



eMpower Health Centres in Uganda Project

Powering Health Centers in Uganda

A project by Environmental Alert

2021-2023



SÜDWIND

 **Federal Ministry**
Republic of Austria
Social Affairs, Health, Care
and Consumer Protection



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Foreword

**Katharina Nosal,
Project Leader – Sudwind.**

I am happy to be writing about this exciting partnership with Environmental Alert. This includes all other partners that were involved as well.

I am particularly happy that this project was based in Uganda a country that I admire so much having worked there before from 2016 - 2018 as a technical adviser for an NGO in Kampala.

I therefore have first hand experience regarding the energy needs at the different health centers where this project intervened. I have seen first hand what it means for health centers to deliver services without power.

I have seen the challenges and limitations that are brought about as a result of water scarcity within the different health centers. I also know how challenging it is to operate in these hard-to-reach areas where the road networks are not so good.

However, this project has demonstrated the resilience and hard work of local communities and their leaders to make the best out of limited situations. We have seen how solar power installed on the two health centers in Kibaale and Kikuube districts are transforming communities.

We are seeing more mothers coming out to utilize health services such as safe deliveries, immunization and laboratory tests. We are seeing men being more supportive to their wives by escorting them for antenatal services and taking



turns in bringing new born babies for immunization.

Through this project, we are seeing a re-energised team of community health volunteers coming out to mobilise their members to adopt basic primary health care ways such as washing of hands and routine health checkups.

Through the water and sanitation support services to the different health centres, we are seeing a significant reduction in infections and disease burdens within the community. I am therefore confident that the success of this pilot will energise many more partners to scale up this intervention to other highly burdened districts.

I want to thank the local governments that have committed to sustain the installations under this project by committing budget lines towards maintenance and training of technical staff who will be responsible for regular monitoring and supervision.

Message from Government of Uganda

Ministry of Energy and Mineral Resources

By Dr Brian Isabirye. Commissioner.



I would like to commend Environmental Alert, Sundwind, the Austrian government and all the partners who worked hard to ensure that this project succeeds. As government, we are committed to the global agenda of going green and this involves investing in alternative energy resources that are crucial in mitigating the extreme effects of climate change.

By implementing this project in these selected locations, it has demonstrated the following that yes communities can move away from the cutting down of trees and other biomass for fuel and adopt cleaner and more efficient means such as use of solar power.

We have also learnt that health centres and other public offices in areas that have not yet accessed hydro power can utilize the available solar resources and be able to deliver quality services in the respective locations.

The project as demonstrated that partnerships with the civil society and government are crucial to the realization of any country's agenda.

We have come to realise that community involvement is crucial in the planning

and implementation of any project.

Based on the above learning, I would like to recommend that Environmental Alert and its partners consider upscaling this project. I am meant to understand that this was just a pilot project that focused on a few areas but the results have been very good.

As government, we do realise the need on the ground but we can only intervene based on our budgets and resource allocations. We therefore encourage partners such as civil society to support communities; however, this support needs to be well coordinated and implemented together with government personnel on the ground.

I am informed that throughout all the health centers, Environmental Alert worked closely with the health officials together with the community and the Village Health Teams. I would like to commend their approach of doing things and should be carried forward.

I am meant to understand that this was just a pilot project that focused on a few areas but the results have been very good.

Acknowledgement

By Lawrence Ssentongo
Executive Director – Environmental Alert

I want to acknowledge the support of all partners who have been part of this project. I want to thank Sudwind for believing in us and trusting that we were the preferred partners when it comes to matters such as the environment, conservation, renewable energy and community participation.

I want to thank the people and government of Austria for committing the resources that made this intervention possible. Because of the trust and respect amongst all partners in this project, Environmental Alert had the opportunity to interact with stakeholders from the grassroots to local community governments, districts, central government and the top most European Union Parliament.

As an organization, we have therefore been exposed widely and through this process have managed to appreciate the power of grassroot voices and what it means to authentically position these voices within the different leadership spaces.

I want to acknowledge the involvement and support of our civil society network on renewable energy in Uganda – RESCO, The Ministry of Energy and Mineral Resources, the Local governments of Kibaale, Kasese, Kikuube and Kyegegwa. All the officials that we reached out actively embraced the project and supported it to their fullest.

As mentioned earlier, the project was situated in a hard-to-reach area and therefore issues such as road access still remain a big challenge.

