Draft Land Acquisition and Resettlement Plan

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Draft Land Acquistion and Resettlement Plan of 220 kV Jauharabad Substation

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.

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NATIONAL TRANSMISSION AND DESPATCH COMPANY, PAKISTAN

2nd POWER TRANSMISSION ENHANCEMENT INVESTMENT PROGRAM Funded By ADB through MFF 2

(Tranche 3)

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List of Abbreviation

ADB	Asian Bank Development
AF	Affected Family
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
ТА	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 procedure 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 AFs.

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 (Cadestral 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 requorements of SPS 2009 and the facility's Land Acquisition and Resettlement Framework (LARF) in addition to technical, financial and economic viability, geographical locaitons 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 Pakhtunkhaw (KPK).

4. **Scope of Work - New Substation at Jauharabad:** Tranche 3 of MFF 2 comprises four subprojects (Annex 1: List of subprojects), three of which involve construction of new substations and allied T/L at Lahore North, Jauharabad and Maira in Punjab province. The substation involves acquisition of land while T/L component will impact the standing crops only temporarily during the installation of T/L while trees coming under lines will need to be removed. The Jauharabad project involves SS and allied 12 km TL. However, this draft LARP covers only the SS as the proposed 12 km TL route is yet to be identified by NTDC. The draft LARP will be updated (through sectional LARPs or addendums based on the TL/towers route survey) after NTDC identifies the route of TL. The updated LARP will have both components (SS+TL) covered after impacts assessment and additional consultaitons are undertaken with DPs based on the final route survey of TL by turnkey contractor and issuance of section 6 of land acquisition act 1894. The proposed subproject falls in Tehsil Jauharabad and District Khushab of the Punjab province.

5. **Project Design Specifications:** In accordance with the Government's PC-1 document, the subproject 220 kV Jauharabadhas two components: (i) construction of 220kV G/S at Jauharabad with three 220/132kV, three 160 MVA transformers along

with allied equipment and accessories, ii) Four 220kV line bays and eight 132kV line bays. The equipment required includes transformers, circuit breakers, insulators, and centries. Other works associated with this subproject include central room, relay room, battery room, office building, boundary wall, internal roads and residential buildings for the staff. The 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 marked on the Google Map provided by NTDC (Google map at Figure 1.1).

6. The design 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 design and land award, disclosed at ADB and Project websites (with summary disclosed to AFs) and approved by ADB prior to its implementation/ construction startup.

7. Consultations with AFs and impact assessment survey were 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 and April 2018. The survey recorded the following land acquisition and resettlement (LAR) related impacts:

8. **LAR impacts of subproject:** The construction of GS requires permanent acquisition of about 55 acres of private agriculture land and land-based assets, e.g. Non-residential), crops (~55 acres) and trees (~46). Installation of Four 220kV line bays and eight 132kV line bays will be constructed on the same land proposed for the Grid Station, hence no separate land will be required for this component. For more details, table ES 1 below presents the overall summary of LAR impacts of SS.

S #	Sub Projects Impacts	Unit	Quantit y Affecte d	Ownership and present use	AFs (Nos.)	DPs	Remarks
1	Land permanently acquired	Acres	55	Private agricultural land being cultivated	1	7	This is the affected family
2	Wood trees to be cut – down	Nos.	46	Private trees on farm land	1	7	Multiple counts. ThesameAF who is losing the land.
3	Cropped area	Nos.	55	Private land currently being cropped	1	7	Multiple counts. The same AF who is losing the land.

Table ES: Overall Summary of LARP Impacts of GS

9. A total of 1 family (7 DPs) is expected to be affected but will not be displaced from housing or lose 10% or more of any productive asset. However, Tranche 3 of MFF has been classified as IR category A (this covers Jauharabad SS also) due to the LAR impacts of Lahore North GS +TL being the most sensitive). For indiginous peoples (IPs), it is still C as no IPs 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 form those of the dominant society and culture.

10. **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 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 AFs 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.

11. 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 project website and AF with copies of LARP summary placed at PIUs and local administrative offices.

12. LAR Conditions:

13. For the transmission lines component, the following LAR conditions will be followed to ensure complaince 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.

14. **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 / census survey was completed on April 06, 2018. Therefore, April 06, 2018 has been fixed as cut-off-date for project impacts and this has been informed to AFs during consultation meetings conducted in April 2018. In case of any delay in land

acquisition and the need for new assessment of impacts after April 2019, a new cutoff-date will be established.

15. **Public Consultations:** Public/community consultations were carried out at representative select sites and a total of 5 consultations (comprising of 18 participants) were carried out with AF/local community members to share project information and record their concerns/ feedback to the project and its design. The AFexpressedits views about rate of compensation, which they said must be at true market price. They were told that compensation rate for land will be based on the agreed rate determined through the private negotiation and in case the failure of negotiation, the department will go on compulsory acquisition. Then 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), while compensation rates. The rates of other affected assets like trees and crops are taken from the concerned department.

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

Accest Operation Entitled Demons Ocean and the Entitlements								
Asset	Specification	Entitled Persons	Compensation Entitlements					
	Access is not restricted, and existing	Farmer/ Titleholder	 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. 					
Arable Land	or current land use will remain unchanged	Leaseholder/ Sharecropper (registered or not)	 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	 Compensation in cash for temporarily damaged crops and trees, etc, temporarily affected. 					
		Squatters	 Compensation in cash for temporarily damaged crops and trees, etc. 					
Arable Land where	All adverse effects on	Farmer/ Titleholder	 Cash compensation for affected land at replacement cost based on market value plus 15% CAS, ^a free of taxes, registration, and transfer costs. 					
access is restricted and/or land use will be	icted land use independent of severity of land		 Cash equivalent to market value of gross yield of affected leased land. 					
affected	impact	Agricultural workers losing work their contract	 Cash payment for lost work or crops damaged by towers ocnstruciton work. 					

Entitlement Matrix¹

¹ All allowances will be indexed for inflation since RF adoption in May 2016, as of month of payment.

Asset	Specification	Entitled Persons	Compensation Entitlements
		Squatters	 1 rehabilitation allowance equal to market value of 1 gross harvest (in addition to crop compensation) for land use loss.
	Additional	Farmer/Titleholder Leaseholder	 1 severe impact allowance equal to market value of gross harvest of the affected land for 1 year (inclusive of winter and summer crop and additional to standard crop compensation)
	provisions for severe impacts (More than	Sharecroppers (registered or not)	 1 severe impact allowance equal to market value of share of harvest lost (additional to standard crop compensation)
	10% of land loss)	Squatters	 1 severe impact allowance equal to market value of gross harvest of the affected land for 1 year (inclusive of winter and summer crop and additional to standard crop compensation)
Temporary land occupation	Land temporarily required during civil works	Owner, lessee, tenant	 Rental fee payment for period of occupation of land, as mutually agreed by the parties. Restoration of land to original state to be minotored 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	 Restoration of land to original state Guarantee of access to land and structures located on remaining land
		Renter/ Leaseholder	 1-3 months allowance (at OPL level Rs. 15,000/ month)
		Squatters	• Accommodation in available alternate land/ or a self-relocation allowance (<i>Rs. 15,000</i>).
Houses/ Structures		Owner of house structures	 Cash compensation at replacement rates for affected structure and other fixed assets free of salvageable materials, depreciation and transaction costs. In case of partial impacts full cash assistance to restore remaining structure.
Crops	Crops affected	All DPs (including squatters)	 Crop compensation in cash at full market rate for one harvest (either winter or summer) by default for impacts caused by 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	 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

Asset Specification Entitled Persons			Compensation Entitlements				
	•		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)	 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 allowance will be adjusted for inflation in case of delay in payment. 				
Relocation	Transport costs	Owners of structures	 Provision of transport expenses (<i>Rs.</i> 15,000). The allowance will be adjusted for inflation in case of delay in payment. 				
Community assets	Mosques, footbridges, roads, schools, health center	Affected community	 Rehabilitation/ substitution of affected structures/ utilities (i.e. mosques, footbridges, roads, schools, health centers). 				
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	 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	 Deal appropriately during sub-project implementation according to the ADB Safeguard Policy 				

17. 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.

