

**WITHOUT**™

*Sugarfree*

# Impact

## Report

2024



Dear Reader,

We are calling our impact reports “sugar-free” because we want to stay away from the 100-page sugar-coated Ramayana-esque impact reports we see out there.

This is our first formal impact report, so we’ll cover our work from our birth (~2021) to now-ish (2024).

We are nowhere close to where we want to be with the impact we want to create, but we are trying.

And there are many things we can do better.

So, if you think we’ve been unfair, inaccurate, ineffectual, or fluffy, please help us be better (email me at [anish@without.live](mailto:anish@without.live)).

Thanks for following along.

*- Anish Malpani  
Founder*





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*Multi-Layered  
Plastic Packaging  
(MLP)*

The

# Problems

*we are trying to solve*

## 1 Low recycling rates of plastic waste, especially flexibles

Certain plastic waste like packets of chips (multi-layered plastic) considered “impossible” to recycle.



**9%-18%**

of **all plastic waste** is recycled

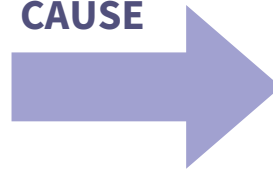
But recycling rates for all types of plastics are not the same. For example, PET bottles have a recycling rate of 50-80% in India, approximately 50% in Europe, and around 30% in the US.



**<1%**

of **flexible plastic waste** is recycled

**CAUSE**



**~80% of leakage into oceans**



**KEEP AN EYE OUT FOR TEXTILE WASTE:** In the last 15 years, clothing production has approximately doubled. Globally, 92 million tonnes of textile waste are produced annually, and just 12% of the material used for clothing ends up being recycled. ~60% of all textile waste is synthetic (or plastic).

The

# Problems

*we are trying to solve*

## 2 Abysmal conditions for waste-workers / informal-workers

~1.5 - 4 million waste-pickers in India who live multidimensionally poor lives. Globally, the estimate is ~15 - 20 million.

- **Informally employed** - no contract, no protective gear, no health insurance, while earning only daily wages based on the type of waste they encounter.
- **Life expectancy can be as low as 39 years of age** (versus 69 for an average Indian) because of the dangerous conditions (fumes, fires, dirt) in which they work, and that too, generally without protective equipment.
- **Generally of low caste, belong to minority groups, or are migrants.** They earn somewhere between **Rs 3,000 (US\$ 35) and Rs 12,000 (US\$ 150)** a month and live in urban areas that have a higher cost of living on average.
- **It's a generational occupation** - once you're a waste picker, there's a high probability your child will also become a waste picker.
- Separately, ~700 million people globally are classified as living in **extreme or moderate poverty while being employed** (generally informally).



# About Us

Without™ is a social enterprise that is reimagining waste and poverty in India and the world.

For starters, we transform “impossible-to-recycle” waste into high-quality products and materials with a lower carbon footprint, while empowering the informal economy out of poverty.

## Mission

**To increase the value of waste ethically;** by using technology to convert it into high-quality, scalable and planet-positive resources, while deeply empowering and formalising the informal economy that drives the industry, especially waste-pickers.

## Vision

**A thriving world in which poverty doesn't exist;** where every human has access to education, healthcare, decent living standards, equal opportunity and most importantly, dignity while positively contributing to the well-being of our planet.

