

Circular Impact Report 2021



Bringing together nature, people and technology to enable maximum resource recovery





Our executive staffs at SZW Materials Recovery Facility, Jigani, Bangalore

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Creating Value for Our Planet and All People

For us, waste management is synonymous with resource recovery.

More than half of the world's total GDP amounting to around US \$44 trillion is moderately or highly dependent on nature and its services.¹ Recovery of resources enables giving back and makes us accountable to the materials we receive from nature.

Our business model looks to prevent waste from reaching a landfill. Our landfill diversion rate is more than 96%. The larger focus however is on resource recovery which is made possible by bringing together Nature, People and Technology. Nature acts as a catalyst to compost all organic waste, process it into bio-CNG or recycle materials. People play a critical role in operations and maintenance and finally technology brings our processes to scale and efficiency.

As a social enterprise, our thriving business model puts environmental and social impact ahead of profits. This makes us truly a 21st century company because this is what it will take to build a circular economy.

Our core values



Resilience | Integrity | Innovation | Impact | Team

1. New Nature Economy Report, World Economic Forum, 2020

Learning from Nature where Nothing is Waste

Wilma Rodrigues

Founder and CEO, Saahas Zero Waste

Without any doubt, we have to acknowledge that we are in the age of the Anthropocene where humans through their destructive activities have impacted the ecology of the planet.

In the 21st century, business leaders are called upon to transition delivery models so that they now integrate with a circular economy. At ground level this translates into companies being accountable more to people and the planet rather than Return of Investment to their shareholders. It is good to see that a push is being initiated by investors themselves who now value companies with a good track record on ESG (Environment, Social, Governance) parameters.



At Saahas Zero Waste, environmental and social impact stays at the centre of our purpose. Each of our service lines looks to deliver 96% landfill diversion and maximum resource recovery from all the waste that we receive. This is the least we can do as we look to emulate nature where nothing is waste. Through our services, we process organic waste and the end products in the form of compost and bio CNG goes back to enrich our soils, grow more food, anchor carbon, and also create energy to cook our food.

Likewise, with the recyclable waste such as paper, plastic, metal and glass, we always look for end destinations which close the loop in the best way possible. Waste paper comes back as recycled stationery products. There are about 10 different grades of plastic which we work with. Rigid plastic bottles made from HDPE and PP go through closed loop recycling where they come back as bottles. PET is recycled into T-shirts and other products. There are however plastic waste including flexible plastic grades like LDPE and MLP (multi layered plastics) where recycling is extremely challenging or is absent altogether so co-processing is the only alternative. It's the same with glass which is an excellent material that can be reused and also have a good closed loop¹ recycling. However the infrastructure on the ground continues to be inadequate and we face enormous difficulties in getting glass recycled formally.

In all these years, industry has just not invested in designing for closed loop systems. We hope that this will quickly change as industry adopts the norms of circular economy.

On a positive note we would like to acknowledge with deep gratitude our customers and partners who have supported us in being the first movers to bring environmental and social change to this sector.

1. Closing the loop refers to recycling and reusing products without material loss. This reduces the need for virgin raw materials.

