

Zambia Cooking Diaries 2.0 Follow Up Survey



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Executive summary

This report showcases the findings from a follow-up survey with participants of the cooking diary study, carried out by MECS and CEEEZ in 2017. Cooking diaries is a methodology that has been developed to collect information of what and how people cook and the energy used in the cooking process. Cooking diaries consist of different stages, allowing for new appliances or cooking fuels to be introduced and trialled by the participants. The conclusions made at the end of this study in 2017 indicate that cooking with electricity is compatible with Zambian cuisine and that modern energy-efficient appliances are highly desirable to everyday Zambian cooks. In particular, the EPC as a prime candidate for future eCook products “as it can significantly reduce the energy demand for the biggest energy consumers: ‘heavy foods’”¹.

The follow-up survey has been conducted to (i) find out if households still have the appliances they had trialled in 2017 and if these are still in use, (ii) understand the impact of the COVID 19 lockdown on their cooking, and (iii) explore whether future cooking diary studies can be adapted to better serve its objectives.

The survey shows that a hotplate and EPC can cook a wide range of Zambian dishes, and that these appliances are valued to the extent that they are recommended to friends and family members. Social networks seem to be an important method of knowledge sharing, as these contacts showed interest in the appliances and one user received cooking tips from her church group. Making the most of the networks of future participants and end users should be an important part of the research design process.

With regards to cooking during the COVID-19 lockdown, respondents indicated that cooking was more challenging, and much more cooking was required except in the case of one respondent with a food business. Almost all respondents indicated that electricity had become expensive for them.

This report concludes with a number of recommendations to be incorporated into the design of future cooking diary studies.

¹ eCook-Zambia-Cooking-Diaries-Report



Foreword

This report has been prepared by CEEZ in fulfillment of our commitment as a Southern Africa partner for the MECS programme in Zambia.

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Background information

The cooking diary study was conducted in Zambia in 2017. Cooking diaries is a methodology that has been developed to collect information of what and how people cook and the energy used, while recording this information in a diary.

The Zambia study involved 20 households recording what they cooked, how they cooked it and how much energy they used, over an initial period of 2 weeks. Then they switched to cooking solely with electricity for the next 4 weeks, continuing to record data. The next 4 weeks specifically involved the trial of two appliances, the electric pressure cooker (EPC) and hotplate (or electric stove). The households were identified and interviewed in a registration exercise. This was followed by training on data recording and taking of measurements for electricity and biomass fuels used during the first phase of the cooking diary. In the second phase, households were provided and trained on how to use the EPCs and hotplates (for households that did not have these prior to the study) which they had to use and record the data. The participating households were drawn from Matero, Northmead, Chainama, Mtendere, Roma, Libala South, Kabwata and Ng'ombe, all located within Lusaka District.

The aim of the study was to gain a deeper understanding of how Zambian households cooked and how compatible this was with electricity. The conclusions made at the end of this study in 2017 indicate that cooking with electricity is compatible with Zambian cuisine and that modern energy-efficient appliances are highly desirable to everyday Zambian cooks. In particular, the EPC as a prime candidate for future eCook products “as it can significantly reduce the energy demand for the biggest energy consumers: ‘heavy foods’”². Similar studies were also undertaken in Tanzania, Myanmar and Kenya³.

Purpose of the study

The current follow-up survey has been conducted to (i) find out if households still have the appliances they had trialled in 2017 and if these are still in use, and (ii) understand the impact of the COVID 19 lockdown on their cooking.

Data collection

Data was collected using a questionnaire that was uploaded onto Mobenzi mobile application. The questionnaire used was adopted from Kenya, who had previously carried out a similar survey, and it was adjusted to fit the Zambian cooking diary circumstances.

The participants of the current survey were the same as those that took part in the study in 2017. The contact names and information were therefore retrieved from the study database in Dropbox.

² eCook-Zambia-Cooking-Diaries-Report

³ www.mecs.uk.org

Due to the COVID 19 pandemic, the current survey interviews were conducted remotely by telephone.

When the interviews were completed, data in Mobenzi was downloaded in excel format. Data analysis was done in MS Excel for open-ended and closed-ended questions. Data has been presented in chart and table form.

Results and analysis

The results are presented in sequence following the questions in the questionnaire. The first section of the questionnaire consists of demographic questions. The main questions include questions on impacts of COVID-19, the availability and user experience with the appliances trialed.

18 participants' contact information and diaries data were found in the database, among which:

- ✓ 11 completed this survey;
- ✓ 1 indicated not receiving any appliances;
- ✓ 1 was deceased;
- ✓ 4 were unavailable⁴; and
- ✓ 1 could not be reached on the number provided.

Demographic outlook of the sample

Gender: 2 male 9 female

Home area: The participants in this survey lived in Matero, Northmead, Chainama, Mtendere, Roma, Libala South, Kabwata and Ng'ombe kasisi. One out of the eleven that completed the survey had moved house since the first study (i.e. from Roma to Ng'ombe Kasisi).

Age: The age range for the respondents was 27 to 59.

⁴ Their indicated they would call back at a suitable time for the interview

Main questions

1. How has the lockdown due to COVID-19 affected your cooking?

The responses to Question 1 were assessed in excel and results are presented in Figure 1 below.

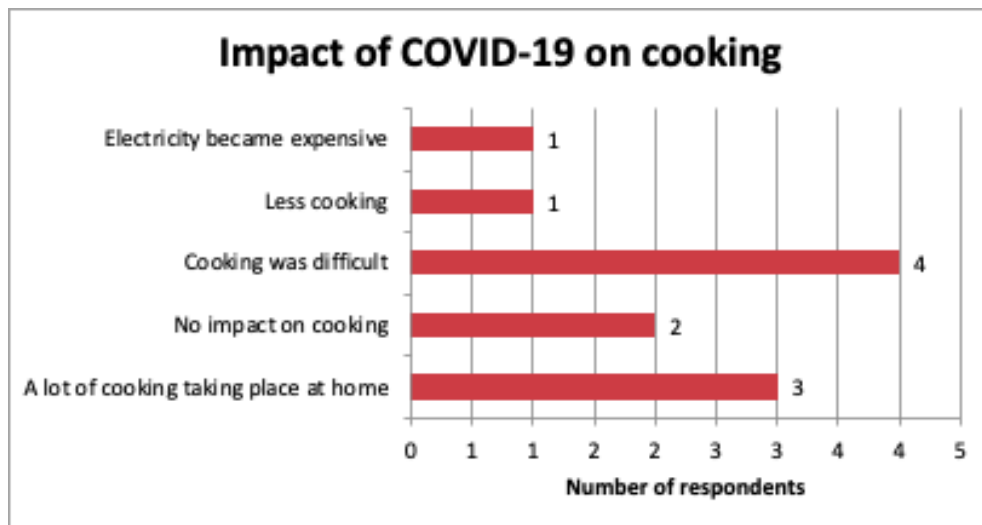


Figure 1. Impact of COVID-19 on cooking

From the graph in Figure 1, respondents that indicated that 'Cooking was difficult' during the lockdown had the highest proportion followed by those that said 'A lot of cooking was taking place at home'. Two respondents said there was no impact, one indicated they were cooking less and another nine indicated that electricity had become expensive for them. It should be noted that the lockdown was characterized with little to no outdoor activities such as people going out to work or children going to school. Further inquiry into the responses given yielded the results presented in Table 1.

