

प्रदान Pradan

Pradan, a voluntary organisation registered in 1983, was set up inspired by the belief that well-educated people with empathy must work at the grassroots to remove mass poverty. Over the years, Pradan has emerged as one of the largest NGOs in India engaged in livelihood promotion. It has been able to attract, groom and retain a large number of development professionals at the grassroots. Over 300 PRADAN professionals are now engaged with disadvantaged communities in 36 of India's poorest districts spread across eight states. We currently work with almost 200,000 families. Besides discovering and putting into practice new approaches and prototypes that enhance poor people's livelihoods on a large scale, we have also been striving to influence public policies with inputs from our grassroots work.

The PRADAN Research and Resource Centre or RRC was set up to meet the knowledge needs of professionals, both in terms of facilitating reflection as well as bridging knowledge gaps; and in utilising this knowledge to inform external stakeholders. The RRC aims at enhancing efficiency and effectiveness of practice, developing methodologies for scaling up and setting systematic processes for policy advocacy. In addition to Sir Dorabji Tata Trust who made this publication possible, RRC has received support from the Ford Foundation, Sir Ratan Tata Trust, and the United Nations Development Programme. In 2007 we also entered into a partnership with the Aga Khan Foundation for the RRC to set up a National Resource Centre for Rural Livelihoods under the European Commission assisted SCALE programme. This initiative seeks to enrich the resource for livelihood related knowledge and create a forum for knowledge exchange between practitioners.



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Iment on the Siali leaf-plate makin

A document on the Siali leaf-plate making activity of Kandhamal district, Orissa

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Designed & Produced by GENESIS 9810033682

The publishing of this document was made possible with support from **Sir Dorabji Tata Trust**

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Contents

1. Introduction

•	Siali – The Life-Giving Plant	2		
•	Through The Siali Forest – A Travelogue	3		
•	An Overview of the Indian Leaf Plate Industry	6		
•	Analysis of the Siali Leaf Plate Value Chain	8		
•	Case Study – P.V.N. Vinod, India's largest wholesaler of Siali leaf plates	1		
2. Situation Analysis Before PRADAN's Intervention				
٠	A Case Study of Belghar, Kandhamal District	14		
3. PRADAN's Intervention				
4.	4. The Siali Leaf Plate Best Practices			
5.	Perspectives	29		
•	Non members	29		
٠	Forest Department	30		
•	MANI – Manav Vikas Niyojan Samiti	31		
•	The Forest Conservation Society – A Case Study of an Unforeseen Impact	32		
6. S.W.O.T analysis and Key learning				
7. The Road Ahead				



Foreword

Siali- A document on the Siali leaf-plate making activity of Kandhmal District, Orissa, is a knowledge document written with the broad objective of highlighting Siali leaf-plate production as an indispensable means of livelihood in various parts of tribal India. In order to do this, the report embarks on a situation analysis of the Belghar community before, and after PRADAN's intervention. Such analysis attempts to compare economies, levels of product value addition, and market linkages that are available to the Belghar community. A candid travelogue adds flavour to this document, taking the reader through the daily life of the women, those who labour hard and long, plucking leaves from the forests and making them into leaf-plates.

An important section of this document is the process summary that enumerates "the best practices" for keen readers who want to replicate such endeavour. This segment explains all the steps undertaken by PRADAN to establish an organised system of Siali leaf-plate production that ensures maximum benefits for the poor communities. The finances and economics of leaf plate production are thoroughly spelled out so as to help in planning. The section on 'Perspectives', documents the views of the key stakeholders and their role in the sustenance of the Siali industry. A chapter on 'S.W.O.T analysis and key learnings' is then provided for an understanding of the position of the Siali leaf-plate intervention, its areas of improvement, and its future scope. The document is concluded with an examination of the various possibilities for the Siali industry, in 'The Road Ahead'.

Preface

The Siali leaf-plant grows only in *Sal* jungles in certain parts of India, making it difficult to access. It has, however, remained the preferred raw material for making leaf plates for various reasons: its large size, its durability, and the obvious eco-friendliness.

Someone eating dry snacks off a leaf-plate in, say, the heart of Delhi, will most likely not realise that such plates have become almost unrecognisable from its raw form. Needless to say, the Siali value chain starts from the jungles of Kandhamal District in Orissa – where the Siali produce is collected – to the markets in Andhra Pradesh. Finally, when the Siali leaf-plate is sold in the market, the product is almost unrecognisable with the numerous changes it has gone through at each level of the process: cutting, packaging, sealing, and branding, to the time they are sold at high retail rates in the city. The Siali leaf-plate industry is large, encompassing a chain of middlemen who stand between the women who pluck the leaves from inaccessible jungles, and those who stitch them into leaf plates in remote villages, and to the final buyers in cities.

The important element in this activity is the ratio of the hours of manual labour put in, and the profit percentage derived, by the different actors in the industry: the Siali leaf-plate producer in the remote village and the retailer in the city who sells the branded product to the end consumer. A relevant question is thus asked: Can the profit be directed into the hands of the poor women of the villages, they who are the real producers but remain deprived of the fruits of their labour?

PRADAN was compelled to make an intervention precisely for this reason. PRADAN first came down to the community in 2002 with the objective of increasing income levels by 100%, by way of forming Self-Help Groups (SHGs), providing training and technology to enhance and upgrade the product quality, and offering market linkages to directly sell the product to wholesale buyers and ensure higher profit margins. PRADAN's intervention has since led to the formation of Kandhamal Women's Leaf-plate Cooperative Limited, which so far comprises 850 families involved in Siali leaf-plate making.

The womenfolk form the backbone of the Siali leaf-plate industry. There are also other stake holders like the Forest Rangers; District Supply and Marketing Society (DSMS); Manav Vikas (another NGO working with Siali leaf-plate producers); and research organisations working on ways to conserve the Siali plant.

It cannot be overemphasised that the Siali leaf-plate business is one which is filled with hope for the rural poor. It is an endeavour that requires no capital and promises income with their sheer effort. A study of the industry dynamics and the key players and various portions of the profit getting distributed at each level, makes one consider the possibility of the profits going directly into the hands of the poor. One of the ways is by coming together, forming a cooperative, pooling resources and becoming influencing factors of the entire Siali leaf-plate market. The cooperative has a lot of power and can use its economies of scale to maximise its returns by adding value to the products and dominating market forces to ensure that more profit would go into their hands.

The Siali leaf-plate industry has been a source of livelihood for many generations of India's rural poor. Bolstered by support from the forest department and other government agencies, the industry is here to stay.



Introduction Siali: The Life-Giving Plant

Siali (Bauhinia vahlii) – commonly called Siali Patta, Madrasi Patta, Patroli, and Adda leaves – is a large creeper that grows mostly in Sal forests. The rich moisture content of the Sal forests is conducive to Siali's growth. The Siali is also one of the most abundant of Indian climbing species and commonly grows in south and western Orissa, in parts of Andhra Pradesh, Chattisgarh, and Madhya Pradesh. Siali has a high regeneration capacity and is also seasonal in nature.

Due to its size, texture and durability, Siali leaves are the preferred raw material in making a variety of plates and bowls for serving food. Six different products are made from Siali leaves: loose leaves (used for dry snacks); rough-stitched plates (from poor quality leaves); medium-stitched; close-stitched (called *bhoji khali*, as used in feasts); machine-stitched (using sewing machine); and moulded plates.

There are two grades of Siali leaves:

- 1. Clean, dry and big leaves
- 2. Damaged or slightly black leaves that are normally sold in *pan* and flower shops. The size of the leaves varies from season to season. Small sized leaves come during summer months, with the size varying from 9 to 14 inches. In the rainy season, however, sizes could go as long as 18 to 24 inches. In the summer, the texture of the leaves remain fine and shiny, and there is less damage to leaves as they dry quickly. Generally, the green, thick and large sized leaves are preferred.

