

# Resettlement Framework

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## India: Demand-Side Energy Efficiency Sector Project

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## **CURRENCY EQUIVALENTS**

(as of 24 June 2016)

Currency unit	–	Indian Ruppee(INR)
INR 1.00	=	\$1.47
\$1.00	=	68.1

## **NOTES**

- (i) The fiscal year (FY) of the Government of India and its agencies begins on 1 April. "FY" before a calendar year denotes the year in which the fiscal year starts, e.g., FY2016 begins on 1 April 2016 and ends on 31 March 2017.
- (ii) In this report, "\$" refers to US dollars.

## ABBREVIATIONS

ADB	:	Asian Development Bank
APs	:	Affected Persons
DSM	:	Demand Side Management
DELP	:	Domestic Efficient Lighting program
DC	:	District Collector
EA	:	Executing Agency
EE	:	Energy Efficiency
EESL	:	Energy Efficiency Services Limited
ESCO	:	Energy services company
ESMU	:	Environment and Social Management Unit
FGD	:	Focus Group Discussions
GOI	:	Government of India
GEF	:	Global Environment Facility
GRM	:	Grievance Redress Mechanism
IP	:	Indigenous People
IR	:	Involuntary Resettlement
LED	:	Light-emitting diode
EA	:	Executing Agencies
LAA	:	Land Acquisition Act 1894, as amended in 1984
LAO	:	Land Acquisition Officer
MRM	:	Management Review Meeting
NGOs	:	Non-Government Organizations
PMU	:	Project Management Unit
PIU	:	Project Implementation Unit
RF	:	Resettlement Framework
RFCT in LARR	:	Right to Fair Compensation and Transparency in Land Acquisition, Rehabilitation and Resettlement Act (RFCT in LARR), 2013
RP	:	Resettlement Plan
SCs	:	Scheduled Castes
RF	:	Resettlement Framework
SMS	:	Social Management System
SIA	:	Social Impact Assessment
SPS	:	Safeguard Policy Statement, 2009
STs	:	Scheduled Tribes
ULB	:	Urban Local Body

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## **Table of Contents**

		<b>Page</b>
<b>1</b>	<b>Project Description</b>	<b>1</b>
<b>2</b>	<b>Sector Loan and Social Safeguard</b>	<b>2</b>
<b>3</b>	<b>Resettlement Framework</b>	<b>3</b>
<b>4</b>	<b>Policy and Legal framework</b>	<b>4</b>
<b>5</b>	<b>Principles</b>	<b>9</b>
<b>6</b>	<b>Entitlement, Assistance and Benefit</b>	<b>10</b>
<b>7</b>	<b>Institutional Arrangements</b>	<b>16</b>
<b>8</b>	<b>Consultation, Disclosure and Grievances</b>	<b>16</b>
<b>9</b>	<b>Resettlement Budget</b>	<b>17</b>
<b>10</b>	<b>Implementation Schedule</b>	<b>17</b>
<b>11</b>	<b>Monitoring and Reporting</b>	<b>18</b>



## 1. PROJECT DESCRIPTION

1. The Asian Development Bank (ADB) will provide a loan to Energy Efficiency Services Limited (EESL), to be guaranteed by the Government of India, to support demand-side energy efficiency investments in several Indian states. EESL was set up as a government-owned energy services company (ESCO) to facilitate energy efficiency investments, including work designing, implementing, monitoring and investing in energy efficiency projects. ADB's loan will cover high-priority areas under EESL's ESCO business: (i) more efficient light-emitting diode (LED) municipal street lighting equipped with remote operating technology; (ii) more efficient domestic lighting through replacement of incandescent lights with LEDs; and (iii) more energy efficient agricultural water pumps. EESL estimates that energy savings of 80% can be achieved in the domestic lighting programs and 30% can be achieved with more efficient pumps. Savings will result in lower electricity bills for consumers, peak power shaving, and reduced commercial losses for distribution companies. The project will also demonstrate the potential for energy efficiency achievements and scalability of the ESCO model for realizing energy savings in India. ADB will also explore a possibility of grant from the Global Environment Facility (GEF) to support expansion of EESL's ESCO business to new energy efficient technologies.

2. The Project will be funded through the sector loan modality of about \$200M to support the demand side energy efficiency investments in several states of India. The initial target states will include Maharashtra, Rajasthan, Goa, Telangana, Karnataka, Andhra Pradesh, and Uttar Pradesh. The executing agency (EA) will be the Energy Efficiency Services Limited (EESL) which was set up by the Ministry of Power as a joint venture of four national public sector enterprises, to operate as an energy services company (ESCO) to facilitate energy efficiency investments, including work designing, implementing, monitoring and investing in energy-efficiency projects.

3. Project components will cover the following high-priority areas of EESL:

- (i) Municipal street lighting efficiency;
- (ii) Efficient domestic lighting and appliance programme; and,
- (iii) Agriculture demand side management (AgDSM).

4. These components are expected to have the following outputs:<sup>1</sup>

- (i) More efficient light-emitting diode (LED) municipal street lighting equipped with remote operating system in Rajasthan, Maharashtra, Goa, Telangana - 1.5 million units
- (ii) More efficient household appliances in Rajasthan, Maharashtra, Andhra Pradesh, Uttar Pradesh - 42 million units
  - Domestic efficient LED Lamps (DELP) to replace incandescent lamps- 37 million units
  - Efficient ceiling fans - 1.2 million units
  - Efficient Tube Lights - 3.8 million units (to be financed by EESL)

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<sup>1</sup> These figures and the states are to be updated in consultation with EESL during further processing of the project and implementation.

- (iii) More energy efficient agriculture water pumps in Rajasthan, Andhra Pradesh, Karnataka - 225,000 units

5. The breakdown of the program is presented below:

No.	Component	Quantity (units)				
		2017-2018	2018-2019	2019-2020	2020-2021	Total
1	Street lighting	314,170	471,250	471,250	314,170	1,570,840
2	Domestic					
	DELP (bulbs)	7,460,820	11,191,240	11,191,240	7,460,820	37,304,120
	Ceiling Fan	251,400	377,100	377,100	251,400	1,257,000
	Tubelight	768,570	1,152,860	1,152,860	768,570	3,842,860
3	AgDSM	48,910	73,360	73,360	48,910	244,540

Source: EESL, May 2016

## 2. SECTOR LOAN AND SOCIAL SAFEGUARD

### 2.1 Anticipated Social Impacts

6. Given the nature of the project, it is not expected to cause any involuntary resettlement impacts nor any indigenous peoples impacts. No private land acquisition and government land transfer is necessary and temporary impacts are unlikely to be envisaged either. Additionally, the people will receive positive benefit from the energy efficient investment project through saving energy and increasing income. The project is classified as “C” for both involuntary resettlement, and indigenous peoples under ADB’s SPS 2009. The selection and screening criteria for the subproject is presented in this resettlement framework (RF) and it will be observed by EESL to ensure that there is no physical and/or economic displacement.

### 2.2 Due Diligence

7. The project is classified as category C for both involuntary resettlement and indigenous peoples without having any negative impacts on titled or non-titled holders including indigenous peoples and livelihood of them. The project activities are not expected to cause any physical and/or economic displacement. For the subproject selection and implementation, resettlement framework (RF) has been prepared including involuntary resettlement (IR) and indigenous peoples (IP) checklists. Stakeholder consultations and due diligence for EESL and each project component were undertaken and the result have been provided in Due Diligence Report (DDR) in **Appendix1**.

### 2.3 Sub Project Selection

8. Sub project selection or inclusion/exclusion criteria used for screening is as follows:



- (i) The project should not have any adverse social impacts requiring a sub project to be categorized as category A or B under ADB's safeguard policy 2009. EESL should confirm clear information provided through IR and IP categorization checklists in **Annexures 1**. If a sub project can have any unexpected adverse impact, the sub project will be implemented following the sections from 4 to 12 of this RF<sup>2</sup>.
- (ii) EESL and/or project counterparts<sup>3</sup> must acquire proper approval from proper national and provincial authorities in charge, and be designed, constructed, and operated in accordance with relevant national and provincial social laws and regulations.
- (iii) The project must not involve any land acquisition or demolition of residential or private commercial buildings.
- (vi) EESL and/or project counterparts should be in compliance with relevant domestic occupational health and safety standards.
- (v) The project should not cause any labor retrenchment and/or redundancies.
- (vi) The project must not have any adverse impacts on schedule tribes.
- (vii) Inclusive gender target (in proportion to their local representation and/or population) needs to be maintained for applicable sub projects.

### **3. RESETTLEMENT FRAMEWORK**

#### **3.1 Resettlement Framework**

9. The proposed investment is to promote market transformation for energy efficiency (EE). The project will only support the sector lending with minimal or no adverse social safeguard impacts. EESL has prepared a Resettlement Framework (RF) to ensure that relevant social safeguards are included in selection and/or exclusion criteria of the recipients of sector lending. Based on the RF, EESL and counterparts will undertake adequate due diligence and impacts avoidance measures in accordance with Indian law and regulations and ADB's Safeguard Policy Statement (SPS), 2009 throughout the sector loan project cycle. The RF will be disclosed on EESL and ADB website and to be revised and updated, if necessary.

#### **3.2 Procedures for Safeguard Compliance for category C Projects**

10. EESL will take responsibility to ensure safeguard compliance as follows:

- (i) Designate a manager responsible for safeguard compliance and ensure safeguard compliance of sub projects implemented by project counterparties;
- (ii) Screen potential project counterparties to ensure that only eligible agencies will be involved in;
- (iii) Prepare and submit IR and IP categorization checklists of the sub projects according to Annexure 1
- (iv) Monitor performance of the project counterparties and the sub projects and provide safeguard information to ADB.

<sup>2</sup> As the project is to retrofit lights and replace appliances, no involuntary resettlement is expected. The sections from 4 to 12 of this RF will only be applicable, in case the sub project can have any unexpected involuntary resettlement impacts. As for example, i) the street lighting program envisages installation of lamp posts and overhead/underground cabling etc; (ii) DELP converges with national rural electrification; and/or (iii) replacement of agricultural pump set is associated with grid improvement.

<sup>3</sup> For the implementation of the project such as selecting location and collecting bills, distribution companies, urban local bodies, state government and other relevant authorities will be involved in.

11. ADB safeguard requirements for information disclosure, consultation and participation, and grievance redress mechanism are addressed by EESL and/or project counterparties. The designated manager of EESL will ensure that adequate resources have been committed to allow for effective safeguard undertaking. The safeguard manager will also ensure that the project counterparties will engage qualified staff for safeguard.

12. Grievances is addressed by grievance redress mechanism (GRM) of each project counterparty through a web-based platform to provide a systematic, transparent, and timely process for receiving, evaluating, and addressing project-related complaints and grievances. The GRM will be open to all project beneficiary people, regardless of the nature of their complaint and should be gender responsive, culturally appropriate, and readily accessible to concerned people at no costs and without retribution.

13. The EESL will maintain regular communications with the project counterparties and provide safeguard information to ADB through quarterly project progress reports and the other social monitoring/survey reports if any.

***As the project is to retrofit lights and replace appliances, no involuntary resettlement is expected. The sections from 4 to 12 of this RF will be applicable, in case the sub project may have any unexpected involuntary resettlement impacts. For example, i) the street lighting program envisages installation of lamp posts and overhead/underground cabling etc; (ii) DELP converges with national rural electrification; and/or (iii) replacement of agricultural pump set is associated with grid improvement.***

#### **4. Policy and Legal Framework**

14. The policy framework and entitlements for the Program are based on national laws: Right to Fair Compensation and Transparency in Land Acquisition, Rehabilitation and Resettlement Act (RFCT in LARR), 2013 and ADB's Safeguard Policy Statement (SPS), 2009.

##### **4.1 Right to Fair Compensation and Transparency in Land Acquisition, Rehabilitation and Resettlement Act (RFCT in LARR), 2013**

15. This RFCT in LARR, 2013 repeals the Land Acquisition Act, 1984 and is applicable to all states in India (Except the state of Jammu and Kashmir). The RFCT in LARR was effective from January 1 2014 and all the state government is to frame Rule accordingly. The central Model Rule is being made for ensuring the smooth implementation of the central Act with regard to the consent process, the Social Impact Assessment process, the compensation mechanism and the rehabilitation and resettlement benefits enumerated under the Act. The RFCT in LARR, 2013 is a first national/central law that addresses land acquisition and rehabilitation and resettlement collectively. Establishing of a completely new Act, which was due from a long time, is a pioneering step taken by the Government of India (GoI) in providing a humane, participative, informed and transparent process for permanent/temporary land acquisition in the public interest. The aim of the Act is to bring in more transparency to the process of land acquisition, thereby bringing assurance of rehabilitation to the affected people. The Act of 2013 seeks to balance the need for facilitating land acquisition while addressing the concerns of title holders and non-title holders and those whose livelihoods are dependent on the land being acquired. The issue of who acquires land is less important than the process of land acquisition,

compensation for land acquired, and the rehabilitation and resettlement (R&R) process, package and conditions. The Act lays down procedures for estimating fair compensation of the affected families (and not just the titleholders) due to land acquisition, rehabilitation and resettlement. The Act prohibits acquisition of multi-cropped irrigated land as a special provision to safeguard food security, unless in exceptional circumstances as a demonstrable last resort<sup>4</sup>. Under the new Land Acquisition law, farmers and landowners are entitled to get compensation of up to four times of the market value for land acquired in rural areas, and two times the market value in urban areas. The law also brings transparency in the process of land acquisition and lays down measures for rehabilitation of those displaced. The aim of the Act is providing fair compensation to people whose land has been taken away for setting up the buildings or factories. Salient features of LARR, 2013 are described below.

- (i) Preliminary Investigations/Preparation of SIA/SIMP: It is mandatory under the Act to conduct a time bound Social Impact Assessment (SIA) and prepare Social Impact Management Plan (SIMP)<sup>5</sup>. No land acquisition shall be initiated unless SIA/SIMP is approved by the Expert Group. SIA shall also be conducted in a participatory manner and with all necessary public hearings, dissemination etc. duly followed.
- (ii) Preliminary Notification, Objections and Hearing: Under the Act, Preliminary Notification<sup>6</sup> shall be issued only after the approval of SIA and within 12 months from the date of SIA approval, failing which a fresh SIA/SIMP will be prepared. Preliminary Notification shall allow appropriate Government to undertake various surveys and update records, which needs to be compulsorily completed within two months. Within this period (60 days), all affected landowners/families shall be given right to raise objections in writing to the District Collector (DC) and shall get a chance to be heard in person.
- (iii) Preparation of Rehabilitation and Resettlement Scheme and its Declaration. Following Preliminary Notification, Administrator appointed for rehabilitation and resettlement shall conduct a survey, census of the affected families and prepare a draft Rehabilitation and Resettlement Scheme (RRS)<sup>7</sup>. Administrator first submits RSS to the DC and DC then to the Commissioner-Rehabilitation and Resettlement who approves the RSS in the last. The DC shall publish a summary of RSS along with Declaration under the hand and seal of Secretary to such Government or any other official duly authorized<sup>8</sup>. Declaration shall be published only after the

<sup>4</sup> Wherever such land is acquired, an equivalent area of cultural wasteland shall be developed for agricultural purposes or an amount equivalent to the value of land acquired shall be deposited with the appropriate Government for investment in agriculture for enhancing food-security. This condition has been included in the entitlement matrix. These provisions however do not apply in case of projects that are linear in nature such as railways, highways, other roads, canals, power lines etc.

<sup>5</sup> SIA shall confirm: (i) the proposed acquisition is for the public purpose and extent of land proposed is the absolute bare minimum extent needed for the project; (ii) number of affected families, displaced families; details of extent of loss and other associated social impacts; and (iii) costing for addressing estimated losses and social impacts. The SIMP shall form a part of SIA and include each component wise ameliorative measures to address land acquisition and social impacts. SIA/SIMP shall be evaluated by independent multi-disciplinary Expert Group who reserves the right to approve it.

<sup>6</sup> The preliminary notification shall include: (i) statement on project/ public purpose; (ii) reasons necessitating the land acquisition; (iii) summary of SIA; and (iv) particulars of the Administrator appointed for the purpose of rehabilitation and resettlement.

<sup>7</sup> Draft RSS shall include: (i) particulars of land and immovable property to be acquired of each affected family; (ii) livelihood losses of landowners as well as dependent landless families; (iii) list of government/public buildings and details of utilities and/or infrastructure facilities where resettlement of affected families is involved; (iv) details of common property resources being acquired; and (v) particulars of the rehabilitation and resettlement entitlements of each affected landowner and landless family and list/details of government buildings, utilities, infrastructure facilities to be provided in the area. The Administrator shall also set implementation timeline in draft RSS.

<sup>8</sup> Summary RSS shall not be published unless it is published along with Declaration.

