



**Action For Nepal:
Kharikhola Community Hospital
Solar Project Report, 2024**



Clean Energy for better health

Action for Nepal is on a mission to bring clean solar energy to hospitals in rural communities of Nepal, as solar energy is a critical resource that can significantly enhance healthcare services and overall development.

Reliable access to clean solar energy can drastically improve healthcare delivery, reduce energy costs, and ensure a healthier life for the community, while also reducing carbon emissions and protecting the environment for future generations.

Project Background:

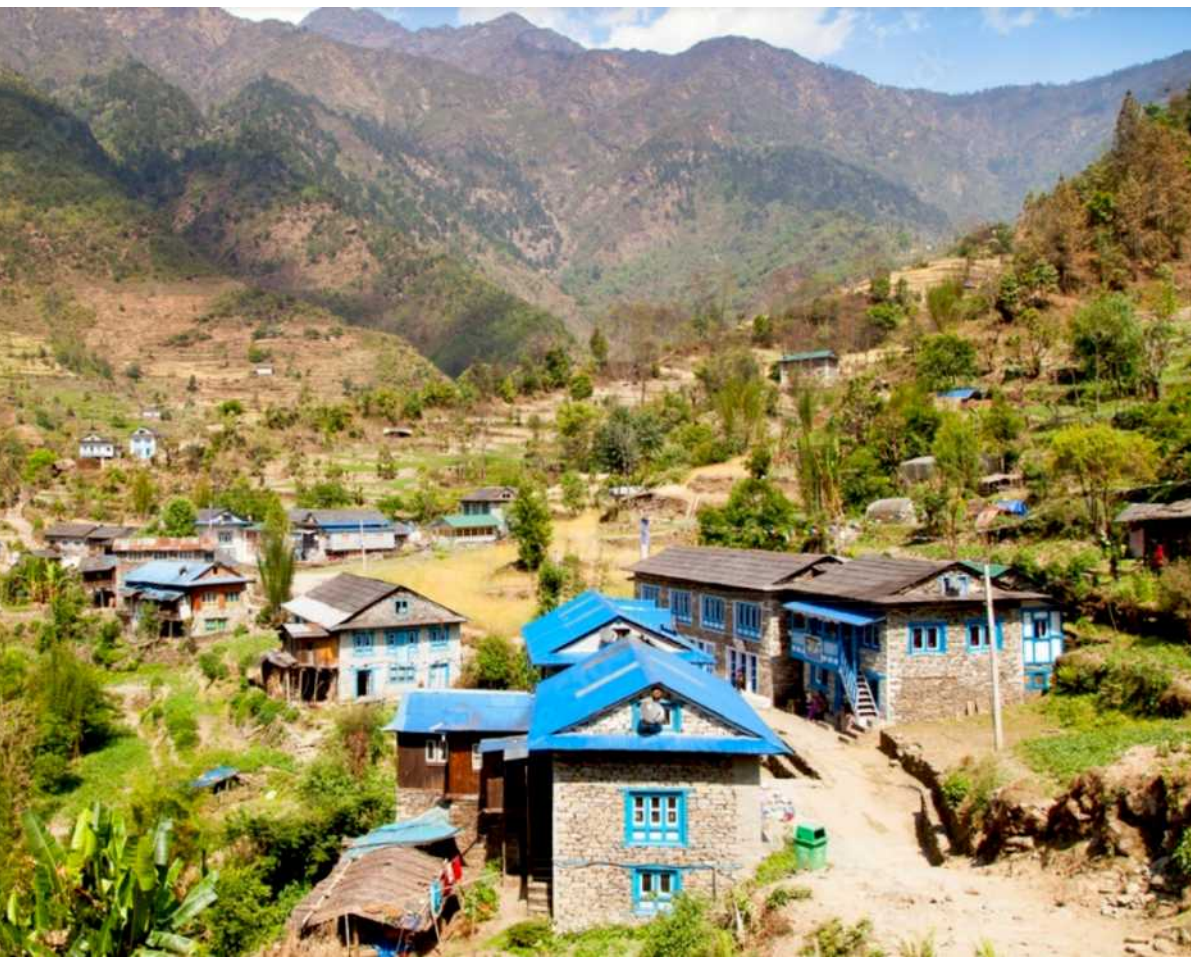
Kharikhola Community Hospital, located in Ward No. 1 of Khumbu Pasang Lamu Rural Municipality, currently operates with five inpatient beds. The local government has ambitious plans to upgrade the hospital to a 15-bed facility in the near future. At present, the hospital is a crucial healthcare provider for the 1,557 residents of the Kharikhola ward no: 1, community and serves as a healthcare hub for approximately 8,000 people from nearby villages.