## Guiding Principles

### GOOD ECONOMICS

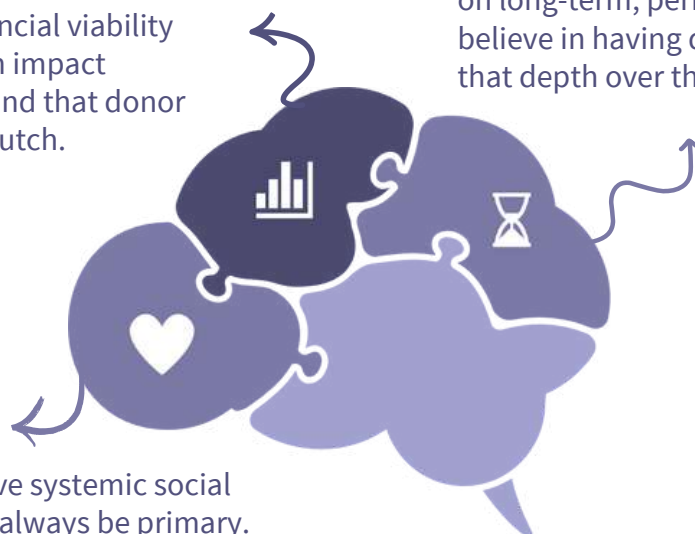
We believe that the financial viability and independence of an impact initiative is important, and that donor dependency can be a crutch.

### IMPACT FIRST

We are doing this to solve systemic social problems, and that will always be primary. We are not doing this to make money.

### LONG-TERM OUTLOOK

We believe in creating solutions that focus on long-term, permanent progress. We believe in having deep impact and scaling that depth over the long run.



# How We Define Impact

- We believe in **deep, permanent, positive** change, and scaling that depth over time. Permanent, deep impact **compounds**.
- We believe that sustainability should consider both the **planet** and **people** and the fact that they are **interconnected**.
- We believe that **quick, cheap interventions** that prioritize **shallow impact** on **large numbers** is a **poor use of resources** that doesn't change much.



Our optimizers featured at Lakme Fashion Week 2024. Sandhya Tai even spoke in Marathi at the press conference after our show (a world's first).

For example, this is how we look at and define impact on **PEOPLE**

Deep Impact



Deep, permanent change, takes time.

OUR FOCUS

**Lives Changed**

**Example:** # of people permanently graduated out of multi-dimensional poverty.



Some impact, but generally doesn't lead to permanent change.

**Lives Impacted**

Examples:

- # of people provided with prescription eyeglasses
- # of immunizations provided
- # of people received a 1-day training program



Most often a waste of time and money, generally stretching to hit numbers doesn't lead to any meaningful change. There are exceptions to this like in the case of a humanitarian emergency / crisis.

**Lives Touched**

Examples:

- # of free meals provided
- # of people in the family of people who received 1-day training
- # of kgs of whole wheat fortified
- # of people in the neighborhood from which waste was collected

Low / Apparent Impact

## Important Notes

- A lot of the above is our perspective, and we could be wrong. If you feel so, please reach out, always looking to learn and improve our thinking.
- The goal is to not negate impact but to hold ourselves as a society to a higher, more accurate standard.

# Our Impact On People



## LIVES FUNDAMENTALLY CHANGED OF

# 14

former multi-dimensionally poor waste-workers/informal workers

### What does this mean?

AVERAGE INCOME INCREASE

## 2.5x

AVERAGE TIME OF INCOME INCREASE

## 12 months

NUMBER OF MONTHS SALARY PAID ON TIME

## 201 times

### “Soft” Impact

- **Upskilled out of informal labour** with unmeasured amounts of vocational training including computer skills, machinery usage and professional skills.
- Provided **health insurance** and how to use it.
- **Preventive health tests** and informal doctor consults.
- **Eye tests and prescription eyeglasses** if needed.
- **Flexible work hours and weekends off** with 20 days paid leave + 12 days paid sick leave.
- **Formal employment agreements** with Hindi translations.
- **ESOPs** in the company.
- **Community support** if there are domestic issues.

THIS EQUATED TO:

## Rs 24.9 Lakhs

in additional income (vs what they used to make)



**Fun thought experiment:** With this amount alone we could have provided over 25k free meals, over 8k free prescription eyewear to the poor or provided a free short-term training program for 300+ folks. The numbers seem big, but that probably wouldn't change the status quo. We prefer to focus on depth.

