GOVERNMENT OF INDIA MINISTRY OF POWER

LOK SABHA STARRED QUESTION NO.338 TO BE ANSWERED ON 03.01.2019

STREET LIGHTING NATIONAL PROGRAMME

*338. SHRIMATI ANJU BALA: SHRI L.R. SHIVARAME GOWDA:

Will the Minister of POWER be pleased to state:

(a) whether the Government is implementing the Street Lighting National Programme (SLNP) to promote the use of LED lights in place of conventional Street lights in the country and if so, the details of the scheme along with the number of streetlights installed, since its inception, State-wise;

(b) whether SLNP is currently being implemented only in a few selected States and if so, the details thereof and the reasons therefor;

(c) the total number of Local Bodies which have entered into contract with Energy Efficiency Services Ltd. (EESL) for replacement of street lights with LED lights under SLNP so far, State-wise;

(d) whether the Government has made any study on the implementation of the project and if so, the details thereof; and

(e) the steps being taken by the Government for effective implementation of SLNP?

ANSWER

THE MINISTER OF STATE (INDEPENDENT CHARGE) FOR POWER AND NEW & RENEWABLE ENERGY

(SHRI R.K. SINGH)

(a) to (e) : A Statement is laid on the Table of the House.

STATEMENT REFERRED TO IN REPLY TO PARTS (a) TO (e) OF STARRED QUESTION NO.338 TO BE ANSWERED IN THE LOK SABHA ON 03.01.2019 REGARDING STREET LIGHTING NATIONAL PROGRAMME.

(a) to (e): Hon'ble Prime Minister, on 5th January, 2015, launched Street Lighting National Programme (SLNP) to replace 1.34 crore conventional street lights with energy efficient LED street lights by March, 2019. SLNP is being implemented by Energy Efficiency Services Limited (EESL), a joint venture company of Public Sector Undertakings (PSUs) under the Ministry of Power. Till date, EESL has installed over 76.77 lakh LED street lights in 28 States/UTs.

2. SLNP is voluntary in nature and runs without any budgetary support from Government of India. The entire investment in supply, installation and maintenance of LED Street Lights is made by EESL. Payment to EESL is made by Urban Local Bodies (ULBs) from the resultant savings achieved in terms of reductions in electricity bills and maintenance cost, in respect of the street lights covered under the programme, over a period of seven years.

3. SLNP is implemented in States/ULBs, which have signed the implementation agreement with EESL. As on date, it is implemented in all ULBs of 13 States and 1 Union Territory (Annexure-I) and partially in 11 other states and 3 UTs (Annexure-II), including States/UTs where demonstration projects have been successfully completed.

4. SLNP has not been implemented so far in the states of Arunachal Pradesh, Manipur, Mizoram, Nagaland and Meghalaya and Union Territories of Daman & Diu, Dadra and Nagar Haveli and Lakshadweep.

5. Till date, total 1,492 ULBs have signed the implementation agreement with EESL for replacement of conventional street lights with LED street lights. Out of these ULBs, installation work in 712 ULBs has been completed. States/UTs wise number of ULBs which have signed the implementation agreement with EESL for this programme is at Annexure-III.

6. EESL has conducted the studies on the implementation of SLNP in the states of Himachal Pradesh and Rajasthan. The gist of findings emerging from these studies is at Annexure IV.

7. For effective implementation of SLNP as well as for expediting the implementation in remaining states/UTs, the following steps have been taken by ESSL/Government:

- (i) EESL has submitted proposals for replacement of Conventional street lights with LED street to the remaining States/UTs
- (ii) Letters have been issued by Secretary (Power) to all the Chief Secretaries of all the States/UTs for implementation of SLNP Programme in their respective states
- (iii) Real time monitoring is done of performance of the installed Street Lights by Centralised Control and Monitoring System (CCMS).

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ANNEXURE REFERRED TO IN PARTS (a) TO (e) OF THE STATEMENT LAID IN REPLY TO STARRED QUESTION NO. 338 TO BE ANSWERED IN THE LOK SABHA ON 03.01.2019 REGARDING STREET LIGHTING NATIONAL PROGRAMME.

List of States where SLNP has been implemented in all ULBs as per implementation agreement signed with EESL

S. No.	States	No. of LED Street Lights installed till date
1.	Andhra Pradesh	21,81,615
2.	Bihar	1,50,203
3.	Chhattisgarh	3,47,251
4.	Goa	2,06,790
5.	Gujarat	8,83,097
6.	Himachal Pradesh	52,404
7.	Jharkhand	93,742
8.	Maharashtra	1,75,146
9.	Odisha	2,70,271
10.	Rajasthan	9,61,229
11.	Telangana	8,17,878
12.	Tripura	75,376
13.	Uttar Pradesh	7,74,549

List of UT where SLNP has been implemented in all ULBs as per implementation agreement signed with EESL

SI. No.	UT	No. of LED Street Lights installed till date
1. C	handigarh	41,942

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ANNEXURE-II

ANNEXURE REFERRED TO IN PARTS (a) TO (e) OF THE STATEMENT LAID IN REPLY TO STARRED QUESTION NO. 338 TO BE ANSWERED IN THE LOK SABHA ON 03.01.2019 REGARDING STREET LIGHTING NATIONAL PROGRAMME.