Requiring Body deposits amount towards the cost of land acquisition<sup>9</sup>. RSS summary and Declaration shall be compulsorily made within the twelve months after the issue of Preliminary Notification. If not complied, such notification shall be considered rescinded unless land acquisition was held up on account of any stay or injunction by the order of Court.

- (iv) Public Notice and Award: Following Declaration and Requiring Body deposits amount towards the cost of land acquisition; the DC shall issue a public notice and hear objections (if any) within six months from the date of its issue. The DC shall make an award within a period of twelve months from the date of publication of the Declaration and if award is not made within that period, the entire proceedings of the acquisition of the land shall lapse.

16. The objectives of Act are as follows:

- (i) to minimize displacement and to promote, as far as possible, non-displacing or least-displacing alternatives;
- (ii) to ensure adequate rehabilitation package and expeditious implementation of the rehabilitation process with the active participation of the affected families;
- (iii) to ensure that special care is taken especially for protecting the rights of the members of the Scheduled Castes and Scheduled Tribes, and to create obligations on the State for their treatment with concern and sensitivity;
- (iv) to provide a better standard of living, making concerted efforts for providing sustainable income to the affected families;
- (v) to integrate rehabilitation concerns into the development planning and implementation process; and
- (vi) Where displacement is on account of land acquisition, to facilitate harmonious relationship between the requiring body and affected families through mutual cooperation.

17. Salient features of the LARR Act, 2013 are listed below:

- (i) The Act provides for land acquisition as well as rehabilitation and resettlement. It replaces the Land Acquisition Act, 1894 and National Rehabilitation and Resettlement Policy, 2007.
- (ii) The affected communities shall be duly informed and consulted at each stage, including public hearings in the affected areas for social impact assessment, wide dissemination of the details of the survey to be conducted for R&R plan or scheme, consultations with the Gram Sabhas and public hearings in areas not having Gram Sabhas, consultations with the affected families including women, Non-Government Organizations (NGOs), Panchayats, and local elected representatives, among others with a view to obtaining mandatory consent both for the land acquisition as well as the compensation package;
- (iii) Compensation in rural areas would be calculated by multiplying market value by up to two and adding assets attached to the land or building and adding a solatium. In urban areas it would be market value plus assets attached to the land and solatium;
- (iv) The Collector shall take possession of land only after ensuring that full payment of compensation as well as rehabilitation and resettlement entitlements are paid or

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<sup>9</sup> In full or part, as prescribed by the appropriate Government

tendered to the entitled persons within a period of three months for the compensation and a period of six months for the monetary part of rehabilitation and resettlement entitlements commencing from the date of the award. However, families will not be displaced from this land till their alternative R&R sites are ready for occupation;

- (v) The benefits to be offered to the affected families include; land-for-land, to the extent Government land would be available in the resettlement areas; preference for employment in the project to at least one person from each nuclear family subject to the availability of vacancies and suitability of the affected person; training and capacity building for taking up suitable jobs and for self-employment; preference to groups of cooperatives of the affected persons in the allotment of other economic opportunities in or around the project site; wage employment to the willing affected persons in the construction work in the project; housing benefits including houses to the landless affected families in both rural and urban areas; and other benefits;
- (vi) Financial support to the affected families for construction of cattle sheds, shops, and working sheds; transportation costs, temporary and transitional accommodation, and comprehensive infrastructural facilities and amenities in the resettlement area including education, health care, drinking water, roads, electricity, sanitation, religious activities, cattle grazing, and other community resources, etc.; Special provision for the STs and SCs include preference in land-for-land, a Tribal Development Plan (TDP) for settling land rights due, but not settled and restoring titles of the Scheduled Tribes as well as the Scheduled Castes on the alienated land by undertaking a special drive together with land acquisition;
- (vii) A strong grievance redress mechanism has been prescribed, Establishment of Land Acquisition, Rehabilitation and Resettlement Authority. The R&R Committees shall have representatives from the affected families including women, voluntary organizations, Panchayats, local elected representatives, etc. Provision has also been made for post-implementation social audits of the rehabilitation and resettlement schemes and plans;
- (viii) For effective monitoring of the progress of implementation of R&R plans, provisions have been made for a National Monitoring Committee at the Centre level, State LARR Authority, Committee constituted;
- (ix) For ensuring transparency, provision has been made for mandatory dissemination of information on displacement, rehabilitation and resettlement, with names of the affected persons and details of the rehabilitation packages. Such information shall be placed in the public domain on the Internet as well as shared with the concerned Gram Sabhas and Panchayats, etc. by the project authorities;
- (x) A Land Acquisition Rehabilitation and Resettlement Authority shall be set up by the Central Government, which will be duly empowered to exercise independent oversight over the rehabilitation and resettlement of the affected families;
- (xi) The Act also proposes amenities like schools, health centres and civic infrastructure etc. in places where project-affected people are resettled;
- (xii) No income tax shall be levied and no stamp duty shall be charged on any amount that accrues to an individual as a result of the provisions of the new law;
- (xiii) The final award has to include damage to any standing crops and trees which might have been harmed due to the process of acquisition (including the preliminary inspection).

## 4.2 ADB'S Safeguard Policy Statement (SPS), 2009

18. ADB has adopted Safeguard Policy Statement (SPS) in 2009 including safeguard requirements for environment, involuntary resettlement and indigenous people. The objectives of the Involuntary Resettlement Safeguard policy is to avoid involuntary resettlement wherever possible; to minimize involuntary resettlement by exploring project and design alternatives; to enhance, or at least restore, the livelihoods of all displaced persons in real terms relative to pre-project levels; and to improve the standards of living of the displaced poor and other vulnerable groups.

19. The involuntary resettlement safeguard covers physical displacement (relocation, loss of residential land, or loss of shelter) and economic displacement (loss of land, assets, access to assets, income sources, or means of livelihoods) as a result of (i) involuntary acquisition of land, or (ii) involuntary restrictions on land use or on access to legally designated parks and protected areas. It covers them whether such losses and involuntary restrictions are full or partial, permanent or temporary. The three important elements of ADB's SPS (2009) are: (i) compensation at replacement cost for lost assets, livelihood, and income prior to displacement; (ii) assistance for relocation, including provision of relocation sites with appropriate facilities and services; and (iii) assistance for rehabilitation to achieve at least the same level of well-being with the project as without it. The SPS gives special attention to poor and vulnerable households to ensure their improved well-being as a result of project interventions. Followings are the basic policy principle of ADB's SPS, 2009:

- (i) Identification of past, present, and future involuntary resettlement impacts and risks and determination of the scope of resettlement planning.
- (ii) Carry out meaningful consultations with affected persons, host communities, and concerned non-government organizations.
- (iii) Improvement or at least restoration of the livelihoods of all displaced persons,
- (iv) Ensure physically and economically displaced persons with needed assistance.
- (v) Improvement of the standards of living of the displaced poor and other vulnerable groups.
- (vi) Development of procedures in a transparent, consistent, and equitable manner if land acquisition is through negotiated settlement,
- (vii) Ensure that displaced persons without titles to land or any recognizable legal rights to land are eligible for resettlement assistance and compensation for loss of non-land assets.
- (viii) Preparation of a resettlement plan elaborating on displaced persons' entitlements, the income and livelihood restoration strategy, institutional arrangements, monitoring and reporting framework, budget, and time-bound implementation schedule.
- (ix) Disclosure of resettlement plan, including documentation of the consultation process in a timely manner to affected persons and other stakeholders.
- (x) Execution of involuntary resettlement as part of a development project or program.
- (xi) Payment of compensation and provide other resettlement entitlements before physical or economic displacement.
- (xii) Monitoring and assessment of resettlement outcomes, their impacts on the standards of living of displaced persons

### 4.3 Comparison of National Policy with ADB

20. The Right to Fair Compensation in Transparency in Land Acquisition, Rehabilitation and Resettlement Act, 2013' (RFCT in LARR, 2013) effective from 1st January 2014 represents a significant milestone in the development of systematic approach to address land acquisition, rehabilitation and resettlement collectively in India. The RFCT in LARR, 2013 has also laid down similar principles like ADB's SPS 2009 and focus on avoiding or minimizing involuntary impacts, if not restoring and enhancing the quality of life of affected families irrespective of title to the land.

21. The RFCT in LARR, 2013 now significantly bridges the gaps between the GoI policy and ADB's SPS, 2009. In particular, the Act require social impact assessments for projects involving land acquisition, although it would set minimum threshold of people affected for this provision to apply, while the ADB does not so require. The Act also expands compensation coverage of the principal act by requiring that the value of trees, plants, or standing crops damaged must also be included and solatium being 100 percent of the all amounts inclusive. The Act furthermore would match ADB requirements for all compensation to be paid prior to project taking possession of any land.

22. The outstanding differences between the government and ADB policy are recognition of non-titleholders and establishment of cut-off date. The RFCT in LARR, 2013 specifies that the non-titleholders residing on any land for preceding three years or more and whose primary source of livelihoods for three years prior to the acquisition is affected will be entitled for compensation and assistance as per this Act. To bring this RF in accord with ADB requirements, this RF mandates that in the case of land acquisition, the date of publication of preliminary notification for acquisition under Section 4(1) of the RFCT in LARR, 2013 will be treated as the cut-off date for title holders, and for non-titleholders such as squatters the cut-off date will be the start date of the project census survey. A comparison of Government policies (RFCT in LARR, 2013) with ADB's involuntary resettlement policy is presented in **Annexure 2**.

## 5. PRINCIPLES

23. Based on the Government's laws, RFCT in LARR, 2013, and ADB's Safeguard Policy Statement, 2009, core involuntary resettlement principles for the Program to be followed for each sub-project, are: (i) land acquisition, and other involuntary resettlement impacts will be avoided or minimized exploring all viable alternative sub-project designs; (ii) where unavoidable, time-bound resettlement plans (RPs) will be prepared if necessary and affected persons (APs) will be assisted in improving or at least regaining their pre-program standard of living; (iii) consultation with APs on compensation, disclosure of resettlement information to APs, and participation of APs in planning and implementing sub-projects will be ensured; (iv) vulnerable groups will be provided special assistance<sup>10</sup>; (v) payment of compensation to APs including non-titled persons (e.g., informal dwellers/squatters, and encroachers) for acquired assets at replacement rates; (vi) payment of compensation and resettlement assistance prior to the contractor taking physical acquisition of the land and prior to the commencement of any

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<sup>10</sup> Vulnerable groups include poor households, households headed by women, scheduled tribes and scheduled caste.

construction activities; (vii) provision of income restoration and rehabilitation; and (viii) establishment of appropriate grievance redress mechanisms.

## 6. ENTITLEMENT, ASSISTANCE AND BENEFITS

### 6.1. Entitlement Matrix

24. A detailed description of each compensation measure and assistance is provided in the entitlement matrix (Table 1). APs will be entitled to a combination of compensation measures and resettlement assistance, depending on the nature of ownership rights of lost assets and scope of the impact, including social and economic vulnerability of the APs.

**Table 1: Entitlement Matrix**

S no	Type of Loss	Application	Definition of Entitled Person	Entitlement
1	Loss of private land	Agricultural land, homestead land or vacant plot	Legal titleholders/ APs with customary land right/APs with Permit from local authority	<ul style="list-style-type: none"> <li>• Compensation at replacement value<sup>11</sup> or land-for-land<sup>12</sup> where feasible.</li> <li>• One time Resettlement allowance</li> <li>• Resettlement and rehabilitation award</li> <li>• 60 days advance notice to harvest standing seasonal crops prior to damage. If notice cannot be given, compensation for share of crop loss will be provided.</li> <li>• Additional compensation for vulnerable households.</li> <li>• Exemption from fees and taxes related to compensation</li> </ul>
			Tenants and leaseholders (whether having written tenancy/lease documents or not)/share cropper	<ul style="list-style-type: none"> <li>• Compensation for rental deposit or unexpired lease.</li> <li>• Compensation for the equal share of the crop loss between owners and sharecroppers/tenants/lease holders or as per the agreement</li> <li>• Resettlement and rehabilitation award</li> <li>• 60 days advance notice to harvest standing seasonal crops prior to damage. If notice cannot be given, compensation for share of crops will be provided.</li> <li>• Additional compensation for vulnerable households to be determined case by case basis.</li> <li>• Exemption from fees and taxes related to compensation</li> </ul>
2	Loss of	Vacant plot,	Leaseholders	<ul style="list-style-type: none"> <li>• Reimbursement of unexpired lease.</li> </ul>

<sup>11</sup> Compensation at 1 to 2 times the market value of the land, including all assets attached to the land. Market value to be multiplied by factor: "1" for land in urban area, "1" to "2" for land in rural area depending on distance from urban area. An additional "Solatium" equal to the amount of compensation (100%) for land including all attached assets.

<sup>12</sup> If land for land is offered, titles will be in the names of original landowners. Joint titles in the name of husband and wife will be offered in case of married APs. Re-titling of the remaining land will be the responsibility of the EA and will occur following land acquisition, within six months of time and in case of delay, the EA will issue interim certificate/provisional proof of the titling for the delayed period.



S no	Type of Loss	Application	Definition of Entitled Person	Entitlement
	Government land	Agricultural land and homestead land		<ul style="list-style-type: none"> <li>• Resettlement and rehabilitation award</li> <li>• 60 days advance notice to harvest standing seasonal crops prior to damage. If notice cannot be given, compensation for share of crops will be provided.</li> <li>• Additional compensation for vulnerable households to be determined case by case basis.</li> <li>• Exemption from fees and taxes related to compensation</li> </ul>
			Encroachers	<ul style="list-style-type: none"> <li>• 60 days advance notice to shift from encroached land.</li> <li>• Notice to harvest standing seasonal crops. If notice cannot be given, compensation for share of crops will be provided.</li> <li>• Additional compensation for vulnerable households to be determined case by case basis.</li> </ul>
			Squatters	<ul style="list-style-type: none"> <li>• 60 days advance notice to shift from occupied land.</li> <li>• 60 days advance notice to harvest standing seasonal crops prior to damage. If notice cannot be given, compensation for share of crops will be provided.</li> <li>• Resettlement and rehabilitation award</li> <li>• Additional compensation for vulnerable households to be determined case by case basis.</li> </ul>
			Government land without being used by anybody	<ul style="list-style-type: none"> <li>• Transfer of land through inter government department</li> <li>• Payment of land value to the concerned government departmental for transfer of ownership.</li> <li>• Further development/construction activities on government land shall comply with ADB's SPS.</li> </ul>
3	Loss of residential structure	Residential structure and other assets <sup>13</sup>	Legal titleholders	<ul style="list-style-type: none"> <li>• Replacement value of the structure and other assets (or part of the structure and other assets, if remainder is viable). Compensation will be at replacement value excluding depreciation</li> <li>• One time Resettlement allowance</li> <li>• Resettlement and rehabilitation award</li> <li>• Right to salvage materials from structure and other assets with no deductions from replacement value.</li> <li>• Additional compensation for vulnerable households.</li> <li>• Exemption from fees and taxes related to</li> </ul>

<sup>13</sup> Other assets include, but is not limited to walls, fences, sheds, wells, etc.

