Resettlement Plan (Tranche-2)

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India: Rajasthan Renewable Energy Transmission Investment Program (Tranche -2)

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ABBREVIATIONS

ADB	Asian Development Bank
APs	Affected Persons
BPL	Below Poverty Line
DC	District Collector
DEA	Department of Economic Affairs
DP	Displaced Persons
EA	Executing Agency
ESO	Environment and Social Officer
FGD	Focus Group Discussions
GOI	Government of India
GoR	Government of Rajasthan
GRC	Grievance Redress Committee
GRM	Grievance Redress Mechanism
IA	Implementing Agency
JNNSM	Jawaharlal Nehru National Solar Mission
LAA	Land Acquisition Act
LAO	Land Acquisition Officer
MFF	Multi-Tranche Financing Facility
NGOs	Non-Government Organizations
PIU	Project Implementation Unit
PMU	Project Management Unit
RF	Resettlement Framework
RP	Resettlement Plan
RRETIP	Rajasthan Renewable Energy Transmission Investment Program
RRVPNL	Rajasthan Rajya Vidyut Prasaran Nigam Limited
SPS	Safeguard Policy Statement, 2009
STs	Scheduled Tribes
STU	State Transmission Utility
WHH	Women Headed Household

Weights and Measures

1 Bigha	:	Measurement of land area (1 Bigha =1618 sq m in western Rajasthan)
1 Cusec	:	Measure of flow rate (28.317 litres per second)
1 ha. (hectare)	:	10,000 sq m
1 Giga Watt	:	1 Giga watt = 1000 Megawatt
1 km (kilometre)	:	1,000 m
1 kV	:	kilovolt (1,000 volts)
1 kW	:	kilowatt (1,000 watts)
1 kWh	:	1 kilowatt-hour = 1000 watts
1 MW	:	1000 Kilowatt

EXECUTIVE SUMMARY

i. The Government of India and Rajasthan requested support from ADB for the development of renewable energy projects in Rajasthan, including its planned solar parks, as well as financing through a multitranche financing facility (MFF) to set up transmission and associated infrastructure to manage integration of renewable energy. The Rajasthan Renewable Energy Transmission Investment Program (RRETIP) is being implemented under the multi tranche financing facility modality of ADB. A framework financing agreement (FFA) for the Rajasthan Renewable Energy Transmission Investment Program was signed between ADB and India on 23 August 2013. On 22 October 2012, ADB's Board of Directors approved the provision of an MFF to India. Tranche 1 was approved on 22 October 2013. The Tranche 1 loan and project agreements were signed on 12 September 2014 and became effective on 6 November 2014. In October, ADB received the government's periodic financing request for Tranche-2. As part of the MFF, each tranche needs to be assessed as a project. This is a Draft Resettlement Plan (RP)[1]. The resettlement impact is insignificant and the Project has been Categorized as "B"[2] for Involuntary Resettlement (IR) and "C" for Indigenous Peoples as per the ADB's Safeguard Policy Statement, 2009 (SPS). The RP remains as draft because it is based on preliminary alignment and the draft needs to be updated and finalized based on the detailed and final design and also based on the final route alignment. An outline of project components for tranche-2 is provided below.

(i) Transmission Lines:

- 765 kV double circuit transmission line from Korna to Ajmer (210 km)
- LILO of 400 kV Raj West – Jodhpur at Korna (10 km)
- LILO of 400 kV Akal – Jodhpur at Korna (4 km)
- 400 kV double circuit transmission line from Korna – Pokaran (115 km)
- 400 kV double circuit transmission line from Korna – Jaisalmer (135 km)
- 220 kV double circuit transmission line from Sheo – Undoo (50 km)
- LILO of 220 kV Akal – Barmer at Sheo (25 km)
- 132 kV double circuit transmission line from Sheo – Undoo (5 km)
- 132 kV double circuit transmission line from Sheo – Jaisalmer (5 km)
- 220 kV double circuit transmission line from Baithwasia – Khinvsar (65 km)
- LILO 2 km D/C Jaislamer-Sheo Line (at Sangarh 132 kV GSS, Jaisalmer)
- LILO 20 km D/C line 132 kV Tinwari-Osian Line (at Bana Ka Bas 132 kV GSS, Jodhpur)
- LILO 3 km D/C of 132 kV Sridungarh-Ratangarh Line (at Kitasar 132 kV GSS, Bikaner)
- 20 km D/C line from 220 kV GSS Dechu Nathrau Jodhpur
- 220kV D/C line from 220kV GSS Gajner to poposed 220kV GSS at Chhattargarh (100 km)
- 132 kV D/C line from proposed 220 kV GSS Chhattargarh to existing 132 kV GSS Loonkaransar (77 km)

(ii) Substations:

- 765/400/220 kV new substation with 3x1500 MVA transformers at Korna.
- 400/220 kV substation with 2x500 MVA transformers at Pokaran (upgrade).
- 220/132 kV new substation with 2x160 MVA transformers at Sheo.
- 220/132 kV new substation at Chattargarh

[1] The scope of the resettlement plan includes the temporary impact of the transmission lines on crops and trees. The project will not entail any private land acquisition and hence there is no permanent physical or economic displacement.

[2] Resettlement is insignificant when less than 200 people experience major "impacts" defined as involving AP being physically displaced from housing and/or having 10% or more of their productive, income generating assets lost. Resettlement having insignificant impact is categorized as B which requires a - resettlement plan.

- Augmentation of 2x500 MVA transformers at Akal substation.
- Augmentation of 2x500 MVA transformers at Jaisalmer substation.
- Extensions of the existing Jaisalmer, Ajmer, Undoo, Baithwasia and Khinvsar substations.
- 132/33 kV new substations at Sangarh, Bana Ka Bas, Kitasar and Nathrau

(iii) Optical Fibre Network:

- Stringing of Optical Ground Wires (OPGW) to connect 132 kV and 220 kV substations in Rajasthan

ii. The draft RP has been prepared based on the preliminary route investigation/ survey. The alignment for the transmission line is not detailed and final at this stage rather it is a preliminary route alignment. The RP remains as a draft, as final survey is not done yet and actual temporary impacts shall be known only during implementation which will be based on the detailed design and final survey once the construction contractor is mobilized for implementation. Exact location of tower is known only after detail survey/check survey. Check survey is done progressively during the construction of the transmission line. The compensation for damage is assessed in actual after construction activities of transmission lines in three stages i.e. after completion of foundation, tower erection and conductor stringing. The payment of compensation may also be paid in three instances, if there are different damages during above three activities. The exact number of affected persons is not known at this stage as far as the transmission lines and towers components are concerned. Land details of each person being affected by transmission towers and line will be collected later when the exact line route is finalized and pegging of tower footings is done during final survey. The draft RP will be finalized and updated during the final design. One of the constraints and limitations of the RP is that the impacts related to transmission lines are based on sample surveys and assumptions. RRVPNL through its construction contractor will be responsible for finalizing the route alignment and tower footing locations and accordingly, this draft RP will be finalized and updated prior to the implementation and construction of the specific phase which is ready for construction. However, sites for grid substations are almost in final shape and assessment has been done accordingly to calculate the permanent impact.

iii. The project will not entail any private land acquisition. An assessment of land acquisition and resettlement has been carried out for the subprojects and its components. The land required for the new substations is approximately 114.7 hectare which is government owned land and the land will be obtained through transfer by RRVPNL. Augmentations work will be done within the existing substation land of RRVPN. The total land available for augmentation is approximately 83.4 hectare. The new grid sub-stations are to be located only on either by Government and RRVPNL' owned land and augmentations are to be done in RRVPNL's existing premises. Due diligence confirmed that all of the sites are identified as vacant, situated in barren and sandy area and free from all encumbrances. The proposed new substations will be constructed on the government land and the bay extension does not require additional land as the extension will be done within the existing premise of RRVPNL substations.

iv. As per the applicable Indian laws and regulations, transmission lines do not require land acquisition and the impacts are considered to be temporary in nature in terms of loss of crops. After construction, the land owners can continue to cultivate. Hence, current land use is not altered and resumed construction. The land disturbance due to tower legs is limited to four spots under tower legs which is very small. Each leg of tower actually requires only 0.2 m2 to 0.49 m2 depending on the type of tower and four such square pieces of land will be required to place the legs of tower. The area that becomes unavailable because of the erection of tower legs for an average 765 kV D/C & 400KV D/C transmission tower is

approximately 1 m2. of land. This impact on agriculture land is limited. Loss of trees is also foreseen along the right of way. However, in Rajasthan, the trees are mostly small trees and are not tall trees. These impacts especially, loss of crops are foreseen during construction. Construction of transmission lines will have temporary impacts in terms of loss of crops. As per the applicable Indian laws and regulations, transmission lines do not require land acquisition and the impacts are considered to be temporary and not significant in nature. The land under the right of way is approximately 3,834 hectare which will be temporarily affected during construction out of which 1,879 hectare is barren land/uncultivated land and 1,955 hectare is considered as cultivated/crop Land for crop compensation. Additionally, 239.91 hectare of will be temporarily affected during construction tower footings of which 117.54 hectare is barren land/uncultivated land and 122.36 hectare is considered as cultivated/crop land for crop compensationAfter the construction, people are usually allowed to continue their cultivation along the right of way. Crop and tree losses are compensated at replacement value. The type of crops found in the area are Bajara, Moong, Moth, Till, Gawar, Jeera, Mustard and groundnut. A summary of the impacts is given in **Table E-1** below**.**

Table E-1: Impact on Land Acquisition and Resettlement

No	Sub-Project components	Key features of sub-project component	Impact on Involuntary Resettlement	Impact on Indigenous Peoples
A	**Transmission Line**			
1	765 kV double circuit transmission line from Korna to Ajmer (210 km)	210 km Line has no land issue - no private land acquisition required.	• Temporary Impact in terms of loss of crops • Approximately 718 hectare of land for crop compensation for RoW and 67 ha for tower footings • Approximate Number of Trees= 1200	Nil
2	LILO of 400kV Raj West – Jodhpur at Korna (10 km)	10km Line has no land issue - no private land acquisition required.	• Temporary Impact in terms of loss of crops • Approximately 23 hectare of land for crop compensation for RoW and 2 ha for tower footings • Approximate Number of Trees= 2	Nil
3	LILO of 400 kV Akal – Jodhpur at Korna (4 km)	4 km Line has no land issue - no private land acquisition required.	• Temporary Impact in terms of loss of crops • Approximately 9 hectare of land for crop compensation for RoW and 1 ha for tower footings • Approximate Number of Trees=2	Nil
4	400 kV double circuit transmission line from Korna – Pokaran (115 km)	115 km Line has no land issue - no private land acquisition required.	• Temporary Impact in terms of loss of crops • Approximately 270 hectare of land for crop compensation for RoW and 18 ha for tower footings • Approximate Number of Trees=470	Nil
5	400 kV double circuit transmission line from Korna – Jaisalmer II (135	135 km Line has no land issue - no private land acquisition	• Temporary Impact in terms of loss of crops • Approximately 317 hectare of	Nil

No	Sub-Project components	Key features of sub-project component	Impact on Involuntary Resettlement	Impact on Indigenous Peoples
	km)	required.	land for crop compensation for RoW and 22 ha for tower footings • Approximate Number of Trees=490	
6	220 kV double circuit transmission line from Sheo – Undoo (50 km)	50 km Line has no land issue - no private land acquisition required.	• Temporary Impact in terms of loss of crops • Approximately 89 hectare of land for crop compensation for RoW and 2 ha for tower footings • Approximate Number of Trees=180	Nil
7	LILO of 220 kV Akal – Barmer at Sheo (25 km)	25 km Line has no land issue - no private land acquisition required.	• Temporary Impact in terms of loss of crops • Approximately 45 hectare of land for crop compensation for RoW and 1 ha for tower footings • Approximate Number of Trees=10	Nil
8	132 kV LILO double circuit transmission line from Sheo – Undoo (5 km)	5 km Line has no land issue - no private land acquisition required.	• Temporary Impact in terms of loss of crops • Approximately 7 hectare of land for crop compensation for RoW and 0.1 ha for tower footings • Approximate Number of Trees=13	Nil
9	132 kV LILO double circuit transmission line from Sheo – Jaisalmer line (5 km)	5 km Line has no land issue - no private land acquisition required.	• Temporary Impact in terms of loss of crops • Approximately 7 hectare of land for crop compensation for RoW and 0.1 ha for tower footings • Approximate Number of Trees=4	Nil
10	220 kV double circuit transmission line from Baithwasia – Khinvsar (65 km)	65 km Line has no land issue - no forestland conversion/private land acquisition required.	• Temporary Impact in terms of loss of crops • Approximately 116 hectare of land for crop compensation for RoW and 3 ha for tower footings • Approximate Number of Trees=235	Nil
11	LILO 2 km D/C Jaislamer-Sheo Line (at Sangarh 132 kV GSS, Jaisalmer)- 2 km	2 km Line has no land issue - no private land acquisition required.	• Temporary Impact in terms of loss of crops • Approximately 3 hectare of land for crop compensation for RoW and 0.03 ha for tower footings • Approximate Number of Trees=5	Nil
12	LILO 20 km D/C line 132	20 km Line has no	• Temporary Impact in terms of	Nil

No	Sub-Project components	Key features of sub-project component	Impact on Involuntary Resettlement	Impact on Indigenous Peoples
	kV Tinwari-Osian Line (at Bana Ka Bas 132 kV GSS, Jodhpur (20 km)	land issue - private land acquisition required.	loss of crops • Approximately 28 hectare of land for crop compensation for RoW and 0.29 ha for tower footings • Approximate Number of Trees=12	
13	LILO 3 km D/C of 132 kV Sridungarh-Ratangarh Line (at Kitasar 132 kV GSS, Bikaner)- 3km	3 km Line has no land issue - no private land acquisition required.	• Temporary Impact in terms of loss of crops • Approximately 4 hectare of land for crop compensation for RoW and 0.04 ha for tower footings • Approximate Number of Trees=2	Nil
14	20 km D/C line from 220 kV GSS Dechu Nathrau Jodhpur (20 km)	20 km Line has no land issue - no private land acquisition required.	• Temporary Impact in terms of loss of crops • Approximately 36 hectare of land for crop compensation for RoW and 0.29 ha for tower footings • Approximate Number of Trees=17	Nil
15	100 km D/C line from 220 kV Chhattargarh GSS to Gajner GSS (100 km)	100 km Line has no land issue - no private land acquisition required.	• Temporary Impact in terms of loss of crops • Approximately 179 hectare of land for crop compensation for RoW and 5 ha for tower footings • Approximate Number of Trees=80	Nil
16	77 km 132 kV Chhattargarh to Loonkaransar line (77 km)	77 km Line has no land issue - no private land acquisition required.	• Temporary Impact in terms of loss of crops • Approximately 106 hectare of land for crop compensation for RoW and 1 ha for tower footings • Approximate Number of Trees=30	Nil
B	**Substations**			
1	765/400/220kV new substation with 3x1500 MVA transformers at Korna	New Substation	• This is a government land. Approximately 64 hectares of land will be required and RRVPNL will take it from the government revenue department through transfer. • No private land acquisition, no physical displacement, no informal settlers.	Nil
2	400/220kV substation with 2x500 MVA transformers at Pokaran (upgrade)	New Substation	• This is a government land. Approximately 27.2 hectares of land will be required and RRVPNL will take it from the government revenue	Nil

No	Sub-Project components	Key features of sub-project component	Impact on Involuntary Resettlement	Impact on Indigenous Peoples
			department through transfer. • No private land acquisition, no physical displacement, no informal settlers.	
3	220/132kV new substation with 2x160 MVA transformers at Sheo	New Substation	• This is a government land. Approximately 6.4 hectares of land will be required and RRVPNL will take it from the government revenue department through transfer. • No private land acquisition, no physical displacement, no informal settlers.	Nil
4	220/132 kV new substation at Chattargarh, Bikaner	Existing/Under construction 132 kV substation for further extension up to 220kV SS	• This is a government land. This is a 132kV RRVPNL substation under construction where 3.4 ha of land is in possession with RRVPNL and the remaining 3 ha of land is being taken from the government for the extension. • No private land acquisition, no physical displacement, no informal settlers.	Nil
5	132/33 kV new substations at Sangarh, Jaisalmer district	New Substation	• This is a government land. Approximately 3.5 hectares of land will be required. Site identified/finalise. Government land for transfer under process • No private land acquisition, no physical displacement, no informal settlers.	Nil
6	132/33 kV new substations at Bana ka Bans, Jodhpur district	New Substation	• This is a government land. Approximately 3.6 hectares of land will be required and RRVPNL has initiated the process for land transfer. • No private land acquisition, no physical displacement, no informal settlers.	Nil
7	132/33 kV new substations at Kitasar, Bikaner district	New Substation	• Approximately 3.5 hectares of land will be required. Government land. • No private land acquisition, no physical displacement, no informal settlers.	Nil
8	132/33 kV new substations at Nathrau, Jodhpur district	New Substation	• This is a government land. Substation under construction on approx. 3.5 ha. land • No private land acquisition, no physical displacement, no informal settlers.	Nil
9	Augmentation of 2x500 MVA transformers at Akal	Existing Substation	• No additional land is required. Augmentation will be done within the existing substation	Nil

No	Sub-Project components	Key features of sub-project component	Impact on Involuntary Resettlement	Impact on Indigenous Peoples
			(approx. 28.8 ha of land) and the land belongs to RRVPNL. • No private land acquisition, no physical displacement, no informal settlers.	
10	Augmentation of 2x500 MVA transformers at Jaisalmer II	Existing Substation	• No additional land is required. Augmentation will be done within the existing substation (approx. 29 ha of land) and the land belongs to RRVPNL. • No private land acquisition, no physical displacement, no informal settlers.	Nil
11	Extensions of the existing Jaisalmer, Undoo, Baithwasia and Khinvsar substations	Existing Substation	• No additional land is required. Augmentation will be done within the existing substation and the land belongs to RRVPNL. Approx 6.4 ha of land for each GSS (total 25.6 ha)is existing. • No private land acquisition, no physical displacement, no informal settlers.	Nil
C	**OPTICAL FIBRE NETWORK**			
1	Stringing of Optical Ground Wires (OPGW) to connect 132kV and 220kV substations in Rajasthan	Existing lines for reconductoring proposed 220/132 kV lines. Line has no land issue.	Easement will be used	Nil

v. Consultations were carried out with various stakeholders during RP preparation and social due diligence. Consultations will continue throughout project implementation. Consultations were carried during the month of August to October, 2016. Consultations were carried out through focused group discussions (FGDs) along the transmission lines and near the substations. Public consultations were carried out at 46 locations and the number of participants was 452. Additionally, focused group discussions were also carried out with women group at four locations and the number of women participants were 42 in the gender consultaion. Broad impacts, mitigation measures, eligibility, entitlement and compensation procedure were discussed with the proplr. Additionally, project information will be disseminated by the project through the disclosure of resettlement planning documents. The summary of the RP including the entitlement matrix will be translated into the local language (Hindi) and will be disclosed to the APs; and made available at the local revenue offices and RRVPNL offices. A copy of the RP will also be disclosed on the RRVPNL's and ADB's websites.

vi. A Grievance Redress Committee (GRC) will be formed to ensure APs grievances are addressed and facilitate timely project implementation. This GRM consists of a Grievance Redress Committee (GRC) headed by the Project head. The GRC will consist of various representative such as (I) Project Head / CE (ADB Projects), (ii) Sub District Magistrate or nominee of SDM, (iii) Land acquisition officer / Secretary RVPN, (iv) Head of Finance wing at

the project level, (v) Representative of APs/local Panchayat/ NGO, (vi) Representative of contractor and Executive Engineer -Environment and Social Cell. Grievances of APs will first be brought to the attention of the Project head of the Project Implementing Unit. Grievances not redressed by the PIU will be brought to the Grievance Redress Committee set up to monitor project Implementation for each project area. Other than disputes relating to ownership rights under the court of law, GRC will review grievances involving all resettlement benefits, compensation, relocation, replacement cost and other assistance

Tranche-2 subprojects will not involve any private land acquisition by using eminent domain or enforcing the land acquisition act of the country. In India, compensation for land acquisition (LA) and resettlement assistance for project affected persons/families is directed by the National law The Right to Fair Compensation and Transparency in Land Acquisition, Rehabilitation and Resettlement Act, 2013 (hereafter RFCT in LARR, 2013), effective from 1 January 2014. However, RRVPNL will not enforce the land acquisition act as the land for the substations are government owned and incase of unavoidable situation in the future, RRVPNL will ensure that the land is procured through negotiated settlement. Therefore, the RP is based on ADB's SPS, 2009 as well as on the Borrower's relevant domestic policy instruments and laws and the Resettlement Framework prepared for the entire MFF. Being a transmission project, the relevant national laws applicable for this project are (i) The Electricity Act, 2003 and (ii) The Indian Telegraph Act, 1885.The compensation principles adopted for the project shall comply with applicable laws and regulations of the Government of India/ State Govt, as well as ADB's Safeguard Policy Statement (2009). An Entitlement Matrix is given in **Table-E-2** which recognizes various types of losses resulting out of the project and specific compensation and assistance.

Table E-2: Entitlement Matrix

Type of Losses	Definition of APs	Entitlement	Details
Government land and Property			
Government Property (Loss of Land)	Relevant Government Department	• Departmental land transfer	• Compensation for required land as per the provision of GoR • Transfer of land through inter government department • Payment of land value by RRVPNL to the concerned government and departmental transfer of ownership.
Trees and Crops			
Loss of Trees	Land holders Share- croppers Lease holders	• Compensation at Market value to be computed with assistance of horticulture department	• Advance notice to APs to harvest fruits and remove trees • For fruit bearing trees compensation at average fruit production for next productive years to be computed at current market value • For timber trees compensation at market cost based on type of trees
Loss of Crops	Land holders Share- croppers Lease holders	• Compensation at Market value to be computed with assistance of agriculture department	• Advance notice to APs to harvest crops • In case of standing crops, cash compensation at current market cost to be calculated of mature crops based on average production.
Temporary Loss			
Temporary loss of land and temporary damage on loss of crops during construction	• All APs losing land and crops on temporary basis during the construction period of the lines • Farming households • Sharecroppers • Tenants	• Notice to harvest standing crops • Compensation at market value for one season • Restoration	• Provision of rent for period of occupation for legal titleholders. • Compensation for assets lost at replacement value. • Restoration of land to previous or better quality • Additionally, Cash Compensation will be paid for the temporary damage of crop under the RoW during the maintenance and repair after the

Type of Losses	Definition of APs	Entitlement	Details
	• non-titled households[3]		construction. In case there is a need for repair or maintenance of the transmission lines in the future, the project authorities would consult with land owners for access to the land for maintenance and repairs, when necessary, and that the land owners would continue to use the land for farming activities.
Vulnerable Households			
Impacts on vulnerable APs	All impacts	• Vulnerable APs	• Additional assistance based on three months of minimum wage • Vulnerable households will be given priority in project construction employment.
Unanticipated Impacts			
Other Impacts Not Identified	Affected households or individuals	• Compensation and assistance	• Unforeseen impacts will be documented and mitigated based on the principles agreed upon in the resettlement framework

viii. The resettlement cost estimate for this subproject includes eligible compensation, resettlement assistance and support cost for RP implementation. These are part of the overall project cost. This is a tentative budget which may change during the original course of implementation. The unit cost for the loss of crop has been derived from the through rapid field appraisal, consultation with affected households, consultation with relevant government authorities especially RRVPNL and its old practice. Contingency provision equivalent to 10% of the total cost has also been made to accommodate any variations from this estimate. The components of the resettlement cost include various features such as, compensation for crops and other support cost which includes cost for implementation of RP and monitoring of RP implementation. The support cost also includes cost for conducting future consultations and cost for grievance redressal. The total resettlement cost for the Tranche 2 subproject is estimated to be INR 189.38 million (equivalent to USD2.91 million). The resettlement costs will be considered as an integral component of sub-project costs. RRVPNL will make the funds available in its annual budget for the disbursement of compensation and assistance.

ix. The RRVPNL will be the Executing Agency (EA) as well as the Implementing Agency (IA) for the project. RRVPNL will constitute a Project Management Unit (PMU) for implementing the ADB loan at the corporate level which is Jaipur and Project Implementing Units (PIUs) at the sub-project level which is Jodhpur in this case for tranche-1 component. The PMU shall be headed by the Chief Engineer (T&C) and the Superintending Engineer (Planning) shall be responsible for coordinating all external functions with ADB. GOI, DEA, GOR as well as the internal functions such as Environment and Social/R&R reporting, Legal, Finance and Accounts, Field Project offices, Procurement and Contracts etc. and other functions from within RRVPNL. One Environment and Social Officer (ESO) shall be designated and headed by one Executive Engineer who shall be designated for monitoring ADB funded projects in areas such as Environment, R&R and Social safeguards. To assist ESO in these specialist functions, RRVPNL may hire appropriate consultants for monitoring purposes. Under PMU, there will be Project Implementation Units (PIUs) which will assume primary responsibility for the planning, preparation and implementation of RPs.

x. All land acquisition (government land in this case for substation), resettlement, and compensation (temporary impacts on crops) will be completed before the start of civil works. All land required will be provided free of encumbrances to the contractor prior to handing over of project sites and the start of civil works. However, public consultation and monitoring will be continued in an intermittent basis as needed during the entire duration of the project.

[3] Subject to verification from district revenue authority

For the construction of transmission line, a phase wise approach can be adopted for payment of compensation and assistance due to the loss of crops and trees. RRVPNL will ensure that compensation is being paid simultaneously during the construction of transmission for the stretch which is ready for construction. Therefore, all compensation and assistance will be completed preferably prior to the start of civil work activities at each specific stretch or simultaneously during construction.

xi. Monitoring will be the responsibility of the EA (RRVPNL). The implementation of RP will be closely monitored. Regular monitoring activities will be carried out internally by PMU/ PIU/ESC. Resettlement plan implementation will be closely monitored by the EA through its PMU and PIU to provide ADB with an effective basis for assessing payment of compensation progress and identifying potential difficulties and problems. RRVPNL through its PMU will be responsible for managing and maintaining affected person databases, documenting the results of the affected person census. Semiannual monitoring reports documenting progress on resettlement implementation and resettlement plan completion reports will be provided by RRVPNL through its PMU to ADB for review.

1.0 INTRODUCTION AND PROJECT DESCRIPTION

1.1 Overview and Background

1. Around 300 million people have no access to electricity in India.[4] The country is dependent on fossil fuel imports of coal and natural gas to generate electricity. At the same time, India is also promoting increased use of clean energy, promoting universal access and energy self-sufficiency by supplementing conventional power generation sources with renewable energy. In 2015, the government announced at the Conference of Parties (COP) 21 in Paris that it aims to increase to 40 percent the share of installed electric power capacity from non-fossil fuel based energy resources by 2030. This includes plans to quadruple the country's renewable energy capacity to 175 GW by 2022 and revise the target of grid-connected solar power from 20 GW to 100 GW by 2022.[5] Due to its tropical location, some regions in India benefit from solar irradiation ranging from 4–7 kilowatt-hours per square meter of area. The solar irradiation available in the western regions, particularly in the desert regions of Rajasthan, is at the higher end of this spectrum. India also has significant wind potential in its western region. These advantages have led to India's decision to invest in renewable energy particularly in the state of Rajasthan.

2. In May 2010, the Asian Development Bank (ADB) announced the Asia Solar Energy Initiative to catalyze 3,000 MW in solar energy projects through innovative public–private partnerships. ADB's operations departments have been active through public and private sector support in this strategic space for some time. ADB's private sector operations have financed stand-alone solar power projects across India, including projects in Rajasthan. ADB support for the public sector activities has been provided mainly through financing for transmission facilities. This included support for the transmission infrastructure for solar parks in the state of Gujarat in 2010. The pipeline of renewable energy projects is strong and growing.

3. The Government of India and Rajasthan requested support from ADB for the development of renewable energy projects in Rajasthan, including its planned solar parks, as well as financing through a multitranche financing facility (MFF) to set up transmission and associated infrastructure to manage integration of renewable energy.

4. A framework financing agreement (FFA) for the Rajasthan Renewable Energy Transmission Investment Program was signed between ADB and India on 23 August 2013. On 22 October 2012, ADB's Board of Directors approved the provision of an MFF to India, with an aggregate facility amount of up to $300 million.[6] Tranche 1 was approved on 22 October 2013. The Tranche 1 loan and project agreements were signed on 12 September 2014 and became effective on 6 November 2014. In October 2016, ADB received the government's periodic financing request for Tranche 2, totaling $ 348 million ($ 238 million from ADB OCR and $ 110 million from the ADB CTF), to integrate 5 GW of solar generation and wind generation in Rajasthan by FY2021 to FY2022.

5. The investment program being supported by ADB will contribute to economic development in Rajasthan through expanded power supplies from clean energy sources, and support a sustainable state electricity sector in the state. The Project outcome is the

[4] Word Bank. 2015. *Power for All: Electricity Access Challenge in India.* Washington DC.
[5] As of June 2016, the total grid-connected capacity of renewable energy stood at qround 44 GW out of 305 GW of the total installed power generation capacity in India. The renewable energy installed is wind (27.2 GW), solar (7.8 GW), biomass (4.8 GW), and small hydropower (4.3 GW).
[6] ADB. 2013. *Report and Recommendation of the President to the Board of Directors*: *Proposed Multitranche Financing Facility and Administration of Loans and Technical Assistance Grant to India for Rajasthan Renewable Energy Transmission Investment Program.* Manila.

development of reliable public sector transmission infrastructure capacity to support renewable energy development in the state of Rajasthan. With ADB support, the proposed program will sustain the energy sector reform agenda, and is expected to help to attract other long-term financiers to the state. The Project's impact would be the development of long-term sustainable energy sources in a cost-effective manner in India. The Project outcome is the successful, timely and reliable development of public sector infrastructure facilities to encourage renewable power generation in Rajasthan. The proposed tranche 2 (the Project) will undertake investments in transmission network strengthening for 5 GW solar generation and wind generation to be connected by FY 2021 to FY 2022. This is a draft Resettlement Plan (RP) prepared for the tranche-2 components of the investment program.

1.2 Subproject Components

6. An outline of project components for tranche-2 is provided below.

(i) Transmission Lines:

- 765 kV double circuit transmission line from Korna to Ajmer (210 km)
- LILO of 400 kV Raj West – Jodhpur at Korna (10 km)
- LILO of 400 kV Akal – Jodhpur at Korna (4 km)
- 400 kV double circuit transmission line from Korna – Pokaran (115 km)
- 400 kV double circuit transmission line from Korna – Jaisalmer (135 km)
- 220 kV double circuit transmission line from Sheo – Undoo (50 km)
- LILO of 220 kV Akal – Barmer at Sheo (25 km)
- 132 kV double circuit transmission line from Sheo – Undoo (5 km)
- 132 kV double circuit transmission line from Sheo – Jaisalmer (5 km)
- 220 kV double circuit transmission line from Baithwasia – Khinvsar (65 km)
- LILO 2 km D/C Jaislamer-Sheo Line (at Sangarh 132 kV GSS, Jaisalmer)
- LILO 20 km D/C line 132 kV Tinwari-Osian Line (at Bana Ka Bas 132 kV GSS, Jodhpur)
- LILO 3 km D/C of 132 kV Sridungarh-Ratangarh Line (at Kitasar 132 kV GSS, Bikaner)
- 20 km D/C line from 220 kV GSS Dechu Nathrau Jodhpur
- 220kV D/C line from 220kV GSS Gajner to poposed 220kV GSS at Chhattargarh (100 km)
- 132 kV D/C line from proposed 220 kV GSS Chhattargarh to existing 132 kV GSS Loonkaransar (77 km)

(ii) Substations:

- 765/400/220 kV new substation with 3x1500 MVA transformers at Korna.
- 400/220 kV substation with 2x500 MVA transformers at Pokaran (upgrade).
- 220/132 kV new substation with 2x160 MVA transformers at Sheo.
- 220/132 kV new substation at Chattargarh.
- Augmentation of 2x500 MVA transformers at Akal substation.
- Augmentation of 2x500 MVA transformers at Jaisalmer substation.
- Extensions of the existing Jaisalmer, Ajmer, Undoo, Baithwasia and Khinvsar substations.
- 132/33 kV new substations at Sangarh, Bana Ka Bas, Kitasar and Nathrau

(iii) Optical Fibre Network:

- Stringing of Optical Ground Wires (OPGW) to connect 132 kV and 220 kV substations in Rajasthan.

1.3 Scope and Methodology

7. The broad scope and methodology adopted to prepare the draft resettlement plan is as follows:

- Scope of the work includes subprojects having transmission lines and substations
- Collection of maps for substations sites and collection of maps and preliminary route alignment for transmission lines
- Collection of secondary information
- Collection of primary information in terms of filed visits and social surveys by the team
- Collection of land details/ownership details for each permanent impact especially for substations and verification of each sites through site visits and to document the current use of land especially, if there are any informal settlers
- Inventory surveys for transmission lines to assess the temporary impacts on loss of crops and also the loss of trees etc. by a transact and walk over survey
- Transmission lines are scattered over a long stretch of kilometres and the route alignment is preliminary, therefore, the assessment for loss of crops, trees, land use pattern, ownership of land etc have been done based on a sample surveys. Approximately, 10% of line routes have been selected for sampling for inventory surveys.
- Specific teams were engaged for various locations to carry out the inventory
- Carrying out informal public consultations at selected location along the transmission linesa as well as near the proposed new substation sites.

1.4 Limitation of the Resettlement plan

8. The draft RP has been prepared based on the preliminary route investigation/ survey. The alignment for the transmission line is not detailed and final at this stage rather it is a preliminary route alignment. The project is categorized as 'B'[7] for Involuntary Resettlement (IR) and 'C' for indigenous people (IP) as per ADB's Safeguard Policy Statement, 2009 (SPS). The impacts are temporary in nature in terms of loss of crops in the right of way (RoW). Additionally, loss of trees is foreseen. Temporary impacts are foreseen during the implementation and construction. Therefore, the RP remains as a draft, as final survey is not done yet and actual temporary impacts shall be known only during implementation which will be based on the detailed design and final survey once the construction contractor is mobilized for implementation. RRVPNL provides compensation for actual damages, which are temporary in nature. Exact location of tower is known only after detail survey/check survey. Check survey is done progressively during the construction of the transmission line. Normally the work is done in off season when there is no standing crop. The compensation for damage is assessed in actual after construction activities of transmission lines in three stages i.e. after completion of foundation, tower erection and conductor stringing. The payment of compensation may also be paid in three instances, if there are different damages during above three activities. The exact number of affected persons is not known at this stage as far as the transmission lines and towers components are concerned. Land details of each person being affected by transmission towers and line will be collected later when the exact line route is finalized and pegging of tower footings is done during final survey.

[7] A proposed project is classified as category B if it includes involuntary resettlement impacts that are not deemed significant which means less than 200 persons will experience major impacts, which are defined as (i) being physically displaced from housing, or (ii) losing 10% or more of their productive assets (income generating). The level of detail and comprehensiveness of the resettlement plan are commensurate with the significance of the potential impacts and risks.

9. The draft RP will be finalized and updated during the final design. One of the constraints and limitations of the RP is that the impacts related to transmission lines are based on assumptions. For example, exact route alignment for transmission lines including the tower footings is not detailed and final at this stage. Therefore, assessment has been done based on the inventory survey which is walkover surveys. RRVPNL through its construction contractor will be responsible for finalizing the route alignment and tower footing locations and accordingly, this draft RP will be finalized and updated prior to the implementation and construction of the specific phase which is ready for construction. However, sites for grid substations are almost in final shape and assessment has been done accordingly to calculate the permanent impact. Following steps will be taken to finalize and update the draft RP which are described below:

- RRVPNL needs to finalize the design to the detailed extent with exact line alignment and physical pegging of each tower.
- Collection of land details including ownership for each tower and a list containing the amount of land and owners details will be collected.
- Collection of land details if there is any change in substation land and accordingly carrying out census survey for the affected persons.
- Based on the final alignment, inventory and detailed assessment on loss of crops and trees need to be enumerated and recorded.
- Upon collection of all necessary data, the draft RP needs to be updated/finalized and the updated/finalized will be sent to ADB for approval and disclosure.