0% LOANS PROVIDED (INFORMALLY)

## 5

loans totaling Rs 2.1 lakhs

# OF SPECIAL EVENTS ATTENDED

## 6

including Lakme Fashion Week, bowling + arcade, adventure sports and a movie night.



Rani & Jayshri with their agreements.



*This has a compounding effect, creating lasting change that creates virtuous cycles.*

### Jayashri's Story



Jayashri is the first informal worker who joined us in January 2022. Her husband committed suicide when their daughter was 3 years old. Since then, she has been staying with her mother while trying to get her daughter to school. She started as a cleaner and now works full-time at Without, helping with the shredding and washing of our waste. Her income has increased 5x from Rs 4,500/month to Rs 22,500/month. She can't really read and write English or Hindi, but we've managed to get her a zero-balance bank account where she has been now receiving on-time monthly paychecks for 35 months. Over the course of her tenure here, she has earned an additional Rs 2.76 Lakhs in income that she wouldn't have earned in her previous job. We have also opened Fixed Deposits for her for which one has even matured and gotten auto-reinvested. She now has health insurance and was recently diagnosed with Tuberculosis for which she took 2-3 months of paid and unpaid leave (once her paid leave was exhausted), after which she has come back to work. In the middle, there were some domestic issues with her uncle showing force, during which her colleagues were by her side.

## OTHER SUPPLEMENTARY IMPACT

*"Lives Impacted"*

	<b>SCHOLARSHIPS GIVEN INCENTIVIZING CHILDREN OF WASTEPICKERS TO STAY IN SCHOOL</b>
<b>JOBS CREATED</b>	<b>29</b>
<b>30</b>	
	<b>ADDITIONAL INCOME MULTIPLE TO WASTEPICKER-OWNED SCRAPSHOP</b>
<b>ALL LIVES IMPACTED</b>	<b>3x</b>
<b>175</b>	



*We pay 3x the going rate for the MLP waste we buy from one of the wastepicker collectives at Kashtakari Panchayat. This collective is run by 12-14 women wastepickers.*

*This is nice and all, but the "lives changed" is what we think matters more.*

# Our Impact On The Planet



KGS OF  
“UNRECYCLABLE”  
MLP RECYCLED  
ETHICALLY

3063  
kgs

# OF PIECES OF MLP  
RECYCLED ETHICALLY

765,000+

(assuming <sup>pieces</sup> 1 packet = ~4 gms)

*This is really not a lot, but let's break down the what, the how and the future implications.*

## What

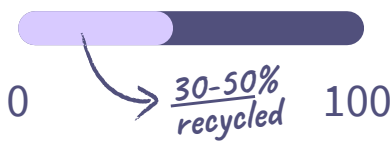
- We recycle post-consumer metalised multi-layered plastic packaging - “MLP” (like packets of chips, chocolate wrappers, Tetrapak, etc).
- Globally, **less than 1%** of this type of flexible packaging is recycled.



MLP



PET



ALL PLASTICS



## How

- The little MLP that is currently recycled is **mainly burnt** for energy, pyrolyzed or mixed with concrete/cement/sand to make bricks/roads/
- We chemo-mechanically **separate and extract materials** from MLP producing recycled materials that are **more recyclable**, of higher quality than traditional recycled material, toxin-free and have a lower carbon footprint than virgin plastic.
- We also conducted **recyclability tests** on our recycled material and even after **10 heat cycles**, it didn't lose properties.