S no	Type of Loss	Application	Definition of Entitled Person	Entitlement
				compensation
			Tenants and leaseholders	<ul style="list-style-type: none"> <li>• Replacement value of the structure and other assets (or part of the structure and other assets, if remainder is viable) constructed by the AP. Compensated will be at replacement value excluding depreciation</li> <li>• Compensation for rental deposit or unexpired lease.</li> <li>• Right to salvage materials (of the portion constructed by tenants or leaseholders) from structure and other assets</li> <li>• One time Resettlement allowance</li> <li>• Resettlement and rehabilitation award</li> <li>• Right to salvage materials from structure and other assets with no deductions from replacement value.</li> <li>• Additional compensation for vulnerable households.</li> <li>• Exemption from fees and taxes related to compensation.</li> </ul>
			Squatters	<ul style="list-style-type: none"> <li>• Replacement cost of structure constructed by the squatter. Compensation will be at replacement value excluding depreciation</li> <li>• Right to salvage materials from structure and other assets</li> <li>• One time Resettlement allowance</li> <li>• Resettlement and rehabilitation award</li> <li>• Right to salvage materials from structure and other assets</li> <li>• Additional compensation for vulnerable households.</li> </ul>
			Encroachers	<ul style="list-style-type: none"> <li>• 60 days advance notice to shift from encroached structure.</li> <li>• Right to salvage materials from structure and other assets</li> <li>• Additional compensation for vulnerable households.</li> </ul>
4	Loss of commercial structure	Commercial structure and other assets	Legal titleholders	<ul style="list-style-type: none"> <li>• Replacement cost of the structure and other assets (or part of the structure and other assets, if remainder is viable). Compensation will be at replacement value excluding depreciation</li> <li>• One time Resettlement allowance</li> <li>• Resettlement and rehabilitation award</li> <li>• Right to salvage materials from structure and other assets with no deductions from replacement value.</li> <li>• Additional compensation for vulnerable</li> </ul>

S no	Type of Loss	Application	Definition of Entitled Person	Entitlement
				households. <ul style="list-style-type: none"> <li>Exemption from fees and taxes related to compensation</li> </ul>
			Tenants and leaseholders	<ul style="list-style-type: none"> <li>Replacement cost of part/whole of structure constructed by the tenant/leaseholder, and this will be deducted from the compensation amount of the total structure. Compensation will be at replacement value excluding depreciation.</li> <li>Compensation for rental deposit or unexpired lease.</li> <li>One time Resettlement allowance</li> <li>Resettlement and rehabilitation award</li> <li>Right to salvage materials from structure and other assets with no deductions from replacement value.</li> <li>Additional compensation for vulnerable households.</li> <li>Exemption from fees and taxes related to compensation</li> </ul>
			Squatters	<ul style="list-style-type: none"> <li>Replacement cost of structure constructed by the squatter. Compensation will be at replacement value excluding depreciation</li> <li>One time Resettlement allowance</li> <li>Resettlement and rehabilitation award</li> <li>Right to salvage materials from structure and other assets.</li> <li>Additional compensation for vulnerable households.</li> </ul>
			Encroachers	<ul style="list-style-type: none"> <li>60 days advance notice to shift from encroached structure.</li> <li>Right to salvage materials from structure and other assets</li> <li>Additional compensation for vulnerable households.</li> </ul>
5	Loss of livelihood	Livelihood	Legal titleholder/tenant/leaseholder/non-titled/employee of commercial structure, farmer/agricultural worker/artisan/small trader/self employed	<ul style="list-style-type: none"> <li>One time financial assistance</li> <li>Income restoration and training</li> <li>Additional compensation for vulnerable households.</li> <li>Consideration for project employment.</li> </ul>
6	Loss of trees and crops	Standing trees and crops	Legal titleholder/tenant/leaseholder/sharecropper/non-titled AP	<ul style="list-style-type: none"> <li>60 days advance notice to harvest standing seasonal crops prior to damage, fruits, and timber.</li> <li>Compensation for standing crops based on an annual crop cycle at market value</li> </ul>

S no	Type of Loss	Application	Definition of Entitled Person	Entitlement
				<ul style="list-style-type: none"> <li>• Compensation for trees based on timber value at market price, and compensation for perennial crops and fruit trees at annual net product market value multiplied by remaining productive years; to be determined in consultation with the Forest Department for timber trees and the Horticulture Department for other trees/crops.</li> </ul>
7	Impacts on vulnerable APs	All impacts	Vulnerable APs <sup>14</sup>	<ul style="list-style-type: none"> <li>• One time lump sum assistance</li> <li>• Vulnerable APs will receive preferential income restoration training program under the Project.</li> <li>• Consideration for project employment.</li> </ul>
8	Temporary loss of land	Land temporarily required for sub-project construction	Legal titleholders, non-titled APs	<ul style="list-style-type: none"> <li>• Provision of rent for period of occupation for legal titleholders</li> <li>• Compensation for assets lost at replacement value.</li> <li>• Restoration of land to previous or better quality</li> <li>• Additionally, Cash Compensation will be paid for the temporary damage of crop</li> </ul>
9	Loss of common resources	Common resources	Communities	<ul style="list-style-type: none"> <li>• Replacement or restoration of the affected community facilities – including public water stand posts, public utility posts, temples, shrines, etc. All community facility and utility replacement is compensated and also re-built following SPS principles and this RF.</li> </ul>
10	Any other loss not identified	-	-	<ul style="list-style-type: none"> <li>• Unanticipated involuntary impacts will be documented and mitigated based on the principles of the Resettlement Framework.</li> </ul>

## 6.2 Valuation of Assets

25. Land surveys for determining the payment of compensation would be conducted on the basis of updated official records and ground facts. The land records containing information like legal title, and classification of land will be updated for ensuring adequate cost compensation and allotment of land to the entitled displaced persons. In cases of areas under the district council/village council in tribal areas, where official land records don't exist, formal land/property boundaries of private property owned by the tribal households can be determined through the process of community consultation and discussion with village head and village council members. Based on such information, land can be classified and land record can be updated and compensation assessment can be made. In the states where the district council is under operation, although the land is notified from the district collector's/ deputy commissioner's office, the verification of ownership is done by the district/village council in consultation with the village

<sup>14</sup> Vulnerable groups include poor households, households headed by women, scheduled tribes and scheduled caste. Poor households will be identified as per the BPL card issued by the government. In addition international standard of poverty level will also be taken in to consideration for defining poverty level especially the income level. All the vulnerable groups will be provided with one time vulnerability allowance.

people and assessment of compensation also done by the revenue officials based in the district council. After determination of ownership and compensation amount the same is sent to the district collector/deputy commissioner. Records as they are on the cut-off date will be taken into consideration while determining the current use of land. The uneconomic residual land remaining after land acquisition will be acquired as per the provisions of RFCT in LARR Act, as the case may be. The owner of such land/property will have the right to seek acquisition of his entire contiguous holding/ property provided the residual land is less than the average land holding of the district. The methodology for verifying the replacement cost for each type of loss will be calculated as per the provision made in the RFCT in LARR.

### **6.3 Resettlement Plan Preparation**

26. The EA (EESL), through its Project Management Unit (PMU) and its respective project counterparties will be responsible for preparing resettlement plans (RPs) if there are any unexpected impacts. Social Impact Assessment (SIA) will be undertaken to determine the magnitude of resettlement and prospective losses, identify vulnerable groups for targeting, ascertain costs of resettlement, and prepare a rehabilitation program for implementation. A census survey and socio economic survey will be carried out to register and document the status of potentially affected persons within sub-project area. It will be used as a benchmark for monitoring the socio-economic status of APs. The survey will also collect gender-disaggregated data to address gender issues in resettlement.

27. The RPs will include the census of APs, and their entitlements to restore losses, institutional mechanisms and schedules, budgets, assessment of feasible income restoration mechanisms, grievance redress mechanisms, and participatory results monitoring mechanisms. The RP should be broadly structured in the following manner:

- (i) Scope of Land Acquisition and Resettlement
- (ii) Socio-economic Information
- (iii) Objectives, Policy Framework, and Entitlements
- (iv) Gender Impact and Mitigation Measures
- (v) Information Dissemination, Consultation, Participatory Approaches, and Disclosure Requirements
- (vi) Grievance Redress Mechanisms
- (vii) Relocation of Housing and Settlements
- (viii) Compensation, Relocation, and Income Restoration
- (ix) Institutional Framework
- (x) Resettlement Budget and Financing
- (xi) Implementation Schedule
- (xii) Monitoring and Reporting

28. RPs will be prepared in consultation with APs and disclosed according to Indian national policy, ADB's Safeguard Policy Statement (SPS) 2009 and the other social safeguard guidelines. The EA will submit the RPs ADB.

## 7. INSTITUTIONAL ARRANGEMENTS

29. Project Management Unit (PMU) is to be established at EESL which will responsible for implementing the sector loan and is also responsible for the preparatory work for the proposed program. For subproject, PMU will do the overall coordination, preparation, planning, implementation, financing and monitoring. Further details on agencies responsible for RP activities are in Table 2.

**Table 2: Institutional Roles and Responsibilities for Resettlement activities**

Activity	Responsible Agency
<b>Sub-project Initiation Stage</b>	
Finalization of locations for sub-projects	EESL/PMU/Counterparties
Disclosure of proposed land acquisition and sub-project details by issuing Public Notice	EESL/PMU/Counterparties
Meetings at community/household level with APs	EESL/PMU/Counterparties
<b>RP Preparation and Updating Stage</b>	
Conducting discussions/meetings/consultation with APs and other stakeholders	EESL/PMU/Counterparties
Fixing compensation for land/property with titleholders	EESL/PMU/Counterparties
Finalizing entitlements and rehabilitation packages	EESL/PMU/Counterparties
Disclosure of final entitlements and rehabilitation packages	EESL/PMU/Counterparties
Review and disclose of RP	EESL/PMU/Counterparties /ADB
<b>RP Implementation Stage</b>	
Implementation of proposed rehabilitation measures	EESL/PMU/Counterparties
Consultations with APs during rehabilitation activities	EESL/PMU/Counterparties
Grievances redress	EESL/PMU/Counterparties
Monitoring	EESL/PMU/Counterparties

ADB-Asian Development Bank, EESL= Energy Efficiency Services Limited, AP-affected person, EA-Executing Agency, GRC-Grievance Redress Committee, RP-Resettlement Plan,

## 8. CONSULTATION, DISCLOSURE AND GRIEVANCE

### 8.1 Consultation

30. Stakeholder consultations will be done during the entire project cycle, i.e., preparation, implementation and post implementation. During the preparatory stages, consultations need to be carried out with various concerned government officials and local communities as part of the social study in order to gather their views on the proposed program. Additionally, focused group discussions are also required at the project influence areas. The EA and project counterparts will ensure that APs and other stakeholders are informed and consulted about the sub-project, its impact, their entitlements and options, and allowed to participate actively in the development of the sub-project.

31. The key stakeholders to be consulted during sub-project preparation and implementation includes:

- (i) all APs, including vulnerable households;
- (ii) program beneficiaries;
- (iii) host populations in resettlement sites (if any);

- (iv) elected representatives, community leaders, and representatives of community-based organizations;
- (v) local NGOs;
- (vi) local government and relevant government agency representatives; and
- (vii) project staff.

## **8.2 Disclosure**

32. The EA and the project counterparties will conduct consultations and disseminate information to APs. The RF and RPs will be translated into the local language and made publicly available at offices of the: (i) sub project site; (ii) relevant project counterparts; and (iii) EESL/PMU. The cut-off-date will be disclosed to the APs through local newspaper and the EA or project counterparties will provide notice in advance in village panchayat/municipalities for non-titleholders during the project surveys.

## **8.3 Grievance Redress Mechanism**

33. Efficient Grievance redress mechanism will be developed to assist APs and resolve their queries and complaints. Firstly, field officers of project counterparts will receive grievances of APs. Grievances not redressed by the project counterparts (field level) will be brought to the Grievance Redress Committee (GRC) which shall be established. The GRC will have representatives from APs, EESL/PMU, project counterparts, district magistrate/commissioner, local administration, revenue authority and local community. The main responsibilities of the GRC are to: (i) provide support to APs on problems arising from land/property acquisition; (ii) record AP grievances, categorize, and prioritize grievances and resolve them; (iii) immediately inform the PMU of serious cases; and (iv) report to APs on developments regarding their grievances and decisions of the GRC and the PMU. Other than disputes relating to ownership rights under the court of law, GRC will review grievances involving all resettlement benefits, compensation, relocation, replacement cost and other assistance. Records will be kept of all grievances received including: contact details of complainant, date the complaint was received, nature of grievance, agreed corrective actions and the date these were effected, and final outcome. The proposed mechanism does not impede access to the country's judicial or administrative remedies. The AP has the right to refer the grievances to appropriate courts of law at any stage of the process.

## **9. RESETTLEMENT BUDGET AND FUND FLOW MECHANISM**

34. Detailed budget estimates for involuntary resettlement will be conducted for each RP if necessary. It will be included in the overall sub-project estimate. The budget will include i) detailed costs of land acquisition, relocation, and livelihood and income restoration and improvement, ii) source of funding, iii) arrangements for approval, and iv) the flow of funds and contingency arrangements.

## **10. IMPLEMENTATION SCHEDULE**

35. All land acquisition, resettlement, and compensation for a sub-project will be completed before physical construction. The implementation of the RP will include: (i) identification of cut-off-date and notification, (ii) verification of losses and extent of impacts, (iii) finalization of entitlements and distribution of identity cards, (iv) consultations with APs on their needs and

priorities, and (v) resettlement, provision of compensation and assistance, and income restoration for APs.

## **11. MONITORING AND REPORTING**

36. Monitoring will be the responsibility of the EA and project counterparties. The EESL/PMU monitoring will include: (i) administrative monitoring: daily planning, implementation, feedback and trouble shooting, individual AP file maintenance, and progress reports; (ii) socio-economic monitoring: baseline information for comparing AP's socio-economic conditions, evacuation, demolition, salvaging materials, community relationships, dates for consultations, and number of appeals placed; and (iii) impact evaluation monitoring: income standards restored/improved, and socioeconomic conditions of the affected persons. Monitoring reports will be provided by the PMU to ADB. A sample monitoring format is provided in **Annexure 3**.



## **ANNEXURE 1: IR and IP Categorization Checklists**

### **A. SCREENING QUESTIONS FOR INVOLUNTARY RESETTLEMENT CATEGORIZATION**

<b>Probable Involuntary Resettlement Effects*</b>	<b>Yes</b>	<b>No</b>	<b>Not Known</b>	<b>Possible</b>	<b>Remarks</b>
Will the project include any physical construction					
Does the project include upgrading or rehabilitation of existing physical facilities?					
Are any project effects likely leads to loss of housing, other assets, resource use or incomes/livelihoods?					
Is land acquisition likely to be necessary?					
Is the site for land acquisition known?					
Is the ownership status and current usage of the land known?					
Will easements be utilized within an existing Right of Way?					
Are there any non-titled people who live or earn their livelihood at the site or affected area?					
Will there be loss of housing? If yes, please specify the impact					
Will there be loss of agricultural plots? If yes, please specify the impact					
Will there be losses of crops, trees, and fixed assets? If yes, please specify the impact					
Will there be loss of businesses or enterprises? If yes, please specify the impact					
Will there be loss of incomes and livelihoods? If yes, please specify the impact					
Will there be any impact on vulnerable households (e.g poor, female headed, disabled and etc)? If yes, please specify the impact					
Will people lose access to facilities, services, or natural resources?					
Will any social or economic activities be affected by land use-related changes?					

**After reviewing the answers above, EESL/PMU confirms that the proposed subproject/component category as follows:**

- ☐ Category A, Significant IR impact, a full Resettlement Plan is required.
- ☐ Category B, No significant IR impact, a Resettlement Plan is required.
- ☐ Category C, No IR impact, no report is required.

**B. SCREENING QUESTIONS FOR INDEGINIOUS PEOPLES CATEGORIZATION**

<b>KEY CONCERNS</b> (Please provide elaborations on the Remarks column)	<b>YES</b>	<b>NO</b>	<b>NOT KNOWN</b>	<b>Remarks</b>
<b>A. Indigenous Peoples Identification</b>				
1. Are there socio-cultural groups present in or use the project area who may be considered as "tribes" (hill tribes, schedules tribes, tribal peoples), "minorities" (ethnic or national minorities), or "indigenous communities" in the project area?				
2. Are there national or local laws or policies as well as anthropological researches/studies that consider these groups present in or using the project area as belonging to "ethnic minorities", scheduled tribes, tribal peoples, national minorities, or cultural communities?				
3. Do such groups self-identify as being part of a distinct social and cultural group?				
4. Do such groups maintain collective attachments to distinct habitats or ancestral territories and/or to the natural resources in these habitats and territories?				
5. Do such groups maintain cultural, economic, social, and political institutions distinct from the dominant society and culture?				
6. Do such groups speak a distinct language or dialect?				
7. Has such groups been historically, socially and economically marginalized, disempowered, excluded, and/or discriminated against?				
8. Are such groups represented as "Indigenous Peoples" or as "ethnic minorities" or "scheduled tribes" or "tribal populations" in any formal decision-making bodies at the national or local levels?				
<b>B. Identification of Potential Impacts</b>				
9. Will the project directly or indirectly benefit or target Indigenous Peoples?				

<b>KEY CONCERNS</b> (Please provide elaborations on the Remarks column)	<b>YES</b>	<b>NO</b>	<b>NOT KNOWN</b>	<b>Remarks</b>
10. Will the project directly or indirectly affect Indigenous Peoples' traditional socio-cultural and belief practices? (e.g. child-rearing, health, education, arts, and governance)				
11. Will the project affect the livelihood systems of Indigenous Peoples? (e.g., food production system, natural resource management, crafts and trade, employment status)				
12. Will the project be in an area (land or territory) occupied, owned, or used by Indigenous Peoples, and/or claimed as ancestral domain?				
<b>C. Identification of Special Requirements</b> <i>Will the project activities include:</i>				
13. Commercial development of the cultural resources and knowledge of Indigenous Peoples?				
14. Physical displacement from traditional or customary lands?				
15. Commercial development of natural resources (such as minerals, hydrocarbons, forests, water, hunting or fishing grounds) within customary lands under use that would impact the livelihoods or the cultural, ceremonial, spiritual uses that define the identity and community of Indigenous Peoples?				
16. Establishing legal recognition of rights to lands and territories that are traditionally owned or customarily used, occupied or claimed by indigenous peoples?				
17. Acquisition of lands that are traditionally owned or customarily used, occupied or claimed by indigenous peoples?				

**After reviewing the answers above, EESL/PMU confirms that the proposed subproject/component category as follows:**

- ☐ Category A, Significant IP impact, a Framework and a full IP Plan are required.
- ☐ Category B, No significant IP impact, a Framework and an IP Plan are required.
- ☐ Category C, No IR impact, no report is required.

