



MISSION CREATIVE MILLION - ODISHA

ENHANCING LIVELIHOODS FOR TRIBAL WOMEN

Industree's Mission Creative Million

Mission Creative Million is an initiative of Industree Foundation that was launched in 2017, to impact one million creative producers. The aim is to give creative producers in rural India access to formal work in enterprises that they collectively own, close to their homes, thereby providing a stable and dignified alternative to the precarious informal sector. Industree works on the construct that economic empowerment is a springboard for social empowerment, and therefore provides handholding support to enable producers to set up and scale their enterprises.

Industree creates and accelerates producer-owned enterprises to sustainability using its **6C model**. This model takes into account the key components required to run and sustain a successful business:

1. Aggregation & infrastructure (Construct)
2. Training and skill-building (Capacity)
3. Working capital (Capital)
4. Design inputs, Value addition (Create)
5. Market access (Channel)
6. Digital resources and platform (Connect)

Creative Million is currently in its 2nd year, with live projects in 5 Indian states - Tamil Nadu, Karnataka, Odisha, Andhra Pradesh and Rajasthan, as well as in Ethiopia (Bahir Dar), where it provides support to producers on various fronts - skilling, capacity building, market linkages, design inputs, access to capital and more.

Odisha Project

In Odisha, Industree has partnered with the Orissa Forestry Sector Development Society (OFSDS) to enhance livelihoods for 2,000 tribal women in Phulbani and Baliguda forest divisions. The tribal community primarily depends on the forest for its livelihood, collecting and processing non-timber forest produce (NTFP) such as siali and sal leaves, turmeric, tamarind, and mahua flowers. While the initial phase of the project looks to carry out interventions in the siali leaf value chain, over time, it would also expand to include producers engaged in the bamboo, other NTFP and the handloom value chains.

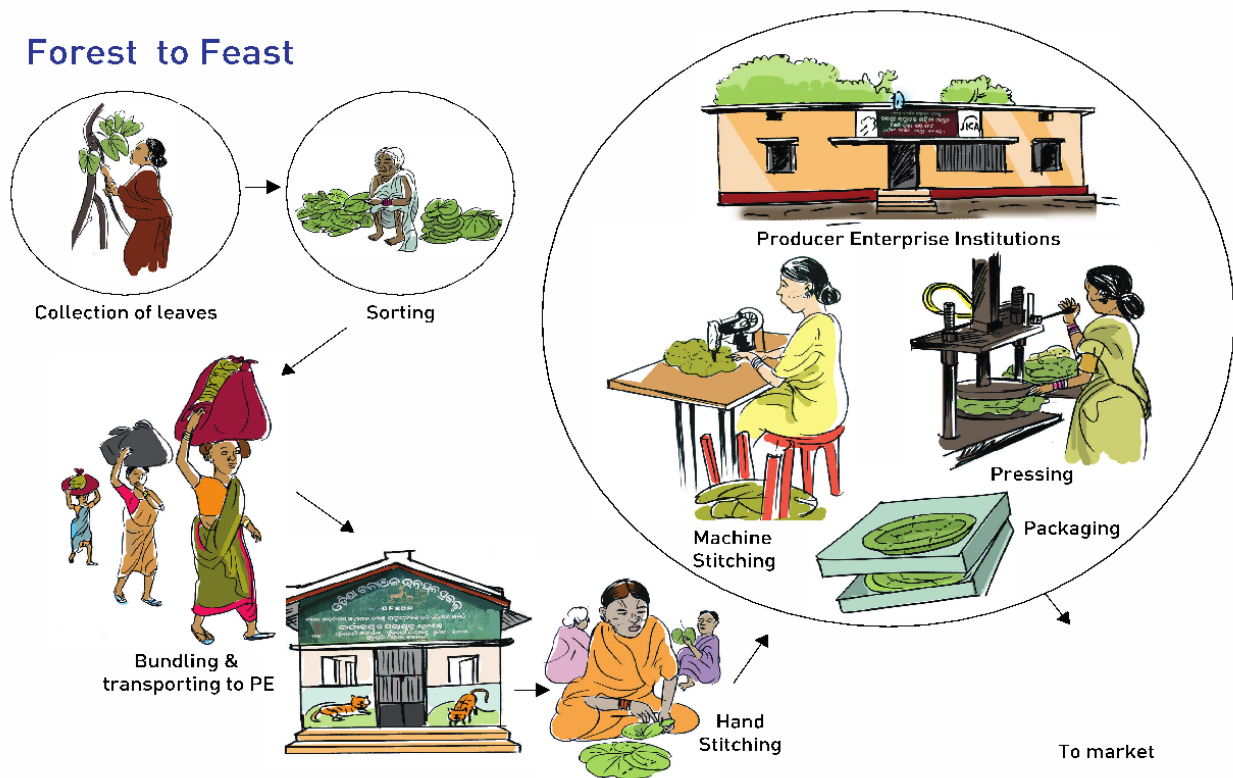
During the initial scoping visit carried out in end-2017, Industree realised that siali leaf collection and processing has the potential to impact 5 lakh people in these areas, primarily women from tribal communities. The objective of the project is to carry out various interventions along the value chain, with an end goal to provide regular work and therefore increase incomes for women in the siali leaf value chain.