Despite its importance, the hospital has been struggling with a reliable electricity supply, which has significantly hindered its ability to provide essential healthcare services effectively around the clock. This issue has particularly impacted the hospital's capacity to operate life-saving equipment during critical emergencies, where timely interventions are essential. Understanding the critical need for reliable electricity at Kharikhola Community Hospital, Action for Nepal proposed a project to KIMKIM, Inc., and the Himalayan Eye Project to support the installation of a 27.5-kilowatt solar power system. The goal of this project was to ensure continuous, uninterrupted solar electricity to facilitate regular health services at the hospital.

With the generous funding support from KIMKIM, Inc., the Himalayan Eye Project, and the local government, the 27.5-kilowatt solar power system was successfully installed at Kharikhola Community Hospital. This initiative has significantly improved the hospital's capability to operate 24/7, ensuring that essential healthcare services are consistently available to the community.

The project also makes a substantial contribution to environmental sustainability by providing a clean and renewable energy source. Solar power generation produces no harmful pollutants or greenhouse gases, which helps in reducing air pollution. The installation and operation of solar panels have a minimal environmental impact, and advancements in sustainable production practices ensure a lower ecological footprint, fostering a cleaner and more environmentally friendly energy landscape.





About Ward no: 1 Kharikhola Community



Total Household:
568 houses in total.



Total Population: 1960
Male - 9,40
Female - 1,020



Occupation:
40% people make their living from Mountain guide, 40% agriculture and 20% others such as, lodges and carpentry



Ethnicity:
60% Sherpa
36% Rai and Magar
4% Tamang and others

27.5 Kilo Watt New Solar Power for Kharikhola Community Hospital



New Solar power



Solar Technical Room



Dental Clinic at hospital



Lab-room



Using USG machine



Delivery room

How is **Kharikhola Hospital and Community** Benefiting from New Solar Power ?

- **Enhanced Emergency Services and Equipment Functionality:** The solar power system powers critical health facilities, enabling rapid responses to urgent situations. It maintains the functionality of essential medical equipment, including ventilators and monitors, and provides constant refrigeration for medications, preventing spoilage. Additionally, it supports efficient information systems, allowing for effective communication and accurate record-keeping among healthcare professionals.
- **Improved Surgical Procedures:** The solar power system enhances surgical procedures by powering lighting, anesthesia machines, and sterilization instruments, ensuring safe and effective surgeries.
- **Cost Savings and Environmental Impact:** The solar power system reduces hospital energy costs, promotes financial sustainability, and decreases reliance on conventional power sources, positively impacting the environment.



Note from Mayor **Khumbu Pasang Lhamu Rural Municipality**



I am delighted to announce that the new solar power system of 27.5 kilo watt at Kharikhola Hospital is providing reliable electricity, enabling the hospital to operate at full capacity and serve approximately 8,000 people in the Kharikhola community and nearby villages.

Our government is proud to have partnered on this project, which is a significant step towards ensuring access to quality healthcare for our people. I extend my heartfelt thanks to KIMKIM, Inc and the Himalayan Eye project for their generous financial support, without which this project would not have been possible.

We also would heartily like to thank Action for Nepal for their excellent management of the project and express our gratitude to Ngima Dorje Sherpa for coordinating with the donor.

Action for Nepal has been a long-term development partner of our government in the Khumbu region, providing quality education and access to clean water. Their contributions have significantly benefited the children and people of our region. We are honored to have a partner like Action for Nepal in our community development efforts.

Thank you once again to everyone involved in making this vision a reality.

Mr. Mingma Chirri Sherpa

Dr. Abishek's Story: *Transformative Journey at Kharikhola Hospital*

Dr. Abishek, who has been the Chief Medical Officer at Kharikhola Hospital for the past two years, shared his excitement about the life-changing impact of the new solar power system. "With reliable solar power, we can fully utilize essential medical equipment like X-ray machines, ECG machines, and lab facilities. My team and I are absolutely thrilled that we can now deliver effective services to people coming to the hospital for treatments."

Dr. Abishek reflected on the challenges faced before the solar power installation: "Previously, due to the lack of electricity, we couldn't use the different medical machine on time. To use heavy machines like the X-ray, we had to request the local electricity power house to cut down the power to all the houses and redirect it to the hospital. This often meant waiting for up to two days. It was hard and frustrating. People would come to the hospital, walking for hours with big expectations, only to face delays in critical diagnostics. It used to hurt me and my team deeply when we couldn't provide the needed health services immediately."

