

GOVERNMENT OF INDIA
MINISTRY OF NEW AND RENEWABLE ENERGY
LOK SABHA
UNSTARRED QUESTION NO. 397
ANSWERED ON 08.12.2022

INSTALLATION OF SOLAR IRRIGATION PUMPS

397. SHRI B.B. PATIL

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

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

ANSWER

THE MINISTER OF NEW & RENEWABLE ENERGY AND POWER
(SHRI R.K. SINGH)

- (a) Till 31.10.2022, a total solar capacity of 816.8 MW has been added through installation of standalone solar pumps under Component-B and solarization of existing grid-connected agriculture pumps under Component-C of the PM-KUSUM Scheme. The state/UT-wise detail of solar capacity added under these two components is placed at **Annexure-I**. No installation has been reported in the State of Telangana under the Scheme.
- (b) A total of 4.72 lakh standalone solar pumps have been reported installed cumulatively till 31.10.2022, including the solar pumps installed under PM-KUSUM Scheme. It is estimated that these pumps have resulted in reduction of 325 million liters in diesel consumption per annum.
- (c) As per All India Agricultural Input Survey 2016-17 released by the Ministry of Agriculture and Farmers Welfare, there are 11.2 million diesel agricultural pumps in the country. The state-wise detail of diesel agricultural pumps and standalone solar pumps installed is placed at **Annexure-II**.
- (d) The State/UT-wise number of farmers benefitted under all the three components of the PM-KUSUM Scheme is placed at **Annexure-III**. No installation is reported in the State of Telangana.
- (e) & (f) It has been estimated that there is a reduction of around 0.53 million tonnes per annum in Carbon Dioxide (CO₂) emissions on account of total solar capacity installed as on 31.10.2022 under all the three components of the PM-KUSUM Scheme. State/UT-wise estimated reduction in CO₂ emissions is placed in **Annexure-IV**.

Annexure-I referred in reply to part (a) of the Lok Sabha Unstarred Question No. 397 to be answered on 08.12.2022

State/UT-wise details of solar capacity addition through solarization of agricultural pumps under Component-B and Component-C of the PM-KUSUM Scheme as on 31.10.2022

S.No.	State/UT	Solar Capacity Addition (MW)
1	Gujarat	6.7
2	Haryana	260.1
3	Himachal Pradesh	2
4	Jammu & Kashmir	2
5	Jharkhand	22.7
6	Karnataka	2
7	Kerala	0.2
8	Madhya Pradesh	29.3
9	Maharashtra	76.5
10	Manipur	0.1
11	Meghalaya	0.1
12	Odisha	4
13	Punjab	59.4
14	Rajasthan	314.4
15	Tamil Nadu	13.4
16	Tripura	2
17	Uttar Pradesh	20
18	Uttarakhand	1.9
	Total	816.8

Annexure-II referred in reply to part (c) of the Lok Sabha Unstarred Question No. 397 to be answered on 08.12.2022

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 31.10.2022.

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 31.10.2022
1	Andhra Pradesh	413600	34045
2	Arunachal Pradesh	2300	22
3	Assam	92100	45
4	Bihar	574000	2813
5	Chhattisgarh	113500	119282
6	Goa	11800	45
7	Gujarat	674800	12528
8	Haryana	322000	40994
9	Himachal Pradesh	1900	479
10	Jammu & Kashmir and Ladakh	29500	501
11	Jharkhand	330600	13399
12	Karnataka	334200	7734
13	Kerala	16000	818
14	Madhya Pradesh	1103600	25047
15	Maharashtra	393300	32814
16	Manipur	100	68
17	Meghalaya	11200	54
18	Odisha	495500	10689
19	Punjab	226700	16552
20	Rajasthan	1121000	102971
21	Tamil Nadu	278600	7701
22	Telangana	56200	424
23	Tripura	71900	1325
24	Uttar Pradesh	3607600	35492
25	Uttarakhand	43000	332
26	West Bengal	817000	653
27	Puducherry	600	21
28	Others	9600	4768
	Total	11152200	471616

Annexure-III referred in reply to part (d) of the Lok Sabha Unstarred Question No. 397 to be answered on 08.12.2022

State/UT-wise details of beneficiaries under all the three components of the PM-KUSUM Scheme as on 31.10.2022

S. No.	State/UT	Beneficiaries under the PM-KUSUM scheme (Nos.)
1	Gujarat	1006
2	Haryana	39059
3	Himachal Pradesh	516
4	Jammu & Kashmir	462
5	Jharkhand	8729
6	Karnataka	314
7	Kerala	30
8	Madhya Pradesh	7234
9	Maharashtra	21499
10	Manipur	28
11	Meghalaya	35
12	Odisha	1138
13	Punjab	11970
14	Rajasthan	50729
15	Tamil Nadu	2242
16	Tripura	1174
17	Uttar Pradesh	6842
18	Uttarakhand	306
	Total	153313

Annexure-IV referred in reply to part (e) & (f) of the Lok Sabha Unstarred Question No. 397 to be answered on 08.12.2022

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 31.10.2022

S. No.	State/UT	CO₂ emission reduction in thousand tonnes per annum
1	Gujarat	3.50
2	Haryana	139.80
3	Himachal Pradesh	26.29
4	Jammu & Kashmir	1.04
5	Jharkhand	11.95
6	Karnataka	1.06
7	Kerala	0.21
8	Madhya Pradesh	15.43
9	Maharashtra	40.25
10	Manipur	0.05
11	Meghalaya	0.03
12	Odisha	2.08
13	Punjab	31.24
14	Rajasthan	235.14
15	Tamil Nadu	7.07
16	Tripura	1.03
17	Uttar Pradesh	10.55
18	Uttarakhand	1.00
	Total	527.72 (Say 0.53 million tonnes of CO₂ per annum)