

Turning Schools into Agents of Change for Waste Management

Winrock International

Enhancing livelihood of Rural Farmers in Nepal



Since engaging with the SWITCH-Asia project 'PPP for 4Gs' about one year ago, students at Green Valley Academy have started segregating waste at source.

"Our attitude towards burning of waste has changed after receiving orientation from the PPP for 4Gs project on the severe impact of burning and benefits of proper waste management. Small steps are significant to obtain greater results"

-Mr. Rajen Michael Gurung

Established 20 years ago, the private school is regarded as one of the best schools in Ilam, a province in Nepal's Eastern Development Region. At present Green Valley Academy has 1250 students from the first to the tenth grade. The school has heaps and heaps of paper waste, generated by frequent paper-based exams, and significant amount of plastic waste, produced from its dormitory.

"Due to little cognizance on waste management practices, the school used to burn paper and plastic wastes. The intensity of its consequences was never realized and an alternative was never explored", says Mr. Gurung, Founder and Principal of Green Valley Academy. "Regular complaints from neighbourhood and even calls, letters from municipality were common because of burning paper and plastic inside school", he explains.

Green Valley Academy is one of the **25 local schools, 14 of them public,**

mobilized through a behavioural change campaign by the SWITCH-Asia project "PPP for 4Gs" (2014-2018), funded by the European Union and implemented by Winrock International in cooperation with the Namsaling Community Development Center. Since March 2016, the project has been conducting several behavioural change campaigns targeting schools, raising awareness among some 6000 students and their teachers about the adverse effects of waste burning and improved waste management practices.

The project provided the schools with bins with pictorial illustrations and labels to **promote source segregation into degradable and non-degradable waste.**



Dustbin with pictorial labels distributed by project schools

Soon after the project interventions, Mr. Gurung became fully aware of the magnitude of proper waste disposal, and its health and environment benefits. **"Information on waste segregation at source and proper waste disposal mechanisms was an eye opener that resulted in behaviour change. After rigorous brainstorming, we designed innovative, cost-effective and sustainable segregation bins using sacks"**, he says.



Mr. Rajen Michael Gurung, Principal at Green Valley Academy stands with pride along his students and sack

While other schools in Ilam use small, readymade plastic bins, Green Valley Academy turned the sacks that were otherwise wasted after emptying rice, pulses and other eateries from the dormitory and the canteen into bins for collecting plastic and paper wastes. By reutilizing the sacks, the Academy saves on costs and provides bins that are less fragile and more durable. Importantly, they are easier to clean, which is a crucial factor in a city, such as Ilam, that is affected by extreme water scarcity. The school has placed bins in prime locations such as corridors, and playground. The paper and plastic are segregated at source, transported to and dumped in a landfill site. However, as of August, the organic waste is being used for composting through an organic waste converter, supplied by the project.

"This is the first time that sample composting is done in Ilam municipality through Public Private Partnership", proudly announces Project Manager Mr. Badri Nath Baral.

In conjunction with this, 'PPP for 4Gs' is also working to strengthen the capacity of recycling enterprises, such as Trishuli Kapas Udh-yog, a cloth-recycling company. The SWITCH-Asia project is training SMEs in the waste sector to produce goods out of paper and plastic waste. It is also linking them with schools in an effort to incentivize reutilization of waste and support recycling enterprises.

As the project is now starting to link schools with waste management SMEs, Mr. Gurung is positive about contributing to this collaboration by providing the waste generated from the school to these SMEs and help them sustain their business.

To ensure knowledge transfer to younger students, the project conducted several demonstrations among secondary level students, explaining labelling and segregating waste into degradable and non-degradable.

Ms. Simran Gautam, an eight grade student at Green Valley Academy, used to be bullied by her neighbours because her school was known to burn paper and plastic waste generated in school. **"Ever since last year, nobody has witnessed a single sight of burning of wastes inside my school because our waste disposal took a major shift after the project intervention"**, she tells enthusiastically.



Student Simran Gautam is now a convinced promoter of waste segregation and management.

