



ZERO WASTE SCHOOL AND CLEAN WATER MODEL TO CREATE A HEALTHIER EDUCATION ENVIRONMENT FOR HIGHLAND STUDENTS OF VIET NAM

April 2025

The “Zero Waste School and Clean Water Model” empowered students at Phieng Luong Primary and Secondary Ethnic Semi-Boarding School (Phieng Luong School) to build resilience to environmental, personal and community health challenges. It improved waste management, access to clean water and environmental knowledge. Implemented by the Center for Supporting Green Development (GreenHub) and sponsored by DOW Chemical Vietnam Co., Ltd., the project bolstered environmental protection, safe waste management practices, and strengthened students’ learning environment. Mural painting and the replacement of the school gate was also supported by Global Giving.

PRE-PROJECT SITUATION

40%

of students didn't recognize different waste types.*



Students burning rubbish generated at Phieng Luong School, Bac Me District, Ha Giang Province, 2024.

49%

of students had suffered from illnesses caused by exposure to waste or contaminated water.*

*According to the KAP (Knowledge – Attitude – Practice) survey by GreenHub in June 2024 and the School Health Check Report No. 72/BC-BV dated June 26, 2024, from Bac Me District General Hospital.

PROJECT IMPACT

1

Adoption of co-designed clean water and Zero Waste learning materials and visual teaching toolkits

GreenHub collaborated with Phieng Luong School teachers to co-design visual toolkits and learning materials on clean water and Zero Waste, including a consultation workshop with 30 teachers, experts, and education officials.



Materials and visual toolkits were designed to reflect local culture, language and needs, enabling students to access knowledge in an engaging way.



28 teachers attended a Training of Trainers session, enabling them to effectively apply materials in both core and extracurricular activities.



2

Construction of educational playground

A creative competition was promoted via nearly 100 digital platforms including websites, social media pages and groups, attracting 430+ views and 40 official registrations.



19 qualified entries were submitted, with one First Prize, one Second Prize, two Third Prizes, and 15 Green Idea Awards. Winning designs will be used for future school playgrounds.



The school collaborated with teachers and volunteers to build the 50m² educational playground based on the winning design.



The playground combines play with educational content on waste reduction, water conservation, and environmental protection.



The playground improves student physical and mental health while creatively raising awareness of environmental protection, encouraging students to learn and play.



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Painting of 143m² educational murals at the main school and one campus



The murals creatively illustrated key knowledge on Zero Waste habits, clean water, and nature protection.

Implemented by seven national volunteers and five local youth union members, the murals create an inspiring school atmosphere.

4

Improvement of clean water system and infrastructure

The water supply system at the main school (Phieng Day) was repaired and upgraded for stable clean water access.

The entrance gate at the satellite campus (Phieng Luong) was replaced to enhance safety.



5

Hands-on waste training and extracurricular activities



Two waste audits were conducted for 40 students, who were able to apply knowledge and skills learnt in the classroom, equipping them with experience to separate and safely dispose of waste at school and home.



Seven extracurricular sessions focused on waste sorting, water saving, and personal hygiene, using interactive and age-appropriate methods.



"I liked the clean water activities and the mural paintings the most. Now, if I see someone littering in the water source, I will stop them and explain why it's wrong."

-Hoang Thao Huong
Grade Six student of
Phieng Luong school



"As a local partner in this initiative, I highly value the activities at the school, which have empowered and inspired students to care for the environment. We hope to continue partnering with the project in future community programs such as plastic waste collection, awareness raising, and infrastructure support."

-Mr. Vang Mi Lenh
Secretary of the Phieng Luong
Commune Youth Union



6

Community engagement through large-scale clean-up campaign

The clean-up attracted over 500 participants, including students, teachers, youth union members, and local residents.

Enhanced community awareness and improved surrounding school environment.



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Commitment to environmental education at handover ceremony for learning tools and materials



More than 400 participants attended the ceremony, including local authorities, teachers, students, and the media.



Stakeholders reaffirmed their commitment to integrating environmental education and tools into teaching and school activities.



"Thanks to the initiative, we've integrated the content into school meetings and lesson plans to help students better understand waste treatment and environmental protection."

-Mr. Pham To Minh Son
Teacher of Phieng Luong school



LESSONS LEARNT



Early engagement and consultation with local stakeholders ensured the project addressed community needs and secured community investment in the project.



Integrating local culture and experiential learning methods made environmental knowledge accessible and engaging for ethnic minority students.



Teachers play a central role in sustaining outcomes. Empowering and training them was crucial for long-term integration into the curriculum.



Community and student participation in tool development fostered ownership and environmental responsibility both in and out of school.



Combining infrastructure upgrades with environmental education improved learning conditions, student's waste and water habits.

"What I find most meaningful is the way this initiative raised awareness among teachers, students, and the community about protecting the environment and using clean water wisely. It also contributes to improving living conditions and preventing environmental risks."



-Mr. Ma Van Toe
Vice Chairman of Bac Me District People's Committee

"As a project implementer, we feel deeply grateful that our initiative has not only been realized with the support and coordination of local authorities and mass organizations at all levels, but also with the enthusiastic participation of a wide network of volunteers from communities across the country."

-Ms. Nguyen Bao Han
GreenHub Project Coordinator



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