**Adoption of clean energy cooking technologies in rural households: the role of women**

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**ONLINE APPENDIX**

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| **Table A1.** Studies reviewed in the meta-analysis | | | | |
| **Author(s)** | **Country** | **Technology** | **Type of model** | **Sample size** |
| Abadi  *et al.* (2017) | Ethiopia | Biogas | Probit model | 200 |
| Abbas  *et al.* (2017) | Pakistan | Biogas | Logit model | 160 |
| Agurto Adrianzen (2009) | Peru | ICS | Linear probability regression | 283 |
| Ahmad and Jabeen (2023) | Pakistan | Biogas | Probit model | 971 |
| Amir  *et al.* (2019) | Pakistan | Biogas | Logit model | 480 |
| Berhe  *et al.* (2017) | Ethiopia | Biogas | Probit model | 300 |
| Bielecki and Wingenbach (2014) | Guatemala | ICS | Qualitative | 20 |
| El Tayeb Muneer and Mukhtar Mohamed (2003) | Sudan | ICS | Linear regression | 300 |
| Gould and Urpelainen (2020a) | India | LPG | Logit model | 3,929 |
| Gould and Urpelainen (2020b) | India | LPG | Logit model | 8,563 |
| He  *et al.* (2022) | China | Biogas | Logit model | 332 |
| He and Veronesi (2017) | China | Biogas | Probit model | 591 |
| Imran and Ozcatalbas (2020) | Pakistan | LPG | Logit model | 196 |
| Jabeen  *et al.* (2020) | Pakistan | Biogas | Probit model | 695 |
| Jan (2012) | Pakistan | ICS | Binary Logistic | 100 |
| Jan and Akram (2018) | Pakistan | Biogas | Probit model | 200 |
| Jan  *et al.* (2017) | Pakistan | ICS | Binary Logistic | 161 |
| Jin  *et al.* (2019) | Pakistan | LPG | Multinomial logit model | 196 |
| Kabir  *et al.* (2013) | Bangladesh | Biogas | Logit model | 300 |
| Kabyanga  *et al.* (2018) | Uganda | Biogas | Logit model | 153 |
| Kalli  *et al.* (2022) | India | LPG | Probit model | 479 |
| Karanja and Gasparatos (2020) | Kenya | ICS | Probit model | 325 |
| Kelebe  *et al.* (2017) | Ethiopia | Biogas | Logit model | 190 |
| Khanwilkar  *et al.* (2021) | India | LPG | Logit model | 2,276 |
| Kulindwa  *et al.* (2018) | Tanzania | ICS | Mixed Logit model | 271 |
| Kumar  *et al.* (2020) | India | LPG | Logit model | 510 |
| Lwiza  *et al.* (2017) | Uganda | Biogas | Probit model | 174 |
| Matavel  *et al.* (2023) | Mozambique | ICS | Probit model | 510 |
| Mengistu  *et al.* (2016) | Ethiopia | Biogas | Logit model | 358 |
| Miller and Mobarak (2013) | Bangladesh | ICS | OLS regression | 800 |
| Momanyi,  *et al.* (2016) | Kenya | Biogas | Descriptive statistics | 150 |
| Mottaleb and Rahut (2019) | India | Biogas | Linear regression | 3,232 |
| Mwirigi  *et al.* (2009) | Kenya | Biogas | Descriptive statistics | 200 |
| Ngcobo  *et al.* (2020) | South-Africa | Biogas | Logit model | 48 |
| Ozoh  *et al.* (2018) | Nigeria | LPG | Descriptive statistics | 456 |
| Pine  *et al.* (2011) | Mexico | ICS | Multinomial logistic regression | 259 |
| Pope  *et al.* (2018) | Cameroon | LPG | Logit model | 243 |
| Putra at al. (2017) | Indonesia | Biogas | Logit model | 351 |
| Putra  *et al.* (2019) | Indonesia | Biogas | Hazard ratio | 238 |
| Qu  *et al.* (2013) | China | Biogas | Probit model | 1,227 |
| Rahman  *et al.*(2021) | Bangladesh | Biogas | Logit model | 400 |
| Sarker  *et al.* (2020) | Bangladesh | Biogas | Logit model | 280 |
| Shallo  *et al.* (2020) | Ethiopia | Biogas | Logit model | 268 |
| Troncoso  *et al.* (2019) | Mexico | LPG | Descriptive statistics | 177 |
| Uhunamure  *et al.* (2019) | South-Africa | Biogas | Logit model | 200 |
| Wahyudi (2017) | Indonesia | Biodigester | Descriptive statistics | 132 |
| Walekhwa  *et al.* (2009) | Uganda | Biogas | Logit model | 220 |
| Wassie  *et al.* (2021) | Ethiopia | Biogas | Chi-square | 605 |
| Yasmin and Grundmann (2019) | Pakistan | Biogas | Probit model | 624 |
| Zeng  *et al.* (2019) | China | Bigas | Logit model | 784 |

