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# UNDERSTANDING THE BARRIERS TO THE INTRODUCTION AND UPTAKE OF CLEAN/ IMPROVED COOKSTOVES IN SOUTHERN AFRICA

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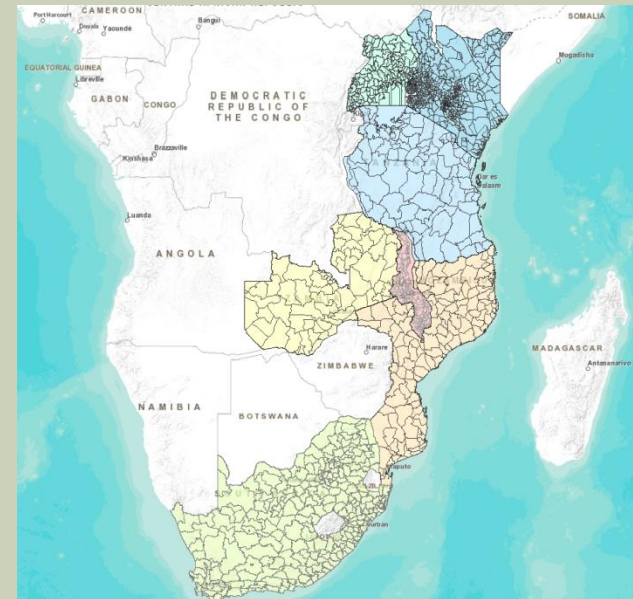


# THE BARRIERS PROJECT

What are the barriers to the introduction and uptake of improved cookstoves (ICS) in East and Southern Africa, and what (if anything) could be done to change this?

## ■ Objectives:

- To assess current uptake of ICS in case study countries.
- Barriers to introduction/ uptake ICS in East Africa.
- How barriers have been overcome.
- Barriers to introduction to ICS in Southern Africa.
- Compare barriers between East and Southern Africa.
- Strategy and Delivery Roadmap.
- Design of 'best practice toolkit'.



# BARRIERS: STORIES FROM THE FIELD

## ■ Resource Access and Availability

- In Kenya, clay is not found country-wide.
- Transportation – from riverbed to production centre – from centre to manufacturers/ distributors/ retailers.

## ■ Finance

- Capital for business growth and stove purchase.

## ■ Market Development

- Supply – distribution, marketing, sales for small-medium, artisanal producers.
- Demand – availability, affordability, appropriate.

## ■ Consumer Awareness

- Rural – transportation costs, availability of firewood, poor intervention programmes.
- Urban – difference between quality ICS and a counterfeit.

## ■ Socio-cultural

- Stove too small to prepare meals.
- Married women use same stove as mother-in-law.

## ■ Policy and Standards

- Policy aimed at electrification, renewables not biomass.
- Standards to ensure quality of stoves.