1.5 Location of Sub Projects

10. **Table 1.1** provide lists of Figures attached the the section. For example, **Figure 1.1** provides the detail power map of Rajasthan. **Figure 1.2** provides the location of ADB's funded tranche 2 transmission sub-projects.

Table 1.1: List of figures for Tranche 2

TRANCHE 2 SUB-PROJECTS		Figures
1	Power Map of Rajasthan	Figure 1.1
2	Location of Tranche 2 components in Rajasthan state	Figure 1.2
3	Map of Korna GSS and LILO lines	Figure 1.3
4	Map of Korna GSS with 2 circuits LILO lines	Figure 1.4
5	Photograph of Korna GSS	Figure 1.5
6	Route Map of 765 kV line from Korna GSS-Ajmer GSS (PG)	Figure 1.6
7	Photograph of Bay at 765 Ajmer GSS (Powergrid)	Figure 1.7
8	Route Map of 400 kV from Korna GSS to Pokharan GSS	Figure 1.8
9	Photograph of Pokharan GSS	Figure 1.9
10	Route Map of 400 kV from Korna GSS to Jaisalmer II	Figure 1.10
11	Photograph of bay at connecting bay at Jaisalmer II GSS	Figure 1.11
12	Route Map of 220 kV Baithwasia to Khinvsar GSS	Figure 1.12
13	Photograph proposed 220 kV bay at Undoo GSS	Figure 1.13
14	Photograph of proposed 220 kV Sheo GSS	Figure 1.14
15	Photograph of 132 kV Kitasar GSS	Figure 1.15
16	Proposed 220 kV Chhattargarh GSS and land for GSS	Figure 1.16
17	Bay for 132 kV D/C Chattargarh Loonkaransar at Loonkaransar	Figure 1.17
18	Land for bay for 132 kV bay for 220 kV Chhattargarh Gajner at Gajner GSS	Figure 1.18
19	Route Map of 132 kV Chhattargarh to Loonkarasar	Figure 1.19
20	Route Map of 220 kV Chattargarh to Gajner line	Figure 1.20
21	A-132 kV bay Nathrau GSS, B. 132 kV Dechu – Nathrau line	Figure

TRANCHE 2 SUB-PROJECTS		Figures
22	A. 132 kV Sangarh GSS B. 132 kV LILO line to Sangarh GSS	1.21A/B Figure
23	A. Bana Ka Bans GSS B. LILO tower at Jaatipur	1.22A/B Figure 1.23A/B

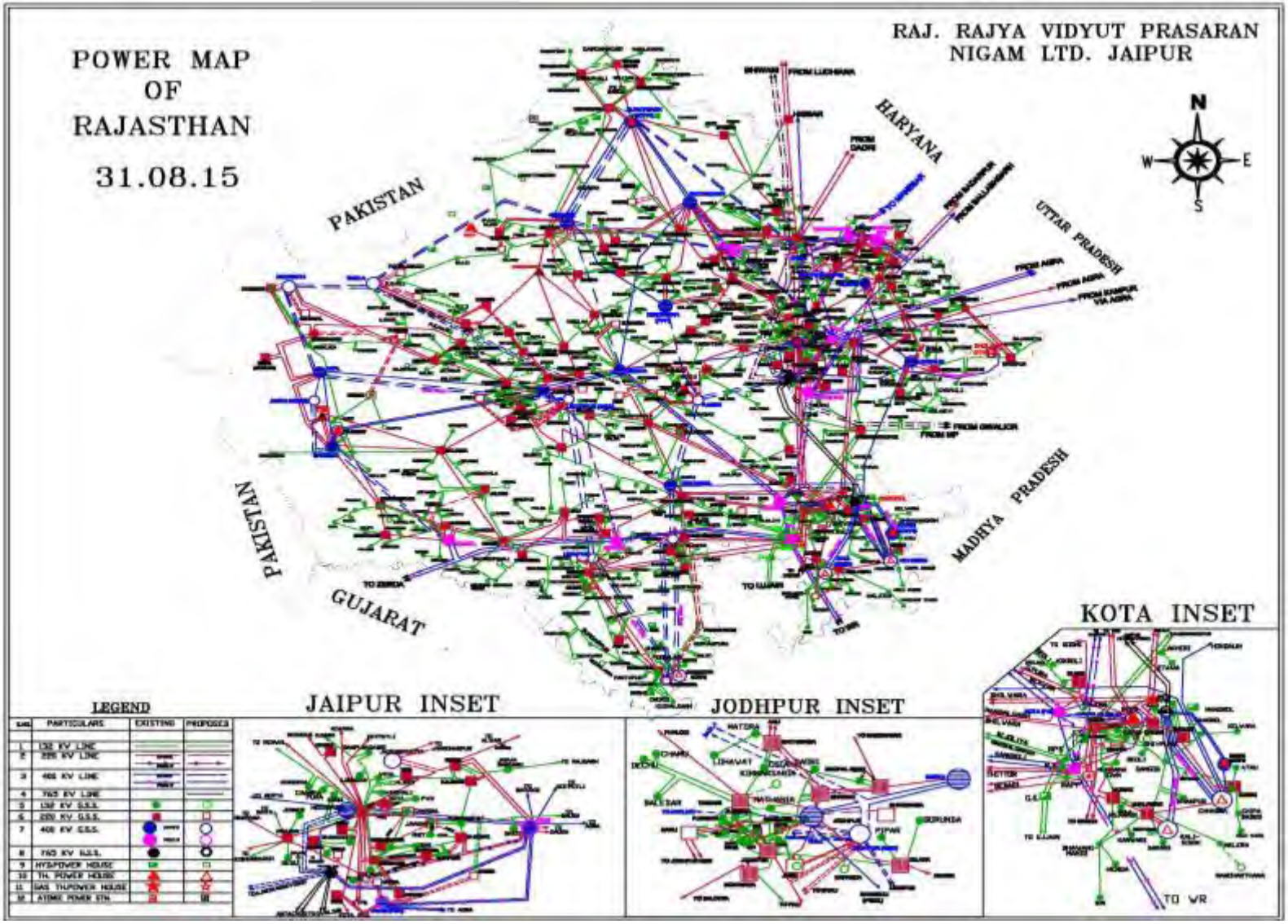


Figure 1.1: Power Map of Rajasthan

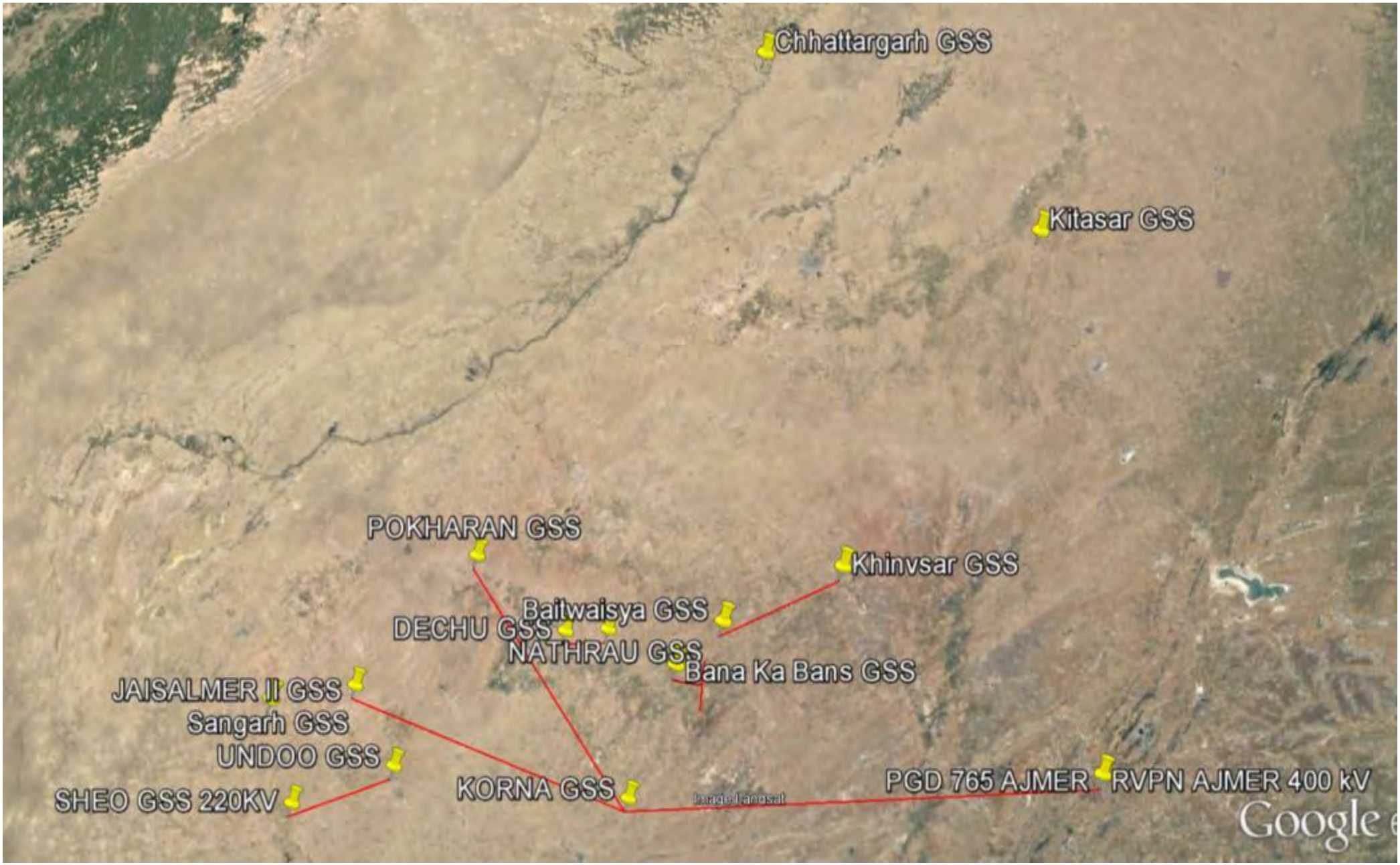


Figure 1.2: Location of Tranche 2 components in Rajasthan state

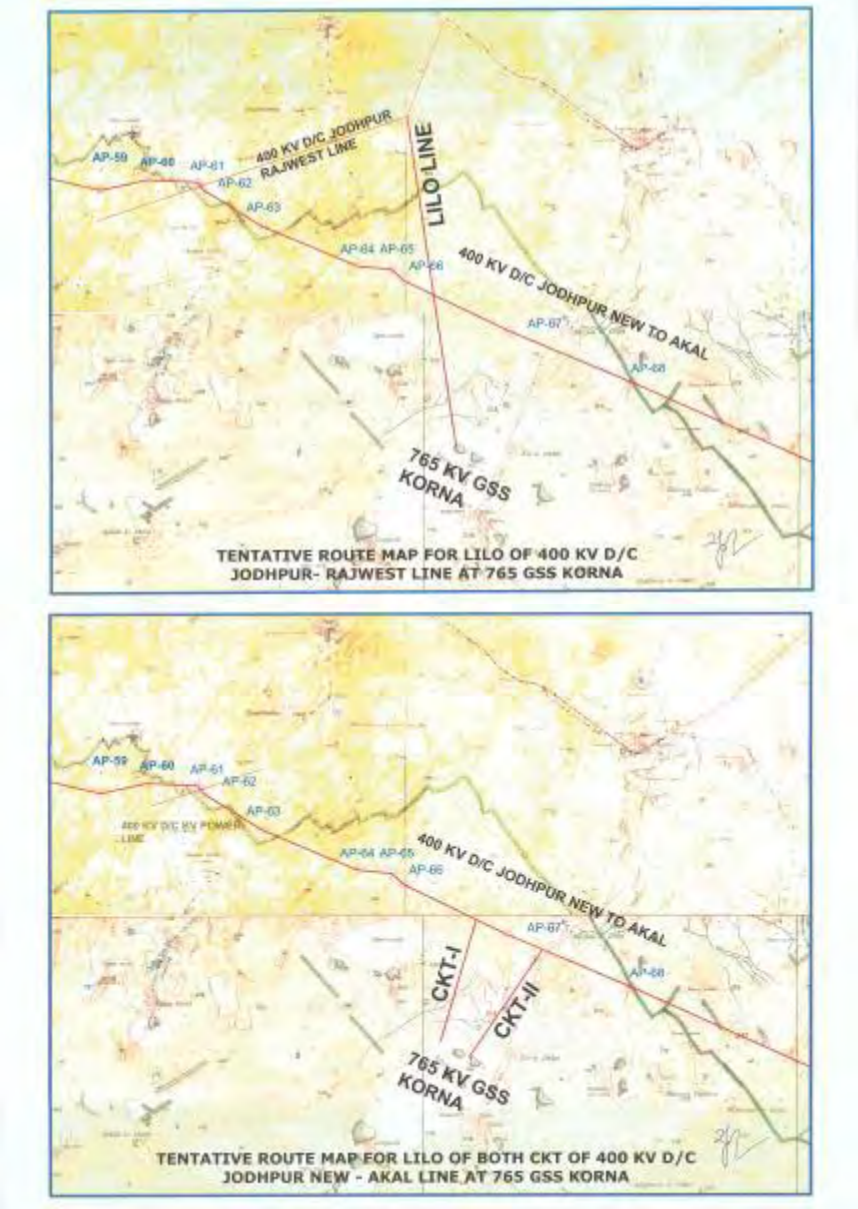


Figure 1.3: Map of Korna GSS along with LILO lines Figure 1.4: Map of Korna GSS along with LILO lines

Figure 1.5: Photograph of Korna GSS

Figure 1.6: Route Map of 765 kV line from Korna GSS-Ajmer GSS

Figure 1.7: Photograph of 765 Ajmer GSS (Powergrid)

Figure 1.8: RouteMap of 400 kV line from Korna GSS to Pokharan GSS

Figure 1.9: Photograph of Pokharan GSS

Figure 1.10: Route Map of 400 kV line from Korna GSS to Jailsalmer II

Figure 1.11: Photograph of bay at connecting bay at Jaisalmer II GSS

Figure 1.12: Route Map of 220 kV Baithwasia to Khinvsar GSS

Figure 1.13: Photograph of Existing Undoo GSS GSS

Figure 1.14: Photograph of Sheo (220 KV)

Figure 1.15: Photograph of 132 kV Kitasar GSS

Figure 1.16: Proposed 220 kV GSS Chhattargarh (highlighted in Pink) and barren land shown picture adjoining 132 kV GSS

Figure 1.17: Land for Bay for 132 kV D/C Chhattargarh-Loonkaransar terminating lines at Loonkaransar

Figure 1.18 Land for bay for 220 kV Chhattargarh – Gajner at Gajner

Figure 1.19 Route Map for 132 kV D/C Chhattargarh – Loonkaransar line

Figure 1.20 220 kV Chhattargarh Gajner Line

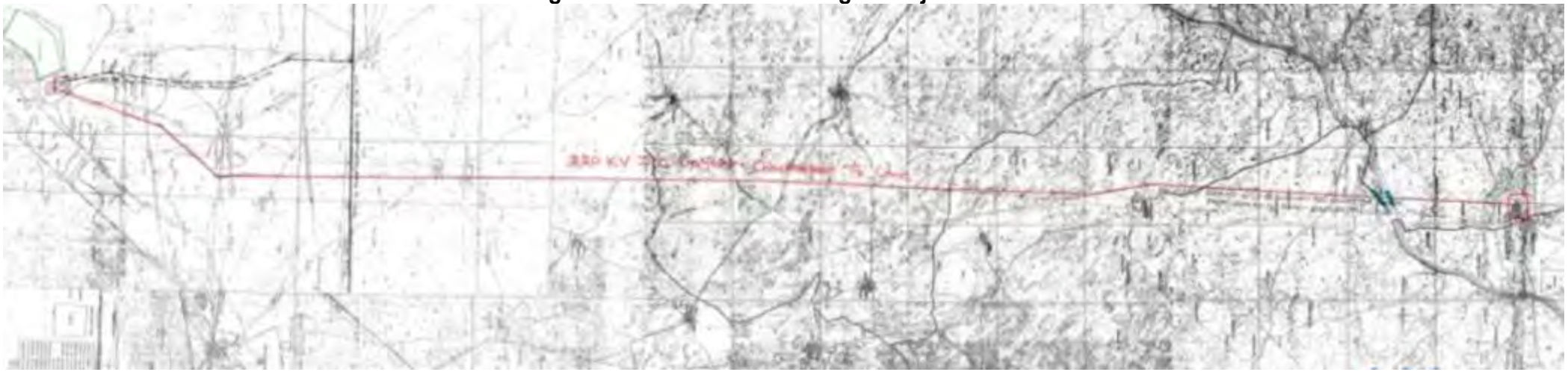


Figure 1.21A: 132 kV Nathrau GSS land

Figure 1.21B: 132 kV Dechu Nathrau line road crossing

Figure 1.22A: 132 kV Sangarh GSS

Figure 1.22B: 132 kV LILO line to Sangarh GSS

Figure 1.23A: 132 kV Bana ka Bans GSS

Figure 1.23 B: LILO tower at Jaatipura

2.0 SCOPE OF LAND ACQUISITION AND RESETTLEMENT

2.1 Background

11. Impacts on land acquisition and involuntary resettlement are categorized in to two parts such as permanent impacts and temporary impacts. Permanent impacts include land acquisition for transmission grid substations (GSS). Site for all the GSS have been identified and almost finalized. Assessment was done for all the GSS to collect the land requirements and type of owenrship through physical verification by survey team. Temporary impacts include loss of crops along the Right of Way (RoW) of transmission lines. Additionally, loss of trees is also foreseen all along the RoW. Assessment on loss of crops and trees along the RoW of transmission lines are done through inventory surveys in the form of walkover surveys along the lines on a sample basis. The inventory survey broadly covers the general impacts and identifies approximate loss which is based on assumptions. The impacts are insignificant as far as individual loss is concerned and none will either physically be displaced or will be losing more than 10% of their productive assets. There is no permanent land acquisition in tranche-2. Actual number of affected persons will be known during the final route alignment.

2.2 Permanent Land Requirement for Substations

12. The project will not entail any private land acquisition. An assessment of land acquisition and resettlement has been carried out for the subprojects and its components. The land required for the new substations is approximately 114.7 hectare which is government owned land and the land will be obtained through transfer by RRVPNL. Augmentations work will be done within the existing substation land of RRVPN. The total land available for augmentation is approximately 83.4 hectare. The new grid sub-stations are to be located only on either by Government and RRVPNL' owned land and augmentations are to be done in RRVPNL's existing premises. Due diligence confirmed that all of the sites are identified as vacant, situated in barren and sandy area and free from all encumbrances. The proposed new substations will be constructed on the government land and the bay extension does not require additional land as the extension will be done within the existing premise of RRVPNL substations. Land details and its ownership details of each substation are described in **Table 2.1**

Table 2.1: Land Details for Substations

No	Sub-Project components	Key features of sub-project component	Impact on Involuntary Resettlement
1	765/400/220kV new substation with 3x1500 MVA transformers at Korna	New Substation	• This is a government land. Approximately 64 hectares of land will be required and RRVPNL will take it from the government revenue department through transfer. • No private land acquisition, no physical displacement, no informal settlers.
2	400/220kV substation with 2x500 MVA transformers at Pokaran (upgrade)	New Substation	• This is a government land. Approximately 27.2 hectares of land will be required and RRVPNL will take it from the government revenue department through transfer. • No private land acquisition, no physical displacement, no informal settlers.
3	220/132kV new substation with 2x160 MVA transformers at Sheo	New Substation	• This is a government land. Approximately 6.4 hectares of land will be required and RRVPNL will

No	Sub-Project components	Key features of sub-project component	Impact on Involuntary Resettlement
			take it from the government revenue department through transfer. • No private land acquisition, no physical displacement, no informal settlers.
4	220/132 kV new substation at Chattargarh, Bikaner	New substation	• 132 kV Chhattargarh substation is under construction where 3.4 hectare of government land was available and now in possession with RRVPNL after having transferred from government to RRVPNL. The proposed 220 kV substation/bays extension is proposed to the current under construction 132kV S/S through an additional land of 3 ha which is adjoining to the current under construction 132kV under construction substation. The land has already been identified which is a government land and was earlier allotted by Government of Rajasthan to Mandi Development Board (an agricultural body). However, RRVPNL has already submitted a request for allotment of this land as it is currently vacant. RRVPNL will ensure that approximately 3 hectare be allotted by the government to RRVPNL for the 220kV substation. Therefore, this is a government vacant land which will be transferred from Government of Rajasthan to RRVPNL. The land is vacant and is not currently under any use and also there are no informal settlers. • No private land acquisition, no physical displacement, no informal settlers.
5	132/33 kV new substations at Sangarh, Jaisalmer district	New Substation	• This is a government land. Approximately 3.5 hectares of land will be required. Site identified/finalise. Government land for transfer under process • No private land acquisition, no physical displacement, no informal settlers.
6	132/33 kV new substations at Bana ka Bans, Jodhpur district	New Substation	• This is a government land. Approximately 3.6 hectares of land will be required and RRVPNL has initiated the process for land transfer. • No private land acquisition, no physical displacement, no informal settlers.
7	132/33 kV new substations at Kitasar, Bikaner district	New Substation	• Approximately 3.5 hectares of land will be required. Government land. • No private land acquisition, no physical displacement, no informal settlers.

No	Sub-Project components	Key features of sub-project component	Impact on Involuntary Resettlement
8	132/33 kV new substations at Nathrau, Jodhpur district	New Substation	• This is a government land. Substation under construction on approx. 3.5 ha. land • No private land acquisition, no physical displacement, no informal settlers.
9	Augmentation of 2x500 MVA transformers at Akal	Existing Substation	• No additional land is required. Augmentation will be done within the existing substation (approx. 28.8 ha of land) and the land belongs to RRVPNL. • No private land acquisition, no physical displacement, no informal settlers.
10	Augmentation of 2x500 MVA transformers at Jaisalmer II	Existing Substation	• No additional land is required. Augmentation will be done within the existing substation (approx. 29 ha of land) and the land belongs to RRVPNL. • No private land acquisition, no physical displacement, no informal settlers.
11	Extensions of the existing Jaisalmer, Undoo, Baithwasia and Khinvsar substations	Existing Substation	• No additional land is required. Augmentation will be done within the existing substation and the land belongs to RRVPNL. Approx 6.4 ha of land for each GSS (total 25.6 ha) is existing . • No private land acquisition, no physical displacement, no informal settlers.

Source: RRVPNL and Preliminary Sample Surveys, Aug-Oct-2016

2.3 Impact Due to Transmission Lines

13. This section deals with the impacts which are likely to be occurred during the time of construction of transmission lines. The impacts are of two types such as loss of crops during the construction period especially for transmission line and towers and loss of trees to be felled permanently along the right of way. There will be no permanent land acquisition for the transmission line components. Land will be restored to its previous use and the users will be allowed to cultivate their land after the construction. Careful scheduling of the construction activities may further reduce the impact in terms of loss of crops. It is proposed that the construction schedule may follow the agricultural off-season where no cultivation or standing crops are there. However, it may happen that the loss of crop may become unavoidable; therefore, an assessment was done to calculate the loss of crops. The preliminary route alignment was done carefully to minimize the damage. Settlement areas have been avoided.

2.3.1 Loss of Crops

14. Transmission lines do not cause any permanent impacts in terms of land acquisition. As per the applicable Indian laws and regulations, transmission lines do not require land acquisition and the impacts are considered to be temporary in nature in terms of loss of crops. These impacts especially, loss of crops are foreseen during construction. After the construction, people are usually allowed to continue their cultivation along the right of way. All these losses are compensated at market value. Temporary impacts are foreseen on crops during the construction period. The types of crops found in the area are Bajara, Moong, Moth, Till, Gawar, Jeera, Mustard and Groundnut. Lines are passing through

agricultural land, desert and barren land and the area is sparsely populated. An inventory of impacts was made through a sample transact surveys. Based on the samples, the calculation was made. List of villages and details on the inventory of major lines are provided in **Annexure 2.1.** The land area under the right of way is approximately 3,834 ha which will be temporarily affected during construction out of which 1,879 ha is barren/uncultivated land and 1,955 ha is considered as cultivated land for crop compensation[8]. After the construction, people are usually allowed to continue their cultivation along the right of way. Crop and tree losses are compensated at replacement value. The project social impacts have been adequately assessed and compensation will be paid to the affected people commensurate to the impacts. Details on temporary loss of crop land due to transmission line along the RoW are described in **Table 2.2.**

[8] This is a calculation based on land use pattern in rajasthan. In rajasthan, 51% of the total land is net sown area (This represents the total area sown with crops and orchards. Area sown more than once in the same year is counted only once) and 49% of land is uncultivated (This includes all land covered by mountains, deserts, etc. Land which cannot be brought under cultivation except at an exorbitant cost is classified as unculturable whether such land is in isolated blocks or within cultivated holdings)- Source: *Land use statistics, Directorate of Economics and Statistics, 2012-2013*

Table 2.2: Impact on Crop Land due to Transmission Lines (Right of Way)

#	Name of the Transmission Lines	Length (km)	Right of Way (meters)	Total Area (sqm)	Total Area (hectare)	Barren Land/Uncultivated Land (hectare)	Cultivated/Crop Land (hectare)[9]
1	765kV double circuit transmission line from Korna to Ajmer (210 km)	210	67	14,070,000	1,407	689.43	718
2	LILO of 400kV Raj West – Jodhpur at Korna (10 km)	10	46	460,000	46	22.54	23
3	LILO of 400kV Akal – Jodhpur at Korna (4 km)	4	46	184,000	18	9.02	9
4	400kV double circuit transmission line from Korna – Pokaran (115 km)	115	46	5,290,000	529	259.21	270
5	400kV double circuit transmission line from Korna – Jaisalmer (135 km)	135	46	6,210,000	621	304.29	317
6	220kV double circuit transmission line from Sheo – Undoo (50 km)	50	35	1,750,000	175	85.75	89
7	LILO of 220kV Akal – Barmer at Sheo (25 km)	25	35	875,000	88	42.88	45
8	132kV double circuit transmission line from Sheo – Undoo (5 km)	5	27	135,000	14	6.62	7
9	132kV double circuit transmission line from Sheo – Jaisalmer (5 km)	5	27	135,000	14	6.62	7
10	220kV double circuit transmission line from Baithwasia – Khinvsar (65 km)	65	35	2,275,000	228	111.48	116
11	LILO 2 km D/C Jaislamer-Sheo Line (at Sangarh 132 kV GSS, Jaisalmer)	2	27	54,000	5	2.65	3
12	LILO 20 km D/C line 132 kV Tinwari-Osian Line (at Bana Ka Bas 132 kV GSS, Jodhpur	20	27	540,000	54	26.46	28
13	LILO 3 km D/C of 132 kV Sridungarh-Ratangarh Line (at Kitasar 132 kV GSS, Bikaner)	3	27	81,000	8	3.97	4
14	20 km D/C line from 220 kV GSS Dechu Nathrau Jodhpur	20	35	700,000	70	34.30	36
15	100 km 220 kV Chhattargarh-Gajner line	100	35	3,500,000	350	171.50	179
16	77 km 132 kV Chhattargarh to Loonkaransar line	77	27	2,079,000	208	101.87	106
	Total	**846**		**38,338,000**	**3,834**	**1,879**	**1,955**

Source: Preliminary Sample Surveys, Aug-Oct-2016

15. During tower foundation, additional area adjoining the actual foundation area can be affected and for compensation purpose, the whole area which can be potentially affected is

[9] This is a tentative assessment based on certain assumptions which is the length of the transmission lines and the Right of Way needed for each transmission line (765 kV=67 meters, 400kV=46 meters, 220 kV= 35 meters and 132 kV=25 meters). The length of the transmission lines is multiplied in to the respective width of RoW. Approximately, 51% of the land in the project area has been considered as cultivated/agricultural/crop land (Source: *Land use statistics, Directorate of Economics and Statistics, 2012-2013)* However, this assessment on the temporary impacts will be further be minimized during the construction and during the actual detailed design. Crop compensation will be paid only for the actual loss (not necessarily the entire RoW) which will be lesser than this assumed quantity. This assumption is to calculate a tentative budget so that RRVPNL makes necessary provision in advance in its annual budget. Actual quantity and loss including the number of affected persons will be known during the pre construction phase by the contractor and RRVPNL.

considered. For example, in case of a 765 kV tower, additional area of 2,500 sq.m. [50mX50m] per tower has been considered for compensation. Similary, 900 sq.m. [30mX30m], 225 sq.m. [15mX15m] and 64 sq.m. [8mX8m] have been considered for a 400 kV tower, a 220 kV tower and a 132 kV tower respectively. However, the actual affected land during construction will be smaller than the estimation. A total of approximately 3,003 towers are to be placed which will require approximately 239.91 hectares of land of which 117.54 heactare is barren land/uncultivated land and 122.36 hectare is cultivated/crop land. Footing work can be scheduled in agricultural-off-season and people may use it for same use after construction. Details are given in **Table 2.3**

Table 2.3: Impact on Crop Land due to Transmission Lines (Tower)

#	Name of the Transmission Lines	Length (km)	Total Tower (Numbers)	Tower Area (Square meter per each Tower)	Total Tower Area (hectare)	Barren Land/Uncultivated Land (hectare)	Cultivated /Crop Land (hectare)
1	765kV double circuit transmission line from Korna to Ajmer (210 km)	210	525	2,500	131.25	64.3	66.94
2	LILO of 400kV Raj West – Jodhpur at Korna (10 km)	10	35	900	3.15	1.54	1.61
3	LILO of 400kV Akal – Jodhpur at Korna (4 km)	4	14	900	1.26	0.62	0.64
4	400kV double circuit transmission line from Korna – Pokaran (115 km)	115	403	900	36.27	17.77	18.50
5	400kV double circuit transmission line from Korna – Jaisalmer (135 km)	135	473	900	42.57	20.86	21.71
6	220kV double circuit transmission line from Sheo – Undoo (50 km)	50	200	225	4.50	2.20	2.30
7	LILO of 220kV Akal – Barmer at Sheo (25 km)	25	100	225	2.25	1.10	1.15
8	132kV LILO double circuit transmission line from Sheo – Undoo (5 km)	5	23	64	0.14	0.07	0.08
9	132kV double circuit transmission line from Sheo – Jaisalmer (5 km)	5	23	64	0.14	0.07	0.08
10	220kV double circuit transmission line from Baithwasia – Khinvsar (65 km)	65	260	225	5.85	2.87	2.98
11	LILO 2 km D/C Jaislamer-Sheo Line (at Sangarh 132 kV GSS, Jaisalmer)	2	9	64	0.06	0.03	0.03
12	LILO 20 km D/C line 132 kV Tinwari-Osian Line (at Bana Ka Bas 132 kV GSS, Jodhpur	20	90	64	0.58	0.28	0.29
13	LILO 3 km D/C of 132 kV Sridungarh-Ratangarh Line (at Kitasar 132 kV GSS, Bikaner)	3	14	64	0.09	0.04	0.05
14	20 km D/C line from 132 kV GSS Dechu Nathrau Jodhpur	20	90	64	0.58	0.28	0.29
15	100 km 220 kV Chhattargarh-Gajner line	100	400	225	9.00	4.41	4.59
16	77 km 132 kV Chhattargarh to Loonkaransar line	77	347	64	2.22	1.09	1.13
	Total	**846**	**3,003**	**7,384**	**239.91**	**117.54**	**122.36**

Source: Preliminary Sample Surveys, Aug-Oct-2016

16. Based on the above estimation, the total land considered for crop compensation for transmission line corridor RoW and tower foundation is 2077.36 hectares. As the assets of any sorts will not be acquired but for temporary damage to crops/trees or any other structures, adequate compensation shall be paid to all affected persons. During construction, only temporary damages will occur for which the compensation shall be paid as per relevant rules. After construction, the total land disturbance is much less and which is estimated to be about 0.3 ha, only 0.248% of the temporary damage area. Thus impact on the agricultural land due to tower erection is negligible.

