

Resettlement Policy Framework - Solar PV Park

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1 PROGRAM OVERVIEW

1.1 India's Solar Program

The Jawaharlal Nehru National Solar Mission (JNNSM) is a major initiative of the Government of India to promote ecologically sustainable growth while addressing India's energy security challenge with active participation from the States. It will also constitute a major contribution by India to the global effort to meet the challenges of climate change. The objective of the Mission is to establish India as a global leader in solar energy, by creating the policy conditions for its large scale diffusion across the country as quickly as possible. The Mission had set a target, amongst others, for deployment of grid connected solar power capacity of 20,000 MW by 2022 to be achieved in 3 phases (1000 MW in first phase up to 2012-13, 9000 MW in second phase from 2013 to 2017 and 10,000 MW in the third phase from 2017 to 2022). Currently, the Government of India is considering to substantially scaling up targets of solar capacity additions in the country to 100 GW by year 2022.

The mission aims at reducing the cost of solar power generation in the country and to achieve grid tariff parity by year 2022 through (i) long term policy measures; (ii) large scale deployment goals; (iii) aggressive R&D; and (iv) domestic production of critical raw materials, components and products. Currently the mission is in Phase - 2 (2013 - 2017) of its implementation. Phase-I of JNNSM (2010-13) has generated huge interest in the solar sector wherein Gird connected and off-grid projects were commissioned throughout the country. Achievements of Phase-I have exceeded the target set for the period.

The Phase-2 of Jawaharlal Nehru National Solar Mission focuses more on a state-led solar power growth through setting up of solar ultra-mega power projects, solar parks and facilities, and promoting new financing models for implementation through private sector participation. The success of JNNSM and state solar policies will proceed on the basis of the technology advancements and cost reduction, which will be necessary for achieving the target of 20,000 megawatts of grid-connected solar power.

World Bank (WB) intends to partner in the efforts of the Ministry of New and Renewable Energy (MNRE), Government of India (GoI) to rapidly scale-up the solar installations in the country through a long term engagement in the program.

India is endowed with vast solar energy potential. About 5,000 trillion kWh per year energy is incident over India's land area with most parts receiving 4-7 kWh per sq. m per day. Hence both technology routes for conversion of solar radiation into heat and electricity, namely, solar thermal and solar photovoltaic, can effectively be harnessed providing huge scalability for solar in India. Solar also provides the ability to generate power on a distributed basis and enables rapid capacity addition with short lead times. From an energy security perspective, solar is the most secure of all sources, since it is abundantly available. Theoretically, a small fraction of the total incident solar energy (if captured effectively) can meet the entire country's power requirements. It is also clear that given the large proportion of poor and energy un-served population in the country, every

effort needs to be made to exploit the relatively abundant sources of energy available to the country. While, today, domestic coal based power generation is the cheapest electricity source, future scenarios suggest that this could well change.

1.2 Concept of Solar Park¹

The solar park is a concentrated zone of development of solar power generation projects and provides developers an area that is well characterized, with proper infrastructure and access to amenities and where the risk of the projects can be minimized. Solar Park will also facilitate developers by reducing the number of required approvals. Large size projects have a potential to bring down the cost of Solar Power. Therefore, Ultra Mega Solar Power Projects having capacity of 500 MW or above have been planned in India. Large chunks of land are available in some States for solar park development. There are some developers who are keen to individually take up very large projects. Land has so far been identified in Gujarat, Madhya Pradesh, Rajasthan, Telangana, Andhra Pradesh, Arunachal Pradesh, Karnataka, Kerala, Uttar Pradesh, Meghalaya, Nagaland, Punjab, Tamil Nadu, Andaman & Nicobar Islands and Uttarakhand. Smaller parks in Himalayan & other hilly States where contiguous land may be difficult to acquire in view of the difficult terrain are also being considered. Smaller parks are also being considered in States where there is acute shortage of non-agricultural lands.

MNRE has rolled out a scheme plans to set up 25 solar parks, each with a capacity of 500 MW and above; thereby targeting around 20000 MW of solar power installed capacity. These solar parks will be set up within in a span of 5 years commencing from 2014-15 and the solar projects may then come up as per demand and interest shown by developers. At the State level, the solar parks will enable the States to bring in significant investment from project developers, meet its Solar Renewable Purchase Obligation (RPO) mandate and provide employment opportunities to local population. The State will also reduce its carbon footprint by avoiding emissions equivalent to the solar park's installed capacity and generation. Further, the State will also avoid procuring expensive fossil fuels to power conventional power plants.

The solar park will provide a huge impetus to solar energy generation by acting as a flagship demonstration facility to encourage project developers and investors, prompting additional projects of similar nature, triggering economies of scale for cost reductions, technical improvements and achieving large scale reductions in Greenhouse Gas emissions. Some Ultra Mega Solar Power Projects may be set up in these Parks or the entire park may individually be an Ultra Mega Solar Power Project.

1.3 Introduction to Environmental and Social Management Framework (ESMF)

The environmental and social management framework being prepared for utility scale Solar Park projects shall aid in screening, assessment, management of environmental and social impacts at an early stage in project planning. This document shall act as guidance for satisfactory assessment and management of environmental and social impacts at sub-project level through appropriate

¹ Source: http://mnre.gov.in/file-manager/UserFiles/Solar-Park-Guidelines.pdf

measures during the planning, design, construction and operation phases of various investments. The framework will identify the adverse environment and social impacts and provide specific guidance on the policies and procedures to be followed for environmental and social assessment along with roles and responsibilities of the implementing agencies.

The document consists of a set of methodologies, assessment procedures and measures to facilitate adequate environmental and social risk & impact management related to the proposed solar UMPP / parks financed by World Bank Group.

2 BASELINE – CASE STUDY SUB-PROJECTS

The following subsections help in identification of the likely environmental and social impacts of the investments in sample sub-projects. This will facilitate early evaluation of such adverse impacts and integrate suitable mitigation measures during planning stage itself. Based on the review of the sample sub projects and public consultations conducted in proposed sites, following are the typical associated impacts with similar solar power projects in India.

The sub-projects are expected to be spread across the states of Madhya Pradesh & Karnataka and may extend to other states in later phase of development. The Bank financing would mainly be in development of land and basic infrastructure for generation of solar power through involvement of a private developer under the PPP Model.

The document has been prepared based on review of sample case studies carried out for Rewa (Madhya Pradesh) and Pavagada (Karnataka) sites covering secondary data on different environmental and social components, review of environmental and social issues and consultation with different stakeholders. The objective of the above exercise was:

- I. To establish environmental and social baseline condition for the site at a broad level.
- II. To understand type and distribution of environmentally and socially sensitive features in and around the proposed site.
- III. Preliminary identification of environmental and social impacts likely to be triggered due to the project activities.
- IV. To assess the applicable regulations and policies.
- V. Consultations with the project affected persons.

2.1 **Project Site Description**

Brief description of the two sample case studies reviewed for preparation of the document is depicted in the table below:

Sr No	Particulars	Description - PAVAGADA	Description - REWA	
1	Project Villages Location	Thirumani, Balasamudra, Vollur, Kyathaganacherlu, Rayacharlu	Badwar, Barseta Desh, Barseta Pahar, RamNagar Pahar and Etar Pahar	
2	Tehsil	Pavagada	Gurh	
3	District Name / Tumkur, Karnataka State		Rewa, Madhya Pradesh	
4	Location Coordinates	14°13' N to 14°20' N 77°23' E to 77°30' E	24° 27' 1" N to 24° 29' 47" N 81° 31' 38" E to 81° 37' 31" E	

Sr No	Particulars	Description - PAVAGADA	Description - REWA	
5	Climatic Zone	Warm & Humid	Humid subtropical climate zone	
6	Average Elevation	800 meter above MSL	360 meter above MSL	
7	Road Accessibility	MDR to Taluk Headquarters; SH to Tumkur	National Highway – 75; Connecting Rewa town (north side) and Sidhi town (south side)	
8	Nearest Airport	Bengaluru Airport (200 kms)	Allahabad Airport (160 kms)	
9	Nearest Railway Link	100 km at Anantpur (Andhra Pradesh) and 140 km at Bellary Junction (Karnataka)	Rewa (30 kms – aerial distance) – district headquarters	
10	DLand4850 ha land to be pooled on long-termAvailabilitylease basis (30 year) from private owners		A total of about 1500 Ha with an estimated 82% government land and balance private land to be acquired	
	Key Social Issues	 Loss of livelihood for landless labourers working in agricultural fields. Annual Lease rentals low as compared to similar land procurements in other areas. Loss of access rights to common property resources. 	 Involuntary resettlement and loss of livelihood Loss of access rights Relocation of built up structures Loss of livelihood for landless labourers working in agricultural fields. 	
	Key Environmental Issues	 Protection of existing surface water resources / natural drainage. Presence of wildlife in vicinity. Waste management including hazardous waste disposal Pre-construction stage activities impacting topography, drainage and slope. Water recycling / ground water recharge considering scarcity of water resource. 	 Protection of existing surface water resources / natural drainage. Waste management including hazardous waste disposal. Pre-construction stage activities impacting topography, drainage and slope. Water recycling / ground water recharge considering scarcity of water resource. 	
11	Water Requirement	72 Million litres per cleaning of PV Panels	Estimated at 1.55 MLD	
12	Proposed capacity	2000 MW, fixed tilted solar panels	750 MW, fixed tilted solar panels	
13	Site Conditions	A few scattered trees, almost flat to sloping hard surface	A few scattered trees, almost flat to sloping hard surface	

Sr No	Particulars	Description - PAVAGADA	Description - REWA
14	Power evacuation	POWERGRID's 765kV station at Madhugiri (aerial distance 70 kms) (Actual alignment yet to be established)	Vindhyachal - Jabalpur 400 KV line (airborne distance of 30 kms) (Actual alignment yet to be established)
15	Soil Characteristics	red sandy soil and red loamy soil	rich clayey to gravelly, mixed red and black soil
16	Seismic Zone	Zone IV	Zone II & Zone III Border

The detailed description of the baseline environmental and social parameters is provided in **Annexure-1** for reference.

3 NATIONAL AND STATE REGULATORY FRAMEWORK

Acts and Regulations go	overning	LA & Social Issues		
Right to fair compensation and transparency in land acquisition, rehabilitation and Resettlement Act	2013	Fair compensation for acquisition of immovable assets; Resettlement of displaced population due to LA and economic rehabilitation of all those who are affected due to land acquisition.	Yes, as private land will be acquired for solar parks as is the case in Rewa	Revenue Department
MP Consent Land Purchase Policy	2014	The government agencies requiring land for various infrastructure projects can acquire land with the mutual consent of the land owners as it saves time, ensure timely payment of land value to owners and the procedures are less cumbersome. The objective is to acquire land from owners with their consent and making them understand the social and economic benefits as a result of the project.	The policy will facilitate speedy acquisition of land and the PAPs will get the compensations as per the provisions of the policy in timely manner.	Revenue Department
Karnataka G.O. on Land Reforms / Land Lease	2014	The GO aims to facilities the transfer and conversion of agricultural land for Solar PV projects on long term lease basis	This would be applicable in state of Karnataka. These incentives help in reduction of overall timeframe for clearance.	SPPD
Seventy Third Constitution Amendment Act,	1992	The Act enables participation of Panchayat level institutions in decision- making. Panchayats at the village level will be involved for preparation and implementation of the project.	Yes, for any sub project located in panchayat area	Department of Panchayati Raj, State Government
The Scheduled Tribes and other Traditional Forest Dwellers (Recognition of Forest Rights) Act	2006	Grants legal recognition to the rights of traditional forest dwelling communities, partially correcting the injustice caused by the forest laws.	Yes, if sub-project is located in customary forest land including reserved and protected forests; protected areas	Ministry of Tribal Affaires, GOI and State Department of Tribal Welfare

Makes a beginning towards giving communities and the public a voice in forest and wildlife conservation	and also community forest.	
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3.1 Indian Labour Laws

All the workers are governed by the relevant Indian labour laws as stated below. The Developer shall undertake the requisite license from Labour Commissioner prior to initiation of any works onsite. Some of these are directly relevant during the construction stage of the proposed sub-projects:

Applicable Acts	Coverage Provisions	
Minimum Wages Act 1948	The act ensures minimum wages for each category of workers	
Child Labour (Prohibition and Regulation) Act, 1986	Prohibits employment of children below 14 years of age	
The Labours Act 1988	Ensure health and safety of construction workers	
The Factories Act, 1948	Ensures Health and safety considerations of workers	
Workmen's Compensation Act, 1923	Ensure fair compensation in case of injury by accidents during the course of employment	
Contract Labour (Regulation and Abolition) Act, 1970	Ensure basic welfare measures to be made available to the contract workers by the employer	
The Building and other Construction Workers Act, 1996	Ensure safety measures at construction work site and other welfare measures such as canteens, first-aid facilities, ambulance, housing accommodation for Workers near the Workplace etc	

3.2 Land Availability / Procurement for Sub-projects

The private land shall be procured within the framework of "The Right to Fair Compensation and Transparency in Land Acquisition, Rehabilitation and Resettlement Act, 2013" (LA Act 2013) and the state policies on procurement of private land to ensure that there are no adverse impacts on the owners whose land is being procured under the project.