Table 1. Reasons for the impacts observed

Impact	Reason(s)
Cooking was difficult	- charcoal prices had gone up making it hard for them to buy and cook - they experienced severe loadshedding in their locations and had to use the tradition stove (mbaula) when preparing most meals
A lot of cooking taking place at home	- experimenting with recipes since they could not go out for meals - started baking - used LPG when there was loadshedding
No impact on cooking	- they experienced load shedding but cooking did not stop, they used the charcoal stove for meal preparation.
Less cooking	- not many people were visiting due to the lockdown, resulting in less cooking - was unable to cook the desired dry foods because of the lockdown
Electricity became expensive	- since the whole family was home, cooking increased and it was difficult to cook with electricity since it turned out to be expensive. - was using more charcoal for meal preparation

2. Do you still have any of the appliances? EPC hotplate

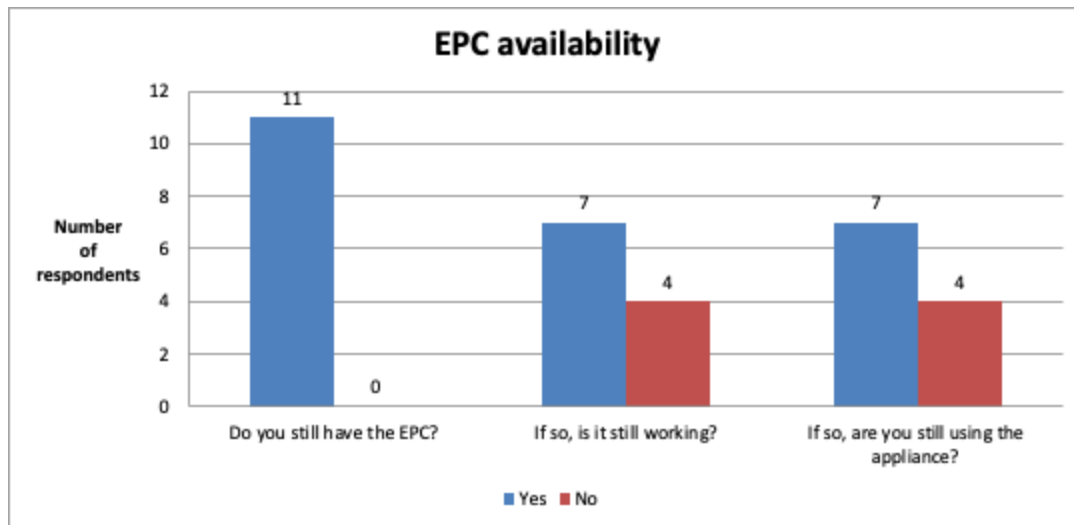


Figure 2. EPC availability

According to Figure 2, all the respondents were still in possession of the EPC.

Most of the respondents (7) also indicated that their EPCs were still in good working condition and that they were still using them.

The respondents whose EPCs were not working gave the following explanations:

- Do not know why it is not working. Two scenarios leading to the non-functionality of the EPC:
 - “Stopped working in March/April this year. We were trying to cook some food and when we switched on the EPC, smoke started coming out from inside the pot. It has never worked again”
 - “I am not sure why it stopped working. I was using it to prepare food and there was a power cut. When power came back, the EPC could not start. This happened 3 weeks ago from today”
- Faulty cord. One respondent explained that the wires in the cord were exposed while the other said it got burnt.

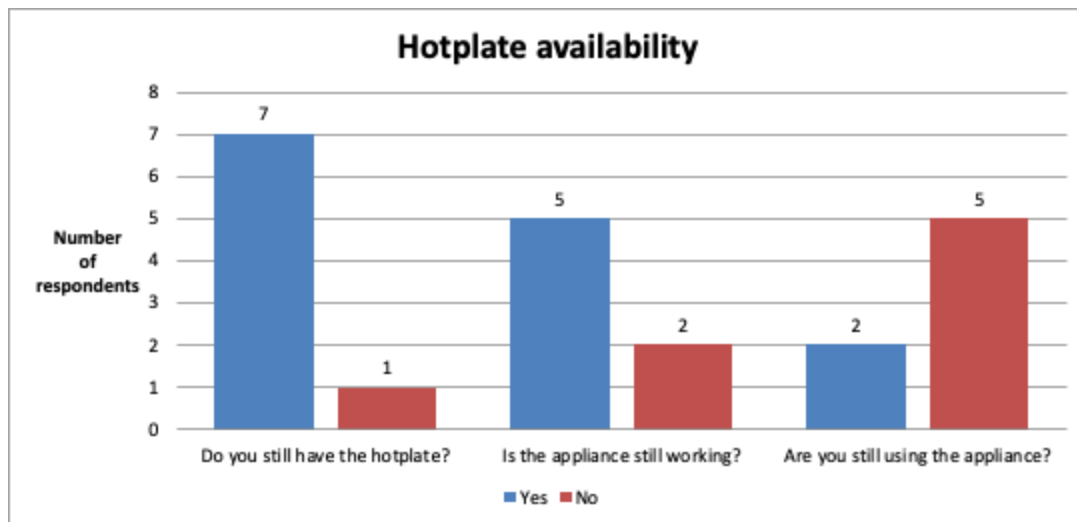


Figure 3. Hotplate availability

Of the eleven respondents interviewed, only eight received the hotplates. Respondents were asked about the availability of the hotplates in this follow-up survey. Majority of the respondents indicated that they still had the hotplates. Whereas every household with a functioning EPC were still using it to cook, households with the hotplate tended not to use the appliance. Five of the eight households with a hot plate reported that it worked, but only two households were still using the appliance (refer to Figure 3).

Similar to the EPC, respondents were also asked to explain why they were not using their hotplates and the following points have been highlighted:

- ✓ The plates no longer work since June 2019. It was been used a lot
- ✓ Experienced a short circuit about a year ago
- ✓ Broke down a year ago due to consist use
- ✓ It got damaged

It was observed that the three respondents that did not receive the hotplates already had the big four-plate stove leaving no space for the trial appliance.

b. *If so, how often are you using each one?*

Table 2. Frequency of use of appliances

Appliance	Number of times	Period	Number of respondents
EPC	Everyday	Every day (when there is power)	4
	1 to 2	Weekly	2
	3 to 4	Weekly	2
Hotplate	Everyday	Every day (when power is available)	3
	Not specified	When power is available	2

Eight respondents who had functioning EPCs were using them at varying frequencies. Majority of these were using the EPC on a daily basis whenever power was available.

