

## BRINGING CLEAN ENERGY AND WATER TO OFF-GRID RURAL COMMUNITIES



### THE ISSUE

Only 16% of the population in rural areas in Tanzania have access to electricity and the supply is not reliable. Electricity generation is heavily dependent on hydropower, which stand for 42%, natural gas at 45% and liquid fuel at 13%. Power cuts are frequent and unpredictable due to aged transmission lines.

Renewable energy sources provide a viable and sustainable option which is yet to be fully exploited in Tanzania. Tanzania's sun hours per year range between 2080 and 3500, with global horizontal radiation of 4-7 kwh per square per day. Tapping into this renewable source of energy will give rural populations more possibilities and increase agricultural productivity, income generation and climate resilience. Women, who shoulder a disproportionate responsibility for household fuel and water collection, food preparation, would benefit greatly from more reliable energy access.

**Duration:**

2018-2019

**Budget:**

USD 500,000

**Geographic area:**

Mainland (Ukerewe Islands & Singida)



### MORE INFO:

Ernest Salla, Programme Specialist  
[ernest.salla@undp.org](mailto:ernest.salla@undp.org)

Emmanuel C. Nnko, UNGC Network Coordinator  
[emmanuel.nnko@undp.org](mailto:emmanuel.nnko@undp.org)

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## UNDP IN ACTION THE RESPONSE



The main purpose of the project is to bring clean energy and safe water to off-grid marginalized communities by introducing technological solutions in the Singida region and selected islands in Ukerewe. The areas to be selected do not currently feature in the national plan for electrification.

The technology is called 'The Off-Grid Box' which is a 6x6x6 feet shipping container, equipped with all the hardware needed to produce electricity and clean water. The application of this technology will help the communities to access clean energy and safe water.

*Financial savings will grow in house-holds due affordable sources of energy and safe water.* Today, most families in the marginalized rural areas buy kerosene for lighting and suffer big costs to pay for treatment of diseases cause by use of unclean and unsafe water.

*Rural economic activities will increase.* Through the solar-powered use of off-grid boxes, communities will be empowered to engage in a diversified range of businesses apart from agriculture and therefore generate more income. These opportunities will be related to, for example, starting new businesses on electronic devices and accessories, hair cutting salons, mobile charging, local cinema business, poultry farming, and crop processing.

*The Project will stimulate sustainable business partnerships through the promotion of private sector and community led implementation.* It directly impacts socio-economic aspects critical to economic development such as productive use and reliance on renewable energy resources and improvement of social delivery services in rural areas through community mobilization and asset creation.