In many parts of rural India, Siali is still used to barter for groceries for the household. The families have very little currency for exchange, except for Siali, that would be accepted in order to obtain food and other basic items. In Kandhamal district, Orissa alone, Siali supports as huge as two-thirds of the population; it is for this reason that Siali is often called, 'the life-giving plant'.



Through The Siali Forest

- A Travelogue

It's 6:00 a.m. at Gasukiya village in Kandhamal district, Orissa. Kandhamal and Kalahandi districts in Orissa are known as the worst poverty inflicted areas of India, with 78 per cent of the population living below the poverty line and an average population density of 71 people per square kilometre. Driving uphill through the densely forested roads, we startle the occasional a herd of goats, cows and passersby. I ask the driver to speed up because I don't want to miss my tryst with the Gasukiya women. They are going to take me on a guided tour through the forests to show me what they do for a living—plucking the Siali leaf that they dry and stitch into leaf plates to be sold in the market.

As the car halts in front of Bishingi Pradhan's house, I see the women waiting patiently for my arrival. I am greeted warmly in Oriya with expressive hand signals. I smile and reply in Hindi, equally emoting with my hands. We have been communicating this way because neither knows a common language, and yet little needs to be translated. We somehow find a way to understand each other.

The women are equipped. They all have towels swung on their shoulder and they show me their small knives that they carry to make the cutting of leaves easier, because the stem is often too thick to pluck with bare hands. "This knife goes in here," says Savitri Pradhan, proudly sticking the knife into her hair, which she has worn as a tight knot.

We begin the climb. We are surrounded by hills. The climb is steep and rocky, with exotic insects and butterflies to distract me. Loose rocks, tall ant hills encroached by snakes, and roots and branches with thorns block our way, and yet, these women, in their old cotton sarees and worn out blueand-white rubber chappals, climb the hill with such finesse. I stop and stare at them and look at myself with all my accessories—track pants, shoes and water bottle, and yet



gasping for breath. Innamoti Diga waits for me smiling, points to a far-away boulder and says, "We have to go there. Earlier, we used to find Siali leaves at the bottom of the hill, but now it has reduced so much that we have to go farther each time to find it."

Finally, we reach a point where we can stand on a large flat slab of stone. They show me the view of Balliguda. It is breathtaking. Seventy-two per cent of Kandhamal district is forested land, and Gasukiya is enveloped by forested hills. There is no time to waste, however, and the three women split in different directions in search of Siali creepers. The Siali creeper is a very thick creeper that looks like a small tree on its own because of its thick, bark covered stem. The leaves are bright green, large in size and heart shaped. Siali is usually found in Sal forests and grows only in the vicinity of big trees, the trunks of which it wraps around. Savitri Pradhan explains, "Here the rule is: to each her own. We split into different directions so that we can collect as much as we can as quickly as possible." Expertly, she ties the ends of her towel to make it into a shoulder bag. Then, she pulls her knife out from her hair and grabs the leaves at the stem and cuts it one after the other. The leaves have to be big not small because bigger leaves make more sturdy plates. Also, a plant should never be stripped off every single leaf because it takes much longer to grow. The leaves should be green, not black or with many holes, because these determine quality and, importantly, the price their plates will fetch in the market.

The Siali plant is one of the few plants of which every single part is used. The Siali stem is used extensively for the purpose of making cots, mattresses, fences and, most commonly, for bundling the Siali leaf plates to transport it to the market. I ask Savitri Pradhan to show me how she uses the stem. She grabs the stem from the bottom, bends it and peels a layer of the stem until it comes off as one long strip that is approximately 5 m long. "We use it here for the purpose of bundling these leaves. It is also sold separately in the market because of the strength of this fibre. It is very strong." I ask her if this will damage the plant and she says, "As long as we don't cut the entire stem from the root or peel it till it



becomes too thin there's nothing to worry. It grows back. But yes, extensive use makes the plant wilt."

The sun has risen, and the morning coolness is now replaced by humid heat. The women go farther, deeper into the hills. They are immune to rain or heat or cold. Their determination is steadfast. I watch them plucking the leaves without a break, only stopping occasionally to dab the sweat trickling down on their faces. At 12 noon they come back together, with their towels full of bundles of Siali leaves. Innamoti Diga says, "This is just the first bit. What we usually do is carry lunch from home, and break for lunch around this time. We then proceed to the next hill and pluck until sunset. By the time we get home, it is usually 9 p.m. or so." But today's schedule is different; I have requested them to spend the day showing me everything they do. So we had decided that we would spend the first half in the forests and the second half in their homes as they dry and stitch the leaves.

We all sit together on the flat slab of stone from where we had enjoyed the first scenic view. I ask them if they sing while they work. I am amazed to hear that they make up their songs depending on the day and the circumstances they're facing. After a lot of convincing, we agree we will sing one song each. Then Innamoti Diga volunteers to sing an impromptu song in Oriya, which loosely translated, is about how we are all climbing the hills on this hot day, and finally the last line goes, "We need to hurry back down now, because the driver, Pandu, waits for us." I laugh, amazed at their presence of mind and creativity. These women have never been to school. Their smartness, wit and strength of character are overwhelming. We begin the climb downhill when Bhishingi Pradhan says, "Do you see how hard we need to work every day?" I couldn't agree more.

Shriya Mohan Tehelka, New Delhi



An Overview of the Indian Leaf Plate Industry

The Siali Market in Orissa

- Bhubanseswar Unit one market
- Cuttack Malgodam, Choudhary Market, Chandini Market, Pithapur Market
- Siali comprises of just 25 to 30 per cent. The rest is Sal leafplate
- Leaf-plate products come from various places like Cuttak -Dhekanal, Baripada, Phulwani, Berhampur, Bhubaneswar (Nayagarh, Balasore)
- It goes to places like Cuttack, Kendrapara, Dhenkanal, Jasipur, Bhadrak, Puri, Bhubaneswar, Paradeep, Keonjhar, etc.

Uses

- Basically used for serving food, packing, parcelling of food and as tiffins
- Used in any sort of gathering where food is served, mostly during marriages, political parties, religious purposes, death and birth ceremonies, birthday, new year celebrations, picnics, etc.
- In various hotels and dhabas, pan shops and other snacks counters

Product Specific Study About the Users

- Siali laminated paper base plates and buffet plates higherincome groups
- Raw Siali leaf-plates middle and lower income groups

Siali Market in Andhra Pradesh

- Hyderabad big market for moulded plates
- Vijayawada big market for loose leaves
- Places from where goods come from Orissa, Chattisgarh, Madhya Pradesh, and also from inside the state from places like Sriharikota, Kothakota, etc.
- Places where leaves come from: Madhya Pradesh, Chattisgarh, Ambikapur and Bilaspur
- Places where these goods go to: Karnataka, Tamil Nadu, Delhi, Maharashtra, Gujarat, etc.



Rough Stitched – Rough stitched plates have two to three stitches between each leaf, and in no particular orientation. They look patchy and mostly the poorer quality leaves are used in rough stitched plates.

Medium Stitched – Medium stitched plates have five to six stitches between two leaves, where the stitches also follow an orientation to make it look more neat. Medium stitched plates are also leak proof, which means, if the leaves have holes they are patched.

Fine or Close Stitched – Fine stitched plates have twelve to fourteen stitches between two leaves, where the stitches follow a close orientation to make it look pleasing to the eye. These plates are also leak proof as the holes or gaps are patched.

Machine Stitched – Machine stitched plates are made with a sewing machine. These machines are given by the cooperative to its member for a fee of Rs 40 per month. The quality of this is really good as the stitches are finely oriented, and is completely leak proof.

