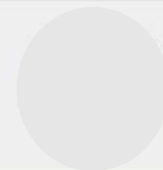


Reimagining Effective Partnership for Tackling River Pollution and Plastic Waste



PLEASE Project
Plastic Free Rivers and Seas for South Asia

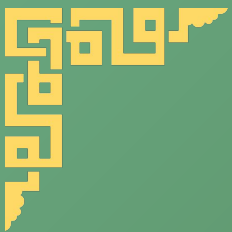


Lead Implementing Organization:
Bhutan Ecological Society (BES)



Co-implementing Organization:
Gross International Nature (GIN)





Partner Institutions

| Dorden Tashi Thang
| Buddhist University, Dordena

| College for Astrology,
| Pangrizampa

| Dechencholing Higher
| Secondary School

| Desuup Skilling Kitchen (DSP), Taba

| Gyalpozhing College of
| Information & Technology (GCIT)

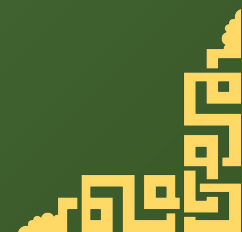
| Kuzuchen Middle
| Secondary School

| Royal Body Guard (RBG)

| Taba Lower
| Secondary School

| Hejo Cremation Ground

| Institute for Advanced
| Vajrayana Studies, Tango



Administrative Support

Thimphu City Corporation

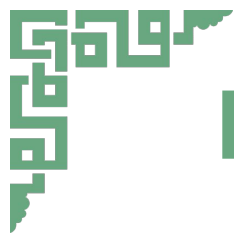


Department of Environment and Climate Change



Thimphu District Administration





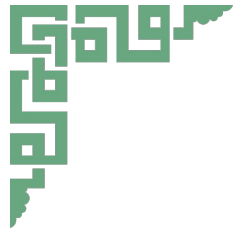
Household-Level Plastic Waste Management (HPWM) Advocacy Toolkit

The Household-Level Plastic Waste Management (HPWM) Advocacy Toolkit, designed by Gross International Nature (GIN), is a thorough guide for advocates focused on educating communities and institutions about efficient plastic waste management practices at home.

Central to the success of the HPWM system is the engagement of women and youth. Therefore, this toolkit focuses on equipping them with the knowledge of plastic waste identification, segregation, and the mechanisms and technologies involved in effective plastic waste management.

This toolkit, **tailored specifically for the communities of Thimphu Thromde and Kawang County**, emphasizes the importance of behavioral change at the household level.



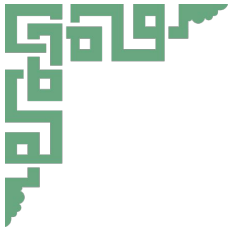


Surveying Plastic Waste

Understanding the Landscape for Action

A Plastic Waste Characterization Survey, conducted by the project, was an extensive effort aimed at comprehensively understanding the landscape of plastic waste in Thimphu City Corporation and Kawang County. Over the course of **5 days**, trained surveyors engaged in face-to-face interviews with local residents to gather crucial data on various aspects of plastic waste, including its types, quantities, sources, and recycling culture. The survey's primary objective was to provide valuable insights into the patterns of plastic waste generation and management practices within these communities, with the ultimate goal of informing and improving waste management strategies. In total, **833 surveys** were conducted across multiple locations, including **Taba, Jungshina, Pamtsho, Royal Body Guard Cantonment, and Kawang County**, underscoring the comprehensive nature and scope of this initiative. Through meticulous data collection and analysis, the survey shall contribute towards more effective and sustainable plastic waste management efforts in the surveyed areas, aligning with the PLEASE Project's commitment to prevent plastic river pollution & plastic waste management.





Advocacy Goals

1. Identification & Segregation of plastic waste at households & institutions

- Educate women & youth on the importance and methods of identifying & segregating plastic waste for proper disposal.

2. Equip households & institutions with plastic waste segregation infrastructure

- Provide 3 plastic waste bins at each household/ institutional block/unit.
- Provide appropriately sized plastic waste storage facilities in the household clusters & institutions.

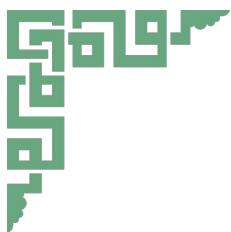
3. Incentivize segregated plastic waste

- Exploring and introducing incentive or reward programs to motivate households and institutions to properly segregate plastic waste.

4. Introduce a system to record plastic waste data

- Advocate the systems for recording and tracking data related to plastic waste generation, segregation, and disposal at both household and institutional levels.





How to identify Household Plastic waste?

Based on the Plastic resin Identification code

CODE	 PET	 HDPE	 PVC	 LDPE	 PP	 PS	 O
PLASTIC TYPE	Polyethylene Terephthalate	High-Density Polyethylene	Polyvinyl Chloride	Low-Density Polyethylene	Polypropylene	Polystyrene	Other Plastics
DESCRIPTION	Commonly used for water bottles.	Used for shampoo, oil bottles & bottle caps.	Found in plumbing pipes	Sauce Bottles & Bread Plastic bags	Food Containers, Buckets & Jugs	Disposable plates & cups.	Any other plastic outside the 6 types. Baby bottles, CDs, waiwai, candy covers
EXAMPLE							
RECYCLABLE?							

