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Raising the Burden: Healthy Food and Cooking Energy Scarcity

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Abstract

Food and nutrition security does not only depend on an adequate quantitative and qualitative availability of especially staples and vegetables. Likewise important is the adequate supply of cooking energy such as fuelwood and charcoal. However, as the process of land degradation is ongoing especially in sub-Saharan Africa - but also in other regions of the global South - forested areas and likewise forest products are diminishing. This has substantial consequences for the 3 billion people globally who depend on so-called traditional bioenergy for cooking but also heating. As the cooking process is essential for nutritious aspects - heat reduces the food matrices and make them more available for the human body -, affected individuals have to develop or apply coping strategies to deal with the challenge of energy scarcity.

We indexed the use of respective coping strategies and quantified their application in the rural and semi-arid region of Dodoma in central Tanzania. As first step, published strategies were identified and clustered via an in-depth literature survey. In sum, 26 strategies were identified in total clustered generally in preventive and acute measures - ranging from introduction of improved cooking stoves to reduction of meals prepared per day. These results were discussed in a series of focus group discussions and expert interviews with villagers in the case study sites of Mzula and Idifu village. Additionally, missing strategies were included as to derive a full picture of strategies applied (23 strategies were applied in the village, two of them not published so far). In total, 39 households were interviewed. In conclusion, affected villagers often only use acute measures that do not tackle the increasing challenge of deforestation. For countermeasures, a long-term strategy needs to be applied by the national and regional governments as well as international donors.

Keywords: Bioenergy, energy scarcity, food energy nexus, forest degradation, healthy and nutritious food, woodfuel