contractor to be contracted by NTDC and this draft LARP will to be finalized based on the final design and land award, disclosed at ADB and Project websites (with summary disclosed to DPs) and approved by ADB prior to its implementation/ construction startup.

8. Fresh consultations with DPs and impact assessment survey was conducted by a Resettlement Specialist (consultant) and his team engaged to the project by NTDC with ADB's concurrence. The team was assisted by NTDC's engineering and design people in the field. The initial consultations and impacts survey was conducted in March 2017. This was updated based on the fresh impacts assessment survey and consultations with same DPs and local people (previously contacted in March 2017) were conducted from 10-21 March 2018. The survey recorded the following land acquisition and resettlement (LAR) related impacts:

9. **LAR impacts of subproject:** About 176 acres of private agricultural land will be acquired by NTDC using the normal procedure of Land Acquisition Act 1894 (LAA) for construction of grid station. Compensation at full replacement costs for lost land and land-based assets including an estimated 174 acres of cropped area, 17 nonresidential structures and about 403 wood trees will be provided along with applicable allowances (as in entitlement matrix below). The installation of 194 km T/L, land under towers footage and lines will not be acquired but cash compensation at market rate will be provided for an estimated 2,228 acres of cropped area to be temporarily affected during installation of T/L, about 1037 wood trees needed to be removed during installation of towers and lines. The subproject is expected to affect an estimated 661 families, 50 of which are severely affected as they stand to lose 10% or more of productive land. For more details, table ES 1 below presents the overall summary of LAR impacts of GS and TL. This subproject will be implemented

in different phases, which are: i) construction of grid station and (ii) installation of transmission lines in further three phases, i.e. (a) construction of tower footings/bases, (b) erection of towers; and (c) stringing of transmission lines.

10. The right of way under lines will not affect the use of land as farmers will continue to cultivate the land. However, farming activities may be temporarily held up during installation of lines for which compensation to farmers will be provided in accordance with entitlement matrix of LARP for any damages sustained by farmers; e.g. damage to crops, structures and trees. NTDC's field offices will enforce the ROW with ROW specifications and any restriction on the construction of structures under the wires. However farming activities will be completely allowed as previously undertaken by the farmers.

Table ES 1: Overall Summary of LARP Impacts of GS and T/L

					DPs	
A. Construction of new 500kV Grid Station, Lahore North						
Land permanently acquired	Acres	176	Private agricultural land under cropping	63	441	Land owning AFs. No leaseholders, tenants or any workers involved.
Fruit Trees to be cut-down	Nos.	55	Private trees on farm land	**9	63	Multiple count. AFs losing land fruit trees.
Wood trees to be cut –down	Nos.	403	Private trees on farm land	20	140	Multiple count. AFs losing land and wood trees
Cropped area	Acres	174	Private land currently being cropped	**63	441	Multiple count. AFs losing land and crops.
Structures (farm houses)	Nos.	02	Private	**3	21	Multiple count. AFs losing land structures with a covered area of 3369.18 sq.ft and boundary wall area 39.3 M ³ . No business or income loss involved.
Fishfarm	Nos	01	Private	1	7	Area comprised on 2410.42m ³ and business income but no employees involved.
Handpump	Nos	01	Private	1	7	
Tubewells	Nos	12	11	11	77	Tubewells along with rooms (05) comprised on the area is 912.12 sq. ft
Sub-total (A)	Acres	176	Private	63	441	63 AFs/ land owners (including affected crops on 174 acres.
B. Transmission Lines of 194 km length.						
Land Acquisition	Acres	Nil	Nil	Nil	Nil	Land under towers footage in rural areas will not be acquired but compensation for lost crops and trees or any structures will be provided.
Tower Spotting	Acres	80.61 ¹	Private agricultural land currently cultivated	**420	2940	In total, 520 towers will be installed. Each tower will affect 625m ² cropped area, totaling 80.61 acres of cropped area to be lost, which is owned by 420 AFs.

¹ In addition, 0.62 acre is owned by the government.

					DPs	
b) Installation of T/L	Acres	2,147.5 ¹²	Private agricultural land currently cultivated	598	4186	T/L right of way (RoW) is 50 m wide (i.e. 25m on either side). The T/L installation (194 km) will affect 2147.51 acres of cropped area owned by 598 AFs which includes the AFs of towers spotting also.
Trees to be cut-down	Nos.	1,037	Private trees on farm land	**245	1715	Multiple counts. These are same AFs who are losing their crops.
Total (A+B)	Acres	-	Private agricultural land	661	4627	63 AFs of permanent land, while 598 AFs of land-based assets making a total of 661 AFs.

*Affected Families. ** AF multiple count.

11. Analysis of LAR impacts presented above indicates that no AF will be physically removed from housing, while 49 AFs (343 DPs) will lose more than 10% of productive land resource and 1 AF will lose their business in the form of affecting his fish farm (2410.42m³), hence 50 AFs (350 DPs) will be severely affected. Furthermore, 2 farm houses (cattle shed, chopper room), and 12 private tubewells and associated 5 rooms will be removed. In line with ADB's definition of project classification/categorization, the LAR impacts are assessed as significant. Accordingly, Tranche 3 is classified A for Involuntary Resettlement based on its most sensitive sub-project, and C for Indigenous Peoples as no IPss have been found living in and around the project areas. People of project area also do not recognize themselves as Ips as defined under ADB's IPs which are referred to as a distinct, vulnerable social and cultural group with self-identification as members of a distinct indigenous cultural group and recognition of this identity by others, collective attachment to geographically distinct habitats or ancestral territories in the project areas, customary cultural, social, or political institutions that are separate from those of the dominant society and culture.

12. **Draft LARP:** This draft LARP been prepared in accordance with Pakistan's Land Acquisition Act 1894 (LAA), the Telegraph Act 1885, the MFF's Land Acquisition and Resettlement Framework (LARF) and ADB's Safeguard Policy Statement 2009 (SPS). The LARP identifies and quantifies the LAR impacts of the subproject and determines compensation based on full replacement cost criterion of SPS; and determines compensation package to be provided to Afs. The LARP has been prepared based on the new alignment covering proposed new GS and route alignment of 194 km TL as marked on Google Map and the design parameters given in PC-I. 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 in SPS 2009. The LARP also provides institutional arrangements for the implementation of LAR activities; LARP implementation schedule; LAR costs/budget; a grievance redress mechanism to address any concerns or grievances of DPs and community members living around the subproject area and LARP monitoring mechanism. This draft LARP will be updated in Nov 2018 as the turn key contractor will be deployed in Sep 2018 and design will be finalized in Oct 2018.

13. The draft LARP in English will be disclosed on the ADB website. An Urdu summary of draft LARP and final LARP (approved by ADB will be disclosed on EA's

² In addition, 14.08 acres are owned by the government.

project website and DPs with copies of LARP summary placed at PIUs, GS office, and local administrative offices.

14. LAR Conditions:

15. For the transmission lines component, the following LAR conditions will be followed to ensure compliance with SPS:

- a. **Section-wise LARP or an addendum covering a section of transmission lines/towers:** Prepare section-wise LARP or an addendum based on the final route survey of transmission lines/towers by turnkey contractor and pay compensation to DPs before start of construction work. If work is undertaken during non-cropping season, this will be clearly documented to indicate that there will be no impacts to crops or trees or structures and hence no DPs. Any unanticipated impacts emerging during construction will also be compensated in accordance with LARP and SPS 2009 before a Notice to Proceed is issued by NTDC to proceed to the next section.
- b. **Third-party validation report:** A third-party validation report by an external monitoring consultant (to be hired by NTDC) confirming full implementation of sectional LARP and payments to DPs for any additional unanticipated impacts will be issued to ADB and approved before the start of construction work for the next section. Same approach will be applied to all sections of TL/towers as finalized by contractor based on the TL/towers route survey.

16. **Cut-off-Date:** In accordance with SPS 2009, compensation entitlements as given in the draft LARP are limited to a cut-off-date, which is notified based on the impacts/census survey (note that NTDC is yet to issue section 4 of LAA) 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 impacts initial impacts survey was conducted during 1-12 March 2017 that has been updated based on the GS and TL site specifications provided by NTDC during 10-21 March 2018. Therefore, 21 March 2018 has been fixed as cut-off-date for project impacts and this has been informed to AFs during consultation meetings conducted in March 2018. A new cut-off-date will be established for households affected by the unassessed components of this subproject, and in case an update of this RP is done at final design stage after March 2019.

17. **Public Consultations:** Public/community consultations were carried out at representative select sites in all five T/L sections and a total of 80 consultations (comprising of 642 participants) were carried out with Afs/ local community members to share project information and record their concerns/ feedback to the project and its design. The AFs expressed their views about 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 assets to be assessed by the district price assessment committee (DPAC) and determined by the Land Acquisition Collector (LAC) keeping in view the full replacement costs as standard of compensation under ADB's SPS 2009.

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

Table ES 2: Entitlement Matrix³

Asset	Specification	Entitled Persons	Compensation Entitlements
Arable Land	Access is not restricted, and existing or current land use will remain unchanged	Farmer/ Titleholder	<ul style="list-style-type: none"> No compensation for land under towers footage in rural area but NTDC/contractor is responsible to rehabilitate/restore land to former condition/use and quality after completion of work. Cost of land restoration work will be borne by contractor, and restoration work will be monitored/validated by EMC.
		Leaseholder/ Sharecropper (registered or not)	<ul style="list-style-type: none"> No compensation for land under towers footage in rural area but land is rehabilitated/restored to its former condition, use and quality following completion of works;
		Agricultural workers	<ul style="list-style-type: none"> Compensation in cash for temporarily damaged crops and trees, etc, temporarily affected.
		Squatters	<ul style="list-style-type: none"> Compensation in cash for temporarily damaged crops and trees, etc.
Arable Land where access is restricted and/or land use will be affected	All adverse effects on land use independent of severity of impact	Farmer/ Titleholder	<ul style="list-style-type: none"> Cash compensation for affected land at replacement cost based on market value plus 15% CAS, ^a free of taxes, registration, and transfer costs.
		Leaseholder/ Sharecropper (registered or not)	<ul style="list-style-type: none"> Cash equivalent to market value of gross yield of affected leased land.
		Agricultural workers losing work their contract	<ul style="list-style-type: none"> Cash payment for lost work or crops damaged by towers construction work.
		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.
	Additional provisions for severe impacts (More than 10% of land 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)
	Land temporarily required	Owner, lessee, tenant	<ul style="list-style-type: none"> Rental fee payment for period of occupation of land, as mutually agreed by the parties.

³ All allowances will be indexed for inflation since RF adoption in May 2016, as of month of payment.

Asset	Specification	Entitled Persons	Compensation Entitlements
	during civil works		<ul style="list-style-type: none"> Restoration of land to original state to be monitored internally by EA and validated by EMC through periodical monitoring reports. Guarantee of access to land and structures located on remaining land.
		Non-titled user	<ul style="list-style-type: none"> Restoration of land to original state Guarantee of access to land and structures located on remaining land
		Renter/ Leaseholder	<ul style="list-style-type: none"> 1-3 months allowance (<i>at OPL level Rs. 15,000/ month</i>)
		Squatters	<ul style="list-style-type: none"> Accommodation in available alternate land/ or a self-relocation allowance (<i>Rs. 15,000</i>).
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 cash assistance to restore remaining structure.
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 grid construction, tower base, stringing and access. All other crop losses will be compensated at market rates based on actual losses.
Trees	Trees affected	Owner of trees	<ul style="list-style-type: none"> For timber/ wood trees, the compensation will be at market value of tree's wood content. Fruit trees: Cash compensation based on lost production based on the yearly produce of tree and investment cost needed to re-grow the tree.
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 (<i>at OPL level Rs. 15,000/ month</i>). The allowance will be adjusted for inflation in case of delay in payment.
Relocation	Transport costs	Owners of structures	<ul style="list-style-type: none"> Provision of transport expenses (<i>Rs. 15,000</i>). The allowance will be adjusted for inflation in case of delay in payment.
Community assets	Mosques, footbridges, roads,	Affected community	<ul style="list-style-type: none"> Rehabilitation/ substitution of affected structures/ utilities (i.e. mosques, footbridges, roads, schools, health centers).

Asset	Specification	Entitled Persons	Compensation Entitlements
	schools, health center		
Vulnerable DPs	Households' below poverty line and female headed households, disable persons of HH, those having no legal title to land, marginal farmers, and landless.	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. • The allowance will be adjusted for inflation in case of delay in payment.
Unidentified Losses	Unanticipated impacts	All DPs	<ul style="list-style-type: none"> • Deal appropriately during sub-project implementation according to the ADB Safeguard Policy

19. The PMU (NTDC) will be responsible to update this draft LARP based on the project design to be finalized by the turn key contractor and seek ADB's approval of the updated or final LARP. 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. In addition, a grievance redress committee (GRC) will be notified to redress the community complaints and documented in this LARP.

20. **Estimated LAR Cost:** The cost of land has been proposed based on the market rate of land assessed keeping in view the following factors: (i) land prices fixed by District Collector (valuation table) for 2018, (ii) average land price based on available land transactions, and (iii) discussions with land owners and common villagers and real estate agents in the project areas. A huge differential in the rates offered by government and the rate demanded by land owners has been recorded. The government's PC-1 rate of land per acre is Rs. 1.0 million, the rate under revenue department (DC rates for 2018) is Rs. 1.0 to 1.6 million per acre (Annex 9.3) while the rate demanded by land owners is Rs. 6.00 million which is based on a latest land transection in Lahore North village. Therefore, estimated land price proposed in the LARP is based on the rate recorded in the latest land transection which Rs. 6.0 million per acre of agriculture land. Thus, total estimated land price for 176 acres of land (needed for GS) is Rs. 1,056 million (\$9.18 million). Other cost of affected structures, crops and trees is Rs. 148.58 million, while cost of resettlement/ rehabilitation allowances is Rs. 4.495 million. Thus, overall estimated cost of land, land-based assets and allowances are Rs. 1,402.97 million. NTDC will need to arrange the required funds and compensate AFs in accordance with LARP and SPS 2009.

21. The LARP implementation will be undertaken in phases which will be monitored internally by NTDC/ESIC on a quarterly basis and externally by external monitoring agency (EMA) on both quarterly during the initial period (upto 1 year) and semiannual basis later on. In addition, each phase of construction will require a validation report of payments made to DPs before start of construction.

1. Project Description

1.1. Background

22. **Project Background:** The Asian Development Bank (ADB) approved a Multitranchise Financing Facility (MFF II) to Pakistan on 23 August 2016 for an aggregate amount of up to \$810 million—comprising \$800 million from ADB's ordinary capital resources (OCR) and \$10 million equivalent from Special Funds resources (Asian Development Fund [ADF])—for the Second Power Transmission Enhancement Investment Program (PTEIP 2).

23. **MFF II and its Tranches.** In line with the government's Vision 2025, 2013 National Power Policy and ADB's sector strategy, MFF II supports meeting quality and reliability of power supply standards, serving the increasing customer demand, and developing a more balanced generation mix with more renewable energy through expansion and reinforcement of a stronger, smarter and more climate resilient transmission system. It also supports policy reforms, enhance competition and transparency of the sector, and improve institutional efficiency, good governance, planning, project management, and procurement capacities of the transmission system owner and operator, the NTDC, and the sector's newly established commercial operator, the Central Power Purchasing Agency (Guarantee) Limited (CPPA-G) through the capacity development component.

24. MFF II comprises of four tranches, selected in accordance with the selection criteria that included meeting the social safeguard requirements of SPS 2009 and the facility's Land Acquisition and Resettlement Framework (LARF) in addition to the technical, financial and economic viability, geographical locations and necessary approvals from the Government including PC-1. Tranche 1 (Loan 3419) focuses on rehabilitation and augmentation of 500 kilovolts (kV) transmission system in Punjab and Sindh provinces. Tranche 1 through its concessional loan from ADF (Loan 3420-SF) provides capacity development to support the NTDC's organizational restructuring, and its capacity in planning, design, operation, and assets management, throughout MFF II. Tranche 2 will expand 220 kV transmission system in Sindh and Balochistan and upgrade the supervisory control and data acquisition (SCADA) system across the national grid to enable NTDC to monitor and control the grid in real time and prevent or reduce the duration of network outages—increasing the grid stability, reliability, and resilience to accommodate more intermittent renewable energy. Tranche 3 will expand 500 kV and 220 kV transmission system to meet demand at load centers in Punjab Province. Tranche 4 will help evacuate hydropower to load centers in Punjab, Islamabad and Khyber Pakhtunkhwa (KPK).

25. **Scope of Work - New 500 kV Grid Station (GS) at Lahore North and Allied Transmission Lines (T/L):** Tranche 3 of MFF 2 comprises four subprojects (Annex 1), three of which involve construction of new GS and allied T/L at Lahore North, Jauharabad and Maira in Punjab province. All three subprojects involve acquisition of private land for GS and farming area (presently under cropping) under T/L affected temporarily. In addition, there will be reconductoring with HTLS conductors for 220 kV New Kotlakhpat - Bund Road - Sheikhpura D/C T/L (44 m), and reconductoring with ACSR conductors for a part of 220kV Gatti - Bandala D/C T/L (5 km). However, the draft LARP currently does not cover this component (combine length of 49 km T/L for reconductoring). This component will be covered with impacts assessment and additional consultations undertaken and fully reflected in the updated LARP based on the scope of work under 49 km long TL for reconductoring, and route survey of 194 km long new transmission lines is undertaken by NTDC through the turn-key contractor..