## **ANNEXURE 2: Comparison between National Policy and ADB SPS 2009**

<b>SNo</b>	<b>ADB Safeguard Requirement as SPS, 2009</b>	<b>RFCT in LARR Act, 2013 and its Compliance with ADB's SPS,2009</b>	<b>Remarks, and provisions in RFCT in LARR Act, 2013</b>	<b>Measures to bridge the Gap</b>
	<b>Objectives</b>			
1	Avoid involuntary resettlement wherever feasible	Complied		-
2	If unavoidable, minimize involuntary resettlement by exploring project and design alternatives	Complied		-
3	To enhance, or at least restore, the livelihoods of all displaced persons in real terms relative to pre-project levels	Complied		-
4	To improve the standards of living of the displaced poor and other vulnerable groups.	Complied		-
	<b>Policy Principles</b>			
5	Screen the project early on to identify past, present, and future involuntary resettlement impacts and risks.	Complied	<ul style="list-style-type: none"> <li>While the policy does not specify any requirement for screening of the project at an early stage for resettlement impacts and risks, it requires carrying out social impact assessment before any proposal for land acquisition (section-16).</li> </ul>	<ul style="list-style-type: none"> <li>Screening of all sub-projects in line with the IR checklist of ADB, towards enabling identification of the potential resettlement impacts and associated risks.</li> </ul>
6	Determine the scope of resettlement planning through a survey and/or census of displaced persons, including a gender analysis, specifically related to resettlement impacts and risks	Complied	<ul style="list-style-type: none"> <li>Carry out census of affected people and their assets to be affected, livelihood loss and common property to be affected; R&amp;R scheme including time line for implementation. (Section: 16. (1) and (2)).</li> </ul>	<ul style="list-style-type: none"> <li>The SPS requirements will be followed.</li> </ul>

SNo	ADB Safeguard Requirement as SPS, 2009	RFCT in LARR Act, 2013 and its Compliance with ADB's SPS,2009	Remarks, and provisions in RFCT in LARR Act, 2013	Measures to bridge the Gap
7	Carryout consultations with displaced persons, host communities and concerned NGOs. Inform all displaced persons of their entitlements and resettlement options	Complied	<ul style="list-style-type: none"> <li>• Consultation with Panchayat, Municipality, to carry out SIA. (Section: 4. (1))</li> <li>• Public hearing for Social Impact Assessment. Section: 5.</li> <li>• Discussion on and Public hearing for Draft Rehabilitation and Resettlement Scheme Section: 16. (4). and (5).</li> </ul>	
8	Establish grievance redressal mechanism	Complied	<ul style="list-style-type: none"> <li>• Establishment of Land Acquisition, Rehabilitation and Resettlement Authority for disposal of disputes relating to land acquisition, compensation, rehabilitation and resettlement. Section: 51. (1). and Section: 64.</li> <li>• The Requiring Body or any person aggrieved by the Award passed by an Authority under section 69 may file an appeal to the High Court within sixty days from the date of award. Section: 74. (1). and (2).</li> </ul>	<ul style="list-style-type: none"> <li>• A project level GRM is included in the RP.</li> </ul>
9	Where involuntary resettlement impacts and risks are highly complex and sensitive, compensation and resettlement decisions should be preceded by a social preparation phase.	Complied	<ul style="list-style-type: none"> <li>• Social Impact Assessment is must before taking final decision on acquisition of land followed by preparation of R&amp;R Scheme</li> </ul>	<ul style="list-style-type: none"> <li>• Social Impact Assessment, awareness campaigns, and social preparation phase will be done for any projects with significant</li> </ul>

SNo	ADB Safeguard Requirement as SPS, 2009	RFCT in LARR Act, 2013 and its Compliance with ADB's SPS,2009	Remarks, and provisions in RFCT in LARR Act, 2013	Measures to bridge the Gap
				impacts.
10	Improve or restore the livelihoods of all displaced persons through (i) land-based resettlement strategies (ii) prompt replacement of assets with access to assets of equal or higher value, (iii) prompt compensation at full replacement cost for assets that cannot be restored, and (iv) additional revenues and services through benefit sharing schemes where possible.	Complied	<ul style="list-style-type: none"> <li>Land for land in case of irrigation projects to the land owners losing agricultural land. Land for land in every projects to land owners belong to SC and ST community up to 2.5 acres of land. Section: 31 and The Second Schedule.</li> <li>Provision of housing units in case of displacement. Offer for developed land. Section: 31 and The Second Schedule.</li> <li>Recognizes 3 methods and whichever is higher will be considered which will be multiplied by a factor given in The First Schedule. Compensation given earlier will not be considered; If rates not available floor price can be set; Steps to be taken to update the market value. (Section 26 and The First Schedule) Provision for employment, fishing rights, annuity policy etc (Section: 31 and The Second Schedule)</li> </ul>	<ul style="list-style-type: none"> <li>Structure to be compensated at replacement cost without depreciation.</li> </ul>
11	If there is relocation, secured tenure to relocation land, better housing at resettlement sites with comparable access to employment and production	Complied	<ul style="list-style-type: none"> <li>A family as a unit will receive R&amp;R grant over and above the compensation and those who are not entitled to</li> </ul>	<ul style="list-style-type: none"> <li>Not envisaged under the proposed project. Therefore, the provision of</li> </ul>

SNo	ADB Safeguard Requirement as SPS, 2009	RFCT in LARR Act, 2013 and its Compliance with ADB's SPS,2009	Remarks, and provisions in RFCT in LARR Act, 2013	Measures to bridge the Gap
	opportunities, integration of resettled persons economically and socially into their host communities, and extension of project benefits to host communities; provide transitional support and development assistance, such as land development, credit facilities, training, or employment opportunities; and (iii) civic infrastructure and community services, as required.		<p>compensation. Section: 31</p> <ul style="list-style-type: none"> <li>• Homeless entitled to constructed house, land for land in irrigation projects in lieu of compensation, in case of acquisition for urbanization 20% of developed land reserved for owners at a prices equal to compensation' jobs or onetime payment or annuity for 20 years' subsistence grant, transportation, land and house registered on joint name husband and wife, etc. Second Schedule</li> <li>• Provision for infrastructural amenities in resettlement areas. Section: 32 and Third Schedule</li> </ul>	alternative resettlement sites is not provided for in the framework.
12	Improve the standards of living of the displaced poor and other vulnerable groups, including women, to at least national minimum standards	Complied	<ul style="list-style-type: none"> <li>• Landless people are considered and eligible for R&amp;R grants. Section: 16. (2).</li> <li>• Widows, divorcees, abandoned women will be considered as separate family and entitled to R&amp;R provisions Section: 3. (m)</li> <li>• Homeless entitled to constructed house and landless entitled to land in irrigation project. Second Schedule</li> <li>• Special provision for Scheduled</li> </ul>	

SNo	ADB Safeguard Requirement as SPS, 2009	RFCT in LARR Act, 2013 and its Compliance with ADB's SPS,2009	Remarks, and provisions in RFCT in LARR Act, 2013	Measures to bridge the Gap
			Caste/Scheduled Tribe; Section: 41. <ul style="list-style-type: none"> <li>Additional provisions for SC&amp;ST for land for land in irrigation projects, additional sum over and above the subsistence grant. Second Schedule</li> </ul>	
13	If land acquisition is through negotiated settlement, ensure that those people who enter into negotiated settlements will maintain the same or better income and livelihood status	Complied	<ul style="list-style-type: none"> <li>R&amp;R entitlements apply in case of land acquired/purchased for PPP projects and for Private Companies. Section: 2. (2), and 46.</li> </ul>	<ul style="list-style-type: none"> <li>Not envisaged</li> </ul>
14	Ensure that displaced persons without titles to land or any recognizable legal rights to land are eligible for resettlement assistance and compensation for loss of non-land assets.	Partially Complied	<ul style="list-style-type: none"> <li>The Act recognises: Section: 3. (c)</li> <li>a family which does not own any land but belong to the family of an agricultural labourer, tenant, share-croppers, or artisans or working in affected area for three years prior to the acquisition of the land</li> <li>the Scheduled Tribes and other traditional forest dweller who have lost any of their forest rights</li> <li>family whose primary source of livelihood for three years prior to the acquisition of the land is dependent on forests or water bodies and includes gatherers of forest produce, hunters, fisher folk and boatmen</li> <li>a family residing or earning livelihoodson</li> </ul>	<ul style="list-style-type: none"> <li>RF mandates that in the case of land acquisition, the date of publication of preliminary notification for acquisition under Section 4.1 of the LAA will be treated as the cut-off date for title holders, and for non-titleholders such as squatters the start date of the project census survey.</li> </ul>



SNo	ADB Safeguard Requirement as SPS, 2009	RFCT in LARR Act, 2013 and its Compliance with ADB's SPS,2009	Remarks, and provisions in RFCT in LARR Act, 2013	Measures to bridge the Gap
			any land in the urban areas for preceding three years or more prior to the acquisition of the land	
15	Prepare a resettlement plan / indigenous peoples plan elaborating on displaced persons' entitlements, the income and livelihood restoration strategy, institutional arrangements, monitoring and reporting framework, budget, and time-bound implementation schedule.	Complied	<ul style="list-style-type: none"> <li>Preparation of Rehabilitation and Resettlement Scheme including time line for implementation. Section: 16. (1) and (2).</li> <li>Separate development plans to be prepared. Section 41</li> </ul>	-
16	Disclose a draft resettlement plan, including documentation of the consultation process in a timely manner, before project appraisal, in an accessible place and a form and language(s) understandable to displaced persons and other stakeholders. Disclose the final resettlement plan and its updates to displaced persons and other stakeholders	Complied	<ul style="list-style-type: none"> <li>The draft Rehabilitation and Resettlement Scheme prepared shall be made known locally by wide publicity in the affected area and discussed in the concerned Gram Sabhas or Municipalities and in website. Section: 16. (4)</li> <li>The approved Rehabilitation and Resettlement Scheme to be made available in the local language to the Panchayat, Municipality or Municipal Corporation and in website. Section: 18.</li> </ul>	In addition to the publishing of the approved resettlement plan, the RF includes provision for disclosure of the various documents pertaining to RP implementation.

SNo	ADB Safeguard Requirement as SPS, 2009	RFCT in LARR Act, 2013 and its Compliance with ADB's SPS,2009	Remarks, and provisions in RFCT in LARR Act, 2013	Measures to bridge the Gap
17	Include the full costs of measures proposed in the resettlement plan and indigenous peoples plan as part of project's costs and benefits. For a project with significant involuntary resettlement impacts and / or indigenous peoples plan, consider implementing the involuntary resettlement component of the project as a stand-alone operation.	Complied	<ul style="list-style-type: none"> <li>The requiring body shall bear the cost of acquisition covering compensation and R&amp;R cost. Section: 19. (2) and Section 95. (1)</li> </ul>	-
18	Pay compensation and provide other resettlement entitlements before physical or economic displacement. Implement the resettlement plan under close supervision throughout project implementation.	Complied	<ul style="list-style-type: none"> <li>The Collector shall take possession of land after ensuring that full payment of compensation as well as rehabilitation and resettlement entitlements are paid within three months for the compensation and a period of six months for the monetary part of rehabilitation and resettlement entitlements. Section: 38. (1)</li> <li>The Collector shall be responsible for ensuring that the rehabilitation and resettlement process is completed in all its aspects before displacing the affected families. Section: 38. (2)</li> </ul>	
19	Monitor and assess resettlement outcomes, their impacts on the standards of living of displaced persons, and whether the objectives of the resettlement plan have been	Complied	<ul style="list-style-type: none"> <li>The Rehabilitation and Resettlement Committee, to monitor and review the progress of implementation of the Rehabilitation and</li> </ul>	The SPS requirements will be followed.

SNo	ADB Safeguard Requirement as SPS, 2009	RFCT in LARR Act, 2013 and its Compliance with ADB's SPS,2009	Remarks, and provisions in RFCT in LARR Act, 2013	Measures to bridge the Gap
	achieved by taking into account the baseline conditions and the results of resettlement monitoring. Disclose monitoring reports.		<p>Resettlement scheme and to carry out post-implementation social audits in consultation with the Gram Sabha in rural areas and municipality in urban areas. Section: 45. (1)</p> <ul style="list-style-type: none"> <li>• Set up National and State level Monitoring Committee to review and monitor progress. Section 48-50</li> </ul>	

### **ANNEXURE 3: Sample Social Monitoring Checklist**

#### **A. PROJECT INFORMATION**

##### **A-1: General**

I	Name of Project	
II	Loan Number	
II	Name of Monitoring/Reporting Agency and Address	
III	Monitoring Period (Season/month)	
IV	Report No.	
V	Report for the period	
VI	Date of reporting	
VII	Type of Contract	

##### **A-2: Subproject Details**

S No	List of sub-projects	Name of the Line Agencies
I		
II		
III		
IV		
V		
VI		

##### **A-3: Overall Project Progress, Agreed Milestones and Implementation Schedules**

S No	Name of Subprojects	Progress as on date of Report	Implementation Schedule

#### **B. CATEGORIZATION OF PROJECT**

Social Safeguards Categorization	A	B	C
Involuntary Resettlement			
Indigenous Peoples			

**C. DESIGN AND ENGINEERING STATUS**

Item	Status (Y/N)	Follow up Required (Y/N)	Type of Required Action
Final detailed engineering design of the subproject completed			<input type="checkbox"/> Updated draft IR/IP <input type="checkbox"/> New RP/ IPP preparation
Changes in project design / scope (Occurred or envisaged)			<input type="checkbox"/> Project re-categorization (IR/IP) <input type="checkbox"/> IR/IP impact assessment <input type="checkbox"/> New RP/IPP preparation

**D. INSTITUTIONAL STATUS READINESS**

No.	Item	Status (Ready/ Not Ready/ NA)	Follow up Required (Y/N)	Completion Deadline
1	Mobilization of civil works contractor			
2	Mobilization of Project Management Unit			
3	Mobilization of Project Supervision Consultant (if applicable)			

**E. SAFEGUARDS REQUIREMENTS**

No.	Item	Status (Ready/ Not Ready/ NA)	Follow up Required (Y/N)	Completion Deadline
1	Safeguards monitoring required			
2	Final / updated RP/IPP prepared and submitted			
3	Project's Grievance Redress Mechanism established			

**F. RP MONITORING CHECKLIST**

Item No.	Safeguards Related Requirements	Status (Ready/ Not Ready/ NA)	Completion Deadline	Process to Date/ Remarks
1	MANAGEMENT			
Institutional and Financing Arrangements				
1.1	Financing and budget: (i) Safeguard office and staff; (ii) RP cost			
Updating of DD/RP/IPP based on Detailed Design				
1.3	Update of RP: Revise based on DMS (II) Revise implementation Schedule (iii) revise budget.			
1.4	Compensation rates: (i) approved by the Government; (ii) Adequate as per RP; (iii) APs informed.			
Disclosure and Grievance Redress Arrangements				
1.5	Disclose final / updated RP (i) to the APs in local language; (ii) in ADB			

	website; (iii) in EA's website			
1.6	Disclose project activities to affected communities: (i) put up a project signboards; (ii) Distribution of project leaflets and GRM to affected communities			
1.7	Grievance redress communities: (i) clear terms of reference; (ii) appointment decree; (iii) Publicly disclosed among APs.			
1.8	Grievance redress records: (i) list and numbers of grievances received; (ii) numbers of resolved issues; (iii) Numbers of cases under GRC review; (iv) outstanding cases (filed to court)			
<b>Monitoring and Reporting Arrangements</b>				
1.9	Set up monitoring system: (i) assessment on capacity and staff requirement; (ii) criteria of safeguards assessment; (iii) reporting mechanism			
1.11	Reporting: (i) Frequency; (ii) timelines; (iii) identified issues; (iv) action taken and /recommendation.			
<b>2.</b>	<b>PR IMPLEMENTATION</b>			
<b>Consultation</b>				
2.1	Consultation: (i) responsibility; (ii) stakeholders identified; (iii) consultation and process; (iv) documentation			
<b>Mapping and Assets Inventory</b>				
2.2	AP Identity cards and affected assets records: (i) issuance and distribution of AP ID cards, (ii) detail measurements survey of affected assets and documentation			
2.3	Common property/ public assets: (i) final inventory; (ii) restoration plan and schedule; (iii) funding sources			
<b>Compensation, Relocation and Rehabilitation</b>				
2.4	Payment of compensation and entitlements (as stated in the RP): (i) schedule of payment; (ii) records / receipts of payment			
2.5	Relocation of process (relocation site readiness): (i) housing and associated facilities established; (ii) transfer of new land/ plot/ house ownerships completed.			

