2025 Annual Report

Mission, Vision, and Values

As Diyalo Foundation, we envision that Nepalese youth are able to successfully develop solutions for problems in their local communities by having access to technological expertise and resources. Our mission is to empower Nepalese youth to become future leaders and support their local communities through technological development by connecting them with young experts and ecosystems worldwide. We strongly believe in equal access to opportunities, and work to make access to innovation and technology available for Nepalese communities. We work on this through our three locations in Nepal, the Netherlands, and the United States.

Diyalo follows a problem-solution oriented approach, using technology as an enabler to solve local needs in Nepal. Together with our partners, we contribute to the development of both global students and local communities in Nepal.

We dream of a world where youth anywhere have equal opportunity to solve the problems their communities face. In this world, knowledge, expertise, and resources are shared freely to solve the problems of our times. To create this world, we connect high-potential, young problem solvers in developing countries with the knowledge and expertise they need. We build international knowledge communities, take away barriers to entry, and support mutual understanding and collaboration across cultures.

Summarised: We enable universities, knowledge hubs, and high-tech companies to transfer knowledge and expertise towards high-potential tech initiatives that lack specific knowledge. We facilitate infrastructures for collaboration, a business & project approach, and funding.

Our Approach

We believe solutions need to be owned by their communities, which is reflected in our operating model.

1. We start by finding local needs defined by communities by looking at the problems that influence quality of life, health, and safety.
2. Our Diyalo Foundation Nepal team connects with local organizations (NGOs, government institutions, etc.) for technology-oriented projects. The DFNP evaluates the potential of the proposed project on several key criteria.
3. We find young representatives through these local partners. They are bright, young Nepalese people from within these communities.
4. We find the right expertise for the project within our network of knowledge partners in the US and Europe.
5. Our international technology partner network connects us to emerging young experts who work together to create and execute solutions.
6. We facilitate connection between our emerging technology experts and our Nepalese representatives to develop and implement technology solutions.

Board

Diyalo Foundation is based in three countries: Nepal, the Netherlands, and the United States. Each country is represented by a national board, and all boards are coordinated by the international council.

At the end of 2024, the board formation was as follows:

International Council
Binita Pandey
Dilip Shrestha
Marijn Götzenberger
Thom Smetsers
Aavash Thapa
Jord Drontman

Diyalo Foundation Nepal
Chairman - Sudip Lingthep
Secretary - Dipesh Sanjel
Treasurer - Arpan Dahal
Board Member - Ashim Dhakal
Board Member - Kiran Khadgi

Diyalo Foundation Netherlands
Chairman - Jord Drontmann
Secretary - Edwin Kllinkenberg
Treasurer - Thom Smetsers
Board Member - Marijn Götzenberger

Diyalo Foundation USA
Chairman - Jord Drontmann
Board Member - Adam Rouhana
Board Member - Andrew Schoen
Board Member - Matthew Michaelides
Board Member - Aavash Thapa

Projects in Nepal

Frugal Phototherapy Device for Neonatal Jaundice (2025 - Spring)

Partners: TU Delft, National Innovation Center (NIC) Nepal, and Diyalo Foundation.

The Challenge In Nepal, jaundice is a very common condition for newborns, but many rural areas do not have the right medical facilities to treat it. Because electricity is often unreliable and medical infrastructure is limited, babies are usually sent to distant city hospitals for treatment. This delay can lead to dangerously high levels of bilirubin, which can cause permanent brain damage or other serious health problems.

Our Solution As part of the "Frugal Warriors" team at the National Innovation Centre (NIC), an intern developed a simple and affordable phototherapy device specifically for low-resource settings. The device is designed to be effective even when power is inconsistent and is easy for nurses to clean and maintain. By using 3D rendering and physical prototyping, the team created a version that is portable and safe for small clinics.

Background The project began with deep research into existing medical standards and interviews with pediatricians and neonatal nurses. The development process involved creating several prototypes that included LED-based light therapy and electric heating mats to prevent hypothermia. Testing the device with real nurses via Zoom and in person was a vital part of the design process, ensuring that the interface was easy to use even in stressful hospital situations.

The Impact This project provides a way to increase the treatment of jaundice directly at local health posts, reducing the need to send babies to far-away hospitals. By making treatment available immediately, the device helps prevent permanent conditions like kernicterus and improves the survival rate of newborns in the most isolated regions of Nepal.

