



BEYOND ما بعد

BY THE ZAYED SUSTAINABILITY PRIZE



ANNUAL IMPACT REPORT 2023-24

PARTNERS



TABLE OF CONTENTS

About Zayed Sustainability Prize	02
About the Beyond2020 Initiative	02
Beyond2020 Deployments	03
Beyond2020 Strategic Framework	04
Overall Impact	06
Health Projects	07
Food Projects	23
Energy Projects	33
Water Projects	52
About Our Partners	78
Glossary	79
Footnotes	79



ABOUT ZAYED SUSTAINABILITY PRIZE

The Zayed Sustainability Prize, a tribute to the visionary legacy of the UAE's founding father, Sheikh Zayed bin Sultan Al Nahyan, stands as a beacon of hope and progress for sustainable development. This prestigious award honours and empowers those who are driving transformative change across the categories of Health, Food, Energy, Water, Climate Action, and Global High Schools.

Each year, the Prize rewards organisations and high schools for their groundbreaking solutions, fostering innovation on global challenges. Over the past 16 years, through its 117 winners, the Prize has positively impacted over 384 million lives worldwide. By recognising these innovators, the Zayed Sustainability Prize inspires countless others to amplify their efforts, creating a positive ripple effect.

The Zayed Sustainability Prize aims to create a better world by advancing sustainable progress, ensuring a legacy of enduring impact on humanity and the planet. This Prize is more than an award; it's a catalyst for global impact, a celebration of human ingenuity, and a commitment to shaping a sustainable future for all.

ABOUT THE BEYOND2020 INITIATIVE

The Beyond2020 initiative connects the technology of the Zayed Sustainability Prize's winners and finalists with last mile communities. It's a call to action to scale existing sustainable solutions that will shape a better future for all.

Launched by the Zayed Sustainability Prize, Beyond2020 provides humanitarian aid to vulnerable communities worldwide, addressing global sustainability challenges and driving progress towards a greener world. The initiative builds on Sheikh Zayed's legacy of sustainable development and humanitarian action.

With the help of the Beyond2020 partners, the Prize accelerates the deployment of solutions developed by its winners and finalists, providing tech for good and fostering development that is inclusive and sustainable to those who need it the most. To date, Beyond2020 has impacted the lives of 229,800 people in 18 countries.

With a mission to drive positive change and make a meaningful contribution to the United Nations' Sustainable Development Goals, Beyond2020 aims to create an equitable and prosperous future for all.

THE DEPLOYMENTS



1 **LEBANON**
17,200 **people** gained access to reliable energy

2 **JORDAN**
3,100 **people** gained access to reliable energy

3 **EGYPT**
3,500 **people** gained access to reliable energy

4 **SUDAN**
20,000 **people** gained access to safe drinking water and sanitation services

5 **NEPAL**
6,000 **mothers** and their infants gained access to better healthcare

6 **BANGLADESH**
4,500 **people** gained access to reliable energy

7 **CAMBODIA**
4,400 **people** gained access to safe drinking water and sanitation services

8 **VIETNAM**
10,000 **people** gained access to safe drinking water

9 **ETHIOPIA**
9,000 **people** gained access to clean water

10 **COSTA RICA**
8,000 **women** have gained access to digital mammography services each year

11 **UGANDA**
12,000 **mothers** and their infants gained access to better healthcare

12 **PERU**
5,000 **people** gained access to affordable and nutritious food

13 **TANZANIA**
50,000 **people** gained access to affordable and nutritious food

14 **THE PHILIPPINES**
18,000 **people** gained access to safe drinking water and sanitation services

15 **MALAYSIA**
10,000 **people** gained access to safe drinking water

16 **INDONESIA**
20,700 **people** gained access to reliable energy

17 **RWANDA**
20,000 **people** gained access to better healthcare

18 **MADAGASCAR**
8,500 **people** gained access to safe drinking water and sanitation services

BEYOND2020 STRATEGIC FRAMEWORK



Beyond2020's Strategic Framework illustrates how each of the 18 projects contribute to the initiative's overarching goal and objectives.

Beyond2020 aims to leverage the Prize's winners and finalists to foster greater sustainable development worldwide and an environment that respects humanity.

To achieve this, Beyond2020 will pursue two complementary objectives:

1. Respond to existing needs in vulnerable communities by raising the living standard, improving their livelihoods, and enhancing community infrastructure
2. Foster an environment of stability, empowerment, and self-reliance within all communities where deployments occur and ensuring that immediate benefits are provided by the sustainable solutions

A core element of the Zayed Sustainability Prize and Beyond2020 is understanding the multi-faceted nature of global challenges to achieve a sustainable future. Thus, projects focus on one of the four primary Sustainable Development Goals (SDGs) of the United Nations (UN), in the areas of health, food, energy, and water.

Furthermore, Beyond2020 builds on the UAE's role as a global leader in philanthropy and international development, and reinforces the powerful message that tolerance, compassion, and cooperation are needed to bring the world closer to transforming humanity.

GOAL

To offer critical, life-transforming solutions to last mile communities, providing tech for good and fostering development that is inclusive and sustainable.

OBJECTIVES

01

02

To raise standards of living to respond to existing needs in vulnerable communities, and to further improve their livelihoods, and enhance community infrastructure

To foster an environment of stability, empowerment and self-reliance within all communities where donation activities occur, carrying forward the immediate benefits provided by the donated solutions

IMPACT

FOOD

Increased access to nutritious food

ENERGY

Increased access to reliable energy

HEALTH

Increased access to better healthcare

WATER

Increased access to safe drinking water

PRIMARY SDGs



SECONDARY SDGs



PROJECTS

Flour dosifiers
Aquaponics system

Solar streetlights
Solar home systems

Solar suitcases
Health clinics
Mammography services

Water filtration units
Solar powered water pumps
Solar powered water yards

PERU

TANZANIA

JORDAN

EGYPT

INDONESIA

BANGLADESH

LEBANON

NEPAL

RWANDA

UGANDA

COSTA RICA

CAMBODIA

MADAGASCAR

PHILIPPINES

SUDAN

VIETNAM

MALAYSIA

ETHIOPIA

OVERALL IMPACT

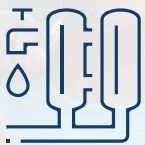
Beyond2020 strives to achieve sustainable and inclusive development by providing life-changing solutions that transcend generations, borders, and limits. The initiative aims to leverage technology for the greater good and create a positive impact on vulnerable communities around the world.

Since its inception, Beyond2020 has transformed the lives of 229,800 people in 18 countries across various regions. The initiative's efforts have resulted in significant impact, including:



46,000

People gaining access to better healthcare



70,900

People gaining access to clean drinking water everyday



57,900

People gaining access to reliable energy everyday



55,000

People gaining access to nutritious food

HEALTH PROJECTS

3 GOOD HEALTH
AND WELL BEING



Ensure healthy lives and
promote well-being for all ages



Global Context

Despite progress in recent years, many people around the world still lack access to basic healthcare services, including vital medicines, vaccines, and skilled health workers.

According to the World Health Organization (WHO), at least half of the world's population does not have access to essential health services, and an estimated 100 million people are pushed into extreme poverty each year due to healthcare expenses.¹

Even today, many pregnant women are hesitant to access healthcare facilities due to unhygienic practices, putting their health and that of their babies at risk. As the world continues to face new health challenges, there is an urgent need for increased investment in making basic healthcare services more accessible and innovative to ensure that everyone has access to the care they need.

