School kitchens to turn smart, clean and efficient

SOVI VIDHYADHARAN @T'Puram

School kitchens, crucial for the day-to-day running of the noon meal scheme, are poised to turn into 'smart electric kitchens' with the support of the Energy Management Centre (EMC) of the state power department. The initiative, billed as the first-of-its-kind in state schools, is expected to set a precedent for clean, safe and efficient meal preparation for schoolchildren.

A pilot project capable of preparing carbon-free meals for 500 students and powered entirely by renewable energy from a solar power plant was launched recently at the AC Kannan Nair Memorial Government UP School, Kanhangad, in Kasaragod.

The initiative ensures 100% renewable energy usage and aims to replace traditional cooking methods with clean and energy-efficient alternatives. Prior to implementation of the project, the school incurred an expense of over ₹15,000 per month on account of LPG and electricity. With the new system, monthly electricity charges are expected reduce to less than one-tenth of the cost at ₹1,200. The solar plant is also projected to generate 2,130 units of power annually, with the excess energy being fed



The smart electric kitchen set up at AC Kannan Nair Memorial Government UP School at Kanhangad in Kasaragod

₹50 lakh

Of the ₹50 lakh spent to install the solar power plant, ₹25 lakh was sourced from the MLA fund of E Chandrasekharan

back into the grid. "Of the ₹50 lakh spent to install the solar power plant, ₹25 lakh was sourced from the MLA fund of Kanhangad MLA E Chandrasekharan. The remaining amount was spent for setting up the electric boiler and related machinery for cooking purposes," said an official of EMC. A new building was also constructed in the school for the project using funds raised locally.

The Smart Electric Kitchen initiative aligns with EMC's broader mission to reduce dependency on traditional fuels and encourage long-term solar-powered cooking. Already, the EMC has successfully helped 2,500 anganwadis adopt electric cooking across the state.

According to the EMC official, the Kasaragod model, installed as a technology demonstrator, could be replicated in other schools.

"Already a few schools have come up with proposals and EMC is ready to arrange the infrastructure support. The flexible project model allows for scalability, in which the capacity and cost of the electric kitchen could be adjusted based on student strength," the official added.