26. The five different routes of TL included in this subproject are; i) 500/220 kV substation with 3 x750 MVA transformers and allied equipment & accessories; ii) 220 kV double circuit T/L for In/Out of Lahore (old) - Ravi at 500 kV Lahore North; iii) 500 kV D/C T/L from Lahore North to

proposed Lahore HVDC switching/ CS; iv) 220 kV double circuit T/L for In/ Out of 220 kV KSK-Ravi at 500 kV Lahore North; v) 500 kV D/C T/L from Lahore North to existing Gujranwala (Nokhar) substation; vi) 220 kV double circuit T/L for In/Out of Ghazi road –KSK at 500 kV Lahore North. The proposed 220 kV D/C T/L route alignment of 194 km long passes through 93 villages belonging to 5 tehsils (Sheikhupura, Muridke, Ferozwala, Naushra Virkan and Nankana Sahib) fall in the jurisdiction of 3 districts Sheikhupura, Gujranwala and Nankana Sahib. There will be installation of 520 towers, i.e. each tower will be installed at varying distance ranging from 350 m to 365 m.

27. The proposed 500 kV and 220 kV double circuit (D/C) combined T/L route of 194 km passes through 93 villages located in 5 sub-districts of Sheikhupura, Muridke, Ferozwala, Nowshehra Virkan and Nankana Sahib of the Punjab province.

28. **Project Design Specifications:** According to Government's PC-1 document, the Lahore North GS and T/L involves two main components: (i) 500 kV Grid Station of 500 kV (ii) 500 kV and 220 kV Transmission lines, 194 km in length. The GS will have the following equipment installed: 500/220/132kV S/S with 4x750 MVA, 500/220kV and 3x250 MVA 220/132 kV transformers, six 500 kV line bays, six 220kV line bays, and two 132kV line bays, (v) extension at 500 kV Nokar S/S of two 500 kV line bays. The T/L will involve construction equipment and live line crew equipment, replacement with fog resistant insulators for existing transmission system at heavily polluted area. The equipment required for GS includes transformers, circuit breakers, insulators, and centres and associated works including central room, relay room, battery room, office building, boundary wall, internal roads and residential buildings for the staff. The installation of transmission lines will further involve (i) foundation work (tower footing/ bases), (ii) erection of towers, and (iii) stringing of transmission lines.

29. Total number of towers to be installed at an average distance of 350-365m are 520. The width of RoW for T/L considered was 50 m, i.e. 25m on either side from the centre of transmission line, while in case of tower spotting the RoW will be 625m (i.e. 25m x 25m). The height of towers will be as per WAPDA specifications of 1997 (section 2.6.4), which for cultivated areas, roads and streets is minimum 9m. The equipment & machinery required for the construction of 500 kV GS and 500 kV/ 220 kV D/C TL includes light & heavy angle towers and suspension towers, conductors, optical ground wire (OPGW) and insulators. The project design and drawings were not available at the time of field survey; however, the impact assessment for preparation of this draft LARP was carried out based on the site proposed for GS and field coordinates and TL route alignments marked on the Google Map provided by NTDC (TL Route – Google map at Figure 1.1).

The design of GS and TL routes will be finalized by the Turnkey Contractor to be contracted by and NTDC and this draft LARP will need to be updated based on the final the TL/towers route survey and issuance of section 6 of land acquisition act 1894 (LAA) or land award, disclosed at ADB and Project websites (with summary disclosed to DPs) and approved by ADB prior to its implementation/ construction startup.

30. The project involves acquisition of 176 acres of private agricultural land for the construction of grid station; and installation of 194 km transmission lines, due to which, there will be loss of land, crops, structures, trees and other structures including a fish farm and poultry farm. The project will be implemented in various stages, such as: i) construction of grid station and installation of transmission lines (i.e. excavation/ foundation, towers and stringing). Out of total 2,442.82 acres, 176 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 2,242.82 acres of private agricultural land.

31. This draft LARP for subproject has been prepared to identify, quantify and value the impacts in order to determine the compensation package and accordingly its implementation. 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.

32. **LAR Conditions:**

33. For the transmission lines component, the following LAR conditions will be followed to ensure compliance with SPS:

- a. **Section-wise LARP or an addendum covering a section of transmission lines/towers:** Prepare section-wise LARP or an addendum based on the final route survey of transmission lines/towers by turnkey contractor and pay compensation to DPs before start of construction work. If work is undertaken during non-cropping season, this will be clearly documented to indicate that there will be no impacts to crops or trees or structures and hence no DPs. Any unanticipated impacts emerging during construction will also be compensated in accordance with LARP and SPS 2009 before a Notice to Proceed is issued by NTDC to proceed to the next section.
- b. **Third-party validation report:** A third-party validation report by an external monitoring consultant (to be hired by NTDC) confirming full implementation of sectional LARP and payments to DPs for any additional unanticipated impacts will be issued to ADB and approved before the start of construction work for the next section. Same approach will be applied to all sections of TL/towers as finalized by contractor based on the TL/towers route survey.

1.2 **Sub-project Alignment**

34. Based on the alignment/ route alignment of transmission lines provided by NTDC, field survey was carried out.

1.2.1 **Route alignment**

35. The proposed 220 kV D/C T/L route alignment of 194 km long passes through 93 villages belonging to 5 Tehsils (Sheikhupura, Muridke, Ferozwala, Naushra Virkan and Nankana Sahib) fall in the jurisdiction of 3 Sheikhupura, Gujranwala and Nankana Sahib. There will be installation of 520 towers, i.e. each tower will be installed at varying distance ranging from 350 m to 365 m.

1.2.2 **Width of RoW**

36. In consultation with the Survey & Investigation section of NTDC and the E&SIC (PMU), NTDC, the width of RoW for T/L considered was 50 m, i.e. 25 m on either side from the centre of transmission line, while in case of tower spotting the area considered was 25m x 25m (i.e. 625 m²).

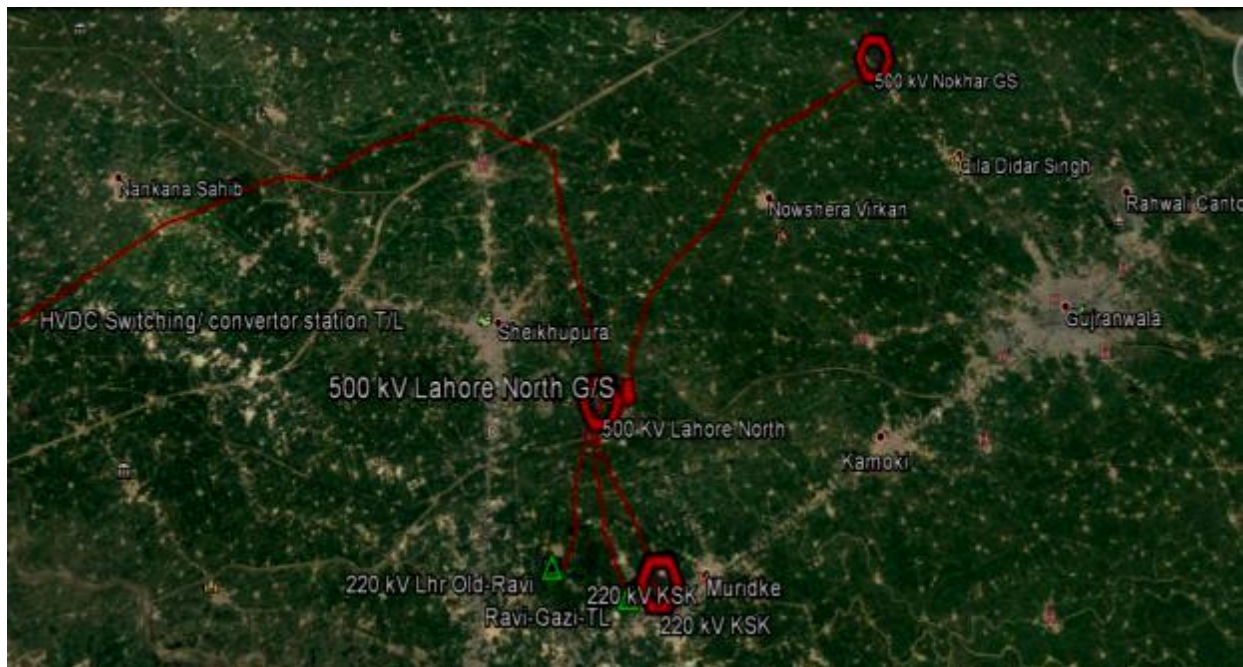
1.3 Alternatives for Minimizing the Sub-Project Impacts

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

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

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

Figure 1.1: Location Map of the proposed Sub-project



39. The proposed sub-project involves the construction of grid station and installation of towers and feeding transmission lines. There are varying degree of impacts at different stages of implementation of sub-project activities, such as:

- i). Construction of grid station;
- ii). Installation of towers; and

iii). Installation of transmission lines - stringing activity.

40. Total number of towers is 520, which are to be installed at a distance varying from 350 m to 365 m. The width of RoW for T/L considered was 50 m, i.e. 25 m on either side from the centre of transmission line, while in case of tower spotting the RoW will be 625 m² (i.e. 25m x 25m). The height of towers will be 44m to 60m. A sample tower is illustrated through a diagram.

41. The equipment & machinery required for the construction of 500 kV grid station and associated 500 kV/ 220 kV double circuit transmission lines includes light & heavy angle towers and suspension towers, conductors, optical ground wire (OPGW) and insulators.

Physical activities include deployment of consultants, preparation of design/ drawings, preparation of bidding documents and agreement of RoW to be completed the 1st year (2018). Bidding, evaluation and award of contract, commencement of civil work will be in the 2nd years (2018-19). Manufacturing & shipment of equipment, completion of civil work will be in 3rd year (2019-20) and clearing for operation will be in the 4th year of the project (2020-21).

1.4 Objectives of the LARP

42. In accordance with the Terms of Reference (ToR), a LARP of 500 kV/220 kV Lahore North G/S along with allied transmission lines⁴ (194 km) is to be prepared.

43. The following are the specific aspects covered in this LARP

- Project description
- Scope of land acquisition and resettlement
- Socio-economic information and profile
- Information disclosure, consultation, and participation
- Grievance redress mechanisms
- Legal framework
- Entitlements, assistances and benefits
- Relocation of assets and utilities

Fig.1.2 Outline Drawing of T/L Tower

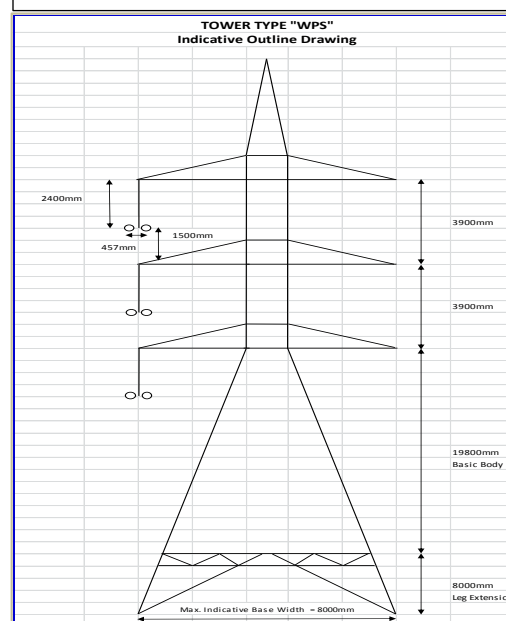
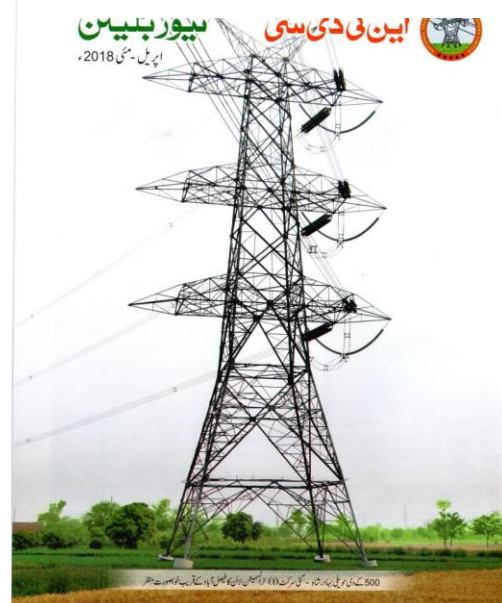


Figure 1 Tower with cropping underneath after construction



⁴ The subproject includes 500/220/132kV S/S with 3x750 MVA, 500/220kV, and 3 x250 MVA 220/132 kV transformers and five transmission lines consisting of total 194 km, i.e. (i) 500 kV D/C T/L Lahore North -proposed Lahore HVDC switching/ converter station (105 km); (ii) 500 kV D/C T/L Lahore North -existing Gujranwala (Nokhar) S/S (45 km) (iii) 220kV D/C T/L for in/out of 220 kV Ghazi Rd.-KSK S/C T/L (15 km); (iv) 220kV D/C T/L for in/out of 220 kV Lahore-Ravi Rd. S/C T/L (14 km), (v) 220kV D/C T/L for in/out of 220 kV KSK-Ravi Rd. S/C T/L (15 km).

- Resettlement budget and financing plan
- Institutional arrangements
- Implementation schedule, and Monitoring and reporting.

2. SOCIOECONOMIC INFORMATION AND PROFILE

2.1 General

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

45. The primary data include census survey of all affected families covering the typology and magnitude of the impacts. The field survey was conducted from August 1, 2016 to September 8, 2016, further supplemented from 01-18 March 2017 and updated in February 20 to March 18, 2018. The socioeconomic profile of the sub-project affected families was established based on the interviews of 159 (25%) selected randomly out of total 661 AFs. The survey will be updated through the increased sampling from 159 AFs to 250 AFs during the detailed design stage, i.e., October 2018. The survey will be added up of the interview of 91 AFs. The survey provides the socioeconomic profile of DPs and the baseline information for subsequent monitoring and evaluation studies.

2.2 Administrative Setting

46. The proposed sub-project includes construction of grid station and installation of towers and transmission line. The land required for the construction of grid station falls in the village Khairpur Mallian of Tehsil & District Sheikhupura. However, the proposed transmission line of 194 km passes through 93 villages⁵, 5 Tehsils (Sheikhupura, Muridke, Ferozwala, Naushra Virkan and Nankana Sahib) of District of Sheikhupura, Gujranwala and Nankana Saheb.

2.3 Settlement Pattern

47. The field survey has shown that considering settlement pattern all affectees were belonging to rural areas and small towns. The DPs were relating to major caste groups including Raja, Dogar, Bhatti, Arain, Rajput, Minhas, Chadder, Khokhar, Kamboh, Awan, Virk, Bodla, Jat, Gujjar, Syed, Pathan, Malik, Mehr, Watto, Maan, Kharal, Sheikh, Rao, Waraich, Sindhu, Tillu, Kashmiri, Cheema, Olakh, Kharal, Manj and other.

2.4 Demographic Profile of Sample DPs

48. The field survey (including census, interviews, and public consultations) was carried out to collect the socioeconomic data from DPs to accomplish the baseline information, which will provide the basis for subsequent monitoring and evaluation studies as well as determine the compensation.

49. The demographic features include the information on household's profile, gender composition, occupations, and literacy status of the sample DPs resided in the sub-project area

⁵ Mallian Kalan, Leel Village, Chak Sanatta, Khashal Pur, Wandala Nasir Wala, Kot Pindi Das, Khairpur Mallian, Chachuke, Gopi Rai, Mirza Virkan, Dera Ch. M. Baksh, Chak Gurdas, Shahpur, Jandiala Sher Khan, Warm Chak, ,Laalke, Dera Gujran Laalka, Bandoke, Sacha Sodha, Dera Bhir Wala Sacha Sodha, Dera Hajian, Dera Mallian Sharki, Jhinda Nau Chak 540, Bhar, Makki 460, Largan, Feroz Watto, Walgan Sohail,Ullawal Kot, Kot Allah Ditta, Kot Karam Dad, Adampur, Wakil Wala , Dolatpur, Budha, Saidpur, khadawala, Ladoana, Janiwala ,Chokori, Chak Chor Shah, Khiray Kalan, Kirchpur, Wandara Ghulam, Jalal Nao, Nota, Masu, Harrya, Paka Qilla, Mango Taro ,Hasalpaar, Guraye, Dhup Sari, , Chak Saikum, Chuhiwala, Chak 32, Berwala, Chak 33, Bhainwala, Chak 34, Chak 36, Nou Village, Nokhar, Palankpur, Dera Jalai Wala , Chabba Sindhuwala, Tonga Wali, Kot Kesho, Olkhan, Dera Cha Wali Wala, Tillo Badshah Dera Cha Wali Wala, Argan, Chuhiwala Khurd, Kikerian Wali, Phammay, Gdhanwala, Wdhanwala, Abidabad, Matta Virkan, Leel Vikran, Mule Virkan, Qasim Pur, Bagh wala Dera, Shamsa Dhada, Herdev, Taray Wala, Pakha Dera, Chak Saikhum , Chubarian Wala, Chi Wala Kalan, Village Purab, Ali pur Tibba and Nun Village.

belonging to the above-mentioned districts. The information relating to the demographic profile of DPs is described.

2.5 Family Size and Gender Composition

50. Based on the field survey of sample DPs, on the whole, the overall average family size determined as 6.5, out of which the proportion of male and female was 51.4 percent and 48.6 percent respectively as shown in Table 2.1.

Table 2.1: Average Family Size and Gender Composition of the Sample Households

Sub-Projects/ Components	Average Family Size (No.)	Gender Composition (%)	
		Male	Female
✓ Construction of grid station and 220 kV double circuit T/L for In/Out of Lahore (old)- Ravi at 500 kV Lahore North	7.3	51.3	48.7
✓ 500 kV D/C T/L from Lahore North to proposed Lahore HVDC switching/CS and 220 kV Double Circuit T/L for In/ Out of 220 kV KSK- Ravi at 500 kV Lahore North	6.4	52.4	47.6
✓ 500 kV D/C T/L from Lahore North to existing Gujranwala (Nokhar) substation and 220 kV double circuit T/L for In/Out of Ghazi road – KSK at 500 kV Lahore North	6.3	49.7	50.3
Overall	6.7	51.1	48.9

2.6 Literacy Status

51. The field survey results shown in Table 2.2 presents that the overall average literacy rate of sample DPs is estimated as 85.6%. The average literacy rate among male and female was 88.0% and 83.3% respectively. The literacy rate is worked out based on the field survey conducted in March 2018 and the District Census Report, Sheikhupura 1998 projected for 2018.

