

# COLLECTIVE ACTION

by Tourism Partners around Protected Areas  
for sustainable Solid Waste Management

with



around the Corbett Landscape

# Who We Are

Waste Warriors is a non-profit organisation and a registered society with a mission to provide sustainable Solid Waste Management solutions to improve our Environment, Health and Quality of life.



We do this through:

1. **Direct Action**
2. **Awareness-Raising**
3. **School Education**
4. **Community Empowerment**
5. **Policy Advocacy**
6. **Government & CSR Partnerships**

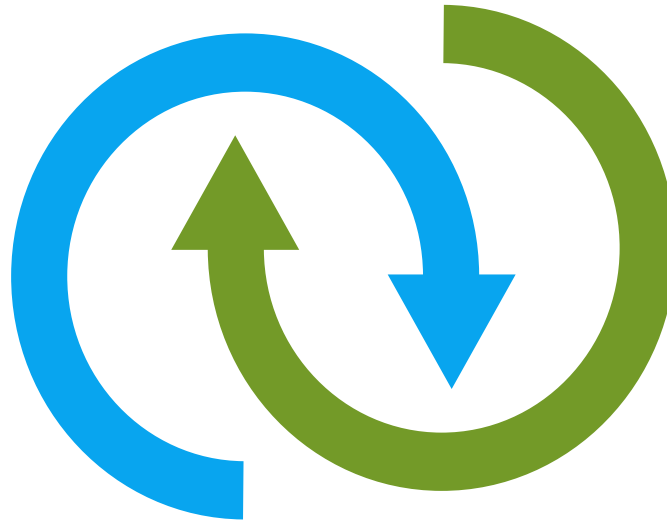
# Waste Warriors Projects



# 4,04,193 kg

**Amount of Solid Waste collected and sustainably processed  
by the Waste Warriors Corbett team  
from October 2013 to March 2019**

Till March 2019, our team has collected, manually segregated, transported, stored & disposed approx. 10,000 kg of waste per month from over 40 locations including 2900 members, with homes, shops & schools.



Our work not only helps communities around the Corbett Landscape but also the lodging providers and over 5,00,000 tourists who visit the Tiger Reserve annually.

***Needless to say, the scores of silent  
inhabitants of Corbett Tiger Reserve  
will be forever grateful.***



# Why Protected Areas?





(Image:  
Otara Foundation)



**Because they NEED your attention!**





**Animals are dying from eating plastic.**



*(Image: Manoj Sharma, 2010)*



**Even the rarely sighted Ibisbill  
has plastic around it!**





**Tourist vehicles and park jeeps being washed in forest streams are regular sightings.**





**Piles of dumped waste burning along forest and village peripheries are disturbingly familiar sights.**





India now generates a whopping **1.69 lakh tonnes (that's 169 million kgs)** of municipal solid waste, **every single day!**

Around 70% is collected, but **less than 25% is actually processed.** (Source PIB 2016)

(Image: Ricky Patel)



**What will be left of wildlife and tourism  
if we continue like this?**



# JOURNEY OF WASTE IN INDIA



Household dustbins  
with mixed waste



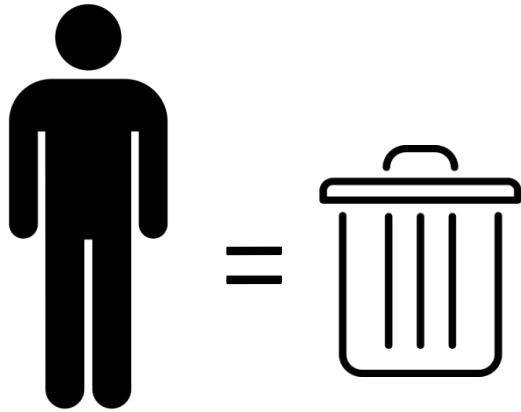
Collection of  
mixed waste



Segregation of  
recyclables from  
mixed waste



Dumping of  
remaining waste in  
an unscientific  
dumping ground



**Rural  
Solid Waste  
PER PERSON**

**0.36 Kg  
to 0.5 Kg**

**Out of 1.21 billion <sup>(2011)</sup> Indians,  
83.3 million **(68.8%)** live in rural  
areas, generating:**



**0.3 to 0.4 Million Tonnes EVERY DAY**



**3.6 to 4.8 Million Tonnes EVERY YEAR**

**At current rates, rural India will need 100 acres of  
landfill space, 1 metre high, EVERY DAY!  
That's about 12% of Corbett Tiger Reserve,  
EACH YEAR!**



