

Important Information

MECS is seeking a consultant or consultancy team to conduct research on repair and maintenance of cooking appliances in Indonesia, Cambodia, Myanmar, the Philippines. The quality of proposals received will determine which countries are chosen from those listed.

Given the global dispersal of the countries, the need to achieve good value for money, and the current difficulties with international travel due to Covid-19 we do not anticipate that a consultant will submit a proposal for more than one country. Consultants wishing to submit proposals for multiple countries must demonstrate through an additional section in their response to these ToRs why and how they are specifically qualified and able to conduct the work in multiple countries. Generic proposals not tailored to a specific country context will be rejected without review.

Project Background

MECS is supporting the transition of low-income economies from biomass to the use of modern energy cooking services (i.e. cooking with electricity or gas) It calls for a greater focus on modern energy as the source of clean cooking, and has evidenced that cooking with modern energy using energy-efficient appliances can be cost effective, particularly for urban communities. The creation of the workstream recognises the need to understand the complexity and scale of both the opportunities and challenges for modern energy cooking transitions in African and Asian cities.

A wide range of electrical cooking appliances are becoming increasingly accessible and affordable to (predominantly urban) populations across Southeast Asia. As these markets continue to attract the attention of appliance manufacturers and distributors, the MECS programme is working pro-actively to understand the economic and environmental implications of these trends in priority countries.

The increasing availability and circulation of electrical appliances has implications for systems of distribution, repair, and waste in urban environments. The market for modern cooking appliances is shaped in part by linear production models ('take, make, waste'), which shorten the life spans of products and contribute to higher emissions and larger volumes of waste.

The concept of the 'circular economy' attempts to limit the impact of wasteful economic activity, primarily through the '4R strategies' of reduce, reuse, remanufacture and recycle. It therefore follows that the growing supply of (and demand for) modern cooking appliances is not solely an indicator of progress, innovation and development, but also an indicator of eventual technological breakdown and waste, repair and restoration. Appliances are not simply produced, sold, used, and disposed of; value is generated through circular processes of repair, recycling, and reuse.

Anecdotal evidence from MECS research suggests that consumers express concern about the quality and durability of different kinds of electric cooking appliances that are available in the market. However, it is unclear how poor product quality impacts countries' transitions to modern energy cooking. It is unclear whether the most common appliance faults can be easily repaired, whether careful maintenance of the appliances can improve their durability, or whether households seek to repair the appliances rather than disposing of them, storing them away, or repurposing them.

Scope of Work

This study will explore issues related to the repair and maintenance of modern energy cooking devices.

Hypothesis: *Faulty cooking appliances tend to be disregarded rather than repaired, due to a lack of familiarity with the appliances themselves and the potential ease of repair. This makes consumers less likely to fully transition to cooking with modern energy.*

The consultant/s are required to collect data in order to answer the following 6 sub-questions.

1. What are the scenarios in which urban residents seek to repair, re-purpose, or dispose of an electric cooking appliance, and how are these activities carried out in practice?
2. How do consumers respond when an appliance fails?
3. How do consumers prefer to have an appliance repaired?
4. What are the different typologies of appliance repair workers and second-hand appliance dealers operating in urban environments?
5. How readily available are parts needed to make the necessary repairs?
6. What do consumers do with an appliance when it is beyond the point of repair?

These 6 questions form the minimum requirements of the study. Consultants are encouraged to expand the questions asked to gain a comprehensive and holistic understanding of repair and maintenance considerations in urban contexts.

The following activities must be included in the proposal:

1: A short piece (5 days) of desk-based research: to understand the types of appliances available and in use in the chosen context, and the types of repair infrastructures that exist in the local area.

2: 8-10 interviews with a variety of stakeholders who have prior expertise/practical experience in issues of repair and maintenance in the given country, to get a broader understanding of the opportunities and markets for repair and for second-hand retail. Stakeholders may include local circular economy and sustainability experts, community leaders, and public officials among others.

3: 10-12 repair workers/second-hand dealers will participate in an **in-depth interview** that will help to shed light on the common faults and practicalities of repair concerning the most popular cooking appliances, and the potential repair implications of newer, more automated cooking appliances entering the market. The interviewees should cover a range of repair contexts, from local handymen and women, to informal repair shops, to established retailers offering returns and warranties to customers.

4: Development of vignettes:

Taking photographs of interviewees in context (e.g. in their workspace) or taking video footage of participants expressing their views on the research topics are highly valuable to the MECS programme. The consultant should aim to capture photos and short videos of participants, shops, markets, and other scenes that they think will be of interest. From across the interviews 4 vignettes must be developed showcasing key findings from the data collection. A vignette is an image, a series of images or a short video (e.g. a talking head) presented with a short description. Consent forms for the collection and use of personal images will be provided by MECS.

Recruiting participants

The research is expected to take place in an urban context. It is expected that the researchers have prior knowledge and experience of the urban context selected and can use their insight to contextualise the findings.

The consultant is responsible for sourcing interviewees and securing their participation. The consultant should indicate where they intend to recruit the participants from and provide a brief description of the characteristics of the location selected.

Deliverables, budget, and duration

The research is expected to commence no later than **1st October 2021**. All contracting will be completed prior to the 1st October. All deliverables must be completed and delivered no later than **15 January 2022**. These dates are non-negotiable. The consultant should demonstrate in their response to these ToRs how the work can be completed within the time available.

The total budget is a maximum of £10,000 (ex VAT where applicable).

Payment is contingent on successful completion of all deliverables.

Deliverable	Payment value
Contract signing	20%
Draft research tool developed (5 days after start of contract)	10%
Full data sets: all interviews and focus groups to be translated into English and transcribed verbatim (summaries of discussions will not be accepted)	30%
Four vignettes from across the interviews Any additional images and videos collected (with permissions)	20%
Final report (concise, e.g. 10 pages) and follow up interview (with the MECS Urban lead). The report should focus on the study context - desk study (method, geography, social and economic context) and findings from the interviews	20%

Communication and Reporting

The contractual requirements will be managed by the MECS Programme Manager of Loughborough University. All other communications and reporting, including in-country consultation, task management and consultations on the research process, will be managed by the Urban Lead. Support for the consultant/organisation will be provided in conjunction with the relevant country Link Researcher and other relevant MECS team members.

The consultant/organisation is expected to communicate with the Urban lead regularly throughout the project via two-weekly update meetings or phone calls, WhatsApp communication and emails, on:

- research progress and milestones achieved;
- anticipated challenges or changes to research plans, activities and timelines;
- upcoming activities and next steps; and
- delays or concerns on reporting.

All meetings and appointments to discuss the overall progress of the project against the contract will be agreed and arranged in advance and at mutually convenient times. Any significant changes to the approved research plan and timelines have to be discussed and approved in advance.

Loughborough University reserves the right to request the consultant/organisation to make revisions to the deliverables if they do not meet the required quality. The consultant/organisation will be required to make these revisions at no additional costs to Loughborough University.

Expertise required

The consultant/s doing the field work will be the primary point of contact between participants and MECS programme. It is, therefore, important that they are polite, courteous, fully informed about the programme and able to answer participants' queries. The consultant should demonstrate experience in using the qualitative methods required for this study and details of experience on similar studies.

Responding to these ToRs

Responses should be a maximum of 8 pages with up to 3 additional CVs (no more than 2 pages each).

Please provide the following when responding to these ToRs

- State explicitly which country context will be studied.
- A description of how the proposed activities will be designed and implemented to address the research questions.
- A description of how participants will be recruited.
- An initial draft of the research tools to be used.
- A detailed breakdown of the budget in terms of personnel, materials, travel etc. Where costs have been estimated please highlight these and provide a brief explanation of the assumptions used to generate the cost.
- Details of all personnel who will be involved in the study, along with their responsibilities.
- A proposed Gantt chart of activities.
- An assessment of how COVID-19 might impact on the proposed activities and whether any mitigation measures can be put in place.

Proposals should be sent to MECS (mecs@lboro.ac.uk) with the subject '**Urban - repair and maintenance: [COUNTRY SELECTED] – add relevant country name**'. All proposals must be received by 23:59 GMT on **24 August 2021**.

Assessing proposals

Shortlisted consultants may be invited to an interview in order to finalise selection. The assessment process will take into consideration the criteria below in order to ensure **value for money**.

- Quality of proposal and methodology.
- Appreciation and understanding of the task.
- Skills, expertise and experience of consultant/organisation team members.
- Past performance (CV).
- Proposed management of the activities.
- Price.

Ethical considerations

All research must be in line with the Code of Practice for research, Promoting good practice and preventing misconduct (UK Research Integrity Office, 2009).

The UK Research Integrity Office (UKRIO) is an independent charity, offering support to the public, researchers and organisations to further good practice in academic, scientific and medical research. Its confidential advice service is available to free of charge to individuals (members of the public, research participants, patients, researchers and students) and subscribing organisations. Their advice service can be [accessed here](#).

At a minimum, participants must not be subjected to physical, social, legal or psychological harm. Due consideration and ethical steps must be taken into safeguarding all participants, especially the vulnerable. A detailed Participation Information Sheet explaining the full scope of the study, what confidentiality entails, and that no participants will be forced into participating, must be provided at recruitment. Participants are to be made aware that participation is fully voluntary and there are no repercussions if they choose to no longer participate in the study at any point in time. Participants should, ideally, sign a consent form which includes consent for the use of photographs and videos.

Confidentiality must be maintained at all times. With regards to confidentiality and privacy of participation, participants must be informed that their anonymity will be maintained in any outputs and that all identifiable markers will be removed from any data sets that are published. Additionally, due consideration must be made to ensure that participants are safeguarded during the research process in line with the local government issued guidelines around COVID-19.

The consultant will be responsible for securing any research or ethical permissions needed from local authorities in each of the field work locations. There may be additional ethical, or research clearance needed for this kind of user centric design research in the chosen country.

MECS is funded by UK Aid through the Department of International Development. It is a partnership between researchers, innovators, policy makers, and ESMAP drawing on their expertise and relevant work from around the world to co-construct new knowledge with practitioners and the private sector. It is led by Loughborough University, UK.