SDG Goals & Targets

- Reduce the global maternal mortality ratio to less than 70 per 100,000 live births
- End preventable deaths of newborns and children under 5 years of age, with all countries aiming to reduce neonatal mortality to at least as low as 12 per 1,000 live births and under 5 mortality to at least as low as 25 per 1,000 live births
- Achieve universal health coverage, including financial risk protection, access to quality essential healthcare services and access to safe, effective, quality and affordable essential medicines and vaccines for all
- Strengthen the capacity of all countries, in particular developing countries, for early warning, risk reduction and management of national and global health risks

Major Challenges



Maternal mortality increasing

Maternal mortality is rising. About 287,000 women died during and following pregnancy and childbirth in 2020. Almost 95% of all maternal deaths occurred in low and lower middle-income countries in 2020, and most could have been prevented.²



Child deaths intolerably high

Despite considerable progress, improving child survival remains a matter of urgent concern. In 2021 alone, roughly 13,800 under-five deaths occurred every day, an intolerably high number of largely preventable child deaths.³



Lack of access to affordable healthcare services

About two billion people are facing financial hardship including one billion experiencing catastrophic out-of-pocket health spending, and 344 million people going deeper into extreme poverty due to health costs.⁴



The impact of COVID-19 on health systems

In 129 surveyed countries, the pandemic has had a significant impact on health systems and caused disruptions to essential health services, affecting 92% of them.⁵ This halted progress made in improving life expectancy, with a decline of 1-2 years observed worldwide. Uneven COVID-19 vaccine distribution, with only 17% of people in low-income countries receiving a single dose compared to 80% in high-income countries, further exacerbated health disparities.

Key Statistics



COVID-19 disrupted essential health services in 92% of countries



Decrease of 1-2 years in life expectancy in many parts of the world



Two billion people face financial hardship due to healthcare costs



13,800 under-five deaths occurred every day in 2021



95% of all maternal deaths occurred in low and lower middle-income countries in 2020

Indicators of Change

Direct Benefits



Decreased infant and maternal mortality rates



Increased access to skilled health professionals



Increased sense of safety during delivery



Improved access to employment opportunities and income



Reduced pregnancy-related issues and complications



Increased practices of healthy and hygienic behaviours

Indirect Benefits



Cut GHG emissions by using solar technology instead of fossil fuels



Saved time and money by bringing healthcare closer to patients, reducing travel distances



Nurses trained in business management, fostering innovation and entrepreneurship in underserved areas



Enhanced quality of life through better health, increased economic opportunities, and reduced medical expenses

HEALTH PROJECTS



RWANDA

Location: Nyaruguru and Rubavu Districts



UGANDA

Location: Minister's Village of Ntinda, Kampala



COSTA RICA

Location: The Guanacaste region, Cartago, and the San Jose region



NEPAL

Location: Bhojpur, Ilam and Shankhu-wasabha

SUMMARY OF COSTA RICA



8,000

Women have gained access to digital mammography services each year

PRIMARY SDG



SECONDARY SDGs



The Solution

Beyond2020, in collaboration with Mamotest, has introduced AI-based digital mammography services in Costa Rica. This initiative equips select healthcare facilities and a mobile health unit with state-of-the-art technology to conduct digital mammograms, aiming to detect breast cancer cases among women in underprivileged communities. The mobile unit has been deployed to various communities across Costa Rica, reaching underserved areas where access to healthcare may be limited. The deployment of AI-based digital mammography services will enable early detection and timely treatment, ultimately saving lives and improving medical services in Costa Rica.

The Challenge

Breast cancer remains a significant health challenge globally, particularly affecting underprivileged communities with limited access to quality healthcare services. In Costa Rica, as in many countries, women from such communities face barriers to early detection and treatment due to inadequate resources and infrastructure. This situation leads to lower rates of breast cancer detection, treatment, and survival, highlighting the urgent need to enhance healthcare accessibility and equity.

Impact



Improved breast cancer detection rates, leading to early diagnosis and timely treatment for women in underprivileged communities



Empowered healthcare professionals with advanced diagnostic tools and techniques, enhancing their ability to provide accurate and efficient medical services



Increased the capacity to conduct digital mammograms



Contributed to reducing the mortality rate associated with late-stage breast cancer cases

Solution Provider



Mamotest

Winner: 2022

Category: Health



It was my first time getting a mammogram. I was very uncertain about the procedure, but I realised that it's very safe, and the medical team alleviated all my doubts. I hope that women overcome the fear of mammograms, especially those who live in remote areas. For women like us, living far from health centres, access to these exams is complicated because we must travel to the city, often facing months-long wait for medical appointments. To the Zayed Sustainability Prize and the partners of Beyond2020, thank you very much for your contribution and providing us access to mammograms."

Mariana Barrio

Resident, Isla Venado, Puntarenas

SUMMARY OF NEPAL



6,000

Mothers and infants have gained access to better healthcare



PRIMARY SDG



SECONDARY SDGs



The Challenge

In Nepal, healthcare accessibility is limited to only 61.8% of the population within a 30-minute radius due to inadequate infrastructure and geographical constraints. The country faces a severe shortage of healthcare professionals, with only 0.67 per 1,000 people, well below the WHO recommendation. The 2015 earthquake disproportionately affected the rural population, highlighting the deficiencies in healthcare infrastructure. Approximately 42% of healthcare centres lack regular electricity access, making medical interventions unreliable and hazardous. The absence of reliable energy also impacts medicine refrigeration, equipment sterilisation, and the use of life-saving medical devices. Midwives resort to unhygienic practices with candles and handheld lighting, posing infection risks. Despite a decline in maternal mortality rates, it remains a significant health issue. Addressing these challenges requires improving healthcare infrastructure and access to reliable energy sources, ultimately saving lives and improving medical services.

The Solution

Through this project, We Care Solar installed Solar Suitcases in ten health centres in rural Nepalese communities, which were selected due to their high maternal and neonatal mortality rates. Each of the chosen health centres suffered from irregular access to electricity yet possessed the existing health services and structural suitability for installing the Solar Suitcases. We Care Solar worked with local partners, One Heart Worldwide, SunFarmer, and the local government, to introduce the technology solution to these health centres and demonstrate how it works. At each centre, three health workers were trained on how to operate the Solar System and its components, and six local district technicians and members of partner organisations were trained on how to install and maintain the technology.

Impact



Improved lighting and hygiene practices help fight the spread of infections, as the proper prevention and control practices can be implemented



The technician trainings to install and maintain Solar Suitcases are creating new jobs and boosting these technicians' household incomes



The replacement of candles, kerosene and oil wick lanterns, and diesel generators improves air quality and reduces black carbon air pollution



Non-fossil fuel based sources help reduce GHG emissions; the project estimates that Solar Suitcases reduce CO₂ emissions by 80 tonnes per year



The medical staff can better handle a range of medical issues at night, leading to a 10% increase of night-time deliveries and a 41% decrease in referrals. As such, both the healthcare workers and the community have more faith in the quality of services at night, and providing around-the-clock services increases access to maternal healthcare

Solution Provider



We Care Solar

Winner: 2019

Category: Health



The Solar Suitcase has been an absolute gamechanger for us. The number of women seeking antenatal care and delivery services is increasing day by day, and Solar Suitcases are one of the contributing factors. We are in a much better position to provide effective services to the community.”

Amrit Wanim

Auxiliary nurse midwife, Walankha Health Post

SUMMARY OF RWANDA



20,000+

Rural Rwandans now have sufficient access to adequate healthcare facilities



PRIMARY SDG



SECONDARY SDG



The Challenge

Lack of access to quality healthcare is a key barrier to achieving the global development goals. Preventable and often treatable illnesses can become more serious and life-threatening. Although it is made difficult by geographical limitations, reducing the distance between patients and healthcare facilities is a priority for the Rwandan Ministry of Health, as studies show that this has a direct impact on infant and maternal mortality rates and overall quality of life. As was the case with the pandemic, these healthcare posts act as the primary healthcare touchpoint for governments and their citizens. First response and reporting of infectious diseases like COVID-19 can help contain and prevent the illness from becoming widespread. This is especially important in rural communities, as early intervention likely means a higher chance of survival and recovery, and primary care is the country's first line of defence.

The Solution

Since 2012, One Family Health (OFH) has focused its efforts on addressing rural healthcare inaccessibility by improving access to quality healthcare services and essential medicines. OFH harnesses public-private partnerships and entrepreneurial principles to deliver primary care through franchised clinics. These franchised clinics benefit from OFH-provided training, medication, digitisation services, and centralised surveillance. OFH opened four franchised clinics in the rural areas of Cyuna, Gorwe, Gihemvu, and Rubavu regions.