2.6	Provision of additional assistance for vulnerable APs: (i) per type of activities; (ii) schedule of implementation			
<b>Monitoring and Reporting</b>				
2.7	Submission of the reports: (i) monitoring reports; (iii) completion report			
2.8	Transfer of acquired assets to the acquiring agency			

#### **G. SOCIAL SAFEGUARDS LOAN COVENANTS**

<b>Item No.</b>	<b>Covenant</b>	<b>Status of Compliance</b>
List Relevant Schedule ( #, para #.)	(List of Relevant Covenants)	(Briefly describe status of compliance)
Involuntary Resettlement		
Indigenous People		
Human and Financial Resources to Implement Safeguards Requirements		
Safeguards and other Provisions in Bidding Documents and Works Contracts.		
Safeguards Monitoring and Reporting		
Prohibited List of Investments		
Labor Standards		
Gender and Development		

<b>Overall Status of Compliance</b>		
<input type="checkbox"/> <u>Not complied</u> – Redressed action & monitoring required	<input type="checkbox"/> <u>Complied</u> with further monitoring	<input type="checkbox"/> <u>Fully complied</u> – No further action

## Appendix 1: Due Diligence Report

# **India: Demand- Side Energy Efficiency Investment Project Due Diligence Report.**

- **Municipal street lighting efficiency;**
- **Efficient domestic lighting and appliance programme; and,**
- **Agriculture demand side management (AgDSM).**

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The Due Diligence Report (DDR) is document of the borrower. The views expressed herein do not necessarily represent those of ADB's Board of Directors, Management, or staff, and may be preliminary in nature. In preparing any country program or strategy, financing any project, or by making any designation of or reference to a particular territory or geographic area in this document, the Asian Development Bank does not intend to make any judgments as to the legal or other status of any territory or area.



## **Table of Contents**

<b>A.</b>	<b>DUE-DILIGENCE REPORT</b>
<b>B</b>	<b>IMPACT AND OUTCOME</b>
<b>C</b>	<b>PROCESS OF EESL IN SELECTING PROJECTS</b>
<b>D</b>	<b>EESL DUE DILIGENCE PRACTICES</b>
<b>E</b>	<b>EESL GOVERNANCE STRUCTURE</b>
<b>F</b>	<b>STREET LIGHT EFFICIENCY PROJECT STRUCTURE</b>
<b>G</b>	<b>DSM-BASED EFFICIENT LIGHTING PROGRAMME</b>
<b>H</b>	<b>AGRICULTURAL DSM PROGRAMME</b>
<b>I</b>	<b>SCOPE OF LAND ACQUISITION AND RESETTLEMENT</b>
<b>J</b>	<b>GENDER</b>
<b>K</b>	<b>PERCEIVED GENDER BENEFITS</b>
<b>L</b>	<b>PUBLIC CONSULTATION, DISCLOSURE AND COMMUNICATION</b>
<b>M</b>	<b>GRIVANCE REDRESS MECHANISM</b>
<b>N</b>	<b>CONCLUSION</b>
<b>Annexure</b>	<b>PHOTOGRAPHS AND ATTENDENCE OF CONSULTATIONS</b>

## A. DUE-DILIGENCE REPORT

1. This report has been prepared for the sector loan to Energy Efficient Services Limited (EESL) under Demand Side Energy Efficient Project. The DDR has been prepared based on the Detailed Project Report (DPR), consultations with stakeholders like state Government officials, EESL officials, users' general public, women groups, farmers etc. There is no involuntary resettlement involved in this sub-project; hence preparation of RP is not required. This has been categorized as "C" for Involuntary Resettlement. There is no negative impact on indigenous people and it has been categorized as C for them as well. This brief due-diligence report has been prepared as per the requirement of ADB for project processing and clearance.

## B. IMPACT AND OUTCOME

2. One of the core objectives of EESL is to support the National Mission for Enhanced Energy Efficiency, under the National Action Plan on Climate Change. The company has evolved a strategic approach to stimulate the implementation of energy efficiency programs by assessing market conditions and barriers. This is undertaken through:

- (i) Creating market access in public and private facilities through handholding, information dissemination and capacity building of facility owners
- (ii) Developing projects for various sectors addressing specific barriers and challenges
- (iii) Designing risk mitigation measures to address technical, financial and regulatory risks
- (iv) Enabling funding at reasonable rates for project implementation to attract private investment
- (v) Aggregating projects to attract the most economical value for facility owners
- (vi) Developing model templates of agreements, payment security, etc. that are necessary for project implementation
- (vii) Disseminating best practices to stakeholders so that replication can occur
- (viii) Providing transaction support to facility owners to implement projects

3. The sector loan investment programme consider following three sub projects.

- (i) **Street Lighting Efficiency:** As per the 18th Electric Power Survey by CEA<sup>15</sup>, the estimated energy consumption in Indian public lighting Sector with 2009-10 as the base year is about 8478 million kWh. The sector will grow at a CAGR of 7% during the XII and XIII plan periods. Based on the projections, the lighting demand in India for the financial year 2015-16 is 10508 Million Units. Assuming that the average public light operates for 11 hours a day throughout the year, the total connected load is 2.62 million kW. Further the average wattage of public lights in India is around 65 W; there are around 40 million operational public lights in India. Retrofitting the entire conventional street lights with LEDs could result in a potential annual savings of 5.3 billion kWh i.e. about 50% of total energy consumed. In addition, the operational optimization such as use of twilight switching controls, dimming and voltage optimization, could lead to an additional energy savings of 15-20%.The total opportunity of energy savings at the national level, could

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<sup>15</sup> The Committee was constituted in 2011 to submit the report to Central Electricity Authority (CEA) (GoI) by 2013-14.

increase from 5.3 billion kWh to about 6.4 billion kWh annually. This initiatives could result in overall savings of INR 37000 million (USD556.16 million) annually.

- (ii) **Domestic Lighting Efficiency in Utility Services Areas:** Domestic consumers account for almost 24% of the total electricity demand in India. Major part of the energy consumption is used for lighting. A significant proportion of household lighting needs are met by use of incandescent bulb(ICL) with a LED bulb using 1/10th as much energy as a normal incandescent bulb to produce the same amount of light. Also, LEDs have life that is 10-12 times more than incandescent bulb and therefore are cheaper option on life cycle cost basis. As per estimates, promoting efficient lighting in household sector will reduce the electricity consumption by as much as 50 billion kWh every year at national level. This quantum of energy savings will help to reduce power shortage, reduce load shedding and improved supply of quality electricity. This will increase economic opportunities, including employment, and overall long-term sustainable development impacts. As per some estimate, at household level Energy savings is achieved as LEDs consumes 88% less electricity for comparable quality of service than ICLs. As of the most recent data published by ELCOMA<sup>16</sup> around 770 million ICLs are sold in the country annually. Under DELP, the government plans to replace all ICLS with LED. This will result in reduction of 20,000 MW load, energy savings of 105 billion kWh and Green House Gas (GHG) emissions savings of 80 million tonnes every year. A recent ILO report<sup>17</sup> concluded that the green economy could yield up to 60 million jobs; The Climate Group, and partners are calling governments to catalyze the scale-up of LEDs in India and invest now in order to capitalize on this and create a significant amount of employment. Further, in order to implement clean energy mechanism through distribution of LED bulbs, the Ministry of Power<sup>18</sup>, decided that all bulbs provided to below-poverty line households at the time of connection, estimated to be about 3.4 million, under the Rajiv Gandhi Grameen Vidyuthikaran Yojana<sup>19</sup> (RGGVY) would use LED technology. For other domestic appliance sector reform, in April 2016, the Gol launched National Energy Efficient Fan Programme. It is estimated that through this programme the household's electricity bills will reduce by about Rs. 700-730 per year. These fans are 30% more energy efficient as compared to conventional fans, which range from 75-80 Watts. For the Financial Year 2011, around 350 million fans were part of Indian households and over 32 million were sold, with annual growth rate of around 6%.If these 350 million fans are replaced, annual energy savings of 47 billion kWh and estimated capacity avoidance of 12,250 MW are possible. In domestic appliance sector, it is estimated that Shifting to LED lights and five-star fans can enable average

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16 Electric lamp & component manufacturing Association,

17 Working towards sustainable development: Opportunities for decent work and social inclusion in a green economy, International Labour Organization, May 2012.

18 Press Information Bureau, Ministry of Power, GOI, 08-October,2014- Power Ministry Initiates Several Measures for Promoting Energy Efficiency in Lighting Sector.

19 Government of India scheme- Rajiv Gandhi Grameen Vidyutikaran Yojana aimed at building rural electricity infrastructure and household electrification towards the National Common Minimum Programme goal of access to electricity for all. Under the scheme, 90% capital subsidy is provided by Government of India for overall cost of projects. Cumulatively till Financial Year 2010, works in 190,858 villages have been completed and free connections to over 10 million below poverty line (BPL) households have been released.

households to reduce their power bills by 45%. This household savings will add to disposable income which can be used for improvement of quality of life of average Indian households. The key finding of climate Group Surveys (The Climate Group report 2012<sup>20</sup>), in Kolkata (India), London (U.K), Sydney (Australia) and Toronto (Canada) indicated that citizens prefer LED lighting, with 68% to 90% of respondents endorsing city-wide rollout of the technology. Among the benefits that were highlighted in these surveys, were a greater sense of safety and improved visibility.

- (iii) **Agricultural demand side management:** There are estimated 21 million grid connected agricultural pump sets in India which consume about 170 billion KWh of energy every year, account for about 18 % of national energy consumption. In most of the states the agricultural consumption is heavily subsidized or is free. The utilities are subsidized by state governments for this below the cost consumption. As per Economic Survey <sup>21</sup>(2016), the total subsidy bill stood at USD 10 billion annually. In order to make country more energy efficient, the Union Government launched a schemes on April 7 2016, namely National Energy Efficient Agriculture Pumps Programme. Under the Programme, farmers can replace their inefficient pumps free of cost with the new BEE star rated energy efficient agricultural pump-sets. These pumps will come enabled with smart control panel and a SIM card, giving farmers the flexibility to remotely control these pumps from their mobile phones and from the comfort of their homes. BEE star rated pump-sets to the farmers under this programme, will lead to 30% of energy savings by 2019. This translates into an annual savings of approximately Rs 200 billion (USD 3006.27 million) on agricultural subsidies or a saving of 50 billion units of energy every year.

### C. Process of EESL in selecting the subprojects

4. EESL follows a standard process for each subproject that will be considered under the sector loan. The process includes detailed energy audits, assessment of technology requirements, and a demonstration in the project area to assess performance and to calculate energy savings.

Subprojects has been selected based on implementation readiness which includes initial assessments of energy efficiency savings potential, stakeholder consultations, and advanced discussions on contract parameters with the relevant municipalities, State Governments and distribution utilities. The following tables describe the process for each component.<sup>22</sup>

<sup>20</sup> The Climate Group report 2012, findings of Light Savers, an independent, two-and-a-half-year global pilot of LED lamps in 15 separate trials across 12 cities including New York, **London**, Kolkata and Sydney, are presented for the first time in a new report entitled, Lighting the Clean Revolution: The rise of LED street lighting and what it means for cities. The report was launched as part of the Clean Revolution campaign at **the Rio+20 UN Global Compact Corporate Sustainability Forum** and produced by The Climate Group in partnership with Philips, in support of the campaign's argument that major energy savings can be achieved virtually overnight at relatively little cost. (<http://thecleanrevolution.org/publications/lighting-the-clean-revolution-the-rise-of-leds-and-what-it-means-for-cities>)

<sup>21</sup> The Economic Survey, Ministry of Finance, Government of India, February 2016.

<sup>22</sup> Based on Appendix 5, Project Concept Paper, February 2016.

**Table 1: DSM-Based Efficient Lighting Program**

Item	Description	Responsible Agency
Memorandum of Undertaking (MoU)	MoU signed between EESL distribution utility	
Sample Survey	<ul style="list-style-type: none"> <li>Define boundaries for program and supply list of eligible consumers</li> </ul>	Distribution utility
	<ul style="list-style-type: none"> <li>Conduct sample survey to set baseline of prevalence of incandescent bulbs and average usage</li> </ul>	EESL and EE consultant support
Technology Selection	<ul style="list-style-type: none"> <li>Finalize LED specifications, including Wattage and technical specifications</li> </ul>	EESL and EE consultant
	<ul style="list-style-type: none"> <li>Estimate annual energy savings per LED and target coverage under the program</li> </ul>	EESL, EE consulting support, and distribution utility
Contractual Agreement	Contract between EESL and distribution utility for the collection of instalment payments from consumers and transfer terms drafted and signed.	EESL and distribution utility
Payment Security	Payment security mechanism finalized, such as bank guarantee, state government guarantee, trust and retention account, or escrow account	EESL and distribution utility
Implementation	<ul style="list-style-type: none"> <li>EESL procures the LEDs through competitive process with requirements for technology specifications and replacement guarantees</li> </ul>	EESL
	<ul style="list-style-type: none"> <li>LEDs are distributed at distribution kiosks</li> </ul>	EESL and distribution agency
	<ul style="list-style-type: none"> <li>LEDs fitted with a unique number and/or marked to avoid resale; replacement guarantee covers project life</li> </ul>	Technology provider and EESL
	<ul style="list-style-type: none"> <li>Consumers informed of ways to maximize efficiency gains</li> </ul>	EESL and media agency
Monitoring and Verification	Database developed and maintained containing records of each participating consumer, the LEDs purchased, the wattage, and the date of purchase.	EESL
	Database verified by an independent Monitoring & Verification (M & V) agency.	M&V agency
	Survey conducted on random sample to ensure proper operation of LEDs.	M & V agency

Item	Description	Responsible Agency
	Remote monitoring devices installed on a small sample basis to verify continued operation and savings.	EESL

**Table 2: Municipal DSM Street Lighting Program**

<b>Item</b>	<b>Description</b>	<b>Responsible Agency</b>
Memorandum of Undertaking (MoU)	MoU signed between EESL and municipality	
DPR developed or validated	<ul style="list-style-type: none"> <li>Detailed energy audit of existing street lighting system and joint verification</li> </ul>	EESL, EE consulting support, and municipality
Technology selection and demonstration	<ul style="list-style-type: none"> <li>Finalize LED specifications, including required lighting need and compatibility with existing system features</li> </ul>	EESL, EE consultant support, and municipality
	<ul style="list-style-type: none"> <li>Install selected technology and measure consumption of the new LED fixtures and consumption of the old features</li> </ul>	EESL, EE consulting support, and municipality
	<ul style="list-style-type: none"> <li>Energy savings is estimated as the measured difference in consumption between the existing and new, LED fixtures from the demonstration. Total energy savings from the program are calculated by scaling the measured per-light savings to the number of lights to be replaced.</li> </ul>	EESL, EE consulting support, and municipality
	<ul style="list-style-type: none"> <li>Determine annuity payment based on cost recovery (equipment and operations and maintenance (O&amp;M) for EESL, returns on equity and debt servicing costs, savings to the municipality from reduced energy bills and reduced maintenance, and a project management fee</li> </ul>	EESL and municipality
Contractual agreement	Contract between EESL and municipality drafted and agreed that covers the service and equipment specifications and the payment schedule	EESL and municipality
Payment security	Payment security mechanism finalized, such as bank guarantee, state government guarantee, and escrow arrangements	EESL and municipality
Implementation	<ul style="list-style-type: none"> <li>EESL procures LEDs through competitive process with requirements for technology specifications and replacement guarantees</li> </ul>	EESL
	<ul style="list-style-type: none"> <li>Equipment supplied and installed (EESL, equipment provider, and municipality)</li> </ul>	EESL, equipment provider, and municipality
	<ul style="list-style-type: none"> <li>Warranty and O&amp;M coverage</li> </ul>	EESL and equipment provider

Item	Description	Responsible Agency
Monitoring & verification	• Completion certificates issued to municipality.	EESL
	• EESL supplies 1% of total light quantity to municipality to allow rapid replacement in the event of defects or other issues (EESL)	EESL
	• EESL installs centralized monitoring and control equipment to optimize operation	EESL

**Table 3: Agricultural DSM Program**

Item	Description	Responsible Agency
Memorandum of Undertaking (MoU)	MoU signed between EESL and local government	
DPR developed or validated	• General survey of all pump sets to be covered under the program and detailed energy audits of 25% of the pumps carried out to create an agreed baseline of current electricity usage	EESL, EE consulting support, and local government
Technology selection and demonstration	• Pump models with Bureau of Energy Efficiency star ratings selected as potential replacements based on power supply parameters and pumping needs	EESL, EE consultant support
	• Demonstration of more efficient pumps (~10) and confirm appropriateness to meet needs	EESL, EE consulting support
	• Energy consumption measured from demonstration of pumps selected for distribution under the program	EESL, EE consulting support
	• Power savings from the program calculated by subtracting consumption from efficient pumps from baseline estimates and scaled to the number of pumps to be distributed under the program and estimated hours of operation	EESL, EE consultant support, and local government
	• Annuity payment calculated based on program costs and energy previously delivered to farmers that can be sold to other customers, according to calculated energy savings	EESL, EE consultant support, and local government
Contractual agreement	Contract between EESL and local government drafted and agreed that covers the service and equipment specifications and the payment schedule	EESL and local government



Item	Description	Responsible Agency
Payment security	Payment security mechanism finalized, such as bank guarantee, state government guarantee, and escrow arrangements	EESL and local government
Implementation	<ul style="list-style-type: none"> <li>EESL procures pumps through a competitive process as per technology specifications and performance guarantees</li> </ul>	EESL
	<ul style="list-style-type: none"> <li>Pumps distributed to farmers</li> </ul>	EESL, equipment provider
	<ul style="list-style-type: none"> <li>Warranty and O&amp;M coverage</li> </ul>	EESL and equipment provider
Monitoring & verification	<ul style="list-style-type: none"> <li>Power consumption in kW is measured before and after each pump set replacement.</li> </ul>	EESL, EE consultant support
	<ul style="list-style-type: none"> <li>EESL may install remote monitoring and optimization equipment</li> </ul>	EESL

#### D. EESL DUE DILIGENCE PRACTICES

5. THE EESL has prepared “Environmental, Occupational Health and Safety and Social (EHSS) manual or guideline”<sup>23</sup> which outlines EESL’s vision, objectives, management system and governance controls. Through the guideline and associated standard operating procedures, intend to integrate the environmental, social, occupational health and safety principles of Indian national and state regulations, IFC Performance Standards and other international guidelines with the working strategy of EESL. EESL cognizant of a number of sectors and regional best practices and have designed standards to be in line with them. EESL also recognize that there may be certain EHSS requirements that may come up from time to time and EESL shall be committed to assess the feasibility of its integration from time to time. The main objective of the manual is to identify and mitigate EHSS risks both in office and on-site operations of EESL. This pertains to EESL own operations and operations of EESL vendors and their sub-contractors thereof. The identification and mitigation of EHSS risks is also interlinked with their integration into company’s decision-making processes for new and existing projects. The EHSS requirements stipulated in the manual must be adhered to by EESL, vendors and their sub-contractors thereof, as a minimum. Over and above this, EESL, their vendors and their sub-contractors should meet all the national and local regulatory requirements, as applicable from time to time.

