



# Draft Initial Environmental Examination

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Project Number: 55182-001  
Initial Environmental Social Examination  
April 2022

## India: AJ Solar Power Project (Part 3 of 3)

Prepared by Arcadis India Private Limited for AEW India West One Private Limited and the Asian Development Bank.

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## APPENDIX A: RELEVANT PAGE OF CPCB DIRECTION



केन्द्रीय प्रदूषण नियंत्रण बोर्ड  
CENTRAL POLLUTION CONTROL BOARD  
(पर्यावरण एवं वन मंत्रालय, भारत सरकार)  
MINISTRY OF ENVIRONMENT & FORESTS, GOVT. OF INDIA

No.B-29012/ESS(CPA)/2015-16/

March 07, 2016

To:

The Chairman  
All the State Pollution Control Boards / Pollution Control Committees  
( List Attached)

**SUB: MODIFIED DIRECTIONS UNDER SECTION 18(1)(b) OF THE WATER (PREVENTION & CONTROL OF POLLUTION) ACT, 1974 and THE AIR (PREVENTION & CONTROL OF POLLUTION) ACT, 1981 REGARDING HARMONIZATION OF CLASSIFICATION OF INDUSTRIAL SECTORS UNDER RED / ORANGE / GREEN / WHITE CATEGORIES.**

WHEREAS, under section 16 (2)(b) of the Water (Prevention and Control of Pollution) Act, 1974 and under Section 16 (2)(c) of the Air (Prevention & Control of Pollution) Act, 1981, one of the functions of the Central Pollution Control Board (CPCB), constituted under the Water (Prevention and Control of Pollution) Act, 1974, is to coordinate activities of the State Pollution Control Boards (SPCBs) and Pollution Control Committees (PCCs), and

WHEREAS, under section 16 (2)(c) of the Water (Prevention and Control of Pollution) Act, 1974 and under Section 16 (2)(d) of the Air (Prevention & Control of Pollution) Act, 1981, one of the functions of the CPCB is to provide technical assistance and guidance to SPCBs and PCCs; and

WHEREAS, it was brought to the notice of CPCB, that different SPCBs / PCCs were following different criteria for classification of industrial sectors under Red/Orange/ Green category and that classification was being used by the SPCBs/PCCs for grant of consents to industries and for Inventorization / surveillance of industries.

WHEREAS, the issue regarding classification of industries was deliberated upon in the 56<sup>th</sup> Conference of Chairmen & Member Secretaries of CPCB & SPCBs/PCCs held on August 31, 2010 and a working group comprising of representatives from SPCBs & CPCB was constituted to prepare a consolidated list of industrial sectors falling under Red/Orange/Green category to bring uniformity in classification of industrial sectors across the country;

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ई-मेल: e-mail: cpcb@nic.in, cpcb@vsnl.com, Website: www.cpcb.nic.in

- o Industrial Sectors having Pollution Index score of 60 and above - Red category
- o Industrial Sectors having Pollution Index score of 41 to 59 -Orange category
- o Industrial Sectors having Pollution Index score of 21 to 40 -Green category
- o Industrial Sectors having Pollution Index score incl&upto 20 -White category

The newly introduced White category of industries pertains to those industrial sectors which are practically non-polluting such as Biscuit trays etc. from rolled PVC sheet (using automatic vacuum forming machines), Cotton and woolen hosiers making (Dry process only without any dyeing/washing operation), Electric lamp (bulb) and CFL manufacturing by assembling only, Scientific and mathematical instrument manufacturing, Solar power generation through photovoltaic cell, wind power and mini hydel power (less than 25 MW).

The salient features of the 'Re-categorization' Exercise are as follows:

- Due importance has been given to relative pollution potential of the industrial sectors based on scientific criteria. Further, wherever possible, splitting of the industrial sectors is also considered based on the use of raw materials, manufacturing process adopted and in turn pollutants expected to be generated.
- The Red category of industrial sectors would be 60.
- The Orange category of industrial sectors would be 83.
- The Green category of industrial sectors would be 63.
- Newly introduced White category contains 36 industrial sectors which are practically non-polluting.
- There shall be no necessity of obtaining the Consent to Operate" for White category of industries. An intimation to concerned SPCE / PCC shall suffice.
- No Red category of industries shall normally be permitted in the ecologically fragile area / protected area.

The purpose of categorization is to ensure that the industry is established in a manner which is consistent with the environmental objectives. The new criteria will prompt industrial sectors willing to adopt cleaner technologies, ultimately resulting in generation of fewer pollutants. Another feature of the new categorization system lies in facilitating self-assessment by industries as the subjectivity of earlier assessment has been eliminated. This 'Re-categorization' is a part of the efforts, policies and objective of present government to create a clean & transparent working environment in the country and promote the Ease of Doing Business.

Other similar efforts include installation of Continuous Online Emissions/ Effluent Monitoring Systems in the polluting industries. Revisiting of the CEPI (Comprehensive Environment Pollution Index) concept for assessment of polluted industrial clusters, Revision of existing industrial Emission/Effluent discharge standards, initiation of special drive on pollution control activities in Ganga River basin and many more in coming future.

# Workers' accommodation: processes and standards

Public guidance note by IFC and the EBRD

### EXECUTIVE SUMMARY

This guidance note addresses the processes and standards that should be applied to the provision of workers' accommodation in relation to projects funded by the EBRD or IFC. Applying appropriate standards to the construction and operation of worker housing falls within the performance requirements on labour issues expected of clients by both organisations.

There is a range of different types of workers' accommodation that may be required by various projects and at different stages within projects, including temporary exploration camps, construction camps and permanent dormitories. Specific issues arise in relation to each of these. This note reviews various international, national, private sector and public sector standards and guidance that are more generally applicable. In some cases clear standards or good practice have been identified. In others, we present a range of standards that provide some flexibility and adaptability within the local context. In these cases, compliance with at least the minimum standard is expected.

Issues for consideration are organised in terms of a staged process to be undertaken in planning, constructing and then operating worker housing facilities. These issues may be relevant to the direct client or to (sub)contractors undertaking particular elements of a project, such as construction or management of facilities. In cases where contractors are used, it is important to set up appropriate mechanisms and processes (reporting/monitoring) to ensure that performance requirements are complied with.

At the initial stage of any project, there is a need to assess whether accommodation for workers is

required, and if so, whether this can be provided within existing local communities or whether new facilities should be constructed. The likely impact on local communities and the housing market of either option should be assessed.

Before constructing any facilities, other potential impacts should be evaluated. These may include the impact of construction, and the effect of a new housed labour force on community services, such as health, and on community cohesion and safety. These assessments should form part of a project's Environmental and Social Impact Assessment.

The next step is to consider the standards to be applied for the location, arrangement and construction of any facilities. Issues here include consideration of a safe and healthy location, application of appropriate construction standards, provision of adequate and sanitary living conditions and provision of appropriate leisure and health facilities.

There are no universally applicable international regulations relating to workers' accommodation standards in general. However, there are some international standards/guidance on food safety, water sanitation and waste management that should be applied, and national or local building regulations that must be complied with.

Lastly, when the accommodation has been completed, there are issues around its operation and management. These include the type of staff who will manage it, development of appropriate management policies, such as security and grievance procedures, and ongoing liaison with local communities. All such policies should be subject to regular review.

## APPENDIX C: NOC FROM VILLAGE PANCHAYAT

સંખ્યા..... સંદેશ..... સંગ્રહનં.....

 **કટારીયા ગ્રામ પંચાયત** 

તા. લીંબડી મુ. કટારીયા તા. લીંબડી, જી. સુરેન્દ્રનગર.

જા. નં. : તા. / /૨૦

પ્રતિ,

મેનેજરશ્રી,

AEW INDIA WEST ONE PRIVATE LIMITED

Unit No.411, 4<sup>th</sup> Floor, Southern park, D-2,

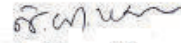
Saket, District Centre

New Delhi,110017

વિષય:- ના-વાંઘા પ્રમાણપત્ર આપવા બાબત.

સંદર્ભ:- આપશ્રીના તા.૧૧/૦૭/૨૦૨૧ વાળો પત્ર.

જયભારત સાથે જણાવવાનું કે, આપશ્રીની ઈકત વિષય અંગેની અરજી સંદર્ભે ના વાંઘા પ્રમાણપત્ર મેળવવા બાબતે આપની અરજીને ધ્યાનમાં રાખીને જણાવવાનું કે, મોજે ગામ: કટારીયા, તા.લીંબડી, જી.સુરેન્દ્રનગરમાં જમીન માલિકો દ્વારા ૨૯.૬ વર્ષના ભાડા પટ્ટાના કરાર પર આપવામાં આવેલ જમીન પર M/s. AEW INDIA WEST ONE PRIVATE LIMITED દ્વારા સોલાર પાવર પ્લાન્ટ પ્રસ્થાપિત કરવામાં આવે તો ગ્રામ પંચાયતને કાંઈ વાંઘા સરખું નથી. જે આથી પ્રમાણિત કરી આ ના-વાંઘા પ્રમાણપત્ર આપવામાં આવે છે.

  
સરપંચશ્રી, કટારીયા ગ્રામ પંચાયત  
કટારીયા ગ્રામ પંચાયત

સંપ....	સંગઠન...	સહકાર....
		મો. ૯૮૨૪૩ ૭૭૨૨૨
	<b>જામણ ગ્રામ પંચાયત</b>	
	<b>મું. જામણ, તા. લીંબડી, જી. સુરેન્દ્રનગર.</b>	

જા નં.

તા. 15 / 07 / 2021

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વિષય:- ના-વાંઘા પ્રમાણપત્ર આપવા બાબત.

સંદર્ભ:- આપશ્રીના તા.૧૧/૦૭/૨૦૨૧ વાળો પત્ર.

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સરપંચશ્રી, જામણ ગ્રામ પંચાયત  
(મહાવીરસિંહ એમ. ઝાલા)

## APPENDIX D: LIST OF LANDOWNERS AND LAND LEASED BY AEW

Sl.No	District	Tehsil	Village	Khasra No.	Area Leased in Acre	Owner Name
1	Surendranagar	Limbdri	Jakhan	243	4.445762293	Jyotsanaba Kishorsinh Zala Krushndevsinh Kishorsinh Zala
2	Surendranagar	Limbdri	Jakhan	244	3.676303435	Mayurdhwajsinh Ghanshyamsinh Rana Rajaniba Hardevsinh Rana Digpalsinh Hardevsinh Rana
3	Surendranagar	Limbdri	Jakhan	245	3.638991846	Mayurdhwajsinh Ghanshyamsinh Rana Rajaniba Hardevsinh Rana Digpalsinh Hardevsinh Rana
4	Surendranagar	Limbdri	Jakhan	246	6.255744996	Rana Janakba Dilipsinh
5	Surendranagar	Limbdri	Jakhan	248	4.371386212	Zala Dipendrasinh Ajitsinh
6	Surendranagar	Limbdri	Jakhan	249	4.3649617	Zala Bhavnaba Bhagirathsinh
7	Surendranagar	Limbdri	Jakhan	250	4.36570299	Jyotiba Ashoksinh Zala
8	Surendranagar	Limbdri	Jakhan	251	7.105016061	Bharvad Narendrakumar Ghudabhai
9	Surendranagar	Limbdri	Jakhan	252	8.958487769	Kusumba Vikramsinh Zala Rana Mitaba Vikramsinh Zala Rana Rashmitaba Vikramsinh Zala Rana Dharmadipsinh Vikramsinh Zala Rana Pritiba Vikramsinh Zala Rana
10	Surendranagar	Limbdri	Jakhan	254	8.869532987	Premkuvarba Jitubha Zala Devendrasinh Jitubha Zala Aniruddhsinh Jitubha Zala
11	Surendranagar	Limbdri	Jakhan	255	8.959723252	Kirtisinh Natubha Rana
12	Surendranagar	Limbdri	Jakhan	256	2.672596985	Balbhadrasinh Anandsinh Rana
13	Surendranagar	Limbdri	Jakhan	257	3.114158636	Janaksinh Anandsinh Rana
14	Surendranagar	Limbdri	Jakhan	258	4.799851742	Mayurdhwajsinh Ghanshyamsinh Rana
15	Surendranagar	Limbdri	Jakhan	258-P1	4.449715839	Zala Shaktisinh Mayurdhwajsinh
16	Surendranagar	Limbdri	Jakhan	259	2.053619965	Mahendrasinh Takhubha Rana
17	Surendranagar	Limbdri	Jakhan	260	2.061032864	Mahendrasinh Takhubha Rana
18	Surendranagar	Limbdri	Jakhan	264	9.18902891	Vrajkuvarba Dilubha Rana, title correction in process
					93.35161848	