# Waste Generation in Hotels



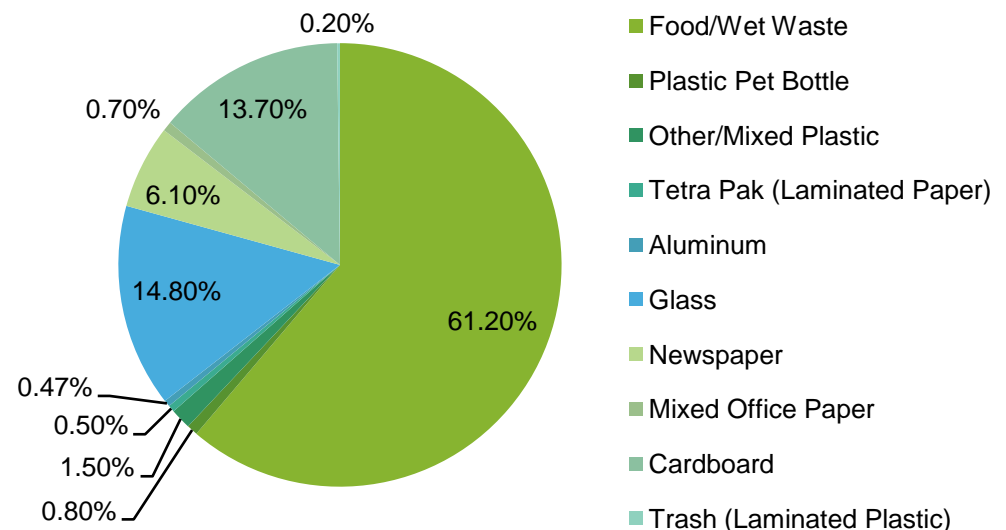
A hotel guest can produce 1 kilogram of waste a day. With thousands of guests in Corbett's hotels, that accumulates to thousands of tonnes of waste annually.

## Waste in the Hospitality Industry:

(by weight %)

Food/Wet Waste: 61.2%  
 Glass: 14.8%  
 Cardboard: 13.7%  
 Newspaper: 6.1%  
 Other/Mixed Plastic: 1.5%  
 Plastic PET Bottles: 0.8%  
 Mixed Office Paper: 0.7%  
 Tetra Pak: 0.5%  
 Aluminum: 0.47%  
 Non-recyclables: 0.2%  
 (laminated plastic)