The review of sample sub-projects in two states has the following applicable state legislations wherein two different models have been adopted. In the state of Madhya Pradesh, the selection of available government land parcels has been given priority and private land acquisition has been only limited to ensuring site contiguity whereas the state of Karnataka has adopted a long term lease model wherein private land parcels are acquired on a 30 year lease to developer for generation of solar power. For this the state of Karnataka has modified the land reforms act and formulated a policy to facilitate the setting up of a solar UMPP / Park.

3.2.1 Madhya Pradesh State Solar Policy

GoMP notified its policy "Implementation of Solar Power based Projects in Madhya Pradesh, 2012 (Policy 2012). The Policy 2012 has defined the maximum limit of land as 3.0 Hectares per MW for land use permission for government land, if available, for setting up Solar Power Plant in Madhya Pradesh. In case of land owned by Revenue Department or any other State Government Department, the New & Renewable Energy Department shall take possession of the land and subsequently give permission for use of land to the concerned Developer (whose project has been accorded administrative approval). For procurement of private land the state Government could adopt "Consent Land Purchase Policy of the GoMP" dated November 12, 2014. The Policy provides for procurement of minimum required private land for the project/ part of the project from the owners with the mutual consent. The owner shall be paid consideration amount which shall include amount for land as per the prevailing Collector Guideline Rates and the amount equal to value of immovable assets on the procured land. The land owner shall also be eligible for one time consolidated amount equal to the consideration amount payable in the form of rehabilitation grant.

3.2.2 Karnataka State Solar Policy 2014- 2021

Under this policy, it is proposed to meet the solar power capacity addition targets through different segments which are Grid connected utility scale projects and grid connected roof top projects. The following are the key features relevant to the current baseline study:

- I. As per the policy document, GoK contemplates to facilitate the conversion of land for solar projects by amending section-95 of the Land Reforms Act.
- II. GoK contemplates time bound permissions and for vesting Deputy Commissioners with full powers to approve purchase of agricultural lands u/s 109 of Land reforms Act for Development of Solar projects.
- III. As per the policy, developers will be allowed to start project execution without waiting for formal approval on filing application for conversion of agricultural land for setting up of solar power projects on payment of specified fees.
- IV. Solar PV projects shall be exempted from obtaining clearances of pollution control board as per the Karnataka Solar Policy 2014 2021.

In addition to the above two states, various other states have also notified their state specific solar policy, these include:

Sr No	State	Solar Policy
1.	Andhra Pradesh	Andhra Pradesh Solar Power Policy, 2015
2.	Chhattisgarh	Chhattisgarh State Solar Energy Policy, 2012-17
3.	Gujarat	Gujarat Solar Power Policy, 2015 notified on 13thAugust, 2015
4.	Haryana	Haryana Solar Power Policy, 2014 notified on 4 th September, 2014
5.	Jharkhand	Jharkhand Solar Policy, 2015 notified on 10 th August, 2015
5.	5. Himachal Pradesh Himachal Pradesh Solar Power Policy, 2014	
6.	J&K	J&K Solar Power Policy notified on 18.03.2013

7.	Karnataka	i) Karnataka Solar Policy, 2011-16 notified on 01.07.2011 ii) Karnataka Solar Policy, 2014-21 notified on 22.05.2014				
8.	Kerala	Kerala Solar Energy Policy, 2013 notified on 25.11.2013				
9.	Madhya Pradesh	Madhya Pradesh Solar Power Policy, 2012 notified in 2012				
10.	Odisha	Draft Solar Policy,2013 notified in 2013				
11.	Rajasthan) Rajasthan Solar Energy Policy, 2011 notified on 19 th April,2011 i)First Amendment dated 09.08.2011 ii)Second Amendment dated 18.09.2012				
12.	Tamil Nadu	Tamil Nadu Solar Energy Policy, 2012 notified in 2012				
13.	3. Telangana Telangana Solar Power Policy 2015					
14.	Uttarakhand	Uttarakhand Solar Energy Policy, 2013 notified on 27.06.2013				

Table below presents a comparative of the various state solar policies in India. Water requirements have not been dealt in any of the policies and land availability has been the prime responsibility of the developer in majority of the policies.

	Policy	Capacity	Cross Subsidy Charge	Wheeling Charge	Bank Guarantee	Metering	Land
1	Gujarat Solar Power Policy 2015	Maximum of 50% of sanctioned load	Exempted	As applicable to normal open-access consumers; 50 % rebate given to projects registered under REC	INR 25 lakhs per MW	As per Central Electricity Authority	Developer responsible for obtaining the land for setting up and operating solar power project
2	Andhra Pradesh Solar Power Policy, 2015	Power plants with capacity 1000 KWp allowed at single location	Exempted	Exempted	Informatio n Not Available	Apply online to Discoms for installation of meters	Developer responsible for obtaining the land for setting up and operating solar power project
3	Chhattishgarh State Solar Energy Policy 2012	Information Not Available	Exempted	As per CSERC regulations	Informatio n Not Available	Information Not Available	Developer responsible for obtaining the land for setting up and operating solar power project
4	Rajasthan Solar Energy Policy 2014	Information Not Available	Information Not Available	Exempted	INR 10 lakhs per MW	Discom will develop a suitable and comprehensive consumer friendly IT application for metering	Developer will be allowed to purchase agriculture land for developing solar power plant in accordance with provisions of Rajasthan Imposition of Ceiling on Agriculture Holding Act, 1973; Other private land may be acquired under Ceiling Act, 1973
5	The Karnataka Solar Policy 2014-2021	Between 1 MW – based on transmission evacuation capacity	Charges applicable as per KERC norms	Charges applicable as per KERC norms	INR 3 lakhs – INR 5 lakhs per MW	Information Not Available	Information Not Available
6	Policy for Implementation of Solar Power based projects in Madhya Pradesh	0.025 MW – 100 MW	Exempted for a period of 10 years	A grant of 4% is given by the state, while the remaining is borne by developer	INR 5 lakhs per MW	Developers will install metering equipment at their own cost. They will be according to stipulations made by MPPTCL	Information Not Available

	Policy	Capacity	Cross Subsidy Charge	Wheeling Charge	Bank Guarantee	Metering	Land
7	Tamil Nadu Solar	Information Not	100% exemption	As per orders of Tamil	Informatio	Information Not	Information Not Available
	Energy Policy 2012	Available	for a period of 5	Nadu Electricity Regulatory	n Not	Available	
			years	Commission	Available		

3.2.3 Land Reforms Act – Karnataka

The Karnataka Land Revenue (Amendment) Act, 2015 (12th August 2015) states that "(10) If any occupant of any agriculture land assessed or held for the purpose of agriculture wishes to divert such land or part thereof for the purpose of setting up of solar power generation in accordance with Karnataka Solar Policy 2014-21 issued in G.O EN 21 VSC 2014 dated 22.05.2014 which has been approved by State and Central Government and which has been approved by the Competent Authority, the permission applied for conversion of such land shall be deemed to have been granted for that purpose so long as they use for purpose for which permission is granted subject to payment of the conversion fine and all such other fees payable if any, in this regard."

If the government revenue land is recorded as forest land with small and minor trees in the revenue records or it is defined as a forest land as per Revenue Department, then the applicant will have to take permission, as per provisions of Forest Conservation Act 1980, from concerned authorities.

3.3 Relevant World Bank Group Safeguard Requirements

3.3.1 World Bank safeguard Requirements

The implementation of the World Bank Operational Policies seek to avoid, minimize or mitigate the adverse environmental and social impacts, including protecting the rights of those likely to be affected or marginalized by the proposed project. Based on the information collated by the consultants during the baseline study, following OP's are likely to be triggered and would require adequate measures to address the safeguard concerns.

World Bank Safe Guard Policies	Objective	Applicability	Safeguard Requirements
OP/BP 4.12 Involuntary Resettlement	The objective of this policy is to avoid or minimize involuntary resettlement where feasible, exploring all viable alternative project designs. Furthermore, it intends to assist displaced person in improving their former living standards; community participation in planning and implementing resettlement; and to provide assistance to affected people, regardless of the legality of title of land	There will be need for limited land acquisition resulting in: relocation or loss of shelter, loss of assets or access to assets; loss of income sources or means of livelihood. This policy applies to all components of the project that result in involuntary resettlement, regardless of the source of financing including projects that are carried out, or planned to be carried out, contemporaneously with the project.	Resettlement Action Plan in consultation with the community and project authorities
OP/BP 4.10 Indigenous People	This policy aims to protect the dignity, right and cultural uniqueness of indigenous	This policy may be triggered if there are indigenous people in the project area;	Indigenous people development Plan

World Bank Safe Guard Policies	Objective	Applicability	Safeguard Requirements
	people; to ensure that they do not suffer due to development; that they receive social and economic benefits	when potential adverse impacts on indigenous people are anticipated; and if indigenous people are among the intended beneficiaries.	
OP/BP 4.11 Physical Cultural Resources	This policy aims at assisting in the preservation of cultural property, historical, religious and unique natural value-this includes remains left by previous human inhabitants and unique environment features, as well as in the protection and enhancement of cultural properties encountered in Bank- financed project.	This policy may be triggered by sub-projects where cultural property, historical, religious and unique natural value-this includes remains left by previous human inhabitants and unique environment features may be affected due to project.	Application has to be prepared and submitted to Archaeological department in case any impact is envisaged due to the project. The impact on such features should be integrated with EIA study and included in EMP

3.4 IFC Performance standards

As per the proposed implementation arrangements under the project, the private developer shall play a lead role in the success of the project implementation and shall be undertaking the setting up of infrastructure for energy generation. The IFC performance standards apply to private sector projects and provide instruments to manage the operations of projects in an environmentally and socially acceptable manner. The performance standards are designed to help avoid, mitigate, and manage risks and impacts as a way of doing business in a sustainable way, including stakeholder engagement and disclosure obligations of the client in relation to project-level activities. The following performance standards are likely to be applicable:

Performance Standards	Applicability
Assessment and Management of Environmental and Social Risks & Impacts	• Yes O No
/ Performance Standard 1	
Land Acquisition and Involuntary Resettlement / Performance Standard 5	• Yes O No
Indigenous Peoples / Performance Standard 7	• Yes O No
Cultural Heritage / Performance standard 8	O Yes ● No

Performance Standard 1 establishes the importance of

- (i) Integrated assessment to identify the environmental and social impacts, risks, and opportunities of projects;
- (ii) effective community engagement through disclosure of project-related information and consultation with local communities on matters that directly affect them; and
- (iii) Client's management of environmental and social performance throughout the life of the project.