Sl.No	District	Tehsil	Village	Khasra No.	Area Leased in Acre	Owner Name
S.No.	District	Tehsil	Village	Khasra No.	Area leased in Acre	Owner Name
1	Surendranagar	Limbdri	Katariya	639-P1	4.903138127	Jagjivanbhai Bhikhabhai Koli
						Rameshbhai Jagdishbhai Parnaliya
						Mukeshbhai Jagdishbhai Parnaluya
2	Surendranagar	Limbdri	Katariya	641	10.14405733	Bharvad Shankarbhai Kamabhai
						Masharubhai Kamabhai Bharvad
						Shelabhai Kamabhai Bharvad
3	Surendranagar	Limbdri	Katariya	642	4.120088955	Barad Pravinaben Ranjitsinh
4	Surendranagar	Limbdri	Katariya	643	9.948109711	Rana Mahendraba Indrasinh
						Rana Amardipsinh Indrasinh
						Rana Hardipsinh Indrasinh
5	Surendranagar	Limbdri	Katariya	644	4.904867803	Vikrambhai Kanjibhai Koli Patel
6	Surendranagar	Limbdri	Katariya	645	3.000494193	Balkrushna Ambarambhai Parmar
7	Surendranagar	Limbdri	Katariya	651	4.99851742	Gatorbhai Becharbhai Koli
8	Surendranagar	Limbdri	Katariya	652	4.526562886	Naranbhai Nanjibhai Koli
9	Surendranagar	Limbdri	Katariya	653	4.647393131	Vitthalbhai Kanjibhai Koli
10	Surendranagar	Limbdri	Katariya	654	3.776377564	Ko.Pa. Dhanjibhai Ravjibhai
11	Surendranagar	Limbdri	Katariya	655	3.750432419	Ko.Pa. Jerambhai Ravjibhai
12	Surendranagar	Limbdri	Katariya	656	5.216950828	Vasantben Karshanbhai Kolipatel
13	Surendranagar	Limbdri	Katariya	657	5.105263158	Krishnaben Hemubhai Kathiya
						Jasuben Hemubhai Kathiya
						Gambhirsang Hmubhai Kathiya
						Pratapsang Hemubhai Kathiya
						Karansinh Ghanshyambhai Kathiya
						Jyotsanaben Ghanshyambhai Kathiya
						Varashaben Ghanshyambhai Kathiya
14	Surendranagar	Limbdri	Katariya	658	7.795156906	Bhimubhai Dansangbhai Barad
						Hathisangbhai Bhikhubhai Barad
						Pratapsingbhai Bhimubhai Barad
						Ranjitsinh Bhimubhai Barad
						Gitaba Bhimubhai Barad
15	Surendranagar	Limbdri	Katariya	660	8.084012849	Karshanbhai Dharamshibhai Koli
16	Surendranagar	Limbdri	Katariya	661	7.613293798	Monghiben Bhikhabhai chauhan
						Ghanshyambhai Bhikhabhai Chauhan



Sl.No	District	Tehsil	Village	Khasra No.	Area Leased in Acre	Owner Name
17	Surendranagar	Limbdri	Katariya	662	6.901655547	Khumansang Narsangbhai Barad
18	Surendranagar	Limbdri	Katariya	663-P1	4	Ajaybhai Jasrajbhai Patel
19	Surendranagar	Limbdri	Katariya	663-P2	3.833951075	Hirenbhai Jasrajbhai Patel
20	Surendranagar	Limbdri	Katariya	664	4.304423029	Dineshbhai Bhavanbhai Gohil
21	Surendranagar	Limbdri	Katariya	665	4.336051396	Monghiben Nagjibhai Gohil
						Hansaben Nagjibhai Gohil
						Galabhai Nagjibhai Gohil
						Amrutbhai Nagjibhai Gohil
						Vinuben Nagjibhai Gohil
						Vikrambhai Nagjibhai Gohil
						Babuben Nagjibhai Gohil
22	Surendranagar	Limbdri	Katariya	666-P1	2.293056585	Bharatbhai Labhubhai Meniya
23	Surendranagar	Limbdri	Katariya	666-P2	2.293056585	Rameshbhai Labhubhai Meniya
24	Surendranagar	Limbdri	Katariya	666-P3	2.293056585	Gambhubhai Labhubhai Meniya
25	Surendranagar	Limbdri	Katariya	666-P4	2.293303682	Matarbhai Labhubhai Meniya
26	Surendranagar	Limbdri	Katariya	747	5.827526563	Prmjibhai Bhikhabhai Koli
						Chhayaben Premjibhai Parnaliya
						Uttambhai Premjibhai Parnaliya
						Nileshbhai Premjibhai Parnaliya
27	Surendranagar	Limbdri	Katariya	765	5.14306894	Rana Punaba Pravinsinh
28	Surendranagar	Limbdri	Katariya	766	5.156412157	Rana Pravinsinh Ratubha
29	Surendranagar	Limbdri	Katariya	767	5.702742772	Kalubhai Bhikhabhai Koli
						Jayaben Kalubhai Parnaliya
						Nareshbhai Kalubhai Parnaliya
						Maheshbhai Kalubhai Parnaliya
30	Surendranagar	Limbdri	Katariya	768	11.14084507	Vijuben Raymalbhai Ko pa
31	Surendranagar	Limbdri	Katariya	771	5.195700519	Sajjanben Vahanbhai
32	Surendranagar	Limbdri	Katariya	772	5.164072152	Butiya Premuben Mohanbhai
33	Surendranagar	Limbdri	Katariya	769	2.704225352	Premjibhai Bhikhabhai Koli
						Chhayaben Premjibhai Parnaliya
						Uttambhai Premjibhai Parnaliya
						Nileshbhai Premjibhai Parnaliya
34	Surendranagar	Limbdri	Katariya	770	2.870027181	Kalubhai Bhikhabhai Koli
						Jayaben Kalubhai Parnaliya
						Nareshbhai Kalubhai Parnaliya
						Maheshbhai Kalubhai Parnaliya

Sl.No	District	Tehsil	Village	Khasra No.	Area Leased in Acre	Owner Name
35	Surendranagar	Limbdri	Katariya	774	2.808253027	Dhirubhai Bhikhabhai Koli
36	Surendranagar	Limbdri	Katariya	775	9.12774895	Rajubhai Manubhai Vanand Ramaben Manubhai Vanand Takhubhai Kanjibhai Vanad Bharatbhai Kanjibhai Vanand
37	Surendranagar	Limbdri	Katariya	777	1.851494935	Rajubhai Manubhai Vanand Ramaben Manubhai Vanand Takhubhai Kanjibhai Vanad Bharatbhai Kanjibhai Vanand
38	Surendranagar	Limbdri	Katariya	779	2.738571782	Mahipatbhai Bhikhabhai Koli
39	Surendranagar	Limbdri	Katariya	789	4.306893996	Jayeshbhai Bhagvanbhai Ko pa
40	Surendranagar	Limbdri	Katariya	788	7.643933778	Jasamatbhai Kanjibhai Koli
41	Surendranagar	Limbdri	Katariya	791	4.34890042	Rohitbhai Bhagvanbhai ko pa
42	Surendranagar	Limbdri	Katariya	792	8.528786756	Gobarbhai Bhanabhai Koli
43	Surendranagar	Limbdri	Katariya	793	2.548307388	Harjivanbhai Lakhmanbhai Ta Ko.
44	Surendranagar	Limbdri	Katariya	794	3.740795651	Girdharbhai Lakhmanbhai Koli
45	Surendranagar	Limbdri	Katariya	795	17.11218186	Maljibhai Hamirbhai Ko pa Kanuben Maljibhai Parnaliya
					332.0937608	

## APPENDIX E: Questionnaire for different stakeholders

### Questionnaire for Educational Institution

Name of Educational Institution	
No of available teacher Male/Female	
No of Students Boys / Girls	
No of rooms	
Toilets Facility	
Source of drinking water	
Electricity	
Transport Facility	
Library	
Playground/ Boundary Wall	
Sports Equipment	
Computer Facility	
First Aid Kit	
Available basic infrastructure facilities:	
Lack of basic infrastructure facilities:	
Any other Issues & Concerns?	

### Questionnaire for Stakeholders Consultation

#### Village Profile

Name of The Village	
Name of The Panchayat	
Name of The Taluka	
Name of The District	
Total Population	
Total Household	
Average Population Per HH	
Religion Hindu, Muslim & Christian	
Caste (Gen, OBC, SC & ST)	
Source Drinking Water	
Sanitation Facility	

Accessibility to Electricity	
Available Transport Facility	
No. of Educational Institutions (Primary School, Secondary School, Senior Secondary School)	
No. of Accessible Health Centers (Primary Health Center, Primary Health Sub-Center, Community Health center etc.)	
Major Diseases	
Main Occupation of the villagers (Agriculture, Animal Husbandry, Industry)	
Major Crops Cultivated	
Available Irrigation Facility	
Average Size of Land Holding	
Livestock Available	
Grazing Areas Distance	
Cooking Source: Cow dung cake, Fuel Wood, and LPG:	
Common Property Resources (CPRs) Community Hall:	
Community Toilet:	
Temple/ Mosque/Church:	
Pond/well/ River	
Cultural/Archeological/Heritage site at the site	
Vulnerable Group	
Physically Handicapped:	
BPL Family:	
Widow:	
Single Women Households.	
Schedule Caste	
Schedule Tribe	
Acres of land to be acquired for the proposed Project	
No of Titleholders to be impacted	
Land Compensation per acre	
Any physical and economic displacement near the site	

Questionnaire for Project Proponent	
Project details	
Proposed Construction date of the project	
Commissioning of Proposed Project	
Total village cover (Area)	
Total No. and Name of villages falling under Proposed Project)	
Total Area of the proposed Project	
Type of land <ul style="list-style-type: none"> <li>• Government Land</li> <li>• Private Land</li> <li>• Forest Land</li> </ul>	
Current use of Govt land if it is to be acquired?	
Current use of Private land, if procured for the proposed Project?	
Land Procurement Process & status	
Proposed Project Land is cultivable/irrigated/ barren	
Land rate given to Private landowners (as per circle rate)	
Land rate as per Govt	

Any livelihood restoration measures?	
Compensation Package	
Any physical and economic displacement near the site	
Any Vulnerable Sections like SCs, STs, BPL, WHH, PHs etc. are residing in the proposed project land	
Indigenous peoples land involved or not. Give details.	
Cultural/Archeological/ Heritage site at the site	
Labour required during construction	
Any Structure/building near proposed site	
GSS distance	
Distance of Access road	
NOC obtained from panchayat	

Other features observed at Site	
Total No. of Labour required during construction phase	
Total No. of Labour required during operation phase	
Source of water	
EPC contractor	
O&M	

Questionnaire for Medical Health Center	
Name & Place of Health Center	
No of available Doctors Male/Female (Name & Designation)	
Nurse (Name)	
No of rooms	
No of Beds	
Toilets facility	
Source of drinking water	
Electricity	
24X7 Emergency Service	
Available basic facilities at the center	
Lack of basic facilities at the center	
Any other Issues & Concerns?	

Questionnaire for Anganwadi Center	
Name of Anganwadi	
No of available ASHA Workers Name Helper Name	
No of enrolled women	
No of enrolled children	
No of rooms	
No of beds	
Toilets facility	
Source of drinking water	

Electricity	
Available basic facilities:	
Lack of basic facilities:	
Any other Issues & Concerns?	

**Questionnaire for Land Owner:-**

**Household Survey PAPs in Land Acquisition Area**

Date: .....

Questionnaire No: .....

Time: .....

Name of the place/Village .....

Revenue Village No. ....

Block = .....

District = .....

1. Location: 1. Rural 2. Urban 3. Semi-urban

2. Khasra No. of the land = .....

3. Category of Land

1. Cultivable 2. Non-cultivable

4. Type of Land

1. Irrigated 2. Non-Irrigated 3. Barren 4. Fallow 5. Forest

5. Ownership of the Land

1. Private 2. Government 3. Religious 4. Community 5. Others

6. Use of Land

1. Cultivation 2. Orchard 3. Residential 4. Commercial

5. Forestation 6. Pastureland 7. No Use

6.a Trees within affected Land-(i) Type (ii) No. ....

7. Total Area of the Land (in Acre) .....

8. Area of the Affected Land (in Acre) .....

8.a Will require displacement 1. Yes 2. No

8.b Did/do you reside in the land? Will you be transferring/transferred your residence because of the project?

8.c Will/did you lose your livelihood or will/was there a reduction in your income because of the project?

8.d Will you have to temporarily move your residence or temporarily lose part of your livelihood because of the project?