The state of the roads compromise health care access especially for expectant mothers. For example, when a patient needs to be urgently referred to a bigger hospital, the poor roads may hinder quick access to the appropriate facility.

It is therefore critical that the responsible local governments prioritise the lessons from this project and ensure that we carry them forward to fruition.



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When a patient needs to be urgently referred to a bigger hospital, the poor roads may hinder quick access to the appropriate facility.

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Executive Summary

The eMpower Health Centres project was implemented over an 18 months period from November 2021 to August 2023. This writeup highlights the key issues and challenges that the project addressed, the intervention areas, the partners that were involved, the outcomes and key recommendations of the project.

The project as two broad interventions areas as shown below:

1. Livelihood Interventions:

These interventions were meant to respond to the challenges of COVID-19 within the project communities by skilling the beneficiaries and supplementing their incomes. These included the following:

- community awareness and raising on income generation, personal hygiene and health.
- training in liquid soap-making and briquettes in order to supplement on personal incomes.
- training and provision of sewing machines, and skilling of women groups especially within the Kasese area.

2. The national level activities included:

- civil society capacity building and training on renewable energy; one training was conducted on advocacy and the other two trainings on public relations.
- two position papers were produced: one regarding the COP 27 civil society position paper on renewable energy and another position paper on health and the energy nexus. This was presented during the energy week of 2022.
- at the international level, four knowledge sharing visits were carried out: one visit was to Egypt during the COP 27 meeting; one visit was to the EU parliament in Belgium; the other was a networking visit to Austria and finally the last one was a visit to Uganda by the EU Parliament and Sudwind team.

Background to the Project

eMpowering Health Centers in Uganda (PHCU) was joint project developed and implemented by Südwind (Austrian NGO) and Environmental Alert (Ugandan NGO), together with key partners in Uganda.

The Project was implemented in the four districts of Kibaale, Kasese, Kikuube and Kyegegwa. These districts are located within the Albertine region and suffer from severe energy limitations because of being off the national grid. They are also hard-to-reach areas, given the poor road network and mountainous nature of the region.

Specifically, the beneficiary Health Centres were Maisuka Health III in Kibaale district, Mahango Health Centre II in Kasese district, Mpara Health Centre III in Kyegegwa district and Kyaka Health Centre III in Kikuube district.

The project, therefore, was implemented to respond to the challenges of lack of access to power and with the hope that by increasing access to power (e.g. through solar installations), the beneficiary health centres would be able to improve on their healthcare service delivery and efficiency and therefore increase on the health benefits of their communities.

The overall project objectives were:

- sustainable empowerment of local health systems through increased access to reliable and sustainable energy as well as through targeted capacity building measures.
- raising awareness about and increasing access to sexual and reproductive health.
- supporting those people hardest hit by the Covid-19 pandemic by providing not only increased access to healthcare but also through vocational training and awareness raising measures.

The project had several partners such as Südwind; the Austrian Ministry of Social Affairs; Health Care and Consumer Protection; Environmental Alert; Local Governments of Kibaale, Kasese, Kikuube and Kyegegwa; KCSO and Ministry of Energy and Mineral Resources.

Partners and Roles

Partner	Role
Austria Ministry of Social Affairs	Donor
Sudwind	Overall project coordination
Environmental Alert	National Implementing Partner in Uganda
Ministry of Energy -Uganda	Political Support and Guidance
Local Government Districts of Kibaale, Kasese, Kyegegwa, Kikuube	District coordination and Sustainability
KCSON & RESCO	Community level support and mobilisation
Health Centres of Maisuka, Mpara, Kyaka and Mahango.	Provide Health Care services Managing and sustaining the project
Project Communities	Monitor and utilise services

Why communities should own the energy revolution



A labourer fetching water at Maisuka Health Centre. The entire district of Kibaale faces long droughts

Somewhere in Kibaale District, in a rural community of Kyakahazire about 250 kilometers from Kampala the capital city of Uganda, EA together with partners like Sudwind (Austrian NGO), a solar power revolution has started. The focus for now is to power community health centers by ensuring that they have the power they need to support all health care services in the community. Energy needs for communities like this one have been growing over the years.

