



INSTALLATION



MAINTENANCE

Solar for Improved Rural Health Systems

SUMMARY

Country	Zambia
Implementer	On Call Africa
Target groups	Rural communities in southern Zambia
Duration	03/2022 – 06/2023
Type of energy use	Electrification

CHALLENGE

Rural health facilities in Zambia often only have limited access to electricity. Over 2,000 rural health facilities have insufficient power supply to meet their basic needs. The government lacks resources to invest in the necessary infrastructure and cannot provide financing for the associated operational and maintenance costs. This significantly impacts the quality of health services that are delivered to rural communities, due to the limitation of power for medical equipment, storage, and the use and availability of information technology. This problem is most evident in the availability of lighting. When delivering a baby during the night, nurses often need to ask non-staff to assist them by providing light with their phones. Furthermore, lack of electricity also has had negative effects on facilities' water, sanitation, hygiene, and waste management, making it challenging for them to install water systems including hand washing facilities and flushable toilets.

IMPACT LOGIC

The project targets three rural health facilities in Zambia. After an initial assessment of the individual centres, a plan is drafted on how to best use solar PV equipment to provide the centres with sustainable electricity. These installations enable the facilities to provide better quality of care through simple improvements such as: lighting for improved care in the evening; improved supply and storage of medicines and vaccines; and improved communication and reporting through IT equipment. In addition, the Kazungula District Health Office receives a solar-powered chlorine production system which can produce up to 2,400 litres of chlorine per month. 45% of the chlorine produced is distributed to all 27 health facilities in Kazungula District, while 20% are distributed among five communities particularly affected by diarrhoea for free. The chlorine production also serves as a form of income generation as the remaining 35% of chlorine is sold to line ministries and lodges. This supports operations and maintenance costs of the solar installations as well as the work of Neighborhood Health Committees and the district health campaigns. Improving access to electricity helps the facilities to meet nationally identified standards and allows for WASH and health interventions that further enhance the functioning of the health system.

INNOVATIVE PROJECT ELEMENTS

The project is the first of its kind focusing on chlorine production in rural regions in southern Zambia. The pilot project creates an evidence base for wider adoption of solar PV technology for rural healthcare facilities and chlorine production in Zambia. The newly created means of generating income through producing chlorine is an important innovative element. This improves the technical and financial sustainability of the installed solar PV systems significantly. Furthermore, it potentially allows the funds for more solar PV systems to be installed on rural health facilities.

FURTHER INFORMATION

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