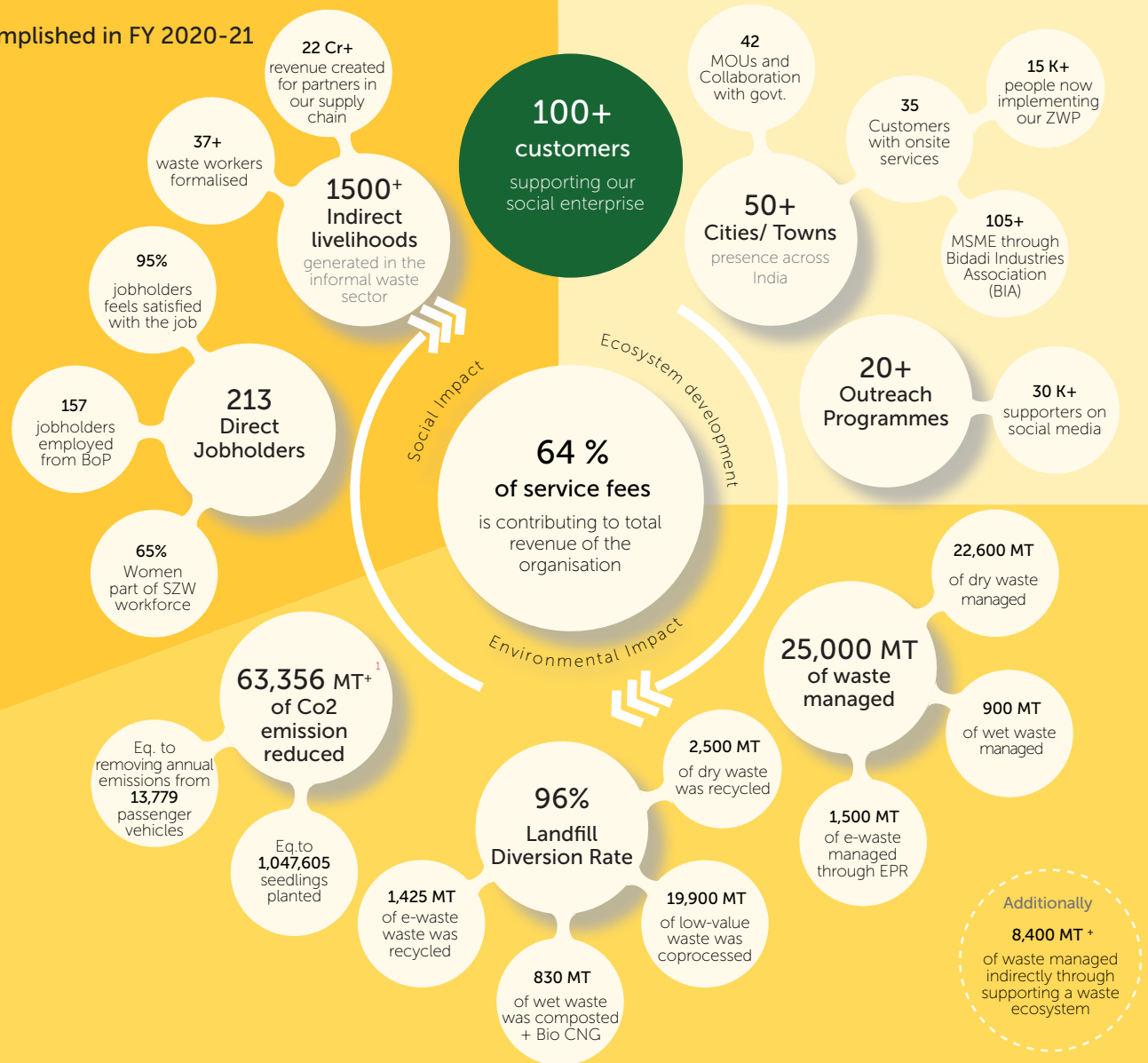
Being Resilient in Change

We look back at FY 2020-21 as a black swan year which challenged every aspect of our belief system. We are grateful to have emerged with our confidence enhanced and numbers to prove that indeed we have what it takes to have a thriving business model which delivers on environmental and social impact.

Last year, we continued to maintain a 96% landfill diversion rate. The volumes of waste which we received from our corporate customers did reduce on account of WFH options but this was compensated by an increase in working with dedicated waste streams like low grade plastic, e-waste and textile waste. Overall, the volumes of waste managed increased by 20% to 25,000 MT. We also had a jump in revenues which increased by 21% over the previous year to touch an all-time high of Rs 29 cr. The icing to our celebrations was the fact that for the first time we ended the year with a small net profit.

On the social side, while we reduced salaries of our executive team, we made sure that our field team did not have any cuts in remuneration. Moreover, we were able to pay our workforce on time every month and meet all our statutory compliances. We extend grateful thanks to all our customers who honoured our contracts and paid our service fees.

We had good success in enrolling the informal sector who now partner with us to support our collection systems. We generated Rs 22 cr. revenues for our partners who in turn generated livelihood options for a workforce of around 1500 individuals from the Base of the Pyramid.



1. GHG emission calculated using WARM Tool Version 15

Setting the Stage for Technology

Very early in our venture we came to the conclusion that systems and processes were a priority for an inclusive business. These were non-negotiable requirements. Technology came next and is now used extensively to support and enhance our operations.