According to testimonies from the local people, not so many years ago, their district was covered by thick forest. But with the increasing population, the area

has lost more than three quarters of its forest cover. Communities in Kyakahazire village in Kibaale district are currently cutting down indigenous forests for firewood and timber and replacing these with commercial tree plantations such as Eucalyptus. Part of the over reliance on forests for energy needs in many parts of the developing world has been due to the failure of governments to match up their pledges on improving access to energy.

It is not uncommon to see communities such as Kyakahazire with electric poles transiting through their villages but access to infrastructure and connectivity to their homes is still at zero level. As part of its

efforts in increasing awareness about the need to for smart energy solutions, EA worked with partners such as Sudwind to secure funding for solar installations for health centres that serve communities such as Kyakahazire. The solar power installed at the community health centre of Maisuka is powering the community healthcare needs and has improved the health and resilience of the community. The project also contributed in several ways to the achievement of the country's global commitments as well as the SDG goals related to the environment.

As part of its sustainable energy use interventions, Environmental Alert is urging communities to adopt the green energy revolution as a way of easing pressure off the forest resources. The solar power installations are now fully overseen and jealously protected by the community in addition to the technical routine supervision by more technical staff. Environmental Alert also trained local communities in alternative sources of power or energy such as briquette

making for home use to replace the charcoal burning.

Apart from the awareness at the community level, Environmental Alert also intensified its advocacy at the national and regional levels. This was done through harmonizing the different civil society voices on renewable energy. A series of consultative dialogues were held with different actors involving government and non-state actors to agree on a joint action towards promoting renewable energy. During one such dialogue that was held in Kampala (Uganda); a joint communique by the Civil Society coalition on renewable energy called for increased awareness and ownership of this green energy revolution by the local people. Majority of the participants agreed that the discussions about renewable energy were happening only at the policy level and efforts needed to be increased to ensure that communities are sensitized about what it all means and how they can be involved.



Staff of Environmental Alert, Carolyn Kenya participates in a radio talkshow at Kyengegwa FM



Mothers waiting in line to have their babies immunised at Maisuka Health Centre in Kibaale District



Staff of Mahango Health Centre receiving the hospital beds donated by Environmental Alert as part of the project. In the background is the tri-cycle ambulance that as donated as well.

Project Activities

In order to realise the objectives of the project, Environment Alert and Partners implemented a number of activities as highlighted below.

a. **Solar power installation**

The project installed state-of-the-art hybrid solar systems in two health centres, which did not only illuminate the health centers but also enabled the operation of critical medical equipment, hence playing a pivotal role in improving patient care. The two health centres that benefited from the solar systems were Maisuka Health Centre II in Kibaale district and Kyaka Health Centre III in Kikuube district.