## Characterisation of waste



# Effects of Poor Solid Waste Management



***Health Hazards***

***Environment  
Pollution***



***Space  
Constraints***



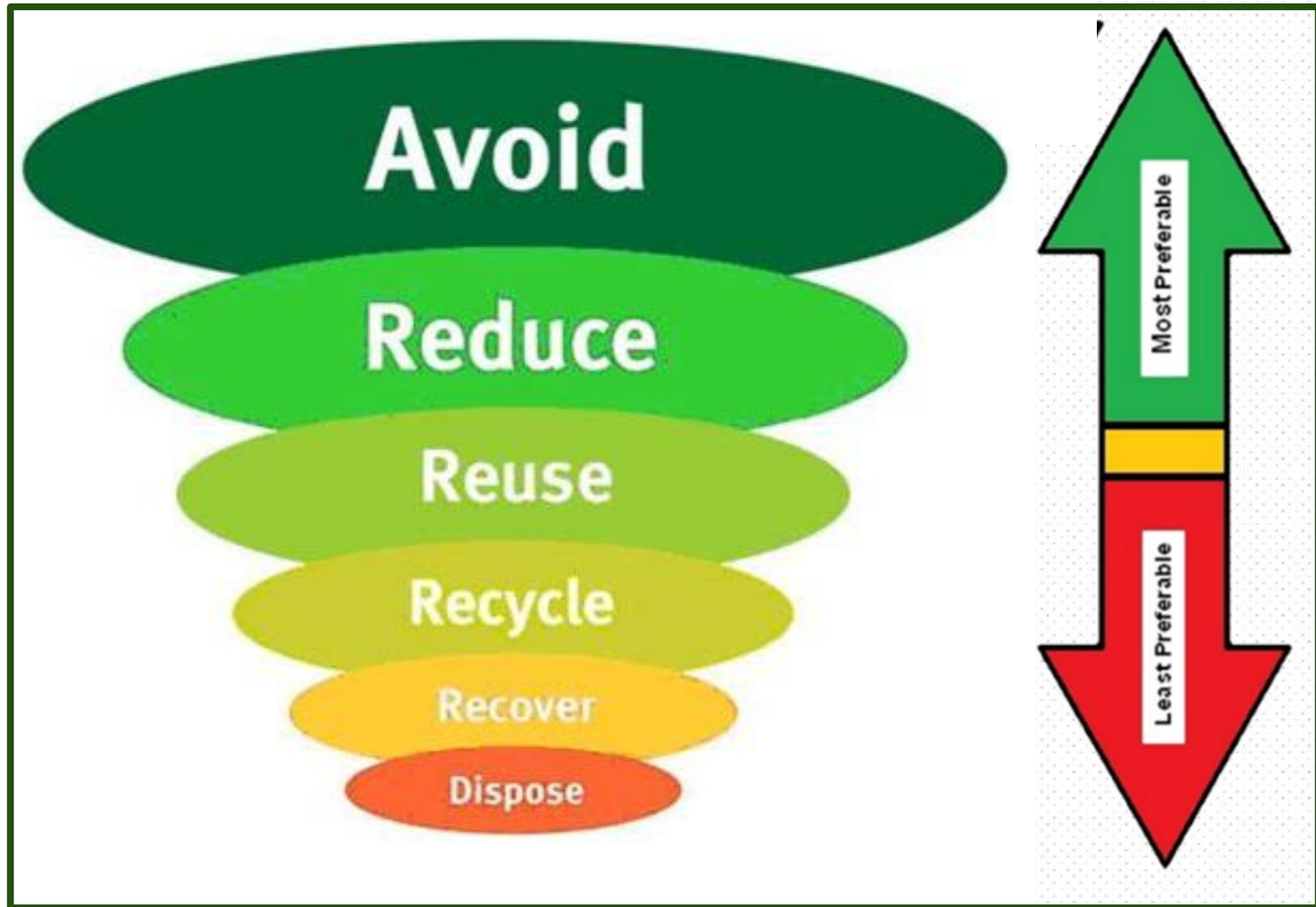


# *What can you do?*



1. **Manage your own waste properly.** This will also reduce your carbon footprint and make your business more profitable.
2. **Give back to the community and manage the cleanliness of public areas, 10m around you.** INVOLVE the community through cleanups and awareness-raising sessions. Work together and introduce low-cost techniques to create micro processing centres.
3. **Spread awareness** by talking about your experience and encourage others to follow your example. Sensitise your staff, your guests, local authorities, visiting drivers and other travellers.

# Waste Hierarchy





# USE sustainable REUSABLE products



**AVOID cheaper single-use disposable plastics**

# SEGREGATE solid waste AT PRIMARY SOURCE to maximize recycling



Organic, Horticulture  
& Food Waste



Reusable &  
Saleable Waste



Sanitary & dirty /  
unusable recyclables

USE LABELLED DUSTBINS



# Food and Horticulture Waste

Fresh grass clipping and garden trimmings			Dry grass and leaves
Leftover food, vegetable and fruit peels			Dry twigs, branches, straw and sawdust
Manure (chicken, horse, rabbit or cow)			Hair clumps and nails
Fish & meat bones Egg shells			Food stained paper or napkins
Coffee grounds, filters and tea bags			Floor sweepings and dust

# Dry Recyclable Waste

Plastic Bottles and Containers			Cardboard, Thermocol and Styrofoam
Newspapers			Aluminium, Tin and Metals
Fused Bulbs, Tube Lights, Batteries			Old/torn Clothes
Broken Electronics			Broken Glass and Glass Bottles
Chips, Chocolate Wrappers & Tetra Pak			Cigarette Butts, Tyres and Rubber
			Plastic Bags and Milk Packets



# Dry Non-recyclable Waste



Used Tissue Paper or Cloth with sanitary waste, blood, puss, snot or any other human discard.



Dirty, old or unusable recyclables



Medical Waste



Soiled Diapers/Pads or any other type of sanitary waste

# What To Do With Dry Waste?



**\*Reuse at Home**

**\*Sell to Recycle**

**\*Up-cycle**



**\*Scientific Landfill**

**\*Approved Incineration**



# What To Do With Wet Waste?



**Composting Bin**



**Khamba Composter**



Put in waste

Cover with Remix daily



**Enclosed Composting**



**Container or Drum Composting**

# 5 MAIN EXPENSE HEADS for SOLID WASTE MANAGEMENT

- 1. AWARENESS RAISING (IEC):** includes awareness resource materials for like leaflets, signboards, posters, books, props, etc.
- 2. MANPOWER:** includes wages for managers, trainers, awareness staff, administration, waste handlers, drivers, etc.
- 3. EQUIPMENT:** includes costs of gloves, bags, bins, labels, litter-pickers, record-keeping stationery, uniforms, shoes, composting materials, etc.
- 4. TRANSPORT:** includes cost of travel & conveyance for workers to/from work locations, transport of waste to stores, to scrap dealers, or to the dumping ground, etc.
- 5. STORAGE:** includes costs of store rooms, space for segregation, composting, office space, etc.

# How Long Does Trash Last



**Banana Peel**  
**3 weeks**



**Apple Core**  
**2 months**



**Aluminium  
Cans**  
**80-200 years**



**Tetra Pak**  
**500 years**



**Glass Bottles**  
**1000+ years**



**Newspaper**  
**1-2 months**



**Cigarette  
Butts**  
**1-5 years**



**Plastic  
Bottles**  
**450 years**



**Baby  
Diapers**  
**500 years**



**Thermocol**  
**Never**



# The Best Time To Start Is Now!

Waste Management  
Yesterday.....



Waste Management Today.....



# CONTACT US FOR MORE INFORMATION



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