Traceability + Zoho MIS



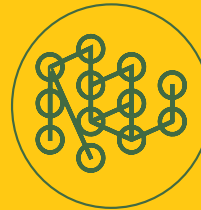
A digital traceability solution built to identify, trace and record history of material transaction in a supply chain.

IoT



IoT integrated weighing scale to capture accurate data of waste collection, sorting and processing.

Machine Learning



Automated sorting system using AI for achieving higher accuracy in sorting for better resource recovery.

Adding values to our customers

- Ensured compliance with governmental regulations on EPR, for plastic waste and e-waste customers through access to real time supply chain data and periodic digital channelization certificates
- Strong trust between stakeholders in the waste management ecosystem, built through increased digital traceability of waste across supply chain
- Improved quality of plastic provided to recyclers, leading to enhanced resale value and economic growth of the circular economy
- Improved livelihood options. Transparency in the value chain enhances accountability which also enhances the prices at which materials are purchased

Our Flagship Zero Waste Programme

It is well known that certified green buildings fall short with respect to implementation of resource recovery and waste management. A building could get a platinum rating with only a simple segregation system in place.

In 2020, we therefore celebrate the emergence of the True Zero Certification from the Green Business Certification Inc. The certification process is well aligned with our own Zero Waste Programme.

With immense pride we announce that our customer in Bangalore, Eco-World from Brookfield has become the first True Zero Certified building in India. The tech-park which has a capacity to house 60,000 employees and generates on an average 6 MT of waste per day worked with us through the last 5 years to streamline their processes so as to achieve complete traceability of their waste along with measures to reduce and recover 96% of the waste generated. The tech-park was awarded a gold certification in February 2021.

True Zero Waste Certification

The TRUE certification program is an Assessor-based program that rates how well facilities perform in minimizing their non-hazardous, solid wastes and maximizing their efficiency in the use of resources.



Our Flagship Zero Waste Programme at EcoWorld- Brookfield, Bangalore



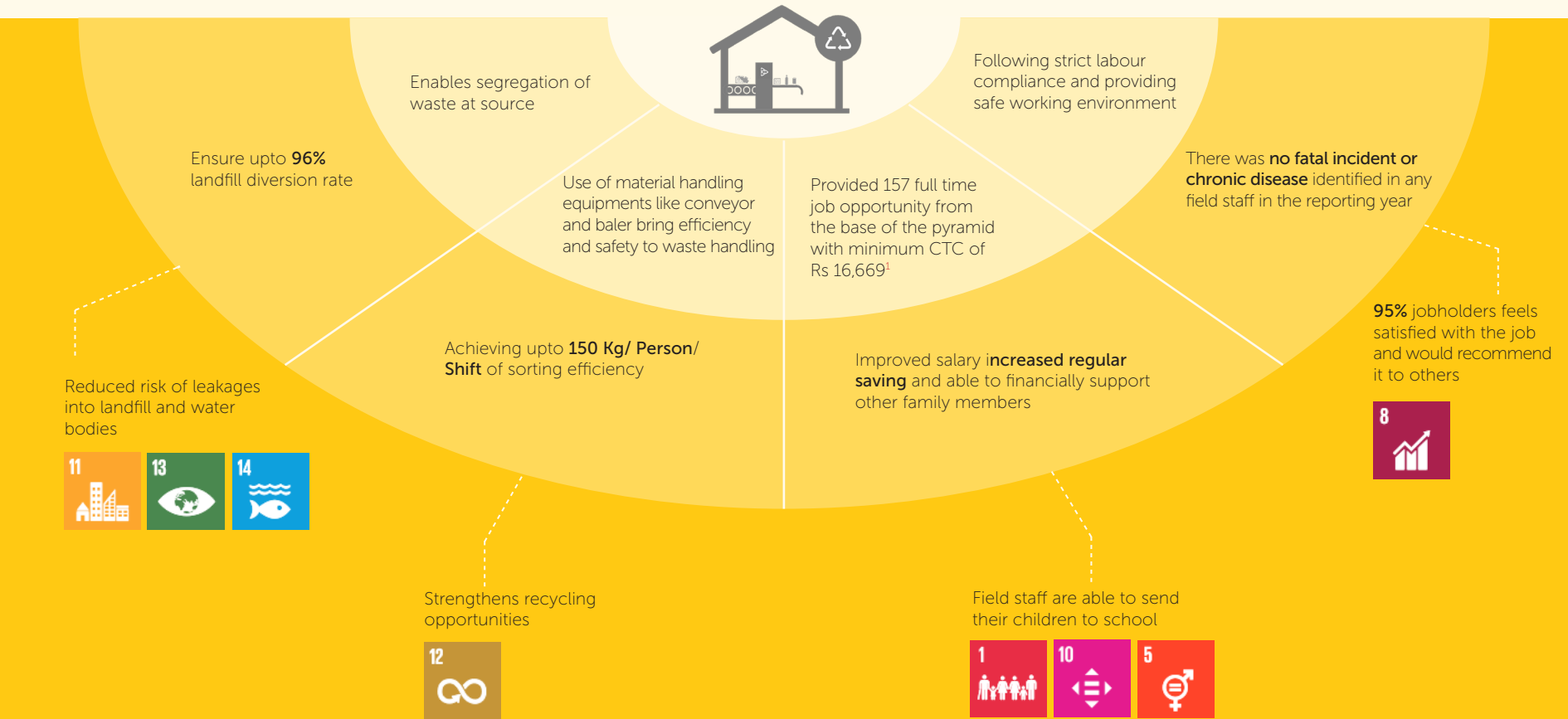
Preliminary on-site sorting of dry waste