And three out of the five respondents with functioning hotplates indicated that they were using them daily (refer to Table 2).

c. If so, are there particular foods that you like to cook in each appliance? How often for each type of food?

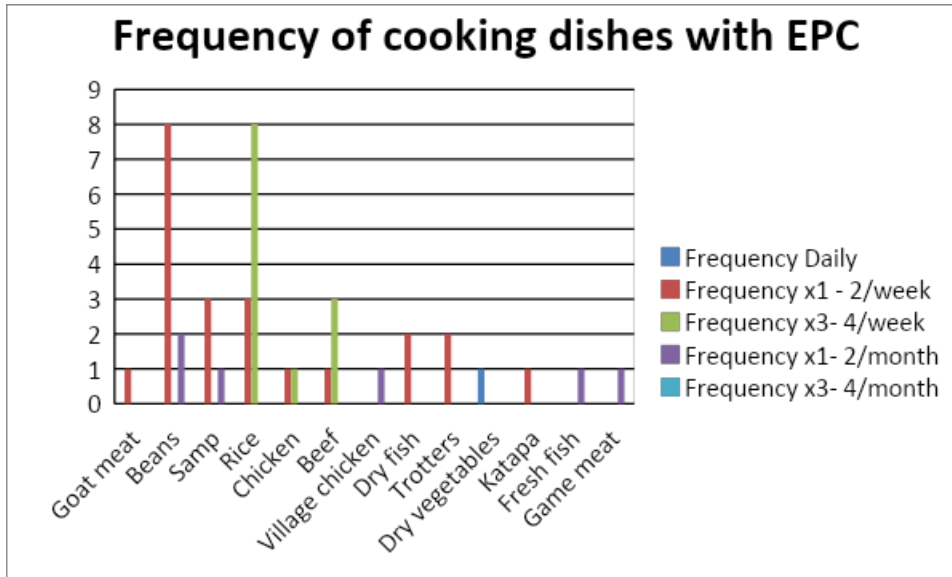


Figure 4. Frequency of cooking each dish in the EPC

According to Figure 4, rice was the dish most frequently cooked in the EPC with a rate of 3 to 4 times a week as indicated by eight respondents. Beans, a long/hard cooking dish, was the second most cooked dish with a rate of 1 to 2 times a week as indicated by eight households. The category of least cooked dishes each mentioned by only one respondent includes goat meat, samp, village chicken, fresh fish and game meat which were cooked once a month. Dry vegetables were cooked frequently (at least 3 to 4 times a month) by one respondent.



Figure 5 Dishes cooked in the EPC

Figure 5 shows the dishes that respondents indicated to have been cooking in the EPC. The dishes include three classes we are calling “long/hard” boiling, “quick/fast” cooking and “medium timed” cooking dishes.

The long/hard boiling dishes are those which take long, i.e. more than 2 hours 30min on hotplate or charcoal/firewood, to cook. According to Figure 5, these dishes are dry fish, game meat, beans, cassava leaves, village chicken, samp and trotters.

The medium-time cooking dishes take about 30minutes to 2 hours of cooking. And from Figure 5, these are chicken, goat meat, fresh fish, dry vegetables and beef.

And the quick/fast cooking dishes cook for less than 30 minutes. In Figure 5, rice represents this group.

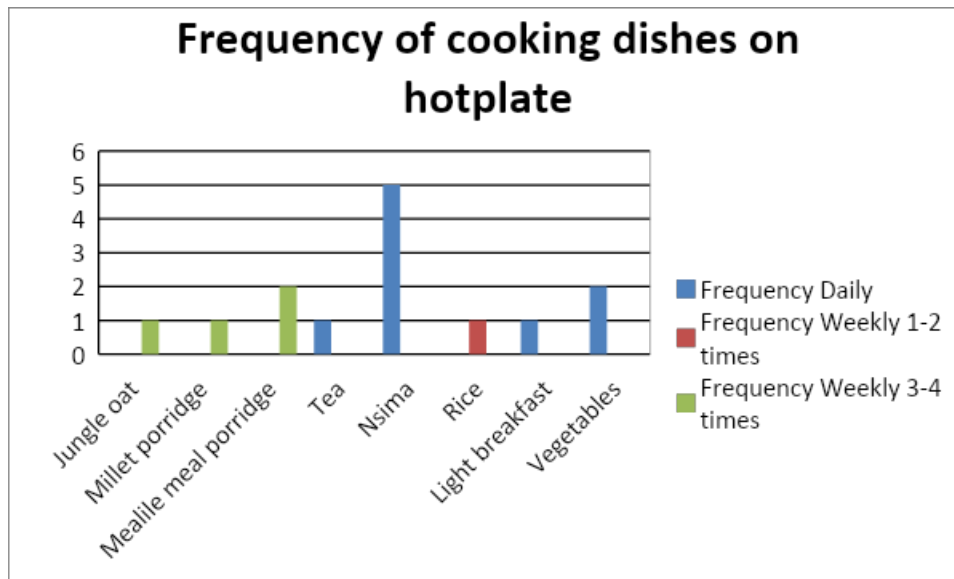


Figure 6. Frequency of cooking dishes on the hotplate

Figure 6 shows that nsima was the most frequently cooked dish on the hotplate, and was cooked daily in 5 of the households. The hotplate was also used frequently to prepare green vegetables, tea and light breakfast. The hotplate was also used to prepare different types of porridge at a rate of 3 to 4 times a week. The least use was for preparation of rice by one respondent at a rate of 1 to 2 times a week.



The dishes which respondents indicated to prepare on the hotplate are shown in Figure 7. Figure 7 also shows activities such as warming of foods and making of light breakfast. Respondents did not break down these categories but mentioned that they preferred to use the hotplate for these activities because the device was fast.

Figure 7 Dishes cooked on the hotplate

e. If so, how much are you spending each month on electricity?

Seven of the eleven respondents said that their electricity expenditure had not changed as a result of the lockdown period.

Three households reported that their expenditure had increased significantly. One of these households attributed the increase to the fact that they had subsequently moved to an area where load shedding was less of a problem, and this enabled them to use the supply for longer periods. The other two households reported an increase in expenditure of approximately 50% and 80%, and the cost of electricity was a concern.

One household reported their expenditure had decreased during the lockdown period, and this was largely due to the fact that they were using electricity for business purposes before the lockdown was imposed.

5. Who is responsible for paying the electricity bill?

a. Who is/was responsible for paying for cooking fuels?

