

De-dieselisation of Farm Sector

Component-B: Installation of Standalone Solar Powered Agriculture Pumps

Under this Component, individual farmers can replace their existing diesel pumps with solar pumps. The replacement of existing diesel pumps with solar pumps will not only reduce the irrigation costs of around Rs.50,000 per year (for 5HP pump) but also lead to reduction in the pollution. This Component will benefit 20 lakh farmers in off-grid areas, where there is no source of electric power for irrigation. It will also help in increasing the farmer's income and living conditions.



Group of farmers, such as Water User Associations and community/cluster based irrigation systems will also be covered under this component. However, priority will be given to small and marginal farmers. In order to minimize water usage for irrigation purposes, preference will be given to farmers using micro irrigation systems or covered under micro irrigation schemes. The size of the pump will be selected on the basis of the depth of the water table in the area, the area of the land to be covered under irrigation and the quantity of water required for irrigation.

Under the scheme, Central Financial Assistance (CFA) upto 30% of the Benchmark cost (fixed by MNRE every year) of the standalone solar pump will be provided. The State Government will give a subsidy of 30%; and the remaining 40% will be provided by the farmer. Bank finance up to 30% out of 40% share can be availed by the farmer, so that farmer has to initially pay only 10% of the total cost of the pump. However, in North Eastern States, Sikkim, Himachal Pradesh, Uttarakhand, Jammu & Kashmir, Ladakh, Lakshadweep and A&N Islands, higher CFA upto 50% of the benchmark cost of the standalone solar pump will be provided.



Solar pumps of capacity higher than 7.5 HP can also be installed under the scheme, however, the CFA will be limited to that of 7.5 HP capacity solar pumps.

Since pumps are generally used for limited period, say 150 days in a year, the installed solar capacity can be utilized for remaining days by using Universal Solar Pump Controller (USPC). A USPC enables the farmer to use solar power for other activities like operating his chaff cutter, floor mill, cold storage, drier, battery charger, etc. Installation of USPC is also permitted under this Component.

All solar pumps installed under this Component will be provided with remote monitoring systems so that the functioning of any pump can be monitored on a real time basis.

Selected vendors for installation of solar pump and panel will mandatorily provide repair & maintenance for a period of 5 years from the date of commissioning of the pump. They will have one authorized service centre in each operational district and a helpline in local language in each operational State.



Solarisation of Agriculture Feeders

Solarisation of agriculture feeders has been included as variant under Component-C of PM-KUSUM Scheme.

Where feeders have already been separated for agricultural purposes, the feeders may be solarised under the scheme by installing solar power plants of sufficient capacity. Government of India will provide 30% subsidy for solarisation of agricultural feeders. This will lower the cost of capital and cost of power. The farmers will get day-time reliable power for irrigation free of cost or at tariff fixed by their respective state.

The requirement of total annual power for an agriculture feeder will be assessed and a solar power plant of capacity that can cater to the requirement of annual power for that agriculture