6. The manual is intended to provide guidance on the basic framework for sound and sustainable EHS management and its continual improvement across all EESL operations. These standards are to be followed along with Standard Operating Procedures (SOPs) as good

<sup>23</sup> EESL is yet to adopt the “Environmental, Occupational Health and Safety and Social (EHSS) manual or guideline for professional practice for their sector operation. During the FFM, EESL informed that this will be adopted soon.

practice and mitigate EHS risks in operations. The list of SOPs and documentation formats are mentioned below (Table 4):

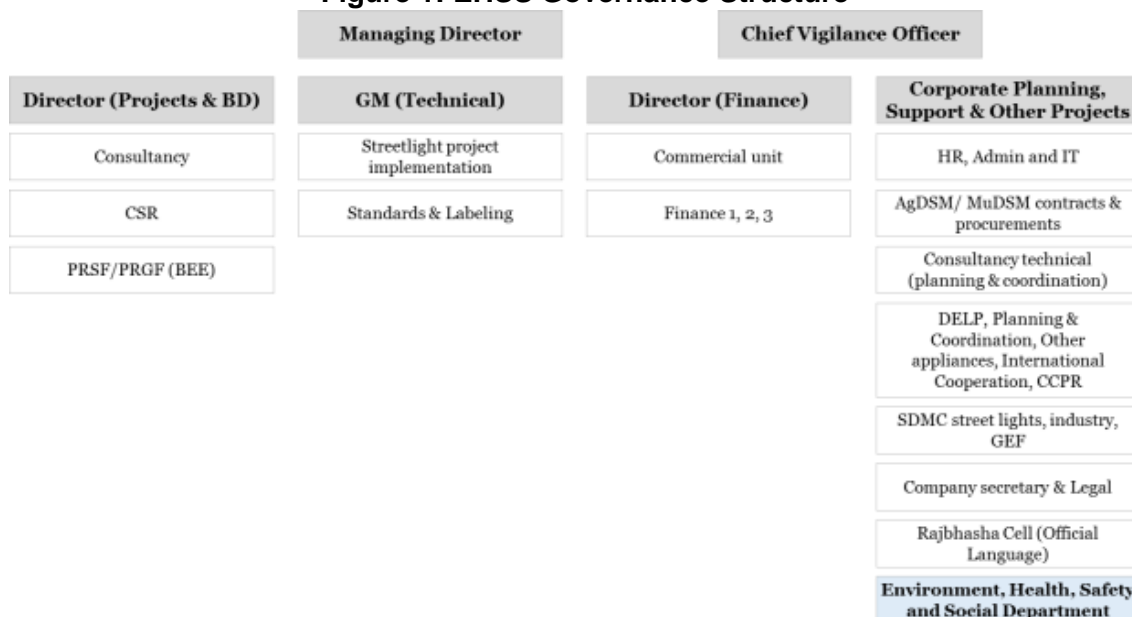
**Table 4: Standard Operating Procedures (SOPs)**

<b>SOPs</b>	<b>Standard Operating Procedures</b>
<b>SOP 01</b>	EHSS Risk Management
<b>SOP 02</b>	Waste Management
<b>SOP 03</b>	Fire and emergency procedures
<b>SOP 04</b>	Electrical safety
<b>SOP 05</b>	Work at height and fall prevention
<b>SOP 06</b>	Portable tools and equipment
<b>SOP 07</b>	Traffic safety
<b>SOP 08</b>	Personal protective equipment
<b>SOP 09</b>	Work permit system
<b>SOP 10</b>	Safe lifting operations
<b>SOP 11</b>	Safety audit procedure
<b>SOP 12</b>	Criteria for selection of warehouse
<b>Documentation Formats(DF)</b>	
<b>DF 01</b>	Legal checklist
<b>DF 02</b>	Accident/Incident Reporting
<b>DF 03</b>	EHSS Risk mitigation plan
<b>DF 04</b>	Sample project report

## **E. EESL GOVERNANCE STRUCTURE**

7. The EHSS function will directly report into the Managing Director. A separate EHSS Department will closely monitor the progress on risk identification, evaluation, mitigation and impact evaluation of EHSS issues. It shall be the responsibility of the head of EHSS department to oversee the EHSS risk mitigation process from time to time. The EHSS governance structure is embedded in the current structure of the organization, as depicted in the following figure-1.

**Figure 1: EHSS Governance Structure**



## F. STREET LIGHT EFFICIENCY PROJECT STRUCTURE

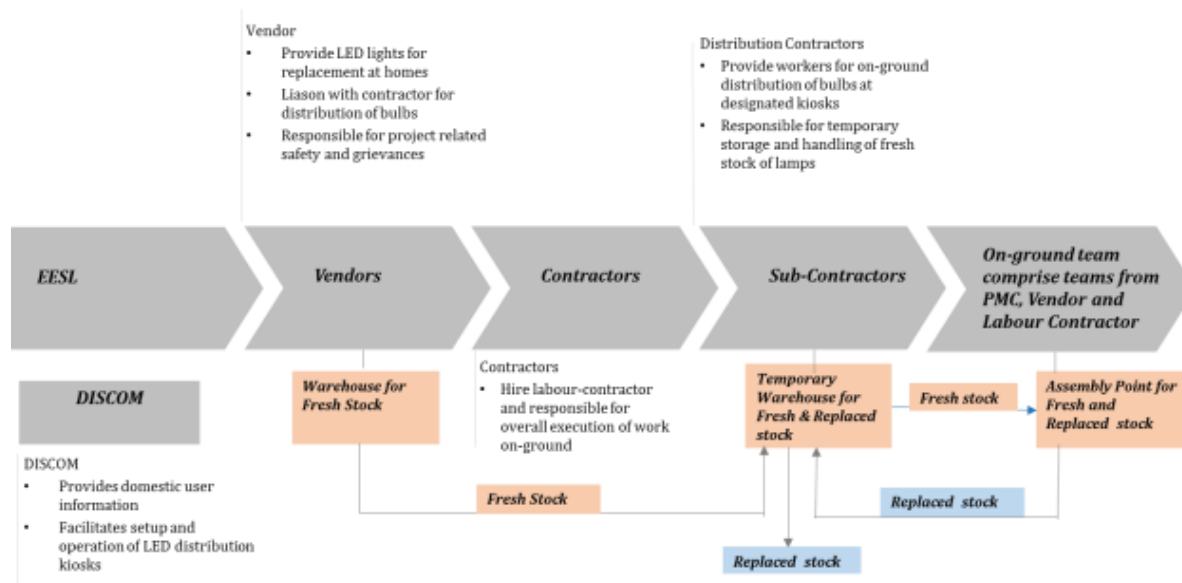
8. In order to implement this program, EESL has adopted two models:

**Annuity Model:** In this model, EESL receives an annuity payment for the project duration (5 to 7 years) to recover the project capital cost, interest cost, equity returns, project management and annual maintenance fee. This annuity payment is lower than the savings achieved by the urban utility / government in energy and maintenance cost incurred in the baseline scenario.

9. **Project financing model:** In this model, EESL takes an equity position in a street lighting project implemented by a private or public entity. The private or public entity signs the ESCO agreement with the urban utility or the government.

10. The program is implemented in partnership with Municipal Bodies and local Electricity Boards. EESL appoints a lighting vendor for end-to-end retrofitting of existing street lights with LED lights. The dismantled lights are taken back by the lighting vendors as per agreements and destroy the same in environmental friendly manner as per applicable laws and procedures. The following figure-2 provides an overview of the street lighting project structure.

**Figure-2 Street Lighting Project Structure**



## G. DSM-BASED EFFICIENT LIGHTING PROGRAMME

11. In the DELP program, energy inefficient Incandescent Bulbs (ICLs) are replaced with more efficient LEDs for domestic consumers. The initial capital cost for the consumers is drastically reduced through the following mechanism mentioned below.

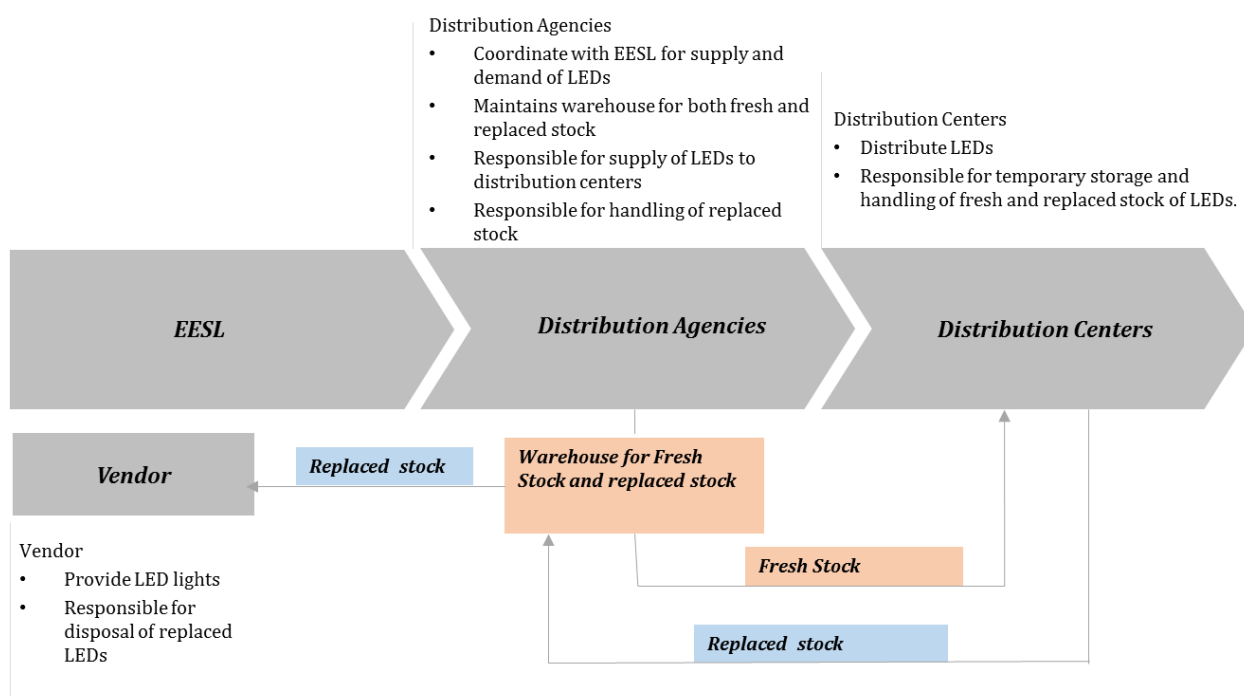
- (i) **Standard Offer Program:** In this program, the government or distribution agency procures demand side resources at a pre-determined price. The program treats demand side resources as energy produced by consumers and the utility pays for this energy

and/or demand reductions. This program is comparable to feed-in-tariffs (FITs) used to promote renewable energy. In this mechanism, EESL recovers the project implementation cost and overheads from the utility / government based on energy saved during the period and the Standard Offers Price for the given period.

- (ii) On-bill financing: Under this mechanism, the cost of implementation is recovered from consumers as a component of their electricity bill over a period of time. The project development cost and other related costs in this model are borne by the distribution utility / government. The utility may charge this additional cost to the consumers as part of their ARR filings.

12. The DSM based efficient lighting program is run in partnership with the local electricity distribution companies. EESL appoints a vendor for distribution of LEDs to households in the participating states. Refer following figure for an overview of the DELP structure (Figure 3).

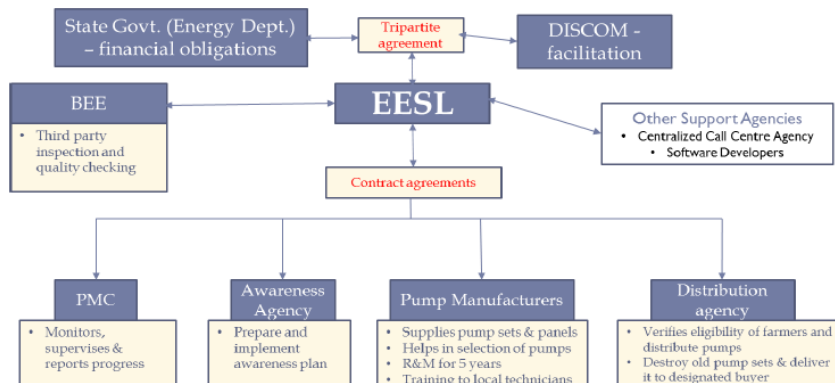
**Figure 3: Project structure of domestic efficient lighting program**



## H. AGRICULTURAL DSM PROGRAMME

13. In the Ag-DSM program, energy inefficient old pump-sets are replaced with energy efficient BEE star rated pump sets for farmers. The working model for up-scaling of this programme:1] No upfront costs to farmers and utility companies;2] EESL recovers investments from DISCOMs through annual energy savings; and 3] reduction in power purchase costs, peak load and load-shedding to DISCOMs. The project structure is presented in figure 4.

**Figure 4-Project structure of Agri-DSM Programme**



### Steps involved in implementation of Ag DSM Project

- Identification of Districts, Sub Divisions of State for Engagement: The objective of this task is to rank districts and sub-division of a State based on a framework and to shortlist/identify most preferred districts for initial engagement and DPR preparation.
- Identification and selection of Feeders for DPR Preparation: The objective of this task is to identify eligible feeders for DPR preparation based on size, HVDS, adequate number of pump sets, measurable baseline (feeder and pumpset level metering), and availability of baseline data.
- Preparation of RFP for DPR preparation (sample template can be downloaded from BEE website)
- Engagement of Consultants for DPR preparation
- Organisation of Workshops and Seminars for Awareness Generation and Capacity Building for farmers and utility employees in areas where DPR is being developed.
- Risk Mitigation Measures for Ring Fencing of Risks in Ag DSM Projects
- Develop a model for implementation of the project
- Engagement of ESCO for implementation of DPR

## I. SCOPE OF LAND ACQUISITION AND RESETTLEMENT

14. Given the type of sector lending, the project will not cause any involuntary resettlement impacts or physical or economic displacement or any adverse impacts to schedule tribe. Additionally, the people will receive positive benefit from the energy efficient investment project. The end use of such sector loans is also not expected to have any adverse social impact. The project is classified as “C” for involuntary resettlement, and indigenous peoples under ADB’s SPS 2009. Therefore, selection and screening criteria will be established at EESL to ensure that there is no physical or economic displacement. EESL will be required to show that they have business principles and have policies, rules, and procedures to guide their lending relations with ESCOs, ULBs and other line agencies. To comply with ADB SPS of 2009, ESCOs, ULBs and other line agencies will develop and implement an social safeguard system to the effect that (i)

they will actively encourage and require their customers/users to observe all applicable social requirements; and (ii) if the relevant business activities of a customer/user/implementer contravene applicable social safeguard requirements, they will take action to determine the reasons for noncompliance and will discuss corrective actions acceptable to the relevant authorities and ADB. The project will only support the sector lending with minimal or no adverse social safeguard impacts. ADB has prepared a Resettlement Framework (RF) to ensure that relevant social safeguards are included in selection and/or exclusion criteria of the recipients of sector lending. Based on the RF, EESL and ESCOs, Urban Local Bodies and state government agencies as project partner/line agencies will develop and establish a social management system (SMS) to ensure adequate due diligence and impacts avoidance in accordance with ADB's Safeguard Policy Statement (SPS), 2009 during annual project processing and throughout the sector loan project cycle. The RF will become effective when ADB and the ESCO sign the loan agreement. To ensure that the ADB safeguard policies are enforced, the Social management System (SMS) will be tailored according to the project and will incorporate the following key elements: (i) applicable social policies; (ii) screening and review procedure; (iii) organizational structure and staffing, including skills and competencies in social issues; (iv) training requirements; and (v) monitoring and reporting.