18. **Estimated LAR Cost:** The cost of land has been proposed based on the market rate of land assessed by PPTA team in the field, which included review of land prices fixed by District Collector (valuation table), available land transections, and discussions with real estate people in the area, common villagers and rates demanded by the land owners. A huge differential in prices (average PC-1 rates of Rs. 1.0 million/ acre versus the rate of Rs. 2.00 million/acre as market rate obtained through latest transaction in the same village). The estimated land price proposed in the LARP is Rs. 2.0 million/ acre. Thus, total

estimated land price for 55 acres of land (needed for GS) is Rs. 115.5 million including 15% compulsory acquisition charges. Other cost of affected crops and trees is Rs. 3.448 million. Thus, overall estimated cost of land, land-based assets are Rs. 130.48 million (US\$ 1.13 Million). NTDC is responsible to provide this cost to PIU which will be paid to the AFs based on the compensation disbursement schedule in line with schedule of GS construction.

19. The construction of SS will be undertaken in one go and the AF will be compensated before construction. However, for TL component (to be incorpored in LARP later) will be installed in three phases, i.e. (i) towers foundation work (ii) erection of towers and (iii) stringing of wires), the AF will be compensated before start of phased construction work. The LARP will be monitored for compliance of LAR requirements, especially the disbursement of compensation to AF before start of construction work and this will be validated by external monitoring consultant before start of each of the three construction phases and construction of SS.

1. Project Description

1.1. Background

20. 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).

21. **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.

22. MFF II comprises of four tranches. The tranches were selected in accordance with the selection criteria that included meeting the social safeguard requorements of SPS 2009 and the facility's Land Acquisition and Resettlement Framework (LARF) in addition to technical, financial and economic viability, geographical locaitons 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 Pakhtunkhaw (KPK).

1.2 Scope of Work – New Substation at Jaurabad and Allied Transmission Line

23. The sub-project consists of two components; i) construction of 220kV SS at Jauharabad with three 220/132kV, three 160 MVA transformers along with allied equipment and accessories, four 220kV line bays and eight 132kV line bays, and ii) allied transmission line of 12 km the route of which is yet to be identified by NTDC. 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.

24. The project involves the acquisition of 55 acres of private agricultural land for the construction of grid station; and installation of four 220kV line bays and eight 132kV line bays, due to which, there will be loss of agricultural land and crops. No government land is required for the implementation of the project.

25. LAR Conditions

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

- c. 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.
- d. **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 construciton 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.

1.3 Alternatives for Minimizing the Sub-Project Impacts

27. 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:

- Impacts on settlements/ villages were avoided, while selecting the proposed Grid station site;
- Efforts were made to select the site, where demolishing of both private and public structures/ infrastructure could be avoided.
- 28. The location map of the proposed sub-project is illustrated in Figure 1.1& 1.2.



Figure: 1.1: Location Map of the Substation



Figure 1.2: Location Map of the proposed Sub-project

1.4 Project Design

29. In accordance with the PC-1 of the subproject as well as well bidding document, for the construction of grid station, the project design covers civil works for grid station. The equipment required for grid station includes transformers, circuit breakers, isulators, and centries. Other works associated with this subproject include central room, relay room, battery room, office building, boundary wall, internal roads and residential buildings for the staff.

30. The project design and drawing were not available; however, the impact assessment for the preparation of LARP was carried out based on the proposed sub-project site (220 kV Jahurabad GS) identified by the NTDC officials and given in the PC-I. Google Map provided by the NTDC is presented in Figure 1.1.

31. The equipment & machinery required for the construction of 220 kV grid station includes three 160 MVA transformers along with allied equipment and accessories, and four 220kV line bays and eight 132kV line bays.

32. 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). Maufacturing& 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).

1.5 Sub-project Categrozation

33. A total of 1 family (7 DPs) is expected to be affected but will not be displaced from housing or lose 10% or more of any productive asset. However, Tranche 3 of MFF has been classified as IR category A (this covers Jauharabad SS also) due to the LAR impacts of Lahore North GS +TL being the most sensitive). Nevertheless, it is still 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 form those of the dominant society and culture.

1.6 Objectives of the LARP

34. In accordance with the Terms of Reference (ToR), a LARP of 220 kV jahurabad G/S is to be prepared in accordance with the Safeguard Policy Statement (SPS), 2009 of Asian Development Bank (ADB) and Pakistan's laws and regulations on land acquisition and resettlement (LAR) and energy.

35. Following are the objrctives

- Identify and assess the impacts that implementation of a road subproject would have on the local population and conduct meaningful consultations with the affected and local communities to inform them about the project and its perceived impacts and outcomes;
- Follow a strategy that would ensure the timely acquisition of assets, payment of compensation and delivery of other benefits to AFs;
- Provide a plan on how the AFs would be involved in the various stages of the subproject, including the implementation of the LARP and
- Give an overall estimate of the required resources needed to implement the LARP
- 36. The following are the specific aspects covered in this LARP
 - Project description
 - Scpe 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
 - Resettlement budget and financing plan
 - Institutional arrangements
 - Implementation schedule
 - Monitoring and reporting

2. SOCIOECONOMIC INFORMATION AND PROFILE

2.1 General

37. 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, Forest Department, District Population Census, Economic Survey of Pakistan and relevant websites.

38. The primary data include census survey of affected family covering the typology and magnitude of the impacts. The field survey was conducted from March 30 to April 6, 2018. The socioeconomic profile of the sub-project affected family was established based on the interviews of affected family and general population (25%) selected randomly of the Mouza, Hadali. This data would provide the socioeconomic profile of AF and the baseline information for subsequent monitoring and evaluation studies.

2.2 Administrative Setting

39. The proposed sub-project includes construction of grid station. The land required for the construction of grid station falls in the Mouza/ village Hadali, Tehsil Jahirabad& District Khushab.

2.3 Settlement Pattern

40. The field survey has shown that considering settlement pattern the affectee wasbelonging to rural area. The AF belongs to Malik caste, however, the other catse like Bhatti and Syed are also existed.

2.4 Demographic Profile of Sample AFs

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

42. The demographic features include the information on household's profile, gender composition, occupations, and literacy status of the sample AFs resided in the sub-project area belonging to the above mentioned districts. The information relating to the demographic profile of AF is described.

2.5 Family Size and Gender Composition

43. Based on the field survey of sample AF, the family size determined as 7, out of which the proportion of male and female was 48 percent and 52 percent respectively.

2.6 Literacy Status

44. The field survey results showthat the literacy rate is estimated as 72%. The average literacy rate among male and female was 78.0% and 66% respectively.

2.7. Status of Agriculture

2.7.1. Cropping Pattern

45. The cropping pattern refers to the allocation of cultivated area under different crops during the year as summarized in Table 2.1. Main rabi (winter) crops were wheat, and rabi fodder, while in case of kharif (summer) crops were basmati rice and kharif fodder. 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 2.1: Cropping Pattern at Sample Farms

Sub-projects	Wheat	Basmati Rice	Kharif fodder	Sugarcane	Vegetables	Rabi Fodder
Construction of grid station and four 220kV line bays and eight 132kV line bays	45	42	6	0.75	0.5	5.75

2.7.2. Cropping Intensity

46. 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.

47. The survey results presented in Table 2.2 shows that the overall average cropping intensity on sample farms computed to be 169%, while it was 85.7% and 83.2% for rabi and kharif crops respectively.

District/ Crops	Average Cropping Intensity (%)
Construction of grid station and four 220kV line bays and eight 132kV line bay	/S.
Rabi Season	
- Wheat	85
- Rabi Fodder	2
- Vegetables	0.1
Av. Cropping Intensity (Rabi Season)	87.1
Kharif Season	
- Bastmati Rice	80
- Kharif Fodder	2.1
Av. Cropping Intensity (Kharif Season)	82.1
Annual Crops	
- Sugacane	0.25
Total	169.45

Table 2.2: Average Cropping Intensity of Sample Farms

2.7.3. Crop Yield

48. The survey results summarized in Table 2.3 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.

Sub-project	Crops	Wheat	Basmati Rice	Millets (Bajra/Jowar)	getable	Sugarcane	Rabi Fodder
Construction of Jahurabadgrid station	Maunds (40 Kg) / acre	39.2	36.0	10	150.0	648.50	400
	Kg./ acre	1,568	1,440	400	6,000	25,940	16,000

2.8. Income Analysis

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

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

2.8.1. Occupations

50. During the field survey, it was noted from data that the AF was 100% involved in farming. He is big landlord and only relay on the farming, though he kept the livestock as well but used for domestic purpose.

2.8.2. Household Income and expenses

51. The income level of the AF was Rs. 1,000,000 per month while the expnses are calculated as Rs.300, 000 on monthly basis.

2.9. Housing Conditions

52. 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 the AF had its own house and comprised on concrete structure while the general public has their own houses but 60% have the Pacca houses while the 40% have the semi pacca houses.

2.10. Availability of Basic Infrastructure

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

54. 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 4 sq. km). However, in case of water filter plant, telecommunication facilities, sewerage and sui-gas were limited

2.11. Cultural, Religious and Other Structures

55. During the field survey it was observed that one shrine named as, Bola Sharif located at the distance of 5 km from the proposed Grid Station. The annual aniversy is celebrated every year and followers are attending the event. In addition, another grave of Mai Sahiba is also located 500 meters away from the project area.

Table 2.3: Average Yield of Major Crops

3. SCOPE OF LAND ACQUISITION AND RESETTLEMENT

56. The subproject impact was assessed/ recorded and consultations were made with the AF based on the identified proposed site of grid. This section subdivided into; i) impact survey and cut-off date, scope of land acquisition and resettlement, number and type of displaced persons.

3.1 Impact Survey and Cut-off-date

57. The sub-project impact was assessed based on the census of 100% AF, socioeconomic 25% and 5 Nos. consultations with AF and other local community members consisting of 18 participants). The field survey was conducted from March 30 to April 06, 2018. Thus, the "cut-off date" was set as April 06, 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

58. The LARP has been prepared based on the new alignment of Grid Station (marked on Google Map) as well as design parameters given in PC-I. The project involves the acquisition of 55 acres of private agricultural land² for the construction of grid station, due to which, there will be loss of land and crops owing to the acquisition of private agriculture land.

59. Details are given in Table 3.1 and Annex-3.1 & Annex-3.2.

²Present site (55 acres) is located in the well fertile private agricultural land while 1000 acres of barren and uncultivated land is available towars the hill side. The EA may take appropriate action to minimize the project impact on the private agricultural land.

Sub-project Component and Impacts	Unit	Quantity affected	Ownership & present use	AFs	Total Affected Persons	Remarks
Land permanently acquired	Acres	55	Private agricultural land being cultivated	1	7	This is the affected family
Cropped area	Acres	55	Private land currently being cropped	*1	7	Multiple counts. This is same AF who is losing their land.
Wood trees to be cut -down	Nos.	46	Private trees on farm land	1	7	Multiple counts. This is same AF who is losing their land.
Total (GS+ TLs)				1	7	

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

3.2.1. Affected Area by Crop

60. There is private land acquisition of 55 acres under this sub-project for the construction of grid station. 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 3.2. The value of a crop per acre has been considered in estimating the crop compensation. (Table 9.1).

61. Table 3.2: Affected Area by Crop Type

Crops	Cropping Pattern(%)	Area Sown by Crop Type (Acres)
- Wheat	45	25
- Basmati Rice	42	23
- Millets (Bajra / Jowar)	6	3
- Sugarcane	0.75	0.5
- Vegetables	0.5	0.5
- Rabi Fodder	5.75	3
Total	100.0	55

3.3. Affected Trees

62. The survey results shown in Table 3.3 indicate that all 46 private trees are wood trees and none of the fruit tree was identified.

63. The main types of wood/ timber trees include dalbergiasissoo (sheesham), eucalyptus and acacia.

Type of Tree	No.	Average Girth (Feet)
Sheesham (Tali)	5	2.0
Eucalyptus (Safida)	30 7	2
		4
Kikar	4	2
Total	46	

3.4. No. of AF

64. The census data reveals that only one AF was affected owing to the projet civil work. The head of AF (Hamid Nawaz s/o Muhammad Nawaz) is the sole owner and one of the big landlord owns 100 squre (2500 acres). The said head of AF is self cultivator.

3.5. Building/ Structures

65. The project does not have any impact on the building structures.

66. Vulnerable and Indigenous People

67. There are no indigenous people/ or group of people located in the area of this subproject or its surroundings. Additionally, the project does not have any impact on the vulnerable person.

3.6. Gender Impacts

68. The project does not have any impact on the women or women headed household.

3.7. Severity of Impacts

69. The project does not have any impact severity as revealed in the census.

4. LEGAL FRAMEWORK

4.1 Telegraph Act (TA), 1885

70. 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.

71. 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.

72. To accommodate the needs of AFs, 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

73. 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).

- 74. 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 AFs 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 AFs 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, AFs 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 AFs. 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 immoveable) or his earnings, v) expanses 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

75. 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

76. 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.

77. 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.

78. 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.

79. 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

80. 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 AFs 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 AFs before their physical or economical displacement, (v) provide AFs with adequate assistance (vi) ensure that untitled AFs 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.
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 AFs can salvage any of their material free of cost and irrespective of compensation payments having been paid.

Pakistan's LAA 1894 and TA 1885	ADB Safeguard Policy Statement (2009)
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 AF 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 AFs should at least be able to reach a defined minimum livelihood standard. In rural areas, AFs 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

81. 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 Affected Families (AFs) that may be relocated, suffer business losses, or may be vulnerable.

82. 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

83. 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 5 consultations were made with the AF and local community.

84. Accordingly, the consultations were made with all primary stakeholders for sharing the information regarding this sub-project, including i) construction of 220kV G/S at Jauharabad with three 220/132kV, three 160 MVA transformers along with allied equipment and accessories, ii) Four 220kV line bays and eight 132kV line bays.

5.2. Public Consultations

85. A series of 5Nos consultations (consisting of 18 participants) were carried out with the AF 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 AF shared their point of view regarding payment on the loss of their land, crops and trees, as he had concerns regarding the true assessment of compensation.

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

1	01-4-2018	Hadala	AF& Local Communit y	 Hamid Nawaz s/o Muhammad Nawaz Muhammad Usman s/o Muhammad Aslam Asad Ali s/o Asghar Ali
2	02-04-2018	Hadala (Angori)	AF	 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	03-04-2018	Hadala (Angori)	General Public	 Haji SaifUllah s/o NajeebUllah Muhammad Abu Bakar s/o Muhammad Javed Khan Muhammad s/o Muhammad Akram Muhammad Aslam s/o Muhammad Rafiq
4	06-04-2018	Jahurabad	AF	 Hamid Nawaz s/o Muhammad Nawaz -
5	06-04-2018	Hadala (Angori)	General Public	 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 Muhammad Usman s/o Muhammad Aslam Asad Ali s/o Asghar Ali

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

5.3. Concerns Regarding the Sub-project

87. 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 AF

88. 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 person 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 AF of grid station; he was 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.

Redress of Farmers Issues

89. 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 AF.

90. The redressal of AFs/ local community concerns is tabulated as below:

Concerns	Redress	Responsibility
An employment in the project should be provided to increase the livelihood.	Preference will be given to engage local people especially AF 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
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 owner 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 AFs.	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 induatrial parks is established	Efforts will be made to acquire the land through the private negotiation.	NTDC, PMU & ESIC
Irrigation water channel should not be disturbed	The restorartion of all channels will be ensured by the project office	NTDC, PMU & Construction supervision consultant

AFs/ Community Concerns and their Redress

Information Disclosure

^{91.} 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.

92. Furthermore, this LARP will also be disclosed in local language to the AF and some other key local persons resided in the vicinity of the sub-project, so that each AF 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.

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

94. 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

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

6. COMPENSATION ELIGIBILITY AND ENTITLEMENTS

6.1. Eligibility

96. 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 customery 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.

97. 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

98. 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 AF 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 AFs. Assessments will be conducted by the DPAC. In case a AF 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 AFs 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.

99. 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.

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

Entitlement Matrix³

Asset	Specification	Entitled Persons	Compensation Entitlements
	Access is not restricted, and existing	Farmer/ Titleholder	 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.
Arable Land	or current land use will remain unchanged	Leaseholder/ Sharecropper (registered or not)	 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	 Compensation in cash for temporarily damaged crops and trees, etc, temporarily affected.
		Squatters	 Compensation in cash for temporarily damaged crops and trees, etc.
	All adverse effects on land use independent of severity of impact Additional provisions for severe impacts (More than 10% of land loss)	Farmer/ Titleholder	 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)	 Cash equivalent to market value of gross yield of affected leased land.
		Agricultural workers losing work their contract	 Cash payment for lost work or crops damaged by towers ocnstruciton work.
Arable Land where access is restricted		Squatters	 1 rehabilitation allowance equal to market value of 1 gross harvest (in addition to crop compensation) for land use loss.
and/or land use will be affected		Farmer/Titleholder Leaseholder	 1 severe impact allowance equal to market value of gross harvest of the affected land for 1 year (inclusive of winter and summer crop and additional to standard crop compensation)
		Sharecroppers (registered or not)	 1 severe impact allowance equal to market value of share of harvest lost (additional to standard crop compensation)
		Squatters	 1 severe impact allowance equal to market value of gross harvest of the affected land for 1 year (inclusive of winter and summer crop and additional to standard crop compensation)
Temporary land occupation	Land temporarily required	Owner, lessee, tenant	 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		 Restoration of land to original state to be minotored internally by EA and validated by EMC through periodical monitoring reports. Guarantee of access to land and structure leasted on remaining land
		Non-titled user	 structures located on remaining land. Restoration of land to original state Guarantee of access to land and structures located on remaining land
		Renter/ Leaseholder	• 1-3 months allowance (at OPL level Rs. 15,000/ month)
		Squatters	• Accommodation in available alternate land/ or a self-relocation allowance (<i>Rs. 15,000</i>).
Houses/ Structures		Owner of house structures	 Cash compensation at replacement rates for affected structure and other fixed assets free of salvageable materials, depreciation and transaction costs. In case of partial impacts full cash assistance to restore remaining structure.
Crops	Crops affected	All DPs (including squatters)	 Crop compensation in cash at full market rate for one harvest (either winter or summer) by default for impacts caused by 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	 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)	 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 allowance will be adjusted for inflation in case of delay in payment.
Relocation	Transport costs	Owners of structures	 Provision of transport expenses (<i>Rs.</i> 15,000). The allowance will be adjusted for inflation in case of delay in payment.
Community assets	Mosques, footbridges, roads,	Affected community	 Rehabilitation/ substitution of affected structures/ utilities (i.e. mosques, footbridges, roads, schools, health

Asset	Specification	Entitled Persons	Compensation Entitlements
	schools, health center		centers).
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	 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	 Deal appropriately during sub-project implementation according to the ADB Safeguard Policy

7. INSTITUTIONAL ARRANGEMENTS AND IMPLEMENTATION

101. The PMU (NTDC) will be responsible for the updation of this draft LARP at final detailed design and implementation of final LARP of 220 kV G/S. 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.

102. 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; and other concerned.

7.1. National Transmission and Despatch Company

103. 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.

104. 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.

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

105. 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), NT	DC Member
v).	Assistant Manager (MIS/ Data Manage	ement) ⁴ Member
vi).	Surveyor	Member

- 106. In addition to ToR, the E&SIC will have the following functions in this sub-project:
 - i). The E&SIC will be responsible for the updation, implementation and monitoring of land acquisition and resettlement plan through the assistance of PIU (Project Implementation Unit at field). The E&SIC will have regular monthly meetings to review the progress regarding LARP implementation and accordingly prepare actions in accordance with the implementation schedule given in the LARP.
 - ii). The E&SIC will have close liaison and coordination with the PIU (field level) and Grievance Redress Committee (GRC).
 - iii). The E&SIC will manage the updation of LARP at final design, including updation of surveys, measurements/ assessment, valuation in coordination with concerned department.

⁴ 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.

107. 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 AFs and place at field office (PIU).
- v). Close coordination with field level PIU
- vi). Other relevant activities

108. 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.

109. 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 activities⁵.

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

7.1.2. Project Implementation Unit (PIU)

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

- i). Executive Engineer (NTDC)
- ii). DO (Revenue)/ LAC
- iii). Representative of E&SIC, PMU (AM, Social Safeguards)
- iv). Assistant Manager (Social Mobilization/ Social Mobilizer)
- v). Contractor
- vi). Project Management Consultant (Safeguard Implementation Specialist)
- vii). Patwari
- viii). Representative of Displaced Persons Committee (DPC).
- 112. The PIU to be notified at field level headed by the Executive Engineer, NTDC.
- 113. The major responsibilities of PIU will include:

⁵The short term tasks will occur in parallel and immediately after the delivery of LARP compensation. They will preparation 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.

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

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

7.1.3. Local Government

115. 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.

7.1.4. ADB

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

7.2. LAR Coordination Committee

117. 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 AFs. Timely payment to the AFs 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.

118. 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)

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

7.3. Displaced Person Committee

120. 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).

121. 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

7.4. Grievance Redress Mechanism

122. 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 aAFappealing any disagreeable decision, practice or activity arising from land or other assets compensation. AFs 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.

123. AFs/ 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.

124. 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.

125. Efforts will be made to avoid the AFs/ 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 AFs/ DPC, PIU and PMU. However, a Grievance Redress Committees (GRC) will also be established to redress the unresolved issues.

126. 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

127. 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 AFs at no cost and without retribution.

	Land Compensation Issues		Other Items Compensation Issues
•	First, complaints will be redressed at field level through the involvement of PIU and DPC as well as other local committees.	•	First, complaints will be redressed at field level through the involvement of PIU and DPC as well as other local committees.
•	If issue is unresolved, then it will be lodged to the DO (Revenue)/ LAC who will have 14 day to make decision on it.	•	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.
•	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.	•	If the grievance redress system does not satisfy the AFs, then, the grievance can be submitted to the GM Projects (PMU), where decision will be made in a period of 2 weeks.
•	In case, the grievance redressal system does not satisfy the AFs, 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.	•	If still AFs are not satisfied, they can pursue their case to appropriate Court of law.

7.5. Organogram

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

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



8. LARP IMPLEMENTATION SCHEDULE

8.1. Implementation Schedule

129. The commencement of civil work will be subject to the satisfactory implementation of this LARP including payment of compensation for the loss of land, crops and trees; and also redress of community concerns. This draft LARP will be updated once the design is finalized.

130. 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 will take about 12 - 18 months as there is permanent land acquisition involved due to construction of grid station.

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

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	April 8, 2018	NTDC/ESIC	
6	Urdu translation and disclosure of LARP	May, 2018	ESIC/Consultant	
7	Facility Management Consultant (FMC), social safeguards personnel (GRM and MIS experts, Patwari and enumerators/social mobilizers)	Exists	NTDC/ADB	Already on board
8	Final Design	October, 2018	NTDC/Consultant	
9	Updated or final LARP (if) required	November, 2018	ESIC/Consultant	
10	Approval of final LARP	December 2018	ADB	
11	Hiring of External Monitoring Consultant (EMC)	May, 2018	ESIC/ADB	Hiring is in process
12	Date of procurement-bidding	May 2018	NTDC	
13	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	
14	First quarterly internal monitoring report (IMR)	Sep 2018	FMC/ESIC	
15	First external monitoring report subsequent reports	Dec 2018	FMC/ESIC	
16	Subsequent Semi-annual Reports	Six monthly	FMC/ESIC	

Table 8.1: Implementation Schedule of LARP

Sr. No.	Action	Timeline	Responsibility	Remarks/ Status
17	Community Complaints Register	Oct. 2018	NTDC/PIU	
18	Central resettlement database including record of payments and management information system	Nov 2018	ESIC/ FMC	To be continued till the completion of the project.

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
Hiring of FMC	-	-	-	-	-	Already in place
Establish Grievance Redress Committee (GRC).	Sep. 2018					
Submission of draft LARP to ADB	April 5, 2018					
Urdu translation and disclosure of LARP	May 2018					
Date of procurement-bidding	May 2018					
Updated or final RP	November. 2018					
Approval of final RP	December 2018					
Hiring of External Monitoring Consultants (EMC)	May 2018					Hiring is in process
Expected dates:						
 Expected date of contract award(expected) 	Nov 2018					
Contractor Mobilization	Dec 2018					
Commencement of Construction	Dec-2018- Jan 2019					
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					

Figure 8.1: LARP Implementaion Schedule

9. RESETTLEMENT BUDGET AND FINANCING

132. 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

133. 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.

134. 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

135. The unit rate of land as per the market and recent transaction in the same village /mouze is Rs.2, 000,000/acre. The total compensation cost of land for 55 acres is Rs. 110,000,000(110 million). Addiionally, 15% compulsory acquisition charges will be added, and total compensation cost worked out was Rs.115.5 million.

9.1.2. Crop Compenation

136. A total land affected due to project is 55 acres and the unit rate of crops by type is given in Table 9.1. Total compensation cost worked out is Rs.3.38 million.

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	25	1600	1000	1,280	1,280,000	51,200
Basmati Rice	23	1600	920	2,010	1,849,200	80,400
Millets (Bajra/Jowar)	03	1410	106	977	103,562	34,521
Sugarcane	0.5	25920	324	170	55,080	110,160
Vegetables	0.5	4398	55	640	35,200	70,400
Rabi Fodder	03	978	73	800	58,400	19467
Total	55				3,381,442	61025

 Table 9.1: Assessment of Value of Crops per Acre

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

9.1.3. Compensation of Wood Trees

137. A total of 46 wood trees will be cut owing to the project activities. The trees of different species like Sheesham, Eucalyptus andKiker are present. Total compensation cost worked out is Rs. 68,213 (Rs. 0.068 million).

9.2. Source of Financing

138. 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.

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

140. 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 AFs/ 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 AFs with assistance from the PIU.

9.3. Resettlement Budget

141. The resettlement budget was estimated keeping in view the sub-project impacts including land, crops and trees as well as other assistance to the AF. The total amount of LAR activities computed to be Rs. 130.148 million (\$1.13M.) as presented in Table 9.2 below:

Description	Unit	Quantit y	Unit Rate (Rs.)	Amou nt (Rs. M.)	Remarks
Permanent Land Acquired					
Construction of Grid Station	Acre s	55	2,000,00 0	110	Prevailing market rate in the area
15% compulsory acquisition charges	-	-	5,500,00 0	5.5	
Sub Total (A)				115.5	
Affected Crops					
a) Grid Station	Acre s	55	-	3.38	
Sub-total (B)				3.38	
Affected Trees					
Wood Trees	Nos.	46	-	0.068	
Sub Total (C)				0.068	
External Monitoring Agency	-	-	-	5.00	
Sub-total (A+B+C+D)	-	-	-	123.94 8	
Contingencies @ 5%	-	-	-	6.20	
Grand Total (Rs. M.)	-	-	-	130.14 8	
US\$ (M.)				1.13	
	PermanentLandAcquiredConstruction of Grid StationConstruction of Grid Station15%compulsoryacquisition chargesSub Total (A)Affected Cropsa) Grid Stationa) Grid StationAffected TreesWood TreesWood TreesSub Total (C)ExternalMonitoringAgencySub-total (A+B+C+D)Contingencies @ 5%Grand Total (Rs. M.)	PermanentLandAcquiredAcreConstruction of Grid StationAcreConstruction of Grid StationS15%compulsoryacquisition charges-Affected Crops-a) Grid StationAcrea) Grid StationAcreSub-total (B)-Affected TreesNos.Sub Total (C)-Wood TreesNos.Sub Total (C)-ExternalMonitoringAgency-Sub-total (A+B+C+D)-Contingencies @ 5%-Contingencies @ 5%-US\$ (M.)US\$ (M.)	DescriptionUnityPermanentLandyAcquiredAcreConstruction of Grid StationAcreConstruction of Grid StationAcre15%compulsoryacquisition charges-Sub Total (A)-Affected Crops-a) Grid StationAcrea) Grid StationAcreSub-total (B)-Affected TreesIWood TreesNos.Affected Trees-Sub Total (C)-External Monitoring-Agency-Sub-total (A+B+C+D)-Contingencies @ 5%-Contingencies @ 5%-US\$ (M.)-	DescriptionUnitQuantit yRate (Rs.)PermanentLandAcquired-Construction of Grid StationAcreConstruction of Grid StationAcre15%compulsoryacquisition charges-2000,00-acquisition charges-30 Grid StationAcre30 Grid StationAcre30 Grid StationAcre30 Grid StationS4ffected Crops-30 Grid StationAcre30 Grid StationS4ffected Trees-15-Sub-total (B)-4ffected Trees-100-Sub-total (B)-Affected Trees-100-Sub Total (C)-100-Sub-total (A+B+C+D)-100-Contingencies @ 5%-101-101-101-101-101-101-101-101-102-103-104-105-105-105-105-105-105-105-105-105-105-105-105-105-105-<	DescriptionUnit yQuantit Rate (Rs.)Int Rate (Rs.)Int (Rs.)Permanent AcquiredLand AcquiredIIIIConstruction of Grid Station construction chargesAcre s552,000,00 0110 015% acquisition charges-5,500,00 05.5 05.5Affected Crops-5,500,00 0115.5Affected Crops115.5Affected CropsIIIIa) Grid Station sAcre s55-3.38Affected TreesIIIIWood TreesNos.46-0.068Sub Total (C)IIIISub-total (A+B+C+D) Agency123.94Sub-total (A+B+C+D) AgencySub-total (Rs. M.) AgencyUS\$ (M.)IIII

Table 9.2: Resettlement Budget

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

10. MONITORING AND EVALUATION

10.1. General

142. 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.

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

10.2. Internal Monitoring

144. 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.

145. 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.

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

- a) Consultation with AFs 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;

147. 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

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

149. 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.

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

151. 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.

152. 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 AFs;
- 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 AFs, officials of project management and other concerned departments to share the feedback/ lessons learnt;
- f) Identify gaps regarding LARP implementation and suggest remedial measures; and also develop a corrective action plan
- g) Assess the LAR implementation efficiency, effectiveness, impact and its sustainability.

153. 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

154. 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.

155. Awarding of civil works contract for Jauharabadproject is conditional to the implementation of approved LARP while the commencement of construction is conditional to full payment to AFand implementation of LARP to be validated by EMA.

Annexures

Annex 1

List of Approved Subprojects Under Tranche 3

Subprojects	Technical Justification
Subproject 1: 500 kV Lahore North Grid Station	with associated Transmission Line
 500/220/132kV S/S with 4x750 MVA, 500/220kV, and 3 x250 MVA 220/132 kV transformers Six 500 kV line bays, six 220kV line bays, and two 132kV line bays Extension at 500 kV of Gujranwala S/S of two 500 kV line bays 500 kV D/C T/L Lahore North -proposed Lahore HVDC switching/ converter station (105km) 500 kV D/C T/L Lahore North -existing Gujranwala S/S (45km) 220kV D/C T/L for in/out of 220 kV Ghazi Rd KSK S/C T/L (15km) 220kV D/C T/L for in/out of 220 kV Lahore- Ravi Rd. S/C T/L (14km) 220kV D/C T/L for in/out of 220 kV KSK-Ravi Rd. S/C T/L (15km) 	The project is needed to meet the load demand in the Lahore north area at acceptable quality levels. In the absence of the project there will be substantial suppressed load and insufficient reliability to major load centers. In addition, the project will enable an alternate supply route for the North-South power transfers at 500 kV from the proposed new converter station at Lahore South to the substations at Gujranwala and Maira. At the expected project commissioning year 2023, the project benefits will include: (a) enabling a load of approximately 1100 MW representing 6300 GWh of energy which would otherwise be suppressed or poorly supplied, (b) the reduction of system losses by 60 MW (peak) amounting to a generation saving of 259 GWh p.a., and (c) the provision of N-1 reliability to a large section of the Lahore North load.
 Transmission line construction equipment, washing units, live line, and dead line crew equipment Replacement with fog resistant insulators for existing transmission system at heavily polluted area 	The transmission line construction equipment and live line crew equipment are needed to enhance line construction work, including live line maintenance operations. The replacement with fog resistant insulators is needed to replace insulators which have been compromised by contamination with fog
 Reconductoring with HTLS conductors for 220 kV New Kotlakhpat - Bund Road - Sheikhupura D/C T/L (44 km) Reconductoring with ACSR conductors for a part of 220kV Gatti - Bandala D/C T/L (5 km) Replacement of 3x37 MVAR shunt reactors at 500 kV Sheikhupura substation & 3x37 MVAR shunt reactors at 500 kV Gatti substation, and 2x22 MVAR shunt reactors at 500 kV Sheikhupura substation Replacement of 1x450MVA 500/220kV Transformer at Gatti 500 kV substation Replacement of existing electro-mechanical protection relays with numerical relays for Islamabad, Lahore & Multan regions 	 (a) Reconductoring with HTLS conductors for 220 kV New Kotlakhpat - Bund Road - Sheikhupura D/C T/L (44 km): The existing line is dilapidated and overloaded. Furthermore, the increasing load demand in the area requires larger power flows but new line construction is restricted by unavailability of access routes. These triple problems will be resolved by reconductoring the existing lines with HTLS conductors utilizing the existing towers. Furthermore, the HTLS conductors have substantially lower losses than the equivalent ACSR conductors and lower system losses will be realized. (b) Reconductoring with ASCR conductors for a part of 220kV Gatti - Bandala D/C T/L (5 km): The reconductoring of the conductors is primarily necessitated by the poor technical condition of the line (31km). This is an important line in the network and need to be maintained in service.
	(c) Replacement of 37 MVAR shunt reactors at Sheikhupura & Gatti 500 kV substations, and 22MVAR shunt reactors at Sheikhupura 500 kV substation: The existing shunt reactors are damaged

Subprojects	Technical Justification
	and do not work as designed. Replacing the damaged shunt reactors with the new one is expected to reduce outage triggered by the over voltage, improving the reliability.
	(d) Replacement of 1x450 MVA 500/220kV transformer at Gatti 500 kV substation: The recent inspection result shows the transformer's condition is at risk of possible explosion due to deteriorated insulation after over 40-year operation. The replacement is needed for both safety considerations and widespread outage (450MW) if the transformer is taken out of service.
	(e) Replacement of electro-mechanical relays with digital numerical relays in Islamabad, Lahore & Multan regions: The existing electro-mechanical relays are outdated and provide limited information when outage happen. Digital numerical relays are needed to improve outage response and system performance.
Subproject 2: 500kV Maira Switching Station	
 Eight 500 kV line bays with four shunt reactor banks. 	This switching station is an integral part of the overall evacuation arrangement of the hydro power plants: 870 MW Suki Kinari, 1,100MW Kohala and 640MW Mahal. The arrangement and location of the switching station has been selected on the basis of an Interconnection Study carried out by NTDC's consultants. The project may be considered as an essential part of the least cost arrangement for the evacuation of the power from the above three hydro stations. The shunt reactors are needed for voltage control of the network at light load conditions.
Subproject 3: 220kV Jauharabad Substation wit	h associated transmission line
 220kV S/S at Jauharabad with 3x160 MVA 220/132kV transformers along with allied equipment and accessories Four 220kV line bays and eight 132kV line bays Two 220kV D/C T/L of twin bundle Rail conductor for looping In/Out of existing Ludewala – Chashnupp D/C T/L at 220kV Jauharabad (12km) 	The project is needed to meet the future load demand in the Jauharabad, Quaid Abad, and Adi Kot areas at acceptable quality levels. In the absence of the project major load centers will have poor reliability of supply. At the expected project commissioning year 2023, the project benefits will include: (a) enabling a load of approximately 32 MW representing 139 GWh of energy which would otherwise be suppressed or poorly supplied, (b) the reduction of system losses by 15.5 MW (peak) amounting to a generation saving of 44.3 GWh p.a., and (c) the provision of N-1 reliability to a large section of area loads.
Subproject 4: Grid Connected Battery Energy St	orage System Pilot Project
Lithium-ion Battery Packs (5 MWh)	A 20 MW/5MWh battery energy storage system at

	Subprojects	Technical Justification
•	Balance of system including inverters (20MW) Transformers (220kV/33kV, 30MVA 1unit and 33kV/0.44kV, 5MVA 6 units)	the proposed location of the Jhimpir-1 substation would provide two major benefits – network stability support by primary frequency control and improved dispatch of variable renewable generation.

D/C =Double circuit, HTLS = high temperature low sag, km = kilometer, kV = kilovolt, MVA = megavolt-ampere, MW = megawatt, T/L = transmission line, S/S = substation.

Outline of Addendum to LARP or Updated sectional LARP

Title page:

NTDC logo, Name of subproject, section of TL/number of towers, prepared by whom and date prepared.

A. Introduction:

Brief description of Investment program and subproject, summary of LAR impacts as in LARP.

B. Need for Addendum to LARP or Updated sectional LARP:

Briefly describe the need for addendum or a sectional LARP, highlight any deviations or noncompliance (if any) from the agreed safeguard assurances/measures, specify the section of transmission lines and number of towers the addendum or sectional LARP pertains to. Annex linear map of transmission lines/towers, indicating the section finalized and impacts.

C. Comparison or Analysis of LAR Impacts:

Provide a comparison of impacts (impacts as per LARP and impacts based on the transmission lines section and number of towers finalized by turn-key contractor and highlight final impacts, final entitlement matrix, and list of DPs for the section finalized. Annex lists of final DPs, affected area under cropping, any trees and structures, etc.

D. Cost of compensation based on final impacts and payment to DPs:

Describe cost of compensation by types of impacts and provide a table by listing down itemized cost. Mention who assessed the cost and how, who will approve and who will payment to DPs on what arrangement, whether directly paid by NTDC or through contractor. Mention officials responsible for compensation disbursement and their contact details.

E. Any corrective action plan:

Identify any deviation form the agreed safeguard assurances/measures as in loan agreement and subproject specific LARP, and list down dated remedial or corrective actions to bring implementation on track ensuring compliance with agreed safeguard measures.

Route Alignment and Construction Plan:

Briefly mention the contractor's plan and timing of the route survey and design finalization, so that subsequent addendums or updated sectional LARPs and disbursement of compensation to DPs can be systematically planned and followed.

F. Implementation Schedule:

Annex a dated implementation schedule by listing down all activities (from impacts identification to cost assessment, approval and payment to DPs, timing of construction work and payment to DPs, etc) including approval by ADB, disclosure and internal and external monitoring of implementation of the addendum or updated section la LARP.

G. Additional consultations (if needed), & disclosure of addendum/sectional LARP:

Where required, undertake additional consultations with DPs informing them about final impacts and compensation disbursement and disclose the addendum/sectional LARP after approval by ADB.

H. Internal Monitoring Report and Third-Party Validation by External Monitoring Consultant: Mention who provide internal monitor report (of implementation of addendum/updated sectional LARP) to ADB and by when, and a third-party validation report by eternal monitoring consultant confirming that payments to DPs have been fully achieved before start of construction work.

I. Tables and Annexes:

J. Plan of Route Survey, Payment to DPs and Construction, Maps, figures and Linear map of TL and Towers

Sr · N o.	Name of AF	Father Name	Tehsil	District	Total Land Holding	Affecte d Land	Land Use Category	Ownershi p Status	Total Family Member	Prime Income Source	Seconda ry Source of Income	Monthly Income (Rs.)
1	Hamid Nawaz	Muhamm ad Nawaz	Jahar abad	Khush ab	2500	55	Agriculture Land	Owner	7	Farming	-	1,000,000

Annexure – 2: Land Owner of proposed 220 kV JahurabadG/S

Annexure – 3: Inventory of Affected Trees under the Proposed GS

Sr. No.	Name	Father Name	Type of Tree	Girth	Number of Tree	Rate	Amount	Final Compensation
1	Hamid Nawaz	Muhammad Nawaz	Eucalyptus	2'	30	1176.099	35283	35283
			Eucalyptus	4	7	2352.2	16465	16465
			Sheesham	2'	5	2352.2	11761	11761
			Kikar	2'	4	1176	4704	4704
					46	-	68213	68213

Annexure – 4: Assessment of Land Compensation of 220 kV G/S

Sr. No.	Name of AF	Father Name	Village	Tehsil	District	Total Land Holding (acres)	Affected Land	Extent of Impact	Land Use Category	Ownership Status	Land Compensation (Rs.)	Crop Compensation (Rs.)	Tree Compensation (Rs.)
1		Muha mmad Nawaz	Hadlai	Jahurabad	Khushab	2500	55	2	Agriculture Land	Owner	110,000,000	3,381,442	
											110,000,000	3,381,442	68,213

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2	-	bout Us	Prices	Weather	News Discussions
Price Date: Mar 11, 2017	Graph	Min	Max	FQP	Arrival Quantity(in Quintals)
1 Maize	<u>ww</u>	2700	2800	2750	•
2 Millet	M//	2400	2500	2450	-
3 Moong	8449	9600	9700	9650	-
4 Moong Pulse	11/1	9900	10000	9950	-
5 RapeSeed (Torya)	<u>8444</u>	13500	13800	13650	-
6 Red Chilli Whole (Dry)	8.000	20000	21000	20500	-
7 Rice Basmati Super (New)	11/1	86000	8800	8700	-
8 Rice Basmati Super (Old)	500	9600	9700	9650	-
9 Sugar	544	5800	5900	5850	-
10 Wheat	M//	3315	3375	3345	-
11 Wheat Straw	5.00	885	900	893	-
12 Bitter Gourd (کـــریلا)	<u>ww</u>	8800	9100	8950	-
13 Bottle Gourd (کـدو)	5000	3300	3700	3500	-
14 Brinjal	3444	4600	4900	4750	-
15 Cabbage	3449	1600	1800	1700	-
(مرچ ئىــملە) 16 Capsicum	<u>8444</u>	3000	3300	3150	-
17 Carrot	5000	1200	1400	1300	-
18 Onion	5000	2400	2600	2500	-
19 Peas	<u>ww</u>	2200	2400	2300	-
20 Potato Fresh	<u></u>	1900	2100	2000	•
21 Radish	1.000	800	1000	900	
22 Spinach	1.000	900	1100	1000	
23 Tinda	<u>ww</u>	-	-	-	-
24 Tomato	8.000	4100	4500	4300	-
25 Turnip	1111	800	1000	900	
(ئىررى گەپسا) 26 Zucchini	<u>8699</u>	•	-	-	•

Annexure – 5: Comodity Prices as per Directorate of Agriculture Punjab

Annexure – 6: Summary Pamphlet of the Resettlement Plan

Land Acquisition and Resettlement Plan of Jauharabad G/S

Background

1. This LARP for subproject has been prepared for JauharabadG/S belonging to tehsilJauharabad, district Khushab). The Ministry of Water and Power and the National Transmission and Dispatch Company Limited (NTDCL) are the Executing Agency (EA) and the Implementing Agency (IA), respectively. The execution of the project will commence in current financial year and is envisaged to be completed in the year 2018-21.

2. The Government of Pakistan is implementing the "Power Transmission Enhancement Investment Program (PTEIP) under the financial assistance of ADB through a multi tranche financing facility (MFF) to meet the requirements of NTDC for financing of the sub-projects planned for implementation under short, medium and long term. This Investment Program seeks to (i) rehabilitate, augment, and expand parts of the system to meet current generation capacities; (ii) expand and augment the system to cope with future power generation stations; and (iii) ensure continued operation and maintenance in accordance with best international practices.

Project Description

3. The sub-project consist of two components; i) construction of 220kV G/S at Jauharabad with three 220/132kV, three 160 MVA transformers along with allied equipment and accessories, ii) Four 220kV line bays and eight 132kV line bays.No civil work has been awarded until preparation of LARP which is expected to be awarded in November 2018. LARP will be finalized in September 2018. Civil work will be started in December 2018 following the payment of compensation.

Objectives of LARP

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

Project Impacts

5. The project involves acquisition of 55 acres of private agricultural land for the construction of grid station; due to which, there will be loss of 55 acres of land, 55 acres of crops, and 46 wood/timber trees. No indigenous people/ or group of people is located in the area of this sub-project or its surroundings.

Resettlement Principles

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

- 7. In this context, the following principles will be taken into consideration:
 - i). Need to screen the sub-project early on in the planning stage
 - ii). Carry out meaningful consultations
 - iii). At the minimum restore livelihood levels to what they were before the sub-project, improve the livelihoods of affected vulnerable groups
 - iv). Prompt compensation at full replacement cost is to be paid
 - v). Provide affected people with adequate assistance

- vi). Ensure that affected people who have no statutory rights to the land that they are working and eligible for resettlement assistance and compensation for the loss of non-land assets; and
- vii). Disclose all reports

Entitlement for Compensation

8. The "cut-off date" was set as April 06, 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. In accordance with this LARP and updated LARF, the affected persons will be eligible for compensation or rehabilitation assistance as discussed below:

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

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

Asset	Specification	Entitled Persons	Compensation Entitlements
Arable Land	Access is not restricted, and existing	Farmer/ Titleholder	 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.
	or current land use will remain unchanged	Leaseholder/ Sharecropper (registered or not)	 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	 Compensation in cash for temporarily damaged crops and trees, etc, temporarily affected.
		Squatters	 Compensation in cash for temporarily damaged crops and trees, etc.

Entitlement Matrix⁶

⁶ All allowances will be indexed for inflation since RF adoption in May 2016, as of month of payment.

Asset	Specification	Entitled Persons	Compensation Entitlements
		Farmer/ Titleholder	 Cash compensation for affected land at replacement cost based on market value plus 15% CAS, ^a free of taxes, registration, and transfer costs.
	All adverse effects on land use independent	Leaseholder/ Sharecropper (registered or not)	 Cash equivalent to market value of gross yield of affected leased land.
	of severity of impact	Agricultural workers losing work their contract	• Cash payment for lost work or crops damaged by towers ocnstruciton work.
Arable Land where access is restricted		Squatters	 1 rehabilitation allowance equal to market value of 1 gross harvest (in addition to crop compensation) for land use loss.
and/or land use will be affected	Additional	Farmer/Titleholder Leaseholder	 1 severe impact allowance equal to market value of gross harvest of the affected land for 1 year (inclusive of winter and summer crop and additional to standard crop compensation)
	provisions for severe impacts (More than	Sharecroppers (registered or not)	 1 severe impact allowance equal to market value of share of harvest lost (additional to standard crop compensation)
	10% of land loss)	Squatters	 1 severe impact allowance equal to market value of gross harvest of the affected land for 1 year (inclusive of winter and summer crop and additional to standard crop compensation)
Temporary land occupation	Land temporarily required during civil works	Owner, lessee, tenant	 Rental fee payment for period of occupation of land, as mutually agreed by the parties. Restoration of land to original state to be minotored 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	 Restoration of land to original state Guarantee of access to land and structures located on remaining land
		Renter/ Leaseholder	 1-3 months allowance (at OPL level Rs. 15,000/ month)
		Squatters	 Accommodation in available alternate land/ or a self-relocation allowance (<i>Rs.</i> 15,000).
Houses/ Structures		Owner of house structures	 Cash compensation at replacement rates for affected structure and other fixed assets free of salvageable materials, depreciation and transaction costs. In case of partial impacts full cash assistance to restore remaining structure.
Crops	Crops affected	All DPs (including squatters)	 Crop compensation in cash at full market rate for one harvest (either winter or summer) by default for

Asset	Specification	Entitled Persons	Compensation Entitlements
			 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	 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)	 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 allowance will be adjusted for inflation in case of delay in payment.
Relocation	Transport costs	Owners of structures	 Provision of transport expenses (<i>Rs.</i> 15,000). The allowance will be adjusted for inflation in case of delay in payment.
Community assets	Mosques, footbridges, roads, schools, health center	Affected community	 Rehabilitation/ substitution of affected structures/ utilities (i.e. mosques, footbridges, roads, schools, health centers).
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	 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	 Deal appropriately during sub-project implementation according to the ADB Safeguard Policy

PICTORIAL PRESENTATION

(220 kV JauharabadG/S)