Performance Standards 2 through 8 establish objectives and requirements to avoid, minimize, and where residual impacts remain, to compensate/offset for risks and impacts to workers, Affected Communities, and the environment. While all relevant environmental and social risks and potential impacts should be considered as part of the assessment, Performance Standards 2 through 8 describes potential environmental and social risks and impacts that require particular attention.

Where environmental or social risks and impacts are identified, the client is required to manage them through its Environmental and Social Management System (ESMS) consistent with Performance Standard 1.

Performance Standard 1 applies to all projects that have environmental and social risks and impacts. Depending on project circumstances, other Performance Standards may apply as well. SPPD is encouraged to apply the ESMF to all their solar PV sub-project activities, regardless of financing source.

3.4.1 Land Acquisition and Involuntary Resettlement

Performance Standard 5 recognizes that project-related land acquisition and restrictions on land use can have adverse impacts on communities and persons that use this land. The objective of Performance Standard 5 is:

- i. Avoid or minimize involuntary resettlement whenever feasible by exploring alternative project designs.
- ii. Mitigate adverse social and economic impacts by providing compensation for loss of assets at replacement cost and ensuring that resettlement activities are implemented with appropriate disclosure of information, consultation and informed participation of those affected.
- iii. Improve or at least restore livelihoods and living standards of displaced persons.
- Improve living conditions among displaced persons through provision of adequate housing with security of tenure at resettlement sites.

3.4.2 Indigenous Peoples / Performance Standard 7

Performance Standard 7 recognizes that Indigenous Peoples, as social groups with identities that are distinct from mainstream groups in national societies, are often among the most marginalized and vulnerable segments of the population.

As a consequence, Indigenous Peoples may be more vulnerable to the adverse impacts associated with project development than non-indigenous communities. This vulnerability may include loss of identity, culture, and natural resource-based livelihoods, as well as exposure to impoverishment and diseases. The objective of Performance Standard 7 is:

Involuntary resettlement

refers both to physical displacement (relocation or loss of shelter) and to economic displacement (loss of assets or access to assets that leads to loss of income sources or other means of livelihood) as a result of project-related land acquisition and/or restrictions on land use. Resettlement is considered involuntary when affected persons or communities do not have the right to refuse land acquisition or restrictions on land use that result in physical or economic displacement.

- i. To ensure that the development process fosters full respect for the human rights, dignity, aspirations, culture, and natural resource-based livelihoods of Indigenous Peoples.
- ii. To anticipate and avoid adverse impacts of projects on communities of Indigenous Peoples, or when avoidance is not possible, to minimize and/or compensate for such impacts.
- iii. To promote sustainable development benefits and opportunities for Indigenous Peoples in a culturally appropriate manner.
- iv. To establish and maintain an ongoing relationship based on Informed Consultation and Participation (ICP) with the Indigenous Peoples affected by a project throughout the project's life-cycle.
- v. To ensure the Free, Prior, and Informed Consent (FPIC) of the Affected Communities of Indigenous Peoples when the circumstances described in this Performance Standard are present
- vi. To respect and preserve the culture, knowledge, and practices of Indigenous Peoples.

3.5 Resettlement Policy Framework

The guidelines are prepared for addressing the issues limited to the project for resettlement and rehabilitation of the PAPs. The project specific policy shall be developed based on the Right to Fair Compensation and transparency in land Acquisition, Rehabilitation and Resettlement (RFCTLARR) Act, 2013 subject to subsequent supplements by state governments and World Bank Operational Policy 4.12 on involuntary resettlement

3.5.1 Broad Principles

The Policy aims to resettle and rehabilitate the affected persons on account of its sub projects in a manner that they do not suffer from adverse impacts and shall improve or at the minimum retain their previous standard of living, earning capacity and production levels. It is also the endeavor of the SPPD that the resettlement shall minimize dependency and be sustainable socially, economically and institutionally. Special attention will be paid for the improvement of living standards of marginalized and vulnerable groups.

This policy recognizes that involuntary resettlement dismantles a previous production System and a way of life, all such rehabilitation programs will adopt a developmental approach rather than the welfare approach. These guidelines details out the assistance in re-establishing the homes and livelihoods of the Project Affected People (PAP) during the course of projects.

- 1) All information related to resettlement preparation and implementation will be disclosed to all concerned, and community participation will be ensured in planning and implementation.
- 2) The principles of mutual consent and negotiated settlement will also be used for land acquisition as required.
- 3) The persons affected by the project who does not own land or other properties but who have economic interest or lose their livelihoods will be assisted as per the broad principles brought out in this policy.
- 4) Before taking possession of the acquired lands and properties, compensation and R&R assistance will be made to those who are available and willing to receive the entitlements in accordance with this policy.
- 5) There would be no/or minimum adverse social, economic and environmental effects of displacement on the host communities but if needed specific measures would be provided.
- 6) Broad entitlement framework of different categories of project-affected people has been assessed and is given in the entitlement matrix. Provision will be kept in the budget. However, anyone moving into the project area after the cut-off date will not be entitled to assistance.
- 7) Three tier appropriate grievance redress mechanism has been established at project level to ensure speedy resolution of disputes.
- 8) All activities related to resettlement planning, implementation, and monitoring would ensure involvement of women. Efforts will also be made to ensure that vulnerable groups are included.

- 9) All consultations with PAPs shall be documented. Consultations will continue during the implementation of resettlement and rehabilitation works.
- 10) As required, a Resettlement Action Plan will be prepared including a fully itemized budget and an implementation schedule.

The broad principles of the Resettlement and Rehabilitation (R&R) policy are as given below;

- 1. All negative impacts including displacement should be avoided or minimized wherever feasible by exploring all viable alternative project designs.
- 2. Where negative impacts are unavoidable, efforts should be made either to improve the standard of living of the affected persons or at least assist them in restoring their previous standard of living at no cost to them.
- 3. Ensure people's participation during the course of the project cycle.
- 4. Effort should be made towards the enhancement of the positive impact of the projects.

The project will broadly have three impacts that require mitigation measures. These are:

- 1. Loss of immovable assets viz., land, house, commercial establishments wells, ponds etc.
- 2. Loss of livelihood or income opportunities viz, for agriculture labours, helping hands in commercial establishments etc.
- 3. Impact on the community in terms of loss of common property resources.

The first two categories represent direct impacts on an identified population. The people likely to be affected will be surveyed and registered, and project monitoring and evaluation will compare long term impacts against baseline socio economic data.

The third category represents a group impact, where gains and losses of a group oriented nature are not quantifiable in terms of impact on the individual. Mitigation and support mechanism will be collectively oriented, and the monitoring will focus on impact on such groups.

The provisions of Rights to Fair Compensation and Transparency in Land Acquisition, Rehabilitation and Resettlement Act, 2013 and in case the State Government has specific policies for mutual consent and negotiated settlement, the provisions of such policy could be used subject to their adherence to the provisions are within the broad framework of the Act and the World Bank Safeguard Policies.

- 1. Support will be extended under the broad principles of this policy to meet the replacement value of the assets and loss of livelihood.
- 2. The policy further recognizes extension of support to non-titleholders for the loss of livelihood and replacement value for assets other than land.
- 3. The common property resources will be replaced as far as feasible and if not then assistance will be provided at replacement value to the group.

The implementation of solar projects would involve transportation of equipment during the installation phase and all efforts will be made during implementation to minimize any disturbance in the daily activities of the local people.

Before taking possession of the acquired lands and properties, all compensation, resettlement and rehabilitation would be made in accordance with this policy.

In case of displacement, resettlement sites will be developed as part of the project. In such circumstances care should be taken so that there is no/or minimum adverse social, economic and environmental effects of displacement on the host communities and specific measures would be provided in the Resettlement and Rehabilitation Action Plan (RAP) to mitigate any such impacts.

Before taking possession of acquired land, sufficient time would be provided to harvest the crop.

The implementation of the R&R Action Plan will be synchronized with the execution of works under the project.

The project will ensure that no civil works are initiated before compensation and assistance to affected population has been provided in accordance with this policy.

3.5.1.1 Definitions

The following definitions are used in the documents:

Cut-off Date: In the cases of land acquisition affecting legal titleholders, the cut-off date would be the date of issuing the publication of preliminary notification u/s 11(I) of RFCTLAR Act, 2013 & for the Non-Titleholders cutoff date would be the date of Census Survey.

Project Affected Person: Person who is affected in respect of his/her land including homestead land and structure thereon, trade and occupation due to construction of the project

Project Displaced Person: A displaced person is a person who is compelled to change his/her place of residence and/or work place or place of business, due to the project.

Projected Affected Family: Family includes a person, his or her spouse, minor children, minor brothers and minor sisters dependent on him. Provided that widows, divorcees and women deserted by families shall be considered separate families;

Explanation - An adult of either gender with or without spouse or children or dependents shall be considered as a separate family for the purpose of this Act.

Land Owner: Land owner includes any person -

Whose name is recorded as the owner of the land or building or part thereof, in the records of the authority concerned; or

Any person who is granted forest rights under the Scheduled Tribes and other Traditional Forest Dwellers (Recognition of Forest Rights) Act, 2006 or under any other law for the time being in force; or

Who is entitled to be granted Patta rights on the land under any law of the State including assigned lands; or any person who has been declared as such by an order of the court or Authority.

Marginal Farmers: Marginal farmer means a cultivator with an un-irrigated land holding up to one hectare or irrigated land holding up to one half hectare, or as may be defined by the concerned state government.

Small Farmer: Small farmer means a cultivator with an un-irrigated land holding up to two hectares or irrigated land holding up to one hectare, but more than the holding of a marginal farmer, or as may be defined by the concerned state government.

Encroacher: A person who has trespassed Government/ private/community Land, adjacent to his or her land or asset to which he/she is not entitled and who derives his/her livelihood and housing there from prior to the cutoff date.

Squatter: A squatter is a person who has settled on publicly owned land for housing or livelihood without permission or who has been occupying publicly owned building without authority prior to the cutoff date.

Landless/Agriculture Labour: A person who does not hold any agriculture land and has been deriving his main income by working on the lands of others as sub-tenant or as an agriculture labour prior to the cut-off date.

Below Poverty Line: A household, whose annual income from all sources is less than the designed sum as fixed by the planning commission of India, will be considered to be below poverty line (BPL).

Vulnerable Person: The Vulnerable group may include but not be limited to the following:

Those people falling under Below Poverty line category as defined by the state government.

- 1. Member of Scheduled caste/tribe community/other backward community.
- 2. Women Headed households.
- 3. Senior citizen-person above the age of 60 years.
- 4. Landless
- 5. Village artisan

3.6 Resettlement Action Plan

In case the sub-project requires involves land acquisition against compensation or loss of livelihood or shelter, the client shall ensure that a satisfactory RAP has been prepared under the ESA study and shared with the affected person and the local community. The SPPD shall not start the works until compensation and assistance has been made available in accordance with the framework.

RAP document provides a link between the impacts identified and proposed mitigation measures to realize the objectives of involuntary resettlement. The RAPs will take into account magnitude of impacts and accordingly prepare a resettlement plan that is consistent with this framework for Bank approval before the sub-project is accepted for Bank financing.

- I. Sub-projects that will affect more than 200 people due to involuntary land taking and/or physical relocation and where a full Resettlement Action Plan (RAP) must be produced.
- II. Sub-projects that will affect less than 200 people will require an abbreviated RP (Resettlement Framework).
- III. The above plans will be prepared as soon as subproject is finalized, prior to Bank's approval of corresponding civil works bid document.

IV. Projects that are not expected to have any land acquisition or any other significant adverse social impacts; on the contrary, significant positive social impact and improved livelihoods are exempted from such interventions.

Every- Resettlement Action Plan (RAP) prepared shall contain the following particulars.