## **J. GENDER**

15. Access to modern energy efficient services is an important indicator of poverty and the state of social development. At the household level women are largely responsible for energy management and therefore, access to improved energy efficiency products has a specific gender dimension. India's Twelfth Five Year Plan (2012-2017) also positions women as primary stakeholders of energy resource management especially for domestic use. This positioning reflects not only the recognition of the potential benefit of energy efficiency investments for women, but also the necessity of proactive interventions (e.g., ensuring women's substantive participation and men's support) to realize these benefits. The India Gender Equality Diagnostic of Selected Sectors (GEDSS) corroborates this need with its assessment that energy access policies and programs generally do not pay sufficient attention to women's needs and priorities, and therefore, do not always benefit women.

16. Though the legal framework in India supports gender equality and women's empowerment however, women are not always able to benefit from energy investments. Due to persistence of traditional practices, women's lack of awareness of their legal rights, and gaps in law enforcement, women have less access to productivity enhancing resources such as land, labor, collateral, credit facilities, information, and training. These inequalities often restrict women's ability to benefit from available opportunities, and hence it cannot be assumed that energy interventions that benefit men will necessarily also benefit women. Special enabling conditions may need to be created to ensure that women are able to access energy services and benefit from them on an equal footing with men.

17. Further, it is also seen that most user education programs in the safe and efficient use of electricity at the household level -- which should complement energy efficiency projects -- are overlooked or not effectively targeted at women household consumers. Outreach among men is

also important because oftentimes the women are not decision makers. If men understand that improving the efficiency of women's work through provision of energy services could realize household economic gains, they could also incorporate that into their decision making. Hence, focused efforts need to be made to maximize benefits to women, economically and socially disadvantaged groups during their mobilization strategy.

## K. PERCEIVED GENDER BENEFITS

18. The project will have focused gender actions/activities towards maximizing project benefits to women and improve their access to energy efficient appliances and thereby improve their overall quality of life.

- (i) **Domestic lightening:** Direct Benefits to women at the household level through energy efficiency domestic lightening include improved access, energy savings and enhanced quality of life. It is perceived that increased and improved energy efficiency in domestic lightening will further improve the quality of life of women thereby providing them more time for study, rest recreation, skill enhancement. The savings from electricity bills may be further used for higher education of children and skill building/enhancement activities for women providing opportunities to enhance their incomes/livelihood opportunities. The project will facilitate improved awareness and understanding of the benefits of using energy efficient lights in homes.
- (ii) **Street lightening:** The street lightening project apart from energy savings for the ULBs will have positive impact on women and girls. Reports of social monitoring and social audits conducted in pilot projects<sup>24</sup> suggests that the street lights have been instrumental in improving safety of women through reduction in dark spots on the streets (around 80 % of the 2000 people surveyed reported reduction in dark spots). Reduction in dark spots and threat perception among women and thereby improved safety and security of women in public spaces are some of the perceived benefits from the street lightening project. Enhanced street lightening (with improved LUX level) will also improve/encourage women's mobility especially during night. The impact on safety and security of women and their mobility will be assessed through social impact assessment that will be undertaken in each project town.
- (iii) **Agriculture Pumps:** The agriculture DSM component project will also have positive impact on women. Both women farmers as well as the women members supporting their men folk i farm based work will be benefitted. The energy efficient smart panel enabled agriculture irrigation pumps will enable operation through remote distances thereby reducing travel time to operate the pump at odd hours, enhancing safety of farms during night to operate the pump, reducing inconvenience especially women farmers. This will improve the quality of life of farmers including women who significantly contribute to farm based activities. The improved quality of life and time and money savings can be utilized for enhancing skills and improving livelihood opportunities. The end user awareness programs will also facilitate in expanding the awareness of women on energy efficiency

<sup>24</sup> Survey Results on Installed Street Lightening at Marine Drive, Mumbai, March 2015

and benefits of using energy saving agricultural pumps in farms, Focused efforts will be made to maximize benefits to women during their mobilization strategy. It is proposed that the end user awareness programs will target at least 30 % women that will improve knowledge about benefits of energy efficient pumps.

#### **L. PUBLIC CONSULTATION, DISCLOSURE AND COMMUNICATION**

19. Census Survey was not undertaken as there is no physical or economic, temporary or permanent, IR impact. No person or community is being adversely affected by this sub-project. People and communities will not be physically or economically displaced due to the sub-project interventions. No Common Property Resources (CPR) will also be affected. Poor, indigenous and other ethnic groups are not being adversely impacted. Since there were no APs, Census and (Baseline) Socio-Economic Survey were not conducted.

20. The energy efficient project interventions by EESL are pan-India. The project disclosures, consultations etc., by EESL has been done through a systematic communication plan which includes: 1] Plain Hoarding, 2] Posters; 3] Wall paintings / Murals; 4] Print media; 5] Advertisements' on Petrol pumps; 4] Door to Door Campaign; 5] Leaflets etc. As per project cycle, awareness, communication, information sharing are meticulously planned and implemented by EESL. It can be seen from the following chart that from the project planning stage to implementation and GRM stage how stakeholders' consultations are taking place. The example has been given from Agri-DSM project.

21. Public consultations were conducted by the multi disciplinary project team comprising Social expert, gender specialists, Communication specialists as part of the Fact Finding Mission during the period between 20-21 May 2016 in proposed project state of Rajasthan to understand the possible positive impacts of the project. The consultation meetings covered stakeholders (Government officials, consumers, farmers, women group etc) of all three programmes (Domestic lighting, Street Lighting and Agri DSM). During consultation meetings, participants were of the view that this project is important and very much needed and all are pleased by the upcoming project and they supported this project. During the consultations the participant demonstrated great interest in energy savings by the project. The photographs and attendance sheets of consultations are placed in Annexure. The programme wise details of consultations in Rajasthan are explained in the following matrix.



**Figure 5-Agri DSM Project- Stake holders Consultations in Project Cycle and GRM**

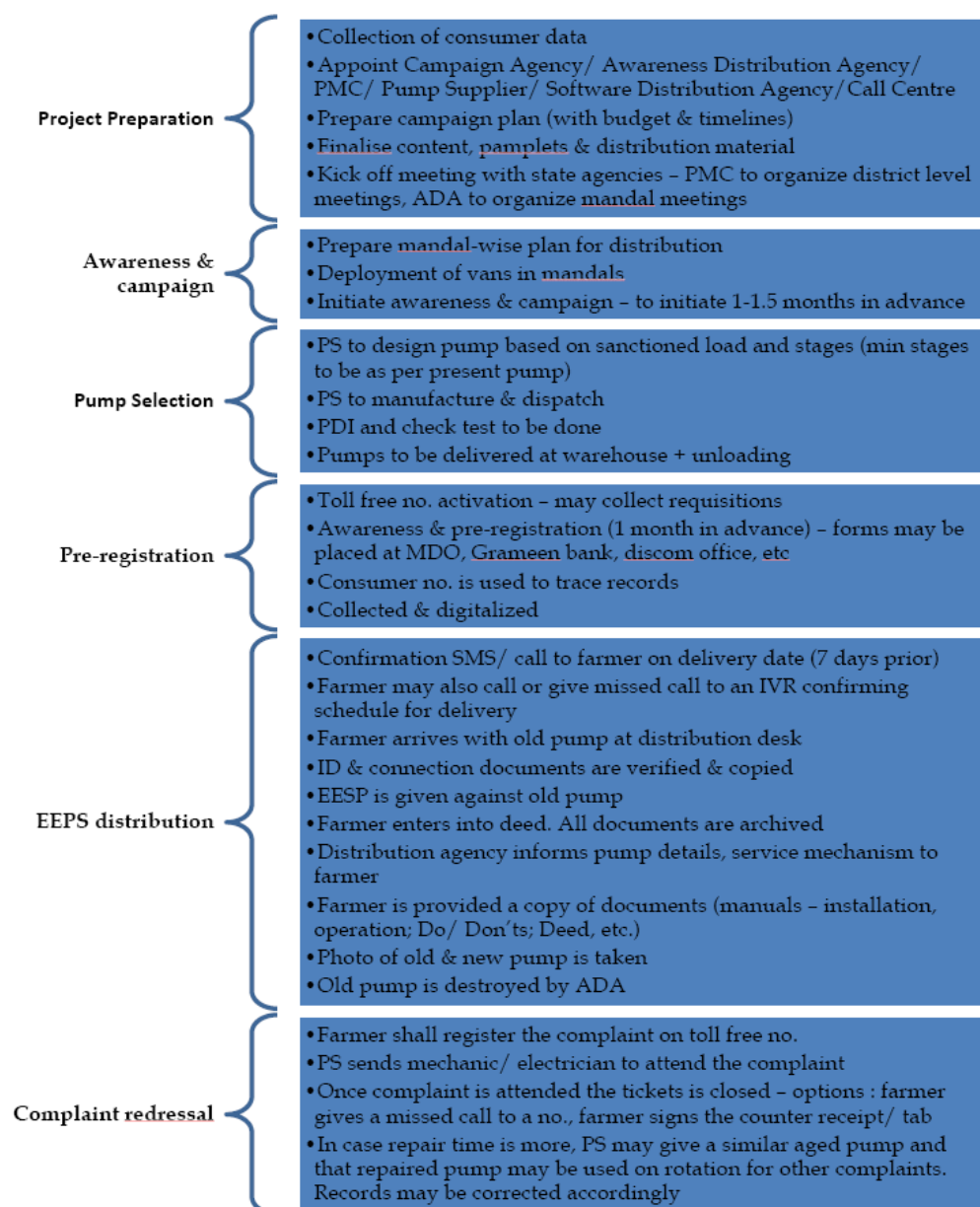


Table 5: Consultation brief and outcome - Rajasthan

Project Brief	Communication/out Reach/ Disclosure	Consultation outcome
<b>Domestic Light Programme</b>		
<p>In order to promote the use of LEDs in household sector and reduce the energy consumption, EESL in consultation with Jaipur Vidyut Vitran Nigam Limited (JVVNL), Ajmer Vidyut Vitran Nigam Limited (AVVNL), and Jodhpur Vidyut Vitran Nigam Limited (JDVVNL) collectively called 'DISCOMS' and Government of Rajasthan, has proposed to implement the DELP (Demand Side Management based Efficient Lighting Programme) programme in Rajasthan. LED based household lights could reduce energy consumption by 88% (as compared to ordinary bulb) and 50% (as compared to CFLs). DELP promotes the usage of LEDs at a minimal cost and is designed to monetize the energy consumption reduction for the domestic consumers. After reviewing the EESL proposal of DSM based Efficient Lighting Program (DELP) for LED bulbs in Rajasthan, the DISCOMs submitted petition with Rajasthan Electricity Regulatory Commission (RERC) on 10th March, 2015, seeking approval for implementation of DSM based Efficient Lighting Program (DELP) for LED bulbs in Rajasthan under Demand Side Management programme through an Energy Service Company (ESCO). Energy Efficiency Services Limited (EESL). The programme has been approved through order dated 20th March 2015. Further, Energy saving Agreements (ESA) has been signed with all the three DISCOMs individually on 4th May, 2015, for effective implementation of the DELP</p>	<p>City/state wide awareness campaigns were done to intimate the consumers about how and where to avail the scheme. It plans to achieve the following objectives:</p> <ul style="list-style-type: none"> <li>• Maximize the awareness among the domestic households on the scheme, benefits, DOs, and DON'Ts, sustainability etc.</li> <li>• Maximize participation and acceptance of the scheme</li> <li>• Minimize irregularities in compliance of scheme</li> </ul> <p>Awareness campaigns commence in advance of distribution of LEDs. They run in parallel to the distribution, and end with the end of the distribution cycles. In addition, intermediary campaigns are run to make the beneficiaries aware about the O&amp;M put in place to ensure fused bulbs replacements.</p> <p>EESL hired an agency to avail the services of an agency that can carry out large-scale awareness campaigns and distribution of LED among the grid connected domestic consumers of JVVNL, AVVNL and JDVVNL in Rajasthan.</p> <p>A state-wide multimedia campaign</p>	<p>The accrued benefits upon implementation of this DELP Scheme are as given below.</p> <p><b>(i) Benefit to House Hold Sector</b> Helps to reduce their energy consumption and its cost.</p> <p><b>(ii) Benefit to Distribution Utility</b> -Aids the department in reducing the demand &amp; Supply gap. - Minimise load shedding during peak hours. - To meet demands of other cross subsidized consumers like commercial and industrial establishment. - Generate additional revenue through sale of deemed energy saving to cross subsidized consumers and thereby helps to bridge the gap between the Average Cost of supply and the cross subsidized tariff rates.</p> <p><b>(iii) Benefit to Society</b> -Energy security. - Mitigation of climate changes and protection of environment.</p>

<p>programme in Rajasthan. Under the program, the 'DISCOMS' along with the technical and financial support of Energy Efficiency Services Limited carried out the following tasks:</p> <ul style="list-style-type: none"> <li>• EESL provided 3 Nos. of LED bulbs to each domestic customer in the operation area of the Discom.</li> <li>• Domestic consumers are having option to opt either for on-bill financing or upfront payment.</li> <li>• Under on-bill financing option, the LEDs are given at an upfront cost of Rs. 10 each and the balance amount is recovered from the consumers' electricity bill over a period of 12 months, subject to maximum of Rs. 10 for each LED bulb every month. The LED bulbs are sold at Rs.300-500 in the open market.</li> <li>• Under upfront payment option, consumer shall make upfront payment of programme cost per LED bulb.</li> </ul>	<p>implemented to support the programme. The campaign focused on:</p> <ul style="list-style-type: none"> <li>• Providing information about the DELP scheme</li> <li>• Dissemination of information about the comparative advantage of LED lighting.</li> <li>• Providing information about the monetary benefit to the consumers in terms of reduction of their electricity bills</li> <li>• Information regarding the place, date and time of distribution of LED bulbs</li> <li>• Any other information that is directly or indirectly related to the implementation of the scheme</li> </ul> <p>The LED bulbs are distributed from designated counters set up at various locations in the State. These locations are mapped in consultation with the concerned agencies and include billing centers of Discoms, Sewa Kendras, prominent locations like schools, etc. EESL engages agencies that helped set up the distribution counters and ensure smooth distribution of LEDs.</p>	
<b>Street Lighting Programme</b>		
<p>The basic objective of the project is to improve the overall energy efficiency of public lightings of Municipalities of Rajasthan State through up gradation through retrofitting of conventional</p>	<p>Enhanced awareness among Municipalities on reducing energy costs, Rajasthan state have taken steps to implement energy efficiency in the street light sector through</p>	<p>-No separate fund required for implementation of the project. -Cost of the project shall be recovered from the financial savings in the electricity</p>