Cut Plates – When the plates are stitched, the border is not a perfect circle because of the rough edges of the leaf sticking out. These stitched plates are piled together and cut manually or using a machine, so as to give it the shape of a perfect circle.

Buffet Plates/Moulded Plates – Buffet plates are medium or fine stitched or machine stitched which are cut and moulded, keeping a cardboard or paper beneath it to give it a strong shape, and also keeping a polythene sheet under the Siali leaf plate to ensure that it is completely leak proof. This arrangement is moulded using a machine, and the leaf plates look very solid and good.



Analysis of the Siali Leaf Plate Value Chain

Loose Dried Leaves

The women from villages, mostly tribals of Andhra Pradesh and Orissa, the two main states where Siali grows in abundance pluck the Siali leaves from the forest. These are sold at Rs 5 to Rs 7 per chakki which has 80 to 100 leaves. Local traders come to these areas to buy the leaves. Also the big traders who make the most profits directly buy the loose leaves and take it to the cities like Berhampur and Kothkuttam; they themselves do all the value addition. A chunk of the



No. of cki's produced - Quality leaves at forest(%) - Price/bumdle(Rs)
 1 Chakki of leaf-plates - A single chakki is a bunch of 80 to 100 leaf plates.
 1 truckload (TI) - One truck load is around 3400 - 3500 chakkis.

harvest is also bought by local villagers who stitch Siali leaf-plates for a living. Almost all who go to collect the Siali leaves also stitch the plates themselves. This gives them additional income.

Rough Stitched / Medium Stitched / Fine Stitched / Machine Stitched

The loose leaves are made into rough, medium stitched, fine stitched and machine stitched leaf-plates by various producer groups. Rough stitch has the largest market, because there is more money to be made by traders who buy them at the cheapest rates and add value to them, and thereafter sell at very profitable margins.

Medium Stitched / Fine Stitched / Machine Stitched

The rough stitched leaves are also bought by various groups to add more stitches to make it medium stitch and fine stitch. The reason why rough stitch is used is because the leaves are already set, and no further arrangement needs to be made to increase the stitches. However, for machine stitch and fine stitch, the rough stitches are removed and stitches are made afresh because the quality has to be of a certain standard that the rough stitch lacks. At this level, these are mostly sold to cities and market places in towns. No further value addition happens in the villages.

Cutting

From here onwards, the traders add the value. The leaves are stacked and manually cut to make the plates look perfectly round in shape and, thus, more appealing. A majority of the cut leaves are directly packaged and sold to the main metro markets in Andhra Pradesh and Maharashtra. Only a small portion moves to the next level of value addition, which is moulding.



Moulding

Moulding into buffet plates is a product that serves only an elite market. Family weddings, important functions, and big hotels, use moulded plates. Here, the cut leaves are made to have a base of cardboard and a thin plastic sheet is inserted in between to make it leak proof. This arrangement is put into a moulding machine which will then produce the buffet plates. These plates look fancy and are the most expensive of all Siali plates.

Packaging

The packaging is where most of the value is added. The finer the packaging, the higher the price fetched per chakki. Here, the cut leaves or moulded leaves are put into plastic bags in bunches of 20 or 40. These are transparent plastic covers. To make it look fancy, a round gold sheet – as per the exact size of the plate – is inserted at the top and the bottom of the bunch to make it look good from both sides. These sheets can come in many colors, although gold is the most popular as it looks very attractive when it is packed. Then the bags are sealed. Then they are stacked in bunches of 80 or 100 – 5 bags of 20, or two bags of 40. The bunch is then wrapped in a cane mesh, and tied with jute rope. The whole package looks attractive, as it shows gold on both sides, and a thick cane mesh, holding it all together. The entire look and feel is changed.

Branding

This is probably the most crucial part of the value addition. The packages are branded before the sealing. After the gold paper is added on both sides, the worker also inserts a small square sheet of white paper on which the brand of the plate is printed along with a logo. *"Madhuri Special"*, for example, is a popular brand of plates. The sealing takes place once the worker makes sure that the brand is inserted in both sides and remains at the centre. The only drawback in branding is that there are many imitations. A unique brand with a hologram or some other sort would be a good idea, else they all look the same, each copying the others brand name.







Case Study: P.V.N Vinod, India's Largest Wholesaler of Siali Leaf Plates

In 1959, Penaguda Venkat Rao set up a leaf-plate making business in Kothaguda. He bought loose dried leaves from the forests near Paderu, Chintapalli, Araku, and near and around Kothguda within the range of 100 kms and sold them in Berhampur. In 1965, P. Srirammurthy joined as a new partner to the business. They then started selling in areas like Rajmundry Rajmahendry, Vijayawada and Vishakhapatnam. By 1969 they had bagged markets in Maharashtra, Gujarat, Rajasthan, and Uttar Pradesh.

Today his son, P.V.N Vinod, runs a Rs 2.5 crore turnover business of Siali leaf-plates, and is one of the key contributors to India's Siali leaf-plate market.

"In 1995, it was my father who invented paper-plates with Siali on the top. Then, it was a great innovation, and today it is being used everywhere.

Siali leaf-plates were in much greater demand earlier. Today because of technology and people's fast paced lives, the Siali leaf-plate is losing out to paper and plastic plates which are not only cheaper, but more durable and less time consuming. The eco-friendly tag is not something that sells so easily. At the end of the day, people want products that will be thoroughly leak proof and that will cost less. Today the market is only 5 per cent of what it used to be earlier," says Vinod.

Vinod runs a pharmaceutical company selling drugs, but the majority of his income is from the Siali business.

He explains the seasonal nature of the livelihood in his area. In Andhra Pradesh, the season for Siali leaves starts by mid April and goes on till July. During this period, all the plucking of Siali leaves is done. From August till October, the people make do with what they have stocked up during the season. Using the same stock they stitch plates. Also during this period they are busy in agriculture. October to January is the time when there is a dearth of leaves. During this period, Vinod's company buys rough stitched plates from Orissa and Bilaspur to supply to the women of Kothaguda so that they can make them into fine stitched plates and sell them back. Then again the season starts in April and the women are on their own, collecting leaves from the forests.

"Back in 1975, my father would buy lots of loose leaves from the Giayan Cooperative Corporation (GCC) about 60 truck loads. All the leaves would be stitched in Kothaguda as medium and fine stitched plates. Then in 1997 we started making machine stitched and moulded plates also" Says Vinod.

During the time of agriculture, the women stay home and work in the fields. Production is low during that season.

"If she buys leaves from us at Rs 12 to Rs 15 per kg, a woman on an average earns Rs 40 per day if she stitches 1 chakki of plates as 14 inch medium stitched plates. This can go up to Rs 80 if she stitches a higher quality of fine stitched plates."

The following are the rates Vinod buys at:

- Between Rs 50 to Rs 65 per chakki of 14 inch plates, ranging from medium to fine stitch.
- Rs 50 for 15 inch and Rs 60 for $16 \frac{1}{2}$ inch plates.

"Because of the nature of this product we all have low margins. It is a non-taxable product now. Initially it used to be taxed (NTR tax). But in 1978-79, the government removed the tax. The sales really shot through", mentions Vinod.

Based on the Maharashtra market, the purchase rate there is Rs 0.33 to Rs 0.48 per plate. This rate is given if the plates are properly packaged and transported to the destination.

Vinod sells a total quantity of 280 truck loads with an annual turnover of Rs 2.5 crores. He is a wholesaler. There are lots of small players in this industry, most of whom will sell not more than 80 truck loads per annum.

Vinod speaks about his future plans, "Currently we are into leaf plates, plastic and paper plates (recent additions), but I'm thinking about exporting outside India. I need a consultant who will guide me properly and help me scale my business".

