Jeevatva

Bringing Waste into the Cycle of Use

Jeevatva aims at reducing open landfills in North India by bringing waste back into the cycle of use through composting and recycling.

SDGs IMPACTED

THE CHALLENGE

That is a mountain of garbage taller than the Taj Mahal.

Due to the lack of a proper waste management system, many Indian cities have massive open dumping yards, often in the middle of residential areas.

- 1654 major open landfills
- Dumps are often set on fire leading to toxic air.
- Runoff contaminates water bodies.
- Breeds diseases and infections.
- 4 million ragpickers working in subhuman conditions.
- Area under landfills rapidly increasing due to rising population.
THE SOLUTION

These waste-mountains are made up of years of unsegregated domestic waste being dumped. However, the reality of this waste is:

- 50% of all waste is biodegradable, if segregated
- 37.5% of all waste is recyclable, if segregated

That means almost 90% of all waste has the potential to be brought back into the cycle of use.

Jeevatva is a waste management service that aims at creating an end-to-end sustainable cycle of waste through segregation, composting and recycling.

**Step 1  Segregation at Source**

The first thing we do, when a household signs up, is to help them learn segregation into separate bins. So, the waste is segregated at source and the first major hurdle has been crossed.

**Step 2  Biodegradable Waste**

We collect the biodegradable waste, process it for two months, turn it into organic compost and deliver back to you, thus completing a full cycle.

**Step 3  Non-biodegradable Waste**

We further segregate the non-biodegradable waste into various recyclable components at our recycling facility. This waste turns into items of daily use, including paper, cloth and furniture. The cloth and metal extracted can be used as raw materials for other industries.
IMPLEMENTATION

Self-sustaining: Jeevatva can sustain itself financially by selling recycled products, and organic manure. (For reference, the recycling market in India is worth $53 billion) All expenses for human resources and infrastructure can be covered by the revenue from the sales. All it needs is an initial funding of $5000 to jump start.

First mover: No similar company exists in the north Indian market. Waste is currently dealt with solely by municipalities, which do not satisfy citizens with their services.

Pilot Project conducted in the Summer of 2022

- Set up a small facility in Kota (Rajasthan)
- Team of 6
- 37 households signed up
- Dealing with biodegradable waste
- 10 Kgs of Organic Manure produced for each day of waste collection

Timeline: Our next goal is to expand operations to 100 households, and begin recycling non-biodegradables by the Summer of 2023. Over subsequent years, the same project can be further expanded to cover the entire city of Kota, and replicated in other cities with the same framework.

Partnerships: The venture may benefit from a future partnership with municipalities, so as to expand market size to entire cities at once.

Obstacles: The biggest obstacle is non-cooperation by households. We overcome this by providing them incentives like free organic manure and recycled products.

References
- https://royalsocietypublishing.org/doi/10.1098/rsos.160764