

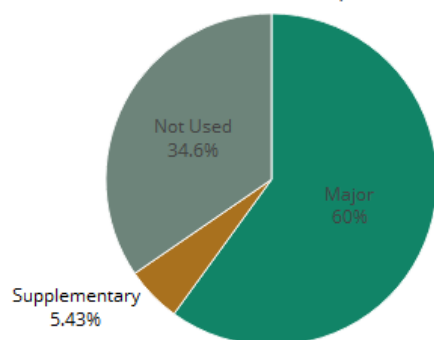
RESEARCH PEARLS | FEDU PEARL #19

In our series “Research Pearls” we are providing first-hand insights into our dynamic and powerful diaries research. In this short Pearl we are looking at the energy component of the research, more specifically at cook stove usage.

Frontrunner “three stone stove” facing competition

Within the Energy Diaries research in Uganda some 580 adults were interviewed about their energy behavior. One of the question, which was asked repeatedly over half a year, during thirteen interviews within a two week intervals, was: “what cooking equipment did you use during the past two weeks?”. Among the overall group, the most common form of cooking was with a margin open fire, also referred to as “3 stone fire” (in 60% of the interviews people reported to have used this as their primary cooking equipment and 5% as their secondary cooking equipment). This was followed by “ordinary clay stove” (mentioned respectively 24% as primary and 11% of interviews as secondary cooking device).

Number of those who use Open Fire/ 3 stone



Number of those who use Ordinary Clay Stove

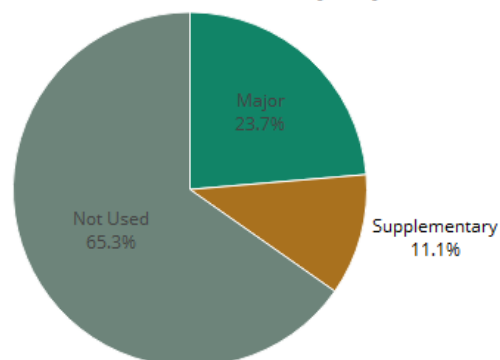


Figure 1: Overview of energy sources usage for cooking

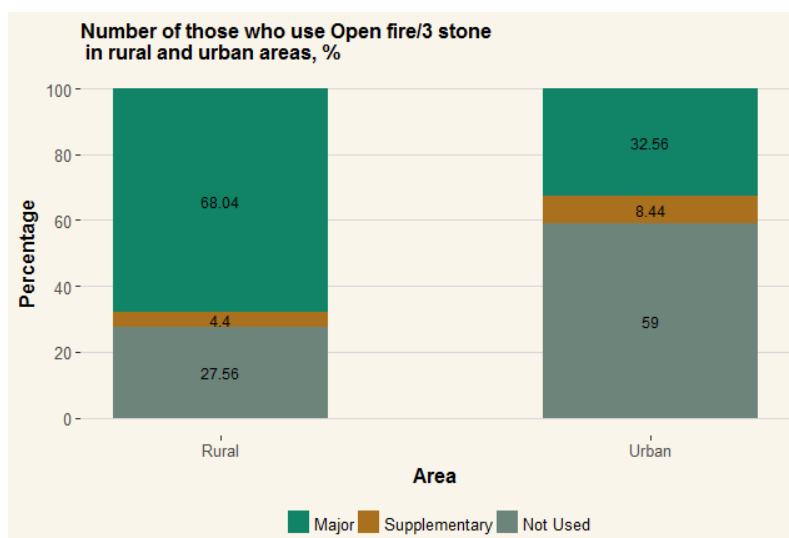
Apart from the “ordinary clay stove” very few alternatives were mentioned. We asked about the usage of ten other models that were various forms of improved cook stoves. Among those ten models, the most reported device (in just 5% of the interviews) was “improved clay-stove”. So basically, usage of improved cook stoves was very rare.

Hence, there is a long way to go for people to switch to efficient cooking devices.