9. Is the residual land (also includes land outside affected village) less than MEH

1. Yes 2. No

10. Rate of the Land (Per Acre)

1. Market Rate..... 2. Revenue Rate.....

11. Name of the Land Holders.....

11.a Name of Existing Land Holder.....





16. Any Agricultural Labour/Sub- Tenant/ Share-Croppers associated with the Land  
 1. Yes 2. No

17. If yes, name of the agricultural Labour/Sub-Tenant/ Share-Croppers

1. ....
2. ....
3. ....

18. Number of other family members above 18 years

1. Son  2. Unmarried Daughter  3. Divorcee/ widowed Daughter   
 4. Others  5. Total

19. Impact Categories:

1. Land with existing crops/trees only
2. Land with existing crops/trees and Structure only
3. Structure only
4. Other impacts(Direct/indirect livelihood dependency specify)

20. If any structure, area of the affected structure (in mtrs), A.R. .... P.R. .... Height .....

20.1 Percentage of loss: \_\_\_\_\_ %

20.2 Will require displacement 1. Yes 2. No

21. Type of Structure 1. Kutcha 2. Semi-Pucca 3. Pucca

22. Market Value of the Structure (in Rs.) \_\_\_\_\_

23. Religion

1. Hindu 2. Muslim 3. Christian 4. Others (specify.....)

24. Social category

1. SC 2. ST 3. OBC 4. Dalit Christian 5. General 6. Others (specify.....)

25. Total No. of the family members (a) Total.....(i) male.....(ii) female.....

26. Is the affected household belong to vulnerable group other than SC/ST?

1. WHHs 2. PHs 3. Aged persons 4. BPLs 5. Land less Artisan

27. Monthly income of the family:

Sl. No.	Source of income	Monthly income (in Rs.)
1.	Agriculture	
2.	Service	
3.	Business	
4.	Labour	
5.	Other	
<b>TOTAL</b>		

28. Willing to lease the land   
 1. Voluntarily 2. Non-voluntarily

29. Compensation received or agreed upon for land   
 1. Land and cash  
 2. Cash and other support (Employment opportunity/skill development etc.)

30. Assistance and other help

**Questionnaire for consultation with Women**

**Consultation with Women**

**General Questions on gender role and utilization of Resources**

1	Division of labour (unpaid and paid work, work within the household, work for wages outside the household)?	
2	Do you have access, power and control over natural and productive resources (e.g. land, livelihood, income, information, technologies and services.	
3	Do you have Access to Education?	
4	Do you have access to medical health facility?	
5	Do you have access to Skill development programme?	
6	Do you have decent sanitation facility at home or go for open defaecation?	
7	Do you have access to marketplace?	
8	Do you make decisions in the household and in the public sphere? Who does it? Why is this so? Is it fair?	
9	Do you participate in community/neighbourhood meetings?	
10	Do you have an influence on political processes/decision making on LOCAL level?	
11	What, in your opinion, can help to improve equality between women and men in your community/ neighbourhood?	
12	How much time do you spend for (in hours per day):	
	Income generation (paid work, producing food or others for sale, agricultural activities, going to the market for sale)	
	Domestic work such as preparing meals, cleaning the house, maintenance of house & garden, fetching water, fetching firewood, child care, voluntary work, public activities	
	Free time and relaxing like watching TV, playing games, reading, etc	
13	Have you experienced any form of domestic violence against yourself? What type of violence? What about physical/ economic violence?	
14	Have your relatives or friends experienced domestic violence?	

15	Who has which rights by law? How are men and women differently treated by customary and formal legal codes and the judicial system (eg inheritance, employment and legal representation)? Why is this so? Is it fair? What measures are taken to ensure that these laws are adhered to?	
16	Any gender empowerment program/policy operational in study area villages	
17	Is there any prevailing Grievance Redress Mechanism in general and/or for women in the community?  If yes, how the existing GRM addresses community/women complaints? Who are involved in decision making and instigation process? What is the methodology of investigation and conclusion of grievance? How is the implementation & effectiveness of committee decisions ensured?  No, how the complaints/ conflicts of community particularly women & vulnerable group are resolved?	
18	Is there any example of the grievance redressal of complaints lodged/raised by women and/or vulnerable group?	
19	Any other issues and concerns raised by Women	
<b>Project Specific Questions</b>		
20	How do women utilize the land prior to acquisition by the project?	
21	Are there communal resources in the land that they use?	
22	How will the land acquisition positively and negatively affect them (in connection with response to no. 1) and their families?	
23	Do they have alternative means to manage any adverse effect?	
24	Are there circumstances that worsens the effect of the land acquisition on them as women, and to their family?	
25	What do they know of the proposed solar project?	
26	What will be the benefit of the project to them as women, and to their families?	
27	What do they see as negative effect of the project (aside from the land acquisition) to them as women and to their families?	
28	What will they do and what will they need order to address any negative effect of the project?	
29	Suggestions & recommendations to enhance status of women.	

## APPENDIX F: LIST OF LANDOWNERS CONSULTED

S.No	Survey No	Name	Total Land in possession with Landowner (in Acre)	Extent of land leased for Solar Project	Extent of Land holding post Leasing
1		Khoman Chand	11	5	6
2		Jaswat Bhai	14.4	7.2	7.2
3		Praveena Ben	7	3	4
4		Ramesh Bhai	8	4	4
5		Jairam Bhai Kabji bhai	7	3	4
6	258	Mayur Dhwez singh Kanchan singh Zala	20	7	13
7	258/1	Shakti singh Mayur singh Rana	60	20	40
8	347	Digpal singh Hardeep singh Zala	40	7.2	32.8
9	770	Mukesh Bhai			
10	769	Mukesh Bhai			
11	774	Mukesh Bhai	74	24	50
12	779	Mukesh Bhai			
13	767	Mukesh Bhai			
14	240	Dilip singh Gajendra Singh			
15	264	Vrajkuvarba Dilubha Rana	80	29.8	50.2
16	542	Divya raj singh chandra singh Zala			
17	247	Dikpal singh zala	20	7	13
18	255	Kirti singh natuba zala	32	9	23
19	793	Harjiwan Bhai Lakshman bhai	45	7	38
20		Kathiya Pratak Singh	12.6	5.6	7
21	254	Aniruddh singh Jitubhai Zala	18	8.9	9.1
22		Vikram Bhai	11	5	6
23		Raju Bhai	18	12	6
24		Jayesh bhai Bhagwan Bhai	8	3.6	4.4

S.No	Survey No	Name	Total Land in possession with Landowner (in Acre)	Extent of land leased for Solar Project	Extent of Land holding post Leasing
25		Girdhar bhai Laxman bhai	6.4	3.2	3.2
26		Sanjay Bhai	47	17	30
27		Hiren bhai	6	2.8	3.2
28		Jitendra bhai (small contractor)	55	30	25

## APPENDIX G: SUMMARY OF STAKEHOLDERS CONSULTATIONS

Stakeholder Group	Village/ Department/ Designation	Name	Methodology	Findings
Project Proponent	• Representatives from Jenwa	• Mr. Divya Bhagat	• Face to Face interaction	<ul style="list-style-type: none"> <li>• The landowners of the proposed 80 MW solar power plant belong to Jakhan and Kataria village.</li> <li>• The proposed project land is agriculture unirrigated land which will be leased for by titleholders/landowners voluntarily for 29 years 11 months. NOC from both Jakhan and Katariya Gram Panchayat has been obtained.</li> <li>• No economic &amp; social displacement involved in land procurement for the project.</li> </ul>
Land Aggregator	• Ocean Trading Company	• Bhavesh Bhai	• Face to Face Interaction	<ul style="list-style-type: none"> <li>• Local language used is Khatiwadi</li> <li>• Most of the family members of villagers have migrated to Rajkot for getting better livelihood and employment opportunities.</li> <li>• Due to the rainfall and from the impact of Narmada canal, the soil of the area has become salty, thus making it less productive.</li> <li>• Three solar power plant situated in the close proximity are- A 150 MW solar project installed by Junipar is operational from the last 2 years.</li> <li>• A 35 MW solar project situated 20 km away from the project site is operational and was installed by the Aditya Birla Group.</li> <li>• A 70 MW solar project situated 20 km away from the project site is operational and was installed by Avaada 2 years back.</li> <li>• For keeping transparency during the process of land leasing, video conference is arranged to make the owners know about the</li> </ul>



Stakeholder Group	Village/ Department/ Designation	Name	Methodology	Findings
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compensation and to obtain their consent.

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Land Aggregator	Ocean Company Trading	<ul style="list-style-type: none"> <li>Chandrakant Soyala-Partner; Ocean Trading Company</li> </ul>	<ul style="list-style-type: none"> <li>Telephonic interaction</li> </ul>	<ul style="list-style-type: none"> <li>There is no economic and physical displacement reported during consultations with landowners. The landowner agreed with the project proponent for giving the land on lease as the land was less productive and low yielding and they were not able to make significant income from it. The landowners also had perception that, if they give the land on lease for solar project, then their land will become safe from the overhead transmission line project of government. This is because if the solar panels are installed then the government will not pass the transmission line from those areas of land and neither the solar company will allow to do so.</li> <li>The landowners used to cultivate corn on the land and that too once in 1.5-2 year because of poor fertility of land.</li> <li>Generally, the Village head men of the village approach the land acquisition company for installation of solar project on the unused/ barren land of farmers.</li> <li>Also, the Rajput community of the village don't sell their land, and since the land was also barren thus, they themselves agreed to give the land on lease because by this way it will be of some use and provide additional income to them.</li> </ul>
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Stakeholder Group	Village/ Department/ Designation	Name	Methodology	Findings
				<ul style="list-style-type: none"> <li>The landowners also own fertile land apart from the barren land which they are now willing to give on lease.</li> <li>As conveyed by the land team and based on our discussion we came on conclusion that the landowners are not doing any major/ high yield producing cultivation on the land which they are giving on lease and also, they are giving their land on lease with their full consent</li> </ul>
Asha Worker	Kataria	<ul style="list-style-type: none"> <li>Lalita Ben</li> <li>Dulera Usha Ben</li> <li>Chaya Ben</li> </ul>	<ul style="list-style-type: none"> <li>Group interaction</li> </ul>	<ul style="list-style-type: none"> <li>Toilet facility - None</li> <li>Treated drinking water - not available</li> <li>Electricity connection - not available</li> <li>108 emergency service – available</li> <li>Currently the ASHA workers are giving treatment and medicines to the villagers from their own house and sometimes use the GP office for organizing small health camps because there is no separate health center available in village.</li> <li>During the discussion, ASHA workers highlighted that healthcare facility in the village is not adequate and need improvisation. General medicines are most of the times remains available with ASHA workers but their availability sometimes becomes an issue when requirement suddenly surges.</li> </ul>
Anganwadi Worker	Kataria	<ul style="list-style-type: none"> <li>Pramila Ben</li> <li>Prabha ben</li> <li>Kanta Ben</li> </ul>	<ul style="list-style-type: none"> <li>Group interaction</li> </ul>	<ul style="list-style-type: none"> <li>Total 100 children are enrolled in anganwadi.</li> <li>There are 2 rooms in anganwadi Kendra.</li> <li>2 Toilets are present, one each for boys and girls.</li> <li>Source of drinking water is not available in anganwadi kendra</li> <li>Electricity connection is not available in anganwadi</li> <li>Basic facilities are lacking in anganwadi centre.</li> </ul>

Stakeholder Group	Village/ Department/ Designation	Name	Methodology	Findings
Anganwadi	Jakhan	<ul style="list-style-type: none"> <li>Nirmala Ben-jantabhai</li> </ul>	<ul style="list-style-type: none"> <li>Face to Face interaction</li> </ul>	<ul style="list-style-type: none"> <li>1 room, 1 Kitchen and 1 toilet facility is available in anganwadi.</li> <li>Currently, 40 children are enrolled in the anganwadi centre.</li> <li>Treated drinking water facility is available in anganwadi centre.</li> <li>Mats are used for sitting purpose.</li> <li>Dani Dharya Rekha is a helper who works in anganwadi and prepare food for children and staff.</li> <li>There is lack of desk and benches in the anganwadi kendra. During the discussion, the anganwadi workers has highlighted that there is need of at least 30 sets of desk and benches</li> <li>Also, the teaching resource are limited and there is need for additional tools such as small toys, learning-by-doing study materials and display icon of alphabets and Hindi numeric etc in Kendra.</li> </ul>
Asha Worker	Jakhan	<ul style="list-style-type: none"> <li>Ratan Ben Mhora</li> </ul>	<ul style="list-style-type: none"> <li>Face to Face interaction</li> </ul>	<ul style="list-style-type: none"> <li>Working as Asha worker in the village since last 12 years.</li> <li>The Primary health centre (PHC) is located in Choraniya village, and 10-12 villages are there under this PHC</li> <li>Children of age 0-5 years are enrolled under this PHC for whom childcare service such as vaccinations, medical treatment are given.</li> <li>On every second Wednesday of the month, Mamta Diwas is celebrated.</li> <li>Awareness regarding the diet of children, diet pan has also been given by the Asha workers</li> <li>108 emergency service is also available.</li> </ul>
Principal-High school	Kataria	<ul style="list-style-type: none"> <li>Nilesh Bhai</li> </ul>	<ul style="list-style-type: none"> <li>Face to face interaction</li> </ul>	<ul style="list-style-type: none"> <li>The school has classes from 1-10 in which total 311 students are enrolled. Out</li> </ul>

