ECO webinar 2: Setting up a Cooking Diaries Study.

Webinar Questions & Answers

1. Any potential effects of voltage fluctuation, humid, temperature on the efficiency/accuracy of data loggers?

yes, all these issues will affect the reliability of dataloggers, which is why it's important to choose a good quality model and to test each unit as thoroughly as possible before taking it out to the field, checking the data recorded regularly and also using plug-in energy meters as a backup.

2. Did you see any impact on cooking experience of people due to data loggers? Any change in practices/perceptions around the data logging device?

I would say more the other way around, in that dataloggers are generally very unintrusive (the datalogger just sits there and silently does its thing). In contrast, asking people to read off of a plug-in energy meter each time they cook creates an extra task but doing this task also adds a level of awareness of energy consumption that wasn't there before. We often use plug in energy meters in live cooking demonstrations to show people how much it really costs to cook with electricity

3. Any hacks or tutorials for DIY data loggers?

EED Advisory/Kaiote have hacked an off-the-shelf smart plug to make it work without Wi-Fi. You could also get in touch with RE Innovation, they've built a few DIY dataloggers and sell kits that you can assemble yourself: https://www.re-innovation.co.uk/projects/

4. Data loggers are hard to find in Cambodia, hence my interest in a DIY approach.

Data loggers is something that we've had real problems trying to solve as well (in Nepal)

DIY approach can work well if you have access to components, but I imagine in Cambodia, you may well have to import these too, so might as well import a complete datalogger unit

5. Which energy meter do you suggest to use it in Nepal as we don't have access to Amazon in Nepal?

There is plugin meter from UNI-T, you can use it to monitor power information such as Voltage, Power consumption, PF etc

6. Keen to find out how the energy meters work out in Cambodia. I wonder if the use/interest in them declines over time. People use it in the beginning and over time as they feel reassured about the costs start to care less about the meter - which is ok as long as people continue to cook with electricity

7. What are the main criteria for selection of participation as well as selection of enumerators ?

Cooking diaries require motivated and capable households so for participant selection, convenience sampling is advised as recording high quality data is prioritised over a nationally representative sample. Qualities of the most ideal households include:

- one main cook, who is well organized, literate, and interested in the findings of the research study (helps with motivation to record high quality data).
- the main cook should volunteer to participate, rather than the head of their household volunteering them.
- cooking 2-3 times a day, rather than regularly buying food out or eating at a friend/family member's place.

8. What are the main criteria for selection of enumerators?

The selection of enumerators is critical as this has a huge bearing on how easy/difficult the study is to conduct and the quality of the data collected. Key recruitment criteria:

- Personable, polite, encouraging and supportive
- Educated, literate, numerate
- Speak the local language(s)
- Familiar with local foods and cooking techniques

9. What is 'KoboToolbox' and can you provide a weblink?

KoboToolbox is a free, open source digital data collection platform designed for use in humanitarian & development settings. https://www.kobotoolbox.org/

10. For how long should we collect data to get a good idea of local cooking practice? Is there a standard duration for that?

The ECO data collection period is 6 months. In the next webinar, we will be suggesting an approach that breaks this down into 4 phases:

- Phase 1: baseline – intensive Cooking Diaries study for at least 3 weeks
- Phase 2: transition – intensive Cooking Diaries study for 4 weeks
- Phase 3: monitor – light cooking diaries study for 3 months
- Phase 4: endline – intensive Cooking Diaries study for 4 weeks

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