Drone Management System – DMS (2025 Fall)

Partners: Avans University of Applied Sciences, National Innovation Center (NIC) Nepal, and Diyalo Foundation.

The Challenge: Delivering medical supplies in Nepal is difficult due to poor infrastructure. While drones are a good solution, existing ground control software often requires advanced technical expertise, creating a barrier for non-expert government monitors and stakeholders.

Our Solution: Students developed a modular, web-based Drone Management System (DMS). The platform features an intuitive interface with role-based access control, allowing operators, technicians, and monitors to manage missions according to their specific needs.

Background: The system serves as a ground control station that communicates with flight controllers using the MAVLink protocol. It uses WebSockets for real-time telemetry and OpenStreetMap for live visualization of flight paths and drone vitals like battery levels.

Impact: By simplifying drone management, the DMS makes logistics accessible to those without advanced technical training. This user-friendly tool helps strengthen medical supply chains and improves the management of drone fleets in Nepal.

Dual-Flywheel Seed Launcher (2025 Fall)

Partners: Avans University of Applied Sciences, Robotics Association of Nepal, and Diyalo Foundation.

The Challenge: Reforestation efforts were previously limited because drones had to fly at a low, risky altitude of 10 meters to ensure seeds hit the target. Additionally, mechanisms often jammed when trying to handle irregular, handmade seeds of varying sizes.

Our Solution: A high-performance dual-flywheel seed launcher was designed to fire native seeds of different sizes (15–50 mm). The system is powerful enough to shoot from a safer altitude of 30 meters while ensuring the seeds penetrate the soil at least 2 cm deep.

Background: Unpredictable weather makes planting difficult. The launcher uses high-speed flywheels, with one mounted on hinged, spring-tensioned arms to compensate for variations in seed shape. Mathematical models were used to calculate the ideal motor power for successful soil impact.

Impact: This high-performance system greatly increases planting speed and success rates. It allows a wider variety of plant species to be used in reforestation, helping to restore vegetation on steep mountain slopes more effectively.

WASH Water Safety IOT Application (2025 Fall)

Partners: NHL Stenden University of Applied Sciences, Phutung Research Institute (PRI), and Diyalo Foundation.

The Challenge: Although PRI had already developed high-tech hardware for detecting water contamination, there was no easy way for stakeholders like government officials, farmers, or suppliers to access and understand the raw diagnostic data.

Our Solution: An integrated software platform was created, consisting of a web application and an Android mobile app. The application pulls data from water testing modules and visualizes contamination levels and turbidity in a comprehensive digital dashboard.

Background: The app allows users to search for public water testing devices by serial number or location and "favorite" them for constant monitoring. It also displays historical safety graphs to help users see how water quality changes over time.

Impact: By providing stakeholders with a clear overview of water safety, the project allows for minimal intrusion into people's lives while maximizing awareness. It helps users pinpoint areas of contamination rapidly to take corrective action.

Solar Cooking Stove (2025 Fall)

Partners: Eindhoven University of Technology (TU/e), National Innovation Center (NIC) Nepal, Stichting Maya, Snow View Secondary School, and Diyalo Foundation.

The Challenge: Over 50% of Nepal's population still cooks on firewood. The smoke from indoor wood fires is a major driver of chronic obstructive pulmonary disease, one of the leading causes of death in Nepal, and falls hardest on women, who traditionally do the cooking. It also fuels deforestation and forces families and institutions to spend hours collecting wood. The original Insulated Solar Electric Cooker (ISEC) could only handle seven liters at a time, which is not enough to feed a school cafeteria.

Our Solution: A student team from TU/e developed ISEC 2.0, a scaled-up 10-liter insulated solar-powered pressure cooker designed for institutional use at Snow View Secondary School in Hemja, Nepal. Switching to a pressure-cooker design reduces boiling time and improves energy efficiency. Alongside the hardware, the team built a MATLAB simulation to identify the most cost-effective combination of solar panels and battery storage for the system under typical Nepalese conditions.

Background: The thermal model accounts for heat loss through the steel, rockwool and aluminium layers of the pot wall, and calculates the power required for three cooking cycles per day at the 1,400 m altitude of Kathmandu. The PV and battery models were run against measured solar irradiance data across the year to find a configuration that stays reliable even in the worst-case month. The analysis showed that four 200 W solar panels paired with a 200 Ah battery offer the best balance between cost and year-round reliability at around €550. In lab testing, boiling time dropped from 87 minutes to 65 minutes.

