**DATASET: 2021 HOUSEHOLD INTERVIEW DATA ACROSS 4 RURAL SUDAN VILLAGES**

*Study Lead:* Mohammed, Ayah, School of Engineering, University of Southampton

*Institutional Review Board Statement:* The study was conducted in accordance with the Declaration of Helsinki, and approved by Ethics and Research Governance of the University of Southampton (3659.A4 - Energy for Development (Amendment 4), 21/01/2021) for studies involving humans.

*Informed Consent Statement:* Informed consent was obtained from all subjects involved in the study.

*Overview:* This dataset corresponds to a survey of four villages in Sudan, typical size 500 people. The interview survey data from the villages was collected between 30/07/2021 and 22/08/2021. The sample size was 60 participants from different households in each village, and an age group of 18 – 79. The average household across the four villages had six members, therefore each village has around 84 households. For a confidence level of 95% and a margin of error of 7%, the survey would therefore need a sample size of 59 households. This survey has collected n=60 surveys from each of the four villages.

*Associated publication:* Further description of the villages and analysis of this dataset is provided in the following paper:

**Mohammed A., James P.A.B. & Bahaj A.S.; (2025) Electricity Access and Sustainable Development Goals Linkages in Rural Sudan, *Sustainability***

If you use this dataset please acknowledge its use by referring to the above paper for survey context and provide the DOI for this data file archive.

Dataset structure: The datafile is a comma separated file with two header rows.

Header row 1: column number 1- 22

Header row 2: description of variable

Where there is response provided to a question the field “no data” has been added

N=240 records

Column 1: Settlement Name, Categorical (4): Taebeen, Al Hashieb 2, Wiheishat, Helbeh extension

Column 2: Number of household members, Integer

Column 3: Number of children in household, Integer

Column 4: Number of boys in household who attend school, Integer

Column 5: Number of boys in household who so not attend school, Integer

Column 6: Number of girls in household who attend school, Integer

Column 7: Number of girls in household who so not attend school, Integer

Column 8: Head of household education level, Categorical (6): Prefer not to say, No qualifications, Primary, Khalawi, Secondary, Higher Education

Column 9: Household monthly income (SDG), Integer

Column 10: Distance to health clinic (km), Number

Column 11: From where did you learn about the importance of water purification?

Categorical (5): no data, From TV news, word of mouth, School, From Radio

Column 12: Is heating of water necessary?, Binary variable (2): yes, no

Column 13: Why is heating of water necessary for you? Response only IF YES to Column 12,

Free text response (2): No data, To clean it from contaminants

Column 14: Do you heat water before drinking / cooking?, Binary variable (2): yes, no

Column 15: What is your view of the health impact of biomass use for cooking?, Free text response (3), I don’t know, Polluting, Clean

Column 16: In the case of a health emergency what do you do? Free text response (4): We walk to clinic, Traditional medicine, We wait for a vehicle, We walk to Tibaib

Column 17: Animal grazing, how many hours per day does your household undertake this?, Integer

Column 18: Biomass collection for cooking, how many hours per day does your household undertake this?, Integer

Column 19: Fetching of water, how many minutes per day does your household undertake this?, Integer

Column 20: How far do your children travel to school?, Real

Column 21: Are energy sources reliable?, Binary variable (2): yes, no

Column 22: What would you use electricity for if it was available?, Free text response