Electric Cooking Market Development in Nepal

Regional Knowledge Seminar
Harnessing Electric Cooking to Solve the Clean Cooking Challenge in Asia and the Pacific
(organized by AEPC, ESCAP, MECS, and UNCDF)

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...popularising electric cooking in Nepal
Stakeholders Striving to Promote E-cooking...
E-cooking Market

• Products
  • E-cooktops Imported
  • Utensils manufactured in Nepal

• Price
  – Market driven
  – Upfront cost perceived high

• Promotion
  – Limited flow of information
  – Awareness about benefits is low
  – Quality assurance

• Place
  – Supply network limited to cities
  – High risk perception of local supply chain actors
  – Customer care service limited

Entry of new private players
Product diversification
Market expansion (20% annual growth)
⇒ accumulating critical mass
⇒ approaching take-off stage
**ABF's Implementation Projects**

- Adoption of Electric Cooking, August 2023 – ongoing, USAID
- Electric Cookstove Project Nepal, August 2023 – ongoing, Gold Standard carbon project, co2balance
- Digital Innovations for E-cooking Market Development (with NACEUN & Practical Action), November 2021 – February 2023, GIZ/EnDev
- Clean Cooking Solution Project, April 2022 – March 2023, AEPC/NREP/SKBBL
- Private-Community Partnership for Upscaling Promotion of Electric Cooking in Community Rural Electrification Areas of Bagmati Province in Nepal, March 2021-December 2021, GIZ/EnDev
- Contributing to Forest Conservation through Electric Cooking Promotion, December 2019-March 2020, FwB Canada
- Market-led Promotion of Electric Cooking in Timal Community Electrification Area, Kavrepalanchok District, Nepal (with NACEUN), June 2019 to February 2020, GIZ/EnDev
- Behavior Change Campaign in Dhunginitar (ICIMOD Demonstration Site) of Nuwakot district, Nepal, June-December 2018, CCA
- Supply Side Development Partner for Maximizing the Health Benefits of Clean Cooking in Urban Nepal: a Demonstration Project, July to December 2018, CCA
- Market-led Promotion of Electric Cooking in Dewabhum Baluwa Community Electrification Area, Baluwa, Kavrepalanchok district, Nepal, November 2017-October 2018
ABF's Research Assignments

• **CCA supported research:**
  • Consumer Assessment to Support the Adoption of Electric Cooking In Nepal, August 2020 – December 2020
  • Energy Access Explorer working group

• **MECS supported research**
  • Analysis of Factors Affecting Adoption of Electric Cooking Options in Electrified Community of Nepal, July – December 2021
  • Transition of Urban Households to 100% Electric Cooking in Nepal, November 2022 – February 2023

• **The WBG**
  • E-cooking Supply Chain System, August 2023 - ongoing
Theory of Change – Intervention Areas

**Demand creation**
- Institutional readiness
- Social mobilisation
- Community & HH demonstration

**Supply**
- Assessment of market readiness
- Local supplier
- National supply partner

**Finance**
- Consumer financing
- Financial incentive on upfront cost

**System reliability assurance**
- Monitoring of transformer load & phase balance
- Upgrading as necessary

**HH ele. safety assurance**
- Improvement of housewiring
- Dedicated socket in the kitchen

**Market development**

**Power supply reliability**

**Behavior change**
- Correct & sustained use
  - User education for correct and regular use
  - Assured after-sales-service

**Desired Changes**
1. Initial Adoption of electric cooking
2. Correct and sustained use of electric cooking

**Long term goals**
Clean kitchen, improved health of women, children and the entire family, improved socio-environmental conditions,

**Access, Affordability, Reliability**

**Behavior Change**
Market System – Reaching the Last Miles

- Importers/Manufacturers → Wholesalers → Retailers
  - Conventional channel
  - Non-conventional channel
  - Support functions (e.g. transport, after-sales service)

- Market rules (e.g. business terms and conditions)
- Policy environment (mostly aspirational targets)

- Retailers → Households in rural and semi-urban areas
  - Cooperatives
  - Community Rural Electrification Entities
  - Motivational functions (e.g. capacity building, awareness, incentives)

Support functions (e.g. transport, after-sales service)
Motivational functions (e.g. capacity building, awareness, incentives)
Issues

Supply side
- quality assurance
- stock management
- working capital
- customer service

Demand side
- making e-cooking as aspirational product
- slow behavior change

Policy
- roadmap to meet aspirational targets
- incentive schemes that promote market systems
ABF's Strategic Focus for Market Development

Energy mix persists: so make electricity as main cooking fuel, reduce LPG consumption and eliminate firewood from the kitchen

**Product**
- Promote 'clean cooking solution' as product
- Quality assurance through Damipasal (damipasal.com) digital wholesale market platform

**Place**
- Ensure accessibility of after-sales/repair and maintenance services
- Business risk mitigation for private sector

**Price**
- Increase willingness to pay by increasing perceived value of the product

**Promotion**
- Energy security as important value proposition
- Avail the means of communication that have the greatest potential to reach to a wide range of audience
National Electric Cooking Campaign

an informal network of e-cooking promoting agencies in Nepal, with policy support from AEPC

NECC contributes towards people's well-being by eliminating indoor air pollution through promotion of energy efficient electric cooking

NECC is a platform for synergy between different stakeholders within the clean cooking ecosystem:
- Knowledge hub,
- Discussion forum, and
- Evidence-based policy advocacy and lobbying

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Thank You!

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