2.3.2 Loss of Trees

17. Loss of trees is also foreseen along the right of way. However, in Rajasthan, the trees are mostly small trees and are not tall trees. Transmission lines always maintain a certain level of heights from the ground which will cause impacts on big trees only. However, small trees are not marked for cutting since these trees can be crossed using standard tower extensions, if required. In the Project areas, no such big trees are found. The actual number of trees and amount of crop loss will be known during the detailed and final surveys. The major species of trees found in the sub-project area are Babul (Vachellia nilotica), Neem (Azadirachta indica), Khejri (Prosopis cineraria) and Peepal (Ficus religiosa) etc. Loss of crops will be compensated. An inventory of trees has also been done which are found along the right of way of the transmission lines and these were enumerated on a sample basis. A total of 2,752 number of trees have been estimated to be found along the right of way which may not necessarily be cut. Details are given in **Table 2.4**

Table 2.4: Estimated Number of Trees along the RoW

#	Sub-Project Components	Names of Trees	Types of Trees	Number of Trees Affected
1	765 kV double circuit transmission line from Korna to Ajmer (210 km)	Khejri, Jaal, Babul, Neem	Non-Fruit/Timber Trees	1200
2	LILO of 400 kV Raj West – Jodhpur at Korna (10 km)	Khejri	Non-Fruit/Timber Trees	2
3	LILO of 400 kV Akal – Jodhpur at Korna (4 km)	Babul	Non-Fruit/Timber Trees	2
4	400 kV double circuit transmission line from Korna – Pokaran (115 km)	Khejri, Jaal, Babul, Neem	Non-Fruit/Timber Trees	470
5	400 kV double circuit transmission line from Korna – Jaisalmer II (135 km)	Khejri, Jaal, Babul, Neem	Non-Fruit/Timber Trees	490
6	220 kV double circuit transmission line from Sheo – Undoo (50 km)	Khejri, Jaal, Babul, Neem	Non-Fruit/Timber Trees	180
7	LILO of 220 kV Akal – Barmer at Sheo (25 km)	Khejri, Jaal, Babul, Neem	Non-Fruit/Timber Trees	10
8	132kV LILO double circuit transmission line from Sheo – Undoo (5 km)	Khejri, Jaal, Babul, Neem	Non-Fruit/Timber Trees	13
9	132 kV LILO double circuit transmission line from Sheo – Jaisalmer (5 km)	Khejri, Jaal, Babul, Neem	Non-Fruit/Timber Trees	4
10	220 kV double circuit transmission line from Baithwasia – Khinvsar (65 km)	Khejri, Jaal, Babul, Neem	Non-Fruit/Timber Trees	235
11	LILO 2 km D/C Jaislamer-Sheo Line (at Sangarh 132 kV GSS, Jaisalmer)	Jaal, Babul, Neem	Non-Fruit/Timber Trees	5
12	LILO 20 km D/C line 132 kV Tinwari-Osian Line (at Bana Ka Bas 132 kV GSS, Jodhpur	Khejri, Jaal, Babul, Neem	Non-Fruit/Timber Trees	12

#	Sub-Project Components	Names of Trees	Types of Trees	Number of Trees Affected
13	LILO 3 km D/C of 132 kV Sridungarh-Ratangarh Line (at Kitasar 132 kV GSS, Bikaner)	Babul, Neem	Non-Fruit/Timber Trees	2
14	20 km D/C line from 220 kV GSS Dechu Nathrau Jodhpur	Khejri, Jaal, Babul, Neem	Non-Fruit/Timber Trees	17
15	100 km 220 kV Chhattargarh-Gajner line	Khejadi, Babul,	Non-Fruit/Timber Trees	80
16	77 km 132 kV Chhattargarh to Loonkaransar line	Khejadi, Babul,	Non-Fruit/Timber Trees	30
	Total			**2,752**

Source: Preliminary Sample Surveys, Aug-Oct-2016

2.4 Summary Impact

18. The summary impact on land and loss of crops/trees due to construction various subprojects especially substations and transmission lines under tranche-2 is described in **Table 2.5**

Table 2.5: Summary Impact

No	Sub-Project components	Key features of sub-project component	Impact on Involuntary Resettlement	Impact on Indigenous Peoples
A	**Transmission Line**			
1	765 kV double circuit transmission line from Korna to Ajmer (210 km)	210 km Line has no land issue - no private land acquisition required.	• Temporary Impact in terms of loss of crops • Approximately 718 hectare of land for crop compensation for RoW and 67 ha for tower footings • Approximate Number of Trees= 1200	Nil
2	LILO of 400kV Raj West – Jodhpur at Korna (10 km)	10km Line has no land issue - no private land acquisition required.	• Temporary Impact in terms of loss of crops • Approximately 23 hectare of land for crop compensation for RoW and 2 ha for tower footings • Approximate Number of Trees= 2	Nil
3	LILO of 400 kV Akal – Jodhpur at Korna (4 km)	4 km Line has no land issue - no private land acquisition required.	• Temporary Impact in terms of loss of crops • Approximately 9 hectare of land for crop compensation for RoW and 1 ha for tower footings • Approximate Number of Trees=2	Nil
4	400 kV double circuit transmission line from Korna – Pokaran (115 km)	115 km Line has no land issue - no private land acquisition required.	• Temporary Impact in terms of loss of crops • Approximately 270 hectare of land for crop compensation for RoW and 18 ha for tower footings • Approximate Number of Trees=470	Nil
5	400 kV double circuit	135 km Line has no	• Temporary Impact in terms of	Nil

No	Sub-Project components	Key features of sub-project component	Impact on Involuntary Resettlement	Impact on Indigenous Peoples
	transmission line from Korna – Jaisalmer II (135 km)	land issue - no private land acquisition required.	loss of crops • Approximately 317 hectare of land for crop compensation for RoW and 22 ha for tower footings • Approximate Number of Trees=490	
6	220 kV double circuit transmission line from Sheo – Undoo (50 km)	50 km Line has no land issue - no private land acquisition required.	• Temporary Impact in terms of loss of crops • Approximately 89 hectare of land for crop compensation for RoW and 2 ha for tower footings • Approximate Number of Trees=180	Nil
7	LILO of 220 kV Akal – Barmer at Sheo (25 km)	25 km Line has no land issue - no private land acquisition required.	• Temporary Impact in terms of loss of crops • Approximately 45 hectare of land for crop compensation for RoW and 1 ha for tower footings • Approximate Number of Trees=10	Nil
8	132 kV LILO double circuit transmission line from Sheo – Undoo (5 km)	5 km Line has no land issue - no private land acquisition required.	• Temporary Impact in terms of loss of crops • Approximately 7 hectare of land for crop compensation for RoW and 0.1 ha for tower footings • Approximate Number of Trees=13	Nil
9	132 kV LILO double circuit transmission line from Sheo – Jaisalmer line (5 km)	5 km Line has no land issue - no private land acquisition required.	• Temporary Impact in terms of loss of crops • Approximately 7 hectare of land for crop compensation for RoW and 0.1 ha for tower footings • Approximate Number of Trees=4	Nil
10	220 kV double circuit transmission line from Baithwasia – Khinvsar (65 km)	65 km Line has no land issue - no forestland conversion/private land acquisition required.	• Temporary Impact in terms of loss of crops • Approximately 116 hectare of land for crop compensation for RoW and 3 ha for tower footings • Approximate Number of Trees=235	Nil
11	LILO 2 km D/C Jaislamer-Sheo Line (at Sangarh 132 kV GSS, Jaisalmer)- 2 km	2 km Line has no land issue - no private land acquisition required.	• Temporary Impact in terms of loss of crops • Approximately 3 hectare of land for crop compensation for RoW and 0.03 ha for tower footings • Approximate Number of Trees=5	Nil
12	LILO 20 km D/C line 132 kV Tinwari-Osian Line (at Bana Ka Bas 132 kV	20 km Line has no land issue - private land acquisition	• Temporary Impact in terms of loss of crops • Approximately 28 hectare of	Nil

No	Sub-Project components	Key features of sub-project component	Impact on Involuntary Resettlement	Impact on Indigenous Peoples
	GSS, Jodhpur (20 km)	required.	land for crop compensation for RoW and 0.29 ha for tower footings • Approximate Number of Trees=12	
13	LILO 3 km D/C of 132 kV Sridungarh-Ratangarh Line (at Kitasar 132 kV GSS, Bikaner)- 3km	3 km Line has no land issue - no private land acquisition required.	• Temporary Impact in terms of loss of crops • Approximately 4 hectare of land for crop compensation for RoW and 0.04 ha for tower footings • Approximate Number of Trees=2	Nil
14	20 km D/C line from 220 kV GSS Dechu Nathrau Jodhpur (20 km)	20 km Line has no land issue - no private land acquisition required.	• Temporary Impact in terms of loss of crops • Approximately 36 hectare of land for crop compensation for RoW and 0.29 ha for tower footings • Approximate Number of Trees=17	Nil
15	100 km D/C line from 220 kV Chhatargarh GSS to Gajner GSS (100 km)	100 km Line has no land issue - no private land acquisition required.	• Temporary Impact in terms of loss of crops • Approximately 179 hectare of land for crop compensation for RoW and 5 ha for tower footings • Approximate Number of Trees=80	Nil
16	77 km 132 kV Chhattargarh to Loonkaransar line (77 km)	77 km Line has no land issue - no private land acquisition required.	• Temporary Impact in terms of loss of crops • Approximately 106 hectare of land for crop compensation for RoW and 1 ha for tower footings • Approximate Number of Trees=30	Nil
B	**Substations**			
1	765/400/220kV new substation with 3x1500 MVA transformers at Korna	New Substation	• This is a government land. Approximately 64 hectares of land will be required and RRVPNL will take it from the government revenue department through transfer. • No private land acquisition, no physical displacement, no informal settlers.	Nil
2	400/220kV substation with 2x500 MVA transformers at Pokaran (upgrade)	New Substation	• This is a government land. Approximately 27.2 hectares of land will be required and RRVPNL will take it from the government revenue department through transfer. • No private land acquisition, no physical displacement, no informal settlers.	Nil

No	Sub-Project components	Key features of sub-project component	Impact on Involuntary Resettlement	Impact on Indigenous Peoples
3	220/132kV new substation with 2x160 MVA transformers at Sheo	New Substation	• This is a government land. Approximately 6.4 hectares of land will be required and RRVPNL will take it from the government revenue department through transfer. • No private land acquisition, no physical displacement, no informal settlers.	Nil
4	220/132 kV new substation at Chattargarh, Bikaner	Existing/Under construction 132 kV substation for further extension up to 220kV SS	• This is a government land. This is a 132kV RRVPNL substation under construction where 3.4 ha of land is in possession with RRVPNL and the remaining 3 ha of land is being taken from the government for the extension. • No private land acquisition, no physical displacement, no informal settlers.	Nil
5	132/33 kV new substations at Sangarh, Jaisalmer district	New Substation	• This is a government land. Approximately 3.5 hectares of land will be required. Site identified/finalise. Government land for transfer under process • No private land acquisition, no physical displacement, no informal settlers.	Nil
6	132/33 kV new substations at Bana ka Bans, Jodhpur district	New Substation	• This is a government land. Approximately 3.6 hectares of land will be required and RRVPNL has initiated the process for land transfer. • No private land acquisition, no physical displacement, no informal settlers.	Nil
7	132/33 kV new substations at Kitasar, Bikaner district	New Substation	• Approximately 3.5 hectares of land will be required. Government land. • No private land acquisition, no physical displacement, no informal settlers.	Nil
8	132/33 kV new substations at Nathrau, Jodhpur district	New Substation	• This is a government land. Substation under construction on approx. 3.5 ha. land • No private land acquisition, no physical displacement, no informal settlers.	Nil
9	Augmentation of 2x500 MVA transformers at Akal	Existing Substation	• No additional land is required. Augmentation will be done within the existing substation (approx. 28.8 ha of land) and the land belongs to RRVPNL. • No private land acquisition, no physical displacement, no informal settlers.	Nil
10	Augmentation of 2x500 MVA transformers at	Existing Substation	• No additional land is required. Augmentation will be done	Nil

No	Sub-Project components	Key features of sub-project component	Impact on Involuntary Resettlement	Impact on Indigenous Peoples
	Jaisalmer II		within the existing substation (approx. 29 ha of land) and the land belongs to RRVPNL. • No private land acquisition, no physical displacement, no informal settlers.	
11	Extensions of the existing Jaisalmer, Undoo, Baithwasia and Khinvsar substations	Existing Substation	• No additional land is required. Augmentation will be done within the existing substation and the land belongs to RRVPNL. Approx 6.4 ha of land for each GSS (total 25.6 ha)is existing. • No private land acquisition, no physical displacement, no informal settlers.	Nil
C	**OPTICAL FIBRE NETWORK**			
1	Stringing of Optical Ground Wires (OPGW) to connect 132kV and 220kV substations in Rajasthan	Existing lines for reconductoring proposed 220/132 kV lines. Line has no land issue.	Easement will be used	Nil

Source: RRVPNL and Preliminary Surveys, Aug-Oct-2016

3.0 SOCIO ECONOMIC INFORMATION AND PROFILE

3.1 General

19. This is a general socio-economic profile of the project area but not necessarily the affected persons. The socio-economic profile of the project areas is based on general information collected from various secondary sources. As the assets of any sorts will not be acquired but for temporary damage to crops/trees or any other structures adequate compensation as per norms shall be paid to all APs. This chapter provides broad socio-economic profile in terms of demography, literacy, employment and other infrastructure etc in the state of Rajasthan and districts (Jodhpur, Jaiselmer, Bikaner, Ajmer, Nagaur, Barmer, and Pali) through which the lines will traverse. Following section briefly discuss socio-economic profile.

3.2 Rajasthan State

20. Rajasthan, the largest state of the country, is located in the north-western part of the country. It has a geographical area of 342,239 square kilometres which constitutes 10.41% area of the country's geographical. It lies between latitude 23°4' to 30°11' N and longitude 69°29' to 78°17' E. Physiographically, the state can be divided into four major regions, namely, the western desert with barren hills, level rocky/sandy plains, the Aravalli hills and south-eastern plateau. The general land use pattern of the state is given in **Table 3.1**:

Table 3.1: Land Use Pattern in Rajasthan

Land use	Area in ' 000 ha	Percentage
Total geographical area	34,224	
Reporting area for land utilization	34,267	100.00
Forests	2,750	8.03
Not available for cultivation	4,275	12.48
Permanent Pasture & Grazing land	1,694	4.94
Land under misc. tree crops & groves((not incl. in net area sown)	23	0.07
Culturable waste land	4,152	12.12
Fallow land other than current fallows	2,024	5.91
Current fallows	1,869	5.45
Net area Sown	17,479	51.01

Source: Land use statistics, Directorate of Economics and Statistics, 2012-2013

3.2.1 Climate

The climate of the state varies from semi-arid to arid. The climate varies throughout Rajasthan. The temperature in the state ranges from 25˚ °C to 50˚ °C. Average rainfall varies; the western deserts accumulate about 100 mm (about 4 inch) annually, while the southeastern part of the state receives 650 mm (26 inch) annually, most of which falls from July through September during the monsoon season. The average rainfall ranges from 480 mm to 750 mm being as low as 150 mm in arid region and 1000 mm in the south-eastern plateau. Predominant soil in the project area is mainly sandy soils.

3.2.2 Mineral Resources

Rajasthan has the second largest mineral reserves in the country. Main minerals found in Rajasthan are Wollastonite, Gypsum, Soap Stone, Asbestos, Fluorite, Feldspar, Ball Clay, Rock Phosphate. It is the second largest producer of glass and ceramic raw materials and

leading producer of feldspar. Also a store-house of 70% of the country's non-ferrous metallic minerals. Rajasthan produces 90% of the country's copper and zinc. Barytes, Calcite, Clay, Dolomite, Emerald, Feldspar, Fluorite, Garnet, Gypsum, Potash, Rock-Phosphate, Silica Sand, Siliceous Earth, Soapstone:, Wollastonite, lime stone, Lignite, Cu, Pb, Zinc & Mica and dimensional and decorative stone including sandstone, slate, marble, phyllite and granite are found in Rajasthan.

3.2.3 Water Resources

In the west, Rajasthan is relatively dry and infertile; this area includes some of the Thar Desert, also known as the Great Indian Desert. In the southwestern part of the state, the land is wetter, hilly, and more fertile. Major rivers of the state are the Mahi, the Chambal and the Anas. Having much arid land, Rajasthan needs extensive irrigation. It receives water from the Punjab rivers and also from the Western Yamuna (Haryana) and Agra canals (Uttar Pradesh) and from the Sabarmati and Narmada Sagar projects to the south. There are thousands of tanks (village ponds or lakes), but they suffer from drought and silt. Rajasthan shares the Bhakra Nangal project with the Punjab and the Chambal Valley project with Madhya Pradesh; both are used to supply water for irrigation and for drinking purposes.

3.3 Jodhpur District

21. Jodhpur district is among the largest districts in the state of Rajasthan. It is centrally situated in the western region of the state, and covers a total geographical area of 22,850 Sq. Kms. Jodhpur district lies between 26°0’ & 27°37’ north latitude and 72°55’ and 73°52’ east longitude. It is bounded by Nagaur in the east, Jaisalmer in the west, Bikaner in the north and Barmer and Pali in the South. The total length of the district from north to south is about 197 Kms and from east to west it is about 208 Kms. The district of Jodhpur lies at a height of 250-300 metres above sea level.

3.3.1 Physiography

22. Jodhpur district forms part of Great Thar Desert of Rajasthan. In this arid region, there are sand dunes, alluvial areas dotted with few hillocks and hill chains scattered in the area. In the eastern part of the district, the area between Bilara and Jodhpur is covered by alluvium deposited due to fluvial action of Luni river system. The eastern part of the district exhibits gentle undulating topography interrupted by small ridges of hard rocks. The general elevation of plains varies from 300 m amsl in north to 150 m amsl in south. Regional slope is from north-east towards south-west direction. Orientation of alluvial plain area follows the Luni River and its tributaries. Sand dunes occupy a major part of the district north of Vindhyan escarpment in northern and northwestern part of the district. The sand dunes are transverse and longitudinal types formed due to aeolian action and overlie the denuded consolidated formations. Ridges and hillocks are common features in Bilara and Osian tehsils. A chain of escarpments and ridges composed of comparatively resistive rocks like granite, rhyolite and Jodhpur sandstone are found extending from Shergarh in the west to Bilara in the east. The alluvial and sand filled valleys are separated by the ridges whose crest elevation ranges from 325 to 460 m amsl. In the northern part of the district, highest peak of the hill is 284 m amsl. Presence of boulder beds exhibits striking plain topography around Bap and low lying outcrops of limestone, shale and sandstone layers are observed in northern part of the district near Phalodi. Distribution of various geomorphic units in the district is shown in **Table 3.2**.

Table 3.2: Distribution of various geomorphic units in Jodhpur districts

Origin	Landform Unit	Occurrence
Aeolian	Sand dunes	North and northwestern part of the district.
	Sandy Plains	North and northwestern part of the district.
Fluvial	Alluvial Plains	Eastern part of the district along rivers- Luni, Mithri etc.
	Interdunal Plains	Scattered in entire district, mainly in north and western part of the district.
Denudational	Pediments	Scattered in district, mainly in east and west.
Hills	Linear Ridges	Occur in Bilara and Osian Blocks. Extend from Shergarh in the west to Bilara in the east.
	Structural Hills	In northwestern and eastern parts of the district and Jodhpur town.

3.3.2 Climate

23. The district experiences arid to semi-arid type of climate. Mean annual rainfall (1971-2012) of the district is 374 mm whereas normal rainfall (1901-1970) is lower than average rainfall and is placed at 314 mm. Rainy days are limited to maximum 15 in a year. Almost 80% of the total annual rainfall is received during the southwest monsoon, which enters the district in the first week of July and withdraws in the mid of September. Drought analysis based on agriculture criteria indicates that the district is prone to mild and normal type of droughts. Occurrence of severe and very severe type of drought is very rare. As the district lies in the desert area, extremes of heat in summer and cold in winter are the characteristic of the desert. Both day and night temperatures increase gradually and reach their maximum in May and June respectively. The temperature varies from 49° C in summer to 1°C in winter. Atmosphere is generally dry except during the monsoon period. Humidity is the highest in August with mean daily relative humidity at 81%. The annual maximum potential evapotranspiration in the district is quite high and is highest (264.7 mm) in the month of May and lowest (76.5 mm) in the month of December.

3.3.3 Water Resources

24. Jodhpur district falls in the Luni and Barmer Basins. Major River of the district is Luni, which flows in ENE – WSW direction. It enters Jodhpur district near village Jhak in Bilara tehsil and leaves the district near village Dhundhara. Total length of the Luni River in Jodhpur district is 125 km. Channel pattern of Luni is dendritic to sub-parallel. However, in major part of the district, the drainage is essentially ephemeral and internal. Important tributaries to the Luni river are Mithri and Bandi. Other streams in the district are Jojri, Golasmi, Guniamata and Bastua, which are all ephemeral. Ground water is the only source of irrigation in the district. Gross area of irrigated land by wells and tubewells works out to 407169 hectares. Maximum irrigated area is in Osian tehsil followed by Bhopalgarh and Bilara tehsils respectively. Minimum area under irrigation is in Luni tehsil due to poor ground water potential. Source wise details of area irrigated in the district are given in **Table 3.3.**

Table 3.3: Source wise area irrigated in Jodhpur district (2010-11)

Source	Net Irrigated Area (ha)	Gross Irrigated Area (ha)
Tubewells	260,535	401,315
Other wells	4,884	5,592
Other sources	262	262
Total	265,681	407,169

3.3.4 Mineral Resources, Soil and Ecological Resources

25. District is mainly rich in non-metallic minerals like Sandstone, Rhyolite, Dolomite, Limestone, Jasper, Granite & Clay. Murram, Kankar, Brick earth, Bajri and other minor minerals. Major Soils of the district are Red desertic soils, Desert soils, Sand dunes and Lithosols and regosols of hills. The recorded forest area of the district is 98 sq.km which is

0.43% of the district's geographical area.

3.3.5 Croping Pattern

26. Agricultural activities in the district mainly dependent on rains. Kharif is the main crop of the district. Rabi crop is mainly cultivated in Bilara, Bhopalgarh and Osian Tehsils only. Bajra, Moong, Moth, Sesamum (Til), Jowar and Cotton to some extent are the main crops of Kharif whereas wheat, Barley, Gram, Mustard, Raida, Taramira etc are the main crops of Rabi in the district. Only 15 per cent of the cultivable land is sowed due to scarcity of irrigational facilities.

3.3.6 Existing Industrial Status

Details on the industrial status of Jodhpur district is given in **Table 3.4.**

Table 3.4: Industrial Status of Jodhpur

S.No.	Head	Unit	Particulars
1.	Registered Industrial Unit	Nos.	21,263
2.	Total Industrial Unit	Nos.	23,319
3.	Registered Medium and Large Unit	Nos.	15
4.	Estimated Avg. No. of Daily Worker Employed in Small Scale Industries	No.	107,151
5.	Employment in Large and Medium Industries	No.	113,260
6.	No. of Industrial Area		22
7.	Turnover of Small Scale Industries		NA
8.	Turnover of Medium and Large Scale Industries		NA

3.4 Jaisalmer

27. District Jaisalmer is located within a rectangle lying between 26°.4’ – 28°.23' north parallel and 69°.20'-72°.42' east meridians. Covering an area of 38,401 sq km, it is the largest district of Rajasthan and one of the largest in the country. The breadth (East-West) of the district is 270 km and the length (North-South) is 186 km. The length of international border attached to District is 471 Kms. The district is is bounded on the north by Bikaner, on the west & south-west by Indian border, on the south by Barmer and Jodhpur, and on the east by Jodhpur and Bikaner Districts.

3.4.1 Physiography

28. Jaisalmer District, a part of the Great Indian Thar Desert, is sandy, dry and scorched. The terrain around, within a radius of about 60 kms is stony and rocky. The area is barren, undulating with its famous sand dunes and slopes towards the Indus valley and the Runn of Kutch. There is no perennial river in the district. The underground water level is very low. Geographically this district is spread over in 38,401 sq. kms which is one of the largest district and almost equal to the state of Kerala.

3.4.2 Climate

29. District has a very dry climate with very hot summer; a cold winter and sparse rains. The climate is extremely hot during summer with maximum temperature reaching up to 49.2 °C and extremely cold during winder with minimum temp. in the range of 1°C. The variation in temperature from morning to noon and the late midnight is a sudden phenomenon. The average rainfall is only 16.4 cms.

3.4.3 Water Resources

30. Jaisalmer district is a part of the 'Great Thar Desert'. The terrain around Jaisalmer town, within a radius of about 60 km is stony and rocky. The area is barren, undulating with its famous sand dunes. There are no rivers worth the name in the area nor are there any perennial streams in the area. Small nallas are purely seasonal and ephemeral with the result that there is lack of effective discharge in the event of heavy precipitation.

31. Ground water and Indira Gandhi Nahar Project canal are the only source of irrigation in the district. Maximum irrigated area is in Jaisalmer block. Minimum area under irrigation is in Sankara block due to poor ground water potential. Indira Gandhi Canal enters Jaisalmer district near village Nachana and flows towards western direction. It has a command area falling to the north of the canal. At Mohangarh, the main canal ends and further westward extension of canal is known as Sagarmal Gopa Branch which takes southward bend near Ramgarh and is called Gadra Road Sub Branch. Major irrigation in the area is through Nachana Branch System, Sagarmal Gopa Branch System, Shaheed Birbal Shakha System and part of Charanawala Branch System.

3.4.4 Mineral Resources, Soil, Ecological Respurces

32. The important minerals found in Jaisalmer district are fuller's earth, clay, gypsum, limestone, yellow and redocher and phosporite. Major Soils of the district are Desert soil, Sand dunes, Red desertic soil and Saline soil of depressions. The recorded forest area of the district is 217 sq.km. which is 0.57% of the district's geographical area.

3.4.5 Existing Industrial Status:

Details on the industrial status of Jaisalmer district is given in **Table 3.5**

Table 3.5: Industrial Status of Jaisalmer

S.No.	Head	Unit	Particulars
1.	Registered Industrial Unit	Nos.	225
2.	Total Industrial Unit	Nos.	4,242
3.	Numbers Of Medium and Large Unit	Nos.	Nil
4.	Employment Generated In MSMEs	Nos.	11,622
5.	Employment in Large And Medium Industries	Nos.	Nil
6.	No. of Industrial Area	Nos.	4
7.	Turnover of MSMEs	In Lacs	N.A.
8.	Turnover of Medium and Large Scale Industries	In Lacs	Nil

3.5 Bikaner District

33. Bikaner district is located between 27°11' to 29°03' North latitude and 71°54' to 74°12' East longitude in the north western part of Rajasthan covering a geographical area of about 27,244 sq.km. It is bounded by Ganganagar district on the north partly by Jaisalmer and Pakistan on the west, Churu and Hanumangarh district on the east, north-east, Nagaur and Jodhpur districts on the south and south- east respectively.

3.5.1 Physiography

34. Administratively, Bikaner district is a part of Bikaner division. The district is further divided into four tehsils- (1) Bikaner, (2) Lunkaransar, (3) Kolayat and (4) Nokha. The above four tehsils are also the panchayat samities of the district. The major part of the district comprises desolate and dreary regions which forms a part of the great Indian desert of Thar. There are two natural division of district namely:- (i) Northern and Western desert and (ii) Southern and eastern semi desert. At many places one finds shifting sand dunes of varying heights ranging from 6 to 30 metre.

3.5.2 Climate

35. The district has a dry climate with large variation of temperatures and scanty rainfall. Hot wind blows in summer, sweeping away and creating new sand dunes. Winters are severe and sometimes touches freezing point. The average maximum temperature is 48°C and minimum up to 2°C and the mean temperature is 25°C. The normal annual rainfall in the district is 263.7 mm.

3.5.3 Water Resources

36. There are no hills, rivers or any stream of significance. Small ephemeral streams flow in the vicinity of Kolayat, Gajner and Gura. Natural inland depression which retains some water during the summer are located near Lunkaransar, Kolayat, Jamsar and Nal. Construction of wells in the western part has led to activation of the stable dune field to a large extent. The migrating sand is however threatening the canals and roads.

3.5.4 Mineral Resources

37. Almost entire district is devoid of rock outcrops except near Kolayat and at a few places in the south of Nokha and Dhulmera. The district is thus a vast sandy tract. All four tehsils except Kolayat, are covered with sand. Rocks locally known as 'Magra', are found in the parts of Kolayat tehsil. In the 'Magra' area various types of sand stone, clay and limestone are found at various depths. Fuller earth (Multani mitti), lignite, gypsum, while clay, yellow ochre and grit are important economic minerals. Gypsum bed upto 30 metre thick and of the best quality available in India is found in Jamser village in Bikaner tehsil.

3.5.5 Soil and Ecological Resources

38. Duny areas are light pale brown to brown, very deep, fine sand to loamy fine sand and devoid of any pedogenic manifestation except weak segregation of alkaline earth carbonates. In associated plains and interdunal areas occur light yellowish brown to brown, loamy fine sand, very weakly blocky, non-calcareous sub soil followed by a weak to moderately developed calcic/cambic horizon and are classified accordingly as calcids/cambids. The recorded forest area of the district is 208 sq.km. which is 0.76 % of the district's geographical area. The vegetation of Bikaner district falls under the broad natural division of the tropical forest but due to extremely low rainfall and extremes of temperature, there is high evaporation and loss of moisture converting the district into a typical arid tract. However, where the moisture accumulates to some extent during rains, a few scattered stunted trees are found.

3.5.6 Existing Industrial Status:

39. The Bikaner district has the following industries located:

- Registered Industrial unit: 12,396 nos.
- Registered Large/medium scale units: 6 nos.
- Estimated Avg. No. of Daily Worker Employed in MSME's: 50,292 Nos.
- Employment In Large and Medium Industries: 14 Nos
- Turnover of Small Scale Ind.: 18167 Lakhs
  Turnover of Medium and Large Scale Industries: 12379 Lakhs

3.6 Ajmer District

40. The district is located in the centre of the state between 25o38' and 26o58' North latitude and 73o54' and 75o22' East longitude, covering a geographical area of about 8481 sq. km. It is bounded on the north by Nagaur district, on the south by Bhilwara district, on the

east by Jaipur and Tonk districts and on the west by Pali district.

3.6.1 Physiography

41. The district is triangular in shape. It is generally a plain interspersed with low hills, which runs in the north-westerly direction in the upper part of Ajmer sub division. Beawar sub-division is an irregular terrain lying in the south west of the district and comprises of two detached blocks. This track is generally hilly. The Kekri sub division forms the south-eastern portion of the district, and is a level plain. The Kishangarh sub-division which is eastern portion of the district is sandy except for a few isolated patches. Aravalli range which divides the plains of Marwar from the high table-land of Mewar passes through the district and the highest elevation is about 870 metres above mean sea level.

3.6.2 Climate

42. The district has a hot dry summer and cold bracing winter. The winter extends from December to February, while the summer season extends from March to June followed by rainy season till mid of September. The temperature during the summer scales up to 45°C and goes down up to 2°C during winter. The normal annual rainfall is 527.3 mm.

3.6.3 Water Resources

43. There are five fivers which flow through the district viz. Banas, Khari, Sagarmati, Saraswati and Rupnagar. There are natural lakes viz. Pushkar and Budha Pushkar near Ajmer city. Among the important tanks in the district are foy sagar, phool sagar, bisala, ramsar, dilwar, jawaja etc.

3.6.4 Mineral Resources

44. Important minerals found in the district are mica, asbestos, vemiculite, soap stone, masonary stone and brickclay etc.

3.6.5 Soil, Ecological Resources

45. Soils of Ajmer district are reddish to yellowish red and yellowish brown color. These soils are sandy loam to sandy clay loam in texture and well drained. Fertility status of these soil is, low in Nitrogen, moderate in Phosphorus and Potassium. Cultivation of crops in the soil is very much restricted due to shallow nature of these soils and presence of stones on the surface. The recorded forest area of the district is 282 sq.km. which is 3.33% of the district's geographical area.

3.6.6 Existing Industrial Status

46. In Ajmer district 8 medium scale Industries and 17,663 small scale & cottage Industries were registered up to March, 2011. The total investment involved was Rs. 92,797.54 lakhs giving employment opportunities to about 87,420 persons. The main Industries of the district are based on textile, food products, leather and leather products, wood products, felspars and quartz grinding, marble, asbestos and cement.

3.7 Nagaur District

47. Nagaur district is located between latitude 26°25’ and 27°40’ North and longitude 73°10’ and 75°15’ East. Due to its central situation in Rajasthan, it shares its borders in North with –Bikaner & Churu, in South with- Ajmer & Pali, in East with- Sikar & Jaipur & in West with- Jodhpur district.

3.7.1 Physiography

48. The district has a geographical area of 17,718 sq.km, representing 5.18% of the total area of Rajasthan and ranks sixth among the districts of the State. The Aravali range of hills passes in eastern and south eastern part of the district. The average elevation of the hills in district is barely 310 meters.

3.7.2 Climate

49. Nagaur has a dry climate with a hot summer. Sand storms are common in summer. The district's climate is marked by extreme dryness, large variations of temperature & highly irregular rainfall patterns. The mean daily maximum temperature in May is 40.4°C and the mean daily minimum temperature is 25.7°C. Night temperatures in June are much higher than in May with mean daily minimum temperature of 27.9°C. During the summer month the maximum temperature sometimes exceeds 48°C. The humidity is highest in August with mean daily relative humidity is 80%. The annual maximum potential evapotranspiration in the district is quite high and it is highest (255.1 mm) in the month of May and lowest (76.5 mm) in the month of December.

3.7.3 Water Resources

50. There is no river which originated from the district however; the river Luni which rises near Pushkar in Ajmer district draining western slopes of the Aravalli crosses the district in the southern part flowing for about 37 km in the western direction. It is an ephemeral river and carries runoff that is generated in the upper reaches. Channel deposits of Luni facilitate percolation during rainstorm, thereby feeding the neighbouring wells along its bank. Other nalas and streams are also ephemeral in nature which originate and die out in the district itself. There is salt lake (Sambhar Lake) at south west of Didwana having an area of 777 hectare The Nawa tehsil also shares a part of well known Sambhar Lake in Jaipur district. There are eight (8) numbers of ponds in the district. Out of these 5 are in Degana and 3 in Parbatsar blocks.

3.7.4 Mineral Resources

51. Nagaur district is abound with variety of mineral resources, gypsum, Limestone and Marble are the most important mineral found in the district. Nagaur district is also an important salt producing area.

3.7.5 Soil and Ecological Resources

52. A big part of the district is covered by blown sand and sand dunes which form part of the great Thar district. Active dunes and sand shifting are main hazards to cultivation. Sand dunes are common in the north and western parts, where they arise over 30 meters and are aligned in a north west and south cast direction. Constant deterioration of soil and mining activity has resulted in soil erosion. The recorded forest area of the district is 121 sq.km. which is 0.68% of the district's geographical area.

3.7.6 Existing Industrial Status:

53. The Nagaur district has the following industries located:

- Registered Large and Medium Industries: 3 Nos
- Registered SSI Units: 8,162 Nos

- Investment in Small Scale Ind.: 14,390.54 (Rs. In Lacs).
- Employment in MSMEs: 40,901 Nos
- Employment in Large and Medium Industries: 581 Nos.

3.8 Barmer District

54. latitude and 70° 05'' and 72° 52' East longitude. It has geographical area of about 28387 sq. km. It is bounded on the north by Jaisalrner and Jodhpur distric on the south cast by Jalor district on the west by Tharparkar district of Pakistan on the east by Jodhpur. Administratively Barmer is a part of Jodhpur division and it is funher divided into 7 tehsils namely:- (I) Barmer, (2) Sheo, (3) Baytoo. (4) Gudha-Malani, (5) Pachpadra, (6) Siwana and (7) Chohtan. The district is divided into 8 panchayat samiities namely:- (I) Sheo. (2) Baytoo. (3) Barmer. (4) Balotra. (5) Chohtan, (6) Siwana. (7) Sindhari, (8) Dhorimanna.

3.8.1 Climate:

55. The characteristic features of the climate of the district are its dryness extremes of temperature and erratic rainfall. The year may be divided into four seasons, winter from November to March and summer from April to June monsoon from June to mid September and post monsoon from mid September to November. The normal annual rainfall is 277.5 mm. The minimum and maximum temperature of the district is below O°C and 49°C respectively. Even during monsoon the air is dry in between the fitful spell of rain.

3.8.2 Geology & Minerals:

56. The oldest rock found in the district is schist belonging to the Aravalli system. The sub arial character of lava is provided by the inclusion between the flows of bands of rolled pebbles of the lava itself and other crystalline rocks derived from the Aravalli range. The rhyolite of this area is pierced by dyke and bosses of granite (known as siwana granite) containing hornblende but no mica distinct from the Jalore granite. These granite form a considerable hill mass in the east of the district. The Saora range south of Siwana rising over 1.125 metre above sea level. The Rhyolite are also traversed by numerous bands of intrusive rock containing aegerine, augite sanidine and sodalite. sandstones and conglomerates with traces of fossil leaves occur at Barmer and are probably of Jurassic age. The sand also contains salt, which has been loosened by rain over the ages to collect in the Pachpadra depression.

57. The district is poor in metallic deposits, however important minerals produced in the district are Bentonite, Gypsum, SIliceous earth and Salt.

3.8.3 Physiography and oils:

58. Apart from small off-shoots of the Aravalli hills in the cast the area is a vast sand covered tract with sub-stratum of gneiss, hornblende and quartz which rises through the sand in some instances it may rises to a height of about 243 to 304 metre. In the extreme south and west the sandy plain is broken by sand- hills, called tibas' which sometimes rise to a height of 91 to 122 metre. The area is dry and forms a pan of Thar Desert. The highest-peak of the district is "Chappan-ka-Pahar" in Siwana tehsil which is about 973 metre above the sea level.

59. The only river of significance is the Luni which rises in the hill south-west of Ajmer city after flowing through Nagaur, Pali & Jodhpur district it enters in this district near village Rampura in Panchpadra tehsil and flows west ward.

60. Soils of the area occupy in large sandy plain with frequent hummocks and dunes.

The dominant soils of duny areas are light pale brown to brown, very deep, fine sand, very weakly blocky non- calcareous sub soil followed by a weak to moderately developed calcic/carnbic horizon and are classified accordingly as calcids/cambids great groups of aridisols order. At few places like Pachpadra, etc. salt playas are observed which have weakly salic horizons and are classified as salids great group of aridisols order.

3.9 Pali District

61. Pali is located between 24 45' and 26° 29' North latitude and 72° 47' and 74 18' East longitude, covering an area of about 12,387 sq.krn. Pali district is bounded by Jodhpur in north, Jalor in south west, Sirohi in the south, Udaipur & Rajsamand in the south east, Ajrner In north-east and Nagaur district In north. Administratively Pali district is a part of Jodhpur division. This district is divided into 7 tehsils namely:- (I) Jaiiaran, (2) Raipur, (3) Sojat, (4) Marwar Junction. (5) Bali. (6) Desun and (7) Pali. The district also divided into 10 panchayat sarmues namely (I) Jaitaran, (2) Raipur. (3) Rohat, (4) Sojat, (5) Pali. (6) Kharchi, (7) Rani, (8) Sumerpur, (9) Desuri, (10) Bali.

3.9.1 Climate:

62. The climate of the district is dry and has extremes of temperatures. It IS very hot during summer and very cold during winter. The district has registered the maximum temperature of 45°C and minimum of O°C. The average mean temperature is 22.5°C. January is coldest, while May and lune are the hottest months. Normal rainfall of the district IS 490.4 mm. The average number of rainy days are only 22 a year.

3.9.2 Geology & Minerals:

63. Geological formation of the district is represented by Igneous. Sedimerury and Meta-sedimentary rocks. The Deihl Super Group is represented by Ajabgarh group exposed near the eastern border of the district and consists of schist, phyllite. marble and basic-volcanic and they are intruded by granite and rhyollite, predominant among which is Erinpura granite, covering the south and the south-eastern pan of the district. The Jalor type granite is exposed south of the Pall town and is generally pink in colour. The Malani rhyolite (volcanic) covers only small areas restricted to the south-wet of Pali. Marwar Super Grup occurs in the northern part of the district and are represented by limestone, dolomite, sandstone and shale. Minerals of economic Importance found in the district are Calcite, Asbestos, Feldspar, Gypsum.

3.9.3 Physiology and Soil

64. The area of the district may be called sub rnountaneous and has undulated plains with scattered hills. The district is surrounded by Aravalli range on its south-east. The general slope of the district is from east to west. The texture of the soil is generally sandy loam. The lower level of the sand is made up of rock of calcium carbonate. There is no perennial river in the district. Four tributaries of river Luni viz. Sukhri, Lilri, Bandi and Jawai flow in district. There is no lake or natural spring in the district. Important dam constructed in the district is Jawai Dam in Bali tehsil. The soils of Pali, Desuri and Rani panchayat samities have good permeability and are therefore appropriate for agricultural purposes. On the other hand. the soils of Kharchi, Sojat and Rohat panchayat samities have lesser permeability and are saline in nature. The soils occunng In this area are dark greyish brown to brown medium textured and moderately sub-angular blocky with heavier subsurface and well developed subangular blocky structure underlained by a thick strata of lime coated concretionary zone. The occurence of calcic and/or cambic horizon permits them to classify as Carnbonhids/Calciorthids. Some patches of salinity is observed and they are classified as Salorthids.

3.10 Other Features

3.10.1 Households Details

65. Total Households in Rajasthan stands at 12,711,146 of which 9,494,903 (74.70%) households belong to rural area and 3,216,243 (25.30%) households belong to urban area. District Ajmer is having the highest percentage of urban households which is 40.64% of the total households and the highest rural households are in the district of Barmer which is 92.77% of total households. Details are given in **Table 3.6**.

Table 3.6: Details on Households

Name/Particulars	Total households	Total (Rural)	Total(Urban)	Percentage (Rural)	Percentage (Urban)
Rajasthan	12,711,146	9,494,903	3,216,243	74.70	25.30
Bikaner	384,944	244,971	139,973	63.64	36.36
Jodhpur	649,013	414,223	234,790	63.82	36.18
Jaisalmer	117,171	100,427	16,744	85.71	14.29
Nagaur	578,809	476,736	102,073	82.36	17.64
Ajmer	494,832	293,744	201,088	59.36	40.64
Barmer	451,629	418,990	32,639	92.77	7.23
Pali	418,157	329,510	88,647	78.80	21.20

Source: Census of India, 2011

3.10.2 Demography

66. Total Population in Rajasthan stands at 68,548,437 of which 51,500,352 (75.13%) population belongs to rural area and 17,048,085 (24.87%) population belongs to urban area. District Ajmer having the highest percentage of urban population which is 40.08% of the total population and the highest rural population is in district of Barmer which is 93.021% of total district population. Details are given in **table 3.7**.

Table 3.7: Details on Total Population

Name/Particulars	Total Population	Total (Rural)	Total (Urban)	Percentage (Rural)	Percentage (Urban)
Rajasthan	68,548,437	51,500,352	17,048,085	75.13	24.87
Bikaner	2,363,937	1,563,553	800,384	66.14	33.86
Jodhpur	3,687,165	2,422,551	1,264,614	65.70	34.30
Jaisalmer	669,919	580,894	89,025	86.71	13.29
Nagaur	3,307,743	2,670,539	637,204	80.74	19.26
Ajmer	2,583,052	1,547,642	1,035,410	59.92	40.08
Barmer	2,603,751	2,421,914	181,837	93.02	6.98
Pali	2,037,573	1,577,567	460,006	77.42	22.58

Source: Census of India, 2011

3.10.3 Male and Female Population

67. Total Population in Rajasthan stands at 68,548,437 of which male population stands at 35,550,997 (51.86%) and female population stands at 32,997,440 (48.14%). District Pali having the highest percentage of female population which is 49.67% of the total population and the highest male population is in the district of Jaisalmer which is 53.99% of total population. Details are given in **table 3.8.**

Table 3.8: Details on Male/ Female Population

Name/Particulars	Total Population	Total Male	Total Female	Percentage (Male)	Percentage (Female)	Sex Ratio
Rajasthan	68,548,437	35,550,997	32,997,440	51.86	48.14	928
Bikaner	2,363,937	1,240,801	1,123,136	52.49	47.51	905
Jodhpur	3,687,165	1,923,928	1,763,237	52.18	47.82	916
Jaisalmer	669,919	361,708	308,211	53.99	46.01	852
Nagaur	3,307,743	1,696,325	1,611,418	51.28	48.72	950
Ajmer	2,583,052	1,324,085	1,258,967	51.26	48.74	951
Barmer	2,603,751	1,369,022	1,234,729	52.58	47.42	902
Pali	2,037,573	1,025,422	1,012,151	50.33	49.67	987

Source: Census of India, 2011

3.10.4 Scheduled Caste (SC) and Scheduled Tribe (ST) Population

68. Total Population in Rajasthan stands at 68,548,437 of which Scheduled Caste (SC) population stands at 12,221,593 (17.83%) and Scheduled Tribe (ST) population stands at 92, 385, 34 (13.48%). District Pali having the highest percentage of ST population which is 19.54% of the total population and the highest number of SC population is in the district of Nagaur which is 21.16% of total population. Details are given in **table 3.9**. This is just the district profile about the scheduled caste and scheduled tribe population; however, the Project will not have any adverse impact on scheduled caste/scheduled tribe population.

Table 3.9: Details on Percentage SC/ST

Name/Particulars	Total Population	Total SC Population	Percentage of SC Population	Total ST Population	Percentage of ST Population
Rajasthan	68,548,437	12,221,593	17.83	9,238,534	13.48
Bikaner	2,363,937	493,646	20.88	7,779	0.33
Jodhpur	3,687,165	608,024	16.49	118,924	3.23
Jaisalmer	669,919	99,134	14.80	42,429	6.33
Nagaur	3,307,743	699,911	21.16	10418	0.31
Ajmer	2,583,052	478,027	18.51	63482	2.46
Barmer	2,603,751	501,522	19	436,414	16.76
Pali	2,037,573	297,434	15	398,096	19.54

Source: Census of India, 2011

3.10.5 Male and Female Population among the Scheduled Caste

69. Total SC Population in Rajasthan stands at 12,221,593 out of which male population of scheduled caste (SC) stands at 6,355,564 (52.00%) and female population of scheduled caste (SC) stands at 5,866,029 (48.00%). Nagaur district is having the highest percentage of SC female population at 48.51% and Jaisalmer district is having the highest SC male population at 53.24%. Details are given in **table 3.10.**

Table 3.10: Male and Female Population among SC

Name/Particulars	Total Population (SC)	Total Male (SC)	Total Female (SC)	Percentage SC (Male)	Percentage SC (Female)
Rajasthan	12,221,593	6,355,564	5,866,029	52.00	48.00
Bikaner	493,646	259,532	234,114	52.57	47.43
Jodhpur	608,024	315,199	292,825	51.84	48.16
Jaisalmer	99,134	52,776	46,358	53.24	46.76
Nagaur	699,911	360,451	339,460	51.49	48.51
Ajmer	478,027	243,750	234,277	51.00	49.00
Barmer	501,522	263,356	238,166	52.51	47.49

Name/Particulars	Total Population (SC)	Total Male (SC)	Total Female (SC)	Percentage SC (Male)	Percentage SC (Female)
Pali	297,434	156,606	140,828	52.65	47.35

Source: Census of India, 2011

3.10.6 Male and Female Population among the Scheduled Tribe

70. Total ST Population in Rajasthan stands at 9,238,534 of which male population of scheduled tribe (ST) stands at 4,742,943 (51.34%) and female population of ST stands at 4,495,591 (48.66%). Bikaner District is having the highest percentage of ST male population at 54.08% and Ajmer District is having the highest ST female population at 48.95%. Details are given in **table 3.11**.

71.

Table 3.11: Male and Female Population among ST

Name/Particulars	Total Population (ST)	Total Male (ST)	Total Female (ST)	Percentage ST (Male)	Percentage ST (Female)
Rajasthan	9,238,534	4,742,943	4,495,591	51.34	48.66
Bikaner	7,779	4,207	3,572	54.08	45.92
Jodhpur	118,924	61969	56955	52.11	47.89
Jaisalmer	42,429	22497	19932	53.02	46.98
Nagaur	10,418	5,475	4,943	52.55	47.45
Ajmer	63,482	32,408	31,074	51.05	48.95
Barmer	436,414	228,431	207,983	52.34	47.66
Pali	398,096	203,328	194,768	51.08	48.92

Source: Census of India, 2011

3.10.7 Literacy

72. Total Population in Rajasthan stands at 68,548,437 out of which total literate population stands at 38,275,282 (55.84%) and total Illiterate population stands at 30,273,155 (44.16%). District Ajmer having the highest percentage of literate population which is 59.10% of the total population and the highest number of Illiterate population is in the district of Jaisalmer which is 53.93% of total population. Details are given in **table 3.12**.

Table 3.12: Literate and Illiterate Population

Name/Particulars	Total Population	Total Literate	Percentage of Literate	Total illiterate	Percentage of illiterate
Rajasthan	68,548,437	38,275,282	55.84	30,273,155	44.16
Bikaner	2,363,937	1,278,801	54.10	1,085,136	45.90
Jodhpur	3,687,165	2,031,532	55.10	1,655,633	44.90
Jaisalmer	669,919	308,653	46.07	361,266	53.93
Nagaur	3,307,743	1,758,624	53.17	1,549,119	46.83
Ajmer	2,583,052	1,526,673	59.10	1,056,379	40.90
Barmer	2,603,751	176,257	6.77	1,188,322	45.64
Pali	2,037,573	144,578	7.10	1,085,693	53.28

Source: Census of India, 2011

3.10.8 Literacy among Male and Female

73. Total literate population in Rajasthan stands at 38,275,282 out of which total male literate population stands at 23,688,412 (61.89%) and Total female literate population stands at 14,586,870 (38.11%). District Jaisalmer is having the highest percentage of literate male population which is 68.71% of the total population and the highest literate female population is in the district of Pali which is 48.56% of total population. Details are given in **table 3.13**.

Table 3.13: Male and Female Literacy

Name/Particulars	Total Population (Literate)	Total Male(Literate)	Total Female(Literate)	Percentage (Male)	Percentage (Female)
Rajasthan	38,275,282	23,688,412	14,586,870	61.89	38.11
Bikaner	1,278,801	782,399	496,402	61.18	38.82
Jodhpur	2,031,532	1,265,753	765,779	62.31	37.69
Jaisalmer	308,653	210,415	98,238	68.17	31.83
Nagaur	1,758,624	1,102,750	655,874	62.71	37.29
Ajmer	1,526,673	926,268	600,405	60.67	39.33
Barmer	176,257	92,610	83,647	52.54	47.46
Pali	144,578	74,369	70,209	51.44	48.56

Source: Census of India, 2011

3.10.9 LIliteracy among Male and Female

74. Total illiterate Population in Rajasthan stands at 30,273,155 out of which total male illiterate population stands at 11,862,585 (39.19%) and total female illiterate population stands at 18,410,570 (60.81%). District Barmer is having the highest percentage of illiterate male population which is 65.93% of the total population and the highest illiterate female population is in the district of Ajmer which is 62.34% of total population. Details are given in **table 3.14**.

Table 3.14: Male and Female Illiteracy

Name/Particulars	Total Population (Illiterate)	Total Male(Illiterate)	Total Female(Illiterate)	Percentage (Male)	Percentage (Female)
Rajasthan	30,273,155	11,862,585	18,410,570	39.19	60.81
Bikaner	1,085,136	458,402	626,734	42.24	57.76
Jodhpur	1,655,633	658175	997458	39.75	60.25
Jaisalmer	361,266	151293	209973	41.88	58.12
Nagaur	1,549,119	593,575	955,544	38.32	61.68
Ajmer	1,056,379	397,817	658,562	37.66	62.34
Barmer	1,188,322	783,461	404,861	65.93	34.07
Pali	1,085,693	667,381	418,312	61.47	38.53

Source: Census of India, 2011

3.10.10 Total Workers (Male and Female)

75. Total population into work in Rajasthan stands at 29,886,255 of which total Male (work) population stands at 18,297,076 (61.22%) and total female (Work) population stands at 11,589,179 (38.78%). District Ajmer having the highest percentage of male (work) population which is 65.12% of the total population and the highest number of female (Work) is in the district of Pali which is 62.44% of total population. Details are given in **table 3.15.**

Table 3.15: Details on Workers

Name/Particulars	Total Population (Work)	Total Male (Work)	Total Female (Work)	Percentage (Male)	Percentage (Female)
Rajasthan	29,886,255	18,297,076	11,589,179	61.22	38.78
Bikaner	986,208	640,572	345,636	64.95	35.05
Jodhpur	1,489,741	965,103	524,638	64.78	35.22
Jaisalmer	288,903	182,565	106,338	63.19	36.81

Name/Particulars	Total Population (Work)	Total Male (Work)	Total Female (Work)	Percentage (Male)	Percentage (Female)
Nagaur	1,425,882	857,031	568,851	60.11	39.89
Ajmer	1,053,722	686,149	367,573	65.12	34.88
Barmer	1,415,429	585,561	829,868	41.37	58.63
Pali	158,101	59,379	98,722	37.56	62.44

Source: Census of India, 2011

3.10.11 Total Non-Workers (Male and Female)

76. Total Population Non-Work in Rajasthan stands at 38,662,182 of which total male (non-work) population stands at 17,253,921 (44.63%) and total female (non-Work) population stands at 21,408,261 (55.37%). District Pali having the highest percentage of male (non-work) population which is 81.91% of the total population and the highest female (non-Work) is in the district of Ajmer which is 58.29% of total population. Details are given in **table 3.16.**

Table 3.16: Details on Non Workers

Name/Particulars	Total Population (Non-Work)	Total Male (Non-Work)	Total Female (Non-Work)	Percentage (Male)	Percentage (Female)
Rajasthan	38,662,182	17,253,921	21,408,261	44.63	55.37
Bikaner	1,377,729	600,229	777,500	43.57	56.43
Jodhpur	2,197,424	958,825	1,238,599	43.63	56.37
Jaisalmer	381,016	179,143	201,873	47.02	52.98
Nagaur	1,881,861	839,294	1,042,567	44.60	55.40
Ajmer	1,529,330	637,936	891,394	41.71	58.29
Barmer	1,202,482	696,240	506,242	57.90	42.10
Pali	149,904	122,791	27,113	81.91	18.09

Source: Census of India, 2011

3.11 Impact on Indigenous Peoples

77. According to the Census of India 2001, 8.2 percent of the Indian population is classified as ST. In comparison to the national figure, Rajasthan has 12.6% percent of its state populations classified as ST. Major tribes of Rajasthan are (1) Bhil, Bhil Garasia, Dholi Bhil, Dungri Bhil, Dungri Garasia, Mewasi Bhil, Rawal Bhil, Tadvi Bhil, Bhagalia, Bhilala, Pawra, Vasava, Vasave, (2) 2. Bhil Mina, (3) Damor, Damaria, (4) Dhanka, Tadvi, Tetaria, Valvi, (5) 5. Garasia (Excluding Rajput Garasia.), (6) 6. Kathodi, Katkari, Dhor Kathodi, Dhor Katkari, Son Kathodi, Son Katkari, (7) Kokna, Kokni, Kukna, (8) Koli Dhor, Tokre Koli, Kolcha, Kolgha, (9) Mina, (10) Naikda, Nayaka, Cholivala Nayaka, Kapadia Nayaka, Mota Nayaka, Nana Nayaka, (11) Patelia and (12) Seharia, Sehria, Sahariya. As per the 2001 census, the Scheduled Tribe (ST) population of Rajasthan State is 7,097,706 constituting 8.4 percent of the total ST population of India. The Scheduled Tribes of the State constitute 12.6 percent of the total population (56,507,188) of the State. It holds 12th position among all States and UTs in respect of the percentage share of ST population to total population

78. The STs in Rajasthan are not self distinctive and geographically attached tribal groups with distinct languages. Since the constitutions identification of scheduled tribes, there has been continuous movement of populations and tribal communities have been a part of this historical process. Tribal and non-tribal communities have lived side-by-side leading to acculturation and assimilation to mainstream societies. Many STs no longer keep their traditions/cultures and individuals and groups of STs have settled amongst non-tribal populations. Potential impact on IPs of the Investment Program's Tranche 1 sub-projects was evaluated and was found that the Investment Program will not have any potential impacts on IPs. This is due to the fact the proposed transmission system which includes construction and augmentation of substations and construction of transmission lines will

mostly be situated in barren desert land and are away from the human habitat. Due diligence on the Tranche-2 subprojects have been carried out. No permanent land acquisition is required as the proposed substations are on government land and no physical displacement is foreseen. Temporary impacts are foreseen on crop damage during the implementation and construction of the project activities which will be compensated in cash during the time of implementation and prior to start of the construction. Also, due diligence on the impact on IP has been carried out in the project area which found that no IPs are to be impacted. In addition, the project alignment will be adjusted in order to avoid impacts to any lands owned or used by indigenous peoples.

4.0 INFORMATION DISCLOSURE, CONSULTATION AND PARTICIPATION

4.1 Consultaion

79. Consultations were carried out with various stakeholders during RP preparation and social due diligence. Consultations were carried out with various stakeholders during the due diligence and the consultations will continue throughout project implementation. Informal public consultations were carried during the month of August and September, 2016. The consultations were carried out by the survey team through focused group discussions (FGDs) along the transmission lines and near the substations. Public consultations were carried out at 46 locations and the number of participants was 452. Additionally, focused group discussions were also carried out with women group at four locations. In general people are supportive of the project and recognize that it will bring job opportunities to the area; improve roads and infrastructure and their living conditions. They raise genuine concern over the adequate compensation during construction and also people demanded that compensation needs to be paid for the degradation of land due to tower footings. However, people also aware that land compensation for tower footing land is subject the applicable laws and regulations which have not been enforced yet. Local people at Korna substation suggested for adequate mitigation to be followed during construction to protect the drinking water intake, grazing of animals in the locality etc. People advised that advance notice be given to harvest the standing crops before start of construction of transmission line and RRVPNL should avoid cropping season as in Rajasthan, people mostly depend on one time crop. Summary findings of consultaions and locations and number of consultations undertaken during the safeguards due diligence work are provided in Table 4.1 and Table 4.2 respectively. Details on the consultations including the list of participants are provided in **Annexure-4.1.**

Table 4.1: Summary Findings of Public Consultations

Issues Discussed	Responses and Suggestions from the Participants
General Perception and Support of local people for the Project	Generally, people are supportive about the projects; however, there are many concerns which are raised by the local people which need to be addressed by the RRVPNL. The major concern is the compensation. People think that Government project is required today for development but there is no such clear and people friendly policy related to the losses and its adequate compensation mechanism caused due to the transmission lines. People are generally aware about the projects, however, not specifically aware about the project design. People have conditional support at most of the places where there are sensitive issues like loss of crops, trees, and land etc is concerned. Where, the line passes through barren land, and then people don't have any objection. Some of the people also viewed the need of the Project as they face problems related to reliability of power supply for agricultural purpose. Where supply is not sufficient especially for tube well. Regular tripping during crops is a major problem. Therefore, construction of substations and transmission lines across the locality will improve in power supply.
Opinion about Construction of Transmission Lines	People viewed that proper planning need to be developed in order to avoid multiple lines by various users or developers at the same place. Lines shall be designed to avoid settlements. Construction of

Issues Discussed	Responses and Suggestions from the Participants
	transmission line shall avoid the crop season or else the damage will become severe. People think that high tension lines also degrades the land value, therefore, adequate compensation needs to be paid. Some people also viewed that transmission line has positive impact as far as the overall development is concerned; however, there is no direct benefit to the local people as such.
Critical issue and concern by the local people for the project during design, construction and operation stage	People are not much aware about the technical details and could not suggest any critical issues to the technical design. However, they suggest that the substation site at Korna needs proper mitigation measures to protect the area as the area is used for cattle grazing, drinking water ponds etc. They also suggested that towers shall be placed mostly on government land and if towers are placed on private land then the compensation should be considered as per permanent land loss. The villagers demanded that the transmission line should avoid passing over through or nearby any habituated area and fertile lands. Villagers were concerned about the safety issues related to transmission line. People also demanded for engaging local people during construction and operation phase. Villagers also demanded RRVPNL to avoid construction work during cropping season as the dust produced by construction may cause damage to crops.
Type and kind of compensation expected for the loss	Most of the people opted for monetary compensation for the losses. Proper compensation as per farmers demand as well as joint assessment shall be considered. People want compensation as per current local market rate. Some people also demanded land compensation for tower footings and right of way though it is not allowed under the current government regulation for transmission lines. People were made aware that all the compenstaion will be regulated by the applicable and existing laws and regulationPeople raised their concern about the government evaluation for crop compensation which seems to be lesser compared to the current market rate.
Type of Crops and number of seasons of Cultivation	It is mostly single crop to two crops in the project area. The types of crops are bajara, moong, moth, till, jeera, mustard, wheat, chilly and tomato.
Employment potential in the project	Current employment is mostly agricultural, labour and some employment through government schemes. People expect that the project will provide employment potential during construction and villagers showed interest in getting involved in small construction, transportation, providing security and storage of material, and providing labour at the time of construction.
Indigenous Peoples/Tribal People Ethnic Minorities	No indigenous people or tribal households are to be affected by the project as revealed during the public consultation.
Number of shops/commercial establishments and industrial units	During consultation, it was noticed that at small shops were present in the village and most of the big shops are located in the town area. The area is not industrial and

Issues Discussed	Responses and Suggestions from the Participants
	except very few PVC pipe factories and stone mining.
Land Use Pattern	Most of the land is agricultural and is not irrigated and mostly dependent on the rain for cultivation. Also, there is grazing land in the project area and barren land.
Irrigation Status	Almost all the villagers are dependent upon rain water for agriculture. Some villagers are having tube wells as source of Irrigation but the quality of ground water is not very good for irrigation or drinking proposed due to high salt contents in water.
Access to Forest Land	Usually, people do not have any access to forest land. There is no rich forest cover in nearby area except some bushes and small trees where people sometime collect firewood. However, at Gajner, people do have some access to the forest area for collection of firewood, however, none of the subprojects will impact adversely in forest area.
Electricity Supply	All the areas covered during consultation were getting power from the government. However, people viewed that reliability of power is a matter of concern. The average monthly expenditure on electricity per household for domestic use is INR 500.
Source of Drinking Water	The sources of drinking water are very limited in the area. Only few villages in the area are connected by piped drinking water supply from Indira Gandhi Canal. Maximum villages are getting water from own ground water sources or water coming from nearby villages for drinking and daily need at a common place in a village. Availability of water is often a problem during the summers and water quality is not good due to high salt contents in ground water.
Shortage of water	Shortage of water is one of the major concerns in the project affected villages. Villagers make their own water harvesting tanks for storage of rain water which can be utilized throughout the year. Some of these tanks are supported by government for Irrigation and other daily uses. During the consultaion near Chhattargarh, people opined that they need better watre supply than electricity.
Protected Areas	There are no protected areas within 10 km vicinity of sub-projects except a sanctuary at Gajner which is 4 kilometers away from the existing GSS.
Health status	General health status of villagers is good. There have been no chronic diseases or health disaster or outburst of any disease is reported in recent past. In most of the villages primary health centres are available. However, people usually travel towards nearby town to access medical services.
Educational status	Literacy rate in most of the villages are around 70-80%. A primary school is present in the village or nearby village. For middle level and high school, the villagers mostly go outside. Some villages reported of having a high school. Villagers have to go to nearby urban area for their higher education.
Perceived benefits from project	Most of the people believe that there will be no direct

Issues Discussed	Responses and Suggestions from the Participants
	benefit to the local people due to the project. However, some of the villages perceive that the project will result in provision of employment, small construction works, transportation works and development of basic infrastructure like roads, small commercial establishment.
Village Committee	In all the villages, the decisions are taken by Gram Panchayat and Gram Sabha held on critical and community related issues. All the Panchayat members and Sarpanch actively participate to take decisions on any community related issues. People also viewed that there are some NGOs active in the local area.
Other issues	Adequate compensation is major concern and also people demand for prior notification for construction activities and placing of towers on the agricultural field shall not be done without proper consent from the land owners and shall be compensated permanently. Similarly, the crop loss under right of way should also be adequately compensated without any interruption.

Table 4.2: Location and Number of Participants of Consultations

#	Name of the Village/Location	Number of Participant	Male	Female
A. PUBLIC CONSULTAIONS				
1	Korna	8	8	0
2	Lunawas Khara	13	13	0
3	Sar	8	8	0
4	Kharabera Purohitan	4	4	0
5	Sanwlta Kalla	17	12	5
6	Lolawas	17	17	0
7	Malkhasani	12	12	0
8	Garnia	7	7	0
9	Asarlai	10	10	0
10	Toonkara	12	11	1
11	Boontiwas	9	9	0
12	Roop Nagar Thorian	10	10	0
13	Dhandhaniya Bhayala	10	10	0
14	Bhandu Jati	17	17	0
15	Hapanada	8	8	0
16	Khirja	10	10	0
17	Bhungra	7	7	0
18	Chandsama	11	11	0
19	Unthvaliya	13	13	0
20	Biramdevra	11	9	2
21	Sointara	12	12	0
22	Guman Singh Pura	7	7	0
23	Abasar	7	7	0
24	Balar	12	12	0
25	Bhainsara	8	8	0
26	Sheo	8	7	1
27	Bisu Kala	6	5	1
28	Bhiyad	10	9	1
29	Undoo	21	20	1
30	Panchala Siddha	5	5	0
31	Isar Nawara	6	5	1

#	Name of the Village/Location	Number of Participant	Male	Female
32	Tapoo	10	10	0
33	Thob	6	6	0
34	Gajner	13	13	0
35	Motigarh	12	12	0
36	Chhattargarh	7	7	0
37	Shobhali	12	11	1
38	Lunkaransar	8	8	0
39	303 Head	5	5	0
40	Ajitman	6	6	0
41	Kitasar	15	15	0
42	Bana ka Bas	9	5	4
43	Jatipura	7	7	0
44	Nathurao	9	9	0
45	Guman	7	7	0
46	Sangarh	10	10	0
Total Particpants Public Consultaions			452 in 46 locations	
B. GENDER CONSULTAIONS (WOMEN GROUP)				
1	Biramdevra	14		
2	Roop Nagar Thorian	17		
3	Sanwlta Kalla	5		
Total Women Participants in Women FGD		42 women participants in 4 villages		

4.2 Disclosure

80. Broad impacts, mitigation measures and broad eligibility and entitlement were discussed among the people. Project information will further be disseminated by the project through the disclosure of resettlement planning documents. The summary of the RP including the entitlement matrix will be translated into the local language (Hindi) and will be disclosed to the APs; and made available at the local revenue offices and RRVPNL offices. A copy of the RP will also be disclosed on the RRVPNL's and ADB's websites.

4.3 Continued Consultaion and Particpation

81. The consultation process will be on going as necessary. The following public consultation measures are envisaged for the project:

- RRVPNL will disclose the construction schedule before the commencement of construction works to ensure that local villages are notified and informed of said activities.
- RRVPNL will inform the communities about progress made in the implementation of resettlement, social and environmental activities.
- RRVPNL will inform the APs on compensation and assistance to be paid for the temporary loss of crops and trees.
- All monitoring reports will be disclosed in the same manner as the RP.
- RRVPNL will disclose information and consult with APs at the project area, with the object of availing no objection from the community where the new sub stations are being proposed.
- Attempts will be made to ensure that vulnerable groups understand the process and that their specific needs are taken into account.

5.0 GRIEVANCE REDRESS MECHANISM

5.1 Need of the GRM and its Formation

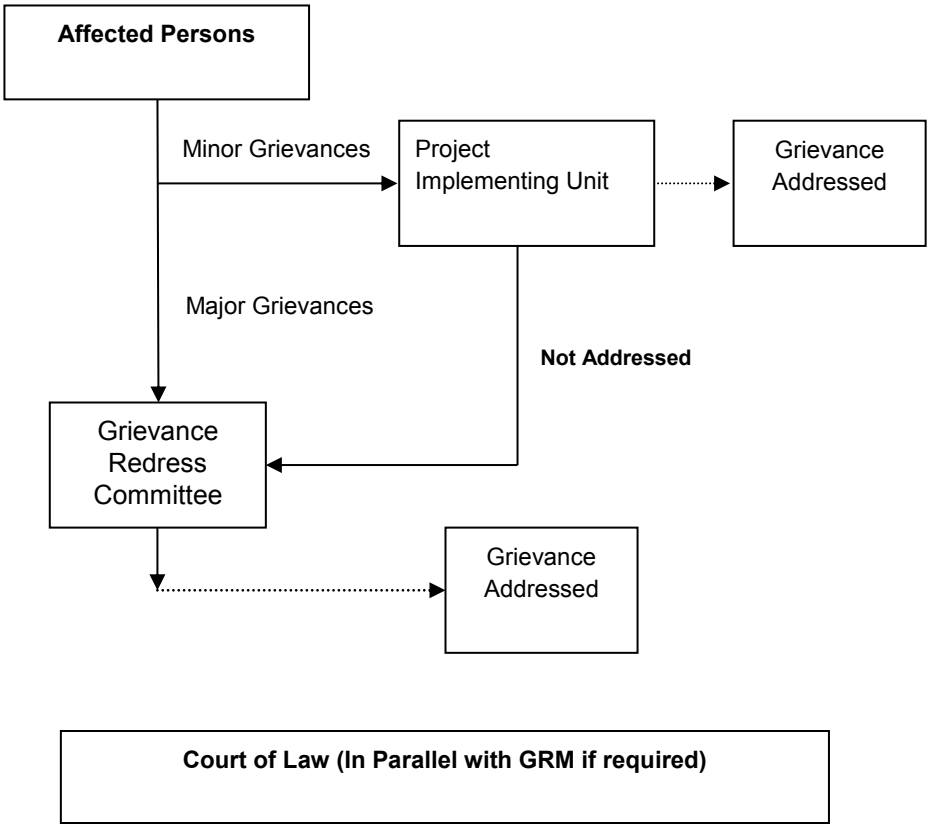
82. There is a need for an efficient grievance redress mechanism, which will assist the APs in resolving queries and complaints. RRVPNL does not have any specific Environment or Social Safeguards Policy currently. ADB procedures require RRVPNL to establish a Grievance Redressal Mechanism (GRM) having suitable grievance redress procedure for the project affected persons. Although, RRVPNL is currently implementing the tranche-1 subprojects having some experience in dealing with the grievance redress, however, RRVPNL will further establish and develop a mechanism to receive and facilitate the resolution of affected persons' concerns and grievances about economic displacement and other project impacts. The grievance redress mechanism will address affected persons' concerns and complaints promptly, using an understandable and transparent process that is gender responsive, culturally appropriate, and readily accessible to the affected persons at no costs and without retribution. A Grievance Redress Committee (GRC) will be formed to ensure APs grievances are addressed and facilitate timely project implementation. This GRM consists of a Grievance Redress Committee (GRC) headed by the Project head. The GRC will consist of various representative such as (I) Project Head / CE (ADB Projects), (ii) Sub District Magistrate or nominee of SDM, (iii) Land acquisition officer / Secretary RRVPNL, (iv) Head of Finance wing at the project level, (v) Representative of APs/local Panchayat/ NGO, (vi) Representative of contractor and Executive Engineer -Environment and Social Cell

83. This Grievance Redress Mechanism (GRM) would provide an effective approach for resolution of complaints and issues of the affected person/community. Project Management Unit (PMU) shall formulate procedures for implementing the GRM. The PIU shall undertake GRM's initiatives that include procedures of taking/recording complaints, handling of on-the-spot resolution of minor problems, taking care of complainants and provisions of responses to distressed stakeholders etc. paying particular attention to the impacts on vulnerable groups.

5.2 Process of GRM

84. Grievances of APs will first be brought to the attention of the Project head of the Project Implementing Unit. Grievances not redressed by the PIU will be brought to the Grievance Redress Committee set up to monitor project Implementation for each project area. The GRC will determine the merit of each grievance, and resolve grievances within three months of receiving the complaints. Additionally, the APs can access the country's legal system which can run parallel to accessing the GRM. The main responsibilities of the GRC are to: (i) provide support to APs on problems arising from land/property acquisition; (ii) record AP grievances, categorize, and prioritize grievances and resolve them; (iii) immediately inform the PMU of serious cases; and (iv) report to APs on developments regarding their grievances and decisions of the GRC and the PMU. Other than disputes relating to ownership rights under the court of law, GRC will review grievances involving all resettlement benefits, compensation, relocation, replacement cost and other assistance. The PIU will keep records of all grievances received including: contact details of complainant, date that the complaint was received, nature of grievance, agreed corrective actions and the date these were effected, and final outcome. The GRCs will continue to function during the life of the Project including the defects liability period. The GRC will be formed with the help of higher authority having authority to designate the representatives to the GRC. The Flow chart showing Grievance Redress Mechanism is presented **in Figure 5.1**.

Figure 5.1: Grievance Redress Mechanism



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6.0 POLICY AND LEGAL FRAMEWORK

6.1 Overview

85. Tranche-2 subprojects will not involve any private land acquisition by using eminent domain or enforcing the land acquisition act of the country. In India, compensation for land acquisition (LA) and resettlement assistance for project affected persons/families is directed by the National law The Right to Fair Compensation and Transparency in Land Acquisition, Rehabilitation and Resettlement Act, 2013 (hereafter RFCT in LARR, 2013), effective from 1 January 2014. However, RRVPNL will not enforce the land acquisition act as the land for the substations are government owned and incase of unavoidable situation in the future, RRVPNL will ensure that the land is procured through negotiated settlement. Therefore, the RP is based on ADB's SPS, 2009 as well as on the Borrower's relevant domestic policy instruments and laws and the Resettlement Framework prepared for the entire MFF. Being a transmission project, the relevant national laws applicable for this project are (i) The Electricity Act, 2003 and (ii) The Indian Telegraph Act, 1885.The compensation principles adopted for the project shall comply with applicable laws and regulations of the Government of India/ State Govt, as well as ADB's Safeguard Policy Statement (2009).

6.2 ADB's Safeguard Policy Statement, 2009 (SPS)

86. ADB has adopted Safeguard Policy Statement (SPS) in 2009 including safeguard requirements for environment, involuntary resettlement and indigenous people. The objectives of the Involuntary Resettlement Safeguard policy is 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.

87. The involuntary resettlement safeguards covers physical displacement (relocation, loss of residential land, or loss of shelter) and 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. It covers them whether such losses and involuntary restrictions are full or partial, permanent or temporary. The main policy principles of the Involuntary Resettlement Safeguard are:

(i) Screen the project early on to identify past, present, and future involuntary resettlement impacts and risks. Determine the scope of resettlement planning through a survey and/or census of displaced persons, including a gender analysis, specifically related to resettlement impacts and risks.

(ii) 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 and 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.

(iii) 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 value for land when the loss of land does not undermine livelihoods, (ii) prompt replacement of assets with access to assets of equal or higher value, (iii) prompt compensation at full replacement cost for assets that cannot be restored, and (iv) additional revenues and services through benefit sharing schemes where possible.

(iv) 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.

(v) 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.

(vi) 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.

(vii) 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.

(viii) 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.

(ix) Disclose a draft resettlement plan, 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.

(x) 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.

(xi) Pay compensation and provide other resettlement entitlements before physical or economic displacement. Implement the resettlement plan under close supervision throughout project implementation.

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

6.3 Satutory Requirements[10]

88. As per the statutory requirements (IS-5613, Part 3, 1989) all the trees and bushes, including saplings coming in the ROW limit i.e. clearance belt of transmission lines must be cut and removed. The provisions of the Electricity Act, 2003 and Indian Telegraph Act, 1885 regarding paying compensation for laying of transmission line are as follows:

6.3.1 The Electricity Act, 2003, Part-VIII, Section 67 & 68

Section 67 (3-5):

(3) A licensee shall, in exercise of any of the powers conferred by or under this section and the rules made there under, cause as little damage, detriment and inconvenience as may be, and shall make full compensation for any damage, detriment or inconvenience caused by him or by any one employed by him.

(4) Where any difference or dispute [including amount of compensation under sub-section (3)] arises under this section, the matter shall be determined by the Appropriate Commission.

(5) The Appropriate Commission, while determining any difference or dispute arising under this section in addition to any compensation under sub-section (3), may impose a penalty not exceeding the amount of compensation payable under that sub-section.

Section 68 (5 & 6):

(5) Where any tree standing or lying near an overhead line or where any structure or other object which has been placed or has fallen near an overhead line subsequent to the placing of such line, interrupts or interferes with, or is likely to interrupt or interfere with, the conveyance or transmission of electricity or the 36 to interrupt or interfere with, the conveyance or transmission of electricity or the accessibility of any works, an Executive Magistrate or authority specified by the Appropriate Government may, on the application of the licensee, cause the tree, structure or object to be removed or otherwise dealt with as he or it thinks fit.

(6) When disposing of an application under sub-section (5), an Executive Magistrate or authority specified under that sub-section shall, in the case of any tree in existence

[10] Ministry of Power (MoP) vide its order No. 3/7/2015-Trans dated 15th April'15 constituted a Committee comprising of representatives of various State Govt., MoP, Central Electricity Authority (CEA) & POWERGRID under the chairmanship of Special Secretary, MoP to analyze the issues relating to Right of Way for laying of transmission lines in the country and to suggest a uniform methodology for payment of compensation on this account. Based on recommendation of the Committee, Ministry of Power, Govt. of India vide its notification dated 15th Oct'15 has issued guidelines for payment of compensation for damages in regard to RoW. The said compensation is payable to all affected farmers/land owners in addition to normal tree and crop damage compensation once it is adopted by respective states. Thus, compensations are made for following:

i) Tower base: Compensation @ 85% of land value as determined by DM or any other authority based on Circle rate/ Guideline value/ Stamp Act for tower base area (between four legs).
ii) Line corridor: Diminution of land value in the RoW would be decided by States as per categorization/type of land in different places of State subject to maximum of 15% of land value as determined based on Circle rate/ Guideline value/ Stamp Act.

Once the MoP guidelines are adopted by State of Rajasthan compensation shall be paid as per the norms of said guidelines. This (MoP Guidelines) is strictly subject to adoption and endorsement for acceptance of the MoP Guidelines by the government of Rajathan. This has not been adopted by Government of Rajasthan till date and hence, RRVPNL has not implemented it yet.

before the placing of the overhead line, award to the person interested in the tree such compensation as he thinks reasonable, and such person may recover the same from the licensee.

89. RRVPNL is covered under section 164 of electricity Act thereby empowered to use powers of the Indian Telegraph Act, 1885 for placing of towers /lines. The provisions of the Telegraph Act for compensation are as follows:

6.3.2 The Indian Telegraph Act, 1885, Part-III, Section 10:

10. Power for telegraph authority to place and maintain telegraph lines and posts – *The telegraph authority may, from time to time, place and maintain a telegraph line under, over, along, or across, and posts in or upon any immovable property: Provided that –*

a) *the telegraph authority shall not exercise the powers conferred by this section except for the purposes of a telegraph established or maintained by the [Central Government], or to be so established or maintained;*
b) *the [Central Government] shall not acquire any right other than that of user only in the property under, over, along, across in or upon which the telegraph authority places any telegraph line or post; and*
c) *except as hereinafter provided, the telegraph authority shall not exercise those powers in respect of any property vested in or under the control or management of any local authority, without the permission of that authority; and*
d) *in the exercise of the powers conferred by this section, the telegraph authority shall do as little damage as possible, and, when it has exercised those powers in respect of any property other than that referred to in clause (c), shall pay full compensation to all persons interested for any damage sustained by them by reason of the exercise of those powers.*

Section 16 of the Indian Telegraph Act'1885 which stipulates as under:

16. Exercise of powers conferred by section 10, and disputes as to compensation, in case of property other than that of a local authority:

(1) If the exercise of the powers mentioned in Section 10 in respect of property referred to in clause (d) of that section is resisted or obstructed, the District Magistrate may, in his discretion, order that the telegraph authority shall be permitted to exercise them.
(2) If, after the making of an order under sub section (1), any person resists the exercise of those powers, or, having control over the property, does not give all facilities for this being exercised, he shall be deemed to have committed an offence under section 188 of the Indian Penal Code (45 of 1860).

90. In exercise of the powers vested with RRVPNL under Indian telegraph Act'1885, part 3, section 10 to 19 conferred under section 164 of the Electricity Act 2003 has the authority to place and maintain transmission lines under over along or across and posts in or upon, any immoveable property. As per the provisions of Indian Telegraph Act1885 Part III Section 10 (b) which prohibits acquisition of any rights other than that of use only, land for tower and right of way is not acquired and agricultural activities are allowed to continue. However, as per clause 10 (d) of same act stipulates that the user agency shall pay full compensation to all interested for any damages sustained during the execution of said work. Accordingly, RRVPNL pays compensation to land owners towards damages.

6.4 Core Principles

91. Based on the above analysis of applicable legal and policy frameworks of government and in consistent with ADB's policy requirements, broad resettlement principle for the project shall be the following:

- Involuntary resettlement would be avoided wherever possible or minimized as much as possible by exploring project and design alternatives. Where negative impacts cannot be avoided, assist affected persons (AP), in improving or at least regaining their standard of living and income.
- Carry out meaningful consultations with affected persons and inform all displaced persons of their entitlements and resettlement options. Ensure their participation in planning, implementation and monitoring of the Project
- Particular attention will be paid to the needs of vulnerable groups, especially those below the poverty line, the landless, the women headed households, and Indigenous Peoples (IP), and those without legal title to land, and ensure their participation in consultations.
- An effective grievance redress mechanism will be established to receive and facilitate resolution of the affected persons' concerns. The social and cultural institutions of displaced persons and their host population will be supported through proper planning. Where involuntary resettlement impacts and risks are highly complex and sensitive, compensation and resettlement decisions should be preceded by a social preparation phase.
- A resettlement plan will be prepared elaborating on displaced persons' entitlements, the income and livelihood restoration strategy, institutional arrangements, monitoring and reporting framework, budget, and time-bound implementation schedule.
- The draft resettlement plan, including documentation of the consultation process will be disclosed in a timely manner, before project appraisal, in an accessible place and in a form and language(s) understandable to affected persons and other stakeholders. The final resettlement plan and its updates will also be disclosed to affected persons and other stakeholders.
- All common property resources (CPR) lost due to the project will be replaced or compensated by the project. .
- Provide compensation for acquired assets at replacement/market value in accordance with the RP.
- 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.
- Provide resettlement assistance and income restoration to APs in case of permanent land acquisition.
- Provide for APs not present during enumeration. However, anyone moving into the project area after will not be entitled to assistance.
- Develop procedures in a transparent, consistent, and equitable manner if land acquisition is through negotiated settlement where applicable to ensure that those people who enter into negotiated settlements will maintain the same or better income and livelihood status.
- Provide compensation and resettlement assistance prior to taking possession of the acquired lands and properties in case of permanent land acquistion. However, payment for loss of crops and trees for the transmission line can go simltaneosly with the construction activities. A particular sttretch of line can be made ready by paying the compensation for loss of crops/trees etc prior/during construction.

- Establish grievance redress mechanisms to ensure speedy resolution of disputes.
- Ensure adequate budgetary support to cover implementation costs for RP.
- Monitoring of the implementation of RP.

92. Additionally, the issues related to the Right of Way (RoW) for the transmission lines will be dealt with proper care especially for the temporary loss. For the loss of crops and trees due to construction of overhead lines, cash compensation payable by cheque will be provided during construction works. RRVPNL will provide cash compensation (by cheque) to the APs for the temporary loss of crop and loss of trees if occurred, during the time of maintenance and repair.

93. The project will recognize three types of displaced persons like (i) persons with formal legal rights to land lost in its entirety or in part; (ii) persons who lost the land they occupy in its entirety or in part who have no formal legal rights to such land, but who have claims to such lands that are recognized or recognizable under national laws; and (iii) persons who lost the land they occupy in its entirety or in part who have neither formal legal rights nor recognized or recognizable claims to such land[11]. The involuntary resettlement requirements apply to all three types of displaced persons.

Cut-off- Date

94. The impacts are temporary in nature in terms of loss of crops etc., which will occur during the construction. The compensation will be paid parallely with construction activities of transmission lines as per assessment of actual damage. A prior notice is served after the detailed survey and finalization of tower location during the construction to the land owners informing that the proposed transmission line is being routed through the property of the individual. The notice shall contain the particulars of the land, ownership details and the details of the trees/crops inevitability likely to be damaged during the course of the construction of the proposed transmission line and acknowledgement received from land owner. This serves as a record for identifying the actual APs and the date of issuance of this notice can be treated as cut-off-date for identification and assessment of damages.

[11] Such cases (APs having neither formal or nor recognized or recognizable claims having permanent and temporary impact) shall only be entertained for compensation for non-land assets due to loss of land, crops, properties etc. provided it is certified by district revenue authority

7.0 ENTITLEMENTS, ASSITANCE AND BENEFITS

95. Compensation for the lost assets to all affected persons (APs) will be paid on the basis of replacement value. Resettlement assistance for lost income will be provided. It is assessed during the social due diligence that the tranche-2 subprojects will not cause any severe impacts in terms of permanent land acquisition and physical displacement. Impacts are limited to loss of trees and crops. An Entitlement Matrix is given in **Table-7.1** which recognizes various types of losses resulting out of the project and specific compensation and assistance.

Table 7.1: Entitlement Matrix

Type of Losses	Definition of APs	Entitlement	Details
Government land and Property			
Government Property (Loss of Land)	Relevant Government Department	• Departmental land transfer	• Compensation for required land as per the provision of GoR • Transfer of land through inter government department • Payment of land value by RRVPNL to the concerned government and departmental transfer of ownership.
Trees and Crops			
Loss of Trees	Land holders Share- croppers Lease holders	• Compensation at Market value to be computed with assistance of horticulture department	• Advance notice to APs to harvest fruits and remove trees • For fruit bearing trees compensation at average fruit production for next productive years to be computed at current market value • For timber trees compensation at market cost based on type of trees
Loss of Crops	Land holders Share- croppers Lease holders	• Compensation at Market value to be computed with assistance of agriculture department	• Advance notice to APs to harvest crops • In case of standing crops, cash compensation at current market cost to be calculated of mature crops based on average production.
Temporary Loss			
Temporary loss of land and temporary damage on loss of crops during construction	• All APs losing land and crops on temporary basis during the construction period of the lines • Farming households • Sharecroppers • Tenants • non-titled households[12]	• Notice to harvest standing crops • Compensation at market value for one season • Restoration	• Provision of rent for period of occupation for legal titleholders. • Compensation for assets lost at replacement value. • Restoration of land to previous or better quality • Additionally, Cash Compensation will be paid for the temporary damage of crop under the RoW during the maintenance and repair after the construction. In case there is a need for repair or maintenance of the transmission lines in the future, the project authorities would consult with

[12] Subject to verification from district revenue authority

Type of Losses	Definition of APs	Entitlement	Details
			land owners land owners for access to the land for maintenance and repairs, when necessary, and that the land owners would continue to use the land for farming activities.
Vulnerable Households			
Impacts on vulnerable [13]APs	All impacts	• Vulnerable APs	• Additional assistance based on three months of minimum wage • Vulnerable households will be given priority in project construction employment.
Unanticipated Impacts			
Other Impacts Not Identified	Affected households or individuals	• Compensation and assistance	• Unforeseen impacts will be documented and mitigated based on the principles agreed upon in the resettlement framework

[13] women-headed households, scheduled tribe households, below poverty line households, and households headed by physically handicapped or disabled persons. This definition follows that in the Resettlement Framdwork for the MFF.

8.0 RELOCATION AND INCOME RESTORATION

96. The subproject will not require physical displacement. Impacts are limited to the temporary loss / damage to crops during the construction phase of development for which adequate compensation will be provided as per the entitlement matrix which will be as per the current market value. Additionally, vulnerable households will be paid an additional assistance equivalent to three months of minimum wage. RRVPNL will ensure that advance notice is issued to the APs prior to the start of construction works and that compensation is also completed before then. In case of future maintenance work, RRVPNL will pay APs for loss of crop due to work activities. Should construction activities result in unavoidable livelihood disruption, compensation for lost income for the period of disruption will be provided. Vulnerable APs will be given priority in project construction employment. Compensation and assistance to affected persons must be made prior to the possession of land/assets and prior to the award of civil works contracts.

9.0 RESETTLEMENT BUDGET AND FINANCING PLAN

97. The resettlement cost estimate for this subproject includes eligible compensation, resettlement assistance and support cost for RP implementation. These are part of the overall project cost. This is a tentative budget which may change during the original course of implementation. The unit cost for the loss of crop has been derived from the through rapid field appraisal, consultation with affected households, consultation with relevant government authorities especially RRVPNL and its old practice. Contingency provision equivalent to 10% of the total cost has also been made to accommodate any variations from this estimate. The components of the resettlement cost include various features such as, compensation for crops and other support cost which includes cost for implementation of RP and monitoring of RP implementation. The support cost also includes cost for conducting future consultations and cost for grievance redressal. The total resettlement cost for the Tranche 2 subproject is estimated to be INR 189.38 million (equivalent to USD 2.91 million). The costs will be considered as an integral component of sub-project costs. RRVPNL will make the funds available in its annual budget for the disbursement of compensation and assistance. Detail cost estimate is given in **Table 9-1**.

Table 9.1: Indicative Resettlement Cost

Item	Unit Cost (INR)	Quantity	Amount (INR)
A. Compensation			
Loss of crop and trees in RoW (per kilometer/lump sum)	200,000	846	169,200,000
Sub Total- A			**169,200,000**
B: Resettlement Support Cost			
Social and Resettlement Specialist (person month)	80,000	12	960,000
Administrative Cost	lump sum		1,000,000
Monitoring Cost	lump sum		1,000,000
Sub Total- B			**2,960,000**
Total			**172,160,000**
Contingency (10%)			**17,216,000**
Grand Total (INR)			**189,376,000**
Grand Total (Million INR)			**189.38**
Grand Total (Million USD)			**2.91**

10.0 INSTITUTIONAL ARRANGEMENTS

98. The RRVPNL will be the Executing Agency (EA) as well as the Implementing Agency (IA) for the project. RRVPNL will constitute a Project Management Unit (PMU) for implementing the ADB loan at the corporate level which is Jaipur and Project Implementing Units (PIUs) at the sub-project level which is Jodhpur in this case for tranche-1 component. The PMU shall be headed by the Chief Engineer (T&C) and the Superintending Engineer (Planning) shall be responsible for coordinating all external functions with ADB. GOI, DEA, GOR as well as the internal functions such as Environment and Social/R&R reporting, Legal, Finance and Accounts, Field Project offices, Procurement and Contracts etc. and other functions from within RRVPNL. One Environment and Social Officer (ESO) shall be designated and headed by one Executive Engineer who shall be designated for monitoring ADB funded projects in areas such as Environment, R&R and Social safeguards. To assist ESO in these specialist functions, RRVPNL may hire appropriate consultants for monitoring purposes.

99. Under PMU, there will be Project Implementation Units (PIUs) which will assume primary responsibility for the planning, preparation and implementation of RPs. The Project Head will be assisted by the PMU's Environmental and Social Officer (ESO) for social and environmental designing, implementation and monitoring. Project Implementation Unit (PIU) will assume primary responsibility for the safeguards assessment on the site as well as implementation of RPs for their respective components in consultation with ESO. Keeping in view the minimal capacity of RRVPNL, it is proposed that the ESO must coordinate with each project divisions (PIU along with other engineering units) to address environmental and social issues.

100. The duties of the ESO will include at a minimum: (i) oversight of PIU for implementing the RPs with timely payment of compensation and assistance to the APs (ii) liaising with the PIU and seeking their help to solve any grievance and related issues of project implementation; and (iii) preparation of monitoring reports every 6 months (as required by ADB).

101. RRVPNL will do the overall coordination, preparation, planning, implementation, and financing of all activities for the tranche-2. Additional third-party services may be employed by the RRVPNL as necessary. RRVPNL through its PMU will ensure that key institutions including local governments are involved in RP preparation, updation and implementation. Further details on agencies responsible for RP activities are in **Table 10.1** and the proposed institutional structure is shown in **Figure 10.1.**

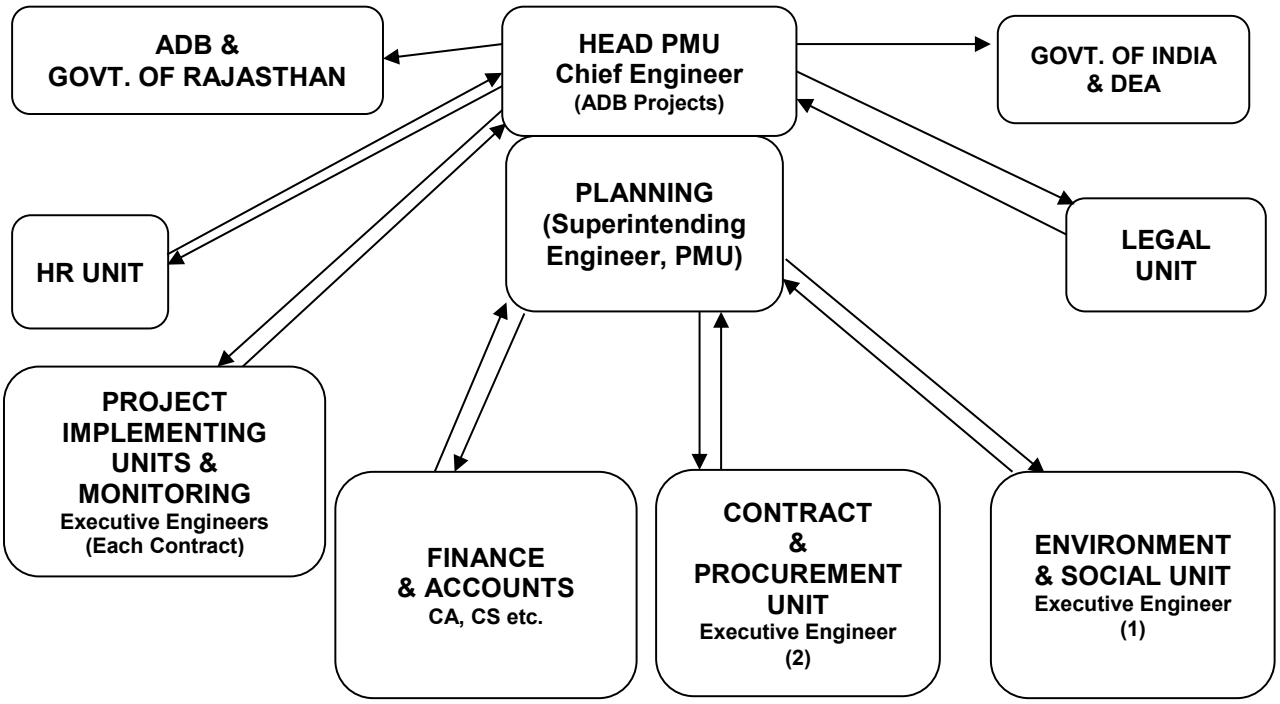
Table 5.1: Institutional Roles and Responsibilities for Resettlement activities

Activity	Responsible Agency
Sub-project Initiation Stage	
Establishing PMU/PIU	EA (RRVPNL)
Establishing ESC in PMU	EA (RRVPNL)
Designating safeguard Specialist in PMU/ESC	EA (RRVPNL)
Finalization of sites for sub-projects	EA (RRVPNL)/PMU/PIU
Disclosure of proposed land acquisition and sub-project details by issuing Public Notice	EA (RRVPNL)/PMU/PIU
Meetings at community/household level with APs	PMU/PIU
RP Preparation and Updating Stage	
Conducting Census of all APs	PMU/PIU/ESO
Conducting consultation/FGDs/meetings	PMU/PIU/ESO

Activity	Responsible Agency
Computation of replacement values of land/properties	PMU/PIU/ESO/Relevant Authority
Finalizing compensation packages and entitlements	PMU/PIU/ESO/ Relevant Authority
Disclosure of final entitlements and rehabilitation packages	PMU/PIU/ESO
Approval of RP	EA/ADB
Sale deed execution and payment	EA/PMU/PIU/LAO/Appropriate Government Department
Taking possession of land	EA/PMU
RP Implementation Stage	
Sale deed execution and payment	EA/PMU/PIU/Appropriate Government Department
Taking possession of land	EA/PMU/PIU
Implementation of proposed rehabilitation measures	PMU/PIU/ESO
Consultations with APs during rehabilitation activities	PMU/PIU/ESO
Grievances redress	PMU/PIU/GRC
Monitoring	PMU/ PIU/ESC

ADB-Asian Development Bank, AP-affected person, EA-Executing Agency, ESC- Environment Social Cell, FGD-focus group discussion, GRC-Grievance Redress Committee, , PIU- Project Implementation Unit, PMU- Project Management Unit, RP-Resettlement Plan and RRVPNL-Rajasthan Vidyut Prasaran Nigan Limited,

Figure 10.1: PMU Structure



11.0 IMPLEMENTAION SCHEDULE

102. All land acquisition (government land in this case for substation), resettlement, and compensation (temporary impacts on crops) will be completed before the start of civil works. All land required will be provided free of encumbrances to the contractor prior to handing over of project sites and the start of civil works. However, public consultation and monitoring will be continued in an intermittent basis as needed during the entire duration of the project. For the construction of transmission line, a phase wise approach can be adopted for payment of compensation and assistance due to the loss of crops and trees. RRVPNL will ensure that compensation is being paid simultaneously during the construction of transmission for the stretch which is ready for construction. Therefore, all compensation and assistance will be completed preferably prior to the start of civil work activities at each specific stretch or simultaneously during construction. A tentative implementation schedule is given in **Table 11.1**.

Table 11.1: Implementation Schedule

Subproject R&R Component/Activities	Month											
	1	2	3	4	5	6	7	8	9	10	11	12-33
Identification of sub project and notification	★											
Community Consultation	★	★	★	★	★	★	★	★	★	★	★	★
Field Survey				★	★							
Submission of RP for ADB Approval						★						
Disclosure of RP							★					
Compensation of APs								★	★	★	★	★
Payment of all eligible assistance								★	★	★	★	★
Monitoring by PMU and PIU						★	★	★	★	★	★	★
Grievance Redress						★	★	★	★	★	★	★
Civil Work												★

12.0 MONITORING AND REPORTING

103. Monitoring will be the responsibility of the EA (RRVPNL). The implementation of RP will be closely monitored. Regular monitoring activities will be carried out internally by PMU/ PIU/ESC. Resettlement plan implementation will be closely monitored by the EA through its PMU and PIU to provide ADB with an effective basis for assessing resettlement progress and identifying potential difficulties and problems. The extent of monitoring activities, including their scope and periodicity, will be commensurate with the project's risks and impacts. Monitoring will involve (i) administrative monitoring to ensure that implementation is on schedule and problems are dealt with on a timely basis; (ii) socio-economic monitoring during and after any resettlement impact utilizing baseline information established through the socio-economic survey undertaken during project sub-preparation; and (iii) overall monitoring to assess status of affected persons. The EA (RRVPNL) is required to implement safeguard measures and relevant safeguard plans, as provided in the legal agreements, and to submit semiannual monitoring reports on their implementation performance. RRVPNL will (i) monitor the progress of implementation of safeguard plans, (ii) verify the compliance with safeguard measures and their progress toward intended outcomes, (iii) document and disclose monitoring results and identify necessary corrective and preventive actions in the periodic monitoring reports, (iv) follow up on these actions to ensure progress toward the desired outcomes, and (v) submit semiannual monitoring reports on safeguard measures as agreed with ADB.

104. Monitoring will include daily planning, implementation, feedback and trouble shooting, individual affected person file maintenance, community relationships, dates for consultations, number of appeals placed and progress reports. RRVPNL through its PMU will be responsible for managing and maintaining affected person databases, documenting the results of the affected person census. Semiannual monitoring reports documenting progress on resettlement implementation and resettlement plan completion reports will be provided by RRVPNL through its PMU to ADB for review. A sample monitoring checklist is given in **Annexure-12.1** which may further be modified as per the need of the project.

ANNEXURE 2.1: INVENTORY OF MAJOR LINES AND LIST OF VILLAGES

A. 765 KV D/C KORNA- AJMER LINE

#	Name of the Transmission Line	Approximate Distance (in kilometers) for sampling of 1 kilometer of Survey	Approximate Distance of transmission line from nearby village (Kilometer)	Number of Villages	Names of Villages	Name of Tehsil	Name of District	Ownership of land (Private /Government, Forest)	Use of Land	Name of Crops	Number of Trees within RoW	Types of Trees	Name of Trees	Affected House/Building/Structure	Is it a Tribal Area
1	765 KV D/C Korna- Ajmer Line	0-7	4 Kilometer	3	Shivnagari, Paralia D Hamat, Korna	Baltora	Barmer	Private	Cultivation	Bajara, Gawar, Moong, Moth	11	Non-Fruit/Timber	Khejadi, Jaal, Babool, Neem	Nil	No
2	765 KV D/C Korna- Ajmer Line	7-14	4 Kilometer	3	Prihorin Ki Dhani, Chichrali, Purkhawas	Baltora	Barmer	Private	Cultivation	Bajara, Gawar, Moong, Moth	9	Non-Fruit/Timber	Khejadi, Jaal, Babool, Neem	Nil	No
3	765 KV D/C Korna- Ajmer Line	14-21	4 Kilometer	3	Khatawas, Vishnu Ki Dhani, Lunawas Khara	Luni	Jodhpur	Private	Cultivation	Bajara, Gawar, Moong, Moth	5	Non-Fruit/Timber	Khejadi, Jaal, Babool, Neem	Nil	No
4	765 KV D/C Korna- Ajmer Line	21-28	4 Kilometer	3	Badliya, Rohila Bhandu, Khudala,	Luni	Jodhpur	Private	Cultivation	Bajara, Gawar, Moong, Moth	7	Non-Fruit/Timber	Khejadi, Jaal, Babool, Neem	Nil	No
5	765 KV D/C Korna- Ajmer Line	28-35	4 Kilometer	2	Bandu Kalla, Bhandu Khurd,	Luni	Jodhpur	Private	Cultivation	Bajara, Gawar, Moong, Moth	10	Non-Fruit/Timber	Khejadi, Jaal, Babool, Neem	Nil	No
6	765 KV D/C Korna- Ajmer Line	35-42	4 Kilometer	2	Basani Jhuta,Sanwaron Ki Dhani,	Luni	Jodhpur	Private	Cultivation	Bajara, Gawar, Moong, Moth	11	Non-Fruit/Timber	Khejadi, Jaal, Babool, Neem	Nil	No
7	765 KV D/C Korna- Ajmer Line	42-49	4 Kilometer	3	Kankani, Sarensa, Sar	Luni	Jodhpur	Private	Cultivation	Bajara, Gawar, Moong, Moth,	5	Non-Fruit/Timber	Khejadi, Jaal, Babool, Neem	Nil	No

#	Name of the Transmission Line	Approximate Distance (in kilometers) for sampling of 1 kilometer of Survey	Approximate Distance of transmission line from nearby village (Kilometer)	Number of Villages	Names of Villages	Name of Tehsil	Name of District	Ownership of land (Private /Government, Forest)	Use of Land	Name of Crops	Number of Trees within RoW	Types of Trees	Name of Trees	Affected House/Building/Structure	Is it a Tribal Area
										Till					
8	765 KV D/C Korna- Ajmer Line	49-56	3 Kilometer	2	Nimbali Pate, Shikarpura,	Luni	Jodhpur	Private	Cultivation	Bajara, Gawar, Moong, Moth, Till	4	Non-Fruit/Timber	Khejadi, Jaal, Babool, Neem	Nil	No
9	765 KV D/C Korna- Ajmer Line	56-63	3 Kilometer	3	Kalali, Lalaki, Kharabera Purohitan	Rohat	Pali	Private	Cultivation	Bajara, Moong, Moth	6	Non-Fruit/Timber	Khejadi, Jaal, Babool, Neem	Nil	No
10	765 KV D/C Korna- Ajmer Line	63-70	3 Kilometer	3	Bhatinda, Modi Josiyanlan, Antan,	Rohat	Pali	Private	Cultivation	Bajara, Moong, Moth	2	Non-Fruit/Timber	Khejadi, Jaal, Babool, Neem	Nil	No
11	765 KV D/C Korna- Ajmer Line	70-77	4 Kilometer	2	Samwalta Khurd, Sanwlta Kalla	Rohat	Pali	Private	Cultivation	Bajara, Moong, Moth	7	Non-Fruit/Timber	Khejadi, Jaal, Babool, Neem	Nil	No
12	765 KV D/C Korna- Ajmer Line	77-84	3 Kilometer	2	Durasani, Pabupura Bhatan,	Rohat	Pali	Private	Cultivation	Bajara, Moong, Moth	8	Non-Fruit/Timber	Khejadi, Jaal, Babool, Neem	Nil	No
13	765 KV D/C Korna- Ajmer Line	84-91	4 Kilometer	3	Pataliya, Lanera, Lolawas	Sojat, Bilara	Pali, Jodhpur	Private	Cultivation	Bajara, Moong, Moth	5	Non-Fruit/Timber	Khejadi, Jaal, Babool, Neem	Nil	No
14	765 KV D/C Korna- Ajmer Line	91-98	3 Kilometer	2	Hoonganv Khurd, Hoonganv Kalla,	Sojat, Bilara	Pali, Jodhpur	Private	Cultivation	Bajara, Moong, Moth	9	Non-Fruit/Timber	Khejadi, Jaal, Babool, Neem	Nil	No

#	Name of the Transmission Line	Approximate Distance (in kilometers) for sampling of 1 kilometer of Survey	Approximate Distance of transmission line from nearby village (Kilometer)	Number of Villages	Names of Villages	Name of Tehsil	Name of District	Ownership of land (Private /Government, Forest)	Use of Land	Name of Crops	Number of Trees within RoW	Types of Trees	Name of Trees	Affected House/Building/Structure	Is it a Tribal Area
15	765 KV D/C Korna- Ajmer Line	98-105	3 Kilometer	3	Hapat, Padasla Khurd, Hariyada,	Sojat, Bilara	Pali, Jodhpur	Private	Cultivation	Bajara, Moong, Moth	3	Non-Fruit/Timber	Khejadi, Jaal, Babool, Neem	Nil	No
16	765 KV D/C Korna- Ajmer Line	105-112	4 Kilometer	3	Jetiwas, Bijasani, Malkhasani	Jaitaran	Pali	Private	Cultivation	Bajara, Moong, Moth	6	Non-Fruit/Timber	Khejadi, Jaal, Babool, Neem	Nil	No
17	765 KV D/C Korna- Ajmer Line	112-119	4 Kilometer	2	, Barana, Bilara,	Jaitaran	Pali	Private	Cultivation	Bajara, Moong, Moth	5	Non-Fruit/Timber	Khejadi, Jaal, Babool, Neem	Nil	No
18	765 KV D/C Korna- Ajmer Line	119-126	4 Kilometer	2	Jajanwas, Binjwaria	Jaitaran	Pali	Private	Cultivation	Bajara, Moong, Moth	2	Non-Fruit/Timber	Khejadi, Jaal, Babool, Neem	Nil	No
19	765 KV D/C Korna- Ajmer Line	126-133	4 Kilometer	2	Jaitaran, Garnia	Jaitaran	Pali	Private	Cultivation	Bajara, Moong, Moth	5	Non-Fruit/Timber	Khejadi, Jaal, Babool, Neem	Nil	No
20	765 KV D/C Korna- Ajmer Line	133-140	3 Kilometer	2	Nimaj,Bhakarwas,	Jaitaran	Pali	Private	Cultivation	Bajara, Moong, Moth	6	Non-Fruit/Timber	Khejadi, Jaal, Babool, Neem	Nil	No
21	765 KV D/C Korna- Ajmer Line	140-147	3 Kilometer	2	Kheda Mehrajpura, Samokhi,	Jaitaran	Pali	Private	Cultivation	Bajara, Moong, Moth	8	Non-Fruit/Timber	Khejadi, Jaal, Babool, Neem	Nil	No
22	765 KV D/C Korna- Ajmer Line	147-154	4 Kilometer	3	Mohrai, Birampuri, ,Asarlai	Jaitaran	Pali	Private	Cultivation	Bajara, Moong, Moth	2	Non-Fruit/Timber	Khejadi, Jaal, Babool, Neem	Nil	No

#	Name of the Transmission Line	Approximate Distance (in kilometers) for sampling of 1 kilometer of Survey	Approximate Distance of transmission line from nearby village (Kilometer)	Number of Villages	Names of Villages	Name of Tehsil	Name of District	Ownership of land (Private /Government, Forest)	Use of Land	Name of Crops	Number of Trees within RoW	Types of Trees	Name of Trees	Affected House/Building/Structure	Is it a Tribal Area
23	765 KV D/C Korna- Ajmer Line	154-161	4 Kilometer	1	Toonkara	Jaitaran	Pali	Private	Cultivation	Bajara, Moong, Moth	4	Non-Fruit/Timber	Khejadi, Jaal, Babool, Neem	Nil	No
24	765 KV D/C Korna- Ajmer Line	161-168	4 Kilometer	1	Boontiwas	Raipur	Pali	Private	Cultivation	Bajara, Moong, Moth	3	Non-Fruit/Timber	Khejadi, Jaal, Babool, Neem	Nil	No
25	765 KV D/C Korna- Ajmer Line	168-175	4 Kilometer	3	Gopalpura, Dhildeva, Bheevgarh	Raipur, Jaitaran	Pali	Private	Cultivation	Bajara, Moong, Moth	5	Non-Fruit/Timber	Khejadi, Jaal, Babool, Neem	Nil	No
26	765 KV D/C Korna- Ajmer Line	175-182	3 Kilometer	3	Karnij, Mohra, Bagra,	Raipur, Jaitaran	Pali	Private	Cultivation	Bajara, Moong, Moth	3	Non-Fruit/Timber	Khejadi, Jaal, Babool, Neem	Nil	No
27	765 KV D/C Korna- Ajmer Line	182-189	4 Kilometer	2	Peelpaya, Roop Nagar Thorian	Raipur, Pisangan	Pali, Ajmer	Private	Cultivation	Bajara, Moong, Moth	7	Non-Fruit/Timber	Khejadi, Jaal, Babool, Neem	Nil	No
28	765 KV D/C Korna- Ajmer Line	189-196	3 Kilometer	2	Shivpura, Dhuwana,	Raipur, Pisangan	Pali, Ajmer	Private	Cultivation	Bajara, Moong, Moth	8	Non-Fruit/Timber	Khejadi, Jaal, Babool, Neem	Nil	No
29	765 KV D/C Korna- Ajmer Line	196-203	3 Kilometer	2	Nagelia, Nahargarh,	Raipur, Pisangan	Pali, Ajmer	Private	Cultivation	Bajara, Moong, Moth	9	Non-Fruit/Timber	Khejadi, Jaal, Babool, Neem	Nil	No
30	765 KV D/C Korna- Ajmer Line	203-210	3 Kilometer	3	Jethana, Samla, Alipura,	Raipur, Pisangan	Pali, Ajmer	Private	Cultivation	Bajara, Moong, Moth	11	Non-Fruit/Timber	Khejadi, Jaal, Babool,	Nil	No

#	Name of the Transmission Line	Approximate Distance (in kilometers) for sampling of 1 kilometer of Survey	Approximate Distance of transmission line from nearby village (Kilometer)	Number of Villages	Names of Villages	Name of Tehsil	Name of District	Ownership of land (Private /Government, Forest)	Use of Land	Name of Crops	Number of Trees within RoW	Types of Trees	Name of Trees	Affected House/Building/Structure	Is it a Tribal Area
													Neem		

B. 400 KV D/C KORNA- JAISALMER II

#	Name of the Transmission Line	Approximate Distance (in kilometers) for sampling of 1 kilometer of Survey	Approximate Distance of transmission line from nearby village (Kilometer)	Number of Villages	Names of Villages	Name of Tehsil	Name of District	Ownership of land (Private /Government, Forest)	Use of Land	Name of Crops	Number of Trees within RoW	Types of Trees	Name of Trees	Affected House/Building/Structure	Is it a Tribal Area
1	400 KV D/C Korna-Jaisalmer II	0-10	4 Kilometer	3	Korna, Gangawas, Jasti,	Baltora	Barmer	Private	Cultivation	Bajara, Moong, Moth, Gawar	3	Non-Fruit/Timber	Khejadi, Jaal, Babul	Nil	No
2	400 KV D/C Korna-Jaisalmer II	10-20	3 Kilometer	2	Rodwa Kalla, Rodwa Khurd,	Baltora	Barmer	Private	Cultivation	Bajara, Moong, Moth, Gawar	5	Non-Fruit/Timber	Khejadi, Jaal, Babul, Neem	Nil	No
3	400 KV D/C Korna-Jaisalmer II	20-30	4 Kilometer	2	Hapanada, Kalawanada,	Baltora	Barmer	Private	Cultivation	Bajara, Moong, Moth, Gawar	4	Non-Fruit/Timber	Khejadi, Jaal, Babul, Neem	Nil	No
4	400 KV D/C Korna-Jaisalmer II	30-40	3 Kilometer	2	Balau Jati, Blania,	Shergarh	Jodhpur	Private	Cultivation	Bajara, Moong, Moth, Gawar	7	Non-Fruit/Timber	Khejadi, Jaal, Babul, Neem	Nil	No

#	Name of the Transmission Line	Approximate Distance (in kilometers) for sampling of 1 kilometer of Survey	Approximate Distance of transmission line from nearby village (Kilometer)	Number of Villages	Names of Villages	Name of Tehsil	Name of District	Ownership of land (Private /Government, Forest)	Use of Land	Name of Crops	Number of Trees within RoW	Types of Trees	Name of Trees	Affected House/Building/Structure	Is it a Tribal Area
5	400 KV D/C Korna-Jaisalmer II	40-50	3 Kilometer	2	Balau Sasan, Chekder,	Shergarh	Jodhpur	Private	Cultivation	Bajara, Moong, Moth, Gawar	5	Non-Fruit/Timber	Khejadi, Jaal, Babul, Neem	Nil	No
6	400 KV D/C Korna-Jaisalmer II	50-60	4 Kilometer	2	Siyanda,Sointra,	Shergarh	Jodhpur	Private	Cultivation	Bajara, Moong, Moth, Gawar	6	Non-Fruit/Timber	Non-Fruit/Timber Khejadi, Jaal, Babul, Neem	Nil	No
7	400 KV D/C Korna-Jaisalmer II	60-70	3 Kilometer	2	Jatawsa, Hanwant Nagar,	Shergarh	Jodhpur	Private	Cultivation	Bajara, Moong, Moth, Gawar	8	Non-Fruit/Timber	Khejadi, Jaal, Babul, Neem	Nil	No
8	400 KV D/C Korna-Jaisalmer II	70-80	3 Kilometer	2	Shergarh, Birad Nagar,	Shergarh	Jodhpur	Private	Cultivation	Bajara, Moong, Moth, Gawar	2	Non-Fruit/Timber	Khejadi, Jaal, Babul, Neem	Nil	No
9	400 KV D/C Korna-Jaisalmer II	80-90	3 Kilometer	2	Ram Nagar, Guman Singh Pura	Shergarh	Jodhpur	Private	Cultivation	Bajara, Moong, Moth, Gawar	1	Non-Fruit/Timber	Khejadi, Jaal, Babul, Neem	Nil	No
10	400 KV D/C Korna-Jaisalmer II	90-100	3 Kilometer	2	Chaba, Abasar,	Shergarh	Jodhpur	Private	Cultivation	Bajara, Moong, Moth, Gawar	2	Non-Fruit/Timber	Khejadi, Jaal, Babul, Neem	Nil	No
11	400 KV D/C Korna-	100-110	4 Kilometer	2	Rajpuohito Ki Dhani,	Bhaniyana	Jaisalmer	Private	Cultivation	Bajara, Moong	4	Non-Fruit/Ti	Khejadi, Jaal,	Nil	No

#	Name of the Transmission Line	Approximate Distance (in kilometers) for sampling of 1 kilometer of Survey	Approximate Distance of transmission line from nearby village (Kilometer)	Number of Villages	Names of Villages	Name of Tehsil	Name of District	Ownership of land (Private /Government, Forest)	Use of Land	Name of Crops	Number of Trees within RoW	Types of Trees	Name of Trees	Affected House/Building/Structure	Is it a Tribal Area
	Jaisalmer II				Phalsund,					, Moth, Gawar		mber	Babul, Neem		
12	400 KV D/C Korna-Jaisalmer II	110-120	3 Kilometer	2	Bhikhorai, Balar	Bhaniyana	Jaisalmer	Private	Cultivation	Bajara, Moong, Moth, Gawar	3	Non-Fruit/Timber	Khejadi, Jaal, Babul, Neem	Nil	No
13	400 KV D/C Korna-Jaisalmer II	120-135	4 Kilometer	3	Bhesara, Khelana, Rajmathai,	Bhaniyana	Jaisalmer	Private	Cultivation	Bajara, Moong, Moth, Gawar	5	Non-Fruit/Timber	Khejadi, Jaal, Babul, Neem	Nil	No

C. 400 KV D/C KORNA- POKARAN LINE

#	Name of the Transmission Line	Approximate Distance (in kilometers) for sampling of 1 kilometer of Survey	Approximate Distance of transmission line from nearby village (Kilometer)	Number of Villages	Names of Villages	Name of Tehsil	Name of District	Ownership of land (Private/Government, Forest)	Use of Land	Name of Crops	Number of Trees within RoW	Types of Trees	Name of Trees	Affected House/Building/Structure	Is it a Tribal Area
1	400 KV D/C Korna-Pokaran Line	0-10	4 Kilometer	3	Korna, Jasti, Gangawas,	Balotra	Barmer	Private	Cultivation	Bajara, Moong, Moth	5	Non-Fruit/Timber	Khejadi, Babul, Jaal, Neem	Nil	No
2	400 KV D/C Korna-Pokaran Line	10-20	3 Kilometer	3	Rodwa Kalla, Rodwa Khurd, Hapanada	Balotra	Barmer	Private	Cultivation	Bajara, Moong, Moth, Gwar, Till	3	Non-Fruit/Timber	Khejadi, Babul, Jaal, Neem	Nil	No
3	400 KV D/C Korna-Pokaran Line	20-30	3 Kilometer	4	Kalawanada, Balau Jati, Bhandu Jati, Bhandu Charana,	Shergarh	Jodhpur	Private	Cultivation	Bajara, Moong, Moth	7	Non-Fruit/Timber	Khejadi, Babul, Jaal, Neem, Royda	Nil	No
4	400 KV D/C Korna-Pokaran Line	30-40	4 Kilometer	2	Tena,Bhungra	Shergarh	Jodhpur	Private	Cultivation	Bajara, Moong, Moth, Gwar, Sonamukhi	6	Non-Fruit/Timber	Khejadi, Babul, Jaal, Neem, Royda	Nil	No

#	Name of the Transmission Line	Approximate Distance (in kilometers) for sampling of 1 kilometer of Survey	Approximate Distance of transmission line from nearby village (Kilometer)	Number of Villages	Names of Villages	Name of Tehsil	Name of District	Ownership of land (Private/Government, Forest)	Use of Land	Name of Crops	Number of Trees within RoW	Types of Trees	Name of Trees	Affected House/Building/Structure	Is it a Tribal Area
5	400 KV D/C Korna-Pokaran Line	40-50	4 Kilometer	4	Khirja, Tibna, Timbari, Nahar Singh Nagar,	Shergarh	Jodhpur	Private	Cultivation	Bajara, Moong, Moth, Gwar, Till	1	Non-Fruit/Timber	Khejadi, Babul, Jaal, Neem, Royda	Nil	No
6	400 KV D/C Korna-Pokaran Line	50-60	3 Kilometer	3	Suwaliya, Dhaulpaliya Talai, Solnkiya Talla Ki Dhani,	Shergarh	Jodhpur	Private	Cultivation	Bajara, Moong, Moth, Gwar, Sonamukhi	3	Non-Fruit/Timber	Khejadi, Babul, Jaal, Neem, Royda	Nil	No
7	400 KV D/C Korna-Pokaran Line	60-70	3 Kilometer	3	Chutraniyon Ki Dhani, Setrawa, Unthvaliya	Shergarh	Jodhpur	Private	Cultivation	Bajara, Moong, Moth, Gwar, Till	4	Non-Fruit/Timber	Khejadi, Babul, Jaal, Neem, Royda	Nil	No
8	400 KV D/C Korna-Pokaran Line	70-80	4 Kilometer	3	Asarlai, Madala, Bara Madala	Shergarh	Jodhpur	Private	Cultivation	Bajara, Moong, Moth, Gwar	2	Non-Fruit/Timber	Khejadi, Babul, Jaal, Neem, Royda	Nil	No

#	Name of the Transmission Line	Approximate Distance (in kilometers) for sampling of 1 kilometer of Survey	Approximate Distance of transmission line from nearby village (Kilometer)	Number of Villages	Names of Villages	Name of Tehsil	Name of District	Ownership of land (Private/Government, Forest)	Use of Land	Name of Crops	Number of Trees within RoW	Types of Trees	Name of Trees	Affected House/Building/Structure	Is it a Tribal Area
9	400 KV D/C Korna-Pokaran Line	80-90	4 Kilometer	2	Chandsama, Lawaran	Shergarh	Jodhpur	Private	Cultivation	Bajara, Moong, Moth, Gwar	7	Non-Fruit/Timber	Khejadi, Babul, Jaal, Neem, Royda	Nil	No
10	400 KV D/C Korna-Pokaran Line	90-115	4 Kilometer	3	Pokaran, Ramdevra, Biramdevra	Pokhran	Jaisalmer	Private	Cultivation	Moong,Moth,Bajara	5	Non-Fruit/Timber	Khejadi, Babul, Neem	Nil	No

D. 220 KV D/C KHINVSAR- BAITHWASIA LINE

#	Name of the Transmission Line	Approximate Distance (in kilometers) for sampling of 1 kilometer of Survey	Approximate Distance of transmission line from nearby village (Kilometer)	Number of Villages	Names of Villages	Name of Tehsil	Name of District	Ownership of land (Private /Government, Forest)	Use of Land	Name of Crops	Number of Trees within RoW	Types of Trees	Name of Trees	Affected House/Building/Structure	Is it a Tribal Area
1	220 KV D/C Khinvsar-Baithwasia Line	0-5 Kilometer	1-2 Kilometer	3	Khinvsar, Maheshpura, Bhaduon Ki Dhani,		Nagour	Private	Cultivation	Bajara, Gawar, Moong, Moth, Till, Arandi, Mustard, Cotton, Onion	3	Non-Fruit/Timber	Khejadi, Babul, Jaal, Neem	Nil	No
2	220 KV D/C Khinvsar-Baithwasia Line	5-10 Kilometer	1-2 Kilometer	3	Narwa Khurd, Narwa Kalan, Joginara,		Nagour	Private	Cultivation	Bajara, Gawar, Moong, Moth, Till, Arandi, Mustard, Cotton, Onion	5	Non-Fruit/Timber	Khejadi, Babul, Jaal, Neem	Nil	No
3	220 KV D/C Khinvsar-Baithwasia Line	10-15 Kilometer	1-2 Kilometer	3	Kantiya, Magari wali Dhaniya, Panchalo Sidd		Nagour	Private	Cultivation	Bajara, Gawar, Moong, Moth, Till, Arandi, Mustard,	6	Non-Fruit/Timber	Khejadi, Babul, Jaal, Neem	Nil	No

#	Name of the Transmission Line	Approximate Distance (in kilometers) for sampling of 1 kilometer of Survey	Approximate Distance of transmission line from nearby village (Kilometer)	Number of Villages	Names of Villages	Name of Tehsil	Name of District	Ownership of land (Private /Government, Forest)	Use of Land	Name of Crops	Number of Trees within RoW	Types of Trees	Name of Trees	Affected House/Building/Structure	Is it a Tribal Area
										Cotton, Onion					
4	220 KV D/C Khinvsar-Baithwasia Line	15-20 Kilometer	2 Kilometer	3	Pipaliya, Sowano Ki Dhani, Hempura,		Nagour	Private	Cultivation	Bajara, Gawar, Moong, Moth, Till, Arandi, Mustard, Cotton, Groundnut	4	Non-Fruit/Timber	Khejadi, Babul, Jaal, Neem	Nil	No
5	220 KV D/C Khinvsar-Baithwasia Line	20-25 Kilometer	2 Kilometer	2	Vishnoiyon Ki Dhani, Jasnata pura,		Nagour	Private	Cultivation	Bajara, Gawar, Moong, Moth, Till, Arandi, Mustard, Cotton, Groundnut	2	Non-Fruit/Timber	Khejadi, Babul, Jaal, Neem	Nil	No
6	220 KV D/C Khinvsar-Baithwasia Line	25-30 Kilometer	2 Kilometer	2	Madhaniyon Ki Dhani, Isar Nawara		Nagour	Private	Cultivation	Bajara, Gawar, Moong, Moth,	5	Non-Fruit/Timber	Khejadi, Babul, Jaal, Neem	Nil	No

#	Name of the Transmission Line	Approximate Distance (in kilometers) for sampling of 1 kilometer of Survey	Approximate Distance of transmission line from nearby village (Kilometer)	Number of Villages	Names of Villages	Name of Tehsil	Name of District	Ownership of land (Private /Government, Forest)	Use of Land	Name of Crops	Number of Trees within RoW	Types of Trees	Name of Trees	Affected House/Building/Structure	Is it a Tribal Area
										Till, Arandi, Mustard, Cotton, Groundnut					
7	220 KV D/C Khinvsar-Baithwasia Line	30-35 Kilometer	1.5 Kilometer	3	Papasani, Barsaloo Kalan, Godaron Ki Dhani,		Jodhpur	Private	Cultivation	Bajara, Moong, Moth, Gawar, Cotton, Mustard, Arandi	2	Non-Fruit/Timber	Khejadi, Babul, Jaal, Neem	Nil	No
8	220 KV D/C Khinvsar-Baithwasia Line	35-40 Kilometer	1.5 Kilometer	3	Khubuniya, Kinjari, Loonawas		Jodhpur	Private	Cultivation	Bajara, Moong, Moth, Gawar, Cotton, Mustard, Arandi	7	Non-Fruit/Timber	Khejadi, Babul, Jaal, Neem	Nil	No
9	220 KV D/C Khinvsar-Baithwasia Line	40-45 Kilometer	1 Kilometer	2	Beniwalon Ki Dhani, Kurchhi,		Jodhpur	Private	Cultivation	Moong, Moth, Bajara, Gawar, Maize, Cotton,	4	Non-Fruit/Timber	Khejadi, Babul, Jaal, Neem	Nil	No

#	Name of the Transmission Line	Approximate Distance (in kilometers) for sampling of 1 kilometer of Survey	Approximate Distance of transmission line from nearby village (Kilometer)	Number of Villages	Names of Villages	Name of Tehsil	Name of District	Ownership of land (Private /Government, Forest)	Use of Land	Name of Crops	Number of Trees within RoW	Types of Trees	Name of Trees	Affected House/Building/Structure	Is it a Tribal Area
										Mustard					
10	220 KV D/C Khinvsar-Baithwasia Line	45-50 Kilometer	1 Kilometer	3	Basani tarda, Dhania, Silli		Jodhpur	Private	Cultivation	Moong, Moth, Bajara, Gawar, Maize, Cotton, Mustard	3	Non-Fruit/Timber	Khejadi, Babul, Jaal, Neem	Nil	No
11	220 KV D/C Khinvsar-Baithwasia Line	50-55 Kilometer	1 Kilometer	3	Geengla, Hadman Sagar, Haniya,		Jodhpur	Private	Cultivation	Bajara, Gawar, Moong, Moth, Till, Cotton, Mustard, Onion	5	Non-Fruit/Timber	Khejadi, Babul, Jaal, Neem	Nil	No
12	220 KV D/C Khinvsar-Baithwasia Line	55-60 Kilometer	1 Kilometer	3	Khindakor, Bhakron ki Dhani, Magra Nagar		Jodhpur	Private	Cultivation	Bajara, Gawar, Moong, Moth, Till, Cotton, Mustard, Onion	8	Non-Fruit/Timber	Khejadi, Babul, Jaal, Neem	Nil	No

#	Name of the Transmission Line	Approximate Distance (in kilometers) for sampling of 1 kilometer of Survey	Approximate Distance of transmission line from nearby village (Kilometer)	Number of Villages	Names of Villages	Name of Tehsil	Name of District	Ownership of land (Private /Government, Forest)	Use of Land	Name of Crops	Number of Trees within RoW	Types of Trees	Name of Trees	Affected House/Building/Structure	Is it a Tribal Area
13	220 KV D/C Khinvsar-Baithwasia Line	60-65 Kilometer	1 Kilometer	4	Tapoo, Thob, Pandit Ki Dhani, Baithwasia		Jodhpur	Private	Cultivation	Bajara, Moong, Moth, Till, Gawar, Cotton, Mustard	3	Non-Fruit/Timber	Khejadi, Babul, Jaal, Neem	Nil	No

E. SHEO-UNDOO-220 KV LINE

#	Name of the Transmission Line	Approximate Distance (in kilometers) for sampling of 1 kilometer of Survey	Approximate Distance of transmission line from nearby village (Kilometer)	Number of Villages	Names of Villages	Name of Tehsil	Name of District	Ownership of land (Private/Government, Forest)	Use of Land	Name of Crops	Number of Trees within RoW	Types of Trees	Name of Trees	Affected House/Building/Structure	Is it a Tribal Area
1	Sheo-Undoo-220 KV Line	0-6 Kilometer	1 Kilometer	2	Sheo, Fatenara,	Sheo	Barmer	Private	Cultivation	Bajara, Gawar, Moong, Moth, Till	4	Non-Fruit/Timber	Khejadi, Babul, Jaal, Neem	Nil	No
2	Sheo-Undoo-220 KV Line	6-12 Kilometer	1 Kilometer	3	Jaranada, Ambabadi, Panj Raj Ki Basti,	Sheo	Barmer	Private	Cultivation	Bajara, Gawar, Moong, Moth, Till	3	Non-Fruit/Timber	Khejadi, Babul, Jaal, Neem	Nil	No
3	Sheo-Undoo-220 KV Line	12-18 Kilometer	1 Kilometer	3	Sawai Singh Ki Basti, Balai, Bishu Kala	Sheo	Barmer	Private	Cultivation	Bajara, Gawar, Moong, Moth, Till	5	Non-Fruit/Timber	Khejadi, Babul, Jaal, Neem	Nil	No
4	Sheo-Undoo-220 KV Line	18-24 Kilometer	2-5 Kilometer	3	Bisu Khurd, Ratnuyo Ki Dhani, Katariyo Ki Dhani,	Sheo	Barmer	Private	Cultivation	Bajara, Gawar, Moong, Moth, Till	2	Non-Fruit/Timber	Khejadi, Babul, Jaal, Neem	Nil	No
5	Sheo-Undoo-220 KV Line	24-30 Kilometer	2-5 Kilometer	3	Rupa Sariya, Amar Singh Ki Dhani, Ratari Bhiyad	Sheo	Barmer	Private	Cultivation	Bajara, Gawar, Moong, Moth, Till	4	Non-Fruit/Timber	Khejadi, Babul, Jaal, Neem	Nil	No

#	Name of the Transmission Line	Approximate Distance (in kilometers) for sampling of 1 kilometer of Survey	Approximate Distance of transmission line from nearby village (Kilometer)	Number of Villages	Names of Villages	Name of Tehsil	Name of District	Ownership of land (Private/Government, Forest)	Use of Land	Name of Crops	Number of Trees within RoW	Types of Trees	Name of Trees	Affected House/Building/Structure	Is it a Tribal Area
6	Sheo-Undoo-220 KV Line	30-36 Kilometer	2.5 Kilometer	3	Nanasat, Sarano Ki Dhani, Kanasar Golai,	Sheo	Barmer	Private	Cultivation	Bajara, Gawar, Moong, Moth, Till	3	Non-Fruit/Timber	Khejadi, Babul, Jaal, Neem	Nil	No
7	Sheo-Undoo-220 KV Line	36-42 Kilometer	2.5 Kilometer	3	Saron Ka Tala, Jivaniyon Ki Basti, Kashmir	Sheo	Barmer	Private	Cultivation	Bajara, Gawar, Moong, Moth, Till	9	Non-Fruit/Timber	Khejadi, Babul, Jaal, Neem	Nil	No
8	Sheo-Undoo-220 KV Line	42-48 Kilometer	2.5 Kilometer	2	Jakharo Ki Dhani, Kanasar,	Sheo	Barmer	Private	Cultivation	Bajara, Gawar, Moong, Moth, Till	3	Non-Fruit/Timber	Khejadi, Babul, Jaal, Neem	Nil	No
9	Sheo-Undoo-220 KV Line	48-57 Kilometer	2.5 Kilometer	3	Samdariya, Gorsiyon Ki Dhani, Undoo	Sheo	Barmer	Private	Cultivation	Bajara, Gawar, Moong, Moth, Till	7	Non-Fruit/Timber	Khejadi, Babul, Jaal, Neem	Nil	No

F. 132 kV Dechu Nathrau - Line

#	Name of the Transmission Line	Approximate Distance (in kilometers) for sampling of 1 kilometer of Survey	Approximate Distance of transmission line from nearby village (Kilometer)	Number of Villages	Names of Villages	Name of Tehsil	Name of District	Ownership of land (Private/Government, Forest)	Use of Land	Name of Crops	Number of Trees within RoW	Types of Trees	Name of Trees	Affected House/Building/Structure
1	132 kV Dechu Nathrau - Line	0-6 Kilometer	1 Kilometer	2	Nathrau, Gilkor	Balesar	Jodhpur	Private	Cultivation	Bajara, Gawar, Moon, Moth, ground nut	8	Non-Fruit	Khejadi, Babul, Jaal, Neem	Nil
2	132 kV Dechu Nathrau - Line	6-12 Kilometer	1 Kilometer	1	Puniya ki Dhani	Balesar	Jodhpur	Private	Cultivation	Bajara, Gawar, Moong	5	Non-Fruit	Khejadi, Babul, Jaal, Neem	Nil
3	132 kV Dechu Nathrau - Line	12-20 Kilometer	1 Kilometer	1	Gumarnpura	Shergarh	Jodhpur	Private	Cultivation	Bajara, Gawar, Moon, Moth, Till	7	Non-Fruit	Khejadi, Babul, Jaal, Neem	Nil

G. LILO of 132 KV S/C Tinwari-Osian Line

#	Name of the Transmission Line	Approximate Distance (in kilometers) for sampling of 1 kilometer of Survey	Approximate Distance of transmission line from nearby village (Kilometer)	Number of Villages	Names of Villages	Name of Tehsil	Name of District	Ownership of land (Private/Government, Forest)	Use of Land	Name of Crops	Number of Trees within RoW	Types of Trees	Name of Trees	Affected House/Building/Structure
1	LILO of 132 KV 20 km S/C	0-10 Kilometer	1 Kilometer	2	Khabara, Khetasar	Balesar	Jodhour	Private	Cultivation	Khabara,	8	Non-Fruit	Khejadi, Babul,	Nil

#	Name of the Transmission Line	Approximate Distance (in kilometers) for sampling of 1 kilometer of Survey	Approximate Distance of transmission line from nearby village (Kilometer)	Number of Villages	Names of Villages	Name of Tehsil	Name of District	Ownership of land (Private/Government, Forest)	Use of Land	Name of Crops	Number of Trees within RoW	Types of Trees	Name of Trees	Affected House/Building/Structure
	Tinwari-Osian Line									Khetasar			Jaal, Neem	
2	LILO of 132 KV S/C Tinwari-Osian Line	10-20 Kilometer	0.2 Kilometer	1	Jaatipura	Tinwari	Jodhpur	Private	Cultivation	Bajara, Moong, Moth, Till, Groundnut, Sarsoo, Cotton, Jeera, Arandi	12	Non-Fruit	Khejadi, Babul, Jaal, Neem, Ker	Nil

H. LILO 2 km of Jaisalmer – Sheo Line at Sangarh GSS

#	Name of the Transmission Line	Approximate Distance (in kilometers) for sampling of 1 kilometer of Survey	Approximate Distance of transmission line from nearby village (Kilometer)	Number of Villages	Names of Villages	Name of Tehsil	Name of District	Ownership of land (Private/ Government, Forest)	Use of Land	Name of Crops	Number of Trees within RoW	Types of Trees	Name of Trees	Affected House/Building/Structure
1	LILO 2 km Jaisalmer-Sheo Line	0-2 Kilometer	1 Kilometer	2	Sangarh	Fatehgarh	Jaisalmer	Private	Cultivation	Bajara, Moong, Moth, Till,	4	Non-Fruit	Khejadi, Babul, Jaal, Neem, Akada, Shesha	Nil

#	Name of the Transmission Line	Approximate Distance (in kilometers) for sampling of 1 kilometer of Survey	Approximate Distance of transmission line from nearby village (Kilometer)	Number of Villages	Names of Villages	Name of Tehsil	Name of District	Ownership of land (Private/ Government, Forest)	Use of Land	Name of Crops	Number of Trees within RoW	Types of Trees	Name of Trees	Affected House/Building/Structure
										Groundnut, Sarsoo, Cotton, Jeera, Arandi			m	

I. LILO D/C of 132 kV Sridungarh-Ratangarh Line (at Kitasar 132 kV GSS, Bikaner (3 km)

#	Name of the Transmission Line	Approximate Distance (in kilometers) for sampling of 1 kilometer of Survey	Approximate Distance of transmission line from nearby village (Kilometer)	Number of Villages	Names of Villages	Name of Tehsil	Name of District	Ownership of land (Private/Government, Forest)	Use of Land	Name of Crops	Number of Trees within RoW	Types of Trees	Name of Trees	Affected House/Building/Structure
1	LILO D/C of 132 kV Sridungarh-Ratangarh Line (at Kitasar 132 kV GSS, Bikaner (3 km)	0-3 Kilometer	2	1	Kitasar	Sri Dungargarh	Bikaner	Private	Cultivation	Bajara, Moong, Moth, Till, Groundnut	2	Non-Fruit	Khejadi, Babul	Nil

J. LILO 220 kV D/C line from Chhattargarh GSS to 132 kV Gajner GSS, Bikaner (100 km)

#	Name of the Transmission Line	Approximate Distance (in kilometers) for sampling of 1 kilometer of Survey	Approximate Distance of transmission line from nearby village (Kilometer)	Number of Villages	Names of Villages	Name of Tehsil	Name of District	Ownership of land (Private /Government, Forest)	Use of Land	Name of Crops	Number of Trees within RoW	Types of Trees	Name of Trees	Affected House/Building/Structure
1	220 kV D/C line from Chhattargarh GSS to 132 kV Gajner GSS, Bikaner (100 km)	0-10 Kilometer	4	2	Gajner, Titaron ka Bada	Bikaner	Bikaner	Private/ Government	Cultivation/ Barren	Bajara, Moong, Moth, Till,	6	Non-Fruit	Khejadi, Babul	Nil
2		10-20 Kilometer	3	2	Titaron ka Bada, Kodamsar	Bikaner	Bikaner	Private/ Government	Cultivation/ Barren	Bajara, Moong, Moth, Till,	3	Non-Fruit	Khejadi, Babul	Nil
3		20-30 Kilometer	5	1	Kawani	Bikaner	Bikaner	Private/ Government	Cultivation/ Barren	Bajara	5	Non-Fruit	Khejadi, Babul	Nil
4		30-40 Kilometer	2	2	Maherasar/ Karnisar	Bikaner	Bikaner	Private/ Government	Cultivation/ Barren	Bajara	2	Non-Fruit	Khejadi, Babul	Nil
5		40-50 Kilometer	3	2	Motigarh/Bariya	Bikaner	Bikaner	Private/ Government	Cultivation/ Barren	Bajara	3	Non-Fruit	Khejadi, Babul	Nil
6		50-60 Kilometer	2	1	Baririya		Bikaner	Private/ Government	Cultivation/ Barren	Bajara	5	Non-Fruit	Khejadi, Babul	Nil

#	Name of the Transmission Line	Approximate Distance (in kilometers) for sampling of 1 kilometer of Survey	Approximate Distance of transmission line from nearby village (Kilometer)	Number of Villages	Names of Villages	Name of Tehsil	Name of District	Ownership of land (Private /Government, Forest)	Use of Land	Name of Crops	Number of Trees within RoW	Types of Trees	Name of Trees	Affected House/Building/Structure
7		60-70 Kilometer	4	1	Bariya		Bikaner	Private/ Government	Cultivation/ Barren	Bajara	6	Non-Fruit	Khejadi, Babul	Nil
8		70-80 Kilometer	3	1	5 LKD	Satasar	Bikaner	Private/ Government	Cultivation/ Barren	Bajara, Moong, Moth, Till,	2	Non-Fruit	Khejadi, Babul, Uclipatas	Nil
9		80-90 Kilometer	2	2	Himarwala/ Chhattargarh	Chhattargarh	Bikaner	Private/ Government	Cultivation/ Barren	Bajara, Moong, Moth, Till,	6	Non-Fruit	Khejadi, Babul	Nil
10		90-100 Kilometer	2	1	Chhattargarh	Chhattargarh	Bikaner	Private/ Government	Cultivation/ Barren	Bajara, Moong, Moth, Till,	3	Non-Fruit	Khejadi, Babul	Nil

K. 132 kV D/C line from proposed 220 kV GSS Chhattargarh to existing 132 kV GSS Loonkaransar (77 km)

#	Name of the Transmission Line	Approximate Distance (in kilometers) for sampling of 1 kilometer of Survey	Approximate Distance of transmission line from nearby village (Kilometer)	Number of Villages	Names of Villages	Name of Tehsil	Name of District	Ownership of land (Private/Government, Forest)	Use of Land	Name of Crops	Number of Trees within RoW	Types of Trees	Name of Trees	Affected House/Building/Structure
1	132 kV D/C line from	0-10 Kilometer	1.5	2	Loonkaras ar	Loonkara sar	Bikaner	Private /Gover	Cultiva tion/Ba	Bajara, Moth,	2	Non-Fruit	Khejadi, Babul	Nil

#	Name of the Transmission Line	Approximate Distance (in kilometers) for sampling of 1 kilometer of Survey	Approximate Distance of transmission line from nearby village (Kilometer)	Number of Villages	Names of Villages	Name of Tehsil	Name of District	Ownership of land (Private/Government, Forest)	Use of Land	Name of Crops	Number of Trees within RoW	Types of Trees	Name of Trees	Affected House/Building/Structure
	proposed 220 kV GSS Chhattargarh to existing 132 kV GSS Loonkaransar (77 km)							nment	rren	Gawar				
2		10-20 Kilometer	1	1	Loonkarasar	Loonkarasar	Bikaner	Private/Government	Cultivation/Barren	Bajara, Moth, Gawar,	3	Non-Fruit	Khejadi, Babul	Nil
3		20-30 Kilometer	5	1	Rojha	Loonkarasar	Bikaner	Private/Government	Cultivation/Barren	Bajara, Moth, Gawar	4	Non-Fruit	Khejadi, Babul	Nil
4		30-40 Kilometer	2	1	Khokhrana	Bikaner	Bikaner	Private/Government	Cultivation/Barren	Bajara, Moth, Gawar	5	Non-Fruit	Khejadi, Babul	Nil
5		40-50 Kilometer	3	1	Lakhawar	Bikaner	Bikaner	Private/Government	Cultivation/Barren	Bajara, Moth, Gawar	2	Non-Fruit	Khejadi, Babul	Nil
6		50-60 Kilometer	2	1	Ajitmana	Ajitmana	Bikaner	Private/Government	Cultivation/Barren	Bajara, Moth, Gawar	1	Non-Fruit	Khejadi, Babul	Nil
7		60-77 Kilometer	4	1	Chhattargarh	Chhattargarh	Bikaner	Private/Government	Cultivation/Barren	Bajara, Moth, Gawar	4	Non-Fruit	Khejadi, Babul	Nil

LIST OF VILLAGES ALONG THE MAJOR TRANSMISSION LINES (MAP STUDY)

List of villages for 220 KV D/C Khinvsar-Baithwasia line

No.	Name of Village	No.	Name of Village
1	Baithwasia	2	Pandit-ki-Dhani
3	Thob	4	Tapoo
5	Magra Nagar	6	Bhakhron-Ki-Dhani
7	Khindakor	8	Haniya
9	Hadman sagar	10	Geengla
11	Sili	12	Dhania
13	Basni Tarda	14	Kurchhi
15	Beniwalon-Ki-Dhani	16	Loonawas
17	Kinjari	18	Khabaniya
19	Godaron-Ki-Dhani	20	Barsaloo-Kalan
21	Papasani	22	Isar Nogra
23	Madhaniyon-ki-Dhani	24	Jasnath Pura
25	Vishnoiyon-Ki-Dhani	26	Hempura
27	Sowano-ki-Dhani	28	Peepliya
29	Panchala Sidha	30	Magari wali Dhaniya
31	Kantiya	32	Joginara
33	Narwa Kalan	34	Narwa Khurd
35	Bhaduon-ki-Dhani	36	Maheshpura
37	Khimsar	38	Berawas

List of villages for 400 KV DIC Korna-Pokaran line (Quad Moose) 115 KM

No.	Name of Village	No.	Name of Village
1	Korna	2	Jasti
3	Gangawas	4	Rodwa Kalla
5	Rodwa Khurd	6	Hapanada
7	Kalawanada	8	Balau Jati
9	Bhandu Jati	10	Bhandu Charnan
11	Siyadhan	12	Timri
13	Bhojan Ka was	14	Tibnan
15	Rawaji Ki Dhani	16	Phetone Ki Ohani
17	Asha Ka Was	18	Guman Singh Ki Dhani
19	Khirja	20	Bhungra
21	BabutJi Ki Ohani	22	Amti (Nayabera)
23	Suwaliya	24	Raisar
25	Mulji Ki Ohani	26	Devji Ki Dhani
27	Solankiya Talla ki Dhani	28	Kamot Wala Ohora
29	Achal Singh Ka Bera	30	Sandh Ka Ohora
31	Bharamlniyon Ka Bera	32	Someshwar
33	Songriya Ka Ohora	34	Shivdan Singh Ka Bera
35	Jethu Singh Ka Bera	36	Jethaniya
37	laton Ki Dhani	38	Maha Singh Kanodiya
39	Kalau	40	Burkiya
41	Sanwlo Ki Ohani	42	Saktaniyon Ki Ohani
43	Untwaliya	44	Gura

No.	Name of Village	No.	Name of Village
45	Kushal Singh Ki Dhani	46	Kojrajj Singh Ki Dhani
47	Bera Thali	48	Chandsamma
49	Lalpura	50	Lawan
51	Hajron Ki Ohani	52	Oidwaniya
53	Prothar	54	Kerawa
55	Oiddnia	56	Sankhla Sar
57	Pokaran	58	Ramdeora
59	Biramdeora		

List of villages for 400 KV DIC Korna-Jaisalmer-ll (Bhesara) (Quad Moose) 135 KM

No.	Name of Village	No.	Name of Village
l.	Koma	2	Gnagawas
3.	Jasti	4	Rodwa Kalla
5	Rodwa Khurd	6	Hapanada
7	Kalawato Ki Dhani	8	Balau Jati
9	Mundon Ki Dhani	10	Sointra
11	Takhat Singh Ki Dhani	12	Siyandha
13	Shergarh	14	Adhuri Bhakari
15	Kumbaro Ki Dhani	16	Phatone Ki Dhani
17	Kisan Singh Ki Dhani	18	Dhrup Singh Ki Dhani
19	Swahalesa Ki Ohani	20	Oholu Ka Ohora
21	Chaba	22	Chohano Ki Ohani
23	Rajputo Ki Dhani	24	Brahmano Ki Dhani
25	Bhomawali Dhani	26	Kumanlyon Ki Dhani
27	Lomhrodo Ki Dhani	28	Chiliwala Ohora
29	Hinduwal Beri	30	Binjaniyo Wali Beri
31	Bheruwali Dhani	32	Baluram Ki Ohani
33	Farid Khan Ki Ohani	34	Binjariyo Ki Ohani
35	PhaIsund	36	Phulasar
37	Mir Khan Ki Dhani	38	Bhikhayon Ki Ohani
39	Dhaman Wali Thali	40	Guraliya Ohora
41	Moti Ki Dhani	42	Bewara Ka Dhora
43	Neem Ka Dhora	44	Bhatiyon Ki Ohani
4S	Khumlaji Ki Ohani	46	Bhikhodhai
47	Balar	48	Malji Ki Ohani
49	Rajmathai	50	Kanji Ki Ohani
51	Khusal Singh Ki Dhani	52	Hussen Khan Ki Ohani
53	Sodan KMi Ohani	54	Toran Thali
55	Chochu Thali	56	Bhiraj Khan Ki Dhani
57	Badhecho	58	Khelana
S9	Damdama Magra	60	Jagoyoton Ki Dhani
61 '	Rajgarh	62	Rawat Ka Tala
63	Bhesara		

765 KV D/c Korna-Ajrner line (HEXA ZEBRA) 210 KM

No.	Name of Village	No.	Name of Village
I.	Jethana	2.	Sarsari
3	Modi Nadi	4	Jetgarh
5	Titri	6	Samla
7	Nayagaon	8	Naharpura
9	Alipur	10	Nagelav
11	Dhawariya	12	Soliya
13	Pilpai	14	Amba
15	Kisanpura	16	Amarpura
17	Shyapura	18	Karnos
19	Ratangarh	20	Rup Nagar
21	Ramgarh	22	Jhalamad
23	Phulsagar	24	Devgarh
2S	Bhimgarh	26	Bhagatpura
27	Kanyakheri	28	Jogatiya
29	Khera	30	Ras
31	Kerpur	32	Jawangarh
33	Nimbeti	34	Patan
35	Kundal	36	Pratapgarh
37	Tunkara	38	Asorlai
39	Balara	40	Mundawa
41	Ghorawar	42	Balunda
43	Jalthara	44	Banjakudi
45	Ramawas Kalan	46	Ramawas Khurd
47	Birol	48	Malpuriya
49	Bikrai	50	Lototi
51	Chantera Magara	52	Ihak
53	Kunprawas	54	Pipliya
55	Talkiya	S6	Thakurwas
57	Karoliya	58	Raniwal
59	Pipli Bera	60	Patwally Bera
61	Ber Khurd	62	Udliya
63	Jaswant Sagar	64	Devasiyon Ki Dhani
65	Keriyon Ki Dhani	66	Bhawi
67	Kalauna	68	Rampuriya
69	Birdwas	70	Ghana Magara
71	Tilwasani	72	Boya)
73	Kaparada	74	Jun Ki Dhani
75	Rawar	76	Thapani Ki Dhani
77	Sindhyon Ki Dhani	78	Beldaron Ki Dhani
79	Ramsani	80	Bhaniya
81	Khari Khurd	82	Khari KalJan
83	Pitasani	84	Goliya
85	Singasni	86	Martuka
87	Rajola	88	Lalawas
89	Kharabera Bhimatan	90	Mori Suthara
91	Mori Manana	92	San walta Khurd
93	San walta Kallan	94	Antan
95	Khaeabera Purohitan	96	Lalki
97	Doli Kankani	98	Kankani
99	Nimbla	100	Sikarpura
101	Sikarpura Naya	102	Raikon Ki Dhani
103	Choudhriyon Ki Dhani	104	Khedo

No.	Name of Village	No.	Name of Village
105	Sar	!06	Sarencha
107	Jatani Basni	108	Chanvra KI Dhani
109	Thumri Dhani	110	Meghwalon Ki Dhani
1 I I	Bhandu Khurd	112	Bhandu Kallan
113	Jatiyasni	114	Khadala
115	Khatawas	116	Lunawas Charnan
117	Lunawas Khurd	118	Rabdiya
119	Bevta	120	Lunawas Khara
121	Vishnu Nagar	122	Gulla Ram Ki Dhani
123	Piraron Ki Dhani	124	Chichrali Ki Dhani
125	Godawas	126	Chichrali
127	Sonagiri	128	Babaji Ka Paraliya
129	Rajgharon Ki Dhani	130	Bishnoiyon Ki Dhani
131	Dhamata Paraliya	132	Paraliya
133	Ala Ki Dhani	134	Koma

List of villages - LILO of Both Circuit from 400KV DIC JodhpurNew-Akal line at 765 KV GSS Korna (Quard Moose) 4 KM

No.	Name of Village	No.	Name of Villae
1.	Korna	2	Badiyon Ki Dhani
3.	Jasti	4	Dhandhaniya

LILO of One Circuit from 400KV DIC Jodhpur-Rajwest line at 765KV GSS Korna (Twin Moose) 10 KM

No.	Name of Village	No.	Name of Village
1.	Koma	2	Badiyon Ki Dhani
3.	Jasti	4	Dhandhaniya

220 kV Khinvsar – Baithwasia transmission line

No.	Name of Village	No.	Name of Village
1.	Khinvsar	2	Maheshpura
3.	Bhaduon Ki Dhani	4	Narwa Khurd
5	Narwa Kalan	6	Joginara
7	Kantiya	8	Magari wali Dhaniya
9	Panchalo Sidd	10	Pipaliya
11	Sowano Ki Dhani	12	Hempura
13	Vishnoiyon Ki Dhani	14	Jasnata pura
15	Madhaniyon Ki Dhani	16	Isar Nawara
17	Papasani	18	Barsaloo Kalan
19	Godaron Ki Dhani	20	Khubuniya
21	Kinjari	22	Loonawas
23	Beniwalon Ki Dhani	24	Kurchhi
25	Basani tarda	26	Dhania
27	Silli	28	Geengla
29	Hadman Sagar	30	Haniya
31	Khindakor	32	Bhakron ki Dhani
33	Magra NagarTapoo	34	Thob
35	Pandit Ki Dhani	36	Baithwasia

List of villages – 220 kV line Undo GSS – Sheo GSS

No	Name of Village	No	Name of Village
1	Sheo	2	Fatenara
3	Jaranada, Ambabadi	4	Panj Raj Ki Basti
5	Sawai Singh Ki Basti	6	Balai
7	Bishu Kala	8	Bisu Khurd
9	Ratnuyo Ki Dhani	10	Katariyo Ki Dhani
11	Rupa Sariya, Amar Singh Ki Dhani	12	Ratari Bhiyad
13	Nanasat, Sarano Ki Dhani	14	Kanasar Golai
15	Saron Ka Tala	16	Jivaniyon Ki Basti
17	Kashmir	18	Jakharo Ki Dhani
19	Kanasar	20	Samdariya
21	Gorsiyon Ki Dhani	22	Undoo

List of villages - 132 kV Dechu-Nathrau line for 132 kV GSS Nathrau.

No	Name of Village	No	Name of Village
1	Dechu	2	Thadiya
3	Kushlawa	4	Asarlai
5	Chordiya	6	Hari Singh Nagar
7	Barnau	8	Gilakore
9	Ekalkhori	10	Bhojakore
11	Peelwa	12	Bher
13	Samrau	14	Chamu
15	Sadulnagar	16	Sukhmandla
17	Nathrau		

List of villages - 132 kV Chattargarh - Loonkaransar.

No	Name of Village	No	Name of Village
1	Chattargarh	2	Sadolai
3	Ajitnama	4	Lakhawar
5	Khokhrana	6	Rojha
7	Loonkaransar		

List of villages - 220 kV D/C Chattargarh - Gajner.

No	Name of Village	No	Name of Village
1	Gajner	2	Titaron Ka Bada
3	Kodamasar	4	Kawani
5	Maharsar	6	Karnisar
7	Bariya	8	Motagarh
9	5LKD	10	Badawana Talai
11	Himarwala	12	Chhattargarh

List of villages - LILO of 132 kV Tinwari-Osian line for 132 kV GSS Bana Ka Bas.

No	Name of Village	No	Name of Village
1	Berdon Ka Bas	2	Ramnagar
3	Cherai	4	Bana Ka Bas
5	Khetasar	6	Bhalasariya

7	Gopasariya	8	Khabara Khurd
9	Khabara Kalan	10	Beh Charnan
11	Jetipura	12	Partapnagar
13	Bala Ki Dhani		

List of villages - LILO of Both Circuit from 400 kV D/C Jodhpur New-Akal line at 765 kV GSS Korna (Quard Moose) 4 KM

No.	Name of Village	No.	Name of Villae
1.	Korna	2	Badiyon Ki Dhani
3.	Jasti	4	Dhandhaniya

List of villages - LILO of One Circuit from 400KV D/C Jodhpur-Rajwest line at 765 kV GSS Korna (Twin Moose) 10 KM

No.	Name of Village	No.	Name of Village
1.	Koma	2	Badiyon Ki Dhani
3.	Jasti	4	Dhandhaniya

ANNEXURE 3.1: DETAILS ON CONSULTATIONS

LIST OF PARTICIPANTS IN PUBLIC CONSULTATIONS

Sl. Nº	Name of the Participant	Male/Female	Age	Occupation
Name of the Component /Site: Korna to Jaisalmer Name of the Village: Abasar				
1	Thana Ram	M	60	Agriculture
2	Sumer Singh	M	38	Agriculture
3	Ranu Singh	M	42	Driver
4	Gulab Singh	M	20	Agriculture
5	Babu Ram	M	40	Agriculture
6	Dungar Ram	M	20	Agriculture
7	Jagdish	M	20	Agriculture
Name of the Component /Site: 765 KV D/C Korna – Ajmer Line Name of the Village: Asarlai				
1	Sardar Singh	M	66	Ex Surpunch
2	Sardar Ram	M	62	Agriculture
3	Ratna Ram	M	50	Agriculture
4	Dayal Ram	M	19	Business
5	Rajendra Choudhary	M	21	ITI
6	Badram	M	30	Agriculture
7	Khyam Ram	M	60	Agriculture
8	Bara Ram	M	60	Agriculture
9	Duda Ram	M	58	Agriculture
10	Hari Ram	M	35	Agriculture
Name of the Component /Site: Korna to Jaisalmer Name of the Village: Balar				
1	Manoj Singh	M	30	Up Surpunch
2	Moti Ram	M	20	Student
3	Narpal Ram	M	23	Shop
4	Thana Ram	M	35	Tailor
5	Ashok Kumar	M	30	Tailor
6	Talab Khan	M	26	Driver
7	Swarupa Ram	M	30	Carpenter
8	Kheta Ram	M	25	Electrician
9	Sata Ram	M	45	Tailor
10	Ashu Ram	M	32	Labour
11	Dine Khan	M	50	Service
12	Mustaq Khan	M	20	Student
Name of the Component /Site: Korna to Jaisalmer Name of the Village: Bhainsara				
Sl. Nº	**Name of the Participant**	**Male/ Female**	**Age**	**Occupation**
1	Kewal Ram Panwar	M	62	Surpunch
2	Devi Singh	M	60	Agriculture
3	Lal Singh	M	90	Retired
4	Derawar Singh	M	40	Teacher
5	Devi Singh	M	30	Up Surpunch
6	Berisal Singh	M	69	Agriculture
7	Rajendra Singh	M	23	Student
8	Arjun Singh	M	52	Service
Name of the Component /Site: Korna to Pokhran Name of the Village: Bhandu Jatia				
1	Uda Ram	M	38	Surpunch Pati
2	Bhabuta Ram	M	26	Labour
3	Soma Ram	M	40	Agriculture

Sl. Nº	Name of the Participant	Male/Female	Age	Occupation
4	Kirpa Ram	M	50	Agriculture
5	Surta Ram	M	55	Agriculture
6	Gordhan	M	22	Student
7	Bhanwararam	M	35	Labour
8	Jagaram	M	51	Government Service
9	Dinesh	M	25	Agriculture
10	Dilip	M	20	Student
11	Chandaram	M	23	Student
12	Kheraj Ram	M	25	Agriculture
13	Dhokal Ram	M	40	Agriculture
14	Bhinya Ram	M	60	Retired Army
15	Viram Puri	M	40	Agriculture
16	Deepa Ram	M	30	Agriculture
17	Dinesh Parekh	M	30	Student
Name of the Component /Site: 220 KV D/C Sheo-Undoo Line Name of the Village: Bhiyad				
1	Sawarupa Ram	M	30	Sarpunch
2	Ramesh Kumar	M	28	Agriculture
3	Satu Devi	F	28	Sarpunch
4	Pira Ram	M	35	Agriculture
5	Deva Ram	M	36	Agriculture
6	Dharma Ram	M	28	Agriculture
7	Kheta Ram	M	33	Agriculture
8	Kumpa Ram	M	55	Agriculture
9	Paraga Ram	M	45	Agriculture
10	Rawata Ram	M	27	Agriculture
Name of the Component /Site: Korna-Pokhran Name of the Village: Bhungra				
1	Prema Ram	M	30	Agriculture
2	Bhawar Singh	M	38	Agriculture
3	Kalu Ram	M	31	Agriculture
4	Dungar Ram	M	25	Agriculture
5	Rawat Ram	M	25	Agriculture
6	Shakti Singh	M	50	Agriculture
7	Inder Singh	M	40	Agriculture
Name of the Component /Site: Korna-Pokhran Name of the Village: Biramdevra				
1	Panalal Darji	M	39	Ward Punch
2	Ganesh	M	20	Agriculture Labour
3	Jaswant Goswami	M	23	Agriculture Labour
4	Jamuna Devi	F	50	Housewife
5	Raju Goswami	F	18	Housewife
6	Khat Singh	M	30	Government Service
7	Takat Singh	M	74	Retired
8	Ram Singh	M	18	Student
9	Chatur Singh	M	60	Agriculture
10	Roop Singh	M	50	Agriculture
11	Mohan Singh	M	18	Student
Name of the Component /Site: 220 KV D/C Sheo- Undoo Line Name of the Village: Bisu Kala				
1	Kamal Singh	M	30	Agriculture
2	Ugam Kanwar	F	28	Sur punch
3	Vikram Singh	M	17	Student
4	Narayan Singh	M	55	Agriculture
5	Rawant Singh	M	65	Small Business

Sl. Nº	Name of the Participant	Male/Female	Age	Occupation
6	Swarup Singh	M	35	Agriculture
Name of the Component /Site: 765 KV D/C Korna- Ajmer Line Name of the Village: Boontiwas				
1	Puran Singh	M	50	Agriculture
2	Sahdev Kumar	M	45	Teacher
3	Sohan Singh	M	60	Labour
4	Mithu Ram	M	47	Agriculture
5	Narendra Kat	M	28	Agriculture
6	Sohan Singh	M	35	Agriculture
7	Kalu Katak	M	33	Contractor
8	Banshi Singh	M	65	Agriculture
9	Govind Singh	M	35	Agriculture
Name of the Component /Site: Korna to Pokhran Name of the Village: Chandsama				
1	Baburam	M	32	Agriculture
2	Manish	M	31	Pharmacist
3	Choth Singh	M	30	Agriculture
4	Patram	M	27	Agriculture
5	Bishan Singh	M	50	Agriculture
6	Om Singh	M	50	Agriculture
7	Shive	M	23	Agriculture
8	Multan Singh	M	45	Agriculture
9	Gulal Singh	M	45	Agriculture
10	Jasu Ram	M	20	Agriculture
11	Manohar	M	25	Agriculture
Name of the Component /Site: 400 KV Rajwest- Korna LILO Name of the Village: Dhandhaniya Bhayala				
1	Ashu Ram	M	60	Agriculture
2	Hukama Ram	M	38	Advocate
3	Dhala Ram	M	50	Agriculture
4	Taja Ram	M	58	Agriculture
5	Mohan Ram	M	29	Agriculture
6	Lala Ram	M	70	Agriculture
7	Rana Ram	M	40	Agriculture
8	Nera Ram	M	45	Business
9	Mohan Ram Chodhary	M	26	Mason
10	Dalaram	M	25	Agriculture
Name of the Component /Site: 765 KV D/C Korna- Ajmer Line Name of the Village: Garnia				
1	Girdhari Lal	M	36	Civil Contractor
2	Sohan Lal	M	55	Ward Punch Pati
3	Ram Lal Mahal	M	33	Hotel Business
4	Prakesh	M	34	Unemployed
5	Ramlal	M	29	Agriculture
6	Pancha Ram Gujjar	M	37	Contractor
7	Jagdish	M	46	Engineer
Name of the Component /Site: Korna to Jaisalmer Name of the Village: Guman Singh Pura				
1	Ganpat Singh	M	62	Agriculture
2	Jaswant Singh	M	30	Agriculture
3	Devi Singh	M	18	Agriculture
4	Indar Singh	M	35	Agriculture
5	Devi Singh	M	42	Agriculture

Sl. Nº	Name of the Participant	Male/Female	Age	Occupation
6	Swarup Singh	M	28	Agriculture
7	Hem Singh	M	30	Agriculture
Name of the Component /Site: Korna to Pokhran Name of the Village: Hapanada				
1	Asha Ram Meghwal	M	32	Agriculture
2	Simana Ram	M	62	Agriculture
3	Dhama Ram	M	36	Labour
4	Amalak Ram	M	60	Agriculture
5	Babuta Ram	M	20	Unemployed
6	Yeruk Khan	M	30	Agriculture
7	Rakesh	M	17	Student
8	Thana Ram	M	20	Agriculture
Name of the Component /Site: 220 KV D/C Khinsvar- Baithwasia Line Name of the Village: Isar Nawara				
1	Santosh Devi	F	32	Surpunch
2	Pappu Ram	M	35	Agriculture
3	Mana Ram	M	75	Agriculture
4	Mangala Ram	M	47	Agriculture
5	Vedprakash	M	33	Agriculture
6	Sona Ram	M	58	Agriculture
Name of the Component /Site: 765 KV D/C Korna – Ajmer Line Name of the Village: Kharabera Purohitan				
1	Sri Chain Singh Rajpurohit	M	50	Agriculture
2	Bhagwan Singh Rajpurohit	M	40	Private Service
3	Man Singh Ji	M	56	Agriculture
4	Mohan Singh Ji	M	82	Agriculture
Name of the Component /Site: Korna to Pokhran Name of the Panchayat: Khirja				
1	Mohan Singh	M	40	Surpunch
2	Fateh Singh	M	50	Agriculture
3	Roop Singh	M	40	Agriculture
4	Bhum Singh	M	60	Pension
5	Phool Singh	M	25	Agriculture
6	Ram Singh	M	60	Agriculture
7	Muna Ram	M	25	Agriculture
8	Roopa Ram	M	30	Agriculture
9	Jetha Ram	M	55	Agriculture
10	Swaran Singh	M	20	Student
Name of the Component /Site: 765 KV D/C Korna – Ajmer Line Name of the Village: Korna				
1	Meha Ram	M	88	Agriculture
2	Krishan	M	48	Agriculture
3	Bana Ram	M	72	Agriculture
4	Durga Ram	M	64	Agriculture
5	Jeevan Das	M	44	Agriculture
6	Laxman	M	60	Agriculture
7	Biram Ram	M	30	Agriculture
8	Mohal Lal	M	65	Agriculture
9	Ramesh Chandra	M	44	Agriculture
10	Govind Ram	M	38	Agriculture
11	Rana Ram	M	30	Agriculture
12	Tulshi Ram	M	60	Agriculture
13	Buddha Ram	M	70	Agriculture
14	Ram Lal	M	47	Agriculture

Sl. Nº	Name of the Participant	Male/Female	Age	Occupation
15	Tulshi Das	M	70	Agriculture
16	Narsingh	M	25	Agriculture
17	Fusha Ram	M	50	Agriculture
Name of the Component /Site: 765 KV D/C Korna- Ajmer Line Name of the Village: Lolawas				
1	Meha Ram	M	88	Agriculture
2	Krishan	M	48	Agriculture
3	Bana Ram	M	72	Agriculture
4	Durga Ram	M	64	Agriculture
5	Jeevan Das	M	44	Agriculture
6	Laxman	M	60	Agriculture
7	Biram Ram	M	30	Agriculture
8	Mohal Lal	M	65	Agriculture
9	Ramesh Chandra	M	44	Agriculture
10	Govind Ram	M	38	Agriculture
11	Rana Ram	M	30	Agriculture
12	Tulshi Ram	M	60	Agriculture
13	Buddha Ram	M	70	Agriculture
14	Ram Lal	M	47	Agriculture
15	Tulshi Das	M	70	Agriculture
16	Narsingh	M	25	Agriculture
17	Fusha Ram	M	50	Agriculture
Name of the Component /Site: 765 KV D/C Korna- Ajmer Line Name of the Village: Malkhasani				
1	Sayar Ram	M	65	Agriculture
2	Sultan Khan	M	63	Business
3	Sayar Ram	M	63	Agriculture
4	Ram Chandra	M	75	Agriculture
5	Chuna Ram Meghwal	M	58	Agriculture Labour
6	Sesha Ram	M	65	Handicapped
7	Rana Ram	M	40	Agriculture
8	Mangala Ram	M	35	Agriculture
9	Sawai Ram	M	35	Agriculture
10	Hapu Ram	M	68	Agriculture
11	Uma Ram	M	32	Labour
12	Raju Ram	M	27	Labour
Name of the Component /Site: 220 KV D/C Khinvsar- Baithwasia Line Name of the Village: Panchala Siddha				
1	Ashu Ram	M	45	Business
2	Joga Ram	M	60	Agriculture
3	Mangi Lal Beniwal	M	55	Agriculture
4	Tulsha Ram	M	46	Agriculture
5	Mula Ram	M	23	Agriculture
Name of the Component /Site: 765 KV D/C Korna- Ajmer Line Name of the Village: Roop Nagar Thorian				
1	Moti Lal	M	40	Agriculture
2	Ram Lal	M	28	Driver
3	Kailash	M	21	Student
4	Saitan	M	20	Student
5	Raimal	M	32	Agriculture
6	Prabhu	M	35	Agriculture
7	Raghunath	M	60	Agriculture
8	Jeev Raj	M	27	Agriculture
9	Shiv Raj	M	32	Agriculture
10	Nathu Jee	M	52	Agriculture

Sl. Nº	Name of the Participant	Male/Female	Age	Occupation
Name of the Component /Site: 765 KV D/C Korna-Ajmer Line Name of the Village: Sanwlta Kalla				
1	Rameshwar Das	M	46	Business
2	Sawari Devi	F	52	Agriculture Labour
3	Narwada Devi	F	50	Agriculture Labour
4	Samuri Devi	F	50	Agriculture Labour
5	Hari Ram	M	40	Agriculture
6	Gautam Singh	M	40	Agriculture
7	Kharta Ram	M	28	Agriculture
8	Mohan Lal	M	42	Labour
9	Ashok	M	23	Job
10	Mahipal Singh	M	30	Agriculture
11	Rama Ram	M	60	Agriculture Labour
12	Ramesh	M	25	Agriculture Labour
13	Sumitra Devi	F	40	Housewife
14	Babu Lal	M	40	Agriculture Labour
15	Rakesh	M	30	Agriculture
16	Teja Ram	M	60	Agriculture Labour
17	Smt. Mutara	F	50	Agriculture
Name of the Component /Site: 765 KV D/C Korna- Ajmer Line Name of the Village: Sar				
1	Sri Bhawara Ram Patel	M	30	Sur punch
2	Bhaskar Ram Patel	M	35	Agriculture
3	Heera Lal Patel	M	28	Agriculture
4	Oma Ram Patel	M	18	Student
5	Ashok Patel	M	19	Student
6	Oma Ram	M	22	Agriculture
7	Sada Ram	M	65	Agriculture
8	Thana Ram	M	33	Agriculture
Name of the Component /Site: 220 KV D/C Sheo- Undoo Line Name of the Village: Sheo				
1	Parmanand	M	43	Agriculture
2	Sugano Devi	F	40	Sur punch
3	Mehroj Singh	M	56	Agriculture
4	Kishan Lal	M	33	Agriculture
5	Sawai Ram	M	33	Hotel
6	Leela Dhar	M	32	Business
7	Sawai	M	17	Agriculture
8	Dalpat Singh	M	16	Business
Name of the Component /Site: Korna to Jaisalmer Name of the Village: Sointara				
1	Govind Singh	M	35	Social work
2	Bhagwat Singh	M	60	Agriculture
3	Jog Singh	M	38	Driver
4	Abdul Khan	M	45	Labour
5	Molu Ram	M	65	Labour
6	Mangu Khan	M	45	Labour
7	Ramesh	M	22	Labour
8	Chana Ram	M	22	Labour
9	Bhiro Singh	M	48	Agriculture
10	Bhanwar Lal	M	35	Agriculture
11	Ganesh Kumar	M	38	Service
12	Madan Singh	M	30	Agriculture
Name of the Component /Site: 220 KV D/C Khinsvar- Baithwasia Line				

Sl. Nº	Name of the Participant	Male/Female	Age	Occupation
Name of the Village: Tapoo				
1	Bhom Singh	M	60	Agriculture
2	Hanuman Bishnoi	M	30	Ex Army
3	Mahender Singh	M	22	Private Job
4	Sang Singh	M	21	Agriculture
5	Mahender Singh	M	27	Agriculture
6	Bhajan Lal Bishnoi	M	21	Agriculture
7	Heer Singh	M	21	Agriculture
8	Mala Ram Bishnoi	M	68	Agriculture
9	Anoop Singh	M	42	Agriculture
10	Kushal Singh	M	24	Agriculture
Name of the Component /Site: 220 KV D/c Khinsver- Bhaitwaisa Line **Name of the Village: Thob**				
1	Bhanwara Ram Singh	M	43	Agriculture
2	Pappu Ram	M	30	Agriculture
3	Budh Ram	M	42	Agriculture
4	Dalip Singh	M	51	Agriculture
5	Bhanwar Singh	M	42	Agriculture
6	Shyam Singh	M	36	Agriculture
Name of the Component /Site: 765 KV D/C Korna- Ajmer Line **Name of the Village: Toonkara**				
1	Sultan Singh	M	40	Agriculture
2	Roshani Devi	F	36	Surpunch
3	Shyam Singh	M	36	Agriculture
4	Gepar Ram	M	65	Agriculture
5	Govind Singh	M	44	Agriculture
6	Madan Lal	M	48	Agriculture
7	Sabak Singh	M	46	Agriculture
8	Hukam Singh	M	24	Agriculure
9	Narayan ji	M	65	Agriculture
10	Bhudha Ram	M	65	Agriculture
11	Dilip Singh	M	43	Agriculture
12	Mahendar Singh	M	32	VLW
Name of the Component /Site: 220 KV D/C Sheo- Undoo Line **Name of the Village: Undoo**				
1	Manohar Singh	M	35	Surpunch
2	Savrup Kanwar	F	32	ZPKMM
3	Srawan Singh	M	25	Agriculture
4	Aman Singh	M	52	Agriculture
5	Swarup Singh	M	41	Agriculture
6	Aman Khan	M	58	Agriculture
7	Sambhu Ram	M	55	Agriculture
8	Tej Singh	M	40	Agriculture
9	Hema Ram	M	50	Agriculture
10	Deva Ram	M	45	Agriculture
11	Taje Khan	M	40	Agriculture
12	Daulat Ram	M	38	Agriculture
13	Leeladhar	M	27	Agriculture
14	Mukanara	M	42	Agriculture
15	Usman Khan	M	48	Agriculture
16	Bhure khan	M	55	Agriculture
17	Bhomara	M	55	Agriculture
18	Kripa Ram	M	55	Agriculture
19	Chima Ram	M	53	Agriculture

Sl. Nº	Name of the Participant	Male/Female	Age	Occupation
20	Vikram Singh	M	33	Agriculture
21	Kamal Singh	M	36	Agriculture
Name of the Component /Site: Korna to Pokhran Name of the Village: Unthvaliya				
1	Jaswant Singh	M	35	Business
2	Rawat Singh	M	40	Agriculture
3	Aslam Ram	M	42	Agriculture
4	Dungar Ram	M	60	Agriculture
5	Inder Singh	M	42	Agriculture
6	Swai Ram	M	45	Agriculture
7	Dave Singh	M	32	Agriculture
8	Jatha Ram	M	50	Agriculture
9	Bhuma Ram	M	35	Agriculture
10	JhabraRam	M	32	Agriculture
11	Mishri Lal	M	70	Agriculture
12	Bhawani Singh	M	22	Agriculture
13	Davsnd	M	55	Business
Name of the Component /Site: 765 KV D/C Korna – Ajmer Line Name of the Village: Lunawas Khara				
1	Sri Jethu Singh	M	35	Agriculture
2	Kana Ram	M	66	Agriculture
3	Jodh Singh	M	63	Agriculture
4	Sri Suresh	M	55	Agriculture
5	Diyan Ram	M	60	Agriculture
6	Sri Uma Ram	M	38	Agriculture
7	Chaman Ram	M	73	Agriculture
8	Prema Ram	M	33	Business
9	Amar Singh	M	53	Driver
10	Teja Ram	M	34	Agriculture
11	Ladu Ram	M	66	Agriculture
12	Narayan Singh	M	52	Agriculture
13	Hanuman Das	M	35	Business
Name of the Component /Site: 132 kV D/C Chattargarh Loonkaransar Line Name of Villagen: Loonkaransar				
1	Kanhaiya Lal	M	25	Driver
2	Bhagirath	M	25	Driver
3	Madan	M	26	Farmer
4	Verwal	M	18	Unemployed
5	Manful	M	21	Unemployed
6	Ram kumar	M	22	Panter
7	Suresh	M	20	Panter
8	rana	M	22	Shop
Name of the Component /Site: 132 kV D/C Chattargarh Loonkaransar Line Name of Village: 303 head				
1	Narendra	M	23	Student
2	Muni Ram	M	60	Labour
3	Deep Chand	M	50	Farmer
4	Sethi	M	32	Farmer
5	Manoj	M	30	Farmer
Name of the Component /Site: 132 kV D/C Chattargarh Loonkaransar Line				

Sl. Nº	Name of the Participant	Male/Female	Age	Occupation
Name of Village: Ajeet Mana				
1	Subhash	M	18	student
2	Madhe Ram	M	30	Farmer
3	Madan Lal	M	30	Farmer
4	Kalu Ram	M	65	Farmer
5	Sai Ram	M	50	Teacher
6	Kalu Ram	M	23	Student
Name of the Component /Site: 132 kV D/C Chattargarh Loonkaransar Line **Name of Village: Shobholai**				
1	Sukh Ram	M	30	Student
2	Lal Chand		40	Driver
3	Gopi Ram	M	24	Farmer
4	Ed Ram	M	35	Farmer
5	Hat Ram	M	47	Farmer
6	Anif	M	23	Farmer
7	Ram Kumar	M	23	Farmer
8	Likhma Ramji	M	75	Farmer
9	Pusha Ramji	M	80	Farmer
10	Jesha Ram	M	75	Farmer
11	Gopal Ram	M	30	Macanic
12	Dayawanti	F	30	Sarpanch
Name of the Component /Site: 220 kV Chhattargarh-Gajner line **Name of Village: Chhattargarh**				
1	Bajranj Sharma	M	30	Contractor
2	Rajveer Singh	M	26	Labour
3	Hatmesh Singh	M	28	Labour
4	Parvinder Singh	M	47	Labour
5	Nathu Singh	M	37	Labour
6	Narender Singh	M	37	Labour
7	Gurvinder Singh	M	21	Mechanic
Name of the Component /Site: 220 kV Chhattargarh-Gajner line				

Sl. Nº	Name of the Participant	Male/Female	Age	Occupation
Name of Village: Gajner				
1	S N SINGH	M	41	Contractor
2	Mithu	M	28	shop
3	Gautam	M	18	Student
4	Ram Chandra	M	35	Labour
5	Narshi Ram	M	54	Sarpanch
6	Ram Lal	M	71	Retd
7	Bhushan Ram	M	64	Retd
8	Kishan lal	M	63	Macanic
9	Shankar Lal	M	25	Unemployed
10	Baban lal	M	65	Retd
11	Aje khan	M	66	Labour
12	Bhagwan Ram	M	40	Shop
13	Karni Singh	M	59	Driver
Name of the Component /Site: 220 kV Chhattargarh-Gajner line **Name of Village: Motigarh**				
1	Ganesh	M	49	Shop
2	Durga Ram	M	35	Farmer
3	Yogesh	M	24	Shop
4	Palu Ram	M	27	Farmer
5	Jetha Ram	M	15	Student
6	Madan Singh	M	50	Farmer
7	Kiya ram	M	30	Farmer
8	Govind	M	21	Student
9	Hukuma Ram	M	35	Farmer
10	Ganesh	M	30	Farmer
Name of the Component /Site: LILO 3 km D/C of 132 kV Sridungarh-Ratangarh Line (at Kitasar 132 kV GSS, Bikaner) **Name f Village: Kitasar**				
1	Mal Chand	M	45	Farmer
2	Jai Narayan	M	21	Shop

Sl. Nº	Name of the Participant	Male/Female	Age	Occupation
3	Pawan	M	18	Shop
4	Ganga Ram	M	40	Farmer
5	Karan Pal	M	25	Business
6	Prem Seni	M	20	Shop
7	Rigta Ram	M	48	Farmer
8	Manish	M	16	Student
9	Rupa Ram	M	37	Farmer
10	Jai Chand	M	40	Farmer
11	Bajrang Lal	M	43	Nai Shop
12	Surya Ram	M	50	Farmer
13	Surya Ram	M	24	Shop
14	Rajinder	M	30	Farmer
15	Mohan Lal	M	40	Farmer
Name of the Component /Site: 220 KV GSS Dechu Nathrau Jodhpur Name of the Village: Gumanpura				
1	Roshan Khilji	M	25	Shop
2	Farukh	M	25	Mason
3	Bhagirath	M	35	Driver
4	Gaj Singh	M	22	Driver
5	Papu Singh	M	18	Labour
6	Manohar Singh	M	25	Labour
7	Farid	M	18	Shop
Name of the Component /Site: 220 KV GSS Dechu Nathrau Jodhpur Name of the Village: Nathrau				
1	Sanjeev Kumar Sharma	M	48	Gram Panchyat Sectary
2	Bhanwar Singh	M	36	Ex Sarpunch
3	Nathu Singh	M	49	Contractor
4	Jaswant Singh	M	28	Government Service
5	Amb Singh	M	26	Business
6	Malaram	M	34	Contractor

Sl. Nº	Name of the Participant	Male/Female	Age	Occupation
7	Swai Singh	M	36	GSS
8	Paras Soni	M	32	Business
9	Ratan Singh	M	56	Agriculture
Name of the Component /Site: LILO of 132 KV S/C Tinwari - Osian Line Name of the Village: Bana Ka Bas				
1	Gana Ram	M	25	Shop
2	Laxman	M	32	Shop
3	Sultan	M	18	Shop
4	Shyari Devi	F	55	Housewife
5	Chukhi Devi	F	28	Housewife
6	Antri Devi	F	25	Housewife
7	Mahender	M	18	Agriculture
8	Luni Devi	F	23	Housewife
9	Gopilal	M	60	Agriculture
Name of the Component /Site: Lilo of 132 KV S/C Tinwari- Osian Line Name of the Village: Jaatipura				
1	Ganpat Ram	M	27	Railway Service
2	Nem Singh	M	33	Agriculture
3	Kewal Ram	M	27	Unemployed
4	Mahendra	M	28	Shop
5	Babu Ram	M	42	Agriculture
6	Budha Ram	M	45	Agriculture
Name of the Component /Site: LILo 2Km D/C Jaisalmer- Sheo Line (Sangarh 132 KV Jaisalmer) Name of the Panchayat: Sangarh				
1	Harkha Ram	M	40	Agriculture
2	Anopa Ram	M	22	Agriculture
3	Laxman Dan	M	40	Agriculture
4	Magudan	M	45	Agriculture
5	Nathuram	M	35	RTO
6	Ugamdan	M	30	Job
7	Dayam Khan	M	50	Business

Sl. Nº	Name of the Participant	Male/Female	Age	Occupation
8	Inderdan	M	25	Student
9	Vabani Singh	M	30	Teacher
10	Laxmandan	M	25	Business Dairy

DETAILS ON GENDER CONSULTATIONS AND LIST OF PARTICIPANTS IN WOMEN GROUP/GENDER CONSULTATIONS

FGD GUIDE LINES ON GENDER (CONSULTATION AMONG WOMEN GROUP)

1. Location/ place of FGD: Biramdevra

	ISSUES	RESPONSE/DETAILS
	Introductory	
1	Open the discussion with an 'ice-breaker', a question which is easy to answer and begins to put people at ease. Ask each person: "Where do you live and how long have you lived there?"	All participants have been living in the village since long time and remain want to live in the village they think village life is better and peaceful compare to the town
2	Ask a further question to warm up: "What do you like most about living in this area?"	Clean and healthy environment
3	Initiate the discussion by asking the group on their primary occupation?	Primary occupation of women participant are agriculture farming, agriculture labour and housewife
4	Please tell us as to how you spend your time (daily routine)? (Try to probe whether they get leisure time and what are the activities they usually do during the leisure hours.	All women are responsible and well active. They work as per their requirement during crops season – they all work in the field they performed household activities, cooking, cleaning, and caring not only their child but their pet animals like – cow, bullock and others, hardly they able to get leisure time, they feel have no tie to do more from morning to late night they involve in doing something but they never claim, they feel proud to do such activities for betterment of their family
	Education:	
5	Opinion on the importance of education for the people and specifically of the girls and women in your area.	Education making difference today educated women getting more respect in the house everybody dreams today for an educated Daughter in Law
6	Educational level of community people in your locality/area.	New generation mostly up to middle standard 5-8th but capable people getting more than middle. Level of education depend on availability of education facility if up 12th facility available in the village mostly all girls/ boys up to 12th standard
7	Types of education facilities (formal and non formal education, its distance) available in the village / neighbourhood and parent's perception on quality of education (pre-school, primary, elementary and secondary/higher secondary). Try to know access and services to the girls.	Up to senior secondary school available in the village
8	Reasons for non-enrolment and dropout amongst children & youth. (Male & Female)	Lack of money is major issue for non-enrolment and dropout

	ISSUES	RESPONSE/DETAILS
9	Perceived importance of girls education reasons for sending/not sending girls to school	1. Will able to live better life 2. Will able to make their family educated and able to tell the importance of education 3. Will get better family for marriage
10	Type of engagement of children in household activities (try to know about the girls) for the (type) and extent to which they directly contribute to the earning of the household (type of occupations engaged in).	Children always engage in house hold activities as per their capacity, specially the girls, child care and involvement in cleaning, other household activities performed by the girls
	Vocational Education:	
11	Existing skills and traditional skills amongst the adolescent girls and women that must be revived /encouraged. (Try to probe the skills those are economically productive for the women).	Nil
12.	What are the barriers in terms of resources, availability, transport, locations of trainings if any, for pursuing vocational courses by women of your community? Also probe for the barriers from the family side, (like lack of time, etc)	Transport facilities available from 0.5 km and government and private transport available from the village
13	Is there any organization, government, private or NGO running any vocational courses for the adolescents and women in area. (Probe for the agencies, nature of vocational trades providing, women's participation and livelihood opportunities).	No
	Economic Activities:	
14	Do the women of the households in the community have ownerships of the property in the community, like houses, land, etc. probe for the reasons for having or not having ownership rights.	No
15	Please tell us what are the nature of jobs mainly performed by the women of your community? (Try to probe for besides household work their engagement in government / private sectors, small scale business, agriculture, animal husbandry).	Household and agriculture labour mainly performed by the women, aaganwadi worker and Asha worker are women also involve in all activities that household have belong
16	Referring to the group ask if there is any form of inequality in the receipt of wages, payments, rewards, etc for the work that the women perform. (Try to understand the nature of inequalities prevailing). What are the underlying factors for this prevalence of	Respect of wages there is inequality in this area women not able to get same amount as per male worker get male -300 Rs ,female-200 Rs, they claim for this inequality as male work more than women, but in government scheme they got equal wages 181 Rs

	ISSUES	RESPONSE/DETAILS
	inequalities?	
17	Are the woman who are working and earning have the ultimate decision on the use of their money? (Try to probe the pattern of using the money earned, part saved, used for them, etc.)	Any kind of decision regarding use of money taken after discussion among the family member, No woman having the ultimate decision on the use of their money, only after the discussion and need
	Decision Making & community Participation	
18	What role do the women of the household have in the decision making process of the household? Do you feel you have equal share along with the male counterpart any household decisions? Does it vary among the earning and non earning women? (How).	All type of decision taken by both male/female consultation if both are working it very among the earning and non earning women
19	Is there any form of inequality or the cases of male dominating the women in the decision making process at the household level? Please try to probe for the different household decisions and the role of the women (Decisions may be financial matters, education & health care of the child, purchase of assets, day to day activities, on social functions and marriages).	Yes**,** It is true male always dominate in the household it is a tradition coming from old time
20	Is there any community based organization (like NGO's, SHGs, etc) for the women of your community? If yes, probe what are the activities those organizations are performing, what is the role of the women, is there any positions that they possess, like president, secretary, etc).	There is no any community based organization for the women
21	Do the women of your community are members of any political bodies, like Pradeshiya Sabhas, Provincial Councils etc. what role actually played by them in terms of their involvement and participation. Also probe what prevent women from engaging in political process.	Women reservation as per govt. Rule 33% fixed in GP. But role and responsibility actually not played by the women in terms of their involvement and participation practically male played active role on behalf of women
	Health	

	ISSUES	RESPONSE/DETAILS
22	General health facilities available and the perceived satisfaction on the quality of services (government and private) & affordability	Sub centre available in the village, ANM visit 3 times in a week and actively giving services like – check up, immunization, and other disease care through treatment
23	Types of commonly prevalent diseases among the community, is there any specific ailments affecting the women of your community? Probe for the problems and the facilities available for the treatment.	Not reported
24	Is there any provision of special health care services available near to your village/ neighbourhood? Probe for the nearest maternity and child health care facilities available, problems faced and the perception on the quality of care.	Only sub centre services available near the village maternity facility also available, but not satisfied with the facility
	Social and Physical Security	
25	Do the women feel safe in going outside in the neighbourhood during day time? Also probe for the situation during the night time? What are the problems or fears they perceived for their movements?	100% feel safe during day and night, no incident took place in the village regarding safety of the women
26	Do the women in the community face any kind of domestic violence at their home? If yes probe for the reasons.	Generally no violence with the women they got as respect as they run their houses together
27	Is the system of dowry is prevalent among your community. Do the women of your community feel insecure for getting their girls married due to the reasons of dowry? What are the problems and challenges they perceive for this system?	Yes today dowry is prevalent among the all society/ community as cash, kind, gold, motorcycle
	General Remarks if any	1. Needs vocational training centre to improve skills and learn new skills 2. Drinking water

LIST OF PARTICIPANTS

Sl. No	Name of the Participant	Relation to the Head of the Households	Occupation
1	Jamuna Devi	Wife	Housewife
2	Rukham Kuar	Wife	Housewife
3	Radhride	Daughter	Student
4	Randhi	Wife	Housewife
5	Bhomrki	Wife	Housewife
6	Poori	Wife	Housewife

Sl. No	Name of the Participant	Relation to the Head of the Households	Occupation
7	Ramkamar	Wife	Housewife
8	Pushpa	Wife	Anganwadi Worker
9	Dhani	Wife	Housewife
10	Nirma	Wife	Worker
11	Ganga	Wife	Housewife
12	Durga	Wife	Housewife
13	Sanpat Kumar	Wife	Housewife
14	Bindu Kumar	Wife	Housewife

FGD GUIDE LINES ON GENDER (CONSULTATION AMONG WOMEN GROUP)

2. Location/ place of FGD: Roop Nagar Thorian

	ISSUES	RESPONSE/DETAILS
	Introductory	
1	Open the discussion with an 'ice-breaker', a question which is easy to answer and begins to put people at ease. Ask each person: "Where do you live and how long have you lived there?"	All the participant lives here since birth and after marriage
2	Ask a further question to warm up: "What do you like most about living in this area?"	In this village people are very cooperative and supportive village people respect the women and give full freedom women are hard working and equally participate in income generation
3	Initiate the discussion by asking the group on their primary occupation?	Household work, Help in agriculture field, Agriculture labour work and animal husbandry
4	Please tell us as to how you spend your time (daily routine)? (Try to probe whether they get leisure time and what are the activities they usually do during the leisure hours.	Always busy in household activities after get up early in the morning till go to bed, feel less time to work rarely get leisure time or rest generally whenever they got leisure time they do animal husbandry work, fetching water and storing it, collection of water is a major job and one individual job sometime very hard during summer
	Education:	
5	Opinion on the importance of education for the people and specifically of the girls and women in your area.	They feel most important thing is education, educated people much respect among the others both male and female now a day people wants to keep own daughter in law educated they feel proud having educated bahu, so as daughter-in-law they also focus to educate their girl child as much as possible 2-5 girls study in outside the village for higher education
6	Educational level of community people in your locality/area.	50% Literate both Male and Female

	ISSUES	RESPONSE/DETAILS
7	Types of education facilities (formal and non formal education, its distance) available in the village / neighbourhood and parent's perception on quality of education (pre-school, primary, elementary and secondary/higher secondary). Try to know access and services to the girls.	Primary school available in the village for middle and higher school visit to karnos- 3 Km, parent's wants high school in the village, at present not satisfy with the quality of education
8	Reasons for non-enrolment and dropout amongst children & youth. (Male & Female)	1. Lack of money, 2. Earlier no enrolment exist but with the time progress children and youth try to get more and more education
9	Perceived importance of girls education reasons for sending/not sending girls to school	But there is barrier for getting higher education sending child to other village is still not favourable for girls
10	Type of engagement of children in household activities (try to know about the girls) for the (type) and extent to which they directly contribute to the earning of the household (type of occupations engaged in).	Children always engage in house hold activities as per their capacity, specially the girls, child care and involvement in cleaning, other household activities performed by the girls
	Vocational Education:	
11	Existing skills and traditional skills amongst the adolescent girls and women that must be revived /encouraged. (Try to probe the skills those are economically productive for the women).	Selai and kadai is the only skill amongst the adolescent girls and women
12.	What are the barriers in terms of resources, availability, transport, locations of trainings if any, for pursuing vocational courses by women of your community? Also probe for the barriers from the family side, (like lack of time, etc)	In society all believe that making women just literate is enough for her, availability of school and lack of money is the barriers, to do any vocational training they need to travel- 20- 50 km, only auto facility is available from the village
13	Is there any organization, government, private or NGO running any vocational courses for the adolescents and women in area. (Probe for the agencies, nature of vocational trades providing, women's participation and livelihood opportunities).	No NGO or any organization working in the village
	Economic Activities:	
14	Do the women of the households in the community have ownerships of the property in the community, like houses, land, etc. probe for the reasons for having or not having ownership rights.	No

	ISSUES	RESPONSE/DETAILS
15	Please tell us what are the nature of jobs mainly performed by the women of your community? (Try to probe for besides household work their engagement in government / private sectors, small scale business, agriculture, animal husbandry).	The main nature of job are agriculture and agriculture labour, animal husbandry and household work
16	Referring to the group ask if there is any form of inequality in the receipt of wages, payments, rewards, etc for the work that the women perform. (Try to understand the nature of inequalities prevailing). What are the underlying factors for this prevalence of inequalities?	Respect of wages there is inequality in this area women not able to get same amount as per male worker get male -400 Rs ,female-300 Rs, they claim for this inequality as male work more than women
17	Are the woman who are working and earning have the ultimate decision on the use of their money? (Try to probe the pattern of using the money earned, part saved, used for them, etc.)	Any kind of decision taken by consultation with male and other mature family members women can take ultimate decision if required regarding using and saving of money
	Decision Making & community Participation	
18	What role do the women of the household have in the decision making process of the household? Do you feel you have equal share along with the male counterpart any household decisions? Does it vary among the earning and non earning women? (How).	All type of decision taken by both male/female consultation if both are working it very among the earning and non earning women
19	Is there any form of inequality or the cases of male dominating the women in the decision making process at the household level? Please try to probe for the different household decisions and the role of the women (Decisions may be financial matters, education & health care of the child, purchase of assets, day to day activities, on social functions and marriages).	Generally any kind of decision taken by male but before the decision male consultation with women partner and other matter members in the house for any matter
20	Is there any community based organization (like NGO's, SHGs, etc) for the women of your community? If yes, probe what are the activities those organizations are performing, what is the role of the women, is there any positions that they possess, like president, secretary, etc).	There is no any community based organization for the women
21	Do the women of your community are members of any political bodies, like Pradeshiya Sabhas, Provincial Councils	Women reservation as per govt. Rule 33% fixed in GP. But role and responsibility actually not played by the women in terms of their involvement and

	ISSUES	RESPONSE/DETAILS
	etc. what role actually played by them in terms of their involvement and participation. Also probe what prevent women from engaging in political process.	participation practically male played active role on behalf of women
	Health	
22	General health facilities available and the perceived satisfaction on the quality of services (government and private) & affordability	Sub centre is there in the village, child immunization and pulse polio, ANM visit 3 times in a week, during pregnancy normal check up done by ANM, but in case of any help women have to visit Pisangan- 22 km or Bayawar- 25 Km and Ajmer-50 Km, no such facility available in the village
23	Types of commonly prevalent diseases among the community, is there any specific ailments affecting the women of your community? Probe for the problems and the facilities available for the treatment.	There is no any specific aliments affecting the women of the community
24	Is there any provision of special health care services available near to your village/ neighbourhood? Probe for the nearest maternity and child health care facilities available, problems faced and the perception on the quality of care.	As per Rajasthan government state health policy
	Social and Physical Security	
25	Do the women feel safe in going outside in the neighbourhood during day time? Also probe for the situation during the night time? What are the problems or fears they perceived for their movements?	Women feel safe in going outside in neighbourhood during day and night, they never perceived any problem and fear
26	Do the women in the community face any kind of domestic violence at their home? If yes probe for the reasons.	Generally no violence with the women they got as respect as they run their houses together
27	Is the system of dowry is prevalent among your community. Do the women of your community feel insecure for getting their girls married due to the reasons of dowry? What are the problems and challenges they perceive for this system?	Yes today dowry is prevalent among the all society/ community as cash, kind, gold, motorcycle
	General Remarks if any	Needs vocational training centre to improve skills and learn new skills

LIST OF PARTICIPANTS

Sl. No	Name of the Participant	Relation to the Head of the Households	Occupation
1	Jeoni Devi	Wife	Labour
2	Lila	Daughter	Labour
3	Laxmi	Daughter	Labour
4	Yeshoda	Daughter	Labour
5	Heera	Daughter	Labour
6	Methi	Daughter	Labour
7	Sandhya	Wife	Labour
8	Sanju	Daughter	Labour
9	Ganga	Daughter	Labour
10	Setha	Daughter	Labour
11	Rampayari	Wife	Labour
12	Pista	Daughter	Labour
13	Manju	Daughter	Labour
14	Kashni	Wife	Labour
15	Ramti	Wife	Labour
16	Saru	Wife	Labour
17	Seema	Wife	Labour

FGD GUIDE LINES ON GENDER (CONSULTATION AMONG WOMEN GROUP)

3. Location/ place of FGD: Sanwlta Kalla

	ISSUES	RESPONSE/DETAILS
	Introductory	
1	Open the discussion with an 'ice-breaker', a question which is easy to answer and begins to put people at ease. Ask each person: "Where do you live and how long have you lived there?"	Most of the participants have been living since birth in this village or any other village they have no problem in living in this village they never attract by the city only they want power supply regular
2	Ask a further question to warm up: "What do you like most about living in this area?"	In this village people having land for livelihood, Living in their community make them easy in the life regarding marriage of male/female child, In this village usually people belong to farmers community farming is the main occupation
3	Initiate the discussion by asking the group on their primary occupation?	Primary occupation of women participant are agriculture farming, agriculture labour and housewife but working condition is almost same for all
4	Please tell us as to how you spend your time (daily routine)? (Try to probe whether they get leisure time and what are the activities they usually do during the leisure hours.	In the village people start with household activities after preparing food for family they use to go field with other working member if stayed at home they usually collect water, collection of water is a major work for the women, child care and live stock care is also done by women, women feel no time for rest but whenever they got leisure time they use to clean house, clothes outside the house sometime they use to watch TV with other family member
	Education:	

	ISSUES	RESPONSE/DETAILS
5	Opinion on the importance of education for the people and specifically of the girls and women in your area.	Now people are very focused and positive towards the importance of education for the boys and girls they today starting thinking through education one can do the best for their future every walk of life
6	Educational level of community people in your locality/area.	Average educational level of community people is middle school both male or female, but young generation they trying to give maximum education at least 12th, due to low income and need in agriculture work they not able to continue education
7	Types of education facilities (formal and non formal education, its distance) available in the village / neighbourhood and parent's perception on quality of education (pre-school, primary, elementary and secondary/higher secondary). Try to know access and services to the girls.	Up to Senior secondary school available in the village
8	Reasons for non-enrolment and dropout amongst children & youth. (Male & Female)	Economic condition is playing against the child education and less opportunity for villagers in government and private job is also reason for dropout and not much importance of education
9	Perceived importance of girls education reasons for sending/not sending girls to school	Sending outside specially for girls a major issue or concern for dropout the reason is very clear village life and nature of job employment overall low income but today many people sending girls for higher education as they are capable
10	Type of engagement of children in household activities (try to know about the girls) for the (type) and extent to which they directly contribute to the earning of the household (type of occupations engaged in).	Children always engage in house hold activities as per their capacity in farming man power played a vital role for getting men power one have to pay as mostly village are belong to marginal farmer having small size of land holding increase child to involve in the household activities
	Vocational Education:	
11	Existing skills and traditional skills amongst the adolescent girls and women that must be revived /encouraged. (Try to probe the skills those are economically productive for the women).	No specific skills and traditional skill amongst the adolescent girl and women
12.	What are the barriers in terms of resources, availability, transport, locations of trainings if any, for pursuing vocational courses by women of your community? Also probe for the barriers from the family side, (like lack of time, etc)	Only barrier is lack of opportunity one and only opportunity available is farming or working as labourer in the farming sector no industry small or major in and around the village, transport facility available only once in the morning to pali district -40 km
13	Is there any organization, government, private or NGO running any vocational courses for the adolescents and women in area. (Probe for the agencies, nature of vocational trades providing, women's participation and livelihood opportunities).	No any NGO, organization, Govt. Running any vocational training for adolescents and women in the area

	ISSUES	RESPONSE/DETAILS
	Economic Activities:	
14	Do the women of the households in the community have ownerships of the property in the community, like houses, land, etc. probe for the reasons for having or not having ownership rights.	**No**
15	Please tell us what are the nature of jobs mainly performed by the women of your community? (Try to probe for besides household work their engagement in government / private sectors, small scale business, agriculture, animal husbandry).	The main nature of job are agriculture and agriculture labour there is no engagement in government or private sector
16	Referring to the group ask if there is any form of inequality in the receipt of wages, payments, rewards, etc for the work that the women perform. (Try to understand the nature of inequalities prevailing). What are the underlying factors for this prevalence of inequalities?	Yes there is inequality in the receipt of wages for the work cash 100 Rs less amount paid on the name of performance of less hard work compare to the male
17	Are the woman who are working and earning have the ultimate decision on the use of their money? (Try to probe the pattern of using the money earned, part saved, used for them, etc.)	Any kind of decision taken by consultation with male and other mature family members women can take ultimate decision if required regarding using and saving of money
	Decision Making & community Participation	
18	What role do the women of the household have in the decision making process of the household? Do you feel you have equal share along with the male counterpart any household decisions? Does it vary among the earning and non earning women? (How).	All type of decision taken by both male/female consultation if both are working it very among the earning and non earning women
19	Is there any form of inequality or the cases of male dominating the women in the decision making process at the household level? Please try to probe for the different household decisions and the role of the women (Decisions may be financial matters, education & health care of the child, purchase of assets, day to day activities, on social functions and marriages).	No domination of male/ female observed during consultation

	ISSUES	RESPONSE/DETAILS
20	Is there any community based organization (like NGO's, SHGs, etc) for the women of your community? If yes, probe what are the activities those organizations are performing, what is the role of the women, is there any positions that they possess, like president, secretary, etc).	No any community based organization or NGO working for the women but there is need of NGO
21	Do the women of your community are members of any political bodies, like Pradeshiya Sabhas, Provincial Councils etc. what role actually played by them in terms of their involvement and participation. Also probe what prevent women from engaging in political process.	As per government guideline for Garm Panchyat 33% members should be female in all GP if Surpunch is male Up Surpanch always female elected, but role and responsibility is not actively carried out
	Health	
22	General health facilities available and the perceived satisfaction on the quality of services (government and private) & affordability	Sub centre is working in the village, mostly women are not satisfied with the health facility but climate and working nature is help full for better health of women
23	Types of commonly prevalent diseases among the community, is there any specific ailments affecting the women of your community? Probe for the problems and the facilities available for the treatment.	There is no any specific aliments affecting the women of the community
24	Is there any provision of special health care services available near to your village/ neighbourhood? Probe for the nearest maternity and child health care facilities available, problems faced and the perception on the quality of care.	No there is no any special health care services for the village while government scheme for rural available but not functioning properly, for any services people use to visit pali district- 40 Km
	Social and Physical Security	
25	Do the women feel safe in going outside in the neighbourhood during day time? Also probe for the situation during the night time? What are the problems or fears they perceived for their movements?	No problem raised by the women feel safe in going outside even for work no problem night time to
26	Do the women in the community face any kind of domestic violence at their home? If yes probe for the reasons.	No domestic violence at the home
27	Is the system of dowry is prevalent among your community. Do the women of your community feel insecure for getting their girls married due to the reasons of dowry? What are the problems and challenges they perceive for this system?	During girls marriage as cash and kind is given to the male parents very common now it is a fashion and matter of worry for the society

	ISSUES	RESPONSE/DETAILS
	General Remarks if any	

LIST OF PARTICIPANTS

Sl. No	Name of the Participant	Relation to the Head of the Households	Occupation
1	Saudi	Widow	Agriculture Labour
2	Samu	Wife	Labour
3	Narmada	Wife	Labour
4	Sasida	Wife	Labour
5	Sumitra Sant	Wife	Shopkeeper

FGD GUIDE LINES ON GENDER (CONSULTATION AMONG WOMEN GROUP)

4. Location/ place of FGD: Toonkara

	ISSUES	RESPONSE/DETAILS
	Introductory	
1	Open the discussion with an 'ice-breaker', a question which is easy to answer and begins to put people at ease. Ask each person: "Where do you live and how long have you lived there?"	All participants have been living in the village since long time and remain want to live in the village they think village life is better and peaceful compare to the town
2	Ask a further question to warm up: "What do you like most about living in this area?"	Living in their community make them easy in the life, In this village people are very cooperative and supportive no difference of caste and religion among the people of this village no infighting in the village people respect the women and give full freedom
3	Initiate the discussion by asking the group on their primary occupation?	Primary occupation is household duties then agriculture and agriculture labourer mostly women involve in all above said activities as and when required
4	Please tell us as to how you spend your time (daily routine)? (Try to probe whether they get leisure time and what are the activities they usually do during the leisure hours.	No any routine fixed for farming labourer community all depend on need and requirement generally women unable to get leisure time ever for rest women life is very hard and responsible in the village from morning to late night women are busy in any important activities without rest no limit for women they involve them self in all type of activities cooking, care of child, care of live stock, cleaning, washing clothes, collection of water are the main activities and then after always stand with their husband in field too
	Education:	
5	Opinion on the importance of education for the people and specifically of the girls and women in your area.	They feel most important thing is education, educated people much respect among the others both male and female now a day people wants to keep own daughter in law educated they feel proud having educated bahu
6	Educational level of community people in your locality/area.	Specially among the women education level is average middle up to 7^{th} -8^{th} girl up to high school it fully depend on the facility school available in and near the village
7	Types of education facilities (formal and non formal education, its distance) available in the village / neighbourhood and parent's perception on quality of education (pre-school, primary, elementary and secondary/higher secondary). Try to know access and services to the girls.	Up to senior secondary school available in the village, young generation girl getting up to 12^{th} standard education

	ISSUES	RESPONSE/DETAILS
8	Reasons for non-enrolment and dropout amongst children & youth. (Male & Female)	Due to Social custom people don't want to give more education to the girl child and lack of money is also an reason for non- enrolment amongst girl
9	Perceived importance of girls education reasons for sending/not sending girls to school	Today all community paying special care and giving importance sending girls/boys to the school, government also taking positive steps through various schemes for the girls specially, free dress once in a year and cycle provided by the government for the girls, according to the participants after education girls living style and thoughts may be change for future
10	Type of engagement of children in household activities (try to know about the girls) for the (type) and extent to which they directly contribute to the earning of the household (type of occupations engaged in).	In the village life everybody has their role and responsibility in the household activities as their capacity children also engage in all kind of activities during season of crop children role become vital more man power required for different activities among the agriculture laborer family children also engage with family and contribute in the earning
	Vocational Education:	
11	Existing skills and traditional skills amongst the adolescent girls and women that must be revived /encouraged. (Try to probe the skills those are economically productive for the women).	Selai and kadai is the only skill amongst the adolescent girls and women
12.	What are the barriers in terms of resources, availability, transport, locations of trainings if any, for pursuing vocational courses by women of your community? Also probe for the barriers from the family side, (like lack of time, etc)	Main barriers are lack of opportunity but no barriers from the family side family try hard
13	Is there any organization, government, private or NGO running any vocational courses for the adolescents and women in area. (Probe for the agencies, nature of vocational trades providing, women's participation and livelihood opportunities).	No NGO or any organization working in the village
	Economic Activities:	
14	Do the women of the households in the community have ownerships of the property in the community, like houses, land, etc. probe for the reasons for having or not having ownership rights.	Only after death of male owner and some women ownership only due to safety of assets
15	Please tell us what are the nature of jobs mainly performed by the women of your community? (Try to probe for besides household work their engagement in government / private sectors, small scale business, agriculture, animal husbandry).	Agriculture/ farming and agriculture labour, animal husbandry are major occupation

	ISSUES	RESPONSE/DETAILS
16	Referring to the group ask if there is any form of inequality in the receipt of wages, payments, rewards, etc for the work that the women perform. (Try to understand the nature of inequalities prevailing). What are the underlying factors for this prevalence of inequalities?	Only inequality in receipt of wages all where in this area on the name of women cannot work hard, male gets- 600 rs and female- 400 rs
17	Are the woman who are working and earning have the ultimate decision on the use of their money? (Try to probe the pattern of using the money earned, part saved, used for them, etc.)	Ultimate decision taken after the consultation with husband and other mature family members but there is no bound to take decision for using money
	Decision Making & community Participation	
18	What role do the women of the household have in the decision making process of the household? Do you feel you have equal share along with the male counterpart any household decisions? Does it vary among the earning and non earning women? (How).	All type of decision taken by both male/female consultation if both are working it very among the earning and non earning women
19	Is there any form of inequality or the cases of male dominating the women in the decision making process at the household level? Please try to probe for the different household decisions and the role of the women (Decisions may be financial matters, education & health care of the child, purchase of assets, day to day activities, on social functions and marriages).	Here no dominating attitude observed in my opinion female are more active in this senses
20	Is there any community based organization (like NGO's, SHGs, etc) for the women of your community? If yes, probe what are the activities those organizations are performing, what is the role of the women, is there any positions that they possess, like president, secretary, etc).	No community based organization working for betterment or promotion of living standard for the women in and around the village SHG formed but not working properly
21	Do the women of your community are members of any political bodies, like Pradeshiya Sabhas, Provincial Councils etc. what role actually played by them in terms of their involvement and participation. Also probe what prevent women from engaging in political process.	Women reservation as per govt. Rule 33% fixed in GP. But role and responsibility actually not played by the women in terms of their involvement and participation practically male played active role on behalf of women
	Health	

	ISSUES	RESPONSE/DETAILS
22	General health facilities available and the perceived satisfaction on the quality of services (government and private) & affordability	Sub centre is there in the village, actively giving services like –check up, immunization, and other disease care through treatment
23	Types of commonly prevalent diseases among the community, is there any specific ailments affecting the women of your community? Probe for the problems and the facilities available for the treatment.	There is no any specific aliments affecting the women of the community
24	Is there any provision of special health care services available near to your village/ neighbourhood? Probe for the nearest maternity and child health care facilities available, problems faced and the perception on the quality of care.	Government run many schemes but only on proper not in practical, even o maternity services available on time, delivery took place or hospital mostly
	Social and Physical Security	
25	Do the women feel safe in going outside in the neighbourhood during day time? Also probe for the situation during the night time? What are the problems or fears they perceived for their movements?	No safety problem for the women in the village in going anywhere any time due to panchyat and local people always concern about women related matter
26	Do the women in the community face any kind of domestic violence at their home? If yes probe for the reasons.	Generally no violence with the women they got as respect as they run their houses together
27	Is the system of dowry is prevalent among your community. Do the women of your community feel insecure for getting their girls married due to the reasons of dowry? What are the problems and challenges they perceive for this system?	Dowry is prevalent among the community, during marriage now people make demand as per their economic condition and assets
	General Remarks if any	

LIST OF PARTICIPANTS

Sl. No	Name of the Participant	Relation to the Head of the Households	Occupation
1	Roshni Devi	Wife	Sur Punch
2	Geeta Devi	Wife	Housewife
3	Sugna Devi	Wife	Up Sur Punch
4	Asha	Wife	Prerak
5	Seema	Wife	Anganwadi Worker
6	Khatuni	Wife	Anganwadi Worker

PHOTOGRAPHS OF CONSULTAIONS

Village:
Sub Project: Korna- Ajmer Substation

Village:
Sub Project: Korna- Ajmer Substation

Village: Lolawas Khara
Sub Project: Korna- Ajmer Transmission Line

Village: Lolawas Khara
Sub Project: Korna- Ajmer Transmission Line

Village: Sar
Subproject: Korna- Ajmer Transmission Line

Village: Sar
Subproject: Korna- Ajmer Transmission Line

Village: Kharabera Purohitan
Subproject: Korna- Ajmer Transmission Line

Village: Kharabera Purohitan
Subproject: Korna- Ajmer Transmission Line

Village: Sanwalta Kalla
Subproject: Korna- Ajmer Transmission Line

Village: Sanwalta Kalla
Subproject: Korna- Ajmer Transmission Line

Village: Lolawas
Subproject: Korna- Ajmer Transmission Line

Village: Lolawas
Subproject: Korna- Ajmer Transmission Line

Village: Malkhasani
Subproject: Korna-Ajmer Transmission Line

Village: Malkhasani
Subproject: Korna-Ajmer Transmission Line

Village: Garnia
Subproject: Korna-Ajmer Transmission Line

Village: Garnia
Subproject: Korna-Ajmer Transmission Line

Village: Asarlai
Subproject: Korna-Ajmer Transmission Line

Village: Asarlai
Subproject: Korna-Ajmer Transmission Line

Village: Toonkara
Subproject: Korna- Ajmer Transmission Line

Village: Toonkara
Subproject: Korna- Ajmer Transmission Line

Village: Bootiwas
Subproject: Korna- Ajmer Transmission Line

Village: Bootiwas
Subproject: Korna- Ajmer Transmission Line

Village: Roop Nagar Thorian
Subproject: Korna- Ajmer Transmission Line

Village: Roop Nagar Thorian
Subproject: Korna- Ajmer Transmission Line

Village: Hapanada
Subproject: Korna- Pokharan Transmission Line

Village: Hapanada
Subproject: Korna- Pokharan Transmission Line

Village: Bhandu Jaati
Subproject: Korna- Pokharan Transmission Line

Village: Bhandu Jaati
Subproject: Korna- Pokharan Transmission Line

Village: Khirza
Subproject: Korna- Pokharan Tansmission Line

Village: Khirza
Subproject: Korna- Pokharan Tansmission Line

Village: Bhungra
Subproject: Korna- Pokharan Transmission Line

Village: Bhungra
Subproject: Korna- Pokharan Transmission Line

 Village: Chandsma Subproject: Korna- Pokharan Transmission Line	 Village: Chandsma Subproject: Korna- Pokharan Transmission Line
 Village: Uthwaliya Subproject: Korna- Pokharan Transmission Line	 Village: Uthwaliya Subproject: Korna- Pokharan Transmission Line

Village: Biramdevra
Subproject: Korna-Pokharan Transmission Line

Village: Biramdevra
Subproject: Korna-Pokharan Transmission Line

Village: Hapanada
Subproject: Korna- Jaisalmer II Transmission Line

Village: Hapanada
Subproject: Korna- Jaisalmer II Transmission Line

Village: Sointra
Subproject: Korna- Jaisalmer II Transmission Line

Village: Sointra
Subproject: Korna- Jaisalmer II Transmission Line

Village: Guman Singh Pura
Subproject: Korna- Jaisalmer II Transmission Line

Village: Guman Singh Pura
Subproject: Korna- Jaisalmer II Transmission Line

Village: Abasar
Subproject: Korna- Jaisalmer II Transmission Line

Village: Abasar
Subproject: Korna- Jaisalmer II Transmission Line

Village : Balar
Subproject: Korna- Jaisalmer II Transmission Line

Village : Balar
Subproject: Korna- Jaisalmer II Transmission Line

 Village: Bhesara Subproject: Korna- Jaisalmer II Transmission Line	 Village: Bhesara Subproject: Korna- Jaisalmer II Transmission Line
 Village: Dhandriya Bhayala Subproject: Korna- Rajwest Lilo	 Village: Dhandriya Bhayala Subproject: Korna- Rajwest Lilo

Village : Ajitmena

Village: Shiboli

Village: Loonkaransar

Village :Chhattargarh

Village: Motigarh

Village: Gajner

Village : Kitasar

Village: Kitasar

Village : Nathrau

Village: Gumanpura

Village : Sangarh

	
Village : Bana ka Bans	Village: Jaatipura

ANNEXURE 12.1: SOCIAL SAFEGUARDS MONITORING FORMAT

A. PROJECT DETAILS

Name of Project	
Project Component (Name of the Subproject)	
Loan Number	
Report No.	
Report for the period	
Date of reporting	

B. MONITORING OF DISBURSEMENT OF COMPENSATION AND ALLOWANCES

Item	Target as per Schedule				Actions during reporting period				Total to date					Comments
	AP	Unit	Unit rate (Rs.)	Total (Rs.)	AP	Unit	Unit rate (Rs.)	Total (Rs.)	AP	Unit	Unit rate (Rs.)	Total (Rs.)	% of target	
Loss of Crops														
Foundation														
Erection														
Stringing														
Other associated Impacts														
Loss of Trees														
Type of Trees														
Compensation to Non-Title Holders														

Item	Target as per Schedule				Actions during reporting period				Total to date					Comments
	AP	Unit	Unit rate (Rs.)	Total (Rs.)	AP	Unit	Unit rate (Rs.)	Total (Rs.)	AP	Unit	Unit rate (Rs.)	Total (Rs.)	% of target	
Non-title holders														
Allowances for Vulnerable APs														
Allowances (vulnerable APs)														

C. STATUS/PROGRESS OF WORK

CONTRACTOR'S RESPONSIBILITY									
Name of Component	**Target as per Schedule**		**Actual Status during reporting period**		**Total Status to date**		**Remaining/Pending Status**		**Remarks**
a. Final Surveys									
Line	Length of Line (kms)	Number of Towers	Length of Line (kms)	Number of Towers	Length of Line (kms)	Number of Towers	Length of Line (kms)	Number of Towers	
400 kV Line									
b. Status on Completion of Foundation									
400 kV Line									
c. Status on Completion of Erection									
400 kV Line									
c. Status on Completion of Stringing									
400 kV Line									

D. PROCESS MONITORING

RP Activity	Task Completed (✓)	AP (No.)			Comments
		Completed to date	Total	%	
Designating concerned staff for Social Safeguards in PMU					
Mobilization of Contractor					
Consultation meeting					
Establish and operate GRM					
Finalize detailed technical design/Final Surveys					
Carry out and updating Inventory of APs & Inventory of Lost Assets (Loss of Crops and trees etc)					
Valuation of Loss of crops and trees					
Allocation of fund by RRVPNL for compensation					
Disbursement of compensation completed					
Disbursement of Allowances completed					
Civil works commenced					

E. CONSULTATION MONITORING FORMAT

Date	Location	Participants	Issues / Decisions / Agreements	Comments

F. GRIEVANCE REDRESS MECHANISM MONITORING FORMAT

Date	Complainant	Receiving Officer	Complaint	Resolution	Comments