Vinod has completed his MBA from Manipal University and has recently taken over his father's business.



Situation Analysis Before PRADAN's Intervention – A Case Study of Belghar, Kandhamal District

Belghar is a village located 60 kms. near Muniguda, in the Kandhamal District of Orissa. Like most other villages in Kandhamal, Belghar is scarcely populated with a population of only 200, half of whom belong to the Kandha tribe, more commonly known as Adivasis. Poverty is widespread, with only *kaccha* houses and roads, and limited supply of electricity (solar) and water.

The villagers of Belghar earn their living mainly through two activities - agriculture, and the plucking of Siali leaves, both of which are seasonal in nature. Out of the total population of Belghar almost 70 per cent of the families is involved in the activity of Siali leaf plucking. Out of the mentioned numbers



almost 60 per cent of the families are into the activity for seven months in a year. In the spring and summer months, agriculture takes priority; in winter and spring, Siali leaves are good for plucking. The two activities also tend to be gendered: the women are more actively involved in plucking Siali leaves (although the men help out as well with bundling and selling the leaves); the men, for their part, focus on agriculture. Alternating their time between the two activities, the villagers of Belghar strive to sustain their families. This case study becomes relevant as it attempts to show the similarities between the Belghar of today and the Balliguda of 1998, before PRADAN's intervention in harnessing the leaf plate making activity.

The Process

For generations families in Belghar have earned their livelihood by plucking Siali leaves. Their routine has remained basically the same throughout the decades. The women of the households wake up early to leave for the forests. They spend the whole day collecting leaves and return late in the evening. If the weather is good and dry, the leaves are tied onto a string and hung out in the sun to dry. After two or three days of drying, most women take their leaves to the common village godown, a storage cell in Bhurlubhar village, where the leaves are bundled by the men, using a tall and hollow metal structure to press the leaves inside and bundle them tightly. These bundles are then pulled out of the structure and safely stored in the godown. For the families that live far from the godown, they bundle their own leaves at home (albeit, roughly) and do not store it at the common godown.

The Degree of Established Market Linkages and Value Additions

The harvested leaves are then bought by a single trader from Thumidibundh, who later sells them in Andhra Pradesh. These bundles of loose dried leaves are bought for a price anywhere between Rs 5 to Rs 7 per kg, depending on the quality of the leaves. The factors that determine quality are the levels of dryness and the colour of the leaves. Normally the golden coloured leaf fetches the maximum price. This particular type is found only during months of April and May every year.

Often the trader will simply dictate a price and the villagers are unable to argue as he is the only seller and, therefore, their only connection to the outside market. For the few who do not use the facilities of the godown, they remain on their own. They go to the nearby tea shops and small eateries where they sell their loose dried Siali leaves, which are directly used as plates or even as packing material for food items. A family roughly sells 10 kg of Siali leaves a day, earning Rs 50 to Rs 70 after long hours of hard



work. A household can make a maximum of 100 kg a week, earning Rs 500 to Rs 700, if sold to the trader who buys in bulk. If they decide to go individually to sell it to the nearby shops, their income is even more irregular.

A tribal woman who lives in the outskirts of Bhurlubhar village says, "Siali gives us enough money to buy salt and sugar and a few basic necessities in the house."

Satish Patnaik an Executive (Projects) with PRADAN for the last three years, has this to say, "You have to understand that when a family says that, sugar and salt is a big deal for them they often have to make do without such basic necessities, this is because of their deep rooted poverty."

The Siali producers of Belghar are unaware about value additions. They have dealt only with loose dried leaves for generations. "Only 6 to 7 years ago, we started bundling the leaves so that they can be easily transported when the buyer comes. "With a single trader buying stock from the people of Belghar, the rates for Siali have hardly changed for several years now. They are incapable of bargaining for a better price and quoting a price for the leaves based on basic inflation over the years. Importantly, their skills have not been harnessed to bring more income to the family by selling value added products to the market. The Siali workers have a very vulnerable source of income due to a skewed market linkage system. What puts them at even greater disadvantage is their complete lack of awareness on how to capitalise on a product that originates in places like Belghar and gets sold for ten times this price in main city markets.

The Women and Siali

There is no doubt about the huge contribution being made by the women of Belghar in their family's incomes. Prabhat Jaani of Belghar very readily admits, "Our women work much harder than us. They work longer hours and contribute so much to the family. While men work only on days when there is work in the fields. Women work all around the year, either plucking Siali leaves, or working in the fields, depending on which is in season. We feel useless compared to them."

It is important to note that the women of Belghar have proved themselves to be stable bread earners for their families, tirelessly shuffling back and forth between their Siali activity and agriculture. Despite rampant poverty, a ray of hope shines, as the women of Belghar enjoy the status of being the decision-makers and planners at home. In turn, these factors contribute to making their domestic lives peaceful.

Willingness to Learn and Cooperate

The villagers of Belghar have always exhibited a high capacity to learn. Ranjit Jaani, one of the village men says, "If you come and train us on how to better our skills and make more money, we will be delighted to learn. If someone tells us today to stitch *Sal* leaves because there is a buyer, we would also do *Sal*. We are willing to do anything to earn more. Right now we are keen to learn."

Such willingness to learn and cooperate has proved to be a key ingredient in the battle against poverty. Of this, the villagers of Belghar are aware, and they are eager to work hard with the guidance of others in order to organise and reach out to the right buyers who will ensure them higher incomes.





Pradan's Intervention

Why Siali Leaf-Plate?

When the PRADAN team at Balliguda in Kandhmal District decided to intervene in the Siali leaf plate sector it was with the following reasons:

- **Inclusion of the Poorest Section of the Community:** Kandhamal district in Orissa is known as one of the country's most impoverished pockets. Encouraging such an activity there offers the people a stable source of livelihood and equips them to come together and capitalise on the large quantities of value added Siali-leaf plates to ensure them of higher incomes. Also, because of its unique features such as no investment and short activity cycle, it fits into the livelihood portfolio of the poor families who live in the vicinity of the forests.
- **Resources:** Kandhamal is rich in raw material for families who would want to take up leaf plate making activity, with a potential for round-the-year produce.
- Prior Experience: More than half (60 per cent) of the families in Kandhamal were already engaged in Siali leaf-plate production.
 Therefore the basic know-how about leaf plate making exists amongst the local population.
- Very Little Liability: The enterprise in itself does not require any investment and hardly has any risk for liability. Therefore it fits into the livelihood portfolio of poor families.
- Short Cycle of the Activity Ensuring Immediate Returns: The activity has a very short cycle and therefore the returns are immediate which suit poor families
- **Constant Demand:** The sector itself has a lot of demand. Its typical use in urban centres during marriages and other social occasions ensures that there is a very steady increase in the demand for leaf-plates. There is also a very steady demand from other states like Andhra Pradesh and Maharashtra also. Therefore, incomes from Siali leaf-plate making activity is guaranteed.
- **Potential for High Return:** Potential for annual returns per family from Siali leaf-plate making is in the range of Rs 6,000 to Rs 8,000 if value additions are made.
- Environment Friendly Product: The whole product, since it is biodegradable, is environment friendly and therefore scores over plastic plates and cups.

The Strategy

PRADAN's Intervention Strategy was to

- a) Plug the leaks (in the form of interest owed to moneylenders) by the formation of Self-Help Groups (SHGs). These SHGs helped the families in paying back their debts thereby pulling them out of the debt cycle
- b) Facilitate livelihood support from external financial institutions like banks by leveraging credit
- c) Promote a basket of activities based on people's present experience level
- d) Provide support to each family through a combination of one or multiple activities, depending on their skills and resource base, with an objective of enhancing their annual income by Rs 8,000.
- e) Organise the families who are into the activity into a cooperative to take up various activities such as procuring leaves, storing them and facilitate the value addition to the final product. Such an organization would be able to bypass the middlemen who exploit the families. Such an entity would help in aggregating the produce of all the families and market the same more efficiently.
- f) Implement a very meticulous and detailed planning for initiating capacity enhancement programs for families who are into the livelihood activity in technical and motivational spheres.