Stakeholder Group	Village/ Department/ Designation	Name	Methodology	Findings
				<p>of 311 students, 154 are boys and 157 girls.</p> <ul style="list-style-type: none"> <li>• The school has 11 rooms in total which includes classrooms, staff rooms, principal room etc. The school also has 1 separate toilet facility for each boys and girls.</li> <li>• RO water facility for drinking is also available in the school. Electricity is available mostly all the time (20 hours approx.) in school. Since almost all the students lives in the same village within 2KM radius from school; transport facility is not required.</li> <li>• School has a playground covered with boundary walls and sports equipment were also available.</li> <li>• Computer lab is functional with 10 desktops computers.</li> <li>• The repair and maintenance for all the amenities like computers, RO purifiers, desk, benches etc are done periodically or on need basic by the principal by utilizing the fund from the grants.</li> <li>• Smart classes are also available in school in which subjects are taught to students in Gujrati language</li> <li>• There is need for more smart class in school in other language like Hindi, English.</li> <li>• Cycles were also been distributed to the girls student of class 9 and 10 under the government schemes based on the family income criteria.</li> <li>• No complaint of harassment or torture registered in school till date.</li> </ul>
Principal- Middle school	Jakhan	<ul style="list-style-type: none"> <li>• Varshuben Vinodchandra Pandit</li> </ul>	<ul style="list-style-type: none"> <li>• Face to Face interaction</li> </ul>	<ul style="list-style-type: none"> <li>• Total of 73 students are enrolled in school out of which 38 are boys and 35 are girls.</li> <li>• The school has 6 rooms, 2 toilets (separate for boys and girls), RO water facility provided by government,</li> </ul>

Stakeholder Group	Village/ Department/ Designation	Name	Methodology	Findings
				<p>electricity connection, Library, sports equipment for Cricket, volleyball etc. First aid kit is also available</p> <ul style="list-style-type: none"> <li>• Tables and benches are also available in school but are not sufficient. Some students sit on the floor because of non-adequate nos. of benches.</li> <li>• There is need for repair and maintenance of classroom in the schools. Re-painting of some areas, walls, repair of existing benches and requirement of additional benches.</li> </ul>
Landowners	Kataria/ 644	<ul style="list-style-type: none"> <li>• Vikram Bhai</li> </ul>	<ul style="list-style-type: none"> <li>• Telephonic</li> </ul>	<ul style="list-style-type: none"> <li>• He is having total 11 acre of land from which he is willing to give 5 acres on lease.</li> <li>• There is no major cultivation done on the land which he is giving on lease.</li> <li>• The other 6-acre land which he is having is cultivable and from that he earns 2-3 lakhs in a year. Apart from this he is a serviceman in a construction company.</li> <li>• Vikram is a Hindu in religion and belongs to OBC category and is having 4 members in family.</li> <li>• He will get 33,500/ year/acre on the land which he is giving on lease.</li> </ul>
Landowners	Kataria/ 663	<ul style="list-style-type: none"> <li>• Hiren Bhai</li> </ul>	<ul style="list-style-type: none"> <li>• Face to Face interaction</li> </ul>	<ul style="list-style-type: none"> <li>• Hiren is a Hindu in religion and belongs to OBC category.</li> <li>• He has given 7 acres of his barren land with his full consent for installation of project. Apart from this land he is also having 15 bigha of land which is cultivable and on which he does agriculture related works.</li> <li>• He sometimes used to cultivate Jawar on the land which he is giving on lease, but that too only once in a year but from that he was hardly able to earn anything.</li> <li>• He is doing job of Diamond casting from which he is able to earn 400/day.</li> </ul>

Stakeholder Group	Village/ Department/ Designation	Name	Methodology	Findings
				<ul style="list-style-type: none"> <li>On the land which he is giving on lease, on that he will get Rs33500/year/acre for 30 years. The contract is for 30 years</li> <li>Market rate of the land in the local area is 4lakhs/acre.</li> </ul>
Landowners	Kataria	<ul style="list-style-type: none"> <li>Raju Bhai</li> </ul>	<ul style="list-style-type: none"> <li>Face to Face interaction</li> </ul>	<ul style="list-style-type: none"> <li>Raju bhai belongs to Hindu religion from OBC category.</li> <li>He has given 12 acres of his barren land with his full consent for installation of project. Apart from this land he is also having 6 acres (total 18 acre) of land which is cultivable and on which he does Agriculture related works.</li> <li>He sometimes used to cultivate cotton on the land which he is giving on lease, but that too only once in a year but from that he was hardly able to earn anything.</li> <li>He is doing job of construction work in Sanad.</li> <li>On the land which he is giving on lease, on that he will get Rs33500/year/acre for 29years 11 months. The contract is for 30 years</li> <li>Market rate of the land in the local area is 4.5-5 lakhs/acre</li> <li>He is having 4 members in family including him, wife and 2 sons.</li> <li>He also has voter id card, other government related documents</li> </ul>
Landowners	Kataria/ 795	<ul style="list-style-type: none"> <li>Sanjay Bhai</li> </ul>	<ul style="list-style-type: none"> <li>Telephonic</li> </ul>	<ul style="list-style-type: none"> <li>He is a Hindu and belongs to OBC community.</li> <li>Sanjay bhai earlier purchased a 17-acre land which he is now giving on lease for solar project. He will get Rs 33500/year/acre as lease rent and the contract is for 30 years.</li> </ul>

Stakeholder Group	Village/ Department/ Designation	Name	Methodology	Findings
				<ul style="list-style-type: none"> <li>• He is also having 30 acres on land in Fhulwariya. He is involved in livestock work, from which he earns for his living</li> <li>• Sanjay bhai is having 4 members in his family among which he is the only earning member. From livestock, he manages to earn around 60000 in a year and from the agricultural land in Fhulwariya he earns around 1-2 lakhs in a year depending on the yield and productivity</li> </ul>
Landowners	Kataria	<ul style="list-style-type: none"> <li>• Jayesh Bhai Bhagwan bhai</li> </ul>	<ul style="list-style-type: none"> <li>• Face to Face interaction</li> </ul>	<ul style="list-style-type: none"> <li>• Jayesh bhai owns 8 acres of land out of which he is going to lease 3.6 acre.</li> <li>• Jayesh bhai was earning 40000/ annum from the affected land.</li> <li>• He was willing to lease the land because the land was less productive and was requiring more effort and high cost of cultivation. By giving the less productive land on lease, he can get 1-1.5 lakhs per annum.</li> </ul>
Landowners	Kataria/ 794	<ul style="list-style-type: none"> <li>• Girdhar bhai Lakshman Bhai</li> </ul>	<ul style="list-style-type: none"> <li>• Face to Face interaction</li> </ul>	<ul style="list-style-type: none"> <li>• Gridhar Bahi owns 6.4 acre of land out of which he is willing to lease 3.2 acre.</li> <li>• The earning which he was having from producing crops on the land was very less and sometimes he is also unable to make any profit. Thus, he is giving the land on lease because he will make profit without working on those acres of land.</li> </ul>
Landowners	Jakhan	<ul style="list-style-type: none"> <li>• Jitendra Bhai</li> </ul>	<ul style="list-style-type: none"> <li>• Face to Face interaction</li> </ul>	<ul style="list-style-type: none"> <li>• Jitendra bhai owns 55 acres of and out of which he is willing to lease 30 acres of land.</li> <li>• He approximately earns around 1 lakh per annum from labour and Agri works and is willing to lease his land voluntarily.</li> </ul>
Landowners	Kataria	<ul style="list-style-type: none"> <li>• Khoman Chand</li> </ul>	<ul style="list-style-type: none"> <li>• Face to Face interaction</li> </ul>	<ul style="list-style-type: none"> <li>• Khoman Chand owns 11 acres of land out of which he is willing to lease 5 acres on lease for solar power project.</li> </ul>

Stakeholder Group	Village/ Department/ Designation	Name	Methodology	Findings
				<ul style="list-style-type: none"> <li>The earning which he was having from producing crops of the land was very less and sometimes he is also unable to make any profit. Thus, he is giving the land on lease because he will get profit without working on those acres of land.</li> </ul>
Landowners	Kataria	<ul style="list-style-type: none"> <li>Jaswat Bhai</li> </ul>	<ul style="list-style-type: none"> <li>Face to Face interaction</li> </ul>	<ul style="list-style-type: none"> <li>Jaswat bhai owns 14.4 acre of land out of which he is willing to lease 7.2 acre on lease.</li> <li>The earning which he was having from producing crops of the land was very less and sometimes he is also unable to make any profit. Thus, he is giving the land on lease because he will get profit without working on those area of land.</li> </ul>
Landowners	Kataria	<ul style="list-style-type: none"> <li>Praveena Ben</li> </ul>	<ul style="list-style-type: none"> <li>Face to Face interaction</li> </ul>	<ul style="list-style-type: none"> <li>Praveen Ben owns 7 acres of land out of which he is willing to lease 3 acres on land</li> <li>The earning which he was having from producing crops of the land was very less and sometimes he is also unable to make any profit. Thus, he is giving the land on lease because he will get profit without working on those acre of land</li> </ul>
Landowners	Kataria	<ul style="list-style-type: none"> <li>Ramesh Bhai</li> </ul>	<ul style="list-style-type: none"> <li>Face to Face interaction</li> </ul>	<ul style="list-style-type: none"> <li>Ramesh Bhai owns 8 acres of land out of which he is willing to lease 4 acres on lease</li> <li>According to Ramesh bhai, the output is negligible compared to the input thus making profit amount negligible. That's why he is willing to give land on lease, because by this way he will make earning without providing any efforts and cost</li> </ul>
Landowners	Kataria	<ul style="list-style-type: none"> <li>Jairam Bhai Kabji bhai</li> </ul>	<ul style="list-style-type: none"> <li>Face to Face interaction</li> </ul>	<ul style="list-style-type: none"> <li>Jairam bhai owns 7 acres of land out of which he is willing to lease 3 acres of land</li> <li>Jairam bhai during the discussion mentioned that there is very less income in</li> </ul>



Stakeholder Group	Village/ Department/ Designation	Name	Methodology	Findings
				<p>farming. He has to provide more input and effort and in return he manages to get very less profit.</p> <ul style="list-style-type: none"> <li>• He said that by giving some part of land on lease, he will get the money without doing any work and without putting any extra efforts, thus it will also save his time which he can utilize on other works.</li> </ul>
Landowners	Jakhan/ 258	<ul style="list-style-type: none"> <li>• Mayur Dhwarz singh</li> <li>• Kanchan singh Zala</li> </ul>	<ul style="list-style-type: none"> <li>• Face to Face interaction</li> </ul>	<ul style="list-style-type: none"> <li>• Mayur Dhwarz singh owns 20 acres of land out of which he is willing to lease 7 acres of land.</li> <li>• He is willing to give his land on lease because those land are less productive and less fertile, thus by giving it on lease he will earn more as compared to his previous earnings from farming on the affected land.</li> </ul>
Landowners	Jakhan/ 258-1	<ul style="list-style-type: none"> <li>• Shakti singh</li> <li>• Mayur singh</li> <li>• Rana</li> </ul>	<ul style="list-style-type: none"> <li>• Face to Face interaction</li> </ul>	<ul style="list-style-type: none"> <li>• Shakti Singh owns 60 acres of land out of which he is willing to lease 20 acres of land</li> <li>• He is willing to give his land on lease because those land are less productive and less fertile, thus by giving it on lease he will earn more as compared to his previous earnings from farming on the affected land.</li> </ul>
Landowners	Jakhan/ 347	<ul style="list-style-type: none"> <li>• Diggpal singh</li> <li>• Hardeep singh Zala</li> </ul>	<ul style="list-style-type: none"> <li>• Face to Face interaction</li> </ul>	<ul style="list-style-type: none"> <li>• Diggpal singh owns 40 acres of land out of which he is willing to lease 7.2 acre of land</li> <li>• He is willing to give his land on lease because those land are less productive and less fertile, thus by giving it on lease he will earn more as compared to his previous earnings from farming on the affected land</li> </ul>
Landowners	Kataria/770 769 774 779 767	<ul style="list-style-type: none"> <li>• Kalubhai bhikabhai</li> <li>• Premjibhai Bhikabhai</li> <li>• Dhirubhai bhikabhai</li> <li>• Mahipatbhai bhikabhai</li> </ul>	<ul style="list-style-type: none"> <li>• Face to Face interaction</li> </ul>	<ul style="list-style-type: none"> <li>• They have 74 acres of land in total which is taken care by Mukesh bhai out of which they are leasing 24 acres of land in total for solar project.</li> <li>• On the remaining land, Jawar, cotton cultivation is mainly practiced.</li> <li>• They are leasing the land because they were hardly</li> </ul>

Stakeholder Group	Village/ Department/ Designation	Name	Methodology	Findings
		Kalubhai Bhikabhai		<p>able to make profit from those 24-acre land. Those land were less productive</p> <ul style="list-style-type: none"> <li>Also, they were dependent on the rain for irrigation, thus it becomes difficult to them to produce sufficient crop if total rainfall remains below average.</li> <li>According to the statement given by Mukesh bhai, by leasing the land on lease they will be able to make profit without doing any work</li> </ul>
Landowners	Jakhan/ 240	<ul style="list-style-type: none"> <li>Dilip singh</li> <li>Gajendra Singh</li> </ul>	<ul style="list-style-type: none"> <li>Face to Face interaction</li> </ul>	<ul style="list-style-type: none"> <li>Dilip singh, Vrajkuvarba, Divra Raj has total of 80 acres of land out of which Dilip is giving 10 acres on lease</li> <li>Since Rain-fed agriculture is practiced in area, so for irrigation they are only dependent on rainwater as there is no other source of water present for irrigation. They have to do more hard work and put extra efforts and in return they were getting very less profit.</li> <li>By giving some land on lease they will get the amount without putting any efforts.</li> <li>Also, they think that by giving the land for solar project, they will prevent the overhead transmission lines to be passed from their land</li> </ul>
Landowners	Jakhan/ 264	<ul style="list-style-type: none"> <li>Vrajkuvarba</li> <li>Dilubha Rana</li> </ul>	<ul style="list-style-type: none"> <li>Face to Face interaction</li> </ul>	<ul style="list-style-type: none"> <li>Since Rain-fed agriculture is practiced in area, so for irrigation they are only dependent on rainwater as there is no other source of water present for irrigation. They have to do more hard work and put extra efforts and in return they were getting very less profit.</li> <li>By giving some land on lease they will get the amount without putting any efforts.</li> <li>Also, they think that by giving the land for solar project, they will prevent the overhead transmission lines to be passed from their land</li> </ul>

Stakeholder Group	Village/ Department/ Designation	Name	Methodology	Findings
	Jakhan/ 542	<ul style="list-style-type: none"> <li>Divya singh chandra singh Zala</li> <li>raj</li> </ul>	<ul style="list-style-type: none"> <li>Face to Face interaction</li> </ul>	<ul style="list-style-type: none"> <li>Since Rain-fed agriculture is practiced in area, so for irrigation they are only dependent on rainwater as there is no other source of water present for irrigation. They have to do more hard work and put extra efforts and in return they were getting very less profit.</li> <li>By giving some land on lease they will get the amount without putting any efforts</li> <li>Also, they think that by giving the land for solar project, they will prevent the overhead transmission lines to be passed from their land</li> </ul>
Landowners	Kataria/ 247	<ul style="list-style-type: none"> <li>Dikpal singh Zala</li> </ul>	<ul style="list-style-type: none"> <li>Face to Face interaction</li> </ul>	<ul style="list-style-type: none"> <li>He owns 20 acres of land out of which he is leasing 7 acres of his less productive and.</li> <li>His one brother works in service. Apart from the land which he is leasing, he does the farming from which he has turnover of 4lakhs/ year.</li> <li>He is giving 7 acres on lease because from that he will make around 2.5 lakhs in year without putting any effort. This will also save his time and cost of production/ cultivation</li> </ul>
Landowners	Jakhan/ 255	<ul style="list-style-type: none"> <li>Kirti singh natuba Zala</li> </ul>	<ul style="list-style-type: none"> <li>Face to Face interaction</li> </ul>	<ul style="list-style-type: none"> <li>He owns 32-acre land out of which he is willing to lease 9 acres.</li> <li>He has himself approached to the team for leasing his land because by this way he will be able to get money without labour work and will also save time.</li> <li>From the total land he makes around 5 lakhs in a year which is very less for 32-acre land. Thus, by giving on lease he will get around 3 lakhs/ year for 9 acres of land</li> </ul>
Landowners	Kataria/ 793	<ul style="list-style-type: none"> <li>Harjiwan bhai Lakshman bhai</li> </ul>	<ul style="list-style-type: none"> <li>Face to Face interaction</li> </ul>	<ul style="list-style-type: none"> <li>He has 45 acres of land out of which he is willing to give 7 acres on lease</li> <li>By leasing the land, he will make around 2.5 lakhs in year without putting any</li> </ul>

Stakeholder Group	Village/ Department/ Designation	Name	Methodology	Findings
Landowners	Kataria	<ul style="list-style-type: none"> <li>Kathiya Pratap singh</li> </ul>	<ul style="list-style-type: none"> <li>Face to Face interaction</li> </ul>	<p>effort. This will also save his time and cost of production/ cultivation.</p> <ul style="list-style-type: none"> <li>He has total of 5.6 acre of land, and he is giving his total land on lease.</li> <li>Some of his earning members of family works in other town and he do the labour work from which he earns 200-300/ day.</li> <li>He was not able to make any profit from agriculture and as said by him, by giving the land on lease for solar project, he will get regular source of earning which will be much more as compared to agriculture</li> </ul>

- The main source of income in both the villages were farming and wages earn working as agriculture labour.
- The land in both the villages were less productive and less fertile.
- Cost of cultivation in the village were high.
- Almost all the villagers were giving the land voluntarily on lease.
- There is requirement of alternate source of employment as the earning of most of the people are low and the employment opportunity is only limited to farming and labour from which they don't able to earn significant amount.
- There is also needed to improve the irrigation facility in villages so that they should not only remain dependent on rainwater for farming.

Sl. No.	Village	Villagers	Basic Social & Physical Infrastructure Facilities	Descriptions
1	Jakhan	Mahavir Singh-Sarpanch	School:	1 Government Primary School
			Name of taluka	Limbdi
			Total population	1200
			Total household	1200
			Caste	General, OBC, SC
			Health:	Nearest health centre is PHC Borna (15 km from village)
			Electricity:	24X7 Available for households
			Livestock available	70-80 houses have cattle rearing
			Grazing area distance	500m from the proposed land
			Drinking Water:	Gujarat water supply board supply water to tank in village for drinking purpose


Sl. No.	Village	Villagers	Basic Social & Physical Infrastructure Facilities	Descriptions
			Sanitation:	Available in all the houses. 100%
			Occupation:	Agriculture during rainy season Labour, Animal husbandry
			Common property Resources (CPRs)	Community Hall- 2 Community Toilet- 1 Temple/ Mosque/ Church- 10 Pond/ well/ River- 2
			Main Food Crops:	80% cotton and remaining 20% Arandi, Bapra, Peanut
			Vulnerable Group	Physically Handicapped- 4-5 BPL Family- 25-35 Widow- 15-20 Single Women household- 0 SC- 0 ST- 0
			Women	Women also participate in agriculture activities
			Cooking source/ Fuel:	Gas cylinder/ provided under Ujjwala Yojna & Cow dung cake n Fuel Wood
			Transport & Communication:	Government Bus, private vehicle
			Available irrigation facility	Narmada river water, well facility on private land
			Issues & Concern	Lack of medical shop, Basic health facilities, higher educational institutes, severe water shortage, untreated drinking water facility etc.

Sl. No.	Village	Name of the Stakeholders	Basic Social & Physical Infrastructure Facilities	Descriptions
1	Jakhan	Janak ben- wife of sarpanch	School:	1 Government Primary/ Middle School
			Name of taluka	Limbdi
			Total population	2700
			Total household	1200
			Caste	General, OBC, SC

Sl. No.	Village	Name of the Stakeholders	Basic Social & Physical Infrastructure Facilities	Descriptions
			Health:	1 PHC subcentre in village. People go to Limbdi for major disease treatment
			Electricity:	24X7 Available for households
			Livestock available	Majority of Koli, Patel community members are having cattle
			Grazing area distance	500m from the proposed land
			Drinking Water:	Narmada pipeline in every house
			Sanitation:	Available in all the houses. 100%
			Occupation:	Agriculture during rainy season Most of the member from SC community work in small cottage industry and some also do the work of Patola saree manufacturing
			Common property Resources (CPRs)	Community Hall- 0 Community Toilet- 1 in panchayat office Temple/ Mosque/ Church- 10 Pond/ well/ River- 1 Dam (known as Bada Talab)
			Main Food Crops:	Cotton, jwar, jeera, Arandi, Wheat
			Vulnerable Group	Physically Handicapped- 20 BPL Family- 0 Widow- 100 Single Women household- 0 SC- 100 ST- 0
			Women	Women also participate in agriculture activities
			Cooking source/ Fuel:	50% of the household use woods and remaining on LPG
			Transport & Communication:	Government Bus, private vehicle

Sl. No.	Village	Name of the Stakeholders	Basic Social & Physical Infrastructure Facilities	Descriptions
			Available irrigation facility	Narmada river water, well facility on private land

## APPENDIX H: 80 MW GUVNL PPA

	<b>Gujarat Urja Vikas Nigam Limited</b> Sardar Patel Vidyut Bhavan, Race Course, Vadodara 390007 Phone (0265) 2334751 (Direct), 2340289 Fax : (0265) 2344543, 2337918, 2338164 PBX : (0265) 2310582-86, Web : gseb.com CIN U40109GJ2004SGC045195
Ref No. GUVNL/COM/GM(IPP)/RE/ 179	Date: 09/02/2021

To,  
Shri Mr. Ankit Jain,  
Authorized Signatory,  
M/s AEW India West One Private Limited,  
3393, 3rd Floor, Ranjet Nagar, South Patel Nagar,  
Near Siddarth Hotel, Delhi,  
Central Delhi, India, 110008

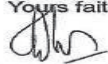
Fax No.:

**Sub: PPA dated 30.01.2021 between M/s AEW India West One Private Limited & GUVNL.**

Sir,

Please find attached herewith the PPA dated 30.01.2021 executed between M/s AEW India West One Private Limited and GUVNL for procurement of power from 80 MW Solar Project.

Thanking you,

Yours faithfully  
  
**(Sailaja Vachhrajani)**  
General Manager (IPP)




By RPAD

Hand Delivery

1. Shri A.B.Rathod,  
I/C Chief Engineer,  
SLDC Gujarat,  
Gotri, Vadodara
2. Shri N.P.Jadav  
Chief Engineer (R&C)  
Corporate Office,  
Gujarat Energy Transmission Corporation Limited,  
Vadodara
3. Shri S.B.Patil,  
Dy Director  
Gujarat Energy Development Authority

**SCHEDULE 2: Approvals**

1. Consent from the GETCO / CTU for the evacuation scheme for evacuation of the power generated by the **80 MW** Solar Photovoltaic Grid Interactive Power Projects.
2. Approval of the Electrical Inspectorate, Government of Gujarat for commissioning of the transmission line and the solar project installed at the Project Site.
3. Certificate of Commissioning of the Solar Photovoltaic Grid Interactive Power Project issued by GEDA.
4. Permission from all other statutory and non-statutory bodies required for the Project
5. Clearance from Department of Forest, Ecology and Environment, if required
6. Certificate by the concerned and competent revenue / registration authority for acquisition / ownership / right to use / vesting of land in the name of Solar Project Developer.
7. Approval for Water from the concerned authority (if applicable) required for the Project.