In this table, you will find categories of **7 main types of plastic**.

The Plastic Resin Identification Code, is a symbol indicating the type of plastic used to make the product and can be commonly found on the bottom of plastic products,

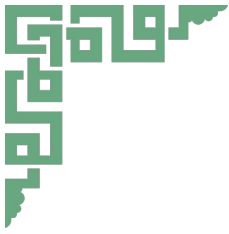


How to segregate your Plastic waste ?

To effectively segregate plastic waste, each institution will receive sets of plastic waste bins, tailored to the population size and distribution of settlements. Within each set, there will be **3 bins** designated for **4 different types of plastic waste**, as illustrated in the image below.



Institutions have been requested to **determine the number and placement of bins**, ensuring effective waste disposal.



Segregation Made Simple: A Hand Gesture for Sorting Plastic

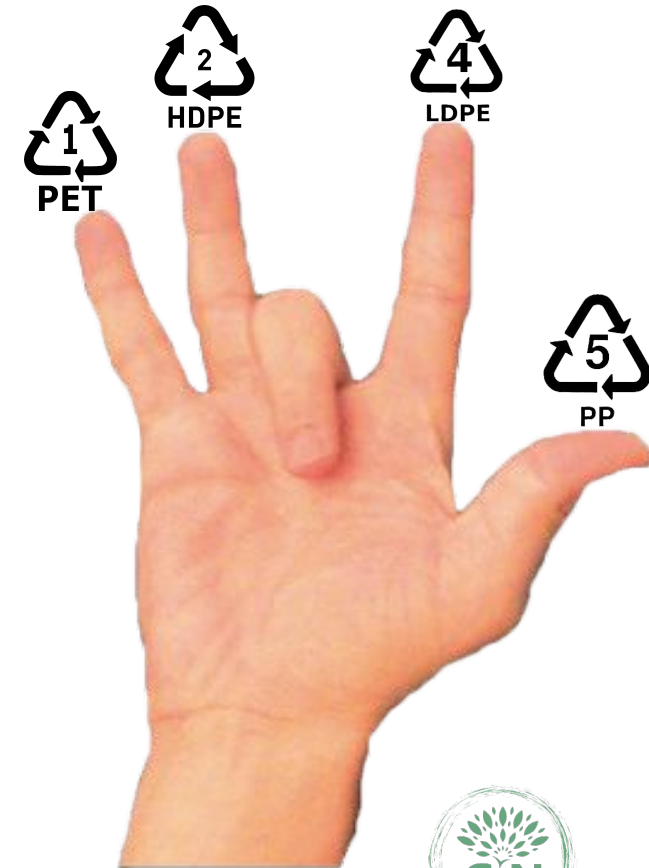


Option A

To remember which plastic waste to segregate for recycling, focus on plastics labeled with the numbers **1, 2, 4, and 5**.

A helpful mnemonic involves making a hand gesture: start with all fingers up and then **lower only the middle finger for the plastic No 3 which cannot be recycled**. This gesture serves as a reminder that plastics labeled 1, 2, 4, and 5 should be segregated and collected for recycling. By associating the hand sign with these specific plastic numbers, it becomes easier to recall and implement proper waste segregation practices.

OR



Option B



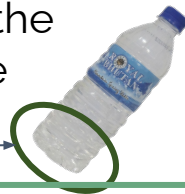
Which Plastic Waste Belongs in which Bin?

1. PET Waste

Determining which bin to place **PET plastic waste** in is straightforward. Look for items such as water, soda, fizzy drinks, juice & oil bottles.

They are usually clear and have a rigid texture. PET plastics are commonly used for beverage containers and are often see-through.

Find this logo under/ in the bottom half of the bottle



Which Plastic Waste Belongs in Which Bin?

2. HDPE & LDPE Waste

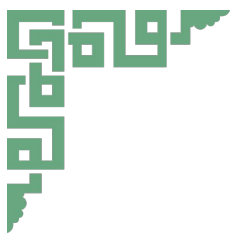
HDPE plastics, commonly found in items like oil jars, shampoo bottles, detergent jars and bottle caps, they have a sturdy and opaque texture.

This symbol is also used for HDPE. Remember 2 is always HDPE



LDPE is used in containers, Squeeze bottles & wash bottles,

Among all recyclable plastics, LDPE is expected to be the least amount of waste collected.



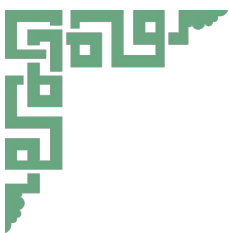
Which Plastic Waste Belongs in Which Bin?

3. PP

PP plastics are commonly used for **durable containers** and often have a **sturdy texture**.

Look for items such as **yogurt containers, food containers and toys**. They typically feel tough and rigid to the touch.