- i. The extent of area to be acquired for the project, the name(s) of the corresponding village(s) and the method employed for acquiring land with the relevant documentation.
- ii. Village wise or municipality wise list of project affected families and likely number of displaced persons by impact category
- iii. Family-wise and the extent and nature of land and immovable property in their possession indicating the survey numbers thereof held by such persons in the affected zone;
- iv. Socio-economic survey of affected people including income/asset survey of PAPs.
- v. A list of agricultural labourers in such area and the names of such persons whose livelihood depend on agricultural activities;
- vi. A list of persons who have lost or are likely to lose their employment or livelihood or who have been alienated wholly and substantially from their main sources of occupation or vocation consequent to the acquisition of land and / or structure for the project;
- vii. Information on vulnerable groups or persons for whom special provisions may have to be made;
- viii. A list of occupiers; if any.
- ix. A list of public utilities and Government buildings which are likely to be affected;
- x. A comprehensive list of benefits and packages which are to be provided to project affected families by impact category;
- xi. Details of the extent of land available which may be acquired in settlement area for resettling and allotting of land to the project affected families;
- xii. Details of the basic amenities and infrastructure facilities which are-to be provided for resettlement;
- xiii. The entitlement matrix;
- xiv. The time schedule for shifting and resettling the displaced families in resettlement zones;
- xv. Grievance redressal mechanism;
- xvi. Institutional mechanism for RAP implementation;
- xvii. Consultation strategy; a disclosure plan and a capacity building plan
- xviii. Monitoring and evaluation indicators and mechanism;
- xix. Budget; and
- xx. Any other particulars as the Administrator for Resettlement and Rehabilitation may think fit to include for the information of the displaced persons.

The RAP should be developed based on the Right to Fair Compensation and transparency in land Acquisition, Rehabilitation and Resettlement Act, 2013 including subsequent amendments; other applicable state regulatory requirements and World Bank Operational Policy 4.12 on involuntary resettlement. States have formulated various legislations pertaining to direct purchase of land / land for land exchange options, etc which shall be applicable depending upon the location of the sub-project.

3.7 R &R Benefits for Project Affected Families

The resettlement and rehabilitation (R&R) benefits shall be extended to all the Project Affected Families (PAF) whether belonging to below poverty line (BPL) or non-BPL. The details are to be provided in the entitlement matrix (presented below). Contractor will ensure that access to residences or business or agricultural land is not blocked during construction or subsequently. The easement rights for the villagers shall be ensured while planning the layouts for the solar parks. The NGO responsible for RAP implementation and M&E consultants will bring it to the notice of project authorities if contractor fails to do so.

For tribal the following provisions will be adhered to:

- 1. Each Project Affected Family of ST category shall be given preference in allotment of land.
- 2. Tribal PAFs will be re-settled close to their natural habitat in a compact block so that they can retain their ethnic/linguistic and cultural identity
- 3. The Tribal Land Alienated in violation of the laws and regulations in force on the subject would be treated as null and void and-the R&R benefits would be available only to the original tribal land owner.

S. No	Applicatio n	Definition of Entitled Unit	Entitlement	Details		
A. Lo	A. Loss of Private Agricultural, Home-Stead & Commercial Land					
1	Land for Solar Project	Titleholder family. and families with traditional land Right	Compensation at Market value, Resettlement and Rehabilitation	 a) Land for land, if available. Or, Cash compensation for the land at Market value, which will be determined as provided under section 26 of RFCTLARR Act 2013. b) The land if allotted will be in the name of both husband and wife. c) If post acquisition, residual land is economically unviable, the land owner will have the choice of either retaining or sell off rest of the land. d) Refund of stamp duty and registration charges incurred for replacement land to be paid by the project; replacement land must be bought within a year from the date of payment of compensation to project affected persons. e) Subsistence allowance of Rs. 36000 as one time grant f) One time grant of Rs. 500,000 or annuity g) Compensation at market value for loss of crops if any 		
			dential/Commerci			
2	Loss of Structure	Title Holder/ Owner	Compensation at Market value, Resettlement & Rehabilitation Assistance	 a) Cash compensation for the structure at Market value which would be determined as per as per section 29 of the RFCTLARR Act 2013. House under Indira Awas Yojna in rural area or Rs 50000 in lieu off and house under RAY in urban area or Rs 100,000 in lieu off. The house if allotted will be in the name of both husband and wife. 		

Table: Entitlement Matrix

S. No	Applicatio n	Definition of Entitled Unit	Entitlement	Details
				 b) Right to salvage material from the demolished structures. c) Three months' notice to vacate structures. d) Refund of stamp duty and registration charges for purchase of new alternative houses/shops at prevailing rates on the market value as determined in (a) above. Alternative houses/shops must be bought within a year from the date of payment of compensation. e) In case of partially affected structures and the remaining structure remains viable, additional 10% to restore the structure. In case of partially affected structures and the remaining structure becomes unviable additional 25% of compensation amount as severance allowance. f) Subsistence allowance equivalent to Rs. 36000 as one time grant. g) Each affected family getting displaced shall get a one-time financial assistance of Rs 50,000 as shifting allowance. h) Each affected person who is a rural artisan, small trader or self-employed person and who has been displaced (in this project owner of any residential-cum commercial structure) shall get a one-time financial assistance of Rs 25,000/-for construction of cattle shed. i) One time grant of Rs. 50,000 as resettlement assistance j) Each affected person who is a rural artisan, small trader or self-employed person and who has been displaced (in this project owner of any residential-cum commercial structure) shall get a one-time financial assistance of Rs 25,000/-for construction of working shed or shop. k) One time grant of Rs. 50,000
3	Structure	Tenants/ Lease Holders	Resettlement & Rehabilitation Assistance	 a) Registered lessees will be entitled to an apportionment of the compensation payable to structure owner in case the lessee has erected any art of1 the structure as per applicable local laws. b) In case of tenants, three months written notice will be provided along with Rs 50,000 towards shifting allowance.
C. Loss of Trees and Crops				
4	Standing Trees, Crops	Owners and beneficiaries (Registered/ Un-registered tenants, contract cultivators, leaseholders & sharecroppers	Compensation at market value	 a) Three months advance notice to project affected persons to harvest fruits, standing crops and removal of trees. b) Compensation to be paid at the rate estimated by: i) The Forest Department for timber trees ii) The State Agriculture Extension Department for crops iii) The Horticulture Department for fruit/flower bearing trees.

S. No	Applicatio n	Definition of Entitled Unit	Entitlement	Details
D. L	oss of Residen	tial/ Commercial	Structures to No	 c) Registered tenants, contract cultivators & leaseholders & sharecroppers will be eligible for compensation for trees and crops as per the agreement document between the owner and the beneficiaries. d) Un-registered tenants, contract cultivators, leaseholders & sharecroppers will be eligible for compensation for trees and crops as per mutual understanding between the owner and the beneficiaries. n-Titled Holders
5	Structures	Owners of	Resettlement &	a) Non vulnerable encroachers shall be given
	on Government land	Structures or Occupants of structures identified as per Project Census Survey	Rehabilitation Assistance	 three months' notice to vacate occupied land b) Vulnerable encroachers will be provided cash assistance at replacement cost for loss of structures as described in section 29 of the RFCTLARR Act 2013. c) Any encroacher identified as non-vulnerable but losing more than 25% of structure used will be paid cash assistance at replacement cost for loss of structures. The amount will be determined as per section 29 of the RFCTLARR Act 2013. d) All squatters to be paid cash assistance for their structures at replacement costs which will be determined as mentioned in section 29 of the RFCTLARR Act 2013. e) All squatters (other than kiosks) will be eligible for one time grant of Rs 36000 as subsistence allowance. f) All squatters other than Kiosks will be given shifting allowance of Rs 50,000 per family as one time grant for a permanent structure and Rs. 10,000 for a temporary structure. g) Each affected person who is a rural artisan, small trader or self-employed person assistance' of Rs 25,000/- for construction of working shed or shop.
				 In case of Kiosks, only Rs. 5000 will be paid as one time grant.
	ss of Livelihoo			
6	Families living within the project area	Title Holders/ Non-Title holders/ sharecroppers, agricultural labourers and employees	Resettlement & Rehabilitation Assistance	 a) Subsistence allowance of Rs. 36,000 as one time grant. (PAPs covered under 1(f), 2 (f) and 5 (e) above would not be eligible for this assistance). b) Training Assistance of Rs 10,000/- for income generation per family. c) Temporary employment in the project construction work to project affected persons with particular attention to vulnerable groups by the project contractor during construction, to the extent possible and preference in the

S. No	Applicatio n	Definition of Entitled Unit	Entitlement	Details
•				employment of semi-skilled and unskilled jobs in the project with adequate training for the job.
F. Ac	dditional Supp	ort to Vulnerable	- Families	
7	Families within project area	As per definition of vulnerable	Resettlement & Rehabilitation Assistance	One time additional financial assistance of Rs. 50,000. Squatters and encroachers already covered under clause 5 are not eligible for this assistance.
			e/Common Prope	
8	Structures & other resources (e.g. land, water, access to structures etc.) within the project area	Affected communiti es and groups	Reconstruction of community structure and common property resources	Reconstruction of community structure and Common property resources in consultation with the community.
ΗΤ		act During Const	ruction	
9	Land & assets temporarily impacted during construction	Owners of land & Assets	Compensation for temporary impact during construction e.g. damage to adjacent parcel of land / assets due to movement of vehicles for transportation of equipment's, machinery and construction activities for infrastructure development.	Compensation to be paid by the contractor for loss of assets, crops and any other damage as per prior agreement between the 'Contractor' and the 'Affected Party'.
I.	Resettlement	Site	development.	
10	Loss of residential structures	Displaced titleholders and non- titleholders	Provision of resettlement site/ vendor market	Resettlement sites will be developed as part of the project, if a minimum of 25 project displaced families opt for assisted resettlement. Vulnerable PAPs will be given preference in allotment of plots/flats at the resettlement site. Plot size will be equivalent to size lost subject to a maximum of provision given in RFCTLARR Act 2013. Basic facilities shall be provided by the project at resettlement site as per the provisions given in the Third Schedule of RFCTLARR Act 2013. Similarly, if at least 25 displaced commercial establishments (small business enterprises) opt for shopping units, the Project Authority will develop the vendor market at suitable location in the nearby area in consultation with displaced persons. Basic facilities

S. No	Applicatio n	Definition of Entitled Unit	Entitlement	Details
				such as approach road, electricity connection, water and sanitation facility, will be provided in the vendor market by the project. Vulnerable PAPs will be given preference in allotment, of shops in vendor market. One displaced family will be eligible for only one land plot at resettlement site or shop in the vendor market.
J.	Land on lease)		
11	Titleholders	Land Owners/ Titleholders	Annual Lease rental for use of land	 a) Annual Lease Rent as per pre agreed rate with the land owners giving consent for sparing their land for the project b) Provisions regarding the increase in lease rent on predetermined rates and timeframe c) Provisions related to loss of structure/ trees/ crops as per the provisions of Clause 2 and 4 respectively
12	Agricultural Labour	Non-Title holders/ sharecroppers, agricultural labourers and employees		As per Clause 6 above

This RPF will also be applicable to all components of the project that result in involuntary resettlement, regardless of the source of financing. It also applies to other activities resulting in involuntary resettlement that in the judgment of the Bank, are (a) directly and significantly related to the Bank-assisted project; (b) necessary to achieve its objectives as set forth in the project documents; and (c) carried out, or planned to be carried out, contemporaneously with the project.

3.8 Gender equality and Social Inclusion

Mainstreaming gender equity and empowerment is already a focus area in the project. In the sub projects, activities related to livelihood restoration will address women's needs. A Gender Development Framework is being designed under the project as part of ESMF which will help analyze gender issues during the preparation stage of sub project and design interventions. At the sub project level, gender analysis will be part of the social assessment and the analysis will based on findings from gender specific queries during primary data collection process and available secondary data. The quantitative and qualitative analysis will bring out sex disaggregated data and issues related to gender disparity, needs, constraints, and priorities; as well as understanding whether there is a potential for gender based inequitable risks, benefits and opportunities. Based on the analysis, the specific interventions will be designed and if required gender action plan will be prepared. The overall monitoring framework of the project will include sex disaggregated indicator and gender relevant indicator.

The participation of beneficiaries and focus on poverty reduction are two other key determinants of the effectiveness and sustainability of any project. Any project must address the constraints on women's participation in project design, construction, and monitoring and evaluation (M & E).