b. **Capacity building for solar maintenance teams**

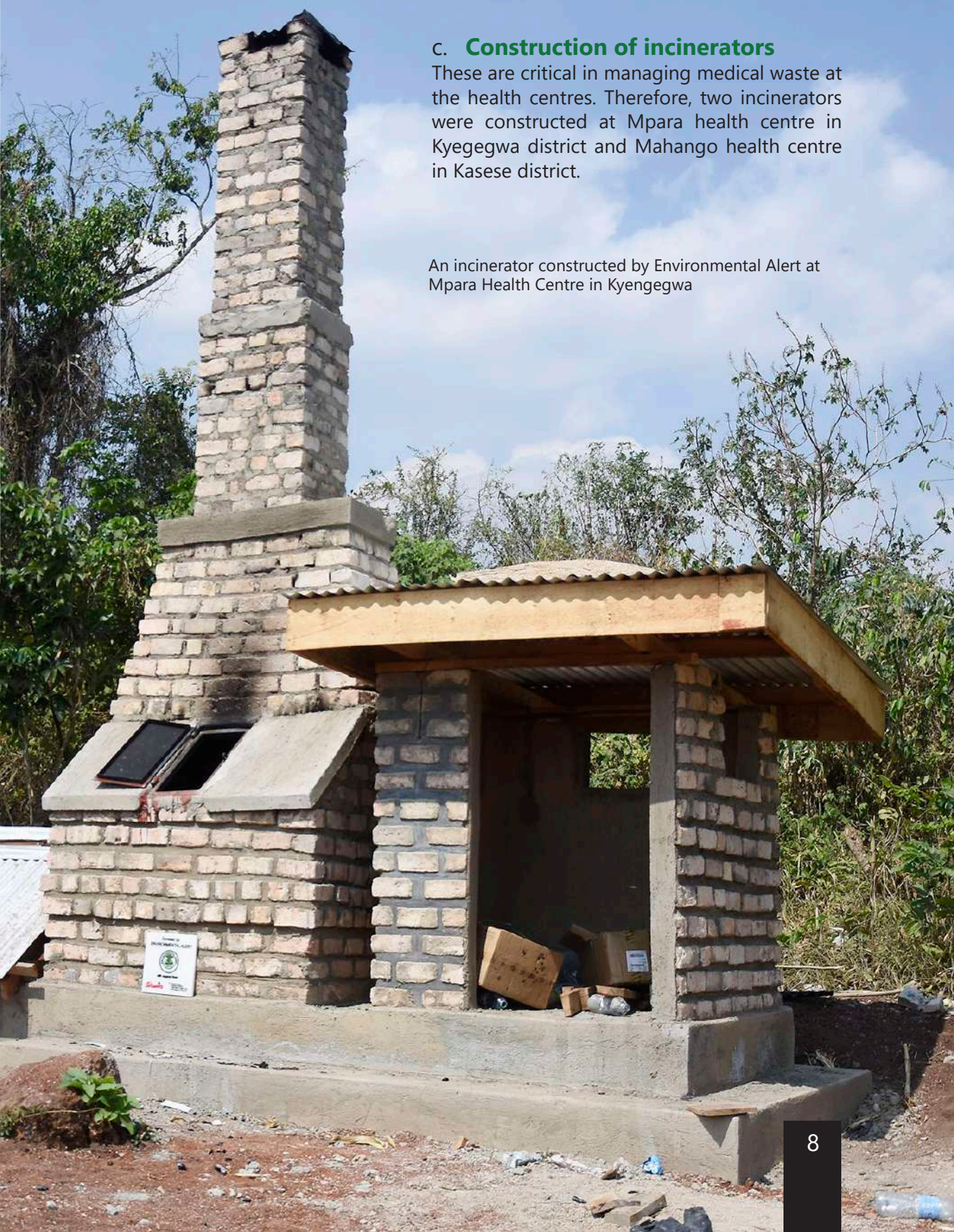
As part of the sustainability plan, a total of 22 community youths, including health personnel, underwent comprehensive training in the solar systems operation and maintenance (e.g. maintenance of solar panels), and troubleshooting. Regular maintenance also acts as an early warning system to alert the district engineers in case of any major fault.

A community Village Health Team member cleans the solar panels at Kyaka Health Centre in Kikube District. Regular cleaning is part of the maintenance arrangement.

c. **Construction of incinerators**

These are critical in managing medical waste at the health centres. Therefore, two incinerators were constructed at Mpara health centre in Kyegegwa district and Mahango health centre in Kasese district.

An incinerator constructed by Environmental Alert at Mpara Health Centre in Kyegegwa



d. **Installation of water harvesting tanks**

As part of improving sanitation and hygiene services in the health centres, two water tanks were provided and installed to the two health centres of Mpara and Mahango in Kyegegwa and Kasese districts respectively.



A water tank supplied by Environmental Alert at Mpara Health Centre in Kyegegwa District



The Tricycle that was supplied to Mahango Health Centre in Kasese to help with transportation of patients.

e. **Provision of Baby (Tri-cycle) Ambulance**

Mahango sub county in Kasese district is one those described as hard-to-reach because of its mountainous nature. The project provided a tri-cycle ambulance to Mahango health centre III to aid in the transportation of patients from their homes to the health centre but also to support the referral process of patients who needed advanced treatment. This critical addition to health resources served not only expectant mothers but also patients needing referral for advanced treatment, thus enhancing patient transportation from their communities within Mahango sub county to bigger hospitals for further management.

f. **Training of Village Health Teams (VHTs)**

VHTs are community-based volunteers responsible for delivery and monitoring of primary health care at the household level. They are the eyes and ears of the State regarding health-related issues at village level. The VHT's received a comprehensive training to improve their communication skills; the training also broadened their knowledge base, hence enabling them to generate monthly reports at the health centre and participate in government programs such as community immunization of babies and conducting of public health awareness. VHTs also received a number of IEC materials to use in their day-to-day work.