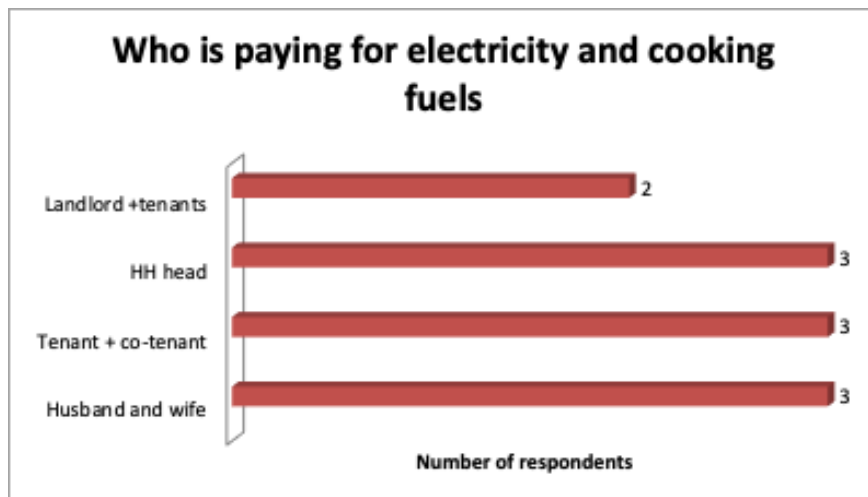


Figure 8. Who is paying for electricity and cooking fuels

It can be observed from Figure 8 that the responsibility of buying electricity and cooking fuels was with the same person or people in the homes of the respondents. The respondents were divided into four groups/categories namely Landlord and tenants (2), household head (3), tenant and co-tenant (3) and husband and wife (3). For the category Landlord and tenants, and tenant and co-tenant, it should be understood that they shared the electricity meter hence sharing the cost of electricity.

b. *If different, has this created any tension?*

All households indicated that there was no tension with the purchase of electricity. However when it was noticed that the cost had increased, tenants had to add more money to enable the purchase of more units/credit.

6. *How would you describe the experience of cooking with electricity? Prompt if necessary: What did you like most? What did you like least?*

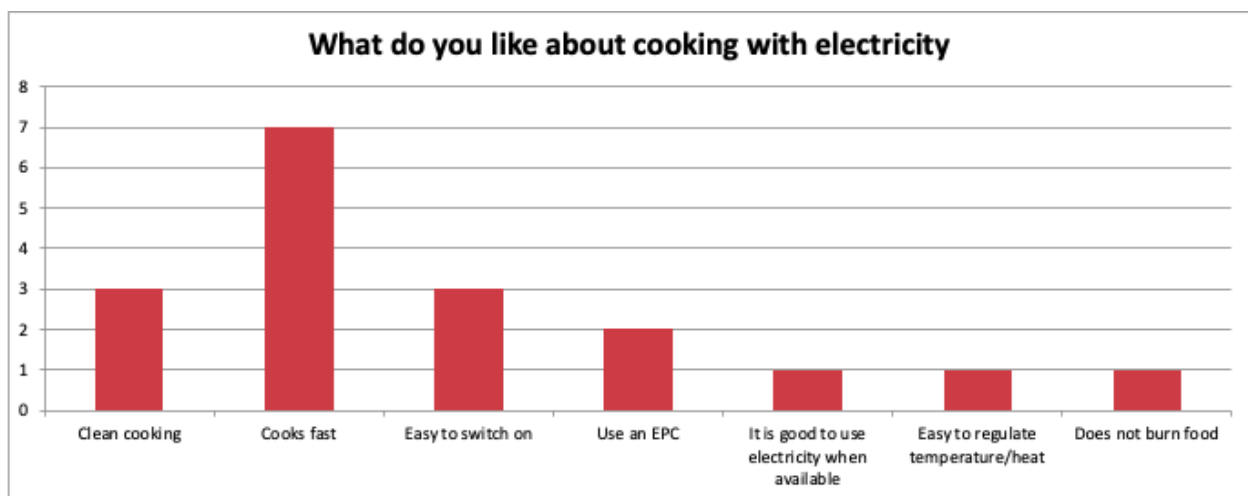


Figure 9. What do you like about cooking with electricity

According to Figure 9, seven respondents liked cooking with electricity because it was fast. Three respondents liked cooking with electricity because it was a clean fuel and another liked it because it was easy to switch on. A further two respondents liked cooking with electricity because it enabled them to use the EPC. One respondent said electricity was good for cooking whenever it was available. One respondent also mentioned that it was easy to regulate temperature/heat. And finally one respondent indicated that food did not burn when cooking with electricity.

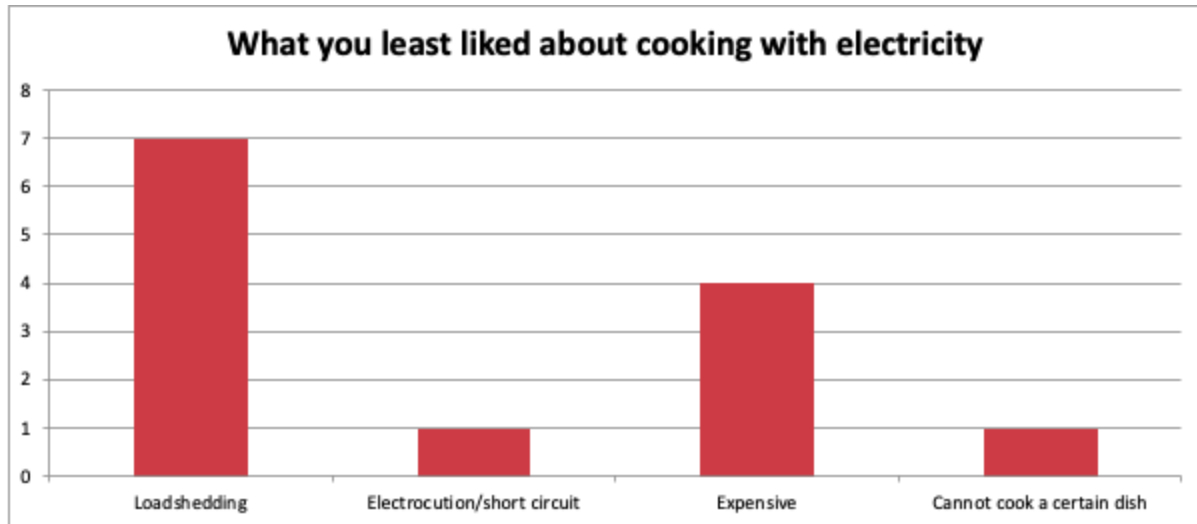


Figure 10. What you least liked about cooking with electricity

The attributes that respondents least liked about cooking with electricity are presented in Figure 10. It can be observed that seven respondents least liked the loadshedding.

Four respondents mentioned that cooking with electricity was expensive. Further inquiry into this revealed that one respondent found it most expensive to cook long-cooking dishes with electricity (even with an EPC); another two respondents said they would rather use charcoal because a lot of electricity units were consumed when cooking (i.e. regardless of whether it was a long or quick cooking dish); and one respondent said it was expensive to cook using the hotplate but not while using an EPC.

One respondent mentioned that if the wiring in the house was not done properly, electricity would cause electrocution/short circuit which they least liked.

