

SILKEN SPREAD, BEYOND BOUNDARIES













TDF AT A GLANCE

2016-17

OVERALL OUTREACH

INDIVIDUALS

44,010

SOCIO- ECONOMIC PROFILE

84%

of the individuals we work with belong to Schedule Tribes (ST) and Schedule Castes (SC) from the economically weakest sections in rural & tribal India.

HOUSEHOLDS

17,130

REVENUE VILLAGES

837

STATES

5

DISTRICTS

17

ADMINISTRATIVE BLOCKS

31

TASAR VIKAS SAMITIS

476

NO OF REGISTERED FORMAL CO-OPERATIVES/ TRUST

4

TDF TEAMS

7

PARTNERS

Government Departments (Central & State)

12

Foundations & Trusts

2

Research Institutions

3

Civil Society organizations

8

BUDGET

₹ 6.2 million



SECTORAL IMPERATIVES

The Tasar culture is a cottage, agro-forestry and forestry based industry practiced by the tribal population of the Gondwana region of central India (12-310 N Latitude and 72-960 E Longitude), involves continuous chain of several production activities. It starts with either collection of nature grown cocoons from forests or rearing of silkworm on its host plants in forests/ plantations for production of cocoons, which are utilized by reeler's and weavers for production of yarn and fabrics. The major producers in the sector include Silkworm rearer's, yarn producers and weavers. Tasar sub-sector is constituted of two distinct segments: Pre-Cocoon segment which includes rearing of Tasar silkworm and harvest of cocoons whereas the after cocoon segment is called Post-cocoon segment which includes Production of Tasar silk yarn from cocoons and fabric weaving. These segments of the sector operates 100-200 km apart bridged by traders and middleman.

Rearer's, majorities of whom are tribal people, live in the forest or in the fringe areas. Although, agriculture is the primary livelihood of these people but considering the low yields of paddy in the rain fed areas, people look for additional livelihood opportunities. Tasar rearing starts after the agriculture season i.e. September, when the opportunity cost of labour remains low. The rearer's traditionally rear Tasar silkworm in the nearby forest areas. On an average, the entire family of the rearer's spends 80-90 days in silkworm rearing in the forestland. The seeds (eggs of moth) for Tasar are obtained mainly through indigenous means; which does not allow determining the quality of eggs. This often makes the crop risk prone. Tasar silkworms emit silk from their mouthparts to spin cocoons to cover their body at the end of their larval cycle. Rearer's harvest Tasar cocoons and sells the same to the traders operating in their area or to Governmental purchasing units like RMB (Raw Material banks). The cash earning from the sale of Tasar cocoons is spent to meet the basic consumption needs of the household. In a good cropping season a rearer can earn up to Rs.20, 000/- that includes his own labour cost.

The Post Cocoon segment initiates with Cocoon sale as a forward purchase through series of traders reaches weaving centres. Tasar yarn spinners, reeler's and fabric weavers are part of this segment and are generally belongs to Muslim or lower caste Hindu communities. The weavers mostly live in the villages in the hinterland of trading centres. Yarn production is an integral part of weaving activity and seldom carried out independently. Yarn production and fabric weaving are traditionally being carried out in handloom weavers' households. Weaving (including yarn production) is the primary source of livelihood for the traditional handloom weavers. The entire household remains engaged in different activities of weaving. The women including the girl children in the family produce yarn through a primitive process by using palm and thigh, which yield 50 gram of reeled yarn through 8 hours of work. The men including the boys weave or assist the adults in weaving. All the activities are to be carried out round the year to earn livelihood for the whole family. Since the weavers live far away from the rearer's, they obtain Tasar cocoons through a chain of middlemen. The weaver takes loans from moneylenders for buying cocoons and after weaving, sells the fabric to the traders. As yarn making does not add any value addition and always considered as part of the weaving activity, therefore yarn producers are further marginalized within the sector.