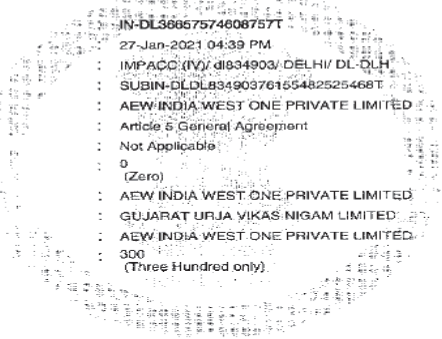


**INDIA NON JUDICIAL**

**Government of National Capital Territory of Delhi**

**e-Stamp**

सत्यमेव जयते  
 Certificate No. : JN-DL386575746087577  
 Certificate Issued Date : 27-Jan-2021 04:39 PM  
 Account Reference : IMPACC (IV) / dl834903/ DELHI/ DL-DLH  
 Unique Doc. Reference : SUBIN-DL83490376155482525468T  
 Purchased by : AEW INDIA WEST ONE PRIVATE LIMITED  
 Description of Document : Article 5 General Agreement  
 Property Description : Not Applicable  
 Consideration Price (Rs.) : 0  
 (Zero)  
 First Party : AEW INDIA WEST ONE PRIVATE LIMITED  
 Second Party : GUJARAT URJA VIKAS NIGAM LIMITED  
 Stamp Duty Paid By : AEW INDIA WEST ONE PRIVATE LIMITED  
 Stamp Duty Amount (Rs.) : 300  
 (Three Hundred only)



.....Please write or type below this line.....

This Stamp Paper shall be an integral part of the Power Purchase Agreement dated 30-01-2021 executed between Gujarat Urja Vikas Nigam Limited and AEW India West One Private Limited.



**SCHEDULE 3: Project Location Details**

CAPACITY (MW)	LOCATION DETAILS	CUF%	SENDING SUBSTATION / POOLING STATION
80	Village: Jakhan Tehsil: Limbdi District: Surenderanagar	28.5%	400/220 kV Choraniya S/S

**Note:**

- (i) If the Power Producers chooses to declare the location / sub-station details upfront at the time of signing of PPA, the Power Producer may be allowed to change the location(s) upto SCOD.
- (ii) The Power Producer shall be solely responsible for getting the connectivity of their project on or before SCOD.



# APPENDIX I: AEW Draft Lease deed

## LEASE DEED

This deed of lease "Lease Deed" is executed at Limbdi on the \_\_\_\_\_ day of \_\_\_\_\_, 2021 ("Execution Date").

### BY & BETWEEN

(a) Shri....., S/o....., Aged about \_\_\_\_\_ years, Resident - Village \_\_\_\_\_, Taluka Limbdi, Dist. Surendranagar, having Aadhar No. .... Income Tax Permanent Account No ..... ("Lessor");

(Lessor is hereinafter collectively referred to as the "Lessors", which expression, unless repugnant to the context or meaning thereof, will include his/her/their legal heirs, successors in interest and permitted assigns) of the **FIRST PART**;

### AND

(b) M/s. **AEW India West One Private Limited** 07AAUCA6097Q1ZI, a company registered and existing under the laws of India having its Corporate Identity No: U40200DL2021FTC375220 (CIN), registered office situated at 3393, 3<sup>rd</sup> Floor, Rajnet Nagar, South Patel Nagar, Near Siddharth Hotel, Delhi-110008, hereinafter referred to as the "Lessee" or "AEWWI" represented by its duly authorized representative Mr....., S/o Mr....., authorized signatory as per the resolution passed by its Board of Directors dated ..... 2021 (which expression unless repugnant to the context or meaning thereof, shall include its successors and permitted assigns) of the **SECOND PART**;

The Lessors and the Lessee are hereinafter individually referred to as "Party" and jointly referred to as "Parties".

### RECITALS:

A. WHEREAS Lessors are the absolute legal owner, occupant and in possession of freehold parcel(s) of lands admeasuring [.....] hectares i.e. [.....] Sq. Mtrs. i.e. [.....] acres, situated in Village \_\_\_\_\_, Taluka Limbdi, District Surendranagar, State Of Gujarat, As More Particularly described in Schedule A hereto (the "Lease Property"), the details of which are given in the table below:

New Survey Number	Old Survey Number	Khata Number	Extent	Square Meters	Area in Acres

B. AND WHEREAS Lessors have represented to Lessee that they are the absolute legal owner and in occupation and possession of the Lease Property to the exclusion of others as per the record maintained in the Village Form No. 7 for the year 2021, Form No. 8 A for the year 2021 and Mutation Entry No. .... dated \_\_\_\_\_ in Form No. 6 for the year ..... by the Mamlatdar, Limbdi, Gujarat and are legally entitled to grant on lease basis the Lease Property to the Lessee;

C. AND WHEREAS Lessors are desirous of granting the Lease Property on leasehold basis to Lessee, including approach road along with all rights and appurtenances thereto free of any encumbrances whatsoever, upon the terms and conditions set forth in this Lease Deed, and such terms and conditions shall be final, irrevocable and binding on both the Parties to this Lease Deed;

- D. AND WHEREAS Lessee has approached Lessors to grant the lease of the entire Lease Property to the Lessee for setting up, operating and maintaining a solar power plant under the solar power plant project awarded to Lessee by Gujarat Urja Vikas Nigam Limited ("GUVNL") in terms of RfIs and PPA (the "Project");
- E. AND WHEREAS Lessors, pursuant to the request made by Lessee, has agreed to execute this Lease Deed to record the terms and condition on which Lessors shall grant on lease basis the Lease Property to Lessee;
- F. AND WHEREAS Lessors and Lessee are, therefore, desirous of entering into this Lease Deed to reduce all the agreed terms and conditions in writing, superseding all previous agreements, arrangements, letters of intent, writings etc., if any, in respect of this lease of the Lease Property by Lessors to Lessee, as set out herein below.

NOW THEREFORE, in consideration of the mutual covenants of the Parties, the sufficiency whereof is hereby acknowledged and for other good and valuable consideration, the Parties agree as follows:

## 1. DEFINITIONS AND INTERPRETATION

### 1.1 Definitions

In this Lease Deed, including in the recitals hereof, the following words, expressions and abbreviations shall have the following meanings, unless the context otherwise requires:

"Affiliates" shall have the meaning ascribed to the term in Clause 4.3 (c) of this Lease Deed.

"Approvals" means all authorizations, consents, approvals, notifications and permissions and any license, permit, ruling, no objection certificates (NOC), exemption or other authorization of whatsoever nature, which are required to be granted by, or any registration or filing with any authority under law for or in respect of this Lease Deed including for the performance of any obligation or exercise of any right by a Party herein.

"Effective Date" shall mean the date of execution of this Lease Deed.

"Government Authority" shall mean the Government of India, the State Government of Gujarat or any Central or State or regional or municipal authority, or local government, or any legislature, ministry including Ministry of New and Renewable Energy (MNRE), Gujarat Electricity Regulatory Commission (GERC), GUVNL, Gujarat Energy Development Agency (GEDA) department, commission, board, authority, instrumentality, agency, regulator, political subdivision, corporation or commission under the direct or indirect control of the Government of India or State Government of Gujarat or any other state or local government or any sub-registrar of assurances, registrar of companies or revenue department or commissioner/district magistrate/collector/deputy collector/ sub-divisional magistrate/Taluka Development Officer/ District Development Officer/ Territory Officer/ panchayat/ taluka panchayat/ mamlatdar/empowered committee/empowered officer or Industries Commissioner or district industries center office (DIC) or any subdivision of any of them and any other government/local authorities as applicable.

"Lease Deed" means this Lease Deed together with the recitals hereof and all Schedules and Annexures hereto, and as may be supplemented and /or amended from time to time in writing.

"Lease Property" means the parcel(s) of land as described in Schedule A to this Lease deed, agreed to be leased by Lessors to the Lessee under the terms and conditions of this Lease Deed.

"Lease Rent" shall have the meaning ascribed to the term in Clause 3.1(a) of this Lease Deed.

"Lease Term" shall have the meaning ascribed to the term in Clause 2.3 of this Lease Deed.

"Project" shall have the meaning ascribed to the terms in Recital D of this Lease Deed.

"Lessors' Lenders" shall have the meaning ascribed to the term in Clause 5.1 of this Lease Deed.

"Lessors' Loan Outstanding Amount" shall have the meaning ascribed to the term in Clause 5.1 of this Lease Deed.

"N. A. Permission" shall have the meaning ascribed to the term in Clause 4.1 (i) of this Lease Deed

"Other Entity" shall have the meaning ascribed to the term in Clause 4.3 (c) of this Lease Deed.

"PPA" power purchase agreement signed between GUVNL & [AEWW1] dated

"Project Related Approvals" shall have the meaning ascribed to the term in Clause 10.7 of this Lease Deed.

"RFS" RfS No. [GUVNL/500 MW /SOLAR/Phase ] dated .....

## 1.2 Interpretation

- (i) In this Lease Deed, unless the context otherwise requires:
  - (a) Words used in the singular shall be deemed to include the plural and vice-versa.
  - (b) References to clauses, recitals, schedules and annexure are, respectively, references to clauses and recitals of and schedules and annexures to this Lease Deed. The schedules, annexures and recitals shall form an integral part of this Lease Deed.
  - (c) Any reference herein to a statutory provision shall include such provision, as is in force for the time being and as from time to time, amended or re-enacted in so far as such amendment or reenactment is capable of applying to any transactions covered by this Lease Deed. Any references to an enactment include references to any subordinate legislation made under that enactment and any amendment to, or replacement of, that enactment or subordinate legislation. Any references to a rule or procedure include references to any amendment or replacement of that rule or procedure.
  - (d) The headings and sub-headings are inserted for convenience only and shall not affect the construction and interpretation of this Lease Deed.
  - (e) References to the word "include" and "including" shall be construed without limitation and the terms "hereof", "herein", "hereby", "hereto" and derivative or similar words refer to this entire Lease Deed or specified ~~Clauses~~, as the case may be.
  - (f) Reference to any month shall mean a reference to a calendar month as per the Gregorian calendar and reference to number of days shall refer to calendar days as per the Gregorian calendar, unless otherwise specified.
- (ii) This Lease Deed shall be executed in both English and Gujarati languages. In the event of any dispute or confusion in the interpretation of any provisions of this Lease Deed under English and Gujarati languages, the interpretation of such provisions of this Lease Deed in English Language shall prevail.

**NOW THIS LEASE DEED WITNESSETH AS FOLLOWS:**

**2. GRANT OF LEASE**

**2.1 Grant and Purpose**

In consideration of mutual promises of the Parties and the mutual representations and warranties contained herein, Lessors hereby grant to Lessee the Lease Property on a leasehold basis free and clear of all encumbrances along with approach road and all rights and appurtenances vested in the Lease Property along with peaceful and absolutely vacant physical possession with no construction of any nature and/or without any crops/plants, trees, vegetation etc. of any nature, for the Lease Term, in consideration of the Lease Rent payable by the Lessee to the Lessors and on the terms, covenants, limitations and conditions set out in this Lease Deed, and the Lessee, on the basis of the representations, assurances, warranties of the Lessor contained herein and subject to the terms and conditions of this Lease Deed, hereby takes on leasehold basis the Lease Property from the Lessors for the Lease

# APPENDIX J: Jakhan NA-Final Order

## OFFICE OF THE COLLECTOR & DISTRICT MAGISTRATE

Dist. Seva Sadan-1, Tower Road, Surendranagar, Gujarat – 363040

Phone number: 2752 – 283892

e-mail: [collector-sm@gujarat.gov.in](mailto:collector-sm@gujarat.gov.in)

Under Section-65 of the Gujarat Land Revenue Act, 1879 (temporary non-agriculture)

Order No.: 712/08/10/036/2021

Dt. 17/09/2021

### Taken on record:

- 1 Online application (No.308102021011272) and Affidavit of Applicant BALBHADRASINH ANANDJI RANA  
Res.: E-114, Sainath Park, Vasna Road, near Ranewar temple, Vasna, Vadodara, VADODARA-390007
- 2 Section 48, 65, 66 & 67 of the Bombay Land Revenue Act, 1879.
- 3 Rule 81, 100, 101, 102 of the Gujarat Land Revenue Rules, 1972.
- 4 Resolution No.BaKhaPa/1006/425/Ka dt. 01/07/2008 of Government's Revenue Department.
- 5 Circular No.BaKhaPa/102018/327/Ka dt. 08/05/2018 of Government's Revenue Department.
- 6 Resolution No.ST/TP/12209/769/11/Ha.1 dt. 31/03/2011 of Government's Revenue Department.
- 7 Resolution No.BaKhaPa/102018/425/Ka dt. 09/01/2019 of Government's Revenue Department.
- 8 Circular No.BaKhaPa/102018/425/Ka dt. 10/02/2019 of Government's Revenue Department.
- 9 Opinion of the Mamlatdar and agriculture Panch (tribunal) (ALT) dt. 13/09/2021.
- 10 Case details on iRCMS Portal.

### ORDER:

Vide application & Affidavit, Sr. No. 1 of taken on record, applicant Shri BALBHADRASINH ANANDJI RANA, requested the permission for the non-agriculture purpose for land admeasuring 10816 S.M. area bearing Survey/ Block No. 256 of Moje Jakhan, Ta. Limbdi, Di. Surendranagar, under the Gujarat Land Revenue Act, 1879.