The project must also focus on the linkage between gender and poverty, by identifying, for example, households headed by females and those households' special needs. An adaptive, learning, and process-oriented approach works better than a blue print approach; continuous dialogue between the SPPD and the beneficiaries / PAPs is therefore important. Project beneficiaries are likely to have a stronger sense of ownership when the project gives them enough time, design flexibility, and authority to take corrective action. In this way, they find it easier to incorporate their earlier learning and negotiate with project staff and service providers. Therefore, a mechanism must be built into the project to allow such two-way interactions between the beneficiaries and the service providers.

Three major tools are used to identify and deal with gender issues in the project cycle: gender analysis, project design, and policy dialogue.

Gender analysis should be an integral part of the initial social assessment at the screening stage itself. The issues identified can be scaled up during the feasibility and detailed analysis can be carried out during the project preparation stage.

The project designs should be gender responsive based on the gender analysis, and should be included in the ESIA document The findings and recommendations from the gender analysis during project planning and feedback from beneficiaries during implementation must be discussed thoroughly to determine the need for further action. Listed below are the key action points:

3.8.1 General Check list

- 1. Identify key gender and women's participation issues.
- 2. Identify the role of gender in the project objectives.
- 3. Prepare terms of reference (TOR) for the gender specialist or social development specialist of the client
- 4. Conduct gender analysis as part of overall Social Assessment.
- 5. Draw up a socioeconomic profile of key stakeholder groups in the target population and disaggregate data by gender.
- 6. Examine gender differences in knowledge, attitudes, practices, roles, status, wellbeing, constraints, needs, and priorities, and the factors that affect those differences.
- 7. Assess men's and women's capacity to participate and the factors affecting that capacity.
- 8. Assess the potential gender-differentiated impact of the project and options to maximize benefits and minimize adverse effects.
- 9. Identify government agencies and nongovernmental organizations (NGOs), communitybased organizations (CBOs), and women's groups that can be used during project implementation. Assess their capacity.
- 10. Review the gender related policies and laws, as necessary.
- 11. Identify information gaps related to the above issues.
- 12. Involve men and women in project design.
- 13. Incorporate gender findings in the project design.

- 14. Ensure that gender concerns are addressed in the relevant sections (including project objectives, scope, poverty and social measures, cost estimates, institutional arrangements, social appendix, and consultant's TOR for implementation and M & E support).
- 15. List out major gender actions.
- 16. Develop gender-disaggregated indicators and monitoring plan.

3.8.2 Core Requirement for Mainstreaming Gender

- 1. All data should be disaggregated by gender, caste, ethnicity, location and age
- 2. Issues of division of labour, access to resources and decision making power (who is doing what, who has access to what, who makes the ultimate decision) have to be assessed for their gender differential impact on women and men of different social identity group.
- 3. Assessment of policies, programs, institutional arrangements, human resources issues and M&E system has to be done from a gender perspective of project, project authorities and community groups.

3.8.3 Steps of Gender Mainstreaming

Three major tools will be used to identify and deal with gender issues in the project cycle: initial gender assessment, gender action plan, and policy note. The initial gender assessment should be an integral part of the initial social assessment at the screening stage. The issues identified can be scaled up during the feasibility study and detailed analysis can be carried out during the detailed project report stage. The project design should be gender responsive based on the gender analysis, and should be included in the detailed project report in the form of a gender action plan. The findings and recommendations from the gender analysis during project planning and feedback from beneficiaries during implementation must be discussed thoroughly to determine the need for further action.

Focus of intervention	Inputs and process indicators	Data source
Policy checklist	 i. What are the requirements of the national gender equality policy, if any, and the executive support provided to it? ii. Which ministry focal point or unit is responsible for advocacy and gender inclusion at the policy and project level? iii. Does the Energy sector strategy address gender issues (labor issues, e.g. promotion of gender in labor-based work, participation of women in prioritization and design of works, measures to eliminate discriminatory labor or contracting practices, HIV/AIDS prevention and treatment) in its works and contracts? iv. Do solar policy and planning procedures explicitly take gender into account: identification of gender gaps and gender-specific needs, capacities, constraints, and opportunities inclusion of socioeconomic empowerment as an integral element? v. Are women and men civil society stakeholders consulted on policies and programs; included in teams analyzing policy and strategy; included in decision making? vi. Is there a system for monitoring the implementation of gender and other components of sector policies and strategies? 	Contract documents; ministry of new and renewable energy; ministry of women and child development; SPPD

Focus of	Inputs and process indicators	Data source	
intervention	 vii. Sex disaggregation of beneficiary data and key gender indicators outreach and capacity building on gender and other social dimensions grants for addressing gender issues? viii. Are there training sessions on gender including gender-sensitive planning? ix. Is stakeholder consultation facilitated? x. Is there participation of implementing agencies or community organizations? xi. Are gender sensitization workshops held for men and women of power ministry / department staff and implementing agencies, and do they consider knowledge gaps in gender elements in the sector? xii. How many women are represented on gender boards and in works prioritization and decision-making forums related to the 		
	planning, implementation, monitoring, and evaluation of		
Project cycle: Project identification, preparation, and design	 projects? i. Conduct a rapid assessment to identify and quantify potential gender-related issues and impacts affecting access, risks, benefits, and participation ii. Identify disadvantaged or vulnerable groups, including who they are, where they live, and their socioeconomic characteristics (scheduled castes, women-headed households, widows, disabled) iii. Examine the impacts of project on these groups iv. Identify the gender-specific implications of land acquisition and resettlement v. Identify gender-specific constraints in receiving information and providing feedback and complaints on the project vii. Discuss identified gender and other social issues in the project viii. Include both females and males affected by the project in stakeholder consultations ix. Use separate focus groups to enable women to voice their views separately from men x. Analyze the data collected to highlight gender differences in uses and the underlying causes of women's and men's project related problems xii. Examine relevant inter-sectoral linkages, such as access to health services, HIV/AIDS prevention, and access to markets and schools xiii. Identify the gender-related issues that need to be addressed to ensure the effectiveness and sustainability of the project xiv. Develop approaches for addressing the gender-related issues identified and creating opportunities for equal access to project benefits for men and women, including training, organizational capacity building, grants programs, targets for women's participation xv. Develop indicators for measuring progress on gender-related issues within the relevant project components (e.g. construction works, institutional arrangements, land acquisition and resettlement benefits, privatization, livelihood restoration, 	Stakeholder and beneficiary assessments: user satisfaction survey, project concept note, social assessments (household surveys and focus group discussions in project influence area), mid-term and end term evaluation surveys	

Focus of intervention	Inputs and process indicators	Data source	
	i Desk review (secondary literature)	Other projects in	
Project cycle: Methodology	 i. Desk review (secondary literature) ii. Review available information (e.g. statistics, gender analysis, documents of previous solar projects, if available or other projects involving acquisition for non-linear projects) in the project area and the socioeconomic profile of the target population iii. Review the relevant legal framework (e.g. inheritance law), policy framework (e.g. resettlement and rehabilitation), and institutional framework (e.g. current administrative system for land acquisition, compensation disbursement, grievance handling, awareness creation) and their gender implications iv. Review government programs for encouraging equal opportunities and participation of women in the project influence area v. Household surveys (primary survey) vi. Draw up gender-disaggregated socioeconomic and cultural profiles and identify the problems faced by and needs of the target population viii. Conduct group discussions, random interviews, and transect walks to study the activity pattern viiii. Collect qualitative information ix. Participatory methodologies (e.g. participatory rapid appraisal) x. Collect qualitative information that cannot be collected through surveys (socio cultural norms, behavioral questions) xi. Define ways in which men and women beneficiaries and other stakeholders, especially poor women, can equally participate in the project xiii. Map out the target areas and assess which are the most disadvantaged areas and sections of society (widows, femaleheaded households, disabled men and women) in terms of access to services and poverty level xiii. Identify major stakeholder groups and their positions xiv. Staffing xy. Ensure adequate gender balance in field teams 	Other projects in the country/state and gender policy documents, household surveys, national sample survey, latest census data, participatory rapid appraisal of target area, focus group discussions, consultations with beneficiaries	
	xvi. Select field team members with gender awareness, local knowledge, cultural understanding, and willingness to listen		
Project cycle: Data collection	 i. Socioeconomic profile: Gender-disaggregated data ii. Demographic: Gender, sex ratio, caste, marriageable age, female-headed households, migration trend, household size iii. Economic: Income level and source, expenditure pattern and decision making, access to land and resources iv. Health: Population growth rate, infant and adult mortality rate, availability of medical facility, reproduction-related decision making, HIV/AIDS awareness v. Education: Literacy, school enrollment and dropout ratio, child labor vi. Status of women: Political representation and awareness, socio cultural perceptions and practices of men and women, domestic violence, trafficking, gender-discriminatory policies and laws, gender roles, responsibilities and gender division of labor in productive areas (e.g. agriculture, income-generating activities) and reproductive areas (e.g. household chores, child care), and time allocation for each responsibility vii. Fuel, fodder, water and sanitation 	District, block, and village census data, national sample survey data, health survey data, household surveys, focus group discussions, behavioral surveys, observation	

Focus of intervention	Inputs and process indicators	Data source
	 viii. Availability, quantity, and quality of fuel and fodder, who collects fuel, fodder, and water for the family, sources of drinking and agricultural water, how men and women store and use water collected, dry season management, how far away these resources are located, time spent on collection of the resources, mode of transport used to collect the resources, availability of sanitation service (chargeable or not, who runs it) ix. Access, control, constraints x. How men and women differ in their access to and control of land, agricultural inputs, extension, markets, employment opportunities, and credit xi. Whether external assistance is provided to improve access and control, and by whom xiii. Factors affecting the level of participation of men vs. women, incentives and constraints, means of information dissemination about the project preferred by men vs. women, labor demand for men vs. women, which modes of participation men and women favor (e.g. decision making in planning, cash contribution, labor contribution for construction, training, financial management, organizational management) xiv. Perception of benefits and impacts xv. Men's and women's perceptions of positive and negative impacts of the project prove access of participated 	
Project implementation : Gender action plan	 of the project, how negative effects can be mitigated i. Prepare gender action plan. Under this: ii. Undertake quality social and gender analyses. Identify constraints to participating and benefiting men and women; develop strategies for each component to ensure that men and women participate and benefit equally iii. Revisit gender design strategies at inception to develop a detailed gender action plan. The plan needs to be tested and reviewed early in implementation; identify detailed activities, targets, resources, and responsibilities for implementation iv. Gender action plan must be fully owned and understood by the executing agency. Use a participatory and flexible approach to developing the plan; a strong rationale that is directly linked to overall project objectives is needed for targeting and working with women v. Identify realistic targets linked to loan objectives. Targets and strategies should enable step-by-step progress, bringing incremental changes and challenging culture without threatening it; linking targets to loan objectives helps all stakeholders to understand the rationale for focusing on women and helps monitoring of participation and benefits. vi. Include gender capacity building in the gender action plan. Both formal training and ongoing support and mentoring are needed for developing skills, ownership, and commitment. vii. Provide adequate skills and resources for implementation of gender action plan. Long-term gender specialists in the executing agency or project team and adequate resources for implementation of actions; nongovernmental organizations and other agencies contracted to implement project activities should have a demonstrated gender capacity. viii. Monitor and follow up gender-related targets and activities. 	Gender expertise, Discussion and participation with beneficiaries, separate focus group discussions with men and women, government departments, labor and employment laws, provisions in project and budget, learning approaches from good practice cases