TASAR DEVELOPMENT FOUNDATION

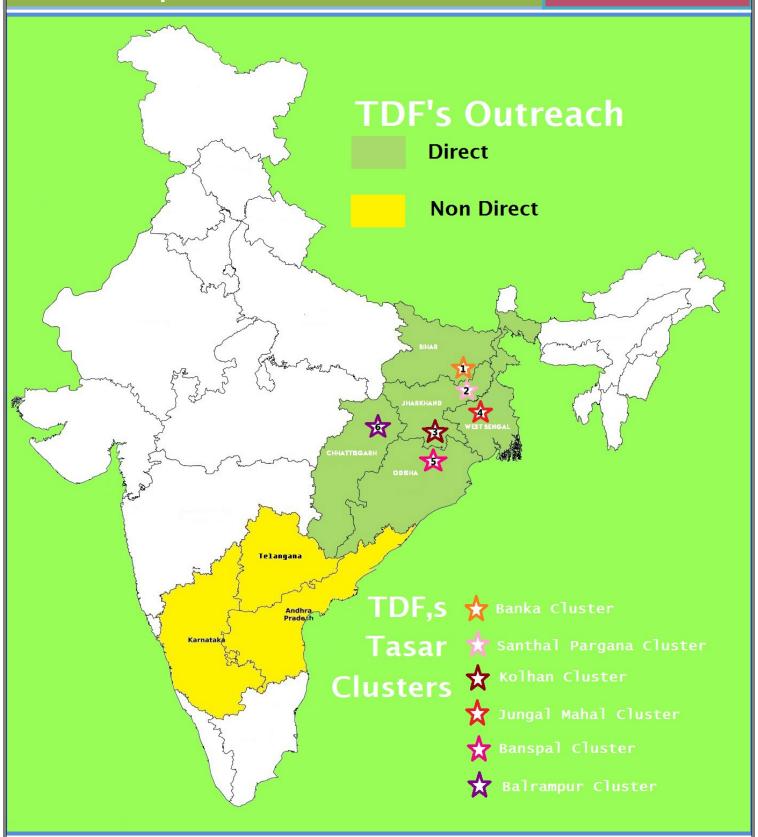
"Tasar Development Foundation", a company limited by guarantee not having share capital and not for profit under Section 8 of the Act (Corporate Identity Number: U17290DL2013NPL259919, dated 15-Nov-2013) and having its office at Flat No. 31 C, SFS S/F, PKT-2, CAT-2, SECTOR 6, Dwarka, New Delhi - 110075, Delhi, INDIA. TDF is a very significant initiative of PRADAN and for promoting and stabilizing Tasar based livelihoods with poor communities. TDF has been registered under Section-8 of the Companies Act, 1956 (No.1 of 1956) without capital and that the company is private limited.



The board of Director of TDF comprises two persons from the Management unit of PRADAN and Managing Director of Eco-tasar Pvt. Ltd. The Head of TDF is the ex-officio Chairperson of the foundation. The TDF is fully integrated with the PRADAN's management and Governance structure.









CLUSTER'S OF OPERATIONS

TDF has organised its grassroot operations into Tasar Clusters. Each Tasar cluster is organised into smaller teams of professionals dedicated to it who are supported by TDF's corporate circles at all levels. A Tasar cluster is a region, which developmentally, agro-climatically, institutionally, operationally and through management point of view can be considered as a unit. TDF's 6 Tasar clusters

1. Banka Cluster

District- Banka

State-Bihar

Household- 2,776

Blocks- 3 Villages- 185

Profile- More than 92% population lives in the rural area and 86% population belongs to Schedule caste and schedule tribe. The area being part of Bihar more resembles agro climatically and institutionally Jharkhand.

2. Santhal Pargana Cluster

District- Godda, Dumka

State- Jharkhand

Household-7,684

Blocks- 11 Villages- 410

Profile- More than 92% population lives in the rural area mostly dominated by Santhal tribe. The area lacks in all basic amenities. The Cluster is also home of the traditional Tasar variety of Sarihan, a local variety small in size but having high productivity parameters.

3. Kolhan Cluster

District- East Singhbhum, West Singhbhum and Saraikella-Kharsawan

State- Jharkhand

Household- 2,099

Blocks- 6

Villages- 82

Profile- This cluster comprises south eastern part of Jharkhand. Presence of rich minerals in this region and ever expanding mining initiatives have, on one hand, created job opportunities for the rural youth and on the other hand created huge exploitation. This cluster is also known for the most commercially exploited Tasar variety"Singhbhum Daba".



4. Jungal Mahal Cluster

District- Paschim Medinipur/ Jhargram and Bankura

State- West Bengal

Household- 1,550

Blocks- 2 Villages- 67

Profile- This cluster has the lowest per capita food grain consumption in the state because of low productivity of cereals and oil seeds. 95.64% population lives in the rural area. The per capita availability of land is very less, as major part of cluster falls under the protected forest category.

5. Banspal Cluster

District- Kendujhar

State- Odisha

Household- 1,405

Blocks- 3

Villages- 45

Profile- More than 95% population lives in the rural area and 92% population belongs to Schedule caste and schedule tribe. This cluster considered to be one of leading Tasar producing clusters of Odisha. Like Kolhan this cluster is also dominated by mining activities.

6. Balrampur Cluster

District- Balrampur, Kanker, Raigarh and Rajpur

State- Chhattisgarh

Household- 1,616

Blocks- 6

Villages- 48

Profile- More than 92% population lives in the rural area and 90% population belongs to Schedule caste and schedule tribe. This cluster is considered as the home of Raily cocoon, the mother of all cocoons, large sized and gives highest yield among all cocoons.



TDF'S STRATEGY AND INTENT

Strategic Intent:

The strategic intent of TDF is to provide a strong institutional framework to generate livelihoods for marginalized families at scale and re-position Tasar as a sector to draw both public and private investments, attract talented professionals and use the traction of the market for growth.

