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Assessment of energy supply and use in households of Mudavula village in Collins Chabane Municipality in Limpopo province.

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Assessment of energy supply and use in households of Mudavula village in Collins Chabane Municipality in Limpopo province.

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With the ever-increasing energy challenges, globally and in South Africa, the diversification in the energy mix with a high proportion of alternative energy sources is becoming imperative. In Mudavula village, most households are connected to the national electricity grid (ESKOM). This study assesses the state of energy supply and usage in Mudavula village in Limpopo Province, focusing on the impacts of poverty, unemployment, and lack of funding on the exploitation of available renewable energy sources. The paper presents a deep analysis of the energy use and renewable energy production from the solar home systems (SHS) installed in some households in the study area. The study applied qualitative and quantitative research methods to investigate community members' perceptions and choices regarding the use of PV systems, SHS, and ESKOM electricity. An online google form questionnaire was used to collect the data. The study found that most of those with grid electricity connections still use traditional firewood for all their heating and cooking needs due to the high costs of electricity. The energy mix in the village presents a unique situation that warrants a detailed study to develop other possible pathways for ensuring access to affordable, reliable, sustainable, and modern energy towards achieving sustainable development goals. This study will inform the community about the opportunities available to minimize biomass.

Apply to be considered for a student ; award (Yes / No)?

Yes

Level for award;(Hons, MSc, PhD, N/A)?

Hons

Consent on use of personal information: Abstract Submission

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