PRADAN's Intervention: A Timeline

1999

A survey was undertaken in and around Balliguda block of Kandhamal district. Taking note of the acute poverty in the district, PRADAN made the decision to place a team in the area.

2000

The team started its operation in Balliguda with an area saturation approach. It initially targeted four blocks, out of which three blocks were covered by the operations of Agency Marketing Cooperative Society (AMCS). AMCS was another key player in the Siali leaf plate industry in the 1990's. These areas were so remote that one had to walk 10 to 15 km to reach the villages.

One of the initial observations during this phase of intervention was that there was absolutely no value addition practiced. The villagers simply plucked the leaves from the forest, dried them, and sold them to a single trader. The price depended on the weight of the leaves. District Supply and Marketing Society (DSMS) had previously given trainings on making Siali leaf plates to 3,000 families, but it did not succeed in bringing the profits into the hands of the poor, for the simple reason that there were no buyers. PRADAN saw that in spite of the technology, the skill and the willingness to cooperate, the women needed assistance in linking their produce to the appropriate market.

2002

With help from PRADAN, three SHGs began getting involved in leaf-plate trading, in order to provide the tribal producers with the opportunity to sell their produce directly to bigger leaf-plate markets. Needless to say, this effort broke the monopoly of the local traders. In the meantime, SHG members got



acquainted with the nitty-gritty of leaf-plate trading, such as working capital requirement, proper storage system, and market behaviours.

2003

Linkages were established with traders of Andhra Pradesh. During this period, eight truck loads (TI) of rough stitched plates were traded at Brahmapur and three TI were traded at Andhra Pradesh. It was here when members started to get exposed to close stitched leaf plate making. Nearly 100 SHG members were given training on close stitched leaf plate making in this year.

By the end of 2003, competitions among traders became quite visible. As a result, the price of rough stitched plates in the area almost got stabilised.

2004

PRADAN conducted market studies in Orissa, Andhra Pradesh, and Maharashtra, to get a clearer picture of the various types of value added leaf-plates like medium stitched, closed stitched, machine stitched and moulded leaf-plate products. Out of these different types of value additions, it was found that the members could easily adopt the medium stitching which was also quite remunerative. Gradually, they began acquiring the skill of stitching close stitched and machine-stitched plates, which would be remunerative only if the members have sufficient skills to do it maintaining its quality. Again after the market study, PRADAN initiated the process of promoting a formal producers' collective of members involved in leaf-plate making activity and started the moulding unit at Balliguda. The purpose of setting the moulding unit was to give additional returns to the beneficiaries. Keeping all these in mind, PRADAN conducted a series of trainings on making medium stitched leaf-plates to 1200 SHG members, 11 members of one SHG were given training and material support for making machine stitched leaf-plates. A fiveyear activity plan was made with a strategy to market 60% of the plates directly, 30% after cutting and 20% after moulding. PRADAN so far had worked with some families and had slowly increased its outreach but now, after about three years of intensive engagement in the sector, and also with the families who are into the business of leaf collection there were few areas which needed to be addressed very urgently like:





- There was the occurrence of price seasonality which had to be taken into consideration before embarking into any long term planning.
- There was an urgent need for a detailed market survey to decide on the future course of action as far as products were concerned. Decisions needed to be taken as to what sort of value addition do these families do that can get them better returns. A high level of product diversification had to be maintained to compete in the market.
- Storage facilities had to be organised to be able to hold products in case there was a dip in prices and also to store high quality leaves.
- Our experiences showed that a single group or an SHG should not get into the business as it could not provide the economies of scale required to make the business work.

This was also the time when the idea of a producers' collective was discussed in the PRADAN team at Balliguda to provide economies of scale for the business and various services to the ordinary producer such as raw material supply, value additions, collection and marketing assistance.

2005

This was the year that the cooperative was formally constituted after three years of experimentation. There were various trainings conducted with the women to help build production skills which could add value to the final product. The members were trained so that they could understand the functioning of the cooperative and its benefits in helping them to get a better price for their products and also the roles and responsibilities of the various stakeholders. As part of the handholding process of the newly constituted producers' collective and its members, the PRADAN team helped them to arrange for the working capital and also the required machinery. An exposure visit was also organised for the members to Kothakotta in Andhra Pradesh to get an enhanced understanding of the role of value addition in the leaf-plate sector. This visit also helped the members in developing a perspective about the sector. Once the exposure was over, there were a series of internal consultations between the members facilitated by the PRADAN team to finalise the strategy, the result of which was a five year activity strategy document for the collective.

It was in the year 2005, that the collective got a firsthand experience of retail marketing and also made profits. This profit and also the first-hand experience of retail marketing acted as a shot in the arm for the cooperative boosting the confidence levels of the members. The cooperative also in the same year made sales of Rs 5.1 lakh and bagged an order from the Tribal Cooperative Marketing Development Federation of India Limited (TRIFED) for an annual supply of Rs 30 lakh medium stitched plates to the famous Tirupati temple. The financial value of the deal was Rs 25 lakhs.

2006-2009

This was a phase where the vision was to strengthen the Cooperative and also enhance the skills and the knowledge of the members further. There were various trainings organised during this period to help the members gain the necessary skills and the confidence in governing a large enterprise. Support to the cooperative in arranging for the working capital cooperative and infrastructure came from the America India Foundation (AIF). Newer marketing tie-ups were explored and strengthened. There was a new emphasis on improved stitching of the products and it was also for the first time that the cooperative was able to deal with traders from Andhra Pradesh directly. Relationships were built with different external agencies like TRIFED, Tribal Development Cooperative (TDCC), DSMS and the World Food Programme (WFP). The tie-up with TRIFED was for marketing assistance, biofuel machines for preparing leaf-plates and for working capital requirements of the co-operative. The World Food Programme came in because of the assistance received for the godown building as well as organising trainings for the producers which was also done with support from TDCC.

All these very positive steps resulted in the cooperative achieving a turnover of Rs 17.2 lakh and of Rs 28.5 lakh during the financial years, 2006-2007, and 2007-2008, respectively.



Kandhamal Women's Leaf Plate Cooperative: An Introduction

Pradan's intervention has led 850 families involved in Siali leaf-plate making to organise themselves into a cooperative—Kandhamal Women's Leaf-plate Cooperative Limited. The collective was set up with the mission of bringing about empowerment of its members, especially from the weaker sections of society, through economic and social progress by means of self-support and mutual help while carrying out the activity of leaf-plate making and trading. The objective of forming a cooperative was discussed to ensure the best way to organise women to pool their produce and directly sell to the end market, thereby ensuring higher profits and the ability to determine who the cooperative wants to sell to and at what rate.

Smruti Rajput, is a member of the Kandhamal Women's Leaf-Plate Cooperative Ltd. (KWLCL). Though she was a bright student, she was forced to stop schooling when she was in the 10th standard, as her father was diagnosed with severe paralysis and her mother suddenly developed brain fever. It was a shock in the family to have both her parents rapidly falling so dangerously ill. Being the oldest in the family, Smruti's responsibilities started mounting, and it came to a point where she could no longer go to school because she was constantly required at home. Still, she struggled to finish her 10th standard board exams, but eventually realised she could no longer continue her schooling. Smruti was compelled to start earning some form of income. She started taking home tuitions for school children, earning Rs 500 a month from teaching mathematics to a few students. With such meagre income, it was difficult for Smruti to make both ends meet, especially as her parents' medical expenses began to mount.

