

Clean Cooking: A Clean Winner?

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Imagine...





Fuel







The Challenge





The Opportunities



Image: Andritz

Electric Cooking Trials in Nepal

- Trialling electric cooking in off-grid communities with microhydropower systems
- 3 off-grid trials
 - Use of different electric cooking devices and technical challenges
 - Understanding of social and cultural acceptance of electric cooking
 - Use of energy efficient cooking devices – electric pressure cookers (on- and off-grid)
- 100% electric cooking trial (urban, grid-connected)



Methods

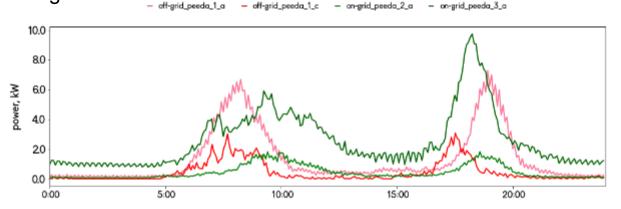




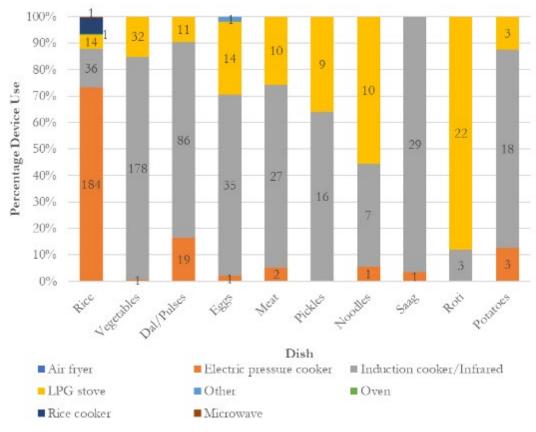
Key Outcomes

- Families able to transition to electric cooking devices
- 'Fuel stacking' widely used
- Cost of electric cooking lower than LPG, biomass
- Reduction in cooking energy usage

- Grid connected households saved between 30 – 60%
- Using EPC for rice saves up to 50% firewood for households
- Device unreliability key issue
- 10 cookers ≠ 10 x power on grid



Key Outcomes



Key Outcomes

- Challenges to cook Nepali staple dishes
- Cookbook and demonstrations able to support new cooking techniques
- Constrained grids would be unable to provide 100% electric cooking



The Community Kitchen



Clean Cooking and the SDGs

















Questions?

Acknowledgements

Partners: PEEDA, SLURC, ACC,

Makerere University, United Purpose

Researchers: Will Clements,

Charlotte Ray

Funders: MECS, UoB

References

- Unlocking electric cooking on Nepali micro-hydropower mini-grids
- Assessing electric cooking potential in micro hydropower microgrids in Nepal
- Understanding the Suitability of Electric Pressure Cookers in Nepali Households
- Nepal eCookbook