Table 2.2: Average Literacy Rate of the Sample DPs

Sub-project	Overall (%)	Average Literacy Rate (%)	
		Male	Female
✓ Construction of grid station and 220 kV double circuit T/L for In/Out of Lahore (old)- Ravi at 500 kV Lahore North	82.3	86.5	78.4
✓ 500 kV D/C T/L from Lahore North to proposed Lahore HVDC switching / CS and 220 kV double circuit T/L for In/ Out of 220 kV KSK- Ravi at 500 kV Lahore North	87.7	89.3	86.2
✓ 500 kV D/C T/L from Lahore North to existing Gujranwala (Nokhar) substation and 220 kV double circuit T/L for In/Out of Ghazi road –KSK at 500 kV Lahore North	84.2	86.9	81.5
Overall	85.6	88.0	83.3

Source: Field survey March 2018 and DCR 1998 projected for 2018.

2.7. Status of Agriculture

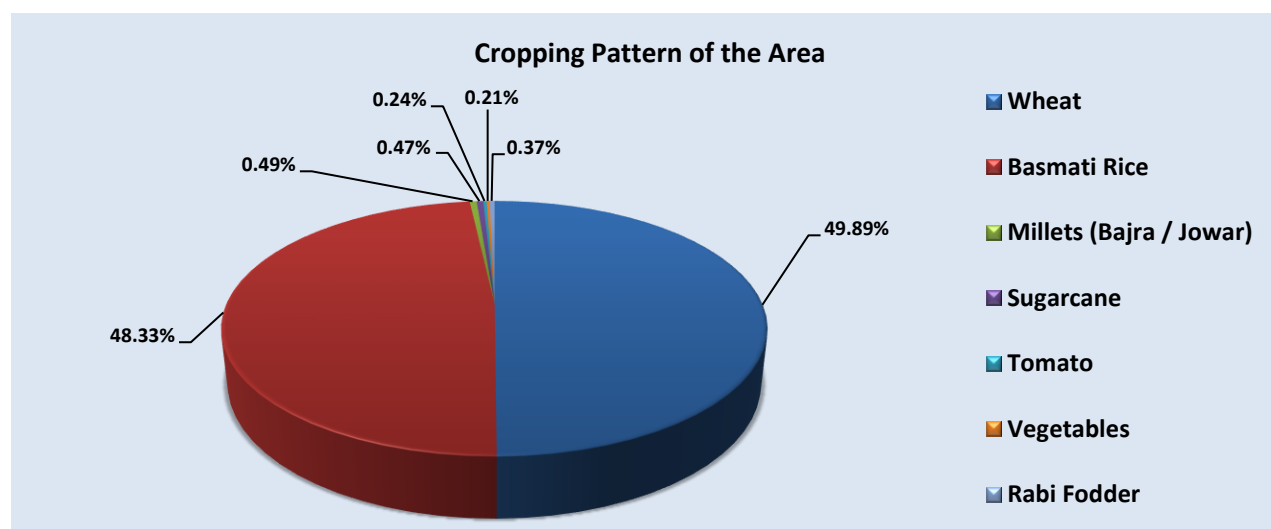
Cropping Pattern

52. The cropping pattern refers to the allocation of cultivated area under different crops during the year as summarized in Table 2.3. Main rabi (winter) crops were wheat, tomato and rabi fodder, while in case of kharif (summer) crops were basmati rice, millet (bajra) and kharif vegetables. The annual crop was sugarcane as illustrated in Figure 2.1 but cultivated at very limited scale, as none of the sugarcane crop was found in the proposed Grid site.

Table 2.3: Cropping Pattern at Sample Farms

Sub-projects	Cropping Pattern (% of Area Cropped)						
	Wheat	Basmati Rice	Millets (Bajra / Jowar)	Sugarcane	Tomato	Vegetables	Rabi Fodder
✓ Construction of grid station and 220 kV double circuit T/L for In/Out of Lahore (old)- Ravi at 500 kV Lahore North	50.0	50.0	-	-	-	-	-
✓ 500 kV D/C T/L from Lahore North to proposed Lahore HVDC switching / CS and 220 kV double circuit T/L for In/ Out of 220 kV KSK- Ravi at 500 kV Lahore North	49.12	47.55	0.90	0.95	0.48	0.29	0.71
✓ 500 kV D/C T/L from Lahore North to existing Gujranwala (Nokhar) substation and 220 kV double circuit T/L for In/Out of Ghazi road –KSK at 500 kV Lahore North	51.04	48.59	0.15	-	-	0.22	-
Overall	49.89	48.33	0.49	0.47	0.24	0.21	0.35

Figure 2.1: Cropping Pattern of the Project Area



Cropping Intensity

53. The cropping intensity refers the extent to which the cultivated area being cropped during the year. The cropping intensity is measured in terms of percentage and is calculated as the cropped area divided by cultivated area multiply by 100.

54. The survey results presented in Table 2.4 shows that on the whole, the overall average cropping intensity on sample farms computed to be 168.9%, while it was 85.7% and 83.2% for rabi and kharif crops respectively.

Table 2.4: Average Cropping Intensity of Sample Farms

District/ Crops	Average Cropping Intensity (%)
Construction of grid station and 220 kV double circuit T/L for In/Out of Lahore (old)- Ravi at 500 kV Lahore North.	
Rabi Season	
- Wheat	96.3
<i>Av. Cropping Intensity (Rabi Season)</i>	96.3
Kharif Season	
- Bastmati Rice	96.3
<i>Av. Cropping Intensity (Kharif Season)</i>	96.3
500 kV D/C T/L from Lahore North to proposed Lahore HVDC switching / CS and 220 kV double circuit T/L for In/ Out of 220 kV KSK- Ravi at 500 kV Lahore North.	
Rabi Season	
- Wheat	50.0
- Tomato	0.48
- Rabi Fodder	0.73
<i>Av. Cropping Intensity (Rabi Season)</i>	51.21
Kharif Season	
- Bastmati Rice	48.40
- Millat/ Bajra	0.92
- Vegetables	0.29
<i>Av. Cropping Intensity (Kharif Season)</i>	49.61
Annual Crops	0.97
Sugacane	
<i>Sub-total</i>	101.79
500 kV D/C T/L from Lahore North to existing Gujranwala (Nokhar) substation and 220 kV double circuit T/L for In/Out of Ghazi road –KSK at 500 kV Lahore North.	
Rabi Season	
- Wheat	107.17
<i>Av. Cropping Intensity (Rabi Season)</i>	107.17
Kharif Season	
- Bastmati Rice	102.02
- Millat/ Bajra	0.31
- Vegetables	0.47
<i>Av. Cropping Intensity (Kharif Season)</i>	102.8
<i>Sub-total</i>	209.9
Overall	

District/ Crops	Average Cropping Intensity (%)
Rabi Season	
- Wheat	84.49
- Tomato	0.48
- Rabi Fodder	0.73
<i>Av. Cropping Intensity (Rabi Season)</i>	<i>85.70</i>
Kharif Season	
- Basmati Rice	82.24
- Millat/ Bajra	0.62
- Vegetables	0.38
<i>Av. Cropping Intensity (Kharif Season)</i>	<i>83.24</i>
Annual Crops	
- Sugarcane	0.97
Total	168.9

Crop Yield

55. The survey results summarized in Table 2.5 below show that on overall basis, the average yield of major crops per acre is 1,386 kgs for wheat, 1,444 kgs for basmati rice, 340 kgs for millet (bajra) and 25,920 kgs for sugarcane in the project area.

Table 2.5: Average Yield of Major Crops

Sub-project	Crops	Wheat	Basmati Rice	Millets (Bajra/Jowar)	Tomato	Vegetables	Sugarcane	Rabi Fodder
Construction of grid station and 220 kV double circuit T/L for In/Out of Lahore (old)-Ravi at 500 kV Lahore North	Maunds (40 Kg) / acre	39.2	36.0	-	-	-	-	-
	Kg./ acre	1,568	1,440	-	-	-	-	-
500 kV D/C T/L from Lahore North to proposed Lahore HVDC switching / CS and 220 kV double circuit T/L for In/ Out of 220 kV KSK- Ravi at 500 kV Lahore North	Maunds (40 Kg) / acre	33.59	35.85	6.9	100.0	150.0	648.50	400
	Kg./ acre	1,344	1,434	276	4,000	6,000	25,940	16,000
500 kV D/C T/L from Lahore North to existing Gujranwala (Nokhar) substation and 220 kV double circuit T/L for In/Out of Ghazi road –KSK at 500 kV Lahore North	Maunds (40 Kg) / acre	33.63	36.57	10	-	108.3	-	-
	Kg./ acre	1,345	1,463	400	-	4,332	-	-
Overall	Maunds (40 Kg) / acre	34.6	36.1	8.5	100	108.9	648	400
	Kg./ acre	1,386	1,444	340	4,000	4,356	2,5920	16,000

2.8. Income Analysis

56. The income analysis indicates the socioeconomic status of affected families. This section of income analysis covers the following:

- Occupations of the displaced persons
- Income by source
- Household expenditure

Occupations

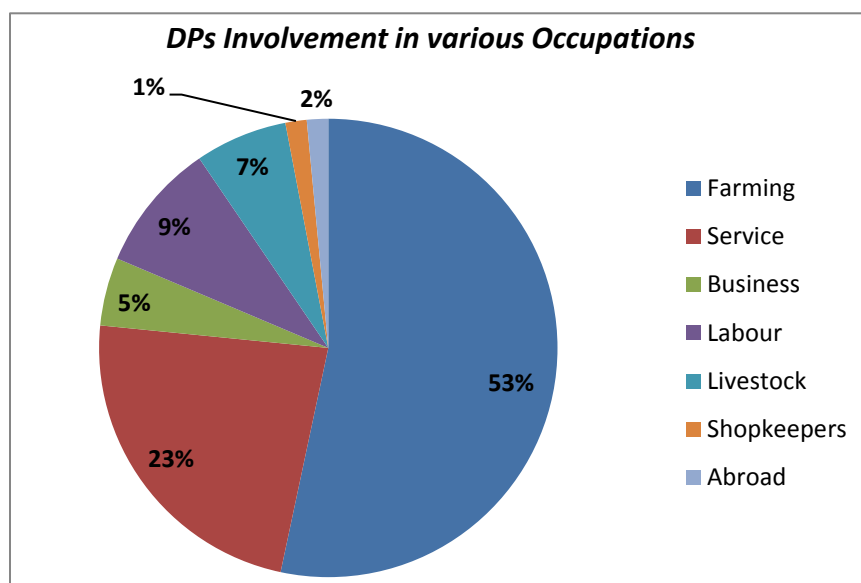
57. During the field survey, it was noted from data given in Table 2.6 and Figure 2.2 that 53.27% of DPs were involved in farming, while in addition to farming, 23.2% were engaged in service, 4.8% were involved in business, 9.1% were labour, 6.5% were involved in livestock enterprise, 1.5% were shopkeepers and 1.5% have gone abroad in the middle east and sending remittance.

Table 2.6: Major Occupations of the Sample DPs

Sub-project	Occupation (%)						
	Farming	Service/ Private Job	Business	Labour	Livestock Enterprise	Shopkeeper	Abroad
Construction of grid station and 220 kV double circuit T/L for In/Out of Lahore (old)- Ravi at 500 kV Lahore North	52.13	24.17	5.15	9.18	7.25	-	2.12
500 kV D/C T/L from Lahore North to proposed Lahore HVDC switching / CS and 220 kV double circuit T/L for In/ Out of 220 kV KSK- Ravi at 500 kV Lahore North	52.89	28.10	6.44	5.79	4.13	1.55	1.1
500 kV D/C T/L from Lahore North to existing Gujranwala (Nokhar) substation and 220 kV double circuit T/L for In/Out of Ghazi road –KSK at 500 kV Lahore North	56.90	17.34	2.74	12.2	8.17	1.37	1.35
Overall	53.27	23.2	4.8	9.1	6.5	1.5	1.5

Household Income by Source

58. The data given in Table 2.7 shows that on overall basis, main sources of income observed in case of affected families were farming, service, business, labour, livestock and shop keeper. The average annual household income was estimated, i.e. farming (Rs. 530,539), service (Rs. 69,496), business (51,410), labour (54,622), livestock enterprise (Rs. 29,383), shopkeeper (Rs. 15,359) and abroad (18,108).

Figure 2.2: DPs Involvement in various Occupations**Table 2.7: Annual Households Income by Source**

(Rs./ Annum)

Sub-project	Farming	Service/ Pvt. Job	Business	Labour/ Daily wages	Livestock	Shopkeeper	Abroad
Construction of grid station and 220 kV double circuit T/L for In/ Out of Lahore (old)- Ravi at 500 kV Lahore North	677,273	84,563	51,301	63, 365	27,465	-	19,178
500 kV D/C T/L from Lahore North to proposed Lahore HVDC switching / CS and 220 kV double circuit T/L for In/ Out of 220 kV KSK- Ravi at 500 kV Lahore North	471,569	57,583	47,273	45,254	36,418	22,489	16,512
500 kV D/C T/L from Lahore North to existing Gujranwala (Nokhar) substation and 220 kV double circuit T/L for In/Out of Ghazi road –KSK at 500 kV Lahore North	442,776	66,342	55,658	55,248	24,265	23,587	18,634
Overall	530,539	69,496	51,410	54,622	29,383	15,359	18,108

Average Household Income

59. The assessment of annual household income is one of the important indicators to measure the well-being/ livelihood of the household. In the field survey, the major sources of income include: income from farming, service, business, labour, livestock and shopkeepers.

60. Based on the data summarized in Table 2.8 below indicates that the overall average annual household income computed to be Rs. 768,918, while it is Rs. 114,764 on per capita basis, while it is Rs. 9,564 per capita/ month.

Table 2.8: Average Annual Household Income of Sample DPs

Sub-project	Average Household Income (Rs.)		Average per Capita Income (Rs.)	
	Annual	Monthly	Annual	Monthly
Construction of grid station and 220 kV double circuit T/L for In/Out of Lahore (old)- Ravi at 500 kV Lahore North	923,145	76,929	137,783	11,482
500 kV D/C T/L from Lahore North to proposed Lahore HVDC switching / CS and 220 kV double circuit T/L for In/ Out of 220 kV KSK- Ravi at 500 kV Lahore North	697,098	58,092	104,044	8,670
500 kV D/C T/L from Lahore North to existing Gujranwala (Nokhar) substation and 220 kV double circuit T/L for In/Out of Ghazi road –KSK at 500 kV Lahore North	686,510	57,209	102,464	8,539
Overall	768,918	64,077	114,764	9,564

Average Household Expenditure

61. The annual expenditure and pattern of expenditure provides an indication for assessing standard of living of a household. The expenditure on food items include cereals, pulses, flour, sugar, cooking oil/ ghee, milk etc., while the non-food items include education, medical treatment, clothes, shoes, cosmetics, utilities and other.

62. On overall basis total average annual household expenditure on both food and non-food items estimated as Rs. 418,057. On the whole, the proportion of expenditure incurred on food and non-food items is 55.9% and 44.1% respectively as given in Table 2.9 below.

Table 2.9: Average Annual Expenditure on Food and Non- Food Items

Sub-project	Total Expenditure on Food & Non-Food Items (Rs./ Annum)	Food Expenditure (Rs.)	% on Food Expense	Non- Food Expenditure (Rs.)	% on Non-Food Expense
Construction of grid station and 220 kV double circuit T/L for In/Out of Lahore (old)- Ravi at 500 kV Lahore North	489,302	245,055	50.1	244,247	49.9
500 kV D/C T/L from Lahore North to proposed Lahore HVDC switching / CS and 220 kV double circuit T/L for In/ Out of 220 kV KSK- Ravi at 500 kV Lahore North	352,612	189,333	53.7	163,279	46.3
500 kV D/C T/L from Lahore North to existing Gujranwala (Nokhar) substation and 220 kV double circuit T/L for In/Out of Ghazi road –KSK at 500 kV Lahore North	412,256	212,768	51.6	199,488	48.4

Sub-project	Total Expenditure on Food & Non-Food Items (Rs./Annum)	Food Expenditure (Rs.)	% on Food Expense	Non-Food Expenditure (Rs.)	% on Non-Food Expense
Overall	418,057	215,719	51.6	202,338	48.4

2.9. Housing Conditions

63. The ownership and housing condition is also one of the important indicators for the assessment of living standard/ household's well-being. Based on the survey results shown in Table 2.10 on overall basis, a 100% of sample DPs had their own houses.

64. As far as the housing condition is concerned, it was observed during the field survey that a major proportion of DPs (96.7%) had their pacca (concrete) houses, 2% had semi-pacca and 1.3% had katcha (mud) house.

