To: Director, Energy Management Centre, Department of Power, Government of Kerala

From: Evelin Treesa, Research Analyst

Re: Enhancing Adoption of Induction Cookstoves in Anganwadis: A Clean Cooking Initiative

Date: December 15, 2024

I. Executive Summary

Induction cookstoves are a promising clean cooking solution for Anganwadis (Public daycare centre) and suggest that they can reap various health, time, and environmental benefits. Despite the laudable efforts and intentions behind the Anganjyothi scheme, the adoption rate continues to be suboptimal due to infrastructure barriers and financial concerns. This memo summarizes the findings from the Phase 1 rollout of the policy and suggests measures for a successful implementation of the Phase - 2 rollout. This memo summarizes the findings of the Phase 1 study of the program and suggests focused resolutions prior to the phase 2 rollout of the program

II. Background and Context

The Angan Jyothi scheme, an initiative of the Energy Management Center, under the Government of Kerala, aims to install all 33115 Anganwadis of the state with induction cookstoves and associated utensils. Phase 1 of the program across the constituencies of Kazhakoottam and Chittur, aimed at reducing LPG consumption, is hindered by infrastructure barriers such as inadequate switchboard to connect the induction cookstove as well as financial concerns regarding the electricity bill.

III. Key Findings

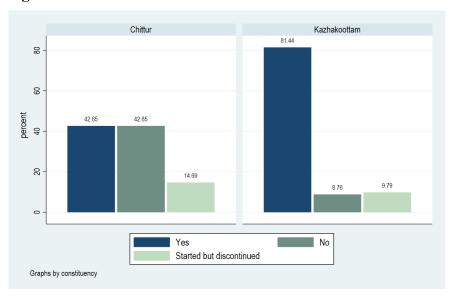


Figure 1: Induction Use by contituency

Only 61 percent of Anganwadis have started using the provided induction stoves with only 25 percent use them for all meals and 47 percent for particular dishes. The survey conducted among all the Anganwadi teachers in the project highlighted significant barriers to adoption as inadequate wiring, switchboards and sockets. It is also to be noted that 17 percent of users raised con-

cerns regarding higher electricity bills and subsequent higher variable costs. In addition to this, the Anganwadis working in rented buildings lacked an electricity bill reimbursement mechanism. The adoption rates and reasons vary by constituencies suggesting the need for location-specific strategies.

Most users depend on both LPG and induction cookstoves signalling partial rather than complete adoption. The Anganwadi teachers reported time savings, improved safety and convenience as additional benefits owing to the transition.

IV. Recommendations

Address Infrastructure Deficiencies:

- Liaison with the Kerala State Electricity Board to upgrade the electrical systems in Anganwadis, to improve and assure compatibility with induction cookstoves.
- Provide financial assistance for these upgrades through state or central government schemes.

Implement Electricity Subsidies:

- The Anganwadis working in rented buildings do not receive electricity bill reimbursements. Introduce electricity subsidies for these group of anganwadis.
- Introduce solar power systems to reduce dependence on grid electricity.

Monitor and Scale:

- Establish a robust monitoring framework to evaluate adoption, usage patterns, and user feedback.
- Use Phase 1 insights to refine strategies for scaling the program across remaining Anganwadis.

V. Conclusion

The Angan Jyothi scheme is a bold step toward cleaner cooking solutions in the state of Kerala and is even more appreciable for collaborating with the integrated child development scheme(ICDS) of the Government of India in the steps to sustainability. Despite providing induction stoves and cooking utensils at free of cost, it is imperative to take necessary steps in building infrastructure and lowering the electricity cost for wider adoption.