The strategic intent of TDF incorporates three important means:

A. Building layers of advantages:

- Continue to bring in young professionals,
- o Enable collectives to spearhead growth processes,
- Strive for drawing public and private finance in Tasar sector,
- Nimbleness to spread across state boundaries and build linkages across geographies,
- o Promote entrepreneurship spaces in key nodes such as seed supply, cocoon marketing,
- o Promote innovation through continued action research with multiple partners,

B. Changing the terms of engagement:

- o Producers as partners and not as beneficiaries,
- o Engagement with collectives rather than individuals,
- Collectives to negotiate with market on equal footing,
- o Collectives to assert and make demands on the Government,

C. Growth through collaboration:

 Broadening stakeholder base and working with multiple institutions such as—banks and Financial Institutions, market, research and resource institutions, producers' collectives, other line departments (such as Forest department etc.) and NGOs to attract investments in the sector, support actions in different geographies and develop new products to open up new possibilities of growth,

Operational Strategy:

One of the core strategies of TDF is to establish linkages across geographical boundaries and to develop the sector holistically. A key ally of TDF in this venture is Central Silk Board. TDF places professionals in major production / marketing clusters across the states and is engage with different stakeholders to build a shared value chain perspective. In collaboration with the CSB and the State Departments, the TDF is orchestrating multi-state initiatives to build bridges across and make best use of the factor conditions to build a value chain that would work for the cause of small and marginal producers.

For articulating a coherent operational strategy, one has to take into consideration the multi-state initiative around Tasar sericulture under MKSP (Mahila Kisan Swasaktikaran Pariyojna) in collaboration with the CSB. For obvious reasons of scale, spread and significance, MKSP project created a context to influence our course of action in the last 2-3 years. However, this has not distracted our attention from the core task of sector promotion. Rather, we built a coherent approach in our immediate and long term operational strategies to maximize the impact of TDF.

Growth of the sector depends largely on the multiplicity of the stakeholder's base to play a concerted role in setting sectoral goals and design strategies to create livelihoods for a large number of poor families at



the national level. NGOs are important stakeholders in the sector. Currently, their presence is negligible in Tasar sector. However, considering their outreach in remote areas and pro-poor orientation, they are well positioned to play lead role. In the last 3 years TDF established partnership with few NGOs with the long term objective of making them salient stakeholders for the sector. Based on the positive experiences of this engagement, this may call for significant investments in NGOs to build their perspectives and knowledge base and seeking their involvement in joint initiatives for expansion of Tasar in new areas / geographies.

The TDF has come up with a cogent strategy to deal with the deficit in private initiatives and lack of producers' institutions in Tasar sector. TDF promoted entrepreneurship at various nodes to unlock the energy in the sector. This has been done by involving rural youth/ women from among the silkworm rearer's (as in case of Grainage Entrepreneurs) and by involving educated youth from the locality (for example Yarn Aggregators). Simultaneously, TDF engaged with producers' collectives to provide ground and nurtured private initiatives to further the cause of the sector by ways of leveraging finance and monitoring and review of business practices. TDF created such self-contained systems in production clusters in which both should flourish together.

Innovation, fine tuning of technologies and processes to improve productivity and performance of the sector would be key focus areas of TDF in the coming years. On an immediate basis, the need is to streamline the management of seed verticals. Creating strong stake of the producers, attracting investments and promoting entrepreneurship would be part of operational strategy. Similarly, the operating procedures and systems for cocoon and yarn banks are to be detailed out in order to link pre and post cocoon segments on a win-win arrangement.

Human Resource Strategy:

At present, the sector is in high need of young and energetic professionals who can revitalize it by ways of infusing ideas, new knowledge, building prototypes and leading frontiers of actions, especially in remote and decentralized setups. Tasar Development Foundation endeavor to attract educated youth from good campuses provided them training and exposure to build their sectoral perspective and domain knowledge and place them at the cutting edge. Their knowledge and skills further honed in the next 2-3 years through practice, reflection and structured training events to become them as sectoral experts. Thus, in one of the initial years, a significant part of energy and resources of the TDF spared to attend to this task. The professionals are essential part of this sectoral initiative to push the frontiers and improve the overall efficiency of the sector for benefiting existing producers and expanding to include new families.

A significant initiative of TDF was to expand the existing pool of Skilled Extension Workers (SEWs), who are located to new clusters within or outside their State to initiate and expand Tasar sericulture based livelihoods. In the initial years, TDF identified potential candidates for SEWs from among the producers, imparted training and provide on-field guidance to build their expertise in handling domain tasks and take them on board for expansion.

TDF also consolidated the knowledge and experiences gathered so far in Tasar sericulture to incorporate the same in Training packages and modules. Already a large volume of resource material is available with TDF. The TDF would seek support of CSB to further improve the training materials by incorporating new experiences and good practices standardized in coming years.



Operