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

(a) whether the Government has achieved the objective for which Pradhan Mantri Kisan Urja Suraksha evam Utthaan Mahabhiyan (PM-KUSUM) was launched and if so, the details thereof;

(b) the target fixed and achieved under PM-KUSUM during the last three years and the current year;

(c) the reasons for inability to install solar water pumps under PM-KUSUM;

(d) the number of solar water pumps that have been installed under PM-KUSUM during the said period in the State/Union Territory of Maharashtra, Tamil Nadu and Andaman & Nicobar Islands;

(e) the steps taken by the Government to increase the country’s solar water pump manufacturing capacity;

(f) whether the Government has requisite surveillance mechanisms and is taking active measures to ensure solar water pumps do not disrupt the ground water table in districts with depleted levels of ground water and if so, the details thereof; and

(g) the other steps taken/being taken by the Government to decentralised solar power production?

THE MINISTER OF STATE OF NEW & RENEWABLE ENERGY AND CHEMICALS AND FERTILIZERS

(SHRI BHAGWANTH KHUBA)

(a) & (b) The objectives of the Pradhan Mantri Kisan Urja Suraksha evam Utthaan Mahabhiyan (PM-KUSUM) include de-dieselisation of the farm sector, providing water and energy security to farmers, increasing the income of farmers and curbing environmental pollution. To achieve these objectives, following targets have been kept under the Scheme:
Component-C: Solarisation of 15 Lakh Grid-connected Agriculture Pumps including through Feeder Level Solarisation.

PM-KUSUM is a demand driven scheme and capacities are allocated based on demand received from the states. Component-wise capacity allocated and achieved in the last three years and current year, till 30.06.2022, is as given below:

<table>
<thead>
<tr>
<th>Component</th>
<th>Capacity sanctioned</th>
<th>Capacity Installed</th>
</tr>
</thead>
<tbody>
<tr>
<td>Component-A</td>
<td>4906 MW</td>
<td>56 MW</td>
</tr>
<tr>
<td>Component-B</td>
<td>3.59 lakh nos.</td>
<td>1.23 lakh nos.</td>
</tr>
<tr>
<td>Component-C</td>
<td>10.01 lakh nos.</td>
<td>1047 nos.</td>
</tr>
</tbody>
</table>
(c) Although installation of solar pumps is being carried out continuously, the pace of implementation has been significantly affected due to the Covid-19 pandemic. To compensate the implementing agencies for challenges faced due to supply chain disruptions and capital & liquidity issues, Ministry has provided multiple extensions. Despite the above-mentioned challenges, 1.23 lakh solar pumps have been installed till 30.06.2022 under Component-B of PM-KUSUM Scheme and 1047 nos. of grid-connected pumps have been solarized under Component ‘C’.

(d) Till 30.06.2022, under Component ‘B’ of the PM-KUSUM Scheme, 5822 nos. of solar pumps have been installed in the State of Maharashtra and 1766 nos. of solar pumps have been installed in the State of Tamil Nadu. No existing agriculture pump has been solarized under component ‘C’ of the Scheme in the states of Maharashtra and Tamil Nadu. Further, in absence of demand, no sanction could be made for the installation of solar pumps under PM-KUSUM in the Andaman & Nicobar Islands.

(e) Following provisions of the PM-KUSUM Scheme aim to increase country’s solar water pump manufacturing capacity: (i) Target of installation or solarisation of 35 lakh pumps through central financial support under the Scheme provides visibility of demand in the coming years. (ii) Condition of domestic content requirement for participation in Component-B and Component-C. (iii) Direct participation of manufacturers of solar pumps/ solar photovoltaic modules/ solar pump controller either as sole bidder or member of a Joint Venture, in bidding under Component-B and Component-C.

(f) To avoid disruption of the groundwater table, particularly in the districts with depleted levels of ground water, installation of new solar pumps is not allowed under the Scheme in the dark zones/ areas notified by Central Ground Water Board (CGWB), which monitors and regulates groundwater development and extraction. Only the existing diesel pumps can be replaced with solar pumps under Component-B and existing electric pumps can be solarized under Component-C in these areas provided they use micro-irrigation techniques to save water. Additionally, to conserve groundwater, the following provisions are included in the PM-KUSUM Scheme: (i) Preference for installation of standalone solar pumps and solarisation of existing agriculture pumps is given to the farmers using micro irrigation systems or covered under micro irrigation schemes or those who opt for micro irrigation systems. (ii) The size of the standalone solar pump is to be selected on the basis of the water table in the area, land covered and quantity of water required for irrigation. (iii) Farmers have the option to monetize the surplus power generated under individual grid-connected pump solarisation by selling it to the DISCOM. Further, under feeder level solarisation, farmers are incentivised for electricity consumption below the benchmark consumption.

(g) The steps taken/being taken by the Ministry of New and Renewable Energy for decentralised solar power production include the following: (i) Installation of grid-connected solar power plants up to 2 MW capacity under Component A of PM-KUSUM Scheme (ii) Installation of standalone solar pumps under Component-B and solarisation of grid-connected agriculture pumps including through feeder level solarisation under Component-C of PM-KUSUM Scheme by providing Central Financial Assistance (CFA). (iii) Promotion of rooftop solar under Solar Rooftop Phase II Programme by providing CFA in the residential sector and incentives to DISCOMs. (iv) Off-Grid & Decentralised Solar PV Applications Programme implemented during the years 2018-21 provided financial support for the installation of Solar Street Lights, Off-Grid Solar Power Plants and distribution of Solar Study Lamps.

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