Table 2.10: Ownership Status and Housing Conditions

Sub-project	Housing Conditions (%)		
	Pacca (Concrete)	Semi Pacca	Katcha
Construction of grid station and 220 kV double circuit T/L for In/Out of Lahore (old)- Ravi at 500 kV Lahore North	95.4	4.6	-
500 kV D/C T/L from Lahore North to proposed Lahore HVDC switching / CS and 220 kV double circuit T/L for In/ Out of 220 kV KSK- Ravi at 500 kV Lahore North	97.7	1.3	1.0
500 kV D/C T/L from Lahore North to existing Gujranwala (Nokhar) substation and 220 kV double circuit T/L for In/Out of Ghazi road –KSK at 500 kV Lahore North	97.1	-	2.9
Overall	96.7	2.0	1.3

2.10. Availability of Basic Infrastructure

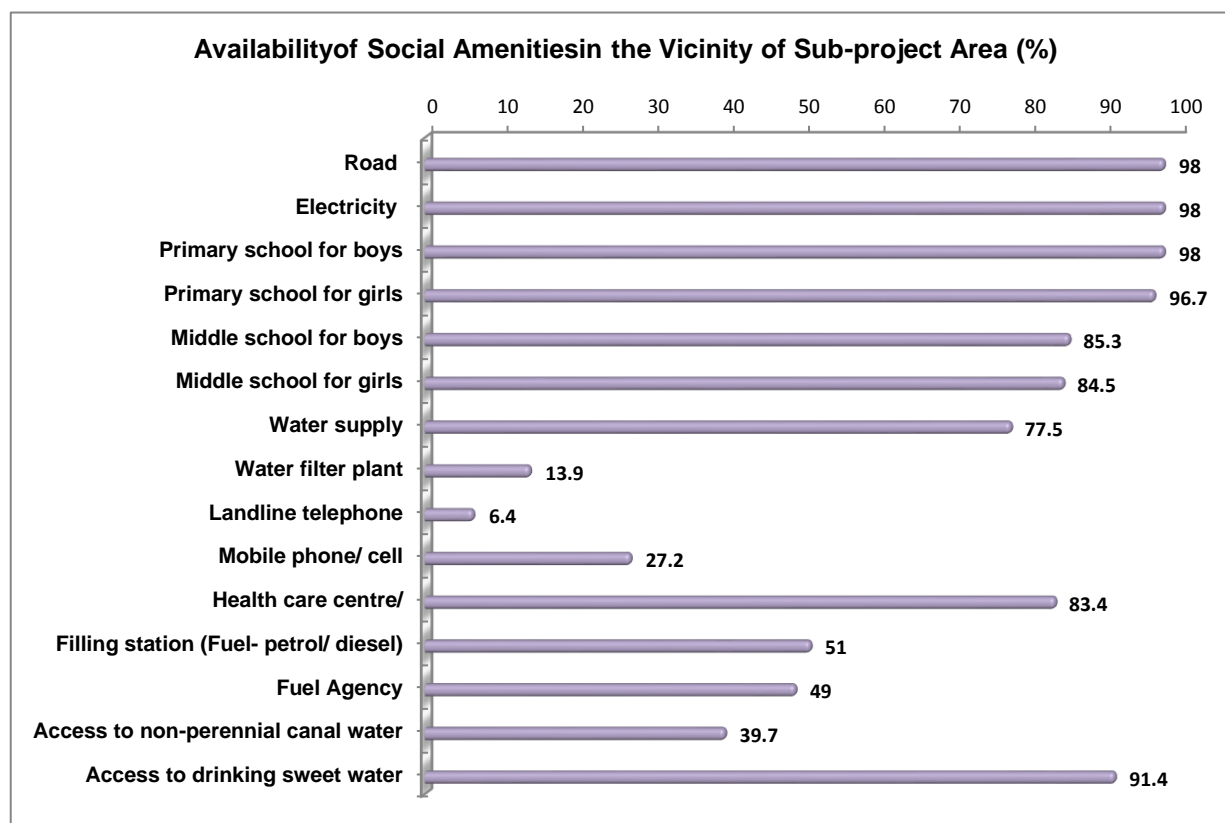
65. During the field survey, the availability of the social amenities/ basic infrastructure near the sub-project area was asked from the sample DPs as well as physically observed at site.

66. It was noted that on the whole, the facilities such as roads, electricity, primary and middle schools, water supply, health facilities, filling stations, and drinking water were available in the vicinity of the project site (i.e. within 3 sq. km). However, in case of water filter plant, telecommunication facilities, sewerage and sui-gas were limited as presented in table below and also illustrated through a bar chart. The details are shown in Table 2.11 and also illustrated through a diagram as given in Figure 2.3.

Table 2.11: Availability of Social Amenities in the Vicinity of Project Area

Percent (%)

Sub-Project	Road	Electricity	Primary school for boys	Primary school for girls	Middle school for boys	Middle school for girls	Water supply	Water filter plant	Health care centre/ BHU/ Dispensary	Filling station (Fuel- petrol/ diesel)	Fuel Agency	Access to non-perennial canal water	Access to drinking sweet water
Construction of grid station and 220 kV double circuit T/L for In/Out of Lahore (old)- Ravi at 500 kV Lahore North	96.4	92.9	96.4	89.3	96.2	95.3	89.3	7.1	96.4	92.8	82.1	57.1	100
500 kV D/C T/L from Lahore North to proposed Lahore HVDC switching / CS and 220 kV double circuit T/L for In/ Out of 220 kV KSK-Ravi at 500 kV Lahore North	98.6	100.0	98.6	98.6	82.6	82.6	80.0	5.3	81.3	46.6	52.0	24.0	90.6
500 kV D/C T/L from Lahore North to existing Gujranwala (Nokhar) substation and 220 kV double circuit T/L for In/Out of Ghazi road –KSK at 500 kV Lahore North	97.9	97.9	97.9	97.9	83.3	81.3	66.7	31.3	79.2	33.3	25.0	54.2	87.5
Overall	98.0	98.0	98.0	96.7	85.3	84.5	77.5	13.9	83.4	51.0	49.0	39.7	91.4

Figure 2.3: Availability of Social Amenities in the Vicinity of Sub-project Area

2.11. Cultural, Religious and Other Structures

67. During the field survey, it was observed that one shrine named as “Hardev shrine, tehsil nowshera virkan district Gujranwala” was located at 500 m away from the proposed transmission line of “500 kV D/C T/L from Lahore North to existing Gujranwala (Nokhar) substation”.

3. SCOPE OF LAND ACQUISITION AND RESETTLEMENT

68. The subproject impact was assessed/ recorded and consultations were made with DPs based on the identified proposed site of grid station and new alignment of five T/L as marked on Google map by NTDC. This section subdivided into; i) impact survey and cut-off date, scope of land acquisition and resettlement, number and type of displaced persons.

Impact Survey and Cut-off-date

69. The sub-project impact was assessed based on the census of 100% affectees, socioeconomic 159 (25%) out of total 643 DPs of total 4,563 family members and 80 Nos. consultations with DPs/ members of local community (consisting of 553 participants). The field survey was conducted from August 1, 2016 to September 8 2016, March 1 to 18, 2017 and February 20 to March 21, 2018. Thus, the “cut-off date” was set as March 21, 2018. 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.

3.2. Scope of Land Acquisition and Resettlement

70. The LARP has been prepared based on the new alignment covering both grid station and five transmission lines covering 194 km (marked on Google Map) as well as design parameters given in PC-I. The project involves acquisition of 176 acres of private agricultural land⁶ for the construction of grid station; and installation of 194 km transmission lines, due to which, there will be loss of land, crops, structures, trees and other structures including a fish farm and poultry farm. The project will be implemented in various stages, such as: i) construction of grid station and installation of transmission lines (i.e. excavation/ foundation, towers and stringing). Out of total 2,418.82 acres, 176 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 2,242.82 acres of private agricultural land. Details are given in Table 3.1 and Annex-3.1 & Annex-3.2.

⁶ Present site (176 acres) is located in the well fertile private agricultural land, while there is existing Chichoki Hydel Power Station near the proposed site (2 .5 km) owned by WAPDA has an adequate land for the construction of proposed grid station. Additionally, less fertile and barren land is located at the distance of 0.5 km (towards west) near the proposed site. The EA may take appropriate action to minimize the project impact on the private agricultural land.

Table 3.1: Sub-project Impacts

					DPs	
A. Construction of New 500kV Grid Station, Lahore North.						
Land permanently acquired	Acres	176	Private agricultural land being cultivated	63	441	These are the Affected Families and all are land owners. No leaseholder (informal/formal), informal users, and employee was identified there.
Cropped area	Acres	174	Private land currently being cropped	*63	441	Multiple counts. These are same AFs who are losing their land.
Fruit Trees to be cut-down	Nos.	55	Private trees on farm land	*9	63	Multiple counts. These are same AFs who are losing their land.
Wood trees to be cut - down	Nos.	403	Private trees on farm land	20	140	Multiple counts. These are same AFs who are losing their land.
Structures (farm houses)	Nos.	02	Private	*2	14	Multiple counts. These are same AFs who are losing their land. Total covered area 3369.18 sq.ft and boundary wall area 39.3 M ³
Fishfarm	Nos	01	Private	1	07	Area comprised on 2410.42m ³ and loss of business is there. No employee is identified at the fish farm.
Handpump	Nos	01	Private	1	07	
Tubewells	Nos	12	11	11	77	Tubewells along with rooms (05) and area is 912.12 sq.ft
Sub-total (A)	Acres	176	Private	63	441	63 AFs/ land owners (including affected crops on 174 acres.
Transmission Lines						
i. 220 kV DC T/L (14 km) for in/out of Lahore (Old-Ravi at 500 kV Lahore North G/S)						
Tower Spotting	Acres	6.18	Private agricultural land being cultivated	*32	224	Multiple counts. These are same AFs who are losing their crop
Installation of T/L	Acres	157.92	Private agricultural land being cultivated	38	266	Individual land owners
Trees to be cut-down	Nos.	117	Private trees on farm land	*19	133	Multiple counts. These are same AFs who are losing their land
Total	Acres	164.1	Private	38	266	38 AFs/ land owners (including affected crops on 164.1 acres, 117 affected trees owned by 19 owners
ii. 500 kV D/C T/L (105 km) from Lahore North to HVDC Switching/ convertor station						
Tower Spotting	Acres	41.08	Private agricultural land being cultivated	*222	1544	Multiple counts. These are same AFs who are losing their crop
Installation of T/L	Acres	1103.61	Private agricultural land being cultivated	343	2401	Individual land owners

					DPs	
Trees to be cut-down	Nos.	520	Private trees on farm land	*128	896	Multiple counts. These are same AFs who are losing their crop
Total	Acres	1144.69	Private	343	2401	343 DPs/ land owners (including affected crops on 1144.69 acres, 520 affected trees owned by 128 owners)
iii. 220 kV DC T/line (15 km) for in/out of 220 kV KSK-Ravi at 500 kV North G/S						
Tower Spotting	Acres	7.10	Private agricultural land being cultivated	*36	252	Multiple counts. These are same AFs who are losing their crop
Installation of T/L	Acres	180.42	Private agricultural land being cultivated	44	308	Individual land owners
Trees to be cut-down	Nos.	43	Private trees on farm land	*12	84	Multiple counts. These are same AFs who are losing their land
Total	Acres	187.52	Private	44	308	44 AFs/ land owners (including affected crops on 187.52 acres, 43 affected trees owned by 12 owners)
iv. 500 kV D/C T/L (45 km) from Lahore North to existing Gujranwala (Nokhar) substation						
Tower Spotting	Acres	19.92	agricultural land being cultivated	*101	707	Multiple counts. These are same AFs who are losing their land
Installation of T/L	Acres	544.06	agricultural land being cultivated	139	973	Individual land owners
Trees to be cut-down	Nos.	325	Private trees on farm land	*74	518	Multiple counts. These are same AFs who are losing their land
Total	Acres	563.98	Private	139	973	139 AFs/ land owners (including affected crops on 563.98 acres, 325 affected trees owned by 74 owners)
v. 220 kV DC T/Line (15 km) In/Out of 220 kV Ghazi road-KSK at 500 kV Lahore North						
Tower Spotting	Acres	6.33 ⁷	agricultural land being cultivated	*29	203	Multiple counts. These are same AFs who are losing their land
Installation of T/L	Acres	161.5 ⁸	agricultural land being cultivated	34	238	Individual land owners
Trees to be cut-down	Nos.	32	Private trees on farm land	*12	84	Multiple counts. These are same AFs who are losing their land
Total		167.83	Private	34	238	34 AFs/ land owners (including affected crops on 167.83 acres, 32 affected trees owned by 12 owners)
Total of all TL sections						
Tower Spotting	Acres	80.61	agricultural land being cultivated	*420	2940	Multiple counts. These are same AFs who are losing their land

⁷ In addition, 0.62 acre is owned by the government.

⁸ In addition, 14.08 acres are owned by the government.

					DPs	
Installation of T/L	Acres	2147.51	agricultural land being cultivated	598	4186	Individual land owners
Trees to be cut-down	Nos.	1037	Private trees on farm land	*245	1715	Multiple counts. These are same AFs who are losing their land

* These owners of land have multiple ownership, i.e. other affected assets as well

71. Temporary Occupation of Land will be required for the contractor during project implementation phase to establish the camps office and workshops etc. The temporary land will be procured through lease arrangement. For temporary requisition of land, the owners/occupiers will receive a rental fee commensurate with current local land rents for the period of occupation of the land. All DPs will have guaranteed access to their land and structures located on their remaining land and their land will be restored to its original state at the end of the contract. The quantity of land to be borrowed or leased will be identified at the time of design finalization and agreement between two parties will be annexed in following the requirements of SPS 2009 in the final LARP.

Affected Area by Crop

72. There is private land acquisition of 174 acres under this sub-project for the construction of grid station. However, for towers spotting and installation of transmission lines temporary land would be needed. Out of total 2,242.82 acres under transmission lines and tower spotting, 2,228.12 acres and 14.7 acres belongs to private and government land respectively. In case of private land, crops on an area of 2,147.51 acres and 80.61 acres will be affected due to installation of transmission lines and towers spotting respectively as shown in Table 3.2. List of crop owners (DPs) is given in Annex 3.1 & Annex-3.2.

Table 3.2: Affected Cropped Area by the Sub-project

Sub-project Component	Area Cropped (Acres)	No. of Crop Owners/ DPs	Remarks
A) Construction of Grid Station	174.00	63	Land is presently being cropped
<i>Sub-total (A)</i>	<i>1760.00</i>		
B) Private Land			
i) Installation of T/L	2147.51	598	Land is presently being cropped
ii) Tower Spotting	80.61	420*	Land is presently being cropped
<i>Sub-total (B)</i>	<i>2228.12</i>	<i>1018</i>	-
C) Government Land			
i) Installation of T/L	14.08		
ii) Tower Spotting	0.62		
<i>Sub-Total (C)</i>	<i>14.7</i>		

* These 420 owners of land are included in installation of T/L 548 owners.

73. 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

Crops	Cropping Pattern (%)	Area Sown by Crop Type (Acres)
- Wheat	49.9	1093.61
- Basmati Rice	48.34	1,016.11
- Millets (Bajra / Jowar)	0.49	10.52
- Sugarcane	0.47	10.09
- Tomato	0.24	5.15
- Vegetables	0.21	4.51
- Rabi Fodder	0.35	7.52
Total	100.0	2,147.51

3.3. Affected Trees

74. The survey results shown in Table 3.4 indicate that out of total 1,495 private trees, 842 wood trees and 195 fruit trees were found within the T/L route alignment, which will need to be cut-down due to construction of grid station and installation of transmission lines respectively.

75. The main types of wood/ timber trees include dalbergia sissoo (sheesham), eucalyptus and acacia, while fruit trees are mango, guava and jambul (*locally called Jaman*) an. DP-wise details are given in Annex 3.3 & Annex-3.4.

Table 3.4: No of Private Trees located within T/L Route Alignment

a) Wood/ Timber Trees

Type of Tree	No.	Average Girth (Feet)
I) Construction of 500 kV Lahore North G/S		
Sheesham (Tali)	35	2.0
	09	4
	01	6
Eucalyptus (Safida)	222	2
	75	4
	02	2
Baqain	31	22
	7	4
Popular	4	2
	3	4
	2	2
Sharian	2	2
	1	4
Sumbal	3	2
	1	4
Kikar	1	2
	1	2
Bambo	2	2
Bohr	1	6
Sub-total (I)	403	-
II) 220 kV double circuit T/L Old – Ravi		
Sheesham (Tali)	44	1.9
Eucalyptus (Safida)	20	1.4
Sub-total (II)	64	-
III) 500 kV D/C T/L from Lahore North to HVDC Switching/ convertor station		

Type of Tree	No.	Average Girth (Feet)
Sheesham (Tali)	300	1.9
Eucalyptus (Safida)	73	1.4
Acacia (Kiker)	02	2.0
<i>Sub-total (III)</i>	375	-
IV) 220 kV double circuit T/line for in/out of 220 kV KSK-Ravi at 500 kV North G/S		
Sheesham (Tali)	25	2.0
Eucalyptus (Safida)	17	1.3
Acacia (Kiker)	1	2.5
<i>Sub-total (IV)</i>	43	-
V) 500 kV D/C T/L from Lahore North to existing Gujranwala (Nokhar) substation		
Sheesham (Tali)	218	2.0
Eucalyptus (Safida)	98	1.4
Acacia (Kiker)	7	2.1
<i>Sub-total (V)</i>	323	-
VI) 220 kV double circuit T/Line for In/Out of 220 kV Ghazi road-KSK at 500 kV Lahore North		
Sheesham (Tali)	22	2.0
Eucalyptus (Safida)	8	1.2
Acacia (Kiker)	2	1.9
<i>Sub-total (VI)</i>	32	-
Grand Total (I to VI)	1245	

b) Fruit Trees

Type of Tree	No.	Average Age (Year)
(A) Construction of 500 kV Lahore North G/S		
Bananas	25	2
Melburry	16	9
Lemon	1	6
Jaman	11	13
Mango	1	12
Bair	1	15
<i>Sub-total (A)</i>	55	
(B) 220 kV double circuit T/L Old –Ravi		
Guava	50	5
Jaman	3	6
<i>Sub-total (B)</i>	53	-
(C) 500 kV D/C T/L from Lahore North to HVDC Switching/ convertor station		
Guava	130	5
Jaman	15	7
<i>Sub-total (C)</i>	145	-
(D) 500 kV D/C T/L from Lahore North to existing Gujranwala (Nokhar) substation		
Mango	2	35
<i>Sub-total (D)</i>	2	-
Grand Total (A+B+C)	250	-

3.4. No. of AFs

76. The data regarding number of AFs by type of impact is given in Table 3.5 reveals that total 661 owners (AFs) consisting of 4,563 DPs will be affected due to the loss of land, crops, trees and structures. List of all DPs is provided in Annex 3.1 and 3.2.