2 In village specimen No.7/12, details of possessors of land in question is as per below.

Survey/Block No.	Area (S.M.) of demand	Names of possessors (Account No.263)	Type of authority of land (as per 7/12)
Survey/Block No. 256 Old Survey/Block No 181/2	10816.00	Balbhadrasingh Anandji Rana	Old condition (Ju.Sa.)

- 3 Details of taxes collected are as per below.  
Deposited Challan in Bank on 15/09/2021 No.570000135515092117735.

Details of taxes	Reference	Area of demand (S.M.)	Rate per Sq. Mtr.	Total amount (Rs.)
Conversion tax	569-0035-00-800-01	10,816.00	6.00	64,896.00
Special Act	570-0035-00-101-01	10,816.00	0.10	1,082.00
Local Fund	574-0029-00-103-01	10,816.00	0.13	1,406.00
Education cess	575-0045-00-108-01	10,816.00	0.03	324.00
Measurement fee	577-0029-00-106-01	10,816.00	--	2,400.00

4 Taking into consideration the above details, the order is hereby issued granting temporary non-agricultural permission purpose (Industrial use) under Section 65 of the Gujarat Land Revenue Act, 1879, for the period from 17/09/2021 to 17/03/2051 for land admeasuring 10,816.00 S.M. bearing Survey/Block No.256 of Moje Jakhan, Tal. Limbdi, Dist. Surendranagar, subject to the conditions mentioned below.

**Conditions:**

- 1 On receiving this order, Sanad in specimen "M" will be received within two months.
- 2 Measurement fee is deposited in the District Inspector, Land Record Office. Therefore, make/arrange to make measurement and required to prepare correction statement as per the approved plan and only after the implementation of correction statement in the Revenue Records, the sale of non-agricultural land/ plot in question made by the registered deed will be noted in the records.
- 3 Applicant is required to pay every year cess, excluding agriculture cess, @ Rs.0.10 per S.M. i.e. Rs.1082/- and required to pay Local Fund and Education cess as per the rules, which are subject to change from time to time.
- 4 Construction is to be made as per the plan approved by the Town Planning Office, Surendranagar, and construction is to be completed within three years from the date of the order issued.
- 5 As resolved in Resolution No. BaKhaPa/1093/1052/Ka dt. 13/09/1993 of the Revenue Department of the Government, common plot and land for road will be of ownership of the society or common ownership of all the plot holders; original owner will not have any right on this.
- 6 As per circular No. BaKhaPa/1091/1756/Ka dt. 07/08/1991 of the Revenue Department of the Government, respective Municipal Corporation / Town Area Development Authority, who is the construction controlling authority, is required to take legal steps in respect of unauthorised construction.

- 7 If petroleum/water or any type of pipeline is passing through this land, than the respective authority issuing development permission is required to obtain no-objection certificate of respective departments and Development Permission is to be issued.
- 8 Following Conditions of circular No. BaKhaPa/ 102018/425/Ka dt. 12/02/2019 of the Revenue Department of the Government, are to be followed.
  - 1 If earlier paid premium for a particular purpose and Development Permission is sought for other purposes/ plans are to be approved than before issuing the Development Permission, and the respective authority is required to ensure that difference in premium is paid and thereafter only Development permission is to be issued.
  - 2 If, as per the GDCR, permission is not available for that purpose/use, than it cannot be used.
  - 3 Development permission is to be issued for the area, equal to the construction area available as per the GDCR in the Agriculture Zone.
  - 4 After receiving non-agriculture permission, if construction is made for religious use without special permission than it will be treated as breach of condition and this construction becomes removable.
- 9 Following conditions of Resolution No. BaKhaPa/ 1006/425/Ka dt. 01/07/2008 of the Revenue Department of the Government, are to be followed.
  - 1 Original Tippan limits should be shown on the measurement sheet issued by the District Inspector, Land Records. The submitted plan and lay-out plan should have been approved by the competent authority.
  - 2 Before starting the construction, should get the approval of construction plans by the competent officer. However, an applicant will not get such a construction permission letter without obtaining the non-agriculture permission.
  - 3 In a city area where town planning is approved, their construction is to be made as per the rules of G.D.C.R. and Zoning.
  - 4 Provision for the disposal of wastewater is to be done as per the approved plans keeping an eye on health.
  - 5 Applicant is required to make construction maintaining distance from the middle point of the road applicable to types of road under the Ribbon



- 6 Required permission of the District Magistrate is to be obtained for the Non-agriculture permission for floor mill, cinema / touring cinema/ theatre, and further action to be undertaken.
- 7 Required permission of the District Magistrate is to be obtained for the Non-agriculture permission for the installation of Petrol, Diesel, Kerosene, C.N.G., L.P.G. pumps and further action to be undertaken.
- 8 Required permission of the District Magistrate is to be obtained for the Non-agriculture permission for Manganese, fireworks, explosives under the Indian Explosive Act, and further action to be undertaken.
- 9 If the land in question is near the Railway line, then construction is to be made after living the space as per the railway limit rules.
- 10 If the electricity grid wires / high tension power or poles are situated on the land in question or passing nearby to it, at that time, applicable rules for this area to be followed, and construction is to be made accordingly.
- 11 If the land for which non-agriculture permission is sought is situated within the radius around the Aerodrome, at that time height of construction and no objection certificate in respect of Aerodrome is to be obtained from the Civil Aviation Department and rules of the Civil Aviation Department are to be followed.
- 12 Applicant is required to follow respective rules in case land is situated near the O.N.G.C. Well.
- 13 Applicant is required to follow the rules for maintaining the distance between the construction if the land is situated near Narmada canal/other irrigation canals.
- 14 Wherever necessary, the applicant is required to follow prevailing provisions of maintaining distance as per rules if the area of the protected monument is declared by the Central Government or the State Government.
- 10 If there is any charge of any bank/society is due on this land than before paying this, in no way this property can be sold, given as a gift, make its will, agreement to sale, mortgaged and cannot directly or indirectly transfer its ownership or possession/use to anyone.
- 11 Conditions prescribed by the Municipality/ Municipal Corporation/ Town Area Development Authority for the permission in the land in question that conditions are to be followed and construction should be done accordingly.

12 invariably, on this land arrangement for percolation bore well is to be made at the rate of one per building or multi-story building for the underground flow/storage of the rainwater, and construction is to be done after making arrangements for the disposal of rainy water.

13 If the construction made on the land in question is not according to the rules of the local self Government institutions, than local self Government institution can take action as per the rules. There will not be any ban on account of this order.

The applicant is required to follow the above conditions. If fails, breach of condition will be treated, and the competent authority will initiate legal action.

14 On breach of any of the above conditions, punishment steps will be taken under Section 657 of the Land Revenue Act. And if punishable under any other, then without any ban on this, will impose a penalty or recover cess, as they deem fit and allow continuing the possession with the applicant.

15 Whatever provided in above conditions, construction made against the said order of the Collector or any additional building or construction is not removed, or changes are not made as per the instruction within the fixed time limit, then whatever expenses incurred for doing so, is authorised to recover from the possessor as land revenue dues.

16 On the expiry of the said time limit fixed for the temporary non-agriculture approval, and its non-agriculture use cannot be continued without the prior permission of the competent authority, else, will become eligible for the appropriate action under the Land Revenue Act and Rules inclusive of the breach of condition.

17 1 Required to deposit difference amount in respect of measurement fee in the District Inspector, Land Record office. So that measurement can be made on the basis of this order and to prepare/arrange to prepare the correction statement on the basis of the plan approved.

2 Non-agriculture permission is granted for the purpose according to land situated in which zone.

Moreover, subject to the above conditions and on the basis of details of the affidavit submitted by the applicant, permission was granted for non-agriculture use of the land in question.

Sd/-

( Amrutesh K. Aurangbadkar )  
Collector, Surendranagar.

To,  
BALBHADRASINH ANANDJI RANA  
e-114, Sainath Park, Vasna Road,  
near Raneshwar temple, Vasna,  
Vadodara, VADODARA – 390007.

Copy sent to

- 1 The Town Planner, Surendranagar Town Planning Office
- 2 The Mamlatdar, Ta. Limbdi, Di. Surendranagar (for the implementation of the order as per the Record of Rights of village records)
- 3 The District Inspector, Land Record, Di. Surendranagar
- 4 The Talati, Jakhan, Tal. Limbi, Dist. Surendranagar.
- 5 The Deputy Mamlatdar, e-Dhara, Mamlatdar office, Limbdi.
- 6 Select file, land 2 branch, Collector Office, Surendranagar.

This order is in noted in e-Dhara Centre vide Note number 1700 in Moje – Jakhan, Ta. Limbdi, Di. Surendranagar.



**APPENDIX K: DAILY WATER CONSUMPTION REPORT (FORMAT)**

Project Name:		Location:	
Month:		Year:	
Source of Water:			

S No.	Date	Number of Such Tanker/ Hours of Running Borewell	Capacity Of Tanker/ Yield of Borewell	Water consumption (KLD)			Signature of In-charge/ Contractor
				Washing of Modules	For Domestic Use	Total	
1							
2							
3							
4							
5							
6							
Total monthly water consumption through tankers							
Total monthly water consumption through borewell/canal water							

## ANNEXURE-L: PERSONAL PROTECTIVE EQUIPMENT INVENTORY

Project Name:		Location:	
Personal Safety Equipment (PPE) Inventory Management for The Month & Year:			
No. of Employees/ Workers			

S No.	Name of PPE	Total PPE Stock Inventory			Damaged/ Returned	Signature of Store/ Safety In- Charge
		Purchased/ Allotted To Site	In Use	Stock In Hand		
1	Safety helmet					
2	Safety shoes – electrical					
3	Safety shoes – general					
4	Safety belt					
5	Ear plug					
6	Fall arrestor					

## ANNEXURE-M: ISSUANCE OF PERSONAL PROTECTIVE EQUIPMENT

Project Name:		Location:	
Personal Protective Equipment's Issued to Employee/Worker:			

S No.	Name of Employee/ Worker	Area of Work	Personal Protective Equipment Issued to Work Force							Signature of Employee
			Helmet	Jacket	Shoes	Safety Belt	Gloves	Goggles	Mask	
1										
2										
3										
4										
5										
6										

## APPENDIX N: PHOTO PLATE OF PROJECT SITE

Consultation in Jakhan village



Consultation with Land aggregator/facilitator.



Consultation with Project proponent



Consultation with Sarpanch of Jakhan village



Consultation with farmers of Jakhan village



Consultation with farmers of Jakhan village



Consultation with farmers of Jakhan village



Consultation with Asha workers of Jakhan village



Consultation with Asha workers of Jakhan village



Consultation with women of vulnerable community



Consultation with farmers of Jakhan village



Consultation with Principal of school in Jakhan village

**CPR of Jakhan village**



**Approach road towards Jakhan village**



**Jakhan village is accessible through public transport**



**Temple on the entrance of Jakhan village**



**Visit to Primary health centre (PHC) in Jakhan village**



**Toilet facility in PHC of Jakhan village**



**Medicines maintained in PHC centre**





Visit to Anganwadi in Jakhan village



Anganwadi room of Jakhan village



Water purifier in Anganwadi in Jakhan village



Toilet facility in Anganwadi in Jakhan village



Visit to village panchayat in Jakhan village



Village panchayat office in Jakhan village



**Pond**



**Temple**

**School in Jakhan Village**



**Visit to Primary school in Jakhan village**



**Consultation with Principal of school in Jakhan village**



**Ongoing classes in primary school**



Ongoing classes in primary school



Drinking water facility



Toilet facility



Toilet facility



Water purifier



Fire extinguisher

Industry in Jakhan Village



Small scale industry (Rajkot patan patola saree) operated by vulnerable community



Small scale industry operated by vulnerable community



(Rajkot patan patola saree)

Consultation in Kataria village



Consultation with Land owners of Kataria village



Consultation with Land owners of Kataria village



Consultation with Land owners of Kataria village



FGD with women stakeholders



FGD with women stakeholders



FGD with women stakeholders



Consultation with Asha workers, Anganwadi workers and women agriculture labour



Consultation with Asha workers, Anganwadi workers and women agriculture labour



Consultation with local villagers



Consultation with Principal of school



Consultation with School teachers

CPR of Kataria village



Temple



Grazing of cattle on open land



Standing crops

School in Kataria Village



Visit to Higher secondary school in Kataria village



Layout plan



Toilet facility



Ongoing classes in primary school



Drinking water facility



Playground



Library



Computer lab facility



Smart class facility



School beautification work ongoing



Small industry operated by vulnerable community



Small industry operated by vulnerable community



**Site Photographs**



**Approach road towards project site**



**Proposed project site**



**Proposed project site**



**Proposed project site**



**Proposed project site**



**Proposed project site**



Air Quality monitoring



Soil Quality monitoring



Water Quality monitoring



Noise Level monitoring



Forest department visit

## **APPENDIX O: BIRD SURVEY REPORT**

# **APPENDIX P: COLLISION RISK AND CUMULATIVE IMPACT ASSESSMENT**

## **APPENDIX Q: CPCB GUIDELINE FOR ENVIRONMENT MONITORING**

## Ambient Air Quality Monitoring

Ambient Air Quality is an important parameter to assess existing level of air quality and to evaluate impacts due to proposed project activities. Air quality pollutants are monitored as per the Guidelines for Ambient Air Quality, by Central Pollution Control Board, Ministry of Environment, Forests & Climate Change, 2009. National Ambient Air Quality Standards, 2009, sampling instrument, frequency, sampling principle and the period of sampling for each parameter were referred<sup>14</sup>.