Four years ago, she heard about Siali leaf-plates and that an NGO named PRADAN and an



organisation named KWLCL was giving out sewing machines at a nominal monthly instalment of Rs 40 per month, while giving training to people to stitch these into leaf-plates. She found the offer attractive and joined.

Today Smruti earns Rs 100 a day from making 10 chakkis, or an equivalent of Rs 3,000 a month. Once in a few days, she buys rough stitch plates from the cooperative at Rs 10 and after machine stitching the leaves, sells them back to the cooperative for Rs 20 to Rs 23. She has altogether given up taking tuitions due to lack of time. She is happy to engage in siali leaf-plate making, for several reasons: She can spend more time at home and she knows that she can earn more from this activity. She is grateful to have found work that brings her good income while allowing her to stay home. Smruti has helped her parents get good medical treatment, and has been running the family now.

Smruti says, "We are able to pay back loans and we have a steady income that is reliable. Life is much better now than when I used to take tuitions. My parents are also improving slowly." When asked about her future plans, she says, "I hope someday my parents will get better and I can resume my studies and become a teacher. Until then I will sustain my family stitching Siali leaves."

PRODUCT PROFILE								
PRODUCT	NO. OF STICKS	ORIENTATION OF STICKS	TIME TO STITCH	PRODUCT USE	PRODUCT DEMAND	PRICE TO PRODUCERS (Rs)		
LOOSE LEAF	0	_	—	Taking tiffin/ food, raw material for value- added plate making	Andhra Pradesh, Tamil Nadu, Karnataka	5/Kg		
ROUGH	12	Zig-Zag	1.25	Taking meals and for value added plate making	Andhra Pradesh, Madhya Pradesh, Chattisgharh, Maharastra, Karnataka	6/100 plates		
MEDIUM	25	Edge	2	A single plate is used for taking food	Andhra Pradesh, Chattisgharh, Maharashtra, Rajasthan, North India	20 / 100 plates (18" Dia)		
FINE	80	Edge	3.5	A single plate is used for taking food	Andhra Pradesh, Gujarat, Karnataka	30/ 100 plates (18" Dia)		
MACHINE	Thread	Edge	2.5	A single plate is used for taking food	Andhra Pradesh, Orissa, Karnataka , Maharashtra	30/ 100 plates (18" Dia)		
MOULDED	_	-	-	Increasingly used in various functions	Andhra Pradesh, Karnataka, Orissa, Maharashtra	Varies as per size, base material & top stitched material		

A) Product Profile

PRODUCT	PRODUCT SKILL INVESTI		PRODUCTION / DAY(Plates)	RETURN PER DAY (Rs)
ROUGH	Very low	Time & labour	350	10—15
MEDIUM	Low	Time & labour	200	24
FINE	Average	Time & labour	150	32
MACHINE	High High Time, labour, Rs 3,000 sewing machine		200	33
MOULDED PLATES/ CUPS	High	Buffet(800—1000) Plates(1200—1500) Cups(2500—3000)	Moulding machine, leaf-plate, accessories	Additional return of Rs 4 per 100 plates



B) Production Systems

Leaf-plate production system – from plucking to the finished product – comprises various stages, as described below.

a) Leaf Collection:

The women members of the family normally do the leaf collection. Normally women in groups go to the forest early in the morning with one male person as a guide, and return to their homes by afternoon after plucking leaves. The leaves are plucked with the help of locally made knives customised for leaf plucking.

b) Plate Making:

After leaf collection, the leaves are tried with a rope and left to dry in the sunlight. Leaf drying process takes around half a day. Members then use these loose leaves to stitch rough plates, medium plates, or fine plates, with the help of bamboo or date palm sticks and then machine stitch.

c) Purchase System:

Purchase is being done at the cluster level with one centre per cluster. A cluster is an association of SHGs from nearby villages. One person from the village is identified by the cluster to maintain the books of accounts while purchasing. To maintain the quality and uniformity of the produce, two SHG members per cluster are selected by the cluster and provided training on quality control. While purchasing, the produce of individual members are graded according to the quality and the grade is written down on the member's card. During the cluster-level monthly meetings, discussions are held to encourage member to maintain quality. Other production related aspects are also discussed during these meetings.

d) Storage Godown:

After purchase is made, all the produce is stored in the cluster-level godowns. All the produce is stored in a stalked manner after bundling and measures are taken to protect the produce from water.

e) Processing Unit:

From cluster godowns the produce is brought to the central processing unit in Balliguda. Here, the final gradation of the produce is done before its processing. After grading, the produce is either pressed moulded or cut in round shapes, they are then packed and delivered as per the orders.

f) Training and Exposure:

Occasional trainings and exposure trips are organised for the members to enhance and update their skill in stitching, market awareness and resource utilisation.

Market Chain: Before and After Intervention

As is evident from the diagram shown below the market chain shows a dramatic change after the setting up of the cooperative for families engaged in leaf plucking and plate production. The cooperative has aggregated the produce at various places and has also provided the economies of scale making it possible to reach directly to a large number of markets, which so far had remained out of bounds for the poor families.





The Siali Leaf Plate Best Practices

The PRADAN experience in the Siali leaf plate making sector has been successful because of two major reasons. Firstly, a robust techno-managerial training system which trains the members not only in producing better quality products but also helps them enhance their abilities in managing their own business as well as their collective. The trainings focus on enhancing the abilities of all the actors involved in the activity. Therefore there are trainings for enhancing their skills in accounting, production, marketing for the producers as well as for the staff of the collective. Secondly, the formation of the leaf-plate producers collective in the area has helped in aggregating the produce and provide the economies of scale to the individual producer to survive and compete in the market.



PRADAN's current situation: 4 types of training					
A. Members and Suppliers (basic training)	B. Procurers				
 Stitching (oil, clean and use of machine) SHG unity, awareness Marketing skills - awareness of cost/benefit Procurement procedure What is the cooperative Training in plucking in applicable areas Members: Also training in roles and responsibilities in cooperative Monitoring and sanctioning training of procurers 	> Training in accounting, checking and administration responsibilities				
C. Cooperative training (comprehensive & extensive training)	D. ToT (Training of Trainers)				
 ToT aspects - they learn to train members and non-members in the production process, cooperative's role, changes in life Negotiating skills, decision making, roles and responsibilities awareness Accounts Fund rasing and public relations Training in plantation skills and public forest maintenance 	 Enabling people to train each other Need assessment Monitoring skills Money trading 				

PRADAN's Comparison between Machine Stitched and Medium Stitched Plates

For this study, the Mahasingi cluster was selected as women were regularly producing machine stitched plates, unlike in other areas where either the machines were being sold or being used for other purposes, if at all being used.

There were mainly two reasons that encouraged women to go for this product: (1) Price is constant round the year unlike rough stitched plates where it varies a lot; (2) The price of the product is high and also collected fortnightly. Thus whenever a woman sells them she gets a lump sum amount. (3) Time is not a major constraint as far as stitching is concerned. On an average, women are able to stitch 1.5 - 2 chakki (150 -200 plates during a day.)

As far as the limitations are concerned the stitching has to be done during daytime only. The evenings can be used for sorting the leaves. Women with small children are not able to go for this activity. A major limiting factor is the seasonality of the availability of the leaves that restricts the production of the machine stitched leaves.

The women in Sirtiguda village were not going for the machine stitched plates as they were able to earn more from other sources such as wage labour and turmeric cultivation.

Suggestions: A comparative study of both the value added products namely - machine stitched and medium stitched plates shows that machine stitched plates are preferred over medium stitched plates. This is because the price offered is not very attractive to the producers as compared to the time taken and care required in the medium stitched plates. Even though machine stitched plates offer a better price, it is not suitable for those who go as daily wage labourers on a regular basis. For others, the problem again is making it a round-the-year activity, which is more desirable. For this there is a need to work on the availability of the leaves by means of storage, etc.