When delving deeper into the data, some clear patterns about which groups were more likely to have moved away from open fire were discovered. The patterns were:

- urban people are less likely to use 3-stone fires
- younger people are less likely to use 3-stone fires
- wealthier people are less likely to use 3-stone fires

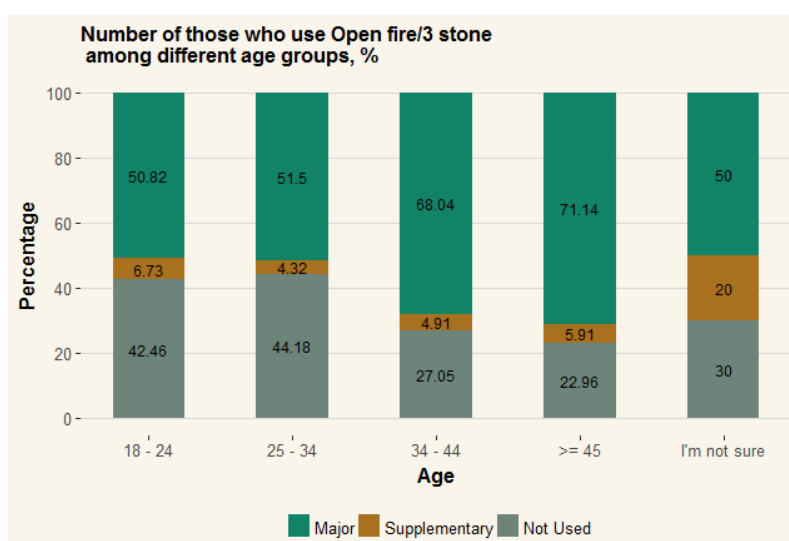
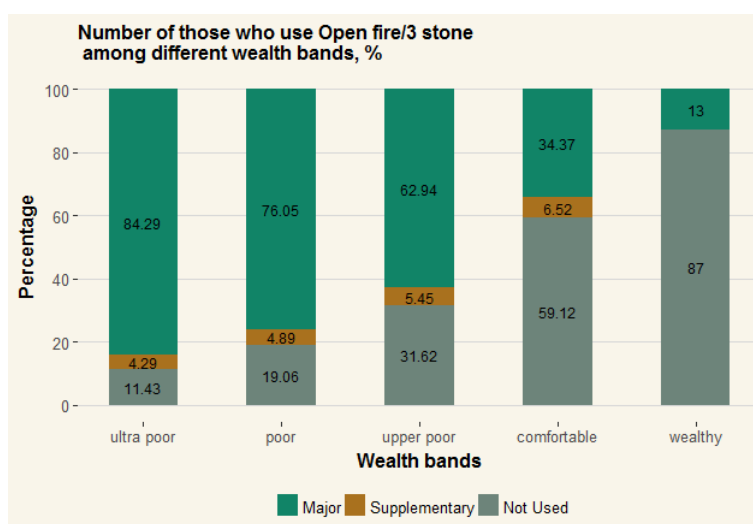
Points a. and c. are commonly known, but its reconfirmation in the energy diaries, which are much more detailed compared to a one time survey, is important, because it tells us how often the various models were used which allows quantifying the differences.



Rural people reported to use 3-stone fire in 68% of the interviews against 33% of the urban interviews. Even if this finding was expected, it is important to note how large the difference is.

It is assumed that 3-stone fire is not convenient for urban people. The cost of firewood is higher as compared to rural areas, which encourages the use of more efficient forms. Furthermore, the access to alternatives is expected to be higher in urban areas.

Wealthier people are considerably less likely to use 3-stone fire for cooking. In 35% of the interviews usage of 3-stone fire was reported among respondents from the “comfortable” wealth band, while it was at 76% among “poor” respondents. One underlying reason for the difference may be that cook stoves of higher efficiency presumably require an initial investment, which some poorer people may not have. Moreover, access to information on alternatives and points of sale are expected to be more prevailing among wealthier groups.



Older respondents were considerably more likely to use open fires as compared to younger groups (72% against 51%). While the difference among age groups is not as large as among other segmenting dimensions, the difference is interesting. In other components of our research we learned that the youngest age cohort actually struggles to access information and due to their lower income have lower adoption of several items, including mobile money. There is therefore no reason to expect that

younger people have more access to alternatives. Instead, the most plausible explanation is that younger people are more likely to take up innovations, while older people are more set in their ways and may have more problems switching to new methods.

In conclusion, it is suggested that efficient cook stoves are primarily promoted among younger people, as they are most probably more likely to switch and adopt new devices. Organisations should also carefully keep in mind that there are far more low-income people using inefficient cooking methods. Hence, promotion campaigns should ideally be designed for the poorest wealth bands. In addition, it is recommended that the campaigns are targeted to rural people, as there are far more 3-stone fire users in rural than urban areas.