The new 27.5 kilowatt solar power system has revolutionized hospital operations. "Now, with the environmental friendly solar power, everything has changed," Dr. Abishek says, "We have enough power to run all the medical equipments and provide the necessary services without delay round the clock to approximately 8,000 people in the region. The ability to respond immediately to medical needs has lifted a tremendous burden off our shoulders and is going to significantly improved the health outcomes for our community."

Dr. Abishek's passion for serving the community is evident. "As a medical doctor, I have always wanted to give my best service to the community. The limitations we faced due to inadequate power were disheartening. I feel deeply satisfied knowing that we can now meet the high expectations of the people who come to us for help. This progress is all possible because of the support from KIMKIM, Action for Nepal, and the local government."

In a heartfelt conclusion, Dr. Abishek expressed his gratitude: "I would like to extend my sincere gratitude to KIMKIM, Action for Nepal, and the local government for making this possible. Your support has not only empowered our hospital but also brought hope and improved health to the people of Kharikhola and the surrounding areas.

Thank you once again."



We believe **working together** in **Partnership** for the same cause makes a huge difference

We believe that working together in partnership towards a common cause can make a significant difference. We have been very fortunate to collaborate with KIMKIM, Inc, the Himalayan Eye. project and the local government to provide access to reliable solar energy for the Kharikhola Community Hospital.

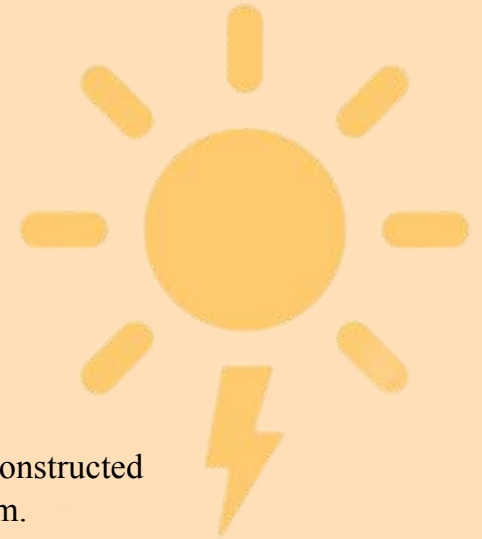
Through our collaboration with KIMKIM, Inc and other donors we have not only received essential financial support but also fostered a harmonious and strong working relationship.

As a result, in a short period of time, Action for Nepal, in collaboration with KIMKIM, Inc, the local government, and other donors, successfully installed a 27.5-kilowatt solar power system for Kharikhola Community Hospital.

KIMKIM, Inc is a pioneering travel agency that specializes in creating personalized travel experiences tailored to each client's unique preferences and needs. By connecting travelers with local experts, KIMKIM, Inc ensures an authentic, immersive, and seamless journey, whether you're exploring the ancient wonders of Nepal, trekking through Patagonia, or experiencing the vibrant culture of Japan. With a focus on quality, expertise, and local connections, KIMKIM, Inc transforms



Solar Project Sustainability



Technical Sustainability

Kharikhola Community Hospital Solar Power is technically we designed, well constructed project led by well trained staff who can operate and maintain the system.

Institutional Sustainability:

To keep the system operational and accessible, the hospital management committee have agreed to develop a set of procedures and rules for operation, and have capacities for management and accountability



Message from the Executive Director

We are thrilled to announce the successful installation of a 27.5-kilowatt solar power system at Kharikhola Community Hospital. This transformative project has enabled the hospital to provide 24/7 health services to more than 8,000 people in the Kharikhola community and nearby villages. For many years, the lack of reliable electricity hindered the hospital's ability to deliver quality healthcare to the region. Today, that challenge has been overcome.

The new solar power system has revolutionized the hospital's operations, ensuring continuous, reliable energy for essential medical services. Women, children, and people no longer have to wait for hours or sometimes days to receive medical services due to the lack of electricity. Additionally, solar power is environmentally friendly, reducing our carbon footprint and promoting sustainable energy practices in the region. This significant milestone would not have been possible without the generous funding support from KIMKIM, Inc and the Himalayan Eye project. We are honored to partner with the Company like KIMKIM, Inc that truly understands the importance of giving back to improve lives.

We also extend our heartfelt thanks to the local government and the hospital management committee for their outstanding partnership and collaboration. Together, we have created a sustainable solution that will have a lasting impact on the health and well-being of the Kharikhola community.

At Action for Nepal, we are deeply committed to improving the health of people in need. This achievement is a testament to our shared vision and dedication. We believe that every individual deserves access to quality healthcare, and we will continue to work tirelessly to make this a reality for all.

Thank you for your unwavering support and belief in our mission.