Impact



These clinics can provide primary healthcare services, and enhanced disease surveillance, screening, and referral of any suspected diseases and epidemics



Creation of a sustainable 'trade, not aid' business model, that is helping the local community and providing employment, while also creating a sustainable source of income to run the healthcare centre



12 new jobs were created (support staff and nurses) across four clinics, and four nurses have been trained in business management. They have been empowered to open and operate businesses in disadvantaged communities and facilitate economic development

Solution Provider



OneFamilyHealth
essential medicines • accessible care

One Family Health

Finalist: 2020

Category: Health



When we got sick and needed emergency care, we often ended up staying at home because the hospital was too far away. You can imagine how hard it was to travel 3-4 hours on foot or pay 8,000 Rwandan Francs (US \$8) for a round-trip motorbike taxi to get to the clinic. Pregnant women were most affected. Now it only takes 5 minutes to get to the health post.”

Innocent Ntakirutimana

Community health worker, Gorwe post

SUMMARY OF UGANDA



12,000

Mothers and infants have gained access to better healthcare

PRIMARY SDG



SECONDARY SDGs



The Challenge

Despite recent government efforts, only 8% of Uganda's rural population has access to energy. As in many parts of Sub-Saharan Africa, less than a third of health facilities have reliable energy access. The lack of energy contributes to Uganda having one of the world's highest maternal mortality rates, at 343 per 100,000 live births in 2015. Without electricity, giving birth at night is an even more complicated process, with higher potential rates of infection or complications. Proper healthcare requires good lighting for visualisation and emergency communication abilities whose equipment is dependent on electricity. Additionally, there is a high turnover rate among midwives, nurses, and doctors in Uganda's challenging context, further disrupting the availability of healthcare providers in rural communities.

The Solution

Solar Suitcases were installed in five health centres in rural Ugandan communities that suffer from extreme poverty and high maternal mortality rates but have infrastructure suitable for installing solar technology. These Solar Suitcases include medical-surgical lights that use 2-6 watts of electricity, which provides sufficient lighting to handle obstetric deliveries, suturing, and various small-scale surgeries. We Care Solar worked with local partners, Healthy Child Uganda, Intrahealth, Brick by Brick, and the Ugandan Ministry of Health, to identify health centres and co-develop the project strategy.

Impact



Provided delivery support to 1,000 mother-infant pairs in their first year



Created new employment opportunities for technicians who installed the equipment



Improved health workers' capacity and quality of services, subsequently reducing delays and leading to more referrals



Reduced CO₂ emissions by 40 tonnes per year



Prevented contamination and enforced infection control protocol

Solution Provider



We Care Solar

Winner: 2019

Category: Health



We Care Solar technology has enabled me to comfort mothers in distress at night, especially those experiencing labour pains for their very first time.”

Ayikoru Peace Maria

Midwife, Angaya HC III

FOOD PROJECTS



End hunger, achieve food security and improved nutrition and promote sustainable agriculture



Global Context

The world faces a global food crisis due to a combination of growing conflicts, climate-related shocks, and widening inequalities, which have partially undermined global food supply systems.

In 2021, as many as 828 million people suffered from hunger,⁸ and conflict poses a significant threat to food security, especially among the poorest and most vulnerable. Addressing the root cause of this crisis is urgent, as the current rate suggests that nearly 670 million people will still be undernourished in 2030, which is the same percentage as in 2015 when the 2030 Agenda was launched.⁹

SDG Goals & Targets

- End hunger and ensure access by all people – in particular, the poor and people in vulnerable situations, including infants – to safe, nutritious and sufficient food all year round
- End all forms of malnutrition, including achieving, by 2025, the internationally agreed targets on stunting and wasting in children under five years of age, and address the nutritional needs of adolescent girls, pregnant and lactating women and older persons
- Ensure sustainable food production systems and implement resilient agricultural practices that increase productivity and production, that help maintain ecosystems, that strengthen capacity for adaptation to climate change, extreme weather, drought, flooding and other disasters and that progressively improve land and soil quality
- Increase investment, including through enhanced international cooperation, in rural infrastructure, agricultural research and extension services, technology development and plant and livestock gene banks to enhance agricultural productive capacity in developing countries, particularly least developed countries

Major Challenges



Climate crisis causing food vulnerability

The climate crisis is one of the leading causes of the steep rise in global hunger. Climate change is disrupting food availability, reducing access to food, and affecting food quality.¹⁰



Pressure of a growing population

As the world's population is projected to increase by two billion people by 2050,¹¹ the demand for food is inevitably rising. Over-cultivation of agricultural land has also led to a decline in the quality of available land for cultivation, reducing the yield even further.



Rising food insecurity

Food insecurity has risen since 2014, worsened by COVID-19 causing 150 million more people to face hunger in 2021 (one in ten globally). 2.3 billion people (1 in 3) lacked regular access to adequate food, an increase of 350 million since the pandemic. The worst increases were in Sub-Saharan Africa, Central and Southern Asia, Latin America and the Caribbean.¹²

Key Statistics



One in ten people worldwide is suffering from hunger



One in three people lack regular access to adequate food

Indicators of Change

Direct Benefits



Increased access to affordable nutritious food, reducing undernourishment



Increased knowledge and awareness of sustainable and climate-resilient technologies



Decreased stunting rates among children



Increased food security for indigenous people

Indirect Benefits



Higher income for small-scale food producers and indigenous communities through efficient food production



Greater acceptance of new technologies as successful adoption boosts community income and economic prospects



Improved access to education for young indigenous populations

FOOD PROJECTS



PERU
Location: Ucayali



TANZANIA
Location: Dar es Salaam and Pwani Region

SUMMARY OF PERU



5,000

People gained access to affordable and nutritious food

PRIMARY SDGs



SECONDARY SDGs



The Challenge

Peru's Amazon region has faced severe deforestation due to climate change, industrialisation, resource extraction, and cattle ranching. Much of the rainforest land has been converted to grasslands, decimating the biodiversity that once existed in this region. Both the yield of edible vegetation and fish have declined as a result. The region's young population often resettles in urbanised areas due to the lack of food, and in search of better employment and education. More than half of the children in the area also experience infection from intestinal parasites. Infection by parasitic worms can cause a range of health problems, including nutrient loss and slow physical and cognitive development. Better nutrition, combined with other preventative measures, can mitigate these damaging health effects.

The Solution

INMED Partnerships for Children has developed a programme that tackles food insecurity, climate change impacts, and poverty via a climate-smart farming technique called aquaponics. The INMED Aquaponics® model is a unique, simplified form of aquaponics technology. It produces ten times more high-quality crops in the same space while using 90% less water and 75% less energy than conventional agriculture systems. The INMED Aquaponics® Social Enterprise model includes a 'grow bed' for vegetation and a fish tank, which is replenished by harvested rainwater and is 100% solar powered. This infrastructure effectively creates a small ecosystem in which vegetation and protein can be grown without the use of external energy inputs or contaminated water.

Impact



Extended training programmes on climate resilience, aquaponics operations, and business management to 2,000 indigenous students, educators, and teachers-in-training



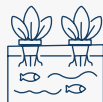
Facilitated research opportunities for hundreds of graduate level students and researchers who experiment with aquaponics to improve the productive capacities of native crops and fish



Fed hundreds of vulnerable indigenous students through the aquaponics-supplied fresh vegetables, fruit, and fish protein



Increased food production to ten tonnes of healthy, locally raised fish, vegetables, and fruit every year via a low footprint system of 300m²



Increased awareness and improved attitudes and practices of thousands of community members on the benefits of aquaponics food production

Solution Provider



INMED Partnerships for Children

Finalist: 2020

Category: Food



I am very grateful to the Zayed Sustainability Prize, Beyond2020 and INMED Andes for building this Aquaponics Center that provides us with healthy food, without contamination. It will be very positive to have more centres of this type so that more families can improve their way of life.”

