

**REDUCING GREENHOUSE GAS EMISSIONS THROUGH COMMUNITY FORESTS AND SUSTAINABLE BIOMASS ENERGY**

Kabul, Afghanistan

While innovation and technology can accelerate climate change mitigation and curb greenhouse gas emissions, levels of acceptance of new ways of doing things remain low among traditional societies. A user-centred design approach can be useful in raising acceptance of a new technology, as the needs of the user are considered throughout the design process. The initiative started in 2017 and is part of a Global Environmental Facility (GEF) funded project, jointly implemented by the Food and Agriculture Organization (FAO) and the two international non-governmental bodies, Welthungerhilfe and MADERA. To augment acceptance of renewable energy technologies such as energy efficient cooking stoves, women, who oversee food preparation, were asked for feedback on the design.

The participatory element is the user-centred design of energy efficient technology that was part of the implementation. Instead of allocating the new devices in bulk, Welthungerhilfe distributed small batches, encouraging users, primarily women, to share their opinions on the new tool. Their feedback was integrated into the design of the following batch. Furthermore, women were offered trainings on how to best make use of the apparatus and they were also involved in the design and installation of other machineries, such as bread ovens, heaters and biogas digesters. Local tin smiths were trained too on how to produce the improved stoves to ensure its sustainability.

Ensuring an efficient use of biomass fuels, improved cooking stoves can help minimize the pressure on forest resources. During the first two years of the project implementation, the savings of different fuels for 10 communities in total have been calculated and monetized, showing very positive results. It can thus be implied that this is also helping to reduce carbon dioxide emissions, even though the fuel savings data have not been converted into greenhouse gas equivalents. Through the intervention of another project partner, a Forest Management Association was set up, so that the savings in fuel wood could be backed-up by better forest management.

**Deutsche Welthungerhilfe e. V.**<https://www.welthungerhilfe.org/our-work/countries/afghanistan/>

Julia Broska, Welthungerhilfe: julia.broska@welthungerhilfe.de



Photos taken by Stefanie Glinski