<p>fixtures with LED streetlight luminaires, which could lead to substantial cost savings for those Municipalities. The department of local self-government, GoR and the Municipalities of Rajasthan have taken an initiative to implement the LED streetlight projects on a deemed savings model with EESL. The project shall require to install LED street lights luminaire as per the lux requirement as replacement for existing luminaire wattage for the category of road, road width, pole span and pole height. EESL shall facilitate the achievement of energy savings, O&amp;M works which are needed to ensure a healthy system, rectification work based on consumer complaints and establishing project monitoring cell in coordination with the respective ULB. The MoU is made on 23rd January, 2015 between Local Self Government Department Government of Rajasthan (hereinafter referred to as the "LSG") and Energy Efficiency Services Limited (hereinafter referred to as "EESL"). Further, an Implementation Agreement were signed between various Urban Local Bodies, Government of Rajasthan and Energy Efficiency Services Limited (EESL) for implementation of energy efficiency measures in street lights in the ULBs under the administrative control of LSG in the State of Rajasthan &amp; will remain in force for 7 years from the date signing. The implementation will be done by EESL or jointly with any implementation partner or through an implementation partner with EESL acting as a facilitator. The entire upfront capital cost of</p>	<p>ESCO mode. An energy efficient public lighting system brings very strong positive externalities for society as indicated below which has been a key points accepted by the decision maker in Rajasthan:</p> <p><b>Reduction in energy consumption and costs:</b> Modern LED based energy efficient lighting systems consume about 45%- 55% less energy than older and inefficient systems that are installed in almost the entire country. The resultant energy savings and the associated monetary savings provide a business model that could be leveraged to get third party financing. The lower running cost is a significant benefit for the State Governments, Discoms and ULBs, particularly for ULBs that are supported by state government budgets. Using third party financing could stimulate faster expansion of the lighting network and would ensure that the benefits of an energy efficient public street lighting system are spread beyond the urban areas.</p> <p><b>Optimizing Operational Performance:</b> LED technology enables optimization of light sources at minimum intensity. It also can be integrated with centralized monitoring and control that turns off lights using a timer or sensor. CMC could help MC save additional two hours of power consumption that may otherwise be required for manual switching. Being directional light sources, LED also help in designs that enhance the quality of light output.</p> <p><b>Social benefits:</b> LEDs not only improves safety conditions for vehicular traffic and pedestrians but also improve the safety and security of citizens, especially women.</p> <p><b>Reduced operation and maintenance cost:</b></p>	<p>consumption bills amount paid to Discom companies.</p> <ul style="list-style-type: none"> <li>-Overall cost of the project shall be borne from the funds released through "Urban Cess" hence no financial burden on ULB.</li> <li>-No additional expenditure in implementation of the project is required.</li> <li>-Illumination level on streets/roads will increase around three times.</li> <li>-Reduction in electricity consumption bill by around 50-60%.</li> <li>-Maintenance cost will be reduced.</li> </ul> <p><b>Social benefits:</b> LEDs not only improves safety conditions for vehicular traffic and pedestrians but also improve the safety and security of citizens, especially women.</p> <p><b>Reduced operation and maintenance cost:</b> The life of such lighting systems is longer and requires less maintenance, thus reducing O&amp;M costs.</p>
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energy efficiency interventions, including field audit, annual maintenance, warranty replacement, establishment of project monitoring cell, dedicated call center for handling complaints, O&M, needed pole cabling work for making a healthy system, shall be through EESL.	The life of such lighting systems is longer and requires less maintenance, thus reducing O&M	
<b>Agri-DSM Programme</b>		
After the initial success of the Pilot AgDSM projects in Maharashtra, Karnataka & ongoing project in Andhra Pradesh, the state of Rajasthan has been selected for implementing the scheme. As per the discussion between EESL & Energy Department, Govt. of Rajasthan, it was decided that AgDSM project of distribution of 1,00,000 pumps in the state of Rajasthan shall be implemented by EESL. In order to ascertain minimum energy savings of 30%, EESL shall be demonstrating energy savings in a feeder. The intervention would lead to lower energy supply on the feeder, and hence, could result in lower subsidized energy sale by utilities and lesser subsidy to be paid by the State Government. The experience of EESL have shown, carefully designed interventions could not only leverage the savings of subsidy to attract third party investments, but equally could create incentives for farmers to participate in the programme. It is evident from the projects that energy savings of more than 30% is possible with use of BEE star labelled pumpsets. The following are the features of some of the pilot	EESL is actively engage with the State Govt. for getting their full co-operation and support implementation of this program. The State shall separately plan and carry out awareness program on the proposed AgDSM Project in consultation with EESL and its PR agency at its cost. In addition to this, EESL would be rolling out a separate program on awareness creation at the State / District level involving local community leaders and various other means EESL shall bear the entire upfront investments in procurement, distribution, services, repair and maintenance of the energy efficient pump-sets along with the awareness creation activity.	<p>Apart from savings in energy consumption through BEE 5 Star rated pump set, additional savings is realized due to the following factors:</p> <p><b>-Life :</b> Increased life span of BEE 5 star rated pumpset because of high quality material</p> <p><b>-Expenditure:</b> Reduced expenditure on Repair &amp; Maintenance</p> <p><b>-Smart Control Panel:</b>Farmer can switch on/off pumpset from any location using just a call/sms facility from mobile phone.</p> <p><b>-Operating Hours:</b> Optimum of the pumpset, thus, saving additional energy &amp; water.</p> <p><b>-Saving Fuel and time:</b> Farmer need not go to the field to operate the pumpset.</p> <p><b>-Improved overall Performance:</b> Capability of achieving of higher flow rates with lower HP</p>

<p>AgDSM Projects which demonstrate that investment in energy efficiency of agricultural pump sets can payback in a short time, while at the same time reducing the energy consumption and subsidy burden of the state. The replacement of existing pump sets with energy efficient pump sets would thus lead to significant energy savings without decreasing the existing water flow of pump, so as per the survey conducted by EESL, more than 80% of farmer agrees to replace their Old pump set with New Energy Efficient Water pump set.</p>		
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## M. GRIEVANCE REDRESS MECHANISM

22. In a project implemented by EESL there might be some issues, concerns, problems, or claims (perceived or actual) that an individual or group of workers or local community wants EESL or contractor to address and resolve. The grievance redress mechanism system is transparent and legitimate to enhance the trust between the stakeholders and the system. Grievance mechanisms in its scope cover all the EESL operations. It is applicable to all the relevant stakeholders of the project like workers, local community, vendor and contractors. This system ensures that all the grievance of the workers and community must be addressed in a time bound and effective manner. At each level of the project, there are designated representative, who looks at the grievance raised at the workplace and ensure timely mitigation measure for the same. There is also a provision of continuous monitoring of the system to track the issues and the solution. Monitoring the system will be beneficial in the trend analysis of the issues and the effectiveness of the system to resolve the same. The grievance redress mechanism functions are managed in following manner.



**Receive and Register:** Vendor, Contractor, and the labour contractor have a representative to look at the problems and issues faced by the workers and the local community members. There is one representative at each level to receive and address the complaints raised by the workers and local community. It ensured that all the issues raised, registered and resolved in a timely manner.

**Review and Investigate:** Issues registered, reviewed and investigated in detail within the limited period of time. Management investigate the issue with in seven working days. Conduct root cause analysis of the issues and an assessment of the number of people getting impacted by that problem. It also provides an opportunity to conduct assessment of the risk it poses on the project.

**Resolve the Issue:** The issue get resolved within the limited time period and the recommended solutions is SMART (Specific, Measurable, Attainable, Relevant and Time-bound). The solutions addresses all the issues raised by complainant and ensure preventive measure to avoid the same issue.

**Table 6: Roles and Responsibilities in GRM**

S. No	Roles	Responsibilities
1	Labour Contractor	Ensure all the grievances raised by the workers or local community must be registered at site. Work along with contractor and vendors to resolve the issues raised by the complainant.
2	EHS Coordinator	Ensure that concerns raised by the workers and community must be registered and evaluated as per the required procedure.
3	Contractor	Must ensure that all the issues raised must be investigated in details and timely solution provided to the complainant. Must ensure continuous monitoring of the issues raised and evaluate the effectiveness of the solutions.
4	Vendor	Ensure that all the issues raised must be evaluated in details and timely solution must be provided in all the cases. Must ensure that issue once raised should be monitored continuously to prevent its reoccurrence. All grievances must be reported to EESL, along with the corrective action and timeline
5	EHSS department	Keep track of grievances and monitor their progress carefully. Ideate on newer methods of obtaining grievances from various sources.

23. Monitor the issues registered on a regular basis. The issues raised in the grievance mechanism shall be assessed monthly for the actions being taken and its closure. These analyses help in the trend analysis of the issues taking place at the workplace and to assess the effectiveness of the solutions provided by the system.

24. During the course of the due diligence by the ADB team the process of GRM has been studied for all the projects and it has been found through consultative process that the GRM is effective. The following photograph shows that computer based GRM process for street lighting programme.



### Computer Based GRM Process for Street Light Programme



## **N. CONCLUSION**

25. It is concluded from this due diligence study that the proposed sector loan project will not change the present land use; there will be no issues of land acquisition and resettlement related to this project. Due to project intervention, there will be no loss of income of any person or any assets, either privately owned or publicly owned. In case any claims or complaints are submitted during the implementation period, an effective and efficient Grievance Redress Mechanism, has been formed which will enhance provision of timely and sensible hearings and facilitate solutions. This information will be disseminated during public consultations with stakeholders of selected states where the project will be implemented. A loan condition of the project will include social safeguard provisions to ensure that the project does not cause negative IR and IP impacts and is implemented in accordance with ADB's Safeguard Policy Statement (2009). The project social safeguard aspects will be followed up through quarterly project progress report and the other relevant project documents. Monitoring reports will be submitted upon ADB request if necessary. A gender inclusive Stakeholder Communication Strategy (SCS) has been prepared to guide stakeholder engagement during project implementation and to ensure adequate channels for feedback from beneficiaries. EESL shall implement the gender actions and communication strategy and report progress to ADB through the quarterly progress reports. In regards to core labor standards, the loan agreements include standard assurances to be complied by contractors. Provisions include the assurance of gender equal pay for equal work, an awareness program on HIV and sexually transmitted diseases, forced labor etc.

## Annexure

## Consultation Street Lighting Programme with ULBs-Rajasthan

TA-9081 IND: Demand-Side Energy Efficiency Investment Project  
Consultation Attendance Sheet







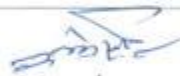


Date: 20/05/2018 Place: DLB Office, Jaipur Sub Project: Street Lighting Programme (Rajasthan)

Sl. No	NAME	Profession/Occupation	Signature with Cell No.
1	PRABHAT KUMAR	ESSEL	P.K. 9971134455
2	K. K. Shasmita	C.E. LSC, Dept. of Japn.	K.K. 995291-20615120 94003
3	M. K. Bajwa	SE (E) DLB Jp	M.K. 9950015017
4	Dr. Himani Tiwari	Co. Director, CMAR, DLB Jp.	Dr. Himani 9950015017
5	MOHIT KHATRI	ESL	Mohit 9950015017
6	Alok Mishra	PM, ESL	Alok 9990292700
7	Prashant Kumar Yadav	AM (Finance), ESL	Prashant 9950015017
8	Sudam Khann	EO, N.P. N.K.T. Sikk	Sudam 9950015017
9	Deepak Meena	JEN M-B Methodology	Deepak 9950015017
10	Eleonora de Gama	Consultant	Eleonora 9950015017
11	Deepa Ahluwalia	G.I., PPSA ADB	Deepa 9950015017

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TA-9081 IND: Demand-Side Energy Efficiency Investment Project  
Consultation Attendance Sheet

Date: 20/11/2016 Place DLB Office, Tripura Sub Project Street Light Programme (Kolkata)

Sl. No	NAME	Profession/Occupation	Signature with Cell No.
12	JIWAN ACHARYA	Sr. Energy Specialist, ADB	 +632634944
13	ARUPHANTH	Socio-Safeguard ADB	
14	M C SRIKANTH	Financial Expert ADB Consultant	
15	B.S. Bedi	Proc. Cons. ADB	
16	B.L. Kandale	XEN (S) JMC Tripura	
17	Rameshwar Sharma	X.En. N.M. Vdaipar	
18	R. L. Gupta	Asst. Asst. X En	
19	Dalip singh	A.En. N.P. Didwana	
20	Charlotte Lapsansky	Communication Specialist ADB	

# Consultation Rajasthan- All Programme(EESL/DISCOM)

TA-9081 IND: Demand-Side Energy Efficiency Investment Project  
Consultation Attendance Sheet

Date: 20/09/16 Place: JAIPUR/EESL Sub Project: ALL(DISCOM/EESL)

Sl. No	NAME	Profession/Occupation	Signature with Cell No.
1.	Parshant Yadav	AM(F), EESL	Parshant
2.	Ritesh Singh.	RM (J upr), EESL	
3.	Prabhat Kumar	PM (DSM), EESL	
4.	Sameer K. Gupta	DM, EESL	Sameer 9212145230
5.	Satendra Kumar	Engineer (Tech) EESL	Satendra
6.	Shilpi Patni	SPD, DOLT & C	Shilpi 9875068651
7.	Shashank Singh	Consultant	Shashank
8.	B.S. Badi	Exec. Cons.	Badi
9.	M.C. Srikant	Finance Specialist, ADB Consultant	M.C. Srikant
10.	PK Jaiswal	Adm. CE (MSP-DSM) Jyoti Jyoti	PK Jaiswal
11.	ADUPHATAN	Social Safeguarding ADB Consultant	ADUPHATAN
12.	Aditya Vaishnav	Sr. Engineer	Aditya
13.	JIWAN AGARWA	Sr. Energy Specialist ADB	JIWAN
14.	Praveen Bhardwaj	ACP (by Director) DOLT	Praveen
15.	Charlotte Lapsensky	Communication Specialist ADB	Charlotte

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### Consultation DELP Rajasthan with Users

TA-9081 IND: Demand-Side Energy Efficiency Investment Project  
Consultation Attendance Sheet

Date 21/05/2016 Place Jodhpur Sub Project Domestic Light Program

Sl. No	NAME	Profession/Occupation	Signature with Cell No.
1	ARUPURAN	S.D.S / ADB	<u>Arupuran</u> 9868109773
2	Manish Choudhary	Student	<u>Manish</u> 9928826774
3	<u>Yashwanth</u>	<u>Student</u>	<u>Yashwanth</u> 9413348065
4	S.R. Gupta	Business	9413348065 <u>S.R. Gupta</u>
5	Nitin Kumar Mishra	Doctor	9414816914
6	Kiran Sharma	Doctor	9694918730
7	C.P. Gupta	Electrical Engineer	9414029421 <u>C.P. Gupta</u>
8	Salish Sharma	Govt. Job	992890047 <u>Salish</u>
9	ASIAN ACHARYA	Teacher	9351796622 <u>Asian</u>
10	Nagendra Khan	Teacher	9352796622 <u>Nagendra</u>
11	Vinod Meena	Teacher	9413348065
12	Prashant Yadav	EEEL	<u>Prashant</u>
13	Triven Acharya	ADB	<u>Triven</u>
14	B.S. Bedia	House Cons.	<u>B.S. Bedia</u>
15	E. de Gupnan	Consultant ADB	<u>E. de Gupnan</u>

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TA-9081 IND: Demand-Side Energy Efficiency Investment Project  
Consultation Attendance Sheet

Date: // // Place \_\_\_\_\_ Sub Project \_\_\_\_\_

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### Consultation Agri-DSM-Village Chomu Rajasthan

TA-9081 IND: Demand-Side Energy Efficiency Investment Project  
Consultation Attendance Sheet

Date: 24/5/16 Place: Chithwari (Bagga ki Dhani) Agri DSM  
Sub Project

Sl. No	NAME	Profession/Occupation	Signature with Cell No.
1	Sardar Seini	Grid Tech.	921449551
2	Arjun <sup>Gupta</sup> Sharma		
3	Babulal Sharma	Farmer	9251519050
4	Rajendra Sharma	farmer	9252271687
5	Santosh Sharma	farmer	9214987942
6	Haruman Gahai	" "	9898742483
7	Haruman Gahai Jaf.	" "	9782703436
8	Ram Lal Sharma	" "	9983747631 07568183809
9	Tara Chand Sharma	" "	8852027331
10	Jaydesh Sharma	" "	9785722971
11	Rakesh Sharma	" "	9887568998
12	Rakesh Bagra	" "	9782537152
13	Kamlesh Kumar	" "	9261208668
14	Ram Narayan	" "	9602299810



## Gender Consultation- Village Chomu-Rajasthan

## GENDER CONSULTATION

TA-9081 IND: Demand-Side Energy Efficiency Investment Project  
Consultation Attendance Sheet

Date: 11/5/2018 Place: Chomu (Banswara) Sub Project: Domestic Wht + LED SM

Sl. No.	NAME	Profession/Occupation	Signature with Cell No.
1	ना.देवी	खेति कार्य	
2	मोहनी देवी	खेति कार्य	
3	चवरी देवी	खेति कार्य	
4	रेखा देवी	खेति कार्य	रेखा देवी
5	इगुन देवी	खेति कार्य	इगुन देवी
6	तारा देवी	खेति कार्य	तारा देवी
7	सुनिता कु	रिडिंग	सुनिता कुमारी
8	मुखीला कु	रिडिंग	मुखीला कुमारी
9	अमनि कु	रिडिंग	अमनि कुमारी
10	सुहानि कु	रिडिंग	सुहानि कुमारी
11	मोहनी कु	रिडिंग	मोहनी कुमारी

### Photographs of Consultations

#### Consultations with Municipalities, Directorate with Urban Local Bodies etc regarding Street lighting Programme



**Consultations with Rajasthan Discom and EESL****Field Visit Ajmer(Rajasthan)- Street Light and Consultations with Vendor,Youths**



**Consultations with villager of Chmou,Rajasthan-Agri DSM****Gender Consultation Regarding DELP and Agri-DSM****Consultation and Feed back –DELP Programme-Rajasthan**