Environmental Alert Staff overseeing a training for Village Health Team members at Maisuka Health Centre in Kibaale district.

g. **Livelihood support through training and income generation activities.**

The project carried out training and learning for community groups in the making of liquid soap and making of briquettes as an alternative source of fuel.



A youth group in Kyengegwa demonstrate a liquid soap making machine they received from Environmental Alert as a way of improving their livelihood





A nurse from Maisuka Health Centre during a community awareness activity

h. **Training on to how to make reusable pads**

– this activity targeted young adolescent girls and mothers, to equip them with skills on how to make reusable pads. Making of reusable pads is one of the healthcare interventions that was implemented to make it safer, comfortable and convenient for the women and girls to manage their periods.

i. **Community awareness, IEC development and radio:**

a number of information and education materials were provided to health centres and specifically to VHTs to increase on awareness and knowledge of primary health care within the communities. Radio and TV programmes were carried out to create awareness e.g. on reproductive health.

j. **Provision of medical and sanitation materials**

– the project provided an assortment of materials (e.g., liquid and bar soap; waste bins and hand washing facilities) to two health centres of Maisuka and Kyaka.



Staff from Environmental Alert hand over sanitation facilities to Maisuka Health Centre. Similar commodities were given to Kyaka Health Centre as well in Kikube District.

k. Exchange/learning visits to Uganda

The Austrian project partners i.e., Südwind together with stakeholders from sustainable energy and health field, visited Uganda for an exposure & learning visit to better understand and appreciate the energy access and health services situation in the refugee's settlements and the hard-to-reach areas in the project sites.

BELOW: A visit to Environmental Alert Offices by Sudwind and the EU Parliament delegation





I. **Exchange/learning visits to Austria**

The Ugandan team also held a learning and exchange visit to Austria to the solar industry as well as the vocational learning facility. This helped the Uganda project partners i.e., Environmental Alert and representatives from Maisuka Health Centre in Kibaale district to better understand and appreciate the solar industry and the learning facilities in Austria.



The Executive Director Environmental Alert, Lawrence Ssentongo (center) together with Mr. Ssekatte the In-charge Maisuka Health Centre visiting DAS Energy in Austria.

Project Results

CASE STUDY: How Solar Installations are transforming gender roles.

Maisuka Health Centre is located in Kyakahizire Subcounty in Kibaale District, South Western Uganda. At 68 years, Byamukama John Bosco wears a broad and joyous smile as he shows off his one-day old baby. He had to walk about 5 Kilometres from his village in Kyakahizire to Maisuka Health Centre to return the baby for her first immunization dose. The mother was too weak to make the return journey.

The day before, the wife had given birth but could not wait for the first day immunization shots. Without power, the health centre had always to wait for the drugs to be transported from the main hospital in Kibaale town which is about an hour's drive. Sometimes, the long wait for deliveries could be so exhausting for patients.

For Byamukama, instead of having the wife to do the long return journey on foot, he chose to trek by himself with their baby. Maisuka Health Centre is not yet on the main national power grid and therefore critical services that require electricity were difficult to come by. In 2022, the Ministry of Health and Social Protection in Austria extended a grant of about \$40,000 to support the installation of solar power in the health center.

The grant, managed through Environmental Alert and Sudwind, targeted hard-to-reach areas such as Maisuka in Kibaale district. "Previously, it would take me a full day of waiting for drugs at the health centre, but today because the drugs are stored here, I came in and left within 10 minutes and my baby had been immunized.

“

Previously, it would take me a full day of waiting for drugs at the health centre, but today because the drugs are stored here, I came in and left within 10 minutes and my baby had been immunized. I now have time to go back and attend to my garden.

”

I now have time to go back and attend to my garden” Byamukama says. Byamukama adds that majority of fellow men shun coming to hospital because they know they are going to spend a long time in the queue waiting for services.

“Now that the hospital has power and the fridge is operational, it takes a very short time and I believe other men will be coming as well” Byamukama adds. Male involvement is one of those indirect benefits that have accrued as a result of this solar project. Male involvement is critical to improving the quality of life within a home, low levels of male involvement have been blamed for the slow uptake of family planning services, and for domestic violence, etc.

The health Centre received 17 solar panels that are providing power to support the health center. According to the Health Centre In-charge, Ssekate William, the introduction of solar power has been a game changer, critical examinations for diseases like malaria are now possible because key machines like the microscope are now fully operational. “Previously 95%

of our clients were women only, but now we see the men coming as well. When the wife is coming for her antenatal checkup, we realise the husband comes along and they prefer to either check for malaria or any other discomfort .

