

GOVERNMENT OF INDIA
MINISTRY OF NEW AND RENEWABLE ENERGY
LOK SABHA
UNSTARRED QUESTION NO. 1252
ANSWERED ON 09.02.2023

ADDITION OF SOLAR CAPACITY

1252. DR. (PROF.) KIRIT PREMJBHAI SOLANKI

Will the Minister of NEW AND RENEWABLE ENERGY be pleased to state:

- (a) the details of the solar capacity added through the installation of solar irrigation pumps for cultivation, since the inception of Pradhan Mantri Kisan Urja Suraksha evam Utthaan Mahabhiyan (PM-KUSUM) scheme;
- (b) the details of the per annum reduction in diesel consumption in terms of litres that has been observed so far across the country;
- (c) the conversion rate of the diesel based pumps to the solar pumps, State/UT-wise
- (d) the number of farmers who are being benefitted under the PM-KUSUM, State/UT-wise;
- (e) whether the Government maintains the record of carbon dioxide (CO₂) emission that has been reduced so far as an outcome of the scheme; and
- (f) if so, the details thereof since the launch of the scheme, State/UT-wise?

ANSWER

THE MINISTER OF NEW & RENEWABLE ENERGY AND POWER

(SHRI R.K. SINGH)

(a) Under Pradhan Mantri Kisan Urja Suraksha evam Utthaan Mahabhiyan (PM-KUSUM) Scheme, a total solar capacity of 947 MW has been added through installation of both standalone solar pumps under Component-B of the PM-KUSUM Scheme and solarization of existing grid connected agricultural pumps under Component-C of the Scheme.

(b) Under Component-B, total 1,80,429 standalone solar pumps have been installed as on 31.12.2022, which is estimated to result in reduction of 124 million litres in diesel consumption per annum.

(c) As per All India Agricultural Input Survey 2016-17 released by the Ministry of Agriculture and Farmer Welfare, there are 11.2 million diesel agricultural pumps in the country. A total of 5 lakh standalone solar pumps have been reported installed cumulatively till 31.12.2022, including the solar pumps installed under PM-KUSUM Scheme. The state-wise detail of diesel agricultural pumps and standalone solar pumps installed is placed at **Annexure-I**.

(d) The State/UT-wise number of farmers benefitted under all the three components of the PM-KUSUM Scheme is placed at **Annexure-II**.

(e) & (f) It has been estimated that capacity installed under all the three components of the PM-KUSUM Scheme as on 31.12.2022 has resulted in a reduction of around 0.64 million tonnes of Carbon Dioxide (CO₂) emissions per annum. State/UT-wise estimated reduction in CO₂ emissions is placed in **Annexure-III**.

Annexure-I referred in reply to part (c) of the Lok Sabha Unstarred Question No. 1252 to be answered on 09.02.2023

State-wise details of number of diesel pumps as per “All India Agri Input Survey 2016-17” and number of standalone solar pumps reported installed cumulatively as on 31.12.2022.

S. No.	States/UT	Total No. of Diesel Pumps as per All India Agriculture Input Survey 2016-17	Total No. of Standalone Solar Pumps installed till 31.12.2022
1	Andhra Pradesh	413600	34045
2	Arunachal Pradesh	2300	113
3	Assam	92100	45
4	Bihar	574000	2813
5	Chhattisgarh	113500	119282
6	Goa	11800	45
7	Gujarat	674800	12805
8	Haryana	322000	42153
9	Himachal Pradesh	1900	484
10	Jammu & Kashmir	29500	501
11	Jharkhand	330600	13592
12	Karnataka	334200	7734
13	Kerala	16000	818
14	Madhya Pradesh	1103600	25047
15	Maharashtra	393300	49036
16	Manipur	100	68
17	Meghalaya	11200	54
18	Nagaland	8100	3
19	Odisha	495500	10689
20	Punjab	226700	16710
21	Rajasthan	1121000	107500
22	Sikkim	100	0
23	Tamil Nadu	278600	7927
24	Telangana	56200	424
25	Tripura	71900	1325
26	Uttar Pradesh	3607600	41423
27	Uttarakhand	43000	333
28	West Bengal	817000	653
29	Andaman & Nicobar	1100	5
30	Puducherry	600	21
31	Others	300	4760
	Total	11152200	500408

Annexure-II referred in reply to part (d) of the Lok Sabha Unstarred Question No. 1252 to be answered on 09.02.2023

Year and State/UT-wise details of farmers benefitted under PM-KUSUM Scheme since inception, till 31.12.2022

S. No.	State	Farmers Benefitted (Nos.)
1	Arunachal Pradesh	91
2	Gujarat	1283
3	Haryana	40218
4	Himachal Pradesh	521
5	Jammu & Kashmir	462
6	Jharkhand	8922
7	Karnataka	314
8	Kerala	30
9	Madhya Pradesh	7237
10	Maharashtra	37721
11	Manipur	28
12	Meghalaya	35
13	Odisha	1138
14	Punjab	12128
15	Rajasthan	55504
16	Tamil Nadu	2468
17	Tripura	1174
18	Uttar Pradesh	12773
19	Uttarakhand	316
	Total	182363

Annexure-III referred in reply to part (e) & (f) of the Lok Sabha Unstarred Question No. 1252 to be answered on 09.02.2023

State/UT-wise reduction in CO₂ emissions per annum against the solar capacity installed under all the three components of the PM-KUSUM Scheme as on 31.12.2022

S. No.	State	CO₂ emission reduction in thousand tonnes per annum
1	Arunachal Pradesh	0.16
2	Gujarat	4.70
3	Haryana	149.61
4	Himachal Pradesh	32.49
5	Jammu & Kashmir	1.09
6	Jharkhand	12.86
7	Karnataka	1.09
8	Kerala	0.14
9	Madhya Pradesh	21.52
10	Maharashtra	74.40
11	Manipur	0.05
12	Meghalaya	0.03
13	Odisha	2.19
14	Punjab	33.21
15	Rajasthan	272.09
16	Tamil Nadu	8.15
17	Tripura	1.09
18	Uttar Pradesh	20.46
19	Uttarakhand	1.04
	Total	636.38 (Say 0.64 million)