Impact: ISEC 2.0 lets scools and other institutional kitchens cook in bulk without wood smoke, reducing exposure to indoor air pollution and freeing up the hours otherwise spent collecting firewood. By running on free solar energy in a familiar pressure-cooker format, it lowers fuel costs and protects respiratory health while staying compatible with the way Nepalese kitchens already work. Next steps include field testing with solar panels in Nepal, increasing capacity, improving the heating element, and integrating the battery into the system.

Financial Statement 2025

Profit and loss statement				
	2022	2023	2024	2025
Income	€88.165,00	€12.800,84	€368,81	€6.973,04
Donations	€88.165,00	€12.800,84	€368,81	€11,91
Interest				€90,46
Miscaleneous				€6.870,67
Expenses	**€5.690,12**	**€86.295,12**	**€209,25**	**€4.454,85**
Staff costs	€4.743,34	€6.183,33		€1.000
Bank costs	€247,33	€574,66	€209,25	€263,85
Overhead	€645,10	€125,00		
Project cost	€0,00	€79.412,13		€3.191
Partner training	€54,35	€0,00	€0,00	
Result	**€82.474,88**	**-€73.494,289**	**€159,56**	**€2.518**

Balance Sheet				
	2022	2023	2024	2025
Assets				
Liquid assets	€79433,17	€5.941,20	€6283,49	€8.760,69
Accounts receivable	€1.350,00	€0,00	€0,00	
Total Assets	**€80.783,17**	**€5.941,20**	**€6283,49**	**€8.760,69**
Liabilities				
Accounts Payable	€746,00	€0,00	€0,00	
Project reservations	€76.000,00	€0,00	€0,00	
Reserves	€4.037.17	€5941.2	€6283,49	€8.760,69
Total Liabilities	**€80.783,17**	**€5941.2**	**€6283,49**	**€8.760,69**
Net assets & liabilities	**€0,00**	**€0,00**	**€0,00**	**€0,00**

2022 - 2023 shows the consolidated profit and loss statement of Diyal Foundation Nepal and Diyalo Foundation Netherlands. 2024, 2025 shows only Diyalo Foundation Netherlands.

Explanation for income

This year, we received just few donations through the donation form on our website. We will need to spend more time in the next year(s) to increase this number and sustain our financials.

Explanation for expenses

We had to pay €1.000 in advance payments to the team in Nepal as funds were held at the bank in Nepal. This will be reserved from the project budget and spent after the project is done. This cost covered the expenses for our team in Nepal, which consists of three part-time members dedicated to project management, training, and administration. Bank costs include fees for maintaining our bank account and transferring funds to Nepal. Project cost is the contribution we paid to a shared project in Nepal in collaboration with Wilde Ganzen and Stichting Nepal where we're building towards sustainable solutions.

Explanation for changes

This year, for project expenses in Nepal, we primarily relied on contributions from Wilde Ganzen and Stichting Nepal. This fuelled our projects in Nepal and ensured we did not need to spend as much as in previous years.

Future Funding Options

We continue to explore new revenue streams, now settling on offering structured internships and thesis placements that generate a fee. This has the potential to provide more consistent funding while still advancing our mission.

Lessons Learned & Activities Summed Up

- **Building Global Partnerships:** We continued expanding alliances with universities and experts, ensuring diverse input for our projects.
- **Ensuring Proper Communication:** Regular updates and clear accountability kept our multi-continent collaborations running smoothly, though occasional challenges highlighted the need for persistent follow-up.
- **Holding Partners Accountable:** Our project managers worked hard to ensure tasks were completed and deadlines met, sometimes navigating tense situations.
- **Bridging Cultures:** We coordinated international student teams and local innovators, fostering rich cultural exchange that fuels more creative, relevant solutions.

Conclusion & Outlook

Whether it's delivering medical supplies to remote clinics by drone or designing water-testing devices that anyone can use, our model continues to yield real change in Nepal.

Our focus for the coming year will be:

- Testing a model for generating steady income
- Expanding Partnerships
- Looking further into the future and exploring new and more ambitious ways we can make an impact

Thank you to everyone: staff, students, donors, and volunteers who made this year of progress possible. We look forward to continuing our mission of empowering local innovators, improving lives, and driving sustainable development where it's needed most.