Focus of intervention	Inputs and process indicators	Data source
	actions are implemented; routine monitoring and reporting; gender-sensitive indicators and gender-related risks must be included in project logical frameworks.	
Project implementation : Participation strategy	 i. Develop a participation strategy for men and women during project implementation and monitoring and evaluation: ii. Avoid overly high expectation of women's participation and develop a practical schedule for participation iii. Planning. Conduct women-specific consultation to take their views and suggestions on the design. Any mechanism established during the project design, such as grievance mechanisms, should have adequate representation of women's participation (e.g. gender-equal wage rates, construction season, toilet and child care facilities) v. Training options. Identify ways to link up with income generation, literacy, and other activities to support an integrated approach to poverty reduction and women's empowerment vi. Staffing, scheduling, procurement, and budgeting. Hire female project staff viii. If appropriate, set a minimum percentage of female laborers and prohibit the use of child laborers in the civil works contract ix. Ensure adequate and flexible budgeting to allow a learning approach (e.g. training budget, consulting service budget for women's organizations) 	Gender expertise, Discussion and participation with beneficiaries, separate focus group discussions with men and women, government departments, labor and employment laws, provisions in project and budget, learning approaches from good practice cases
Project cycle: Impact	 i. Establish whether men and women perceive positive and negative impacts of the project differently, and assess how the negative effects can be mitigated ii. Consider whether the benefits are likely to be distributed equitably iii. For disadvantaged or vulnerable groups, find out who they are, where they live, what are their socioeconomic characteristics (scheduled castes, women-headed households, widows, disabled), and how the project will affect them iv. Assess the gender-specific implications of the following: v. land acquisition and resettlement: extent of land being acquired vi. utility relocation: what and where vii. tree cutting: how many and local dependence viiii. diversion of forest land: how much and local dependence 	Project monitoring reports, audits, group discussions, household survey, land tenure details
Monitoring and Evaluation: Feedback mechanism	 i. Develop a feedback mechanism in which both males and females have a voice ii. Disaggregate all relevant indicators by gender, such as number of women gaining access to credit, increase in women's income, and career prospects for project-trained women iii. Integrate sex-disaggregated beneficiary data and relevant measures of gender equality into the baselines and other routine monitoring and evaluation processes iv. Measure the impacts of the project components on women and men v. Assess the value added by women's participation in the project 	Focus group discussions, project monitoring reports
Monitoring and Evaluation: Gender-	 i. Develop gender-informed results indicators for monitoring. These include: ii. Increased income, employment, and entrepreneurship. Number of women and men employed in sector, number of women and 	Review of gender-informed results indicators

Focus of intervention	Inputs and process indicators	Data source
informed indicators	 men employed in solar power project; increased women's and men's income from produce marketed using project services. iii. Time saving and increased productivity. Reduced women's and men's time for domestic work (collection of water, fuel wood, food crop collection, fodder, etc.); increased productive time used for economic activities. iv. Improved affordability. Percentage increase of income among women and men; increased participation in decision making; number of women and men participating in community decision meetings; reduced incidence of harassment, crime, and human trafficking; increased awareness of HIV/AIDS transmission and prevention; number of women and men leading committees; number of women and men managers in agencies; women control their income and establish bank accounts in their names; increased recognition of women's contributions to the household and community 	

4 CONSULTATION AND PUBLIC DISCLOSURE

The Consultation process envisages involvement of all the stakeholders' at each stage of project planning and implementation. The SPPD will be responsible for ensuring participation of the community at sub-project level. Involvement of the community is not limited to interactions with the community but also disclosing relevant information pertaining to the project tasks.

4.1 Sub-project Consultations

The consultants team conducted FGD's / stakeholder consultations in selected villages in the subproject locations involving the team social experts, community mobilizer and other key experts to gauge the stakeholder perception about the sub-project. A total of 15 local level consultations were carried out in the selected 10 villages. The stakeholders included land owners losing land and landless labourers. Team ensured participation of women members in each consultation.

The key issues and concerns identified during the consultations included:

- i. Are these project going to provide any benefits for the local people especially in terms of employment
- ii. Whether local people will get employment
- iii. Whether solar panels will have any impact on the health of the people and the crops being grown in the area.
- iv. What will be the rate for land payable to the land owners (in case of Rewa)
- v. What is the mechanism to ensure timely payment of lease rent for land being pooled for solar project (in case of Pavagada).
- vi. What will be the fate of agricultural labour that do not own land and are dependent on land owners for labour work on agricultural land owned by big farmers?
- vii. How would the SPPD ensure that the noise / dust / labour camps setup during the construction phase of the project does not impact the local village community?
- viii. Will the construction activity have any adverse impacts on our existing surface water resources?

The details of the consultations are provided below:

Location for Consultation	Issues Covered / Raised by participants	How it would be addressed
Proposed Solar Pa	rk Site - Pavagada	
Selected five villages: Thirumani,	Opportunity for employment generation for the village land owners and the agricultural labour	The local community members will be preferred for employment during construction.
Balasamudra, Vollur, Kyathaganacherlu, Rayacharlu	Semi-skilled / unskilled	Those losing livelihood will be provided opportunities for alternative livelihood.
Number of stakeholders	The annual lease rate is low in comparison to adjoining areas for	Rates will be finalized in consultation with the local

Location for	Issues Covered / Raised by	How it would be addressed			
Consultation	participants				
consulted : 70 stakeholders	similar projects	community and district administration. Additional public disclosure about the criteria for calculation etc to be made known to stakeholders.			
	What other benefits for the village / land owners	Developers will carry out developmental activities in the villages as part of CSR. The activities will be identified in consultation with the community.			
	Stakeholder expects better power supply situation in villages after the implementation of solar power plant	The government may consider to include a small percentage of power produced by the developer to be allocated for the local population or alternatively, the conditions could be included in the agreements for the developer to install roof-top solar power panels for the local villagers as part of the CSR budget of the company			
	What would be the payment schedules and how will the timely payments be ensured	The lease will be paid annually with an increment of 5% every two years. Project to make community aware about the mechanisms to be put in place for ensuring timely payment of lease rentals payable to them.			
	Impact of dust on standing crops during construction phase	Contactor will ensure watering of construction site / tracks on regular basis.			
•	Proposed Solar Park Site - Rewa				
Selected five villages: Badwar, Barseta Desh, Barseta Pahar, RamNagar Pahar and Etar Pahar	What will be the rate for acquiring land	The land owners will be paid double the circle rate as per the provisions of the state policy.			
Number of stakeholders consulted :	What impact the project will have on the surrounding areas due to radiation.	The solar panels do not have any adverse impacts on the health due to radiations.			

Location for Consultation	Issues Covered / Raised by participants	How it would be addressed
85 stakeholders		The Project will undertake awareness campaigns about the solar panels and how it works on regular basis.
	How will the access to the private land parcels ensured which are not included in the solar park	The easement rights shall be ensured while preparing the detailed layout plans for the solar park.
	Impact on surface water sources	Ensure that the existing drainage and surface water bodies are not altered during construction stage. Water from such sources should only be withdrawn after getting NOC from local panchayat.
	What will happen to our houses falling within the proposed site?	Project will prepare a resettlement action plan which will provide for mitigation measures for all adverse impacts including relocation. The impacted structures will be compensated at replacement value.
	Access to forest area for collection of NTFP	Project to ensure that community has access to forested areas.

4.2 Mechanism for Consultation

The Consultation Framework envisages involvement of all the stakeholders' at each stage of project planning and implementation. Involvement of the community is not limited to interactions with the community but also disclosing relevant information pertaining to the project tasks. Community participation shall be ensured at the following stages:

4.2.1 Sub Project identification stage

To sensitize the community about the sub-project and their role

4.2.2 Planning Stage

For disseminating information pertaining to the sub-project, work schedule and the procedures involved; finalization of project components with identification of impacts, entitled persons, mitigation measures; and Grievance Redressal mechanisms to be adopted

Dissemination of project information to the community and relevant stakeholders is to be carried out by SPPD at this stage of the project initiative. The community at large shall be made aware of

the project alternatives and necessary feedback is to be obtained. Community and other stakeholders should be involved in the decision making to the extent possible. Information generated at this stage should be documented for addressal of queries arising out of the Right to Information Act, 2005.

Consultations with Project Affected Persons and their profiling are mandatory as per the requirements of SIA and preparation of RAP. This needs to be done as socio-economic and census surveys as part of the ESA study. Consultations with respect to cultural aspects are to be carried out as part of the Social Impact Assessments for all alternatives and the selected alternative sub-project option.

4.2.3 Implementation Stage

Consultations as part of the implementation stage would be direct interactions of the implementation agency with the Project Affected Persons. These would comprise of consultations towards relocation of the PAPs, relocation of cultural properties, and towards addressing the impacts on common property resources (CPRs) such as places of religious importance, community buildings, trees etc.

With the implementation of the R&R provisions in progress, consultations and information dissemination is to be undertaken to let the affected persons informed of the progress. Implementation stage also involves redressal of grievances in case of R&R aspects as well as relocation of common property resources through the grievance redressal mechanisms. These would usually be one to one meeting of PAP or community representatives with the grievance redressal committee established for the project.

4.3 Stakeholder Mapping

Through the formal and informal consultation, following stakeholder mapping has been done, identifying their interests concerned with the project activities.

Stakeholder Category	Interests	Potential/Probable impacts
Primary stakeholders		
Project affected people	Access to the facility, Project entitlement, Time-bound delivery of benefits, enhanced quality of life	(+/-)
Beneficiaries	Access to the facility, Project entitlement, Time-bound delivery of benefits, enhanced quality of life	(+/-)
Secondary stakeholders		
MNRE, SPPD, Developers, Village Panchayat	Project implementation, Contracting; Project management, Monitoring and evaluation	(+/-)
NGOs, CSOs, Research institutes	Development, Community participation, and Community welfare	(+/-)

This is a tentative mapping is likely to change during the project implementation. Each of these stakeholders will be part of the consultation process and their views will be incorporated in to the project design. The key stakeholders can be grouped into two categories viz., primary and secondary. Their respective roles are presented below:

4.3.1 Primary Stakeholders

4.3.1.1 **Project Affected Persons (PAPs) have the following roles:**

- i. Participate in public meetings and identify alternatives to avoid or minimise displacement
- ii. Assist SPPD in developing and choosing alternative options for relocation and income generation.
- iii. Participate in census survey.
- iv. Provide inputs to entitlement provisions, thus assisting in preparation of the resettlement action plan
- v. Participate in grievance redress as members of grievance redress cells (GRC)
- vi. Decide on relocation and management of common properties
- vii. Labour and other inputs in the project
- viii. Members of implementation committee

4.3.1.2 Beneficiaries and Host Population has the following roles:

- i. Assist Developer in planning CSR activities in the villages.
- ii. Provide inputs to site selection
- iii. Identify possible conflict areas with PAPs
- iv. Assist in identification and design inputs for IG (income generation) schemes
- v. Manage common property
- vi. Participate in local committees.

4.3.2 Secondary Stakeholders

4.3.2.1 SPPD, Developer, Village Panchayat has the following roles:

- i. Establish separate cell for environment and social development
- ii. Notification at various stages for land acquisition and joint measurement of land to be acquired along with the revenue department
- iii. Design and approval of resettlement policy
- iv. Coordinate with line departments such as telephone, state electricity board, and forest department for shifting of utilities and cutting of trees.
- v. Participate with NGOs in verification survey of PAPs and categorisation of PAPs
- vi. Participate in consultations with PAPs and beneficiaries
- vii. Coordinate with local community in identifying land for relocation of common property resources
- viii. Coordinate with civil construction contractor to relocate common property resources
- ix. Coordinate with revenue department for facilitating disbursement of compensation and resettlement and rehabilitation assistances

- x. Monitoring of physical and financial progress
- xi. Participate in training programmes for income restoration.
- xii. Consult with panchayat and block office to facilitate inclusion of PAPs' name for poverty alleviation schemes of government of India.