All this is because they know the facility has many more capabilities now” says Ssekate William (Health Centre Incharge). According to Environmental Alert, there is a deliberate effort to target the men who come for services at the health center. As they wait for their results, the health center staff use this window to pass on information about general primary health care issues such as how to care for their wives, babies and their role within the home.

Research has demonstrated that male involvement is an important factor not only in maternal health care but also in all areas of family and community livelihood improvement. For the rural community of Kyakahazire subcounty in Kibaale district, its amazing to see how the simple introduction of solar power is getting the men to take the right steps.

“

*Previously **95% of our clients were women only**, but now we see the men coming as well. When the wife is coming for her antenatal checkup, we realise the husband comes along and they prefer to either check for malaria or any other discomfort.*

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Lessons Learned

The project implementation provided valuable insights as follows:

1. **Expansion of Solar Solutions:**
Witnessing the project's remarkable success, there's an imperative to proliferate such sustainable energy solutions to additional health centers across Uganda.
2. **Strengthened Community Engagement & Sensitisation:**
Continuous community interactions and feedback mechanisms are vital for the project's long-term success and adaptability. Involving community leaders in awareness campaigns lends credibility to the messages being communicated and aids in acceptance and behavioural change within the community.
3. **Infrastructure Augmentation:**
Alongside energy solutions, there should be a concerted push for holistic health center development, encompassing modern equipment acquisition and robust staff training programs.
4. **Policy Advocacy:**
Engage actively with national policymakers. Advocate for energy access as an inalienable right, especially for health institutions, aligning with the United Nations Sustainable Development Goals.
5. **Scaling and Replication:**
Considering the global emphasis on sustainable solutions and universal health coverage, the project's model could serve as a blueprint for replication in other similar settings, contributing to UN's 2030 agenda.
6. **Partnership Building:**
Explore synergies with international agencies, NGOs, and private sector players to leverage expertise, funding, and innovative technologies.
7. **Community Sensitization:**
Direct knowledge transfer to beneficiaries is crucial to effect change, as it equips them with the understanding needed to make informed decisions about their health.
8. **Local Leadership Involvement:**
Engaging local leaders fosters product sustainability and assists in assessing service delivery levels, creating a sense of shared responsibility and accountability.
9. **VHT Training:**
Regular refresher training sessions help VHTs stay abreast of new information, especially concerning changes in disease control and prevention strategies. It also equips new VHTs to understand their roles and responsibilities.
10. **Information, Education and Communication Provision:**
Translating IEC materials into locally understood languages, using culturally respectful imagery, and making them visually appealing enhances community engagement and uptake of vital information.

Conclusions

Environmental Alert is proud to have led in the implementation of this project. This was a pilot project that has demonstrated how partnerships and collaboration are vital in the realization of our goals under renewable energy. We believe that it has provided valuable experiences and lessons to scale up these interventions at regional and national levels. Environmental alert will be looking out for partners to design and implement such a programme together.

Recommendations

These recommendations have been organized by each partner that was involved in the project as shown below.

PARTNER	RECOMMENDATION
Austrian Ministry of Social Affairs	Fund a scale-up of the project to other locations in Uganda particularly those that are off the grid and hard-to-reach regions.
Sudwind	Follow up on more resource mobilization for projects in the area of renewable energy
Environmental Alert	Sustainability Promotion, should keep up engaging local leadership in project maintenance and sustainability.
Uganda Government, Ministry of Energy and Mineral Development	Allocate more resources to maintain and upscale the installed solar systems.
District Local Governments (DLGs)	Strengthen VHTs service delivery; regular capacity-building training for VHTs should be provided, and peer learning exchange visits should be facilitated to share best practices. The is need for DLGs to plan and budget for the sustainability and maintenance of the installed facilities.
KSCON & RESCO	Scale up knowledge levels among local civil society members and their capacity to advocate on issues of renewable energy; and mobilise funds to up-scale.
Project Communities.	Utilise the health services available at the health centres; and monitor and supervise the maintenance of the installed facilities.
Health Centers	Diversify communication channels i.e., utilise various means of communication to reach different segments of the community, taking into account their level of understanding and access to communication platforms.

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