Table 3.5: No. AFs by Type of Impact

Sub-project	No. of DPs	No. of individuals (family members)	Remarks
(I) Construction of 500 kV Lahore North G/S			
a) Permanent land acquisition	63	410	<i>The land belongs to 63 land owners</i>
b) Affected Trees	29*	189*	<i>*These 29 owners of trees are included in above mentioned 63 owners</i>
<i>Sub-total (I)</i>	63	410	
(II) 220 kV double circuit T/L Old –Ravi			
a) Affected crops due to installation of T/L (stringing)	38	314	-
b) Affected crops due to tower spotting (excavation, erection & stringing)	32*	255*	<i>*These 32 owners of land are included in above mentioned 38 owners</i>
c) Affected trees	19*	141*	<i>*These 19 owners of trees are included in above mentioned 38 owners</i>
<i>Sub-total (II)</i>	38	314	-
(III) 500 kV D/C T/L from Lahore North to HVDC Switching/ convertor station			
a) Affected crops due to installation of T/L (stringing)	343	2,197	
b) Affected crops due to tower spotting (excavation, erection & stringing)	222*	1471	<i>These 222 owners of crops are included in mentioned 343 owners</i>
c) Affected Trees ³	128*	940	<i>These 128 owners of crops are included in mentioned 343 owners</i>
<i>Sub-total (III)</i>	343	2,197	-
(IV) 220 kV double circuit T/line for in/out of 220 kV KSK-Ravi at 500 kV North G/S			
a) Affected crops due to installation of T/L (stringing)	44	368	
b) Affected crops due to tower spotting (excavation, erection & stringing)	36*	302	<i>These 36 owners of crops are included in mentioned 44 owners</i>
c) Affected Trees	12*	105	<i>*These 12 owners of trees are included in mentioned 44 owners</i>
<i>Sub-total (IV)</i>	44	368	
(V) 500 kV D/C T/L from Lahore North to existing Gujranwala (Nokhar) substation			
a) Affected crops due to installation of T/L (stringing)	139	1,102	
b) Affected crops due to tower spotting (excavation, erection & stringing)	101*	800	<i>These 101 owners of crops are included in mentioned 139 owners</i>
c) Affected Trees	74*	554	<i>*These 74 owners of trees are included in mentioned 139 owners</i>

Sub-project	No. of DPs	No. of individuals (family members)	Remarks
<i>Sub-total (V)</i>	139	1,102	
(VI) 220 kV double circuit T/Line for In/Out of 220 kV Ghazi road-KSK at 500 kV Lahore North			
a) Affected crops due to installation of T/L (stringing)	34	286	
b) Affected crops due to tower spotting (excavation, erection & stringing)	29*	227	<i>These 29 owners of crops are included in mentioned 34 owners</i>
c) Affected Trees	12*	72	<i>*These 12 owners of trees are included in mentioned 34 owners</i>
<i>Sub-total (VI)</i>	34	286	
Grand Total (I to VI)	661	4,677	

3.5. Building/ Structures

77. Based on the survey, it was observed that total 16 Nos. of structure (commercial) will be affected due to the construction of grid station as given in Table 3.6 below and Annex 3.5.

Table 3.6: No. AFs by Type of Impact

Type of Structure	Affected Structures (Nos.)	Type of Structures	Size of Structures (m ²)/sq ft	No. of AFs	Remarks
Construction of 500 kV Lahore North G/S					
Fish Farm	1	Kacha	2410.43	1	912.52 sq. ft area of 5 tw rooms
Tube well	12	Semi Pacca	912.52	10	
Farm houses	02	Semi Pacca+ Pacca	2004	2	39.30 M ³ Boundary wall, only the impact is on building structure (cattle shed & chopper room) No employee is identified.
Hand pump	01	-	-	1	
Total	16	-	2,203.23	14	All AFs are included in the Land

3.6. Public Infrastructure

78. During the field survey, it was noted that some public items/ infrastructures were also found within the proposed T/L route alignment of 194 km. All care will need to be taken to avoid the disturbance in the present use of these public items/ infrastructure, while installation of towers and feeding transmission line. List of public items/ infrastructure is summarized in Table 3.7 and Annex-3.6.

Table 3.7: No. of Public Infrastructure located within T/L Route Alignment

Sr. No	Description	Nos.
I) 220 kV Double Circuit T/L Old –Ravi		
1	Upper Chenab Canal	1
2	T/L and Towers of 11 kV/ 132 kV/220 Kv	3
3	Canal	1
4	Kot-Pindi Mandala Road , Kot Pindi das – Shamke road	2
	<i>Sub-total (II)</i>	7
II) 220 kV Double Circuit T/Line for In/Out of 220 kV KSK-Ravi at 500 kV North G/S		
1	Road Quaid Azam Park Road	1
2	Canal Muajayke	1
3	Sam Nullah	1
4	Road Chak 33, Chak34- link to Muridke Road	2
	<i>Sub-total (III)</i>	5
III) 500 kV D/C T/L from Lahore North to HVDC Switching/ convertor station		
1	Roads <ul style="list-style-type: none"> - Lahore – Islamabad Motorway (M-2) - Sheikhpura-Muridke - Sheikhpura-Gujranwala Road - Main Sheikhpura Road - Jandilia Sher Khan Road - Gopi Rai Road - More Khunda Road - Sargodha Road - Sheikhpura -Farooqabad Road 	9
2	Canals <ul style="list-style-type: none"> - Dharwai Canal - Khan pur Canal - Qadirabad Link Canal - Makki Canal - Khandan Canal 	5
3	220 kV, 500 kV T/L	3
4	Railway Track	1
	<i>Sub-total (IV)</i>	18
IV) 500 kV D/C T/L from Lahore North to existing Gujranwala (Nokhar) substation		
1	Canals	7
2	Pacca Roads	2
3	Nullah	1
4	Transmission Lines (500 kV/ 132 kV T/L)	3
	<i>Sub-total (V)</i>	13
V) 220 kV Double Circuit T/Line for In/Out of 220 kV Ghazi road-KSK at 500 kV Lahore North		
1	Road (Quaid Azam Park Road, Saikum, Nun Link Road, Bhianwali)	4
2	Canal	2
3	Sam Nullah	1
4	132 kV T/L	1
	<i>Sub-total (VI)</i>	8
	Grand Total (II to VI)	51

3.7. Impact on Business

79. The project has the impact on a fishfarm that belong to single AF. The fishfarm comprised on an area of 2410.42 m³. No employee is identified at the fish farm. The AF intends to replace the fishfarm in his left over land to continue the business activity.

3.8. Vulnerable and Indigenous People

80. 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. There are no indigenous people/ or group of people located in the area of this sub-project or its surroundings. According to social impact assessment, 49 vulnerables have been identified based on the low income, i.e., Rs.15000/month (minimum wage rate fixed by the government. These vulnerable AFs have been identified 3 from the Grid Station and 46 are located at the TLs. The vulnerability survey will be updated once the detailed design is available, i.e., October 2018.

3.9. Gender Impacts

81. 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.

3.10. Severity of Impacts

82. Table 3.8 shows that the extent of impact is greater than 10% on all land owners (AFs) indicating that there is severe impact due to the acquisition of agricultural land/ loss of productive resource. The severe impact is calculated based on the percentage of affected land from the total landholding of the AFs as given in **Annex-3.9**. These all 50 AFs are identified at the Grid station owing to the permanent acquisition of agricultural land while the temporary impacts are reported at the TLs. The AF-wise extent of impact is presented in Annex 3.9.

Table 3.8: Severity of Impacts

Description	Extent of Impact		11-20%	21-40%	41-60%	61-80%	81-100%
	Upto 10%	> 10%					
No. of AFs	13	50	7	6	12	5	20
% of AFs	21	79	11	09	19	08	32

4. LEGAL FRAMEWORK

4.1 Telegraph Act (TA), 1885

83. 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.

84. 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.

85. To accommodate the needs of DPs, under this Program, the NTDC has agreed to apply the Telegraphic Act liberally by i) compensating at market rate all land occupied by towers in urban areas; 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 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

86. 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. The LAA1894 is Federal but its implementation is with Provincial Boards of Revenue (BOR) which implement the Act in the provincial context. The Act is meant for the acquisition of land only and it does not explicitly consider the social, cultural, economic, and environmental conditions of those needing to be resettled and/or rehabilitated. 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 according to the provision of the law. The displaced persons, if not satisfied, can go to the Court of Law to contest the compensation award of the Land Acquisition Collector (LAC).

87. 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 17 Emergency clause that allows acquisition of land prior to compensation of DPs. This clause will not be applied in any NTDC's tranche-III projects as it denies consultations with land owners and their right to appeal to the land prices and matters related to the acquisition of land
- Section 23 refers to the award of compensation to the title holders for acquired land is determined at i) its market value of land, ii) loss of standing crops, trees and structures, iii) any damage sustained at the time of possession, iv) injurious affect to other property (moveable or immovable) or his earnings, v) expenses incidental to compelled relocation of the residence or business and vi diminution of the profits between the time of publication of Section 6 and the time of taking possession plus 15% premium in view of the compulsory nature of the acquisition for public purposes
- 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 entre 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 entre 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

88. 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:

- i. **Screen the project** early on to identify past, present and future involuntary resettlement impacts and risks;
- ii. **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;
- iii. **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

89. In terms of implementation of this LARP, identifying the type of land affected will be 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.

90. 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.

91. 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.

92. Therefore, during the field survey for the preparation of this LARP, the identification of land ownership was done with the assistance of local people/ Number Dar/ Patwari.

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

93. 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 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 as long as 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.

Pakistan's LAA 1894 and TA 1885	ADB Safeguard Policy Statement (2009)
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 between Pakistan's Acts and ADB SPS

94. To reconcile the differences between the LAA (1894), Telegraph Act 1885 and ADB policy, the NTDC (EA) has prepared this LARP, 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 displaced Persons (DPs) that may be relocated, suffer business losses, or may be vulnerable.

95. In this context, the following are the ADB Safeguard principles to reconcile the differences:

- i). the need to screen the sub-project early 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.

5. CONSULTATION, PARTICIPATION AND DISCLOSURE

5.1 Stakeholder's Consultations

96. 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 resided in villages in the vicinity of the sub-project area. Total 80 consultations were made with the DPs and local community.

97. Accordingly, the consultations were made with all primary stakeholders for sharing the information regarding this sub-project, including i) 500/220 kV substation with 3X750 MVA transformers and allied equipment & accessories; ii) 220 kV double circuit T/L for In/Out of Lahore (old) - Ravi at 500 kV Lahore North; iii) 500 kV D/C T/L from Lahore North to proposed Lahore HVDC switching/ CS; iv) 220 kV double circuit T/L for In/ Out of 220 kV KSK- Ravi at 500 kV Lahore North; v) 500 kV D/C T/L from Lahore North to existing Gujranwala (Nokhar) substation; vi) 220 kV double circuit T/L for In/Out of Ghazi road – KSK at 500 kV Lahore North.

5.2. Public Consultations

98. A series of 80 Nos consultations (consisting of 553 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.

99. 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

Sr. No.	Date	Location/ Venue	Category of participants	Name of Main Participants
(A) 500/200 kV substation with 3X750 MVA transformers and allied equipment & accessories				
1	19-08-2016	Khairpur Mallian, Tehsil and District Sheikhpura	DPs	<ul style="list-style-type: none"> - Mr. M. Farooq S/o M. Nawaz - Mr. Nauman S/o M. Aslam - Mr. Fahim S/o M. Aslam - Mr. Tariq Hameed S/o A. Hameed - Mr. Abdul Jabbar S/o Safdar Ali - Mr. Abdul Samad S/o Safdar Ali - Mr. Abdul Sattar S/o Safdar Ali - Mr. Abdul Ghafoor S/o Safdar Ali - Mr. M. Hassan S/o Karim Din - Mr. M. Manawar S/o Nishan Ali - Mr. M. Nawaz S/o Nishan Ali - Mr. M. Munir S/o Nishan Ali - Mr. Manzoor Hussain S/o Nishan - Mr. Saif Ullah S/o Nishan Ali - Mr. M. Sarwar S/o Shah Nawaz - Mr. Anwar Nawaz S/o Shah Nawaz - Mr. M. Manawar S/o Shah Nawaz
(B) 220 kV double circuit T/line for in/out of 220 kV KSK-Ravi at 500 kV North G/S				

Sr. No.	Date	Location/ Venue	Category of participan ts	Name of Main Participants
2	20-08-2016	Noon, Tehsil Muridkey, District Shiekhupura	DPs	- Mr. M. Arif S/o Sher Din - Mr. M. Iftikhar S/o M. Yaqoob - Mr. M. Shabir S/o Major - Mr. Waris Ali S/o khair Din
3	20-08-2016	Chak 32, Tehsil Muridkey, District Shiekhupura	DPs	- Mr. Ghulam Mustafa S/o Gh: Rasool - Mr. Khuram Shehzad S/o Khizar Hayat - Mr. Amanat Ali S/o M.Sharif
4	20-08-2016	Chuhey wali Khurd, Tehsil Muridkey, District Shiekhupura	DPs	- Mr. Asif Mehmood S/o M. Arif - Mr. Karamat Ali S/o M. Slammat - Mr. Mansha S/o Shah M. - Mr. Omer Din S/o Khair Din - Mr. Ghulam M. S/o Shah M.
5	20-08-2016	Chak Saukum, Tehsil Muridkey, District Shiekhupura	DPs	- Mr. Omer Farooq S/o Allah Dita - Mr. Maqbool Ahmad S/o M. Hussain - Haji Manzoor Hussain S/o M. Hussain - Mr. Iftikhar S/o Malik Nawaz
(C)) 220 kV double circuit T/L for in/out of Lahore (old-Ravi at 500 kV Lahore North G/S				
6	22-08-2016	Chak Sanatta Tehsil Muridke District Sheikupura	DPs/ Local Community	- Mr. M. Ashraf S/o M. Rod Khan - Mr. M. Ibrahim S/o Hassan M. - Mr. M. Danish S/o Liaqat Ali - Mr. Manawar Ali S/o Ali Ahmad - Mr. M. Ashraf Minhas S/o Salam Din - Mr. M. Yousaf S/o Siraj Din
7	22-08-2016	Mallian Kalan Tehsil Sheikhpura District Sheikupura	DPs/ Local Community	- Mr. Chando Iftikhar S/o Raja Iftikhar - Mr. Amjad Dogar S/o Muhammad - Mr. Asghar Ali S/o Ghulam M - Mr. Abdul Rouf S/o M. Yousaf - Mr. Maqsood S/o M. Yousaf
8	22-08-2016	Khushalpura, Tehsil Muridke District Sheikhpura	DPs	- Mr. Pervaiz Iqbal S/o Akbar Ali - Mr. Safdar Ali S.o Shah M. - Mr. Khurram Abbs S/o M. Ali - Mr. M. Boota S/o Ahmad Ali - Mr. M. Yousaf S/o Siraj Din - Mr. M. Zulfiqar S/o Shah M - Mr. M. Sadiq S/o Shah M - Mr. M. Manzoor S/o Rehmat Ali - Mr. M. Malik S/o Ahmad - Mr. M. Bashir S/p Noor M.
9	23-08-2016	Kot Pindi Das. Tehsil Ferozwala District Sheikhpura	DPs	- Mr. Anwar S/o M. Sharif - Mr. Umar S/o M. Anwar - Mr. M. Ibrahim S/o Omer Din - Mr. M. Nawaz S/o Shafi M. - Mr. M. Younas S/o Ghulam Ghous - Mr. M. Tahir S/o Ghulam Ghous - Mr. Ahmad Din S/o Rahim Bakhsh

Sr. No.	Date	Location/ Venue	Category of participants	Name of Main Participants
				<ul style="list-style-type: none"> - Mr. M. Abid S/o Siraj Din - Mr. M. Arif S/o M. Din - Mr. Ghulam Ali S/o Abdul Karim - Mr. Ijaz Ali S/o M. Shafi - Mr. Omar Hayat S/o Muhammad - Mr. Shafi S/o Siraj Din
(D) 500 kV D/C T/L from Lahore North to HVDC Switching/ convertor station				
10	24-08-2016	Khairpur Mallian, Tehsil & District Sheikhpura	DPs	<ul style="list-style-type: none"> - Mr. Abdul Ghafar S/o Safdar Ali - Mr. Masawar javaid S/o M. Anwar - Mr. Abdul Shakoor S/o Abdul Rasheed - Malik Bilal S/o M.Awan
11	24-08-2016	Gopi Rai Tehsil & District Sheikhpura	DPs	<ul style="list-style-type: none"> - Mr. Rashid Ali S/o Nazeer Ahmad - Mr. Aqib Hussain S/o Sabir Hussain - Mr. Talib Hussain S/o Sardar M.
12	24-08-2016	Mirza Virkan Tehsil & District Sheikhpura	DP/ local Community	<ul style="list-style-type: none"> - Baba Yaqoob S/o M. Munir - Mr. M. Hussain S/o Shah Muhammad - Mr. Ali S/o Abbas Ali - Mr. Nawaz S/o Ilyas
13	24-8-2016	Dera Ch. M. Bakhsh Tehsil & District Sheikhpura	DP/ local Community	<ul style="list-style-type: none"> - Mr. Ijaz Ahmad S/o M. Riaz - Mr. Sikhawat Ali S/o M. Ishaq - Mr. Qaiser Ahsan S/o Khan M. - Mr. Sufian Gujjar S/o M. Saif
14	25-08-2016	Gurdas Village Tehsil & District Sheikhpura	DP/ Local Community	<ul style="list-style-type: none"> - Mr. M. Usman Ss/o M. Arshad - Mr. Rizwan S/o M. Arshad - Mr. Rafaqat S/o M. Soan - Mr. M. Ishaq S/o Ahmad Din
15	25-08-2016	Jandiala Sher Khan Tehsil & District Sheikhpura	DPs	<ul style="list-style-type: none"> - Malik Safdar S/o Muhammad - Baba Sajjad Shah S/o M. Shah - Mr. Ghulam Mehdi S/o Malik Safdar - Mr. Ghulam Ali S/o Malik Noor - Mr. Ahmad Zia S/o Yousaf Khan
16	01-09-2016	Laalke Village Tehsil & District Sheikhpura	DPs	<ul style="list-style-type: none"> - Mr. Ghulam Nabi S/o Sana Ullah - Mr. M. Riaz S/o M. Nawaz - Mr. Sikander S/o M. Ilyas - Mr. M. Saleem S/o Allah Ditta
17	01-09-2016	Warm Chak Tehsil & District Sheikhpura	DPs	<ul style="list-style-type: none"> - Mr. Gulam M. S/o Abdul Sattar - Mr. M. Waris S/o M. Barkat - Mr. M. Anwar S/o Abdul Sattar - Mr. M. Zulfiqar S/o Imdad Ali
18	01-09-2016	Dera Gujran Tehsil & District Sheikhpura	DPs	<ul style="list-style-type: none"> - Mr. M. Mustafa S/o M. Shafi - Mr. Asif Ali S/o Ch. Rehmat Ali - Mr. Ashgar Ali S/o Ch. Din M. - Mr. M. Anayat S/o Muhammad