4.3.2.2 NGOs have following roles:

- i. Develop rapport with PAPs and between PAPs and EAs.
- ii. Verification of PAPs
- iii. Consultations with the community.
- iv. Assess the level of skills and efficiency in pursuing economic activities, identify needs for training and organise programmes either to improve the efficiency and/or to impart new skills
- v. Assist PAP in receiving rehabilitation entitlements due to them
- vi. Motivate and guide PAP for proper utilisation of benefits under R&R policy provisions
- vii. Assist PAPs in obtaining benefits from the appropriate development programmes.
- viii. Complete the consultation at the community level and provide support by describing the entitlements to the entitled persons (EPs) and assisting them in their choices
- ix. Accompany and represent the EPs at the Grievance Redress Committee meeting.
- x. Assist EPs to take advantage of the existing government housing schemes and employment and training schemes that are selected for use during the project, and
- xi. Promote location specific Community Based Organisations (CBOs) of PAPs to handle resettlement planning, implementation and monitoring.
- xii. Create awareness among PAPs of health and hygiene.

4.4 Information Disclosure

The mechanism of information dissemination should be simple and be accessible to all. Two of the important means that have been followed until now include briefing material and organization of community consultation sessions. The briefing material (all to be prepared in local language) can be in the form of (a) brochures (including project information, land requirements and details of entitlements including compensation and assistance to be given to the PAPs) that can be kept in the offices of local self-government (municipal office in case of urban area and gram panchayat office in case of rural area) and SPPD; (b) posters to be displayed at prominent locations and (c) leaflets that can be distributed in the impacted zone of the sub project. Consultation meetings should also be organized at regular intervals by the SPPD to acquaint the PAPs of the following:

- i. Timeline and progress of the project;
- ii. Information on compensation and entitlements;
- iii. Information on land acquisition and market valuations of property;
- iv. Time line for acquisition.

Also, opinion and consensus of the community needs to be sought for common and cultural property relocation. Information disclosure procedures are mandated to provide citizen centric information as well as all documentation necessary for addressing any queries under Right to Information Act that came into effect from October 2005. A computer based information

management systems shall be employed to disseminate information pertaining to the project. Disclosure of information will enhance governance and accountability specifically with respect to strengthening of monitoring indicators to help the World Bank monitor compliance with the agreements and assess impact on outcomes.

This Information Disclosure Policy is intended to ensure that information concerning the Solar project activities will be made available to the public in the absence of a compelling reason for confidentiality. Information shall be provided in a timely and regular manner to all stakeholders, affected parties, and the general public. Access by the public to information and documentation held or generated by SPPD will facilitate the transparency, accountability, and legitimacy as well as operations overseen by it. As a part of its disclosure policy, all documents shall be made available to the public in accordance with relevant provisions of the RTI Act, except when otherwise warranted by legal requirements. A designated Information Officer shall be responsible for ensuring timely and complete dissemination in accordance with this policy.

4.4.1 Information to be disclosed

Торіс	Documents to be Disclosed	Frequency	Where
Resettlement, Rehabilitation and Land Acquisition	Resettlement Action Plan (RAP).	Once in the entire project cycle. But to remain on the website and other disclosure locations throughout the project period.	World Bank's Infoshop On the website of SPPD, The client would make the RAP available at a place accessible to displaced persons and local NGOs, in a form, manner, and language that are understandable to the PAPs in the following offices: DM's Office State and District Libraries Local municipal and gram panchayat office Office of the contractor
	Resettlement&RehabilitationPolicytranslatedinlanguage	Once in the entire project cycle.	Distributed among Project Affected Persons (PAP)
	Information regarding impacts and their entitlements in local language	Once at the start of the project and as and when demanded by the PAP.	Through one-to-one contact with PAPs. Community consultation List of PAPs with impacts and entitlements to be pasted in the SPPD office and website of SPPD,
	R&R and LA monthly progress report.	10th day of every month	Website of SPPD. Hard copy in the office of contractor in local language
	RAP Impact Assessment Report	At midterm and end of the RAP implementation	SPPD website in local language.

Table below specifies the type of additional information and frequency of dissemination for projects which are financed either from domestic or donors' funds.

Торіс	Documents to be Disclosed	Frequency	Where
	Land Acquisition notifications	As required under the RFCTLARR Act 2013	SPPD, website. Hard copy in the office of contractor in local language
	Grievance redressal process.	Continuous process throughout the project cycle.	World Bank's Info shop. On the web sites of SPPD Hard copies in local language in the following offices: DM's Office Local municipal and gram panchayat office Office of the contractor PAPs to be informed on one to one
Public Consultation	Minutes of Formal Public Consultation Meetings	Within two weeks of meeting	contact On the web sites of SPPD Hard copies in local language in the following offices: DM's Office Local municipal and <i>gram</i> <i>panchayat</i> office Office of the contractor
Environmental Management Plan	Construction Schedule including movement of heavy machinery	Before the start of the project construction phase	On the web sites of SPPD Hard copies in local language in the following offices: DM's Office Local municipal and <i>gram</i> <i>panchayat</i> office Office of the contractor
	Hazardous Waste Disposal		On the web sites of SPPD Office of the contractor

In addition to the information specified in the table, the following information shall also be displayed / disseminated, wherever applicable.

- i. Project specific information need to be made available at each contract site through public information kiosk
- ii. Project Information brochures shall be made available at all the construction sites as well as the office of implementation agency and the office of Engineer in charge.
- iii. Reports and publications, as deemed fit, shall be expressly prepared for public dissemination e.g., English versions of the SIA and RAP and Executive Summary of SIA and RAP in local language.
- iv. Wherever civil work will be carried out a board will be put up for public information which will disclose all desired information to the public, for greater social accountability.
- v. All information will be translated into local language and will be disclosed to the public through the Panchayat, District Magistrate's office, concerned project offices, websites of SPPD.

5 INSITUTITIONAL STRUCTURE / IMPLEMENTATION

For successful implementation of Environmental and Social safeguards, Institutional setup plays a vital role. The Solar Power Park Developer (SPPD) would be set-up as a JV Company between the state and Centre government agencies to streamline decision-making and provide more autonomy for project execution and delivery.

5.1 Sub-project Execution Structure

MNRE has notified the administrative approval on 12th December, 2014 for implementation of a Scheme for Development of Solar Parks and Ultra Mega Solar Power Projects in the country commencing from 2014-15 and onwards (i.e. from the year 2014 – 15 to 2018 – 19). The implementation arrangement for the sub-projects is depicted in the figure 2 below:

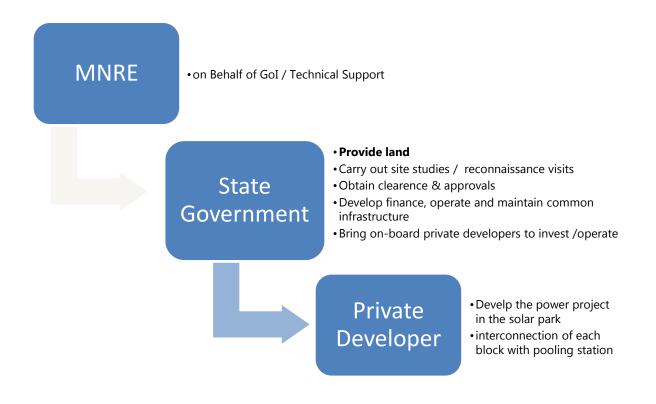


Figure 1: Implementation Arrangement for Solar Parks

5.1.1 Role of State Government

Land for setting up of the Solar Park will be identified by the State Government unless the implementing agency has its own land. In order to provide for such a large tract of contiguous land, the State Government may prioritize the use of government waste/ non-agricultural land in order to speed up the acquisition process. The use of private land shall be minimized. The price

of the land is to be kept as low as possible in order to attract the developers and, therefore, the site should be selected in such a manner so that inexpensive land can be made available. If land cannot be made available in one location, then land in few locations in close vicinity may be taken. Possibility of using cold and hot deserts, sides of highways can also be actively explored. The park must have at least 5 acres per MW towards installation of solar projects and will give opportunity for use of all technologies in a technologically agnostic fashion.

All infrastructural requirements outside the park such as connecting road, provision of water supply, electricity, etc. to make the park functional, will be the sole responsibility of the concerned State Government.

5.1.2 Role of Solar Power Park Developer (SPPD) / JV Company

The Implementing Agency of Solar Park as defined in the Scheme is re-designated as the Solar Power Park Developer (SPPD). The SPPD will be nominated by the State Government for development of solar parks as per the procedure given in the Scheme for the solar park. The SPPD is tasked with acquiring the land for the Park, maintain it, leveling it wherever considered desirable and allocating the plots for individual projects.

The SPPD will be responsible for creating the internal transmission network on behalf of the solar project developers. This network will connect with the Intra State Transmission System (ISTS) or State Transmission System. The transmission network within the solar park will be captive / dedicated transmission system of the solar project developers of the park. Following are the essential responsibilities of SPPD:

- I. Acquisition of land or Land Assembly/pooling
- II. <u>Getting land related clearances</u>
- III. Developing approach road to each plot
- IV. Developing internal transmission system and maintaining it.
- V. Making arrangement to connect to the grid i.e. ISTS or State Transmission Network.
- VI. <u>Providing basic drainage.</u>
- VII. <u>Providing water supply (minimum essential quantity)</u>

Following are the optional responsibilities of the SPPD:

- I. <u>Leveling and development of land (to be avoided as far as possible).</u>
- II. <u>Construction of offices, housing and common building infrastructures.</u>
- III. Forecasting, Scheduling
- IV. O&M or related functions.
- V. Solar radiation data
- VI. Metalled road to all plots and within plots to each array
- VII. <u>Maintenance of internal power supply and water supply.</u>
- VIII. Security
- IX. Operations & maintenance and waste disposal
- X. Technical support services (consultancy etc.).

The above mentioned (in particular the underlined activities) roles and responsibilities of the SPPD are likely to have some adverse impacts on the environment which need to be mitigated and ensured that the appropriate mitigation measures are included as part of the civil works contracts / EMP.

5.1.3 Roles and Responsibilities of Social & Environmental Officer - SPPD

Most of the solar parks are located in remote areas, and development of solar parks may relocate the people or affect their livelihood. For upliftment of people and community development, there is a need for Rehabilitation and Resettlement (R&R) of Project Affected People (PAP) with the objective that standards of living of the PAP improves or at least regain their previous standards of living.

The proposed organization structure for RAP/EMP implementation is presented in figure 3. The CEO of the SPPD will have overall responsibility for implementation of sub-projects and identification of developers. An "environmental and social development expert" shall be recruited as part of SPPD and will report to the CEO of SPPD. He is overall responsible for EMP and RAP Implementation, coordinating and liaising with government organization as well as the World Bank with respect to different social and environmental issues. He will also be responsible for progress monitoring of Environmental and social safeguards during project construction and execution stage and submission of monthly report (during construction stage) and quarterly report (during operations stage) on EMP compliance to the funding Agency.

The roles and responsibilities of the Social and Environmental Expert shall be:

- I. Prepare TOR for any studies required and qualitative dimensions to the implementation of RAP/ ESMP;
- II. Participate in and facilitate consultations with stakeholders
- III. Participate in project meetings and report on the issues related to environmental management and social safeguards to provide for any mid-course corrections that may be required based on situation on the ground
- IV. Assist PAPs to resolve their grievances
- V. Coordinate on the training and capacity building initiatives
- VI. Review contract documents to ensure that EMP provisions related to works are included in the contract documents
- VII. Act as a resource person in trainings based on experience on implementing this project and previous relevant work
- VIII. Oversee and report to CEO on implementation of EMP provisions included in the works contract for each sub-project in the state
- IX. Liaison with state administration for land acquisition/procurement and implementation of RAP
- X. Report progress, highlighting social issues not addressed, to provide for mid-course correction.
- XI. Assist PAFs in approaching the grievance redressal mechanism
- XII. Carry out other responsibilities as required from time to time

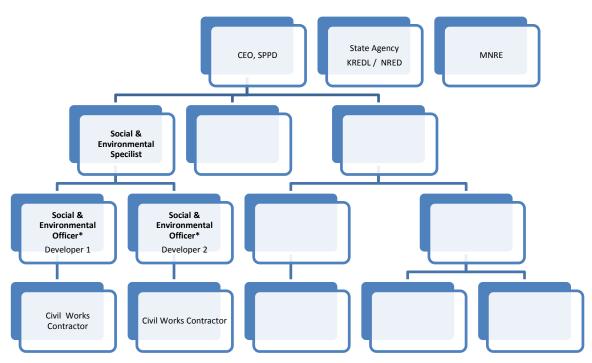


Figure 2: Proposed Organization structure for EMP/RAP Implementation²

5.2 Utilization of MNRE Grant

The expenditure on the development of a solar park will mainly constitute (a) expenditure on account of development of land and its infrastructure facilities and (b) Transmission network and Pooling Sub-station. The MNRE grant may be utilized in such a manner that higher proportion of funds are used for internal and external transmission as that is the most essential function. The SPPD, responsible for development of the solar park, shall endeavor to optimize the total expenditure to be made for the development of the solar park, such that the power generated by the prospective solar project develops is low and competitive.