One respondent mentioned that she was not able to cook visashi using electricity. She added that visashi requires a lot of heat initially and then a reduction in heat until the dish is fully cooked. The fuel most preferred for this is charcoal.



7. *Did the appliances change the way you cook? If so, how?*

Only one of the eleven respondents said that the appliances had not changed their cooking. For the other 10 respondents, the appliances had made the cooking process more convenient and shorter. The reasons given include:

- better time management and the ability to multitask
- can cook in larger quantities and cook dishes in advance
- aware of electricity usage and able to reduce energy waste
- cooking was made simpler and cleaning the appliances were easy
- food tastes better

a. *Have the responsibilities for preparing food changed at all with the new appliance? For example, do other members of the family cook more often?*

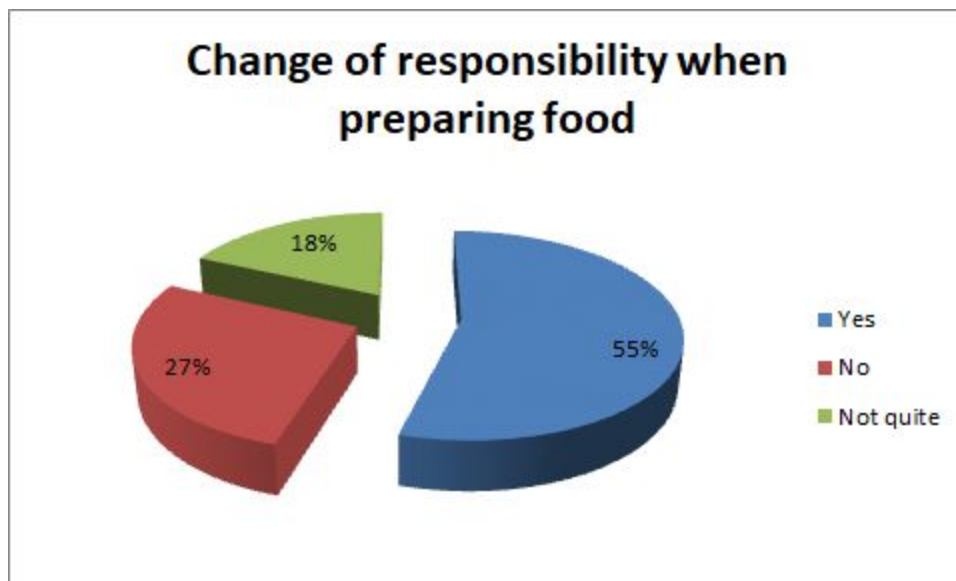


Figure 11 Change of responsibility when preparing food.

The respondents were asked to explain their responses to the question on change of responsibility when cooking, this is what they had to say (and the number of respondents is indicated in brackets):

- those that responded “Yes”
 - ◆ husband or head of household participates in cooking because of the EPC (3)
 - ◆ the household member that received training in operating the EPC does all cooking for dishes prepared in the appliance (1)
 - ◆ the household member that received training taught her oldest child how to operate the EPC and the child helps out with the cooking (1)
 - ◆ trained the nanny in use of EPC to ease the cooking work, but other chores are done on her behalf so that she can complete the cooking using the epc (1)
- “No” response
 - ◆ no change observed
- “not quite” response
 - ◆ one respondent was quoted as saying “My husband only cooks when I am unwell and unable to cook”
 - ◆ the other respondent said there was not much change but other chores are done on her behalf so that she can complete the cooking using the epc

b. Do you spend more or less time in the kitchen now?

All the respondents (100%) indicated that they now spend less time in the kitchen.

i. If so, how much

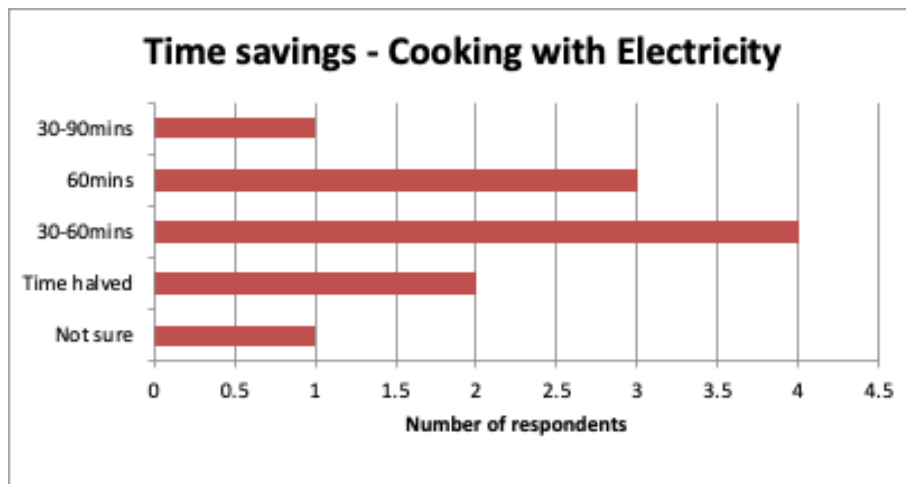


Figure 12. Time saved from cooking

All but one of the respondents stated that electrical appliances (especially the EPC) reduce the time spent cooking each day. Although there were inconsistencies in how this time saving was communicated, Figure 14 shows that this time saving tended to be at least half an hour, and sometimes up to an hour and a half.

ii. *If you have more time, then what do you do with this extra time?*

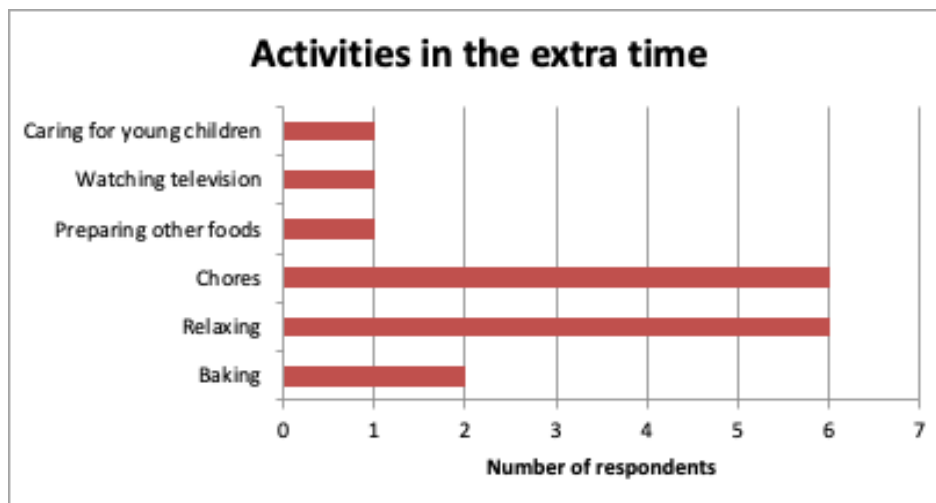


Figure 13. Activities in the extra time

According to Figure 13, six respondents said they used their extra time to relax and six others carried out other chores. The chores mentioned include washing dishes, drawing water, and doing laundry.