Roxana Perez

Native, Shipibo-Konibo tribe

SUMMARY OF TANZANIA



50,000

People have access
to affordable, nutritious food

PRIMARY SDGs



SECONDARY SDG



The Challenge

Tanzania's population suffers from high malnutrition rates and related health issues due to insufficient access to healthy foods, and a diet lacking in crucial vitamins and minerals. According to USAID, 34% of children under five suffer from stunting, and 16% are underweight (USAID, 2019). Dar es Salaam, the country's capital and largest city, has some of the highest rates of chronic malnutrition and stunting in the country and has become a priority area for UNICEF's nutrition interventions (Tanzania Ministry of Health et. al., 2018). Chronic malnutrition exacerbates other risk factors in Tanzanian communities. For example, 75% of Dar es Salaam residents live in informal housing with inadequate sanitation facilities, leaving the malnourished population more susceptible to diseases like cholera. Similarly, women of reproductive age have insufficient iron levels, leading to anaemia and adverse effects on the pregnancy and maternal health. One of the main staple foods for residents of Dar es Salaam and the surrounding region is maize flour. However, the industry suffers from volatile prices and uncertain availability of raw maize inputs and packaging material. Simultaneously, a lack of awareness among the population regarding the advantages of fortified foods has resulted in their underutilisation in the battle against malnutrition.

The Solution

Sanku's objective is to reduce malnutrition and related diseases and deaths in East African communities by producing fortified maize flour, which adds critical micronutrients like B12, Folic Acid, Iron, and Zinc, which are scientifically proven to improve health and vitality. Sanku selected ten flour mills in five districts throughout Dar es Salaam and the neighbouring Pwani region to support implementation for this project. In each selected small flour mill, they installed a dosifier that adds a precise amount of the essential micronutrients. The dosifier allows the mills to produce and sell fortified flour, replacing the less nutritious traditional maize flour that families eat every day. Sanku also supplies the inputs and packaging material the mills need to successfully produce fortified maize flour. Throughout the project, Sanku provides mills with ongoing support through remote monitoring, follow up visits to restock nutrients and make repairs, and bi-monthly training for mill owners and operators.

Impact



Increased fortified flour production to 1,830 tonnes across ten mills



Reduced burden on local healthcare systems



Improved nutrition for over 50,000 people in the area, and reduced stunting and infant mortality rates



Reduced prevalence of anaemia in pregnant women, leading to better maternal health and pregnancy outcomes



Improved immune systems for beneficiaries



Increased awareness about fortified flour and its benefits, resulting in better sales and revenue for flour mills, allowing the mills to expand their business and provide more employment

Solution Provider



Sanku

Winner: 2019

Category: Food



I am so happy that I got the opportunity to source fortified flour from a miller supported by Sanku. It gives me immense satisfaction to know I am able to give my people healthy food. My profits from the food stall are steadily increasing and I hope malnutrition within my community is steadily decreasing.”

Khalima Juma

Mother and food stall owner, Dar es Salaam

ENERGY PROJECTS



Ensure access to affordable, reliable, sustainable and modern energy for all



Global Context

Global progress towards sustainable energy targets is slow, making it unlikely that SDG Goal 7 will be achieved by 2030. The International Energy Agency (IEA) reports that 733 million people still lack access to electricity, and 2.4 billion people are at risk due to slow progress towards clean cooking solutions.¹³

Global conflicts have also resulted in supply shortages and price hikes, affecting countries that heavily rely on natural gas imports. The IEA estimates that an annual investment of US \$35 billion is needed to reach SDG Goal 7, but current investments are insufficient.

SDG Goals & Targets

- Ensure universal access to affordable, reliable and modern energy services
- Increase substantially the share of renewable energy in the global energy mix
- Enhance international cooperation to facilitate access to clean energy research and technology, including renewable energy, energy efficiency and advanced and cleaner fossil fuel technology, and promote investment in energy infrastructure and clean energy technology
- Expand infrastructure and upgrade technology for supplying modern and sustainable energy services for all in developing countries, particularly Least Developed Countries (LDCs), Small Island Developing States (SIDS), and land-locked developing countries, in accordance with their respective programmes of support

Major Challenges



Electrification progress has slowed

Globally, electricity access increased from 83% in 2010 to 91% in 2020, reducing the unserved population from 1.2 billion to 733 million¹⁴, but the number of people without electricity in Sub-Saharan Africa actually increased. Sub-Saharan Africa's share of the global population without electricity jumped to 77% in 2020 from 71% in 2018. If current trends persist, 92% of the global population will have electricity access in 2030, leaving 670 million unserved.¹⁶



Clean cooking fuels needed

Clean cooking access increased by 12% from 2010 to 2020, reaching 69%, with 2.4 billion still relying on polluting methods. Half of those without access live in Asia, while 19 of the 20 countries with the lowest access rate are African LDCs. Without urgent attention to this issue, only 72% of the global population will have access to clean cooking fuels and technologies by 2030.¹⁷



More investment in renewable energy

While renewable energy has seen unprecedented growth over the last decade – in 2020 it constituted 19.1% of total global energy consumption – this still falls short of what is required to reach the net-zero by 2050 goal.¹⁸

Key Statistics



733 million people still don't have access to electricity



2.4 billion people still use inefficient and polluting cooking systems



Over 75% of the global population without electricity live in Sub-Saharan Africa



In 2020, the share of renewable energy in total energy consumption was only 19.1%

Indicators of Change

Direct Benefits



Increased access to electricity and clean energy in hard-to-reach areas



Decreased use of toxic and polluting means of light and energy



Decreased number of accidents and crime with an increase in visibility and feeling of safety



Increased productivity and income in households

Indirect Benefits



Enhanced education for youth with evening access to electricity



Stronger community bonds through evening gatherings and sports events



Cost savings due to solar powered equipment, reducing operational expenses

ENERGY PROJECTS



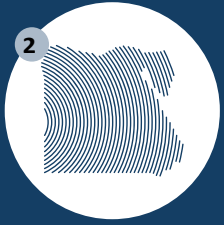
LEBANON

Location: Mar Mitr Street, Achrafieh Suburb, Beirut



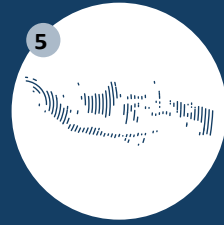
BANGLADESH

Location: Kutupalong Rohingya refugee Camp, Cox's Bazar



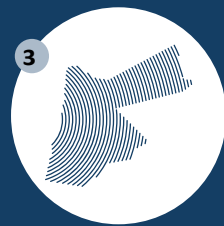
EGYPT

Location: Habisha Village, Asyut, Governorate



INDONESIA

Location: Pulau, Laut Barat, Pulau Laut Kepulauan, and Pulau Laut Selatan sub-districts, South Kalimantan



JORDAN

Location: Prince Hamzah Hospital, Amman

SUMMARY OF BANGLADESH



4,500

Residents in the refugee camp
will have improved energy
access every day

PRIMARY SDG



SECONDARY SDGs



The Challenge

In 2017, there was a huge influx of Rohingya refugees that moved to Bangladesh almost overnight. This raised concerns over the lack of adequate shelter, water and sanitation, access to basic services, and general protection considerations such as safety for women and children. The Kutupalong refugee camp in Cox's Bazar has become the largest of its kind in the world, with more than 600,000 people living in an area of 13 square kilometres. This has put more pressure on the already limited resources available to the local population. As refugee camps and their infrastructure are seen as temporary settlements, they are often excluded from long-term sustainability projects. The UN's 'Innovation Service' highlighted that when meeting the energy requirements of refugees and displaced people, the approach has always been short-term solutions. These solutions are often unsustainable and inefficient. Consequently, the emphasis has shifted towards policy approaches that seek more sustainable solutions, ones that leverage local capacity alongside global technology.

The Solution

Electricians Without Borders installed 640 solar lamps and 240 solar home systems for individuals in the Kutupalong refugee camps. The focus of this project was to create a safer environment in the camp, to avoid exposing vulnerable refugees to further violence. It was also meant to encourage socialisation and rebuild their sense of community. There was a specific emphasis on making sure that street lighting and lamps were made available for people with disabilities, pregnant women, and young girls.

Impact



Installed solar home systems for 503 members of CMAMI (Community Management of Acute Malnutrition of At-Risk Mothers and Infants under Six Months of Age) and 377 People of Determination (PoD), widows, or individuals in the worst economic conditions



Conducted community and socialisation activities in the evenings safely, re-establishing a sense of community

Solution Provider



Electriciens Sans Frontières

(Electricians Without Borders)

Winner: 2020

Category: Energy



Thanks to the lights, I now move about safely in the darkness, making it easier to complete important tasks and boosting my confidence. These lights have made a significant difference in my life. I'm more active at home, cooking meals for my family and taking care of household chores without fear."

Hafaja Khatun

Refugee, Kutupalong refugee camp, Cox's Bazar

SUMMARY OF EGYPT



3,500+

People now have access to reliable energy

PRIMARY SDG



SECONDARY SDGs



The Challenge

Egypt's rapidly growing population has increased the country's energy demand, straining its domestic energy sources (IRENA, 2018). Habisha village in Asyut Governorate is an impoverished community of 3,500 people that, like many rural communities, lacked sufficient energy to provide essential services, such as streetlights. In Habisha village and elsewhere, streetlighting plays a critical role in reducing traffic accidents and crime, ensuring public safety, enhancing social cohesion, and increasing economic activity. Moreover, sufficient lighting is essential for ensuring women's safety at night while also allowing children and families to socialise, and businesses to stay open after dark.

The Solution

Working with its partners Siraj Lighting and MEMCO Co., Sunna Design installed 51 solar streetlights on the village's critical main street. To identify Habisha village as the recipient community, the tech developers worked closely with the Ministry of Urban Planning to determine which community needed assistance.

Impact



Reduced nighttime traffic accidents as drivers have more visibility of the road



Decreased street crime, making all pedestrians, especially women, feel safer moving around after dark



Protects the environment as the technology does not emit GHG emissions or pollutants. This technology is expected to last for ten years



Enabled businesses to stay open for longer, thus expanding their working hours, while also giving their customers more access to essential goods like food and medicine



Provided a safe place for children to play and gather in the evenings. They can also stay at school later as there is less fear about walking home late in the dark, allowing them to study more and potentially improve their academic performance

Solution Provider



Sunna Design

Winner: 2018

Category: Energy



The new lighting motivated me and my staff to work harder and keep the store open for longer hours, creating better options for the local community for their daily necessities, at various times of the day.”

Fawzy Gerges

Grocery store owner, Habisha Village

SUMMARY OF INDONESIA



20,700+

People gained access to
reliable energy

PRIMARY SDG



SECONDARY SDG



The Challenge

Kotabaru Regency is one of the most remote and disconnected areas in the province of South Kalimantan, Indonesia. Out of a total population of 336,000 people, more than 48,000 people – 23% of the population – lack access to electricity, making this the regency with the highest rate of households without electricity in the province. While the state-owned electricity company has extended the electricity network to nearly all villages within the regency, access within communities is unevenly distributed. In the sub-districts of Pulau Laut Barat, Pulau Laut Kepulauan, and Pulau Laut Selatan, access to electricity is still a pressing challenge. The lack of electricity negatively impacts small communities in these areas in several ways. Prior to the deployment, these communities relied on battery-operated flashlights, candles, kerosene powered lanterns, and diesel generators for lighting. However, these sources often run out and negatively affect both people’s health and the surrounding environment.

The Solution

d.light, in partnership with on-ground support from Kopernik, provided communities in the Kota Baru Regency with 3,600 solar lanterns and 1,000 mobile-charging solar torches. The solar lanterns are six times more powerful than kerosene-based lighting sources and stay charged for 12 hours. While the mobile-charging solar torches are 18 times more powerful than kerosene-based lighting sources and stay charged for eight hours and provide lighting for one kilometre. Across the 17 villages included in the project, nearly 4,600 solar lanterns and torches were distributed to public facilities, households, and fishermen.

Impact



Increased productivity for villagers outside daylight hours, allowing women and children to perform household chores and study after dark



Improved health as kerosene burning releases toxic pollutants



Increased fishermen’s household income by 7% each year



Reduced villagers’ use of hazardous lead-acid batteries, preventing leaching into the ground and reducing environmental damage



Improved lighting safety for community buildings and health facilities



Reduced GHG emissions by ten metric tonnes per year

Solution Providers



d.light
Winner: 2013
Category: Energy



Kopernik
Winner: 2016
Category: Energy



Previously, I used candles at night. Now that there is lighting in the house, thank God, even my children can study at night. We can also cook at night with this light.”

Rashmatia

Resident, Kerasian Island

SUMMARY OF JORDAN

EMERGENCY

إمريء



3,000+

People have access to reliable energy every day

PRIMARY SDGs



7 AFFORDABLE AND CLEAN ENERGY



9 INDUSTRY, INNOVATION AND INFRASTRUCTURE

SECONDARY SDGs



3 GOOD HEALTH AND WELL-BEING



11 SUSTAINABLE CITIES AND COMMUNITIES

The Challenge

In Jordan, lighting is essential in building sustainable communities. It provides better safety, security, and quality of life. However, access to lighting – and in particular clean, reliable lighting – remains inconsistent across the country, and even among some public facilities in the capital city of Amman. One such facility is Prince Hamzah Hospital, one of the largest government hospitals in Amman, which employs and treats thousands of people daily. The hospital is vital for the community and was key in the COVID-19 response. However, visiting the hospital was challenging due to low lighting near the entrances, courtyards, and car parks. This prevented some patients from accessing the hospital and its services, while also making some of the staff feel unsafe.

The Solution

Sunna Design installed 55 off-grid solar streetlights in and around the premises of Prince Hamzah Hospital to ensure all patients' and medical staff's safety. Implementing partners worked with local government authorities to determine where the lighting solution was most needed. Local partners also collected feedback from beneficiaries and followed up on the technology to ensure that there were no safety or access problems after installation.

Impact



Improved the hospital's accessibility to its patients and staff



Increased safety of all people entering and exiting the hospital at night



Reduced maintenance requirements of the streetlights, which will last for 10 years



Reduced CO₂ emissions as the lights use solar power and do not pollute the environment

Solution Provider



Sunna Design

Winner: 2018

Category: Energy



We are confident that the solar streetlights will complement and further optimise the efficiencies of Prince Hamzah Hospital’s advanced capabilities by providing enhanced lighting to many of our valued staff to support their daily work and commute to and from their residences.”

Dr. Abdul Razaq Al Khashman

Former General Manager, Prince Hamzah Hospital

SUMMARY OF LEBANON



17,200+

Residents in Beirut have reliable access to street lighting every day

PRIMARY SDGs



SECONDARY SDG



The Challenge

In 2020, a devastating explosion in the Port of Beirut destroyed large parts of the old city centre of Beirut in the Achrafieh neighbourhood. The area has a large elderly population, and small, family-owned shops, cafes, and restaurants characterise the streets. Since the explosion, these areas have been severely damaged and have yet to be rebuilt due to the financial crisis in the country. As this area used to be bustling, businesses have found it hard to recover due to the lack of rebuilt infrastructure. Street lighting is limited so residents feel insecure, leading businesses to close earlier and residents to avoid being out during the evenings.

The Solution

Sunna Design has developed solar street lighting that can provide affordable and reliable lighting without needing a power generator. The streetlights installed in this project have been installed on wall-mounted brackets at six metres high. The technology involved can operate in extreme temperatures up to 70°C and has a lifespan of over ten years. It also allows for a customised lighting profile that provides the full power of light during busy hours and reduced light during quiet hours. This optimises the battery's life and ensures that there is no excessive light pollution as a result. The off-grid solar streetlights have made it easier for locals to access businesses and shops after dark, without the risk of crime.

Impact



Increased business operation hours, as more people feel comfortable being out after dark



Avoided excessive light pollution and optimised energy efficiency by using a system that adapts to busy and quiet hours



Increased community safety as people can travel safely and comfortably to school, work, and the local shops, while children can play safely on the well-lit streets

Solution Provider



Sunna Design

Winner: 2018

Category: Energy



There is a lot of danger that stems from darkness; as business owners, we fear getting robbed and hurt, while as customers, they are afraid of walking home at night. Since the solar powered streetlights were installed, we feel more comfortable living and working in the area again. The lack of darkness brought life back to the neighbourhood after sunset. Now, you see more people walking around and running errands, and businesses are staying open later.”