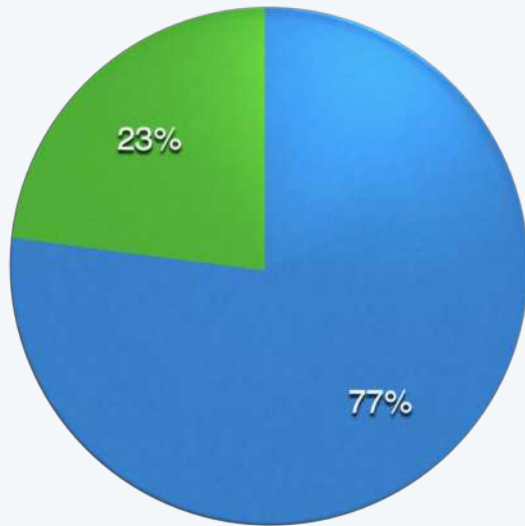
Financial Transparency

We believe that transparency is essential for honestly presenting our work and maintaining a trusting relationship with our partners and donors.

We have decided to publish the Kharikhola Community Hospital Solar Power Project report. This report highlights our achievements and details how the funds from our generous donors have been utilized.

Additionally, we firmly believe that every donor and organization has the right to know how their contributions are being spent.

● KIMKIM, Inc ● The Himalayan Eye Project



S.N	Name of Donors	Amount
1	KIMKIM, Inc	5,653,638.98
2	Himalayan Eye Project Switzerland	1,661,010.33
	Total	7,314,649.31
A.	Solar Panel and Batteries	6,136,280.00
1	Seraphim Mono PERC Solar PV Module 545Wp/24V (Total 27.25kWp)	1,450,000.00
3	Victron MPPT Smart Charge Controller 5.8KW/48V	593,750.00
4	Victron Bidirectional Pure Sine Wave Stackable Inverter 8kVA/48V stacked in 3 phase configuration (Total 24kVA/48V)	990,000.00
6	Lead Carbon (equivalent to lithium, battery) Tubular Battery 1000Ah@C10,2V with copper busbar	2,169,600.00
9	Weather Proof Junction Box with accessories and copper bus bar all complete	45,200.00 Text
10	DC Surge Protector	70,625.00
11	AC Surge Protector	42,375.00
12	Earthing set Earthing Electrode 2m length and 50mm diameter with backfill chemical for earthing and wire 16sq.mm all complete	144,075.00
16	Mounting Structure with Adhesive to install Solar PV module at the rooftop (as required)	47,460.00
17	Renergy Solar Inverter 5kVA/48V with inbuilt MPPT charge controller 4kW	220,000.00
18	VIC CCSS MPPT 150/60, Victron Venus GX Remote Monitoring System	47,000.00
	VIC Venus GX, Victron Smart MPPT Smart Charge Controller 3.4 KW/48 V	30,510.00
	HBL100A12VGEL, HBL Gel Tubar VRLA Battery 100 AH @C10 12 V	119,780.00
21	Installation Materials for Monastery Including Fire Extinguishers	20,905.00
22	PVM JKM Jinko Mono PERC Solar PV Module 550 Wp /24	145,000.00
B	Installation Cost	666,650.00
	Solar Equipment Transportation cost	185,727.00
	Technician Cost	42,000.00
	Printing / donor plaque Cost	18,923.00
	Project Coordinator Salary (Nigma Dorge Sherpa)	300,000.00
	Project Manager Cost	75,000.00
	Finance Officer Cost	45,000.00
C	Monitoring and Supervision	155,000.00
	SWC Registration cost	100,000.00
	Field visit and monitoring	30,000.00
	Project Audit Cost	25,000.00
D	Activity cost	6,957,930.00
	Administration Cost	
	5% of activity budget	347,896.50
	Total Project Cost	7,305,826.50
	Differences	8,822.81

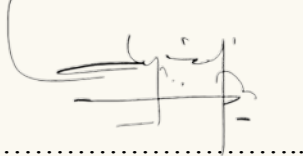
Thank You

On behalf of Action for Nepal, I would like to extend our heartfelt thanks to KIMKIM, Inc., local government, the Himalayan Eye project and all our partners who supported us in installing 27.5 Kilo Watt solar power at the Kharikhola Community Hospital.

Your kindness, generosity, and dedication have been instrumental in our achievements thus far. Without your support, this project would not have been possible.

We eagerly anticipate future collaborations and continued success together.

Warm regards and sincere thanks to all,



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Lakpa Thering Sherpa
Founder, CEO
Action for Nepal



Pictures of New Solar Project





Lab-room



Using Xray machine



USG machine



Emergency Room



Delivery room



New baby delivery



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