On-site composting of wet waste

Understanding the Ripple Effects

Our decentralised systems which integrate nature, people and technology are able to demonstrate great depth when it comes to impact both on the environment and social front.



1. This is as per the government prescribed minimum wage in Bangalore.

21,000 MT

of plastic waste is diverted from landfill

These numbers bring attention to the huge failure that confronts us with respect to plastic recycling. The majority of plastic which we collected had to be diverted to co-processing because of limited recycling facilities for this grade of material.

94 %

of total plastic collected is non-recyclable and sent for co-processing



6 %

of total plastic collected is recyclable and sent for recycling

Key Highlights

19,900 MT

is non-recyclable plastic (MLP, LVP)

1,100 MT

is recyclable plastic (LDPE, HDPE, PP, PET, EPS)

14

end destination partnerships for recycling plastic

20

Brands supporting EPR for plastic collection

1218

indirect livelihood generated

40

no. of cities and town for collections

1,500 MT

of e-waste channelized to authorised recyclers



Key Highlights

23

end destination
partnerships for
recycling e-waste

6

brands supporting
EPR for e-waste
collection

121

indirect livelihoods
generated

25

no. of cities and
town for collections

1000+

people benefited
through awareness
and collection drives

Others

pan India operations for
channelizing consumer
and IT electronics
(including tubelights and batteries)

Reducing GHG Emission

Our annual report card captures the environment footprint which includes emissions on account of logistics as well as processing costs during collection, aggregation and dispatch to a recycler. Weighed against the same material ending in a landfill, there is a healthy net savings amounting to 63,356 MT of Co2 eq.

Co2 emission from logistic from source of waste to MRF

605 MT of Co2 E

No. of dispatches : 700
Avg. distance from source to MRF : 30 km

Co2 emission from energy consumption at MRF

23 MT of Co2 E

Electricity consumed : 25,200 kWh

Co2 emission from logistic from processing facilities to end destination (ED)

1,865 MT of Co2 E

No. of dispatches plastic EPR : 1606
Avg. distance to ED : 432 km
No. of dispatches e-waste EPR : 315
Avg distance to ED : 200 km

Negative GHG emission through diverting waste from landfill

65,849 MT of Co2 E

Dry waste recycled/ coprocessed : 64,354 MT of Co2 E
E-waste recycled : 1183 MT of Co2 E
Wet waste composted/ biogas : 312 MT of Co2 E



Net reduction in GHG emissions

63,356 MT of Co2 E

Enabling Livelihood to Improve Social Indicators

In all these years, waste management services associated with resource recovery was typically delivered by the informal sector. The sector was expected to survive only from the revenue from sale of waste. But this we know is not adequate to meet minimum wages of the workforce.

As a social enterprise we are committed to addressing the inequality in India (10% of Indians own 80% of the country's wealth) through an inclusive business model. Revenues from sale of waste and a user/service fee enables us to pay minimum wages and have social security for all our staff.