Vivienne

Clothing shop owner, Achrafieh neighbourhood

WATER PROJECTS



Ensure availability and sustainable management of water and sanitation for all



Global Context

Access to clean water and sanitation is a basic human right, yet more than two billion people lack access to safe drinking water, and over four billion people lack access to adequate sanitation.¹⁹

SDG 6 aims to ensure universal access to clean water and sanitation for all by 2030, but progress has been slow. Factors such as climate change, population growth, and inadequate infrastructure have made matters worse, exacerbating water scarcity, deteriorating water quality, and increasing the risk of water-related disasters.

Decades of misuse, poor management and the over-extraction and contamination of freshwater and groundwater supplies have worsened water stress and degraded water-related ecosystems. This, in turn, affects human health, economic activities, and food and energy supplies.

SDG Goals & Targets

- Achieve universal and equitable access to safe and affordable drinking water for all
- Achieve access to adequate and equitable sanitation and hygiene for all and end open defecation, paying special attention to the needs of women and girls and those in vulnerable situations
- Expand international cooperation and capacity-building support to developing countries in water- and sanitation-related activities and programmes, including water harvesting, desalination, water efficiency, wastewater treatment, recycling and reuse technologies
- Support and strengthen the participation of local communities in improving water and sanitation management

Major Challenges



Meeting water targets requires four-fold increase:

Safe drinking water access rose from 70% to 74% globally from 2015 to 2020, but two billion people still lacked access, including 1.2 billion without basic services. 733 million live in high water stress areas, mostly in rural areas and in LDCs. At the current rate of progress, the world will reach 81% coverage by 2030, missing the target and leaving 1.6 billion people without safely managed drinking water supplies.²⁰



Hand hygiene essential to controlling disease:

Hand hygiene is crucial for disease prevention. While access improved from 67% to 71% from 2015 to 2020, 25% of the global population still lacks access to handwashing facilities with soap and water.²¹ Universal access to drinking water, sanitation and hygiene is critical to global health. To reach universal coverage by 2030, current rates of progress would need to increase fourfold. Achieving these targets would save 829,000 lives annually.²²



Climate change impacting global water access and quality:

Climate change is affecting water access for people around the world, causing more severe droughts and floods. Only 0.5% of water on Earth is useable and available freshwater – and climate change is dangerously affecting that supply.²³ Water quality is also affected by climate change, as higher water temperatures and more frequent floods and droughts are projected to exacerbate many forms of water pollution.²⁴

Key Statistics



1.7 billion people live in high water stress areas



829,000 people die annually from diseases related to unsafe water



0.5% of water on Earth is useable and available freshwater



25% of people lack access to handwashing facilities with soap and water



Two billion people lack access to safe drinking water

Indicators of Change

Direct Benefits



Decreased risk of waterborne diseases, leading to improved health



Increased levels of hygiene and sanitation



Decreased levels of pollution and emissions, leading to overall positive environmental impact



Increased access to free time for women to participate in income-generating activities



Increased access to safe drinking water for hard-to-reach areas

Indirect Benefits



Reduced absenteeism rates because of students falling sick less



Improved focus on education in children and adolescents because of improved health



Increased job opportunities for the local community

WATER PROJECTS



CAMBODIA

Location: Chhnok Trou, Kampong Phrah, and Ses Salab villages



SUDAN

Location: Tawait & Tahger villages in Telkuk District, Kassala State



ETHIOPIA

Location: Walessa, Holte, and Gato villages in Dirashe District, Southern Nations, Nationalities, and People's Region (SNNPR) Sate



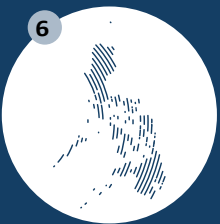
MADAGASCAR

Location: Antsirabé, Vohitrarivo, Ambohijafy and Ambohijafy Talata Andraikiba



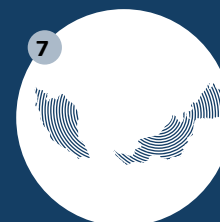
VIETNAM

Location: Dai Loc, Nam Giang, Thang Binh- Quảng Nam Province



THE PHILIPPINES

Location: Cabagnaan, La Castellana, Negros Occidental & Altavista, Matalom, Leyte



MALAYSIA

Location: Sarawak and Sabah

SUMMARY OF CAMBODIA



4,400

People gained access
to safe drinking water

PRIMARY SDGs



SECONDARY SDG



The Challenge

Access to clean water is a major challenge in Cambodia, as the National Institute of Public Health reports that only 50% of the population has sufficient access to water to meet their daily needs. In poor communities along Tonlé Sap Great Lake, communities lack resources to purchase filtered water, priced at US \$1.25 for a 20-litre bottle. Instead, they are forced to drink boiled water sourced from the lake. The bacteria in the water, however, leads to malnutrition and a host of waterborne diseases, including cholera, hepatitis, dysentery, and diarrhoea. The resulting health issues create many additional problems, as sick students miss school, and adults' productivity suffers due to a lack of focus on economic endeavours. Women, traditionally responsible for fetching water, spend a disproportionate amount of their time searching for potable water. Consequently, girls spend even less time at school, and women have less time to devote to income-generating activities. The dire water situation has forced many Tonlé Sap Great Lake residents to flee to the cities, creating a rural exodus.

The Solution

Five Safe Water Cube fountains were installed in the lakeside villages of Chhnok Trou, Kampong Phrah, and Ses Salab. While developing the project, the implementers worked closely with Professor Puy Lim, the Vice Chairman of the Tonlé Sap Authority Advisor of the Water Resources & Meteorology, Ministry of Cambodia. To ensure community access, water fountains were installed in easy-to-reach public locations, such as schools and health centres. Each fountain filters 1,000 litres of water per hour, making one unit capable of serving 1,000 people per day. Beneficiary families are each entitled to 20 litres of water and are expected to pay US \$0.05 per month. In addition to providing the fountains, Safe Water Cube trained ten fountain managers (one male and one female per fountain) to use and maintain the fountains.

Impact



Reduced rates of waterborne diseases and improved health



Reduced time women and girls spend fetching water



Reduced school absenteeism as fewer students miss class due to waterborne illnesses



Improved community hygiene through hand washing, preventing the spread of illnesses



Increased productivity and income as adults can spend more time on income generating activities



Created new employment opportunities through the fountain manager roles, leading to increased income



Reduced pollution and GHG emissions, as the fountains operate without chemical or energy inputs

Solution Provider



Safe Water Cube

Finalist: 2019

Category: Water



I am so reassured to have access to this fountain. I was very worried about my child's health while drinking the water from the lake. Today, I don't get sick anymore, and my stomach cramps have stopped."

San Sophy

23-year-old mother, Kampong Phrah

SUMMARY OF ETHIOPIA



9,000

People have gained access to safe drinking water

PRIMARY SDGs



SECONDARY SDGs



The Challenge

The people of Dirashe – a special district, in Ethiopia’s Southern Nations, Nationalities and Peoples Region (SNNPR) – suffer from water insecurity. In 2020, clean drinking water was available in only 32% of the Dirashe district, according to the Water, Mining, and Energy Office. The lack of access to safe drinking water has negatively impacted community members’ health and sustainable livelihoods, especially since 98% of the district’s population are subsistence farmers. The people rely on unsafe water sources like surface water harvested from rain and rivers for drinking, cooking, and washing. During the dry season, these traditional sources of water become unavailable, and the most vulnerable people in the community – young girls and women – walk over 5 kilometres to collect drinking water from neighbouring local water sources, such as rivers and ponds.

The Solution

Solkiosk Solutions, a Germany-based company that provides rural, off-grid communities electricity, developed a sustainable solution that leverages the existing wells to provide reliable, clean water to the people of Dirashe. The non-functional water wells were retrofitted with solar pumps in the villages of Walessa, Holte, and Gato, supplying 20,000-25,000 litres of clean drinking water every day to the communities. Following the construction of the solar powered pumps, approximately 9,000 people now have access to safe drinking water year-round.