Ambient Air Quality is monitored in the study area for parameters: Sulphur dioxide (SO<sub>2</sub>), Nitrogen oxides (NO<sub>x</sub>), Particulate Matter (PM<sub>2.5</sub> and PM<sub>10</sub>), Suspended Particulate Matter (SPM), Ozone (O<sub>3</sub>), Ammonia (NH<sub>3</sub>), Benzo(a)Pyrene (BaP) & other PAHs, Lead, Nickel, Arsenic, Carbon Monoxide (CO).

- **Sulphur dioxide (SO<sub>2</sub>)**

Sulphur dioxide content in the ambient air is measured by the Modified West & Gaeke Method (IS 5182 Part 2 Method of Measurement of Air Pollution: Sulphur dioxide).

Sulphur dioxide from air is absorbed in a solution of potassium tetrachloro-mercurate (TCM) at an average flow rate of 1 liter per minute (lpm). A dichlorosulphitomercurate complex, which resists oxidation by the oxygen in the air, is formed. Once formed, this complex is stable to strong oxidants such as ozone and oxides of nitrogen and therefore, the absorber solution may be stored for some time prior to analysis. The complex is made to react with para-rosaniline and formaldehyde to form the intensely coloured pararosaniline methylsulphonic acid. The absorbance of the solution is measured by means of a suitable spectrophotometer.

- **Nitrogen oxides (NO<sub>x</sub>)**

NO<sub>x</sub> is measured by Modified Jacobs & Hochheiser Method (IS 5182 Part 6 Methods for Measurement of Air Pollution: Oxides of nitrogen).

Ambient nitrogen dioxide (NO<sub>2</sub>) is collected by bubbling air through a solution of sodium hydroxide and sodium arsenite. The concentration of nitrite ion (NO<sub>2</sub>) produced during sampling is determined calorimetrically by reacting the nitrite ion with phosphoric acid, sulphanilamide, and N-(1-naphthyl)-ethylenediamine di-hydrochloride (NEDA) and measuring the absorbance of the highly coloured azo-dye at 540 nm.

- **Particulate Matter (PM<sub>2.5</sub> and PM<sub>10</sub>)**

Gravimetric Method is to be used for monitoring and analysis of Particulate Matter in ambient air.

Air is drawn through a size-selective inlet and through a 20.3 X 25.4 cm (8 X 10 in) filter at a flow rate, which is typically 1132 lpm. Particles with aerodynamic diameter less than the cut-point of the inlet are

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<sup>14</sup> Source: Guidelines for the Measurement of Ambient Air Pollutants, Volume-I, National Ambient Air Quality Series: NAAQMS/36/ 2012-13

<https://cpcb.nic.in/openpdf.php?id=UmVwb3J0RmlsZXMvMjdfMTQ1ODExMDQyNi90ZXJdJdGVtXzE5Ni90QUFRTVNFVm9sQW11LUkucGRm>

collected, by the filter. The mass of these particles is determined by the difference in filter weights prior to and after sampling. The concentration of PM<sub>10</sub> in the designated size range is calculated by dividing the weight gain of the filter by the volume of air sampled.

Similarly, an electrically powered air sampler draws ambient air at a constant volumetric flow rate (16.7 lpm) maintained by a mass flow / volumetric flow controller coupled to a microprocessor into specially designed inertial particle-size separator where the suspended particulate matter in the PM<sub>2.5</sub> size ranges is separated for collection on 47 mm polytetrafluoroethylene (PTFE) filter over a specified sampling period. Each filter is weighed before and after sample collection to determine the net gain due to the particulate matter.

- **Ozone (O<sub>3</sub>)**

Chemical method (Method 411, Air Sampling and Analysis, 3<sup>rd</sup> Edition, Determination of oxidizing substances in the atmosphere) is referred for monitoring of ozone in ambient air. Micro-amounts of ozone and the oxidants liberate iodine when absorbed in a 1% solution of potassium iodine buffered at pH 6.8±0.2. The iodine is determined spectrophotometrically by measuring the absorption of tri-iodide ion at 352 nm.

- **Ammonia (NH<sub>3</sub>)**

Indophenol method (Method 401, Air Sampling and Analysis, 3<sup>rd</sup> Edition) is referred for monitoring of ammonia in ambient air. Ammonia in the atmosphere is collected by bubbling a measured volume of air through a dilute solution of sulphuric acid to form ammonium sulphate. The ammonium sulphate formed in the sample is analyzed colorimetrically by reaction with phenol and alkaline sodium hypochlorite to produce indophenol. The reaction is accelerated by the addition of Sodium Nitroprusside as catalyst.

- **Benzo(a)Pyrene (BaP) & other PAHs**

BaP is one of the most important constituents of PAH compounds and also one of the most potent carcinogens. It is based on BIS method IS 5182 (Part 12):2004 and USEPA method (TO-13). This method is designed to collect particulate phase PAHs in ambient air and fugitive emissions and to determine individual PAH compounds using capillary gas chromatograph equipped with flame ionization detector. It is a high volume 3 3 (1.2m<sup>3</sup>/min) sampling method capable of detecting sub.ng/m concentration of PAH 3 in 24 hours sample (i.e. collected in 3 shifts of 8 hour each with 480 m<sup>3</sup> sampling volume of air).

- **Lead, Nickel, Arsenic**

The Atomic Absorption Spectroscopy (AAS) technique makes use of absorption spectrometry to assess the concentration of an analyte in the sample. The method is based on active sampling using PM<sub>10</sub> High Volume Sampler and then sample analysis is done by atomic absorption spectrophotometer.

- **Carbon Monoxide**

Carbon Monoxide in ambient air is analyzed by Nondispersive Infrared (NDIR) Spectroscopy.

## Water Quality Monitoring

The analytical techniques prescribed in 'Standard Methods for the Examination of Water & Wastewater'- (latest edition) published by American Public Health Association (APHA), or Methods for testing Water & Wastewater- Methods of sampling & testing (physical & chemical) by Bureau of Indian Standards (BIS) IS-3025/1622 is to be referred<sup>15</sup>.

The BIS has specified drinking water quality standards (IS 10500:2012) to analyse all physical, chemical and microbiological parameters to provide safe drinking water. The BIS standards provide two limits , i.e. acceptable limits and permissible limits in the absence of an alternate source. If any parameter exceeds the permissible limit, the water is considered unfit for human consumption.

The parameters to be monitored are colour, odour, temperature, pH, EC, DO, turbidity, TDS, Nutrients as NH<sub>3</sub>, N, NO<sub>2</sub>, NO<sub>3</sub>, Total P, Organic Matter, BOD, COD, Major ions as K, Na, Ca, Mg, CO<sub>3</sub>, HCO<sub>3</sub>, Cl, SO<sub>4</sub>, other inorganics, and microbiological parameters as Total and Faecal Coliforms.

For surface water, samples should be collected from well-mixed section of the river or main stem 30 cm below the water surface using Dissolved Oxygen (DO) sampler or weighted bottle.

For ground water, a weighted sample bottle to collect sample from an open well about 30 cm below the surface of the water. Samples from the production tube wells will be collected after running the well for about 5 minutes.

For analyzing dissolved oxygen (DO) of water, a sample is collected in a DO bottle using a DO sampler. Similarly, for bacteriological samples sterilized bottle container to be used to avoid any contamination. pH, colour, temperature parameters are monitored onsite and for rest of the parameters water samples are to be collected in clean bottle container and stored in icebox maintaining temperature below 4°C and transferred to laboratory for further analysis.

## Noise Level Monitoring

The ambient noise level monitoring is to be carried out using **Digital Sound Level Meter** with free-field microphone which meets the Accuracy of noise measurement as per IEC 804 (BS 6698) Grade I or ANSI Type I or equivalent IEC 61672-1(2002-05)<sup>16</sup> Class-I near various sensitive receptors like Residential area, Commercial area, School, Hospital, Institutes, religious places etc. Also, the areas with major construction works is to be also considered for noise level monitoring for generating the base line of the noise level before stating the construction work. Noise monitoring on the field is to be carried out throughout the day and night. The noise levels is to be observed and based on the observation parameters like Leq, L10, L50, L90, Lday, Lnight to understand the noise pollution in day and night time. The formula is to be used for the calculation is given below.

$$Leq = 10 \log \sum (10^{L_i/10} \times t_i / T)$$

<sup>15</sup> [Guidelines Water Quality Monitoring 2017.pdf \(cpcb.nic.in\)](#)

<sup>16</sup> [Protocol for Ambient Level Noise Monitoring \(mahervis.nic.in\)](#)



$i=n$   $i=1$ ,

$n$ = number of sound samples,

$L_i$ =The noise level of any  $i^{\text{th}}$  sample,

$t_i$ = time duration of  $i^{\text{th}}$  sample,  $t_t$ = total time period of event

**Leq:** - Leq is that statistical value of sound pressure level that can be equated to any fluctuating noise level. The human ear does not respond uniformly to sounds of all frequencies being less efficient to low and high frequencies as compared to medium range frequencies. In order to obtain sound level which, cover wide range of frequencies and conforms approximately to the response of the human ear, frequency weighting filter is used. Resultant sound level obtained is A weighted sound. Therefore, we measure sound level as Leq dB(A).

**Ln:** The Ln is a statistical measure indicating how frequently a particular Sound level is exceeded. The value of Ln will represent the sound pressure level that will exceed for N% of the gauging time.

### **Standards adopted for Noise Level Monitoring**

Ambient Air Quality Standards in respect of Noise prescribed in Noise Pollution (Regulation and Control) Rules, 2000 (see rule 3(1) and 4(1)) are used for analysis of ambient noise levels in the study area.

*Ambient Air Quality Standards in respect of Noise (see rule 3(1) and 4(1))*

Area Code	Category of Area/Zone	Limits in dB(A) Leq	
		Day time	Night Time
(A)	Industrial Area	75	70
(B)	Commercial Area	65	55
(C)	Residential Area	55	45
(D)	Silence Zone	50	40

**Note: -**

- 1) Day time shall mean from 6.00 a.m. to 10.00 p.m.
- 2) Night time shall mean from 10.00 p.m. to 6.00 a.m.
- 3) Silence zone is an area comprising not less than 100 meters around hospitals, educational institutions, courts, religious places or any other area which is declared as such by the competent authority
- 4) Mixed categories of areas may be declared as one of the four above mentioned categories by the competent authority.

## Soil Monitoring

The sampling is to be done in line with IS: 2720 and Methods of Soil Analysis, Part-1, 2nd edition, 1986 of (American Society for Agronomy and Soil Science Society of America). The soil samples are to be collected from three different depths viz. 30 cm, 60 cm and 90 cm below the surface and homogenized. The homogenized samples are to be analyzed for physical, chemical and heavy metal characteristics.

Following categories of elements are generally measured:

- (a) N, P, K (Major nutrients)
- (b) Ca, Mg, S (Secondary nutrients)
- (c) Zn, Fe, Cu, Mn, B, Mo, Cl (Micro nutrients)
- (d) C, H, O (Auxiliary nutrients)

Quantities of Nitrogen, Phosphorus and Potassium in soil are measured using Titration, Spectrophotometer and Flame Photometer respectively. Micro nutrients like Zinc, Iron, Copper, Calcium, Magnesium and Manganese are determined using an Atomic Absorption Spectrophotometer (AAS). Molybdenum, Boron and Sulphur are measured using a normal Spectrophotometer<sup>17</sup>.

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<sup>17</sup> [https://agriculture.uk.gov.in/files/SOIL\\_TESTING\\_GUIDELINE\\_OF\\_GOVT\\_OF\\_INDIA.pdf](https://agriculture.uk.gov.in/files/SOIL_TESTING_GUIDELINE_OF_GOVT_OF_INDIA.pdf)

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