Last year we introduced Circle Up, a brand through which we introduced our upcycled/recycled products. We partnered with several SHGs through which we enabled livelihood for women. These partnerships now require that we create a market for these products in a manner where each partner organisation will also pay minimum wages to its workforce.

Our efforts to formalise the informal sector will in the coming years also follow this road map of creating adequate revenue sources so as to pay minimum or even living wages.



Meaningful Partnerships- Hosa Belaku speaks

Kameshwari Devi Kumar,
CEO, Hosa Belaku Artisans Foundation

"Saahas Zero Waste has been a consistent support for our work. In fact if it were not for their purchase orders for masks, we may not have been able to sustain the organisation itself. The pandemic provided us an opportunity to make masks but without purchase orders we would have had to invest in raw materials, labour, transport etc without knowing whether we will be able to sell them. This would obviously have put us under tremendous financial pressure. I still remember how grateful I felt when I received a call from SZW with the first order of 100 fabric masks. There was no stopping us since then. With the experience of making over 30,000 masks for one single order from SZW we were confident enough to pick up larger orders with shorter time lines resulting in sustaining us through the pandemic and beyond. Today we are confident to face the future. Saahas Zero Waste feels like an extended family for all of us at Hosa Belaku."

Hosa Belaku is our SHG partner who upcycles textile waste to second life products and masks. The SHG was founded in 2017 by Kameshwari Devi Kumar, a lawyer by profession and 20 years experience working in disability sector. Hosa Belaku was established to meet the income generation needs of individuals with disability and women surviving abuse, from difficult economic and social backgrounds in both remote rural areas and urban slums. The organisation manufactures hand made, recycled and upcycled products and the proceeds from the sale of the products gives sustainable income to the target groups.

During the pandemic, while government helped families with dry rations, the struggle was for cash to pay loans, buy regular medicines for family members and meet costs for basic necessities. Our upcycling business vertical prevented them from taking more unsecured loans at 13-16% rate of interest.

Key Highlights



1,06,230

fabric
mask made



400+

upcycled
denim bags



9,64,000+

revenue
generated
(in Lakhs)



120+

livelihood
generated



90%

of women
employed

ನನಗೆ SZW ನ ಕೆಲಸದ ವಾತಾವರಣ ಇಷ್ಟ

(I like the work environment at SZW)

**Kavitha, Field Staff at SZW
Materials Recovery Facility, Jigani**

"I have been working with Saahas Zero Waste for past 2.5 years. I like the work environment and the management as they care about my safety at work by providing gloves, mask and other PPEs.

I'm also getting a good salary with ESI and PF benefits which is helping me support my children's education. I feel my livelihood has been improved as I'm financially independent now."

Verifying our Impact

We realise it is important to develop a reporting framework so that our impact can be measured. We are grateful to our partners who have helped us develop a process.

Impact reporting is still in a nascent stage but we believe that the stage is set for improvements. We look forward to being part of the conversations around ESG and BRSR reporting which is now becoming mandatory.

BCtA Impact Lab

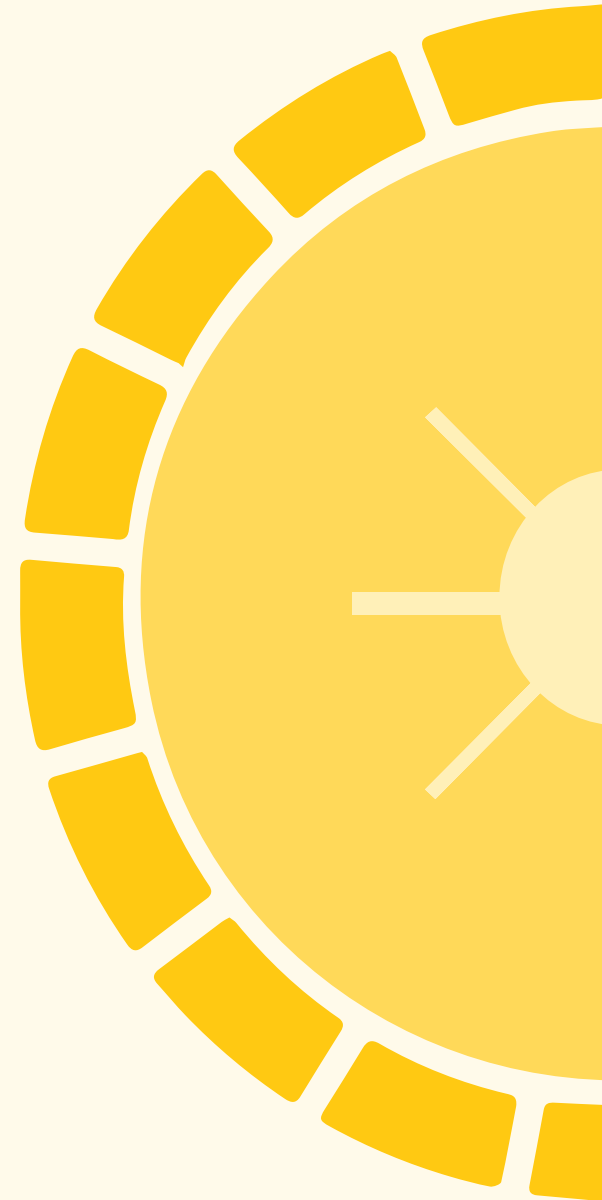
It has helped us develop an impact framework with an SDG lens and collect data from employees and stakeholders.

SROI

We use Social Return of Investment (SROI) framework to measure value it has created for our stakeholder for each rupee investment/spent on the programme.

UNDP SDG Impact Standards for Enterprise

We participated in second public consultation for developing SDG Impact Standards for MSMEs to accelerate their contribution to the SDGs. The SDG Impact Standards for MSMEs are a set of practices that enable companies to embed impact considerations into their decision making, processes and systems.