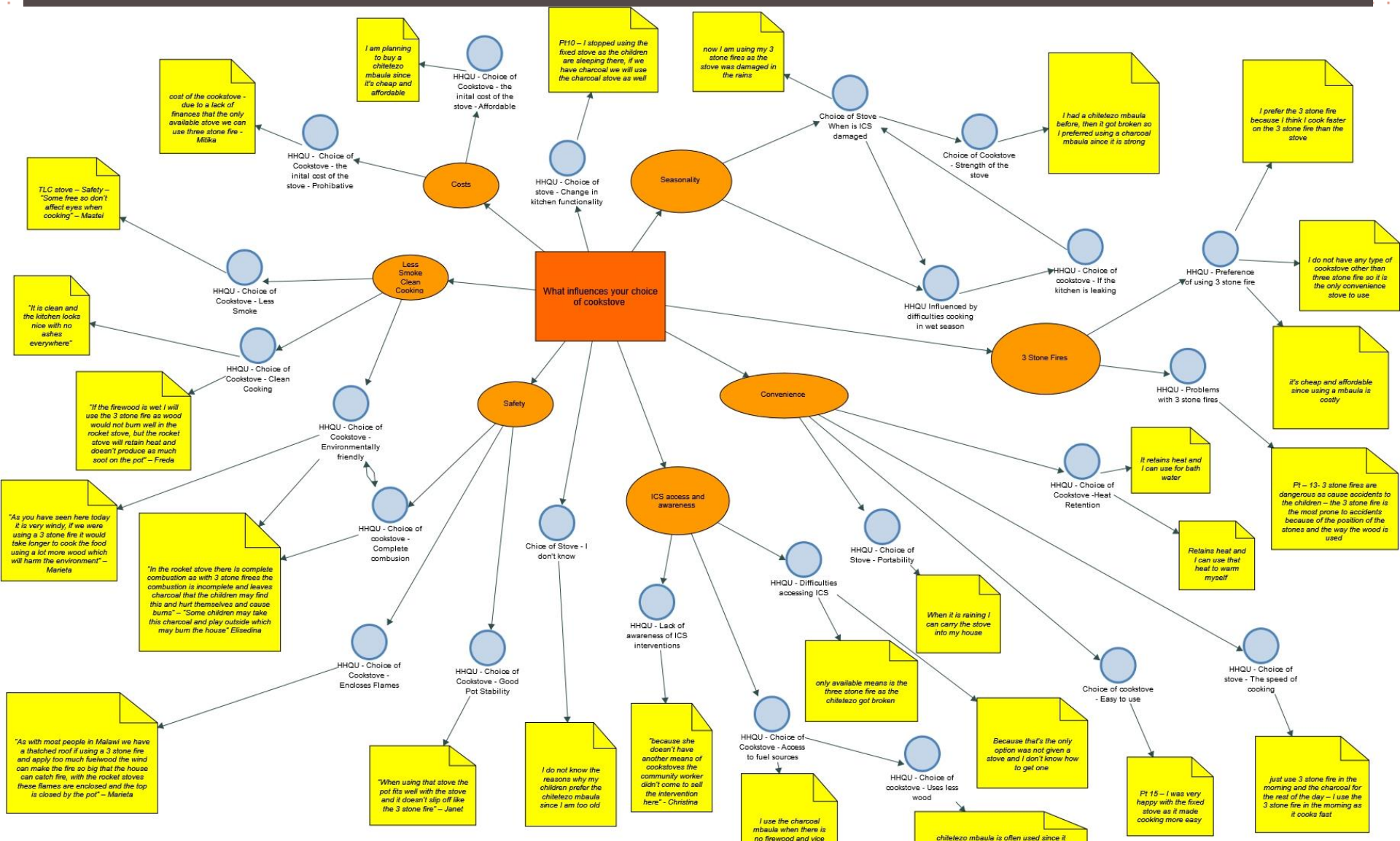


# LESSONS FROM END USERS

- “Solar is good. But I don’t use it as my neighbours will think I can’t afford to pay for electricity” (Uncle Ben – Zambia)
- “I used to send my Grandmother stoves all the time but I have given up. She doesn’t believe in this type of modern technology” (Energy Consultant, Kenya)
- Unless everyone changes their cooking behaviour, individual households will not feel the health benefits of ICS (Edo Akiti, Nigeria)



# LISTENING TO COOKS





# MAIN FINDINGS - CONFLICTING PRIORITIES?

## Donors / Funders

- Improved efficiency
- Clean / modern fuels
- Standards
- Demonstrable Health Benefits
- Reduced CO, PM2.5, Greenhouse gas emissions



## “End Users” – Cooks!

- Fast cooking
- Easy to use
- Cheap
- Cook for large families
- Portable?
- Reliable, cheap source of fuel
- Not too much smoke?
- Well-cooked food



# KEY IMPACT: THE GREAT AFRICAN BAKE OFF





# THE GREAT AFRICAN BAKE OFF





# THE GREAT AFRICAN COOK OFF - MALAWI





# THE GREAT AFRICAN COOK OFF - MALAWI



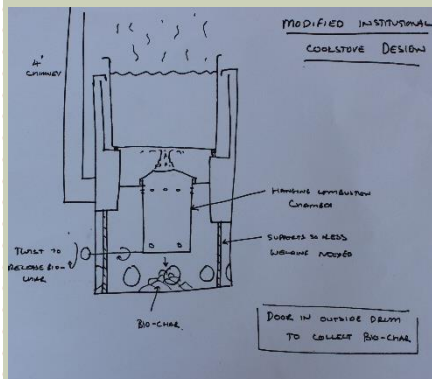


# FOLLOW-UP PROJECTS

Oct 2017 – **Appropriate Institutional Cookstoves for Nepal**  
Mar 2018 *Investigators: M J Clifford, S Jewitt, I Hall*  
*Funder: EPSRC / GCRF*

Apr 2017 – **Smart Biogas Networks**  
Mar 2018 *Investigators: M J Clifford*  
*Funder: Innovate UK*

Oct 2016 – **Biomass Fuel at the Nexus: Policy Lessons from Bottom-Up Perspectives in Urban Ghana**  
Sept 2017 *Investigators: S Raman, M J Clifford*  
*Funder: ESRC / GCRF (ES/P0026171-1)*





**THANK YOU!**