5.3 Grievance Redressal Mechanism

An integrated system will be established with Grievance Redressal Cell (GRCs), with necessary officers, officials and systems, at the state as well as SPPD. Grievances if any, may be submitted through various mediums, including in person, in written form to a noted address, through a toll free phone line or through direct calls to concerned officials, and online. The Social and Environmental Expert in the SPPD team shall be responsible for coordination of grievance/complaints received. The person in-charge based on nature of complaint, will forward the same to the concerned official. A ticket or a unique number will be generated for all such call and messages. The complainant will follow up based on that unique number. All calls and messages will be responded within two weeks. If response is not received within 15 days, the complaint will be escalated to next level. The staffing of GRC will include Environmental and Social

² The developer should designate one person from core team as "Environmental and Social Officer" to discharge sub-project responsibilities on ESMP compliance.

Nodal officer of SPPD; and two representatives from community / beneficiary / affected persons. The head of the cell will be a person of repute but not continuing in the government service.

A project affected person however is free to approach judiciary system of the country if he or she is not satisfied with the verdict given by GRC.

5.4 Monitoring and Reporting

The SPPD through the respective developers will monitor all the sub projects to ensure conformity to the requirements of the ESMF. The monitoring will cover all stages of planning and implementation. The monitoring will be carried out through the environmental and social safeguard compliance reports that will form a part of Monthly Progress Reports (MPR) for all sub projects and regular visits by the environmental and social specialists of the SPPD.

The SPPD will review these evaluation reports and identify technical, managerial, policy or regulatory issues with regards to the compliance of the RAP reports. The identified technical issues will be duly incorporated. Policy and regulatory issues will be debated internally by SPPD and the need for appropriate interventions will be determined. These interventions could include appropriate revision of ESMF document / R&R Policy in consultation with the Bank or suitable analytical studies to influence policy or programs of the state, if found necessary / warranted.

An external evaluation of the RAP implementation prepared for sub projects will also be undertaken twice during the implementation of the project – midterm and at the end of the implementation as per the terms of reference. During implementation, meetings will be organized by SPPD inviting all PIUs for providing information on the progress of the project work.

Project monitoring will be the responsibility of the SPPD who will submit Monthly Progress Reports. The reports will compare the progress of the project to targets set up at the commencement of the project

Tables 2 below present the Mitigation, Monitoring, Responsibility and Timeline for Environmental and Social Impacts

S. No	Impact / Issues	Monitoring Measures	Responsible Agency
Enviror	mental Indicators		
1	Disposal of Batteries	Number of batteries disposed / new installed	Developer
2	Handling / disposal of defected PV panels	Number of panels defective / number of panels replaced	Developer
3	Extent of wash water reuse / recycling	Water used on a monthly basis / wash water recycled on a monthly basis	Developer
4	Use of PPE on site	PPE available on site /	Developer
5	Regulatory Compliance	Quarterly and annual compliance reports submitted to the regulatory authority / SPPD	Developer

Table 1: Environmental and Social Monitoring Indicators

S. No	Impact / Issues	Monitoring Measures	Responsible Agency
Social I	ndicators		
1	Land acquisition	Regular internal monitoring by the SPPD and periodic evaluation	SPPD
2	Acquisition of house/ structure	Regular internal monitoring by the SPPD and periodic evaluation	SPPD
3	Loss of livelihood or source of livelihood	Regular internal monitoring by SPPD; midterm and end term evaluation	SPPD to hire evaluation consultants
4	Loss of access to private and / or common property	Regular internal monitoring by SPPD ; midterm and end term evaluation	SPPD to hire evaluation consultants
5	Displacement of Non-Titleholders	Regular internal monitoring by the SPPD a midterm and end term evaluation	SPPD to hire evaluation consultants
6	IPDP (If applicable)	Regular internal monitoring by the social development professional of SPPD. midterm and end term evaluation	SPPD to hire evaluation consultants
7	Gender Action Plan	Regular internal monitoring by the social development professional of SPPD. midterm and end term evaluation	SPPD to hire evaluation consultants

The list of above mentioned impact performance indicators will be used to monitor project objectives as depicted in table below along with the milestones. The socio-economic survey conducted will provide the benchmarks for comparison.

Table 2: Project Objectives as per milestone

Milestones	Objectives	Process	Responsibilit y	Decision/Target / Deliverable
1. Sub- Project Screenin g	To approve categorization of proposed sub-projects	 a. Discussions with implementing agencies to Assess eligibility of project based on project's priorities Identify scope of project report b. Consultants to submit report along with proposed impact categorization 	SPPD	 Decision to proceed or not Identification of impact category

Milestones	Objectives	Process	Responsibilit y	Decision/Target / Deliverable
2. Sub- Project Appraisal	To ensure satisfactory compliance with ESMF	Detailed appraisal (including EIA & EMP, RAP, GAP and IPDP where relevant), including site visits/ investigations if necessary assess suitability of site, adequacy of safeguard measures, risk analysis and regulatory clearances). DPR to be submitted for approval	SPPD	Review report and decide to - accept - accept with modifications - reject and instruct to resubmit
3. Approval	Approvals from SPPD	a. Project Implementation Agency to recommend to SPPDb. SPPD to review and approve	SPPD	 Approval of RAP, GAP and IPDP if required
4. Impleme ntation of EMP, RAP, GAP and IPDP Monitori ng and Review	Ensure Implementatio n of agreed RAP, GAP and IPDP where applicable)	 a. Prepare quarterly progress reports b. Schedule field visits as required c. Midterm and end term evaluation 	SPPD	Quarterly Progress Report

The table 4 below gives the assessment methodology and the expected outputs for the various stages of implementation process. Table 3: Monitoring Project Implementation Process, Input and Output

Progress	Assessment Methodology	Expected Output			
Implementation Process	Implementation Process				
Notices under land acquisition process	Structured Schedule, informal and formal discussion	Timely notices to the affected families			
Dissemination of information on project and social issues	Check the registers with the SPPD for queries	Adequate knowledge on project and its various components			
Consultations conducted under the project with PAPs and others	Check the minutes of meetings registers with the PAPs. Verify copies on agreements made on issues raised and discussed.	Awareness and information on the project and participation in the project.			
Consultations on R&R Policy and Distribution of R&R Policy of the project	Check the registers with the PAPs. Verify copies on agreements made on issues raised and discussed.	Awareness on R&R Benefits			
Information on modes of valuation of assets, payment schedules and disbursement modes	Check the registers with the PAPs. Structured Schedule, informal and formal discussion	Awareness on methods of valuation, satisfaction with the			

Progress	Assessment Methodology	Expected Output	
		payment schedules, disbursement modes	
Needs assessment and training programs for income generation	Structured Schedule, informal and formal discussion	Awareness and satisfaction with the training programs for income restoration	
Services of the NGO	Structured Schedule, informal and formal discussion	Proper knowledge, guidance and assistance in rehabilitation and resettlement	
Functioning of the Grievance redressal mechanism	Check the records of the NGO and SPPD for the complaints registered	Appropriate and timely action on the grievances of the affected people	
Consultations for the identification of the Community Development Works	Check the minutes of meetings registers with the PAPs. Verify copies on agreements made on issues raised and discussed.	Participation in decision making process and satisfaction with the identified areas of development	
Financial progress			
Amount disbursed for acquisition of land, structure, trees, etc.	Structured Schedule, informal and formal discussion	PAPs purchased land equivalent or more than land loss of same quality	
Amount disbursed R&R assistance.	Structured Schedule, informal and formal discussion	New house constructed, new land purchased, new productive assets purchased, created some income source to offset the loss of income	
Amount disbursed for extension of development programmes, training and capacity building.	Structured Schedule, informal and formal discussion	Alternative income restoration programs initiated and lost income restored.	
Fees paid to NGO for implementation of RAP and consultants for M&E activities	Structured Schedule, informal and formal discussion	Timely implementation	
Amount disbursed for training of implementation staff of SPPD and PIU	Formal Discussion with concerned officials	Better implementation and coordination	
Physical progress			
Total land Acquired	Structured Schedule	Progress of land acquisition	
Number of PAFs relocated	Structured Schedule	Progress of resettlement	

Progress	Assessment Methodology	Expected Output
Number of PAFs R&R Assistance	Structured Schedule	Progress on Economic Rehabilitation
Social well being		
Area and type of house and facility in case of relocation	Core Rapid Appraisal	Resettlement
Health conditions, morbidity and mortality rates, if relocated or pollution due to construction	Structured Schedule	Social well being
Communal harmony if relocated in another revenue village	Rapid Appraisal	Resettlement
Women time disposition and decision making power for women groups trained for alternative livelihood	Participatory Appraisal	Women Empowerment
Increase in literacy level due to project intervention; drinking water, schools, health facilities, and other community infrastructures if relocated and enhanced by the project	Structured Schedule	Social well and improved social status.
Increased annual Household income and expenditure due to project intervention	Structured Schedule	Improved income Economic Status

5.5 Budget

Each sub-project will have its own budget for implementation of EMP, RAP and IPDP. The budget heads for planning and pre-construction stage will include cost towards

- i. compensation for immovable properties;
- ii. R&R assistances;
- iii. cost towards relocation facilities if required;
- iv. training and capacity building;
- v. implementation arrangement;
- vi. monitoring and evaluation and
- vii. cost incurred by SPPD for day to day expenses on R&R issues.
- viii. Environmental & Social plan preparation

The budget heads for construction and O&M stage will include cost towards

- i. Wash Water treatment and reuse
- ii. Personal protective equipment
- iii. Health & Safety
- iv. Hazardous material transportation & disposal

5.6 Capacity Building Requirements / Activities

An assessment of the current institutional structure of the SPPD need to be reviewed to understand the capacity w.r.t to ensuring environmental and social management measures compliance. Being a new entity, the SPPD staff would need additional training in the management of environmental and social issues of the program.

The SPPD in coordination with the educational / research institutions in the country who have substantial experience in the environmental and social management sector including a good understanding of the WB/IFC safeguard requirements, shall conduct classroom training sessions for all staff likely to be involved in sub-project planning & implementation. The Social and Environmental Officer can also be one of the resource persons for conducting such training programs.

The training will focus on the environmental and social issues. The contents will basically focus on the ESMF concept, regulatory requirements, Environment and Social priority issues, project cycle, outline of EA / SA and report formats in respect of the Environmental aspects. In respect of social aspects the course content will focus on the R & R policies and procedures, Land Acquisition process, identification of PAPs, Social entitlement frameworks, social assessment, RP techniques, and Risk Assessment and management skills.

The typical training modules for formal class room training could cover the following:

- i. **Module 1 ESMF Profile** (Concept, regulatory requirements, ESA, reports and formats)
- Module 2 Environmental Assessment Process (Environmental Laws & Regulations, EIA process, Identification of Environmental Impacts, Impact Identification Methods, Identification Mitigation Measures, Formulation of Environmental Management Plan, Implementation and Monitoring, Institutional Mechanism)
- iii. **Module 3 Social Assessment Process** (Description of NGRBA program R&R, tribal and gender frameworks and procedures and National requirements, LA process, Necessity for RAP and its preparation process)

The program should be structured in such a way that it clearly brings out the value addition and enhancement benefits of proper management of environmental and social issues.