Forest to Feast: The Siali Leaf Value Chain

Siali (*Bauhinia vahlii*), is a creeper with large leaves that typically grows around Sal trees, and is commonly found in the forests of Odisha, and parts of Andhra Pradesh, Chattisgarh and Jharkhand.

On account of its size, texture and durability, siali leaves make for a very good source of raw material for the production of disposable plates and bowls. Tribal women travel deep into the forests to collect these leaves, which are then stitched together with bamboo splits to make disposable plates. These products are a familiar sight as the bowls on which temple *prasad* or *pani puri* is served. While they are typically used to serve food at community gatherings such as temple festivals, marriages, and in snack shops, there is immense scope to propagate its usage in higher value markets and bulk users like multiplex concessions and airlines as well, which typically use disposable plastic ware.

Forest to Feast



Leaf Collection



Women travel deep into the forest to collect the leaves. The leaf is then bundled into *chakkis*, where each *chakki* consists of 80 to 100 leaves. Most people who collect the leaves also stitch them, since it provides them with an additional source of income. If they were to sell the *chakkis*, they would get as little as Rs 10 - 16 for a *chakki*.

Stitching

Leaves are stitched together with bamboo splits and are graded into raw-stitched, medium stitched and fine stitched based on the number of stitches holding the leaves together. Raw stitched plates typically have only 2-3 stitches to attach leaf to leaf and use the poorest quality of leaves. These are typically picked up by traders at very low prices for local markets. In comparison, fine-stitched leaves have about 12-14 stitches and are leak proof.



Cutting

The stitched leaves are stacked and cut as per the required shape before it can be pressed and moulded to usable service ware such as plates and bowls.

Moulding

Once the leaves have been cut, stacks of them are pressed together around a mould to create a plate or bowl shape. A stiff inner layer is required to create a sturdy finished product.

Storage



Collection points have been set up at 23 villages to store the stitched leaves. Proper storage method eliminates the chances of the leaves getting infested by fungus or insects.

Value addition at CFC

Common Facility Centres have been set up from where the following activities are carried out.

- Quality check of stitched leaves
- Machine stitching of leaves
- Manual cutting of leaves into desired shape
- Pressing of leaves into plates or bowls using sized dies
- UV Treatment
- Shrink wrapping
- Packaging for Sales

The Story So Far

At present, there are close to 30 Self Help Groups comprising of around 600 women who are engaged in the collection and processing of siali leaf.



With these groups, Industree has already carried out the following interventions:

1. Aggregation into Self Help Groups

2. Training

a) Leaf collection: Industree has trained women in leaf collection, so as to optimise the time they spent in the forest. They have been taught to identify the best quality leaves, and collect them without causing any damage. This in turn leads to the producers being able to use best quality leaves for production, resulting in better quality of finished product. This is also complemented by OFSDS's Plantation Program with the Forest Department to ensure that there is no over-exploitation of siali leaf.

b) Upskilling to move from raw-stitching to fine-stitching: Industree has carried out training to upskill the women to move from raw-stitched leaves to fine-stitched leaves. It has additionally introduced line production to standardise the stitching process and quality control measures to reduce wastage. While a bundle of 100 raw-stitched leaves sell for as little as Rs 10-16, fine-stitched leaves sell for Rs 80, marking a 4 times increase in revenues.