8. *Have you learned any new tips/techniques to help you cook with these appliances?*

Out of eleven respondents, 7(64%) indicated that they had learned some tips/techniques on how to cook with the appliance and the remaining 4 (36%) did not learn any.

a. *If so, how did you learn them? e.g. individual experimentation, social media, neighbor/friend/family member.*



Figure 14. How respondents learnt new tip/techniques to cook with the appliance

Figure 14 illustrates the ways in which the respondents learnt new tips/techniques for cooking with the appliance. One said she learnt by accidental experimentation and she discovered that she could cook without a lid over the EPC and also the keep warm feature of the appliance. Four respondents said they learnt by individual experimentation. Frying was a type of food preparation method discovered by individual experimentation.

One respondent said she learnt cooking methods from a cookery group at her church which she tried out in her EPC. One respondent cited that she learnt from the enumerators during the study and has been building up on that. One respondent cited social media, e.g. 356 days on Facebook and Pinterest, as the sources of information on how to cook using the EPC.

9. Have you had any alarming incidents with the appliances?

Three respondents answered “Yes” to this question. Their individual experiences are quoted below:

- “I burnt some food while preparing it. Did not think the EPC could burn food”
- “The day it stopped working we saw smoke come out of the pot when we switched it on to cook”
- “One day when I connected the EPC directly to power, there was a loud sound. But the epc worked when I plugged in and switched on later”

10. Do you have blackouts at home?

All the respondents (100%) reported that they experienced blackouts or loadshedding in the homes and locations.

a. If so, how often?

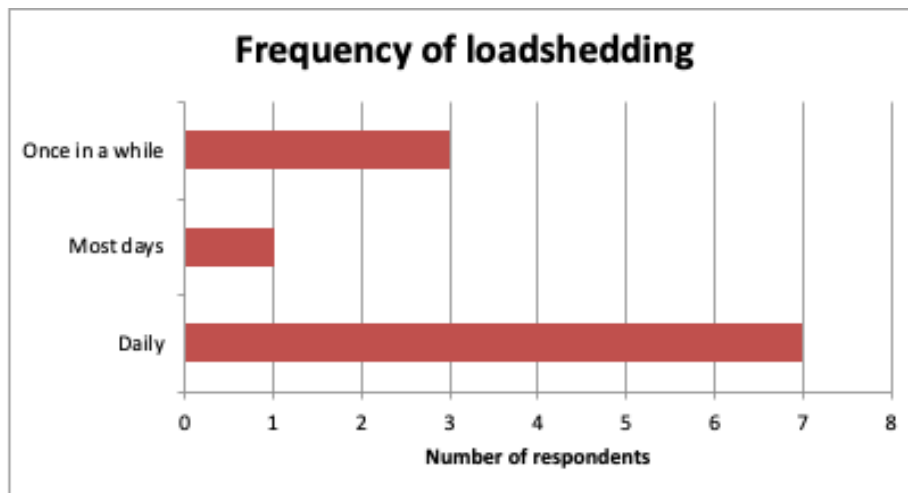


Figure 15. Frequency of load shedding

Figure 15 shows that “daily” load shedding was common among the respondents and this was followed by “once in a while” occurrences.

b. If so, for how long?

The respondents were asked how long a blackout lasted. The longest blackout was for 15hrs while the shortest lasted a few minutes. The average time for the longest time given by the respondents was calculated as 7hrs. The average for the shortest times could not be calculated because some respondents could not put a value on a “few minutes”.

c. Do they affect cooking with the electric appliances?

Only one out of the eleven respondents said that the blackouts do not affect her cooking with the electric appliances, while ten said they were affected.

d. *If so, what do you do when there is a blackout?*

Of the ten respondents who indicated that the blackouts affected their cooking with electric appliances, eight used charcoal to complete their cooking and two used LPG.

11. *What were the main limitations of the appliances? e.g. power cuts, size of pot, lack of manual control.*

EPC

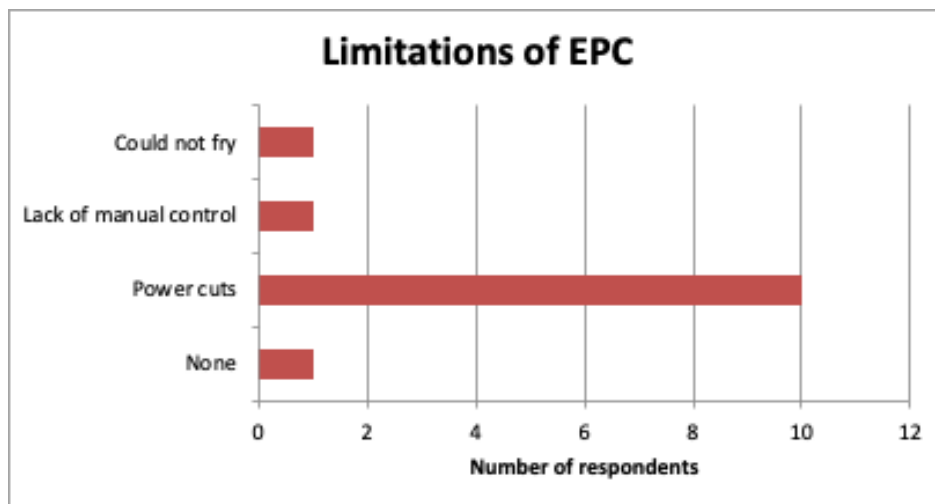


Figure 16. Limitations of the EPC

Ten respondents mentioned that power cuts were a limiting factor to the use of the EPC. One respondent mentioned the lack of manual control and another cited not being able to fry. One respondent said there were no limitations.

Hotplate

Eight respondents said the main limitation of using the hotplate was power cuts. The remaining three respondents did not give any feedback to this question.

12. What were the main strengths of the appliances?

EPC

All the respondents said the main strength of the EPC was that it cooked fast. They added that slow cooking or hard boiling foods were cooked well in a short time.

Hotplate

This question was answered by all the respondents that had received the hotplate in the study and two who had not received the appliance but already had one.