Sr. No.	Date	Location/ Venue	Category of participants	Name of Main Participants
19	02-09-2016	Dear Numbran Da Tehsil & District Sheikhpura	DPs	- Mr. Liaqat Ali S/o Mahr Din - Mr. Abdul Razzaq S/o Said M. - Mr. Jamshaid S/o Liaqat ali - Mr. Noor M. S/o Pathana - Mr. Muzammil S/o Habib Ali
20	02-09-2016	Sacha Sodha Dera Bhirwala Tehsil & District Sheikhpura	DPs	- Rana Abdul Rehman S/o Bootay Khan - Mr. Amanat Ali S/o Shaukat Ali - Baba Sadiq S/o Charag Din - Mr. M. Iqbal S/o Farzand Cheeba
21	03-09-2016	Dera Mallian Sharki Da Tehsil & District Sheikhpura	DPs	- Mr. M. Murad S/o Mir Ahmad - Mr. Miraj Din S/o Ilm Din - Mr. Yousaf Din S/o Ilm Din - Mr. M. Tahir S/o Imdad Ali - Mr. M. Aftab S/o M. Din
22	03-09-2016	Jhinda Nau Chak 540 Tehsil & District Sheikhpura	DPs	- Mr. Anayat Ali S/o M. Bakhsh - Mr. M. Qamar S/o M. Hadayat - Mr. Aftab Ali S/o Maqbool Khan - Mr. Asghar Ali S/o Taj Din
23	05-09-2016	Bhar Village Tehsil & District Sheikhpura	DP/ Local Community	- Mr. Iqbal Khan S/o Lateef Khan - Mr. Khalid Khan S/o Mukhtor Khan - Mr. Ghaffar S/o Meher Deen - Mr. M. Hussain S/o Abdul Ghafor - Mr. Rafiq Khan S/o Abdul Ghafor - Mr. Ibrar Khan S/o Shafiq Khan - Mr. Farzand Khan S/o Ramzan Khan
24	05-09-2016	Village Makki 460 Tehsil & District Sheikhpura	DP/ Local Community	- Mastar Fakar Din S/o Usman Khan - Mr. Rahmat Gill S/o Usman Khan - Mr. Atta M. S/o Ali M. - Mr. Wali Khan S/o Rehmat Ali
25	05-09-2016	Village Largan Tehsil & District Sheikhpura	DP/ Local Community	- Mr. Yaseen S/o Dalbir - Mr. Manga S/o Haji Qasim - Mr. Yaqoob S/o Mahdi Hassan - Mr. Rafiq S/o Hakeem Ali
26	06-09-2016	Village Feroz Watto Tehsil & District Sheikhpura	DP/ Local Community	- Mr. Abdullah S/o Bahadur - Mr. Sanaullah S/o Bahadur - Mr. M. Mansha S/o Ibrahim - Mr. Younas S/o Ibrahim - Mr. Sultan S/o Abdul Ghani
27	06-09-2016	Village Walgan Sohail, Tehsil & District Nankana Sahib	DPs	- Mr. Rehmat Ali S/o Sadaf - Mr. Rehmat Ali S/o Shah M. - Mr Zeshan Haider S/o Rashid Ali - Mr. Shafiq S/o Qamar Zaman

Sr. No.	Date	Location/ Venue	Category of participants	Name of Main Participants
28	06-09-2016	Village Ullawal Kot, Tehsil & District Nankana Sahib	DPs/ Local Community	- Mr. Allah Dad S/o M. Ali - Mr. Shaukat Ali S/o barkat Ali - Mr. Munir S/o Nazar Muhammad - Mr. Imran S/o Nawaz - Mr. Idrees S/o Nawaz - Mr. Shoaib S/o Junaid
29	06-09-2016	Village Budha, Tehsil & District Nankana	DPs	- Mr. Noor S/o Mathela - Mr. Zakir S/o Chawa - Rana Akhter S/o Chawa - Mr. Zakir S/o Chawa
30	07-09-2016	Feroz watto, Tehsil District Shiekhpura	DPs/ Local Community	- Mr. Afzal s/o M. ismail - Mr. Iqbal s/o M. Zaffer - Mr. Ilyas s/o M. Aslam - Mr. Ahmed Ali s/o Mughala - Mr. Khalid s/o M. Rasheed - Mr. Razzaq s/o M. Rasheed - Mr. Riaz s/o Abdul Ghaffar - Mr. Yaqoob s/o M. Irshad - Mr. Waheed s/o M. Rashed
31	07-09-2016	Walgon Sohail, Tehsil Nankana Sahab District Nankana Sahab	DPs/ Local Community	- Mr. Riasat s/o M. Hayyat - Mr. Faqeer Hussain s/o M. Yousaf - Mr. Riaz s/o M. Shamir Ali - Master Ashfaq - Muhammad Javaid Gondal - Mr. Mansha Rehmani - Mr. Muhammad Ashraf Baloch
32	07-09-2016	Wakeel Wala, Tehsil Nankana Sahab District Nankana Sahab	DPs/ Local Community	- Mr. Sarfaraz s/o Abdul Majeed - Mr. Ashfaq s/o Dilawar Ali - Rana Abdul Aziz s/o Abdul Majeed - Mr. Basharat s/o M. Abdullah - Mr. Mazhar s/o Wali M.
33	07-09-2016	Budha, Tehsil Nankana Sahab District Nankana Sahab	DPs/ Local Community	- Mr. Asif Ali s/o Abdul Haq - Mr. Ilyas s/o Miraj Ahmed - Mr. Wali M. s/o Allah Ditta - Mr. Bahadur s/o Wali M. - Mr. Wali M. s/o Allah Ditta
34	07-09-2016	Ladoana, Tehsil Nankana Sahab District Nankana Sahab	DPs/ Local Community	- Mr. Liaqat s/o M. Rahmat - Mr. Ahmed s/o M. Khan - Mr. Muhabat Ali s/o Ali M. - Mr. Ghulam Ali s/o Ahmed Ali - Mr. Abbass s/o Ghulam Ali - Mr. Noshair s/o M. Ghulam - Mr. Riasat s/o M. Sohail jani
35	07-09-2016	Janiwala/ Chokori, Tehsil Nankana Sahab District Nankana Sahab	DPs/ Local Community	- M. Ali s/o M. Karmal - Mr. Riaz s/o M. Mumtaz Ahmed - Mr. Mudassar Mehdi S/o Mehdi Hasan

Sr. No.	Date	Location/ Venue	Category of participan ts	Name of Main Participants
36	08-09-2016	Chak Chor Shah, Tehsil Nankana Sahab District Nankana Sahab	DPs/ Local Communit y	- Mr. Bota s/o M. Zamal Deen - Rana Nazeer s/o M. Sadeeq - Rana Shafeeq s/o M. Sadeeq - Mr. Niaz s/o Dilshad - Mr. Nawaz Dogar
37	08-09-2016	Khairay Kalan, Tehsil Nankana Sahab District Nankana Sahab	DPs/ Local Communit y	- Rai Qamar s/o M. Fazal - Mr. Karamat Ali s/o M. Mirza - M. Ishaq s/o M. Hussain - Mr. Suleman s/o M. Younas - Mr. Akram s/o M. Younas - Mr. Iftikhar Ahmed s/o M. Aslam - Mian Safdar s/o Haji Ameer Ali - Mr. Niamat s/o Malik Yaqoob
38	08-09-2016	Wandara Ghulam, Tehsil Nankana Sahab District Nankana Sahab	DPs/ Local Communit y	- Mr. Walaiyat Ali s/o M. Sadeeq - Mr. Amanat Ali s/o Khan M. - Mr. Shahid Hassan s/o M. Aslam - Mr. Amir s/o Nasrullah - Mr. Sarfaraz s/o Khan M. - Mr. Zahid s/o M. Aslam - Malik Irshad s/o Allah Ditta
39	08-09-2016	Nota, Tehsil Nankana Sahab District Nankana Sahab	DPs/ Local Communit y	- Mr. Mazhar Abbas s/o Rai Shahadat - Mr. Asghar Ali s/o Muhabat Ali - Mr. Shahbaz s/o Rai Shahadat - Mr. Ghulam Abbas s/o M. Ali - Mr. Tehseen s/o Asghar Ali - Mr. Walayat Ali s/o Muhabbat Ali - Mr. M. Ali s/o Noor Ahmed
40	08-09-2016	Masu, Tehsil Nankana Sahab District Nankana Sahab	DPs/ Local Communit y	- Mr. Amanat Ali s/o M. Kamran Deen - Mr. Abdul Ghaffar s/o Ghulam M. - Mr. Allah Rakha s/o Ghulam M. - Mr. Khuda Baksh s/o Ahmed Deen - Mr. Amir s/o Mansor Hussain - Mr. Manzor hussain s/o Khuda Bakush
41	08-09-2016	Guraye, Tehsil Nankana Sahab District Nankana Sahab	DPs/ Local Communit y	- Mr. Ashraf s/o M. Bashir - Mr. Asif s/o M. Bashir - Mr. Hakam Ali s/o Akbar Ali - Mr. Amanat Ali s/o M. Hayyat - Mr. Suleman s/o M. Salim
42	05-09-2016	Bhaar, Tehsil Shiekhupura, District Shiekhupura	DPs/ Local Communit y	- M. Sabar Husain s/o Taj Deen - M. Nazeer s/o Rasheed - M. Bashir s/o M. Said - Wakeel Khan s/o Habib Khan
43	05-09-2016	Lagran, Tehsil Shiekhupura, District Shiekhupura	DPs/ Local Communit y	- Mr. Irfan s/o M. Dilbar - Mr. Dilbar s/o Moharram - Mr. Kamran s/o Dilbar - Mr. Kashif s/o M. Iqbal - Mr. Saqib s/o M. Farzand - Mr. Farzand s/o M. Hanif

Sr. No.	Date	Location/ Venue	Category of participants	Name of Main Participants
44	07-09-2016	Feroz watto, Tehsil District Shiekhpura	DPs/ Local Community	<ul style="list-style-type: none"> - Mr. Afzal s/o M. ismail - Mr. Iqbal s/o M. Zaffer - Mr. Ilyas s/o M. Aslam - Mr. Ahmed Ali s/o Mughala - Mr. Khalid s/o M. Rasheed - Mr. Razzaq s/o M. Rasheed - Mr. Riaz s/o Abdul Ghaffar - Mr. Yaqoob s/o M. Irshad - Mr. Waheed s/o M. Rashed
45	07-09-2016	Walgon Sohail, Tehsil Nankana Sahab District Nankana Sahab	DPs/ Local Community	<ul style="list-style-type: none"> - Mr. Riasat s/o M. Hayyat - Mr. Faqeer Hussain s/o M. Yousaf - Mr. Riaz s/o M. Shamir Ali - Master Ashfaq - Muhammad Javaid Gondal - Mr. Mansha Rehmani - Mr. Muhammad Ashraf Baloch
46	07-09-2016	Wakeel Wala, Tehsil Nankana Sahab District Nankana Sahab	DPs/ Local Community	<ul style="list-style-type: none"> - Mr. Sarfaraz s/o Abdul Majeed - Mr. Ashfaq s/o Dilawar Ali - Rana Abdul Aziz s/o Abdul Majeed - Mr. Basharat s/o M. Abdullah - Mr. Mazhar s/o Wali M.
47	07-09-2016	Budha, Tehsil Nankana Sahab District Nankana Sahab	DPs/ Local Community	<ul style="list-style-type: none"> - Mr. Asif Ali s/o Abdul Haq - Mr. Ilyas s/o Miraj Ahmed - Mr. Wali M. s/o Allah Ditta - Mr. Bahadur s/o Wali M. - Mr. Wali M. s/o Allah Ditta
48	07-09-2016	Ladoana, Tehsil Nankana Sahab District Nankana Sahab	DPs/ Local Community	<ul style="list-style-type: none"> - Mr. Liaqat s/o M. Rahmat - Mr. Ahmed s/o M. Khan - Mr. Muhabat Ali s/o Ali M. - Mr. Ghulam Ali s/o Ahmed Ali - Mr. Abbass s/o Ghulam Ali - Mr. Noshair s/o M. Ghulam - Mr. Riasat s/o M. Sohail jani
49	07-09-2016	Janiwala/ Chokori, Tehsil Nankana Sahab District Nankana Sahab	DPs/ Local Community	<ul style="list-style-type: none"> - M. Ali s/o M. Karmal - Mr. Riaz s/o M. Mumtaz Ahmed - Mr. Mudassar Mehdi S/o Mehdi Hasan
50	08-09-2016	Chak Chor Shah, Tehsil Nankana Sahab District Nankana Sahab	DPs/ Local Community	<ul style="list-style-type: none"> - Mr. Bota s/o M. Zamal Deen - Rana Nazeer s/o M. Sadeeq - Rana Shafeeq s/o M. Sadeeq - Mr. Niaz s/o Dilshad - Mr. Nawaz Dogar
51	08-09-2016	Khairay Kalan, Tehsil Nankana Sahab District Nankana Sahab	DPs/ Local Community	<ul style="list-style-type: none"> - Rai Qamar s/o M. Fazal - Mr. Karamat Ali s/o M. Mirza - M. Ishaq s/o M. Hussain - Mr. Suleman s/o M. Younas - Mr. Akram s/o M. Younas - Mr. Iftikhar Ahmed s/o M. Aslam - Mian Safdar s/o Haji Ameer Ali - Mr. Niamat s/o Malik Yaqoob

Sr. No.	Date	Location/ Venue	Category of participants	Name of Main Participants
(E) 500 kV D/C T/L from Lahore North to existing Gujranwala (Nokhar) substation				
52	1-03-2017	Village, Nokhar, Tehsil Naushera Virkan, District Gujranwala	Farmers/ Local Community	<ul style="list-style-type: none"> - Mr. M. Farooq S/o M. Nawaz - Mr. Adnan M. S/o M. Yousaf - Mr. M. Yousaf S/o M. Khushi - Mr. Atta Ullah S/o M. Sharif - Mr. Abdul Sattar S/o M. Boota - Mr. Mukhtiar Hussain S/o M. Sharif - Mr. M. Ghaffar S/o M. Naik
53	1-03-2017	Tongi Wala, Tehsil Naushera Virkan, District Gujranwala	DPs	<ul style="list-style-type: none"> - Mr. Liaqat Ali S/o M. Haif - Mr. Muzaffer S/o M. Zaffer - Mr. Nasir S/o M. Khna - Sher Khan S/o M. Sharif - Mr. M. Iqbal S/o M. Ismail - Mr. M. Boota S/o Haji Dogar - Mr. Faisal Tanveer S/o Tanveer
54	2-03-2017	Kot Kesho, Tehsil Naushera Virkan, District Gujranwala	DPs	<ul style="list-style-type: none"> - Mr. Sadaqat Ali S/o Iftikhar Ahmad - Mr. M. Safdar S/o Haji Sardar - Mr. Karamat Ali S/o M. Barkat - Mr. Zulfiqar S/o Haji Hussain
55	2-03-2017	Kot Abdul Malik (Kot Kesho) Tehsil Naushera Virkan, District Gujranwala	AP/ Local Community	<ul style="list-style-type: none"> - Mr. Saif Ullah S/o Raj M. - Mr. Nazar M. S/o Ilm Din - Mr. Farman S/o Fetch M. - Mr. Abu Sufyan S/o M. Rafique - Mr. M. Riaz S/o M. Nazir
56	2-03-2017	Aulakh Bhai Wala Tehsil Naushera Virkan, District Gujranwala	DPs	<ul style="list-style-type: none"> - Syed Nasir Hussain S/o Syed Tasawar Hussain - Mr. Abdul Majeed S/o Sharaf Din - Syed Zubair S/o Syed Arshad - Syed Umair Shah S/o Syed Arshad - Mr. M. Riaz S/o Khair Din - Mr. Nauman S/o M. Mushtaq
57	3-03-2017	Dera Cha Wali Wala Tehsil Naushera Virkan, District Gujranwala	DPs	<ul style="list-style-type: none"> - Mr. Khushi M. S/o Wazir Ali - Mr. M. Khan S/o Wazir Ali - Mr. M. Nawaz S/o M. Khan - Mr. M. Riaz S/o M. Khan - Mr. Irfan Ali S/o M. Latif - Mr. Shabbir S/o Haji M.
58	3-03-2017	Dera Hajian Wala Tehsil Naushera Virkan, District Gujranwala	Local Community	<ul style="list-style-type: none"> - Mr. M. Idrees S/o bashir Ahmad - Mr. Irshad Ullah S/o M. Minsha - Hafiz M. Imran S/o M. Minsha