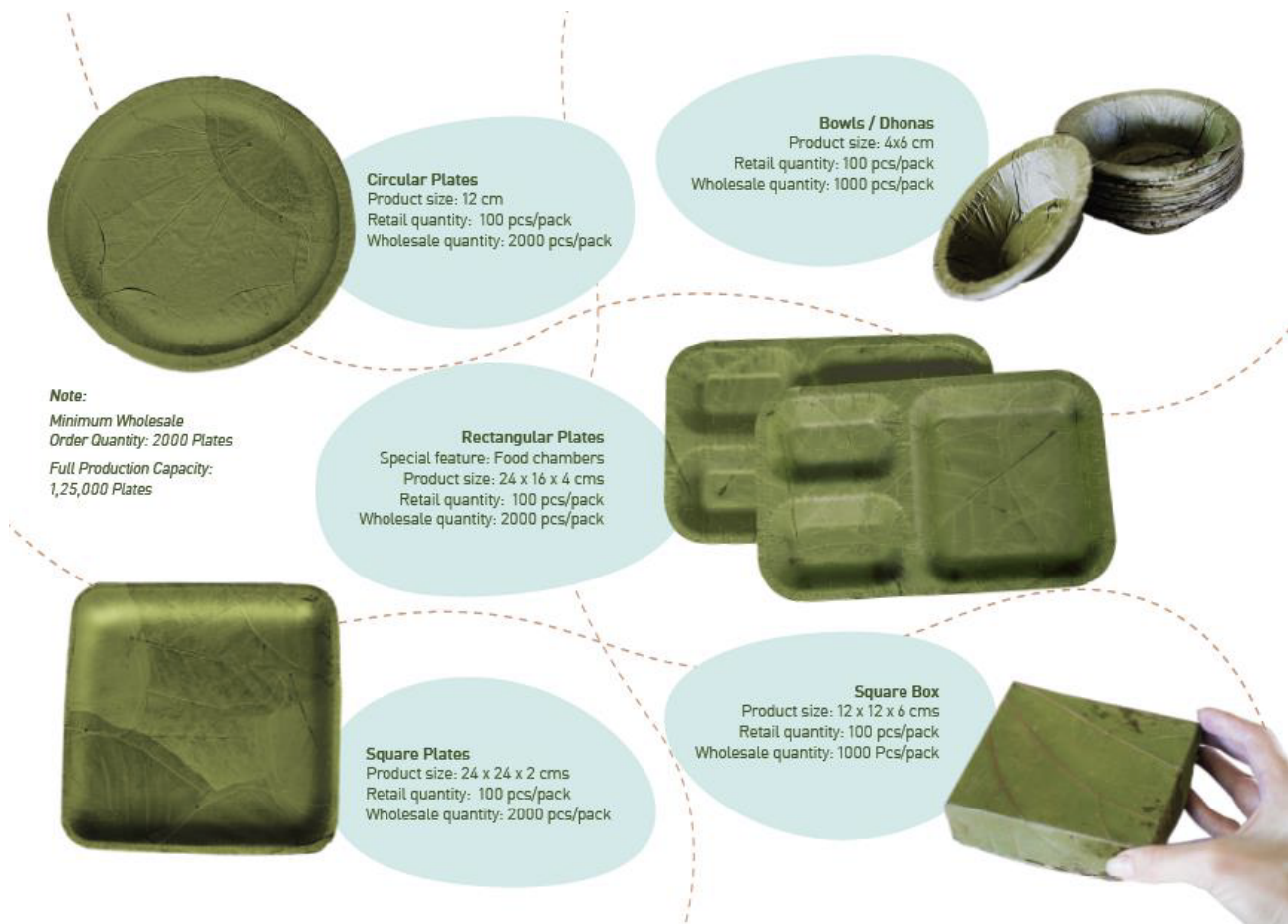
c) Financial literacy: Producers have also undergone a basic financial literacy training program to equip them to manage their finances more prudently.

3. Design Development

Designers have worked with the groups to develop products such as storage boxes and trays using fine-stitched siali leaves. This will aid in groups being able to diversify their product range to include other products to cater to lifestyle supply chains, in addition to tableware.

4. Market Linkage

While the groups previously supplied only to traders in the local market, Industree has established linkages with buyers in cities like Bengaluru. Infrastructure is being put in place at the Common Facility Centres to allow the groups to produce table-ware and buffet plates that are sturdy, leak proof and of a much higher quality, and can be used at weddings and other functions. What Industree has also observed is that it is possible to take the product to international markets as well, especially since communities across the globe are looking for sustainable solutions that can substitute single use plastic.



Proposed Project

Industree seeks to introduce infrastructure at the Common Facility Centre in Lundraguda to enable the producer group to be able to manufacture products that are of a much higher quality (in terms of look and feel and durability), allowing them to command a higher price for their product and reach out to newer markets.

It seeks to introduce the following infrastructure:

1) 6-head hydraulic leaf plate making machine.

The machine comes with 6 heads, each of which are fitted with a different-sized die.

This will also allow the group to expand their product range into diverse shapes and sizes of tableware.

2) 30 KW Solar power plant

The solar power plant will consist of solar photovoltaic panels, battery backup and controller. As the common facility centre is located on the fringes of the forest, power outages are commonplace. A solar power plant would negate the dependency on electricity supply.

Setting up this infrastructure in the common facility in Lunruguda would in turn have the following impact.

- 1) Diversification their product range
- 2) Higher quality of finished product
- 3) Command a higher price for finished product
- 4) Establish linkages with urban markets
- 5) Increased earning for the producers



Budget for set up of infrastructure

Cost head	Item	Cost per unit	No of units	Total cost in INR	Total cost in USD
Pressing machine	6-axis hydraulic leaf plate making machine including dies with cutter and coil	5,00,000	1	5,00,000	6,849
Solar power plant	30 KW Solar power plant with PV panels, battery backup and controller	10,00,000	1	10,00,000	13,699
Training	Upskilling women at CFC to use the machine	5,000	10	50,000	685
TOTAL				15,50,000	21,233