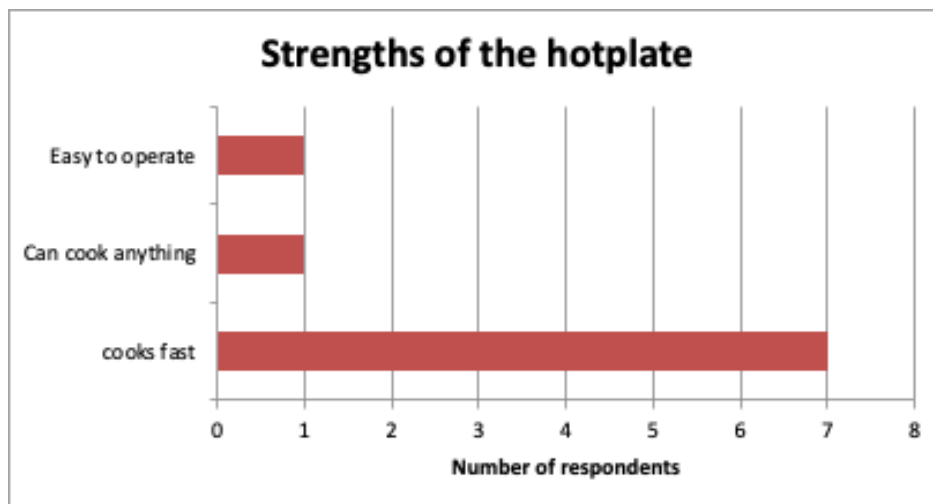


Figure 17. Strengths of the hotplate

Seven respondents mentioned that the hotplate cooked fast. They added that dishes which were cooked fast were in small amounts and were those which were quick or fast to prepare, and the dishes included porridge.

One respondent mentioned that another strength of the hotplate was its ability to cook anything. That is, the ability to support different cooking methods and different pots of variable sizes. Another strength cited by one respondent was that it was easy to operate, e.g. heat control using the knob.



13. Which foods does each appliance cook best and why?

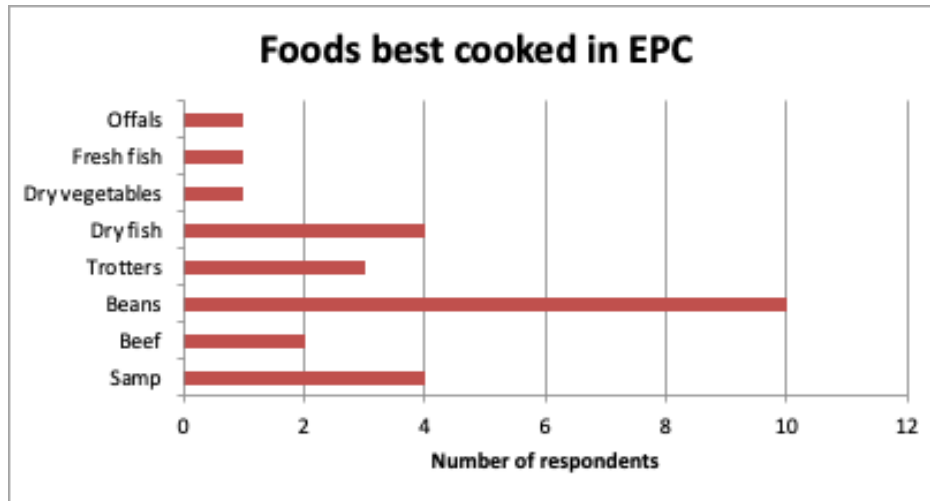


Figure 18. Foods best cooked in the EPC

Respondents listed the dishes/foods best cooked which are shown in Figure 18. Beans was the dish most preferred for preparation in the EPC. The reason that the respondents gave was that these long cooking dishes were cooked fast in the appliance.

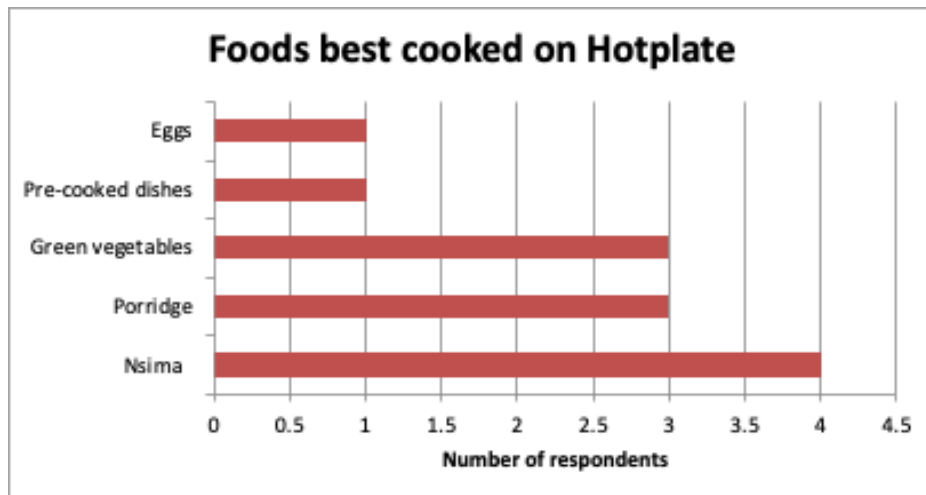


Figure 19. Foods best cooked on the hotplate

The foods that respondents said were best cooked on the hotplate are shown in Figure 19. The respondents added that these dishes are light and cook fast on the appliance.



14. Which foods do you frequently cook that you cannot cook in the efficient appliances (EPC)?

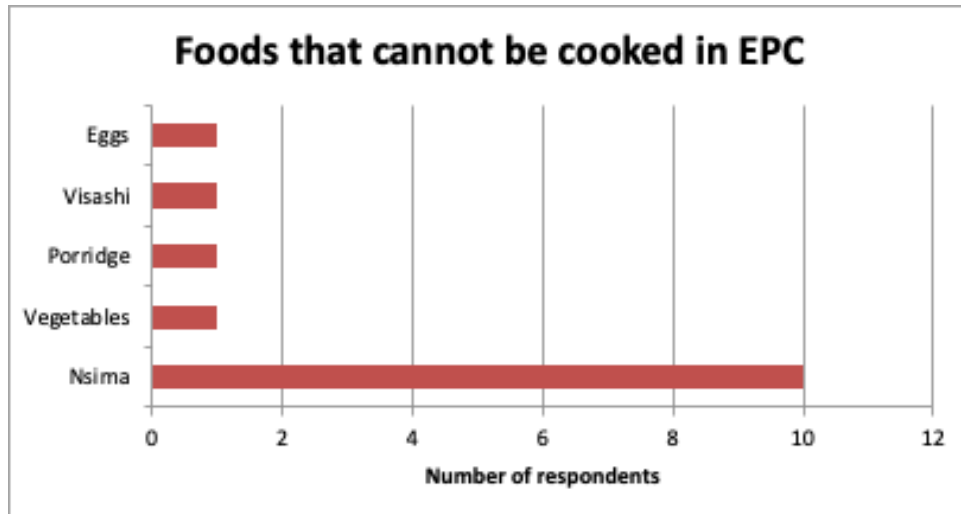


Figure 20. Foods that cannot be cooked in EPC

Nsima is a staple for Zambians and it is cooked on a daily basis in nearly all households. Therefore when asked what food they frequently cooked which they could not cook in the EPC, nsima topped the list (refer to Figure 20). Nsima is instead cooked using charcoal or on a hotplate.