Perspectives

Non Members

In Mathrungaon village the women of a joint family have been selling loose Siali leaves for the last ten years. Apart from engaging in Siali leaf activity, they are also engaged in agriculture. They know how to make Siali leaf-plates and bowls. "Although we know how to make leaf-plates and bowls, there is no demand for those. We have only one buyer who wants to buy loose leaves. Also making leaf-plates takes more time. It is easier for us to just pluck the leaves and dry them, so they are directly ready for sale."

They are paid Rs 6 for 1 chakki of rough stitched, or Rs 8 for 1 kg if they sell loose leaves. "We make Rs 70 a day selling leaf-plates, but between Rs 80 to Rs 90 per day selling loose dry leaves."

They use the money they get for health purposes and daily consumption. There is hardly anything left for savings. Every single day is a new day for plucking Siali leaves in order to feed their stomachs.

At Mathrungaon, there are hardly ten houses and families living together. These are adivasi families living without even the basic necessities such as electricity, or proper irrigation facilities. It is not unusual for them to have just one single buyer who has been buying their produce at the same rate, for the last five or six years. This is what one of the women in the family had to say, *"If there is a good demand for Siali leaf-plates and bowls, we are willing to make them. We are even willing to make Sal leafplates. We are ready to do anything that the buyer wants."*

As an afterthought, she adds, "We might be getting cheated. We are poor; we really don't know these things. Where do we go look for new buyers now?"



Forest Department

Forest ranger, Mr Ashok Kumar Behra, is in charge of the Belghar forest area. He speaks about a non timber forest produce (NTFP) licence required only for *Sal* trees and not for Siali. He says, "There are no restrictions on Siali produce. One is allowed to pluck as much as one wants. The only thing one is not allowed to do is to cut the Siali stem, or use the Siali fibre. For that, they will need an NTFP licence."

Siali used to grow in abundance. Over the years, however, the harvest has reduced significantly, causing worry to the ones who depend on Siali for their livelihood. Speaking about the gradual reduction in Siali growth, Mr. Ashok Kumar Behra says, "What is known as 'Podhu' or shifting agriculture is the cause behind the Siali's depletion. The tribals in these areas burn patches of land for various reasons. Sometimes it is for agriculture, and sometimes to ward away animals. Although we have tried to stop them, it is a way of life for them which they cannot give up easily."

Another reason for the decline in the growth of Siali plants is the extensive use of the Siali fibre for various purposes. Cutting the stem of the Siali plant kills it. Although trimming is good for the plant (i.e., as you cut a portion of the plant, five more stems sprout), uprooting it or peeling off its fibre causes irreparable damage. Another factor is the natural occurrence of forest fires; that cause a lot of damage.

Therefore, one may ask, is the future bleak for the Siali? What is the forest department doing about these issues? Mr. P. Patnaik, Forest range officer of Phulbani area says, "This year OFSDP (Orissa Forestry Sector Development Project), in association with JBIC (Japan Bank for International Cooperation) is planting 1000 new plants. It is a pilot, depending on which we will expand and continue this support."

He also talked about the various Forest Conservation Committees which had been set up, "They are called VSS – Vana Sangarshana Surakhya samithi, or the Forest Conservation Societies. We started these 3 years ago. People are gradually becoming aware if it. With the new funding that we have received for Siali plantation, we have planted 10,000 Siali plants across 10 villages. A lot needs to be done to increase the supply to match the growing demand."

The forest department supports the Siali business wholeheartedly. Recently, P. Patnaik helped PRADAN's members by constructing five storage godowns at Rutungia village, for the proper storage and care of Siali leaves that are plucked by the village women. The women often get poor rates for their produce simply because the leaves which they hang out to dry get wet in the rain. Dry leaves are regarded as good quality leaves that fetch them good prices. Recently the forest department has started giving support to the cooperative in the construction of five storage godowns in the villages so that members can properly store the quality leaves and the leaf plates stitched by them in bulk Mr Patnaik adds, *"One would be shocked to see that in a lot of cases, the price they sell for has not changed in the last 20 years. The people who produce Siali leaf-plates need organizations like PRADAN to give them market linkages and guidance on how to capitalize on their hard work."*

Mr Ashok Behra recalls, "Roughly in the year 2001, the Forest Department gave out sewing machines to a few families in Belgaur, to help them make value additions, like stitched leaf plates, and sell for a better price in the market. They stitched leaf plates for a few months, but gave it up because they could find no buyers for machine stitched plates. Organizations like PRADAN need to intervene in such areas. The poor communities need encouragement and guidance to get out of poverty."

MANI - Manav Vikas Niyojan Samiti

MANI – Manav Vikas Niyojan Samiti is an organisation established in 1987 in Kandhamal District in Orissa. It works on the empowerment of Self-Help Groups and the promotion of rural livelihood initiatives. Two of its primary activities are training women on handicraft and working with Siali producers. In a discussion with Mr. Ashok Kumar Parida, the founder and secretary of MANI, he throws light on several key issues.

Members of MANI are spread across Kandhamal district, Phulbani, Phirinigia, Balliguda, Tumudibundh and K. Nuagoan. In all, 580 women are engaged with the organisation. The SHGs produce medium stiched, fine stitched, machine stitched and moulded buffet plates, tiffin plates (small plates) and bowls. Mr. Ashok Kumar Parida says, "The concept of Siali leaf produce is actually used as a barter system by the locals. In several extremely under developed villages, the Siali leaf is used as currency to buy groceries for the family. For instance, a poor family goes to a grocer asking for 1 bag of rice. The grocer would in turn take away all the Siali produce brought by the family for that one bag, without keeping in mind the equality of the market value for each. Many families are trapped in this cycle because of their deep rooted ignorance. To them, Siali is the only 'money' they will ever have to feed their families."

He explains that the families in these areas are not even aware that they have the right to demand a price for their produce. MANI works to help these families raise their awareness about the markets, principally by exposing them to the Siali leaf-plate market outside Kandhamal district. These producers also tend to think that more quantity automatically translates to more money, instead of understanding that value additions give higher returns in the long run. Another factor that deters them from producing finer quality products is the lack of buyers. They have become so used to being cheated and exploited, that when a buyer comes to order truckloads of leaf-plates, they move with much caution because they feel they will only end up being cheated.

Mr. Ashok Kumar Parida says, "We need to do serious work with their self confidence and morale first, before any training takes place. Today Siali is their only ATM card." Mr. Parida is of the opinion that Rs 6 per chakki, is far too less for rough stitched plates."The sector is monopolised by big players, without anyone considering the kind of effort these villagers put in to pluck the leaves every day," he says.

The good news is that demand for the produce is increasing by the day, and Kandhamal district in Orissa is one of the key suppliers to this booming industry. One needs to capitalise on such a position.

The Forest Conservation Society – A Case Study of an Unforeseen Impact

The Siali creeper has been used for generations to make leaf-plates for domestic consumption. The stem, known for its strength and durability, is peeled and used for binding. A small grain found inside the seeds makes a good snack. The fruit of the Siali, (a long and flat velvety brown texture) has also been used for its velvet skin. A tree with such innumerable uses is a wonder. Siali has been used as a source of income only for the last 30 to 40 years.

Says Forest Ranger Mr. Ashok Kumar Behra, "90% of Kandhamal district is dependent on Siali, directly or indirectly." Siali was a plant initially being used only in the areas where it grew, by the locals for their personal consumption. Now with developed trade routes, Siali has found its way to places like Maharashtra and Gujarat, where it does not grow, but a demand exists for these eco-friendly leaf-plates. It is used in weddings, temples, etc. Siali has now become the predominant source of income for scores of people across the country – producers, middlemen, wholesalers, and retailers.