Impact



Women and children, who were most affected by water scarcity, spend significantly less time fetching drinking water for the household



The project has had a positive impact on health, with less people falling ill from waterborne diseases



There is increased security for women, who had to travel far distances to fetch water from unsafe sources



Children’s health has improved due to enhanced access to safe drinking water



Community members now have more time to spend on income-generating activities

Solution Provider

SOLAR KIOSK

Solarkiosk Solutions GmbH

Finalist: 2020 & 2023

Category: Energy



I used to have to walk over five kilometres to fetch water. Now, I can fetch water for my family in under ten minutes, and I have time to care for my family. My children can fully concentrate on school and don't have to endure the hardships that I faced as a child."

Emu Bezabi

Mother and resident, Gato

SUMMARY OF MADAGASCAR



8,500

People gained access to safe drinking water

PRIMARY SDGs



SECONDARY SDGs



The Challenge

In Madagascar, more than 58% of the population lacks access to safe drinking water (USAID, 2020). The lack of potable water is particularly challenging in Antsirabé, the country's third-largest city. At an altitude of 1,500 metres, the city is characterised by poverty and inadequate water, hygiene, and sanitation. While the region is surrounded by mineral and thermal waters, the local water sources are unpotable. Consuming this water leads to multiple adverse health impacts, including waterborne diseases and malnutrition. An estimated 30% of the city does not have access to safe drinking water, and 80% of the illnesses that plague children in Antsirabé are due to the water they consume. The lack of clean water is also problematic at local health centres, where patients must bring their own boiled water not only to drink, but also for the healthcare workers to use. The lack of capacity and coordination between regional water sector actors has prevented the city from gaining better access to potable water.

The Solution

Safe Water Cube worked with local authorities, the Taratry Ny Ankizy Association and Salette missionaries, to install five fountains in five schools in the Antsirabé region: Champfleury (387 children), Talata Andraikiba (600 children), Saint Jean Andraikiba (1,217 children), Vohitrarivo (725 children), Ambalavato (1,300 children). These schools were selected based on the results of questionnaires and field visits to determine their level of need, while plays were used to disseminate information about the project to the targeted communities. The project's direct beneficiaries include school children, their families, and the schools' surrounding populations, which can also access affordable, potable water.

Impact



Increased supply of clean water to healthcare centres for better patient care



Created new employment opportunities through the fountain manager roles, leading to increased income



Reduced children absenteeism in schools by 85% and increased number of children attending school by 25%



Reduced pollution and GHG emissions, as the fountains operate without chemical or energy inputs



Reduced rates of waterborne diseases, improving community health

Solution Provider



Safe Water Cube

Finalist: 2019

Category: Water



I can have clean water that tastes good every time I am thirsty, and even my younger siblings can enjoy it too because I bring water for them every day.”

Anjara Rakoto

9-year-old student, Antsirabé region

SUMMARY OF MALAYSIA



10,000

People have gained access to safe drinking water

PRIMARY SDGs



SECONDARY SDGs



The Challenge

Deforestation caused by commercial logging, over-harvesting of timber and rapid development in Sarawak and Sabah, along with seasonal monsoons and the effects of the changing climate, have negatively impacted the water quality of the Rajang River. The lack of safe drinking water poses a public health challenge for the local community. Villagers living near Sibu often develop health issues, such as chronic diarrhoea and dysentery from consuming untreated water that contains high levels of bacteria and organic pollutants. To avoid health issues, needy families in villages often pay a premium for bottled water, traveling long distances to purchase it from distant towns. With few alternatives, villagers resort to consuming untreated water, and unfortunately, this poses a significant risk to their health.

The Solution

To reduce the financial burden caused by the high cost of bottled water and to tackle the health issues in targeted communities, Wateroam introduced a water filtration system that can filter surface and ground water sources (springs, streams or wells) into clean drinking water. Wateroam's community water filtration system is designed for rural areas and disaster relief efforts. It is simple to operate, long-lasting, lightweight and cost-effective. A total of 28 water filters were installed in 25 different communities in the states of Sarawak and Sabah. Wateroam's filtration system removes 99% of bacteria and viruses. The filter uses an industrial grade ultrafiltration membrane that has a pore size of 0.02 microns to provide high quality drinking water rapidly. The filters operate through natural gravity flows or low wattage pumps, requiring little to no electricity to operate. They are easy to set-up and maintain, making it sustainable for locals to manage and operate in the long-term.

Impact



Reduced incidences of waterborne diseases due to increased access to clean drinking water



Trained locals to maintain the systems



Reduced school absenteeism due to a decline in water-related illnesses



Improved financial circumstances of parents who receive daily wages



Improved hygiene and health of children, women and vulnerable groups in the villages

Solution Provider



wateroam

Wateroam

Winner: 2022

Category: Water



Safe drinking water has transformed our lives. It has freed us from the burden of travel, expenses, and health issues. With the water filter system, we have gained health, financial stability, and time for our families and livelihoods. It's a priceless gift we are forever grateful for."

Ms. Turie

Longhouse Headwoman, Sarawak

SUMMARY OF THE PHILIPPINES



18,000

People have gained improved access to water

PRIMARY SDGs



SECONDARY SDGs



The Challenge

In the communities of this region in The Philippines, residents must retrieve water from a distant and challenging-to-access source. Due to the geographical location being high above sea level, insufficient gravity flows or high costs of water meant that people had to wait long hours to gain access to water, or they had to travel down steep terrain to fetch water. For the regions of Cabagnaan and Altavista, water comes at a premium when purchasing it locally and is unaffordable for most of their residents. The Municipal Water Districts' inability to supply water to these areas despite there being abundant water sources downhill has led to an absence of necessary services and reliable access to water for more than 14,000 residents.

The Solution

To address the issues faced by the local community, Alternative Indigenous Development Foundation, Inc. (AIDFI) introduced a solution that pumps water from a low-lying source such as a spring, stream, or river to a higher elevation without the need for electricity or fuel. It utilises the energy contained in falling (free-flowing) water and pumps water 24/7, without the need for external energy inputs.

Impact



Reduced cost of water by 85% for the communities



Improved sanitation and hygiene for the local community



Created job opportunities through water-related livelihoods such as vegetable gardens, aquaculture, and livestock breeding



Reduced waterborne diseases and skin diseases, and improved community members' overall health

Solution Provider



Alternative Indigenous Development
Foundation, Inc. (AIDFI)

Finalist: 2020

Category: Water



We would even spend a whole day just to secure water, which my husband and I would usually do so that our children can concentrate on their schooling. I don't want my children to experience the hardships and sacrifices that I had to endure in life. It is much better not to be able to eat rice in a day than to have no water."

Joefanny Peras

Resident, La CaStellana, Negros Occidental

SUMMARY OF SUDAN



20,000

People have gained access to basic water and sanitation services



PRIMARY SDGs



SECONDARY SDGs



The Challenge

Tawait and Tahger's groundwater water supply is replenished by the Elgash River, which starts from the mountains in Eritrea. Water supply in this area heavily depends on the river's quantity and flow rate in the rainy season. A scarcity of rainwater and extended droughts in 2021, coupled with restricted road access to other cities, have hindered the tribal community's access to water resources. A water infrastructure survey in the area revealed a severe lack of potable water. Only 30% of the population in this region has access to safe water supplies compared to the national average of 64%. On average, residents must walk approximately three kilometres to access water, and often transport and store water unhygienically. As a result, there is a high rate of waterborne illnesses in the area, particularly amongst children who are often also tasked with collecting water for their households.

The Solution

Two solar powered mini water yards were installed. The environmentally friendly and energy-efficient groundwater pumps supply 20 litres of water per day per person to the communities. Using solar power, the mini water yards protect the community from the consequences of chronic fuel shortages in the country. Following the construction of the mini-yards, approximately 20,000 people have access to the drinking water supply year-round.