15. Would you recommend any of the appliances? Which ones? (in order of priority)

All the respondents (100%) mentioned that they had recommended the one or both of the appliances. All the respondents had recommended the EPC as a first priority and seven out of eleven recommended it as the only priority appliance. Four respondents indicated the hotplate for second priority.

16. Have your neighbors/friends/family shown interest in acquiring these appliances?

All the respondents indicated that their neighbors, friends and family had shown interest in acquiring the appliances, especially the EPC. They added that the people would ask them how they acquired the EPC, when the next study would be starting; and one respondent said she would demonstrate and then let them borrow and try out the EPC.

17. *Would you be interested in being involved in another cooking diary study?*

All the respondents (100%) said they would want to be involved in another cooking diary study.

18. *What would you recommend that we do differently from the last cooking diary study?*

Table 3. Recommendations for the next cooking diary

Response	Number of respondents
No recommendation	6
Provide energy meters to all households	1
Introduce alternative fuels to trial other than electricity	1
Find a way to replace the burden of weighing fuels and recording	1
Introduce appliances that do not only rely on electricity	1
Demonstrate preparation of a wide range of common dishes with the trial appliances	1

According to Table 3, most of the respondents felt that the cooking diary was well implemented and did not have any recommendations for improvements. The other responses have been incorporated into the conclusion and recommendations section below.

19. *Are there any other observations you would like to make?*

Nine respondents did not have any comments here. However one respondent mentioned that charcoal prices had gone up. The respondent added that they were now spending between 150 to 200 ZMW compared to 100 ZMW before the lockdown. Another respondent indicated that her household had started using a rice cooker a lot more often from the time of the lockdown.

Conclusion and recommendations

The follow-up survey has proved to be an invaluable resource, in terms of understanding the participant experience of the cooking diaries. In addition to the data collected during the study, regarding cooking times, cooking costs, appliance efficiency, and the cooking experience, this survey has allowed us to understand the long-term impact of this type of intervention.

The survey shows that a hotplate and EPC can cook a wide range of Zambian dishes, and that these appliances are valued to the extent that they are recommended to friends and family members. Social networks seem to be an important method of knowledge sharing, as these contacts showed interest in the appliances and one user received cooking tips from her church group. Making the most of the networks of future participants and end users should be an important part of the research design process.

For the 2021 cooking diaries, we will use these follow-up surveys as a learning tool that will help improve the impact of the study and the insights it will generate. In designing the upcoming study, we plan to take the following steps:

- Including LPG as an alternative modern energy cooking fuel, so that participants have a clean fuel option during periods of load shedding. This will also tell us how comfortable Zambian households feel using LPG, and whether this improves with regular use. Cost comparisons will also be made between LPG, electricity, and baseline fuels
- Demonstrating to participants that Nsima can be cooked successfully using an EPC. This will not only help to improve attitudes towards the appliance, but it will also demonstrate how our intervention is well suited to local cuisine and dishes of cultural importance. It may also be necessary to demonstrate that an EPC can easily fry foods (although deep frying is a significant challenge)
- Ensuring all participants have energy meters, and are equipped with the tools that allow fuels to be weighed as easily as possible
- In more affluent households, we should encourage the head of household to teach domestic staff to cook with the EPC, as an alternative to cooking with charcoal. This may require an emphasis on the EPC's enhanced functionality and durability
- There is need for making available quality appliance which can withstand use over a long period of time
- Ensuring (where possible) that participant households receive appliances with a good warranty period. Further research should also be done that looks at the systems of repair concerning electric cooking appliances.

Appendix

Dear Participant ,

My name is And I'm calling from the Centre for Energy, Environment and Engineering Zambia. In 2017, you participated in a cooking diary study, where you tested an Electric Pressure Cooker (EPC) and hotplate in your kitchen.

We take this opportunity to once again thank you for your participation. As a result of the data you and the other cooking diary participants collected for us, we

We would like to check in with you to find out whether you are still using the electric cooking appliances you trialed in 2017 and if so, how. The information you share with us will help us to inform the design of the next cooking diary studies that we are planning in Zambia and several other countries. The survey will take 30 minutes and will be carried out over the phone.

- Are you willing to participate?
- If so, is now a convenient time?

NAME:

.....
.....

GENDER:

.....
.....

HOME AREAS (at the time of the study and now, if different):

.....

AGE:

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QUESTIONS

1. How has the lockdown due to COVID-19 affected your cooking?



a. If you become aware of additional changes as we go through the survey questions, please do make us aware of them.

2. Do you still have any of the appliances? EPC hotplate

a. If not, what happened to them?

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3. If so, are any of the appliances still working? EPC hotplate

a. If not, what happened to them?

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4. If so, are you still using any of the appliances? EPC hotplate

a. If not, why not?

EPC:

Hotplate:

b. If so, how often are you using each one?

EPC:

Hotplate:

c. If so, are there particular foods that you like to cook in each appliance? How often for each type of food?

Appliance	Food	Frequency
EPC		
Hotplate		

d. If so, are there other reasons why you choose to use each appliance?

EPC:

Hotplate:



- e. If so, how much are you spending each month on:
 - i. electricity? Now:ZMW; Before lockdown:ZMW
- 5. Who is responsible for paying the electricity bill?
 - a. Who is/was responsible for paying for cooking fuels?
 - b. If different, has this created any tension?
- 6. How would you describe the experience of cooking with electricity?
 - a. Prompt if necessary: What did you like most? What did you like least?
- 7. Did the appliances change the way you cook? If so, how?
 - a. Have the responsibilities for preparing food changed at all with the new appliances? For example, do other members of the family now cook more often?
 - b. Do you spend more or less time in the kitchen now?
 - i. If so, how much?
 - ii. If you have more time, then what do you do with this extra time?
- 8. Have you learned any new tips/techniques to help you cook with these appliances?
 - a. If so, how did you learn them? e.g. individual experimentation, social media, neighbour/friend/family member
- 9. Have you had any alarming incidents with the appliances?
- 10. Do you have blackouts at home?
 - a. If so, how often?
 - b. If so, how long do they last for?
 - c. Do they affect cooking with the electric appliances?
 - d. If so, what do you do when there is a blackout?
- 11. What were the main limitations of the appliances? e.g. power cuts, size of the pot, lack of manual control



EPC:

Hotplate:

12. What were their main strengths?

EPC:

Hotplate:

13. Which foods does each appliance cook best? Why?

EPC:

Hotplate:

14. Which foods do you frequently cook that you cannot cook in the efficient appliances (EPC)?

15. Would you recommend any of the appliances? Which ones?(in order of priority)

16. Have your neighbors/friends/family shown interest in acquiring these appliances?

17. Would you be interested in being involved in another cooking diary study?

18. What would you recommend that we do differently from the last cooking diary study?

19. Are there any other observations you would like to make?

Thank you once again for your participation. We will be in touch soon if we are able to carry out another cooking diary study in your area.