



Energising Development

Electrification of health centers, a no-regret investment

Context

So far, official numbers for COVID-19 are still relatively low in sub-Saharan Africa (SSA) in comparison to global figures. Anticipating a strong increase in the weeks and months to come, the electrification of health centers is crucial. One in four health centers in SSA does not have electricity at all, whereas 60% of all SSA health centers do not have reliable electricity provision. Lack of cooling of vaccines, lights for operating theatres, power for diagnostic equipment, water pumps, incubators lead to numerous avoidable deaths (300,000 women during pregnancy and childbirth alone) and complications each year. It is the rural poor that suffer the most. It is at current unpredictable what the spread and impact of the corona pandemic in SSA exactly will be, but if scenarios like in Europe and the US unfold, the very weak health structures in many countries in sub-Saharan Africa will be fully overwhelmed. Yet, they fulfill a critical role in awareness raising and providing information on hygiene and social distancing, and taking battlefront position in complementing measures of more advanced health care services providers for testing and diagnosing, quarantining and treating infected persons, and keeping regular critical health care services available to those who need it. Besides the challenges this will pose to clinics and hospitals in urban population centers, and especially in urban slums where social distancing will prove virtually impossible,

mitigating the impact in rural areas is important, too. Rural health centers are understaffed, ill-equipped, staff itself is not well informed about COVID-19, access to actual information and advice is limited, and patient administration is not yet digitized. This situation is serious aggravated by the lack of reliable electricity. There is a need for comprehensive solutions where health care structures are in the lead, supported by energy actors, and which sustain beyond the pandemic, accelerating the gap-closing to adequate universal health care.

EnDev's experience in the electrification of health centers

Energising Development (EnDev) has gathered extensive experience on the energy provision to thousands of social infrastructures, i.e. rural clinics and schools, encompassing emergency electrification (and appliances) of rural clinics in Sierra Leone and Liberia (www.renewables-liberia.info) during the Ebola crisis, the solar-PV electrification of many rural health centres in Ethiopia and schools in Uganda, and both electrification and provision of improved institutional cooking solutions in countries like Kenya, Benin and Rwanda. EnDev's permanent country teams prepare and manage the interventions, including interaction with local and national public actors. Where possible installation and aftercare is performed by local private companies in order to strengthen local structures. Particular focus is oriented



towards sustaining the services over time, beyond the installation and initial operating period.

What EnDev can deliver

EnDev builds on 15 years of experience and continuous presence in 25 countries with a focus on SSA, where it has supported the development of rural and peri-urban markets and strengthening of private sector actors for delivering (renewable) energy services to households, social infrastructure and SME's. Staying close to its strengths and mandate as a rural energy access partnership, EnDev could contribute to the strengthening of rural and peri-urban health facilities in the following ways:

- Providing technical expertise and access to local and national energy actors
- Installation of solar equipment and appliances involving local private capacity, including the training of operators
- Providing a long-term vision towards sustainability of the energy systems, including
 - Setting up national monitoring and support structures
 - designing public-private (long term) maintenance and troubleshooting structures
- Procurement (or assistance with) of solar equipment
- Additional information on chronic obstructive pulmonary disease

On a technical level, EnDev is well experienced in system sizing and procuring components, (PV panels, controllers, wiring, switchboards, etc.) and rolling out installations, also at large scale. Procurement of specific medical appliances is however not EnDev's area of expertise.

Where EnDev can deliver

Building on current activities and presence in these countries EnDev could engage on short notice in Liberia, Sierra Leone, Guinea and Ethiopia. With additional preparation interventions in Mali, Burkina Faso, Uganda, and Benin could be started. Depending on local circumstances and partners, EnDev could ramp up activities in its other countries, too. EnDev's country list is available at https://endev.info/content/Main_Page.

How EnDev could partner up

EnDev is an energy program. Although in some countries its access to the public health structures is excellent, it is too challenging to analyze and define the broader needs of health centers during a pandemic. Coordination of the different actors involved is also not on EnDev's path. The program can however valuably contribute its energy expertise, experience and network to such coordinated efforts. EnDev intends to explore cooperation on national levels (building on its existing relationships) and internationally – for instance with GAVI and WHO.



Energising Development

EnDev provides access to energy in Africa, Asia and Latin America. Improving the lives of the most vulnerable people, ensuring no one is left behind, and creating economic opportunities and green jobs by building markets for modern, renewable energy is at the core of EnDev. EnDev contributes to reducing greenhouse gas emissions to protect our planet's climate.

At a glance

Around 4 billion people have no access to electricity or modern cooking technologies. This has a dramatic impact on quality of life, environment, health, education and income opportunities. EnDev's involvement focuses on providing access to modern, renewable energy. This is a pivotal factor in strengthening socio-economic development and combatting climate change.

EnDev's drive is to improve the lives of the most vulnerable people, ensuring no one is left behind. Economic opportunities and green jobs are created by building markets for modern, renewable energy. EnDev contributes to reducing greenhouse gas emissions to protect our planet's climate. Its approach is to empower structural, self-sustaining change; kickstarting a market and sector development that evolves further without support by EnDev.

EnDev's work is about people. Results are monitored and reported rigorously. By 2019, EnDev has helped 22.9 million people gain access to electricity or improved cooking technologies. EnDev has reached 27,390 SIs and 53,860 SMEs and reduced carbon emissions by more than 2.3 million tonnes of CO₂ per year.

EnDev is a strategic partnership. Dedicated donors, partners and individuals work together to support social development and economic growth by providing access to modern, renewable energy in more than 20 countries around the globe. The driving force behind EnDev is the partnership of Germany, the Netherlands, Norway, Switzerland, and the United Kingdom; donors who are committed to accelerating energy access and socio-economic development.