Impact



Reduced the incidences of waterborne diseases because of residents having access to clean drinking water



Educated 168 women through lectures and awareness sessions on personal hygiene and environmental sanitation



Trained 25 people on the operation and management of the two mini water yards, including three women



Established two women-managed farms to grow nutritious vegetables for additional income



Increased access to nutritious foods and increased income generation due to healthy livestock, which has reduced conflict and displacement

Solution Provider

Practical **ACTION**

Practical Action

Winner: 2017

Category: Energy



Looking at this project and the people involved in it at all levels, I am impressed by the capability of the community who participated in the process and monitored the implementation of the water stations in both villages. Through this sustainable project, the community has been empowered to manage their own water stations without any support from the government, as is the case in some other areas.”

Mr. Edrees Ali Mohamed

Commissioner (Wali), Kassala

SUMMARY OF VIETNAM



10,000+

People have gained access to safe drinking water

PRIMARY SDGs



SECONDARY SDGs



The Challenge

Although the country has made rapid progress in improving water supplies over the past few decades, many parts of Vietnam still lack access to clean water. In the country's rural areas, where two-thirds of the population reside, it is reported that less than 50% of households have access to safe drinking water and sanitation. This lack of access to water, along with poor sanitation and hygiene practices, contributes to high rates of diarrhoea, pneumonia, and parasitic infections.

The Solution

Eight Safe Water Cubes were deployed across three schools and villages in the Quảng Nam province. The Safe Water Cube, developed by Agir Ensemble, is a water purification fountain that uses a filtration technology that makes surface water drinkable. The Safe Water Cube fountain is compact, robust, and mobile. It makes all surface water (river water, ponds, wells, and brackish water) potable, producing 1,000 litres of water per hour, which corresponds to the needs of approximately 1,000 people. As there is no electricity or electronics, the fountain cannot break down, so it is easy for anyone to use and has a long lifespan.

Impact



Reduced school absences by 85% due to a decline in water-related illnesses



Trained 26 fountain managers, including 14 men and eight women, in the use, upkeep and maintenance of the fountain



Reduced incidences of waterborne diseases due to increased access to clean drinking water

Solution Provider



Safe Water Cube

Winner: 2019

Category: Water



In the past, I often became ill due to unclean water. I couldn't even go to school. Now that I have clean water, I don't get sick easily anymore, and I go to school more often so I can learn new things."

Do Thi Dieu Hien

Student, Dai Hong Primary School

ABOUT OUR PARTNERS

The Zayed Sustainability Prize recognises that collaboration and shared values are essential in achieving sustainable development and making a positive impact on vulnerable communities around the world.

The partners of Beyond2020 include non-governmental organisations, private sector entities, and financial institutions. The Beyond2020 partners have provided critical support in the form of funding, expertise, and resources to ensure the successful deployment of sustainable solutions and the achievement of the initiative's objectives.

Beyond2020's partners have played a vital role in expanding the initiative's reach and impact, both through their financial contributions and their active participation in identifying and implementing innovative solutions. Their involvement has helped to enhance the effectiveness and efficiency of the initiative and contributed to its overall success.

The Zayed Sustainability Prize acknowledges and appreciates the generosity and commitment of all partners who have contributed to the success of the Beyond2020 initiative. The partnership model has proven to be an effective approach to tackling global challenges and driving positive change in vulnerable communities worldwide.



BEYOND2020 PARTNERS



Abu Dhabi Fund for Development (ADFD) is the UAE's leading development-financing institution that supports developing countries to achieve sustainable and inclusive growth. Established in 1971, ADFD provides funds for infrastructure projects in those countries in the form of concessionary loans and manages Abu Dhabi government grants in line with the UAE's foreign aid policy. In addition, ADFD invests in vital companies which also helps partner countries to achieve impactful economic, social and environmental objectives.

Furthermore, supporting the national economy is a key priority for ADFD by giving priority to national companies to implement projects it finances in various countries of the world and supporting the national private sector inside and outside the country, in addition to supporting UAE exports to enhance their competitiveness and enable them to access global markets.



Established in 2012 as Mubadala Petroleum, in 2022 the company became Mubadala Energy.

With a focus on expanding across the gas value chain and into new energy sectors, Mubadala Energy plays a proactive role in the energy transition as a leading international energy company.

It manages assets and operations spanning 11 countries, with a primary geographic focus on the Middle East and North Africa, Russia and Southeast Asia. And with a unique, global track record of operational excellence, innovation and steadfast focus on value creation, it is a future-orientated, trusted partner around the world and in the communities it operates in.



Abu Dhabi's renewable energy company, Masdar, is advancing the commercialisation and deployment of renewable energy, sustainable urban development and clean technologies to address global sustainability challenges.

Established in 2006, Masdar's mandate is to help maintain the UAE's leadership in the global energy sector, while supporting the diversification of both its economy and energy sources for the benefit of future generations.

A catalyst for renewable energy development across more than 40 countries, Masdar is demonstrating how the business community can deliver on the global sustainability agenda.



BNP Paribas is a leading European bank with international reach. It has presence in 68 countries, with more than 193,000 employees. BNP Paribas has been operating in the Middle East and Africa (MEA) region, including the GCC, for over 45 years, in the fields of Corporate & Institutional Banking and International Financial Services.

The Group helps its clients realise their projects through solutions spanning financing, investment, savings and protection insurance. BNP Paribas also enjoys top positions in Europe, a strong presence in the Americas, as well as a solid and fast-growing business in Asia-Pacific.

GLOSSARY

- AIDFI: Alternative Indigenous Development Foundation Incorporated
- CMAM: Community Management of Acute Malnutrition
- DMO: Domestic Market Obligation
- EUR: Euros
- GDP: Gross Domestic Product
- GHG: Green House Gas
- IEA: International Energy Agency
- LDC: Least Developed Countries as classified by United Nations
- LED: Light-Emitting Diode
- LNG: Liquid Natural Gas
- MICS: Multi Indicator Cluster Survey
- MoH: Ministry of Health
- NEEAPs: National Energy Efficiency Action Plans – Jordan
- NiMH: Nickel-Metal Hydride
- OFH: One Family Health
- PoD: People of Determination
- SDG: Sustainable Development Goals
- SME: Small and Medium Enterprise
- TB: Tuberculosis
- UAE: United Arab Emirates
- UN: United Nations
- UNCCD: United Nations Convention to Combat Desertification
- USD: United States Dollar
- WASH: Water, Sanitation, Hygiene
- WHO: World Health Organization

FOOTNOTES

1. Data from article by [World Health Organisation \(WHO\)](#)
2. [UN SDG Report 2022](#) (Pg. 30)
3. [UN SDG Report 2022](#) (Pg.30)
4. [UN SDG Report 2022](#) (Pg. 30)
5. [UN SDG Report 2022](#) (Pg.31)
6. [UN SDG Report 2022](#) (Pg.32)
7. [UN SDG Report 2022](#) (Pg. 30)
8. [UN SDG Report 2022](#) (Pg.32)
9. [UN SDG Report 2022](#) (Pg.30)
10. [UN SDG Report 2022](#) (Pg. 30)
11. [UN SDG Report 2022](#) (Pg. 28)
12. [Article](#) by United Nations based on the State of Food Security & Nutrition Report 2022
13. [Article](#) by United Nations.
14. [UN SDG Report 2022](#) (Pg.28)
15. [UN SDG Report 2022](#) (Pg.28)
16. [UN SDG Report 2022](#) (Pg.28)
17. [Article](#) by International Energy Agency (IEA)
18. [UN SDG Report 2022](#) (Pg.40)
19. [UN SDG Report 2022](#) (Pg.40)
20. [UN SDG Report 2022](#) (Pg.40)
21. [UN SDG Report 2022](#) (Pg.40)
22. [UN SDG Report 2022](#) (Pg.40)
23. [UN SDG Report 2022](#) (Pg.40)
24. [Article](#) by World Health Organisation (WHO)
25. [UN SDG Report 2022](#) (Pg.38)
26. [UN SDG Report 2022](#) (Pg.38)
27. [UN SDG Report 2022](#) (Pg.38)
28. [UN SDG Report 2022](#) (Pg.38)
29. [UN SDG Report 2022](#) (Pg.38)
30. [Article](#) on United Nations report Convention to Combat Desertification (UNCCD)
31. [Article](#) on United Nations report Convention to Combat Desertification (UNCCD)

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