List of States where SLNP has been partially implemented in some ULBs as per implementation agreement signed with EESL

S. No.	States	No. of LED Street Lights installed till date
1.	Assam	23,651
2.	Haryana	61,500
3.	Jammu & Kashmir	11,991
4.	Karnataka	9,882
5.	Kerala	38,301
6.	Madhya Pradesh	81,095
7.	Punjab	46,780
8.	Sikkim	868
9.	Tamil Nadu	6,689
10.	Uttarakhand	30,619
11.	West Bengal	15,307

List of UTs where SLNP has been partially implemented in some ULBs as per implementation agreement signed with EESL

SI.	UTs	No. of LED Street Lights
No.		installed till date
1.	Delhi	
		3,05,082
2.	Andaman & Nicobar	
		13,500
3.	Puducherry	
		450

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States/UTs wise details ULBs, which have signed the implementation agreement with EESL for replacement of conventional street lights with LED street lights

SI. No.	States/UTs	Number of ULBs signed till
		date
1.	Andaman & Nicobar	1
2.	Andhra Pradesh	108
3.	Assam	3
4.	Bihar	143
5.	Chandigarh	1
6.	Chhattisgarh	168
7.	Goa	14
8.	Gujarat	148
9.	Haryana	1
10.	Himachal Pradesh	48
11.	Jharkhand	43
12.	Kerala	4
13.	Madhya Pradesh	2
14.	Maharashtra	351
15.	New Delhi	1
16.	Odisha	109
17.	Punjab	16
18.	Rajasthan	191
19.	Telangana	76
20.	Tripura	20
21.	Uttar Pradesh	43
22.	Uttarakhand	1
	Total	1,492

In some States/ UTs demonstration projects have been successfully completednotably in Jammu & Kashmir, Karnataka, Puducherry, Sikkim, Tamil Nadu and West Bengal.

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The gist of the findings of the case studies on the implementation of LED street lights projects in Himachal Pradesh and Rajasthan are as follows:-

1. Himachal Pradesh: The energy & monetary savings achieved through implementation of Street Light National Program in Himachal Pradesh as per survey conducted by EESL, on sample basis, is as follows:-

SI. No	City	Total Inst. Lights	Monthly Energy Consumption with Conventional	Monthly Energy Consump- tion with	Monthly Energy Saving (in kWh)	% Saving	Monetary Saving Per Month (in INR)
			lights (in kWh)	LED (in kWh)			
1	Shimla	8516	358082	158199	199883	56%	9,89,419
2	Dharamshala	2910	120345	52495	67850	56%	3,35,859
3	Mandi	2189	80003	34917	45086	56%	2,23,174
4	Sundernagar	1821	62822	27023	35799	57%	1,77,205
5	Paonta Sahib	1948	114525	50654	63871	56%	3,16,159
6	Ghumarwin	608	22645	9911	12734	56%	63,033
7	Manali	798	40912	18876	22036	54%	1,09,079
	Total	18790	799334	352075	447258	56%	22,13,928

(Average operating hours per day considered as 11; Monetary saving calculation is based on Deemed saving approach, considering unit rate of INR 4.95/kWh).

2. Rajasthan:

(i) Jhalawar Street Light Project:- The energy savings achieved through implementation of Street Light National Programme in Jhalawar as per survey conducted by EESL, on sample basis, is as follows:-

	Total Inventory of Conventional Street L	.ights	
Sr. No.	Earlier Wattage of Lamp (W)	Quantity	Total kW
1	High Pressure Sodium Vapour - 400	36	16
2	High Pressure Sodium Vapour – 250	120	33
3	High Pressure Sodium Vapour – 150	140	23
4	High Pressure Sodium Vapour – 70	157	13
5	Fluorescent Tube Light - 40W	1624	78
6	Compact Fluorescent Lamp - 20W	372	7
		170	
	Total Inventory after Installation of LED Stre	et Lights	
Sr. No.	Wattage of LED Light	Quantity	Total kW
1	190	36	7
2	120	120	14
3	72	140	10
4	40	157	6
5	18	1624	29
6	12	372	4
	Total kW (New)		71

Estimates of energy saving potential		
Earlier Load (in kW)	170	
New Load (in kW)	71	
Reduction in Load after Installation (in kW)	99	
Annual Energy Saving in kWh	395863	
Annual Energy saving in MU's	0.396	
% reduction in Load	58%	

(Average operating hours per day considered as 11 and operating days considered as 365).

Implementation of the LED street light project in Jhalawar has resulted in reduction of the street lighting load from 170 kW to 71 kW.

(ii) Mount Abu Street Light Project:- The energy savings achieved through implementation of Street Light National Programme in Mount Abu as per survey conducted by EESL, on sample basis is as follows:-

	Total Inventory of Conventional Street Lights				
SI. No.	Earlier Wattage of Lamp (W)	Quantity	Total kW		
1	High Pressure Sodium Vapour – 400	106	42.4		
2	High Pressure Sodium Vapour – 250	43	10.8		
3	High Pressure Sodium Vapour – 150	492	73.8		
4	High Pressure Sodium Vapour – 70	144	10.1		
5	Fluorescent Tube Light – 40 W	508	20.3		
6	Compact Fluorescent Lamp – 36 W	202	7.3		
7	Compact Fluorescent Lamp – 72 W	6	0.432		
8	Compact Fluorescent Lamp – 15 W	3	0.045		
9	Compact Fluorescent Lamp – 11 W	26	0.286		
		Total kW	165.4		

Total Inventory after Installation of LED Street Lights				
Sr. Wattage of LED Light Quantity T No				
1 120 76 9				
2	70	669	46.83	
3	15	737	11.055	
	Total kW (New) 67			

Estimates of energy saving potential			
Earlier Load (in kW)	165.4		
New Load (in kW)	67		
Reduction in Load after Installation (in kW) 9			
Annual Energy Saving in kWh	394996		
Annual Energy saving in MU's			
% reduction in Load	59%		

(Average operating hours per day considered as 11 and operating days considered as 365). The implementation of LED street light project in Mount Abu has resulted in reduction of the street lighting load from 165.4 kW to 67 kW.