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| **Table A2.** Fractional logit regression to test the robustness of the model | | | | | | |
|  | **Adoption** | | | | | |
|  | **Model 1** | **Model 2** | **Model 3** | **Model 4** | **Model 5** | **Model 6** |
| Publishing | 0.50  (0.34) | -0.01  (0.01) | -0.01  0.01 | -0.01  (0.01) | -0.01  (0.06) | -0.01  (0.01) |
| Type adoption  (actual) | -0.45  (0.07) | -0.45  (0.07) | -0.45  (0.07) | -0.45  (0.07) | -0.45  (0.07) | -0.45  (0.07) |
| Log(Income) | 0.09  (0.03) | 0.09  (0.04) | 0.09  (0.03) | 0.09  (0.03) | 0.10  (0.03) | 0.09  (0.03) |
| Size | 0.03  (0.01) | 0.03  (0.02) | 0.03  (0.01) | 0.03  (0.02) | 0.03  (0.01) | 0.03  (0.02) |
| Age | -0.01  (0.01) | -0.01  (0.01) | -0.01  (0.01) | -0.02  (0.01) | -0.01  (0.01) | -0.01  (0.01) |
| Education | - | - | - | - | - | 0.01  (0.01) |
| Information | 0.16  (0.05) | 0.16  (0.05) | 0.17  (0.05) | 0.16  (0.05) | 0.17  (0.05) | 0.16  (0.05) |
| Exc\_government | - | - | - | -0.04  (0.05) | - | - |
| Woman enrollment | 0.08  (0.05) | 0.08  (0.05) | 0.08  (0.05) | 0.08  (0.10) | 0.08  (0.05) | 0.09  (0.05) |
| SIGI | -0.01  (0.01) | -0.01  (0.01) | -0.01  (0.01) | -0.01  (0.01) | -0.01  (0.01) | -0.01  (0.01) |
| Forest area | 0.01  (0.01) | 0.01  (0.01) | 0.01  (0.01) | 0.01  (0.01) | 0.01  (0.01) | 0.01  (0.01) |
| D.air\_poll | - | -0.00  (0.01) | - | - | - | - |
| Africa | - | - | 0.02  (0.05) | - | - | - |
| LPG | - | - | - | - | 0.01  (0.06) | - |
| Intercept | 0.50  (0.33) | - | 0.46  (0.36) | 0.57  (0.35) | 0.49  (0.36) | 0.53  (0.35) |
| Observations | 53 | 53 | 53 | 53 | 53 | 53 |
| Null deviance | 3.43 | 3.43 | 3.43 | 3.43 | 3.43 | 3.43 |
| Residual deviance | 1.08 | 1.08 | 1.08 | 1.06 | 1.08 | 1.08 |
| AIC | -33.84 | -31.85 | -32.03 | -32.60 | -31.86 | -31.96 |
| *Note:* Standard errors are in parentheses. | | | | | | |

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