Sr. No.	Date	Location/ Venue	Category of participan ts	Name of Main Participants
59	3-03-2017	Chuainwali Tehsil Naushera Virkan, District Gujranwala	DPs	- Mr. Irshad Ullah S/o M. Riaz - Mr. Zaheer Ahmad S/o M. Munir - Mr. Arshad S/o Sobay Khan - Mr. M. Shoaib S/o M. Ilyas
60	4-03-2017	Gdhanwala Tehsil Naushera Virkan, District Gujranwala	DPs	- Mr. M. Jamil S/o M. Ibrahim - Mr. M. Nadeem S/o M. Sadiq - Mr. Khalil S/o M. Ibrahim - Mr. M. Yousaf S/o Lal Din
61	4-03-2017	Nasim Filling Station, Village Wdhanwala Tehsil Naushera Virkan, District Gujranwala	DPs	- Rana Tahir S/o M. Nasim - Mr. Naeem S/o M. Sharif - Mr. M. Javaid S/o M. Sadique
62	4-03-2017	Aiya Tehsil Naushera Virkan District Gujranwala	DPs	- Mr. Ahmad Sajid S/o M. Sajid - Mr. Munawar Hussain S/o M. Bashir - Mr. Mansoor Sabir S/o M. Sabir - Mr. Mehmood S/o Sharif Nasir
63	5-03-2017	Leel Virkan Tehsil Naushera District Gujranwala	DPs	- Mr. Khushi Muhammad S/o Charag Din - Mr. Muhammad Yousaf S/o Charag Din - Mr. Farid Ahmed S/o Shahbaz Jat - Mr. Yamin S/o Sabir
64	5-03-2017	Shamsha Dera Baghwala Tehsil Naushera District Gujranwala	DPs	- Mr. Muhammad Rafique S/o Jamal Din - Mr. Amanat S/o Nasar Din - Mr. Zafar Ali S/o Wali Muhammad - Mr. Abdul Rauf S/o Nasar Din
65	6-03-2017	Shamsha Dera Tehsil Naushera District Gujranwala	DPs	- Mr. M. Nazim S/o M. Ilyas - Mr. Mohsin S/o Ghulam Rasool - Mr. Usman S/o M. Yousaf - Mr. Ashiq Hussain S/o Ghulam Rasool - Mr. Ammir S/o Ashraf Ali - Mr. Nasir Mehmood S/o Abbas Ali

Sr. No.	Date	Location/Venue	Category of participants	Name of Main Participants
66	6-03-2017	Herdev Tehsil Naushera District Gujranwala	DPs	<ul style="list-style-type: none"> - Mr. M. Idrees S/o Soba - Mr. Ilyas S/o M. Malik - Mr. M. Malik S/o Allah Ditta - Mr. Kalim Ullah S/o M. Ilyas - Mr. Sabir S/o Abdul Ghafoor - Mr. Abu Sufyan S/o Zulfiqar - Mr. Nasurullah S/o M. Sadiq - Mr. M. Fiaz S/o M. Nawab - Mr. M. Nawaz S/o Khushi M. - Mr. Anayat Ali S/o Ghulam M. - Mr. Iftikhar S/o M. Sadique
67	7-03-2017	Millian Tehsil & District Shiekhupura	DPs	<ul style="list-style-type: none"> - Mr. Rafique S/o Ch. Mauj Din - Mr. Shaukat Ali S/o M. Ali - Mr. Ali Hussian S/o Shaukat Ali - Mr. M. Mushtaq S/o Ch M. Ali - Mr. M. Aslam S/o Abdul Rasheed
68	7-03-2017	Khairupur Millian Tehsil & District Shiekhupura	DPs	<ul style="list-style-type: none"> - Mr. M. Sarwar S/o Shah Nawaz - Mr. M. Anwer S/o Shah Nawaz - Mr. Manawar S/o Shah Nawaz - Shah Nawaz S/o Siraj Din
(F) 220 kV double circuit T/Line for In/Out of 220 kV Ghazi road-KSK at 500 kV Lahore North				
69	8-03-2017	Village Santa, Tehsil Muridke & District Sheikhupura	DPs/ Local Community	<ul style="list-style-type: none"> - Mr. Abdullah S/o Barkat - Mr. Ilam Din S/o Hanif - Mian Nazir S/o Shabir - Mr. Allah Ditta S/o Noor Hussain - Mr. Arif Ali S/o Sadique - Mr. Ishaq S/o Saleem - Mr. Ashraf S/o Urrah Khan - Mr. Babar S/o Ahmed Din - Mr. Khadim Hussain S/o Siriya - Mr. Laag Din S/o Shami - Mr. Akram S/o Abdul Hamid - Mr. Talib Hussain S/o Tufail - Mr. Farman Ali S/o Zikar Din - Mr. Abdullah S/o Barkat Ali - Mr. Younus S/o Saraj Din - Mr. Karamat S/o Ali Hassan - Mr. Nazir Hussain S/o Aslam - Haji Sabir S/o Gulam Ali - Mr. Ashraf S/o Zameer
70	9-03-2017	Village Chuhay Wali Kalan, Tehsil Muridke & District	DPs/ local community	<ul style="list-style-type: none"> - Mr. M. Boota S/o Allah Rakha - Mr. Gous Shah Afzal S/o Wali Muhammad - Mr. Yousaf S/o Nazir - Mr. Manzoor Hussain S/o Tedi

Sr. No.	Date	Location/ Venue	Category of participants	Name of Main Participants
		Sheikhupura		<ul style="list-style-type: none"> - Mr. Rehamt Din S/o Ali Din - Mr. Maqssod S/o Sadiq - Mr. Yaqoob S/o Faiz Rasool - Mr. M. Imran S/o Aslam - Mr. Tanveer Hussain S/o Ahmed Hussain - Mr. Mustafa S/o Pehlwan - Mst. Rehamat Bibi W/o Salamat - Mr. Bilal Ahmed S/o Zafar Ahmed
71	10-03-2017	Village Ali Pur Tiba Tehsil Muridke & District Sheikhupura	DPs/ local community	<ul style="list-style-type: none"> - Mr. Abbas S/o Sher Muhammad - Mr. Ifikhar S/o Hayat Ali - Baba Said S/o Taj Din - Mr. Abbas S/o M. Ameen - Mr. Ashiq Hussain S/o Karam Dad - Mr. Umair Bajwa S/o Mushtaq Ali - Mr. Manzoor S/o M. Nawa - Mr. Amanat Ali S/o Sarwar - Mr. Sadaqat Hussain S/o Zamir Hussain
72	11-03-2017	Chubarianwali Tehsil Muridke & District Sheikhupura	DPs/ local community	<ul style="list-style-type: none"> - Syed Riaz Hussain S/o Pir Wali M. - Mr. M. Munir S/o M. Boota - Master Bashir S/o Allah Rakha - Mr. Asad Manzoor S/o Manzoor Hussain - Malik Shabir S/o Nazir Ahmad
73	12-03-2017	Nun Village Tehsil Muridke & District Sheikhupura	DPs	<ul style="list-style-type: none"> - Mr. Bashir Ahmad S/p M. Din - Mr. Liaqat Bhatti S/o Abdullah Bhatti - Mr. M. Akbar S/o Jamal Din - Molvi Khair Din S/o Dolat Din - Fauji Nazir S/o M. Bashir - Mr. Ismail Bhatti S/o M. Din - Mr. Abbas Ali S/o Badar Din
- 500/200 kV substation with 3X750 MVA transformers and allied equipment & accessories (Grid Station)				
74	25-02-2018	Khairpur Malian	DPs	<ul style="list-style-type: none"> - M. Afzal s/o M. Anwar - Ijaz Afzal s/o M. Afzal - Imran Afzal s/o M. Afzal - M. Alam s/o Allah Ditta - M. Malik s/o Allah Ditta - Muhammad Mansha s/o Sharif - M. Siddique s/o Abdul Rashid - Zia Ullah s/o A. Aziz
75	26-02-2018	Khairpur Malian	DPs	<ul style="list-style-type: none"> - Mian Mehmood s/o M. Rashid - Muhammad Asghar s/o Faeer M - Sher M s/o Allah Ditta - Amir s/o Ali Hassan - M. Kashif s/o M. Iqbal - M Yousaf s/o Khushi M - M. Sarwar s/o Shah Nawaz

Sr. No.	Date	Location/ Venue	Category of participants	Name of Main Participants
76	01-03-2018	Khairpur Malian	DPs	<ul style="list-style-type: none"> - M.Sarwar s/o Shah Nawaz - Nazir s/o Ghulam - Ghulam Mustafa s/o Rehmat Ullah - Anwar Nawaz s/o Shah Nawaz - M Ghaffar s/o A. Rehman
77	10-03-2018	Khairpur Malian	DPs	<ul style="list-style-type: none"> - M Rafiq Kugh s/o Hayat - Abdul Sattar s/o A. Rehman - Professor Javed s/o Anwar virk - M. Younas s/o Khushi M - M Shabbir s/o M. Bashir - Muhammad Hassan s/o Karim ud Din
78	11-03-2018	Khairpur Malian	DPs	<ul style="list-style-type: none"> - M.Sarwar s/o Shah Nawaz - M. Basharat s/o Sharif - Khalid s/o Noor Muhammad - M. Arif s/o sharif - M. Alam s/o Allah Ditta - Mian Mehmood s/o M. Rashid - M. Ahmad s/o M. Iqbal
79	21-03-2018			<ul style="list-style-type: none"> - M. Afzal s/o M. Anwar - Ijaz Afzal s/o M. Afzal - Imran Afzal s/o M. Afzal - M. Alam s/o Allah Ditta - M.Malik s/o Allah Ditta - Muhammad Mansha s/o Sharif - M. Siddique s/o Abdul Rashid - Zia Ullah s/o A. Aziz - M Rafiq Kugh s/o Hayat - Abdul Sattar s/o A. Rehman - Professor Javed s/o Anwar virk - M. Younas s/o Khushi M - M Shabbir s/o M. Bashir - Muhammad Hassan s/o Karim ud Din - M.Sarwar s/o Shah Nawaz - Nazir s/o Ghulam - Ghulam Mustafa s/o Rehmat Ullah - Anwar Nawaz s/o Shah Nawaz - M Ghaffar s/o A. Rehman - Mr. Khushi Muhammad S/o Charag Din - Mr. Muhammad Yousaf S/o Charag Din - Mr. Farid Ahmed S/o Shahbaz Jat - Mr. Yamin S/o Sabir
80				<ul style="list-style-type: none"> - Mr. M. Farooq S/o M. Nawaz - Mr. Nauman S/o M. Aslam - Mr. Fahim S/o M. Aslam - Mr. Tariq Hameed S/o Abdul Hameed - Mr. Abdul Jabbar S/o Safdar Ali - Mr. Abdul Samad S/o Safdar Ali - Mr. Abdul Sattar S/o Safdar Ali

Sr. No.	Date	Location/ Venue	Category of participants	Name of Main Participants
				<ul style="list-style-type: none"> - Mr. Abdul Ghafoor S/o Safdar Ali - Mr. M. Hassan S/o Karim Din - Mr. M. Manawar S/o Nishan Ali - Mr. M. Nawaz S/o Nishan Ali - Mr. M. Munir S/o Nishan Ali - Mr. Manzoor Hussain S/o Nishan Ali - Mr. Saif Ullah S/o Nishan Ali - Mr. M. Sarwar S/o Shah Nawaz - Mr. Anwar Nawaz S/o Shah Nawaz - Mr. M. Manawar S/o Shah Nawaz - Amar s/o Ali - Amanat Ali s/o Bashir Ahmad - Saeed s/o Sharif - Karamet Ali s/o Nawab Din - Ghulam Mustafa s/o Khushi Muhammad - M. Naeem s/o Hassan - M. Shahid s/o Hassan - Israr Ahmad s/o Raza - Asghar s/o Faqir M - Qamar S/o Ghafoor - Ihsan Ullah s/o Haji Akram - Awais s/o Amin - M. Aslam s/o Siddique - Alam s/o Allah Ditta - Jamshaid s/o Zia Ullah - Akhtar Javaid s/o Haji Anwar - Haji Masawar s/o Javeed

5.3. Concerns Regarding the Sub-project

100. 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

101. 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 for the DPs of grid station; they were demanding the compensation as per current market value of the land. Along with the 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

102. The women DPs were also consulted; they showed their concern over the compensation rate of the government which are on lower side and demanded the fair market rate of lost land and assets. The women DPs were demanding the jobs for the

educated girls and upgradation of school and health center located in the area. They also asked for the vocational centre for the women of the area.

Redress of Farmers Issues

103. 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.

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

DPs/ Community Concerns and their Redress

Concerns	Redress	Responsibility
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.	, NTDC, PMU & Contractor
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.	NTDC, PMU, ESIC, Consultant & Local Representatives
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.	PMU & NTDC
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.	NTDC, PMU, & Contactors
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 & ESIC
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.	PMU, NTDC & ESIC -
NTDC should shift the Grid station to the less productive agricultural land	The option is seriously considered but the technical requirement is also essential	NTDC, PMU & design consultant

The land to be acquired for the Grid Station is prime agricultural land, hence the compensation should be worked out as per the future potential of the land use especially in context with the commercialization owing to located near the motorway where the industrial parks is established	Efforts will be made to acquire the land through the private negotiation.	NTDC, PMU & ESIC
Government should also acquire their left over land	In case there is no use of land, then the leftover land can be acquired	NTDC, PMU & ESIC
Irrigation water channel should not be disturbed	The restoration of all channels will be ensured by the project office	NTDC, PMU & Construction supervision consultant

Information Disclosure

105. This draft LARP in English is to be disclosed on the ADB website (a copy of information brochure is provided in Annex A), while the one in local language (*Urdu*) will be disclosed in the EA website and in local administrative offices. Disclosure is a condition for LARP approval.

106. Furthermore, this LARP will also be disclosed in local language to the DPs and some other key local persons resided in the vicinity of the sub-project, so that each DP could be able to understand the sub-project activities, i.e. the sub-project, cut-off date, eligibility for entitlement of compensation, methods of measurement, price assessment & valuation of losses, payment of compensation, community complaints redress system, budget and monitoring & evaluation.

107. The PIU will keep the DPs informed about the impacts and entitlement of compensation and facilitate in addressing grievance (s) of the DPs as well as local community members. Finally, there will be on-site community/ DPs gathering to monitor the entitled disbursement of the compensation to the DPs.

108. 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.

5.4. Information Brochure

109. A copy of information brochure in local language will be distributed to all DPs, as disclosure is a condition for LARP approval.

6. COMPENSATION ELIGIBILITY AND ENTITLEMENTS

6.1. Eligibility

110. 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). Affected 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). Affected 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.

111. In accordance with the 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 will be announced through the mass media (like pamphlets/ leaflets, newspaper). The affected persons who settled in the vicinity of the sub-project area after the cut-off date will not be eligible for compensation.

a. Entitlement for Compensation

112. 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 or through the negotiation with the displaced persons. 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 Affected Persons: Vulnerable households, 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.

113. 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.

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

Table ES 2: Entitlement Matrix

Asset	Specification	Entitled Persons	Compensation Entitlements
Arable Land	Access is not restricted, and existing or current land use will remain unchanged	Farmer/ Titleholder	<ul style="list-style-type: none"> No compensation for land under towers footage in rural area but NTDC/contractor is responsible to rehabilitated/restored land to former condition/use and quality after completion of work. Cost of land restoration work will be borne by contractor, and restoration work will be monitored/validated by EMC.
		Leaseholder/ Sharecropper (registered or not)	<ul style="list-style-type: none"> No compensation for land under towers footage in rural area but land is rehabilitated/restored to its former condition, use and quality following completion of works;
		Agricultural workers	<ul style="list-style-type: none"> Compensation in cash for temporarily damaged crops and trees, etc, temporarily affected.
		Squatters	<ul style="list-style-type: none"> Compensation in cash for temporarily damaged crops and trees, etc.
Arable Land where access is restricted and/or land use will be affected	All adverse effects on land use independent of severity of impact	Farmer/ Titleholder	<ul style="list-style-type: none"> Cash compensation for affected land at replacement cost based on market value plus 15% CAS, ^a free of taxes, registration, and transfer costs.
		Leaseholder/ Sharecropper (registered or not)	<ul style="list-style-type: none"> Cash equivalent to market value of gross yield of affected leased land.
		Agricultural workers losing work their contract	<ul style="list-style-type: none"> Cash payment for lost work or crops damaged by towers construction work.
		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.
	Additional provisions for severe impacts (More than 10% of land 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)
Temporary land occupation	Land temporarily required during civil works	Owner, lessee, tenant	<ul style="list-style-type: none"> Rental fee payment for period of occupation of land, as mutually agreed by the parties. Restoration of land to original state to be monitored internally by EA and validated by EMC through periodical monitoring reports.

Asset	Specification	Entitled Persons	Compensation Entitlements
			<ul style="list-style-type: none"> Guarantee of access to land and structures located on remaining land.
		Non-titled user	<ul style="list-style-type: none"> Restoration of land to original state Guarantee of access to land and structures located on remaining land
		Renter/ Leaseholder	<ul style="list-style-type: none"> 1-3 months allowance (at OPL level Rs. 15,000/ month)
		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 cash assistance to restore remaining structure.
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 grid construction, tower base, stringing and access. All other crop losses will be compensated at market rates based on actual losses.
Trees	Trees affected	Owner of trees	<ul style="list-style-type: none"> For timber/ wood trees, the compensation will be at market value of tree's wood content. Fruit trees: Cash compensation based on lost production based on the yearly produce of tree and investment cost needed to re-grow the tree.
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). The inflation will be adjusted in case of delay in payment.
Relocation	Transport costs	Owners of structures	<ul style="list-style-type: none"> Provision of transport expenses (Rs. 15,000). The inflation will be adjusted in case of delay in payment.
Community assets	Mosques, footbridges, 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	Households' below poverty line and	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

Asset	Specification	Entitled Persons	Compensation Entitlements
	female headed households, disable persons of HH.		restoration support. <ul style="list-style-type: none"> • Temporary or permanent employment during construction or operation, wherever feasible. • The inflation will be adjusted in case of delay in payment.
Unidentified Losses	Unanticipated impacts	All DPs	<ul style="list-style-type: none"> • Deal appropriately during sub-project implementation according to the ADB Safeguard Policy

*Distinct group of people who may suffer disproportionately from resettlement effects. These include vulnerable groups below the poverty line, the elderly, those without legal title to assets, landless, women, children and indigenous people and the disabled.