As recently as 20 years ago, the Siali creeper grew in such abundance in the forests of Orissa and Andhra Pradesh, that the Forest Department had classified it as a weed. Today, demand for the creeper exceeds its supply. This overutilisation is one of the reasons why the Siali is losing its abundant supply in the jungles. The women who pluck the leaves, however, are of the opinion that the leaves are depleting due to another reason: forest fires. These are sometimes natural fires, but more often than not, these fires are started by the tribals of the area.

Forest Ranger Mr. Ashok Behra says, "It is known as 'Shifting Agriculture'. Essentially they are nomadic communities and so they keep burning patches of the forests for cultivation. They do not understand the value of the forests (it is evaluative as perhaps they do not have other livelihood





options). We try to explain it to them a lot, but they have been doing this for generations, and now it's difficult to make them stop."

At PRADAN, a new initiative has started on this front in Palami village, called the Forest Conservation Society. Satish, with Executive at PRADAN says, "The Forest Conservation Society is an initiative that was started a year ago in 2007 in one of our areas. What we try to do, is make the Adivasis understand why burning of forests is disastrous for the environment and eventually for their own livelihoods. The Adivasis are totally dependent on the forest for almost everything. But by burning the forests, they are depleting valuable resources for themselves." Palami, the village in Kandhamal district, where PRADAN has started its first Forest Conservation Society (FCS/VSS), is a small village where 70 to 80 Adivasi families live. It is beautifully situated in a valley that is surrounded by hills on all sides. A group of villagers, who have been appointed as President and other key roles with the FCS, share that, "We use forest resources for sal seeds, amla, harida, bahada, dhoop, bhimbread, shikakai, mahua flowers, pathaal garud, honey, gara, sal wood and piya sal wood, til, turmeric, mustard and importantly Siali leaves and their stem,".

The Adivasis have always been portrayed as villains for contributing to forest depletion and destruction of natural resources. Speaking to them face to face, however, allows one to understand the rationale behind their behaviour. *"Earlier, we didn't have enough to eat and didn't have any land but the forest area to cultivate," says Ranga Mallika. "The only way we could do it was by cutting forest trees and using the space to cultivate. When we tried to cultivate on the little non forest land, the animals came and destroyed the crops. Another reason is that the crops we want to cultivate simply do not grow in this terrain where we live. It only grows in the forests. So we must clear trees and cultivate these crops."*

When one visits Palami, it is evident that there is hardly any land available to cultivate. The forest area starts within a few hundred meters, and then one can notice the patches in the hills that have been cleared. Kishore Mallick explains, "We cultivate *paddy, beans, and black dal*" pointing to the various patches that have been cleared to cultivate various crops.

Of all the crops they cultivate, the black dal, is the most important for them, and fetches the highest income, at Rs 30 per kg. It can be quite upsetting to know that they are incapable of growing these crops on non-forest terrain. They do not use their existing living areas to cultivate vegetables and other crops because of lack of money to buy fertilizers and the lack of proper established irrigation facilities. Cultivating in the forest is easier for them because it requires no fertilizers and no water _ the soil is rich and the rains provide the water.

Before they started the Siali business, the families of Palami were engaged in agriculture for their livelihood. *"Our annual income per household was a maximum of Rs 15,000. Most of our crops were used for consumption and if anything remained we sold it in the market."*

"It all started in 1998 when the government body, AMCS, came to our area and told us that if we plucked Siali leaves from the forests nearby and stitched them into rough stitched plates, they would buy it from us at Re1 per chakki. They showed us how to stitch, brought us a few samples and slowly we learnt how to do it. We produced about 100 chakkis per week back then."

Each family in Palami makes somewhere from three to four chakkis of leaf - plate every three days. Now they sell rough stitched leaf-plates at Rs 6 per chakki. They sell to a local trader from Balliguda. In the winter they earn more, a maximum of Rs 7 to Rs 8 per chakki, because the quality of leaves is better then. *"Now there is more money and less leaves.* According to the Adivasis, Siali leaves have consistently reduced over the years because of three reasons:

- Goats, buffaloes, and other animals eat the Siali leaves when there is no other food around.
- There are too many people collecting from the same area. People even come from nearby villages and collect the leaves from in their forests.
- There is extensive use of the Siali branches and peeling of the stem to make cots and mats and also to bundle the siali to transport it easily. All this kills the Siali creeper.

As a part of there efforts to protect the forest, the villagers of Palami have now implemented new norms for utilising forest resources:

- Nobody will set the forests on fire.
- Nobody will pluck the Siali stem or uproot Siali plants. Only the cutting of leaves is allowed.

It is a clear understanding now of the role that the forests play in their lives that helps them in their stand. "If we cut the jungles, we would have to go farther and farther away to get all our resources, we depend so much on these forests that we realize their importance now and feel that we cannot do without having them at arms' reach. We must always have it close to us." The Adivasis of Palami have stopped burning forests for cultivation. They make do with the existing land that they had burnt and are using it for cultivating various crops. "We are both happy and sad with the setting up of Forest Conservation Society, happy, because the forest is within reach now and will always be. And sad because these grains and grams are so important to us, and we just cannot grow enough of it. We need time to discover more about this initiative. It would probably bring us more good in the long run. We are still learning."



S.W.O.T. Analysis of the Leaf-plate Intervention

Strengths

- 1. Abundance of raw material
- 2. Eco-friendly
- 3. Builds on traditional knowledge
- 4. Empowerment of the women as owners of the cooperative
- 5. Low investment a no liability business

Weaknesses

- 1. A time consuming process
- 2. Non standardised quality
- 3. Easily damaged
- 4. Depleting quantity
- 5. Storage capacity
- 6. Working capital
- 7. Product portfolio not yet optimised
- 8. Absence of marketing and trading expertise

Opportunities

- 1. Creation of value additions
- 2. Supply of value added products directly to end markets
- 3. Brand creation
- 4. Increasing the outreach of the cooperative by bringing in more families
- 5. Purchase from other non-cooperative producers and become the leading brand

Threats

- 1. Plastic and paper plates are cheaper
- 2. Price driven market
- 3. Unscientific cropping of Siali
- 4. Multiple stakeholders



The Road Ahead

When the cooperative started, it comprised of just 50 families. Today, it is growing rapidly with over 850 families. The plan is to move towards making the KWLCL a registered brand. This comes with a lot of benefits. First, KWLCL will be in a stronger position to bypass middlemen and directly reach retailers because the products will be packaged and branded properly. Second, KWLCL can look at ISO quality grading through quality upgradation of the products. The women need to be trained on how to produce standardised quality leaf plates. The quality mark will fetch a more stable price in the market and make it a trusted brand. This will, however, need intense training and the arrangement of a quality control committee that samples the produce periodically. The leaf plates that do not make the quality cut can always be used as rough stitched plates. Third, it is important to create a strong end-user market, preferably, trusted, long-term clients who can purchase in bulk. These should be retailers, who sell directly to the end user.

The cooperative can become the single largest supplier of Siali in Orissa. If the members are ambitious, the cooperative can slowly start buying off other suppliers in Kandhamal district. Rough or medium stitched can be bought, and the cooperative can make value additions such as moulding, packaging and branding. This would also cost less for both parties because transportation costs will be very minimal. The cooperative can then set the price and raise industry prices slowly to ensure fair profits go into the hands of the 'Siali women'. Finally, when the cooperative really has strength, it can form a lobby group and ask the government for financial and infrastructural support. Such lobby groups would be strong when all members of the cooperative unite for effective advocacy. The future is full of possibilities for KWLPC. The cooperative has vested the rural poor women with the power to pull themselves out of poverty.