Ms. Gautam is an active participant in the orientation classes on waste management to junior students. "I want the concept of solid waste management to reach rural communities and inform the people on health and environment hazards of improper waste disposal.

Winrock International is a nonprofit organization that works with people in the United States and around the world to empower the disadvantaged, increase economic opportunity, and sustain natural resources.



Nepal Office

1103/68 Devkota Sadak | Baneshwor | P.O. Box: 1312 | Kathmandu | T 977.1.4467087 F 977.1.4476109
W: www.winrock.org.np | E: winrocknepal@winrock.org

Principal Offices

2101 Riverfront Drive | Little Rock, AR 72202-1748 | T 501.280.3000 F 501.280.3090
2121 Crystal Drive, Suite 500 | Arlington, VA 22202-3706 | T 703.302.6500 F 703.302.6512

The behavioural change is the only way to collectively attain our dream of cleaner and greener Ilam", she explains smilingly.

Green Valley Academy's student prefect Ms. Sudikshya Bohara, at grade ten, keenly instructs her juniors to change their habit of random littering. But her knowledge transfer does not stop on the school ground: she persuaded her family to take waste management seriously and start practising segregation at source. **Her family now produces compost from their food waste.**

That of Ms. Bohara is not an isolated case. "I am happy to see the behavioural and attitudinal change in my students", declares Mr. Gurung, who was initially unaware that, **after learning it at school, some students used to burn their waste at home.** "It was a harsh realization", he sighs. "But I can proudly say that **after the project's intervention my students now practise waste segregation and disposal at home**, which has a multiplier effect in the society".

The principal used to think that collecting and disposing waste in landfills would be expensive. The orientation given by SWITCH-Asia project, waste collection schedule it distributed and the coordination established with waste collection system of the municipality made him realise that it would hardly cost him anything to collect and dispose waste in an organized manner. This change supported his vision of making students responsible and accountable towards schools, their homes and society as a whole. In addition, it positively impacted on the reputation of the school that is now popular for its proper waste management practice along with its strong academic history.

A waste collection vehicle operated by the Ilam Municipality and a second one, supplied by the project in July 2017, run daily with illustrations of degradable and non-degradable wastes and defined schedule of collection. The project along with the private sector has distributed to both households and schools waste collection schedules of the vehicle to encourage source segregation and proper waste collection. "I have clearly instructed my non-teaching staff to follow the waste collection schedule. I have even assigned kitchen staff to provide food waste to the school staff with cattle", explains Mr. Gurung.



The waste collecting vehicle operated by the Ilam Municipality displays information produced by the SWITCH-Asia project about waste segregation.

For its active uptake of project's recommendations and knowledge transfer to junior students and to households, Green Valley Academy serves as a model school, instilling social change and improved environmental practices. **"There are no complaints since a year, instead parents appreciate our innovative sack dustbin and our way of conditioning students to be studious yet carry values of a responsible citizen"**, proudly announces Mr. Gurung.

It is through the active engagement and proactive response of local stakeholders such as Green Valley Academy that measures of change initiated by a project can be sustained and expanded in the long run.

"Every action has a ripple effect, and the behavioural change campaign adopted by PPP for 4Gs targeting school has changed the perception of teachers, students and parents to take waste management seriously. Not only students but the community has transformed their habit of waste management"

- Mr. Badri Nath Baral

Winrock International is a nonprofit organization that works with people in the United States and around the world to empower the disadvantaged, increase economic opportunity, and sustain natural resources.



Nepal Office

1103/68 Devkota Sadak | Baneshwor | P.O. Box: 1312 | Kathmandu | T 977.1.4467087 F 977.1.4476109
W: www.winrock.org.np | E: winrocknepal@winrock.org

Principal Offices

2101 Riverfront Drive | Little Rock, AR 72202-1748 | T 501.280.3000 F 501.280.3090
2121 Crystal Drive, Suite 500 | Arlington, VA 22202-3706 | T 703.302.6500 F 703.302.6512