7. INSTITUTIONAL ARRANGEMENTS AND IMPLEMENTATION

115. The PMU (NTDC) will be responsible for the updation of this draft LARP at final detailed design and implementation of final LARP of 500 kV Lahore North G/S along with allied transmission lines (T/Ls). 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.

116. 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; Building & works, Wapda, and other concerned.

7.1. National Transmission and Despatch Company

117. 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 (Project) will be responsible for general project execution through the Project Implementation Unit (PIU) at field level, which will be tasked with day to day project activities.

118. 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.

7.2. Environment and Social Impact Cell (E&SIC)

119. 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) ⁹	Member
vi).	Surveyor	Member

120. 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)

⁹ 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.

and Grievance Redress Committee (GRC).

- iii). The E&SIC will manage the updation of LARP at final design, including updation of surveys, measurements/ assessment, valuation in coordination with concerned department.

121. 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). Updation 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

122. All activities related to the LARP updation, 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.

123. An independent monitoring agency or individual external monitor/ external monitoring agency (which may be an academic institute, consultancy or professional NGO or panel of experts, or individual consultant) will be hired by the NTDC (PMU) to conduct the short and medium-term tasks of external monitoring activities¹⁰.

124. As per SPS 2009, all monitoring reports will be disclosed to the displaced parties (DPs) including the preparation of corrective action plan (if any).

7.3. Facility Management Consultants (FMC)

125. The EISC will be assisted by a team of social experts (including resettlement specialist, revenue officer, gender specialist and a resettlement database specialist) who will be hired by NTDC to assist ESIC in preparation and updating of LARPs and internal monitoring of LARPs. The social team will work on intermittent basis and will operate from NTDC's office and space provided near the office of ESIC.

7.4. Project Implementation Unit (PIU)

126. 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)

¹⁰The 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. The medium term task will be the monitoring of the effectiveness of the compensation package.

- 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).

127. The PIU to be notified at field level headed by the Executive Engineer, NTDC.

128. 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.

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

7.5. Local Government

130. 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.

7.6. ADB

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

7.7. LAR Coordination Committee

132. 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.

133. 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, B&W, PHE)

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

7.8. Displaced Person Committee

135. 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).

136. 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

7.9. Grievance Redress Mechanism

137. 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 a 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.

138. 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.

139. 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.

140. 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/ DPC, PIU and

PMU. However, a Grievance Redress Committees (GRC) will also be established to redress the unresolved issues.

141. 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 Displaced Person Committee (DPC)
- vi). Patwari

142. 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

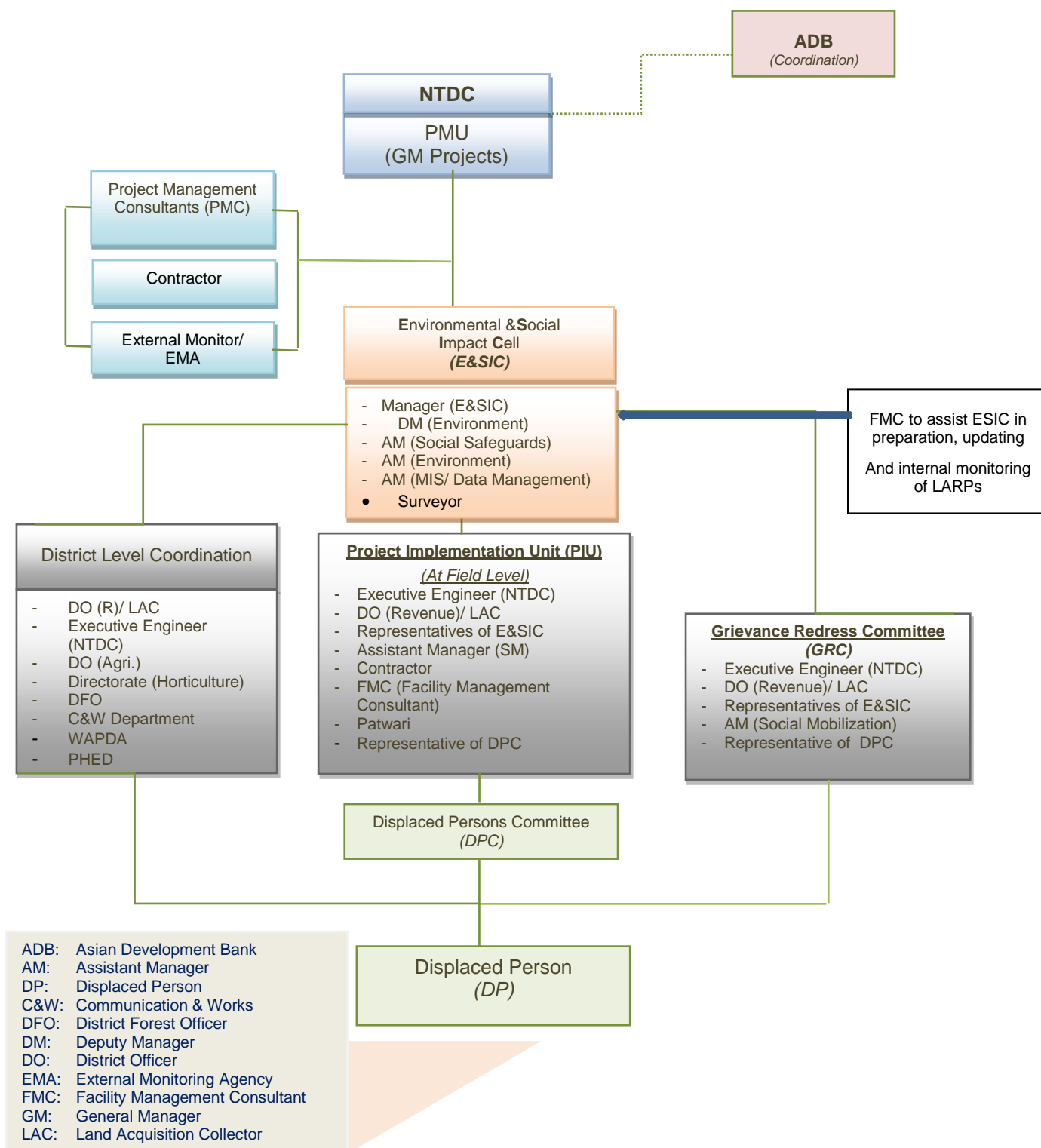
Land Compensation Issues	Other Items Compensation Issues
<ul style="list-style-type: none"> First, complaints will be redressed at field level through the involvement of PIU and DPC as well as other local committees. 	<ul style="list-style-type: none"> First, complaints will be redressed at field level through the involvement of PIU and DPC 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.

7.10. Organogram

143. 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



LARP IMPLEMENTATION SCHEDULE

8.1. Implementation Schedule

144. 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 redress of community concerns. This draft LARP will be updated once the design is finalized.

145. Based on the implementation experience of previous projects, it is expected that the implementation of LARP of this sub-project including construction of grid station and installation of transmission lines will take about 12 - 18 months as there is permanent land acquisition involved due to construction of grid station. The payment of compensation will be made in three stages, i.e. (excavation/ foundation, tower erection and stringing/ installation of transmission line). The implementation schedule is prepared in consultation with NTDC.

146. Step-wise LARP implementation process is presented in Table 8.1 below.

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.	Sep 2018	NTDC	GRC will be notified.
5	Submission of draft LARP to ADB	26 MAR 2018	NTDC/ESIC	
6	LARP updated through addendums or sectional LARPs based on the TL route/towers survey by turn-key contractor.	Upon completion of route survey	PD, contractor, ESIC/FMC	
7	Approval of addendum to LARP or sectional LARP	As and when ready but before start of construction.	ADB	
8	Urdu translation and disclosure of LARP	July 2018	ESIC/Consultant	
9	Facility Management Consultant (FMC), social safeguards personnel (GRM and MIS experts, Patwari and enumerators/social mobilizers)	July 2018	NTDC/ ADB	Already on board
10	Hiring of External Monitoring Consultant (EMC)	May, 2018	ESIC/ADB	In process
11	Date of procurement-bidding	May 2018	NTDC	
12	Expected or definite dates of following			
	• Expected date of contract award(expected)	Nov 2018	NTDC	
	• Contractor Mobilization	Dec 2018	NTDC/ Contractor	
	• Commencement of Construction	Jan 2019	NTDC/ Contractor	
	• Foundation work	Feb. 2019	Contractor	

Sr. No.	Action	Timeline	Responsibility	Remarks/ Status
	• Towers erection	Mar. 2020	Contractor	
	• Stringing of wires	Jun 2021	Contractor	
13	First quarterly internal monitoring report (IMR)	Sep 2018	FMC/ESIC	Before start of construction
14	First external monitoring report subsequent reports	Dec 2018	FMC/ESIC	Before start of construction
15	Subsequent Semi-annual Reports	Six monthly	FMC/ESIC	
16	Community Complaints Register	Oct. 2018	NTDC/PIU	
17	Central resettlement database including record of payments and management information system	Nov 2018	ESIC/ FMC	To be continued till the completion of the project.

Figure 8.2: LARP Implementaion Schedule

Main Activities	Tentative Date	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).	Sep. 2018					
Submission of draft LARP to ADB	26 Mar 2018					
LARP updated through addendums or sectional LARPs based on the TL route/towers survey by turn-key contractor.	Jun 2018					As and when ready but before start of construction.
Approval of final RP	Jul. 2018					Before implementation and start of construction.
Urdu translation and disclosure of LARP	Jul 2018					
Hiring of FMC	Jul 2018					
Hiring of External Monitoring Consultants (EMC)	Dec 2018					
Date of procurement-bidding	May 2018					
<u>Expected dates:</u>						
• Expected date of contract award(expected)	Nov 2018					
• Contractor Mobilization	Dec 2018					
• Commencement of Construction	Dec-2018-Jan 2019					
• Foundation work	Feb. 2019					
• Towers erection	Mar. 2020					
• Stringing of wires	June 2021					
First quarterly internal monitoring report (IMR)	Sep. 2018					
First external monitoring report subsequent reports	Dec 2018					
Community Complaints Register	Oct. 2018					
Central resettlement database including record of payments and management information system	Nov 2018					

8. RESETTLEMENT BUDGET AND FINANCING

147. 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

148. 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.

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

9.1.1. Land Compensation

150. The unit rate of land as per the market and recent transaction in the same village /mouze is Rs.6, 000,000/acre (Annex 9.4). The total compensation cost of land for 176 acres is Rs. 1,056,000,000 (1056 million). The cost is negotiable and EA should negotiate with the DPs to workout the compensation cost.

151. The unit rate of crops and trees by type is given in Table 9.1.

Table 9.1: Assessment of Value of Crops per Acre

Crops	Area Sown (Acres)	Av. Yield/ Acre (kg.)	Total Production (40 kg)	Price (Rs./ 40 kg)	Total Value of Crops of Sample Farms (Rs)	Value of Crop as per Compensation (Rs./ Acre)
Wheat	1093.61	1600	43744	1,280	55,992,320	51,237
Basmati Rice	1016.11	1600	40644	2,010	816,900,004	80,410
Millets (Bajra/Jowar)	10.52	1410	371	977	362,467	34,455
Sugarcane	10.09	25920	6539	170	1,111,630	110,172
Tomato	5.15	4000	515	1,720	885,800	172,000
Vegetables	4.51	4398	496	640	317,440	70386
Rabi Fodder	7.52	978	184	800	147,200	19575
Total	2147.51				875,716,861	76,891

Source: <http://www.amis.pk/ViewPrices.aspx?searchType=1&commodityId=70> (March, 2017) also see **Annex 9.5**.

9.1.2. Compensation of Wood Trees

152. A total of 1240 wood trees will be cut owing to the project activities. These include 403 of Grid station and 837 trees of transmission line. The trees of different species like Sheesham, Eucalyptus, Kiker, Bakain, Sumble, Shireen, Bohr, Poplar and Bamboo. Total compensation cost worked out is Rs. 2176182 (Rs. 2.18 million).

9.1.3. Compensation of Fruit trees

153. A total of 255 fruit trees will be cut due to ptoject. These fruit trees include mango, jaman, banana, lemon, Bair, Melburry and guava. The total compensation cost worked out is Rs. 1082839 (Rs.1.08 million).

9.1.4. Compensation of Structures

154. The unit rate of each structure to be affected due to the proposed 500 kV Lahore North grid station along with allied T/Ls is given in Table 9.2 below. .

Table 9.2: No. of affected structures

Type of Structure	Affected Structure (Nos.)	Type of Structure	Size of Structure (ft ² /m ³)	Unit Rates (Rs)	Compensation Cost (Rs)
Farm houses (Covered Area)	2	Pacca / Semi Pacca	2003.9	900 / 700	2,759,206
Bounday wall	3	Pacca / Semi Pacca	32.819 Pcca and 6.487 Semi Pacca boundary wall	4585.44 / 2532	166,882
Fish Farm	1	Kacha	2410.43	600	14,462,58
Tubewell (electric & non electric)	12	Bore	-	40,000	480,000
Tubewell Rooms	6	Semi Pacca	912.52	700	638764
Water tank	7	Pacca	87.8930	4584.44	402941
Hand pump	1	-	-	-	3000
Total					5897051

9.2. Source of Financing

155. 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.

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

157. 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

158. 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. 1,402.97 million (\$12.1M.) as presented in Table 9.3.

159. The compensation to be made to an individual DP is given in Annex 9.1 and 9.2.

Table 9.3: Resettlement Budget

Sr. No.	Description	Unit	Quantity	Unit Rate (Rs.)	Amount (Rs. M.)	Remarks
A)	Permanent Land Acquired					
	Construction of Grid Station	Acres	176	6,000,000	1,056	DC rate in the area Annex 9.3
	Sub Total (A)				1,056	
B)	Affected Crops					
	a) Grid Station	Acres	174	-	22.906	
	b) Tower Installation					
	i). Tower Base	Acres	80.61	51,237	4.13	Unit price assessed based on Annex 9.4 and given in Table 9.1
	ii). Erection	Acres	80.61	51,237	4.13	
	iii). Stringing	Acres	80.61	51,237	4.13	
	b) Transmission Line					
	i) Stringing activity	Acres	2147.51	51,237	110.031	Stringing activity at T/L portion
	Sub Total (B)				145.328	
C)	Affected Trees					
	Wood Trees	Nos.	1240	-	2.176	
	Fruit Trees	Nos.	255	-	1.082	
	Sub Total (C)				3.258	
D)	Affected Structure					
	Farm houses (Cover area & Bounday wall)	Nos.	02	-	2.92	
	Fish Farm	m ³	2410.43	600	1.446	
	Tubewell Room & Water Tank	Nos.	6 & 7	-	1.041	
	Tubewells (Bore)	Nos.	12	40,000	0.48	
	Hand pump	Nos.	1	3000	0.003	
	Sub Total (D)				5.89	
E)	Livelihood Assistance					
	Vulnerable allowance to DPs (below poverty line and 3 months payment equal to OPL Rs. 15,000/ month).	Nos.	45000	49	2.20	
	Impact severity allowance to DPs (with severe impact (more than 10% of their	Nos.	45000	50	2.25	

Sr. No.	Description	Unit	Quantity	Unit Rate (Rs.)	Amount (Rs. M.)	Remarks
	productive assets) on their property) 3 months payment equal to OPL Rs. 15,000/ month).					
	Loss of Business	Nos.	45000	1	0.045	
	Sub Total (E)				4.495	
F)	External Monitoring Agency	-	-	-	5.00	
	Sub-total (A+B+C+D+E+F)	-	-	-	1219.97	
	Contingencies @ 15%	-	-	-	183	
	Grand Total (Rs. M.)	-	-	-	1402.97	
	US\$ (M.)				12.1	

1 US \$= Rs. 115 as of March, 2018.

10. MONITORING AND EVALUATION

10.1. General

160. 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 Agency (EMA) to be hired by PMU, and approved by ADB. The EMA will be selected among local consultants/ consulting firms.

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

10.2. Internal Monitoring

162. Internal monitoring will be carried out by the PMU through E&SIC assisted by the Project Management Consultants (Safeguard Implementation Specialist). The results will be presented in the quarterly project implementation reports and submitted to ADB.

163. 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.

164. 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;

165. 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

166. External monitoring will be carried out by the External Monitoring Agency to be hired by the PMU among the local consultants/ consulting firms.

167. 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.

168. The medium term task will include the monitoring of the effectiveness of the compensation package.

169. As the number of impacts are limited, so that the external monitoring report at the initial stage of the LARP implementation and on its completion will be prepared. However,

some additional external monitoring report may be prepared depending upon the requirements of ADB.

170. 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 develop a corrective action plan
- g) Assess the LAR implementation efficiency, effectiveness, impact and its sustainability.

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

10.4. REPORTING REQUIREMENTS

172. Executing Agency (through PMU and ESIC) will prepare monthly progress report and internal monitoring report on quarterly basis. While the external monitoring will be prepared by the EMA on bi-annual basis. The report will identify the gaps and appropriate recommendations for compliance purposes. Monitoring reports will be submitted at regular intervals as specified. The M&E documents will also be publicly available (after approval from the ADB), including posting in project website.

173. Awarding of civil works contract for Lahore North project is conditional to the implementation of approved LARP while the commencement of construction is conditional to full payment to DPs and implementation of LARP to be validated by EMA.