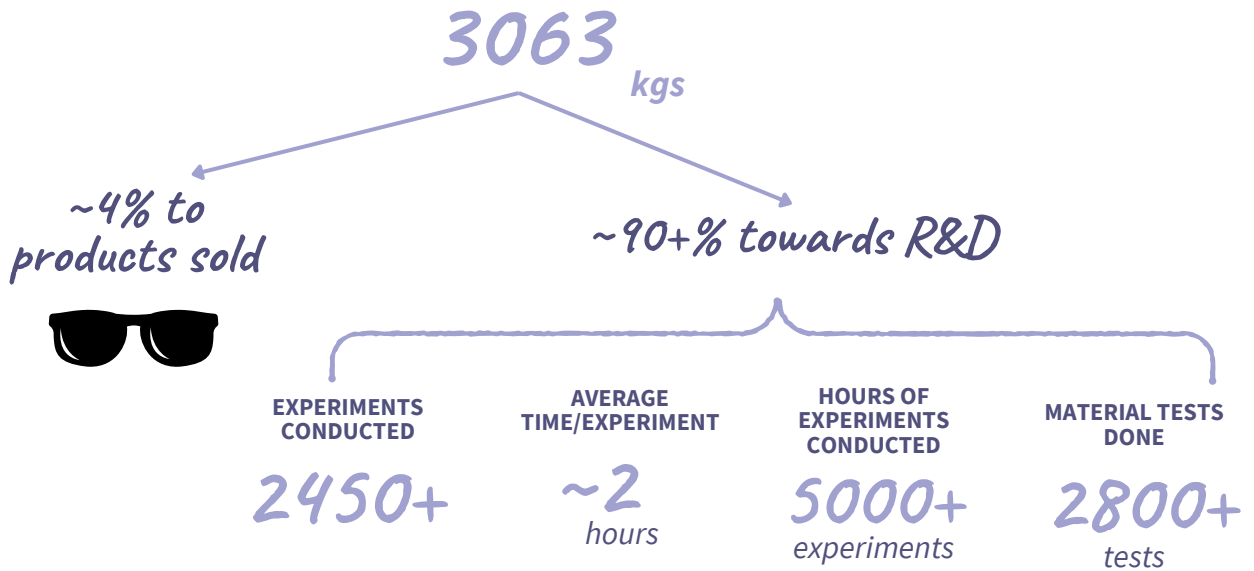
## HIGH ADDITIONALITY

*This is important because for every 100 pieces of MLP produced, less than 1 is recycled, whereas for every 100 PET bottles produced, 30-50 are already recycled, so almost half of any new recycling initiatives in PET is mainly pocket-shifting.*

Our research aims to extend the life of this material. And we do a lot of it!



**KGS OF “UNRECYCLABLE” MLP RECYCLED ETHICALLY**



**Life Cycle Analysis (LCA)**

We conducted an independent LCA of our lab-scale process, along with a projected scenario for our mini-demonstration plant:

Impact Category	MLP Polyolefin Pellets @ Pilot Scale (50kg/day)	Average of Virgin Plastic (PP, PE, PET) at Full Commercial Scale	% Variance vs Virgin Plastic
Total CO2 Impact (Climate Change - Long + Short Term) (kg CO2 eq)	-2.11	4.87	-143.4%
Fossil and nuclear energy use (MJ deprived)	-125	80.30	-256.3%
Water scarcity (m3 world-eq)	1.10	0.44	147.7%
Mineral resources use (kg deprived)	-0.0238	0.03	-174.0%

At an un-optimized, non-commercial scale, our technology is already at a better place, but we still have a ways to go to improve overall energy footprint and water usage.



**Future Prospects**

Our patented technology does a **higher quality of recycling**, creating more recyclable materials from materials that couldn't be recycled. So yes, so far, we haven't recycled much, but when we scale, a better solution will scale.

## Where We Can Do

# Better

+ our mistakes

### *In Our Impact On People*

- We are impacting small numbers right now, however deep the impact is.
- For scalability, we have to validate our financial model so we can sustain this impact. We see a path, but we need to walk it.
- In 2023, we failed to handle a delicate situation well with an informal worker who used to work with us. Our over-involvement in trying to rectify the situation actually resulted in us losing our battle over her. Sometimes, intention isn't enough. We wrote more about it in one of our founder's letters.

### *In Our Impact On The Planet*

- We are still recycling only tiny amounts in our lab (6 kgs/day). We are currently in the process of building our pilot plant which will test this technology at scale.
- Our process uses more water than virgin plastic, but we currently recycle this water in our lab. We are working on reducing the amount of water we need per kg of waste recycled. Also, in our pilot plant that is under construction, we are building a water recycling plant that can recycle the water used at least 10 times.
- We are working on optimizing our economics, both demand and supply and will validate that using our pilot plant in the next 12 months.
- Early on, we were shredding the MLP into flakes that were way too small, leading to more microplastics than we would have liked.
- We've currently found applications for 70% of the material we extract from MLP. There are two other components (20% of TPA and 10% of aromatic organics) that we are still developing circular applications for.

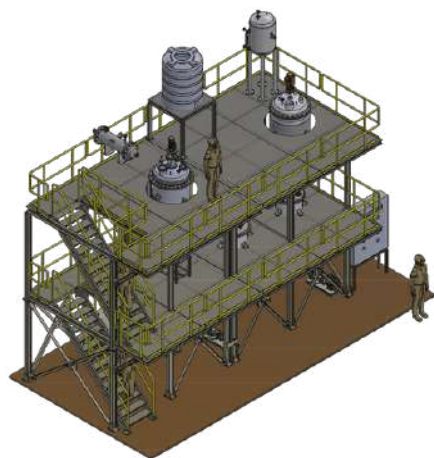
### *In How We Run Things Generally*

- We don't do a great job recycling all the waste we generate in our lab/facility. We are actively working on rectifying that.
- We have had more attrition in our core team than we would have liked, and while we have a great young, diverse team, we need more experienced leaders in the organization.

*We will never be perfect, but we strive for it. If there's anything you think we can do better, please email our founder directly.*

# What's Next

## First-Of-A-Kind (FOAK) Plastic Recycling Demo Plant



We are currently building probably the world's first **post-consumer all-plastics + textiles recycling plant** that genuinely **recycles all plastics** in a segregated fashion, **without burning anything**.

This won't be a large plant - it'll process 500kgs to 1 ton of all plastic waste daily, out of which MLP will be 50-100kgs/day.

The goal is to prove our technology at a scale that can eventually scale to commercial levels. Little by little.

## Ashaya Impact Foundation



This year (2025) we will be starting a parallel non-profit to further supplement and amplify our impact. The functions we foresee for this include a formalization of upskilling programs for informal workers, educational programs for the less fortunate (computer literacy, basic life skills – insurance, banking, English), conditional and unconditional cash transfers as needed, working with folks like [Rang De](#) for low-interest loans for the less fortunate and unlock CSR opportunities where possible.

We believe legal entities are just tools that are a part of building our impact. Even for our private limited (“for-profit”), we have amended our Memorandum of Association (MOA) to include clauses that legally bind us to our impact (you can read them [here at the end](#)).

Our goal is to build a transparent organizational structure that puts impact at its helm while bringing in the best of all worlds.

## Our Long Term Utopia



However hard this might seem, decentralization is what's essential for solving the waste problem holistically.

# Our Supporters

The work we do is complex, and we would struggle without our support system of investors, advisors, mentors and organizations. So these aren't just logos and names that fill a page, these are supporters/recognition we are genuinely grateful for.



**Our advisors, angel investors and mentors:** Dr K.R. Malpani, Pradeep Malpani, Ambarish Malpani, Dr Ajay Malpani, Rohan Malpani, Francois Saugier, Abha Malpani, Jyoti Krishna, Dia Mirza, Dr Maria Nigam, Aaron Gomes, Abhinav Suraiya, Sahna Reddy, Govind Chandrasekhar, Aditya Bhat, Akshay Soni, Dr Vaibhav Gaikwad, Kaushik Rajan, Preeta Sukhthankar, Shailendra Singh, Harendra Kapur, Dr Jitendra Samdani, Dr Dibyangana Parbat, Shishir Malhotra, Jayant Pai.

## Some of the media coverage we've gotten:



[Our website](#) has more details and links on all of our supporters, and our team members.

Thank you to everyone, we are just getting started.