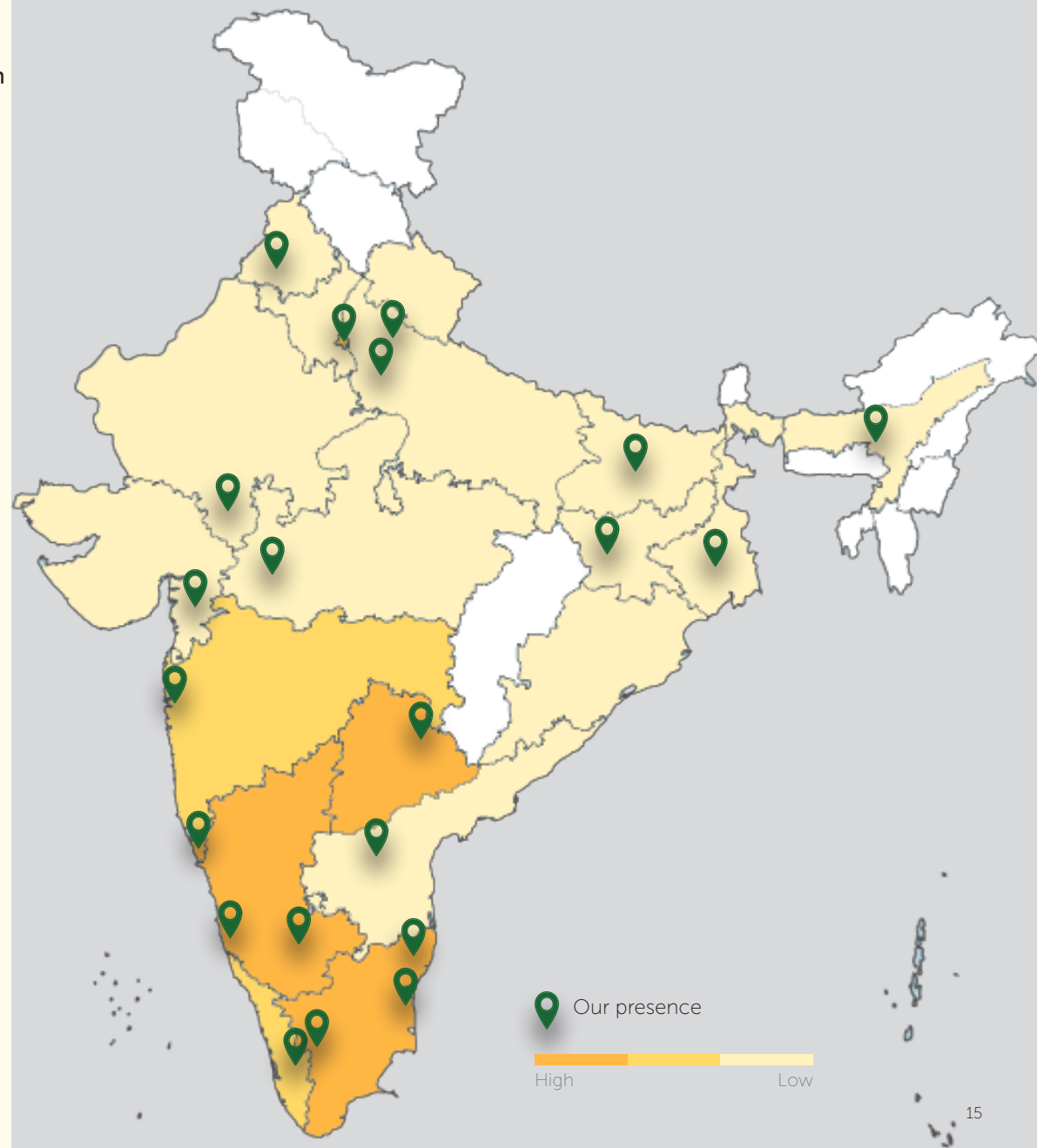


Scaleup our Social Enterprise

In the next 3 years, we aim to become a INR 100 cr.+ company by expanding to new geographies across India, introducing new products, identifying new markets, moving up the value chain and integrating technology.

The growth plan is structured on the basis our belief, mission and vision. It is thus focused on holistic and decentralized solutions, generating more local employment/ entrepreneurship, formalizing the processing chain, promoting-circular economy, traceability of waste and maximum resource recovery. We will also be focusing on adaptive waste management to enable gathering of data and collaborate with the brand owners and processing destination partners to bring about innovating packaging design etc.

By the year 2025-26, Saahas Zero Waste has projected to have a 1000+ workforce and to manage 500 MT+ of waste per day across all verticals.



Defining True Triple Bottom Line for Social Enterprises



I'm very happy to see that Saahas Zero Waste has taken a bold step towards defining a true triple bottom for social business in the country and leading the way. I congratulate the entire team towards achieving this goal. Even during the trying times of the pandemic, they were able to demonstrate that it's possible to have all PPPs without focusing on Profit alone. Wish Saahas Zero Waste the best as they embark on diverting 500 MT/day of waste from landfill. If every social business in India brings this kind of DNA in early days, the need for ESG and other watch dogs when they become tomorrows corporate, would not be required.

Nagaraja Praksam
Angel Investor, Board Member of SZW



Saahas Zero Waste has been operating in the waste management space with honesty and responsibility. Seldom have I come across teams that are fully aligned with the vision of the organization. This is a perfect example of how to build a social business for the future, keeping sustainability and profitability in mind.

Aravind Agarwal
Co-Founder, CEO - C4D Partners, Board Member of SZW

BoP	Base of the Pyramid
BRSR	Business Responsibility and Sustainability Reporting
CNG	Compressed Natural gas
Cr	Crore
CTC	Cost to Company
ED	End Destination
EPR	Extended Producers Responsibility
EPS	Expanded Polystyrene
ESG	Environmental, Social, and Governance
Eq	Equivalent
FY	Financial year
GDP	Gross Domestic Product
GHG	Greenhouse Gas
HDPE	High-Density Polyethylene
IoT	Internet of Things
kWh	kilowatt hour
LDPE	Low Density Polyethylene
MIS	Management Information System
MLP	Multi-Layered Plastics
MoU	Memorandum of Understanding
MRF	Materials Recovery Facility
MSME	Micro, Small & Medium Enterprises
MT	Metric tons
MT of Co2 E	Metric tons of carbon dioxide equivalent
PET	Polyethylene Terephthalate
PP	Polypropylene
PVC	Polyvinyl Chloride
SZW	Saahas Zero Waste
SHG	Self-Help Group
SDG	Sustainable Development Goal
SROI	Social Return of Investment
WFH	Work from Home
ZWP	Zero Waste Programme



Our Investors