Plastic Waste Storage Facility



This bin can be utilized for other types of waste that do not fit into the first three categories. The Collection of waste in this bin should be done as usual.

All 11 target institutions have chosen communal spots to build a waste storage facility. Here, they'll collect sorted plastic waste when bins are full and for the garbage truck to pick up from. Each compartment will hold up to 660 liters waste.



Plastic Waste Collection, Weighing, and Record-Keeping

Collection

Once the waste storage facility is installed and plastic waste collection and segregation begin, GIN will oversee waste collection. GIN will initially test the schedule based on the institution's waste generation assumptions. Once a fixed schedule is established, it will ensure efficient waste collection and prevent storage facilities from overflowing.



Weighing

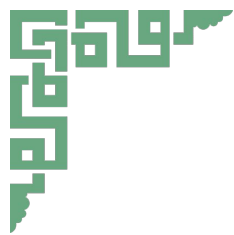
During waste collection, each type of waste will be weighed and recorded for the plastic waste inventory report in the presence of institution focal points.



Record-keeping

The data collected on plastic waste will be utilized for the plastic waste inventory report. Note that this data will be collected to maintain transparency and efficiently distribute incentives accordingly.





Where will your segregated plastic waste go?

Recycling Hub in Bjimena Industrial Estate

A state-of-the-art **Recycling Hub** will be established to process segregated plastic waste. This hub is designed to function as a knowledge center, actively involving women and youth, empowering, employing and fostering innovation in waste recycling within the country. The hub will collaborate with plastic experts and recycling agencies both domestically and internationally to advance the circular economy in Bhutan.

Currently, GIN has forged a partnership with **Precious Plastic JYC Recycling, Tashi Beverages & Clean Bhutan** to enhance the Recycling Hub's efforts.



What will be made from your waste?



1. UR (Useful Recycled) Bricks

- 100% recycled plastic
- Easily assemble and disassemble
- One storied temporary structures
- Eco-friendly alternative

Build temporary
sheds, toilets and
walls with UR bricks

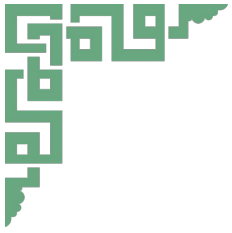


What will be made from your waste?

2. PET Pellet / rPET (Recycled PET)

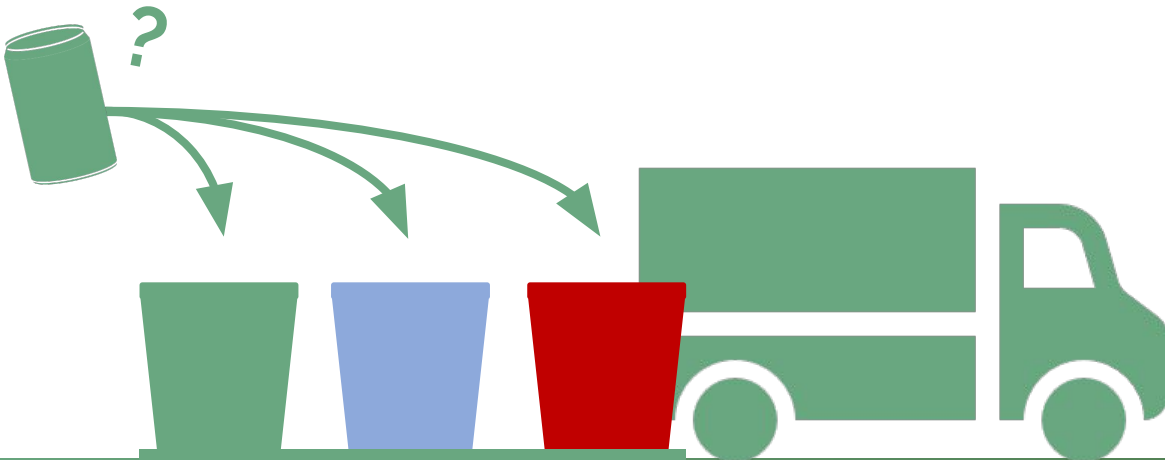
- PET (polyethylene terephthalate) is the most produced type of plastic globally.
- Due to its widespread use, PET accounts for a significant portion of plastic waste worldwide.
- Currently Bhutan imports 100% of virgin PET Pellets to make bottles.
- rPET pellets will be a sustainable alternative.
- Promote circular economy (waste from one industry is used as a resource for another)

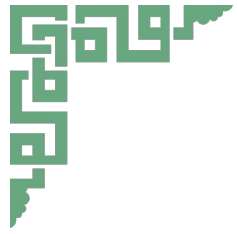




Small Actions, Big Impact

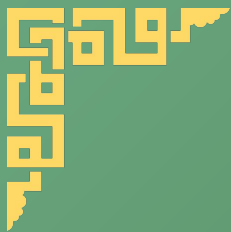
"Your daily actions matter!" By simply sorting your plastic waste at home, you contribute to a larger movement towards reducing plastic pollution and preserving natural resources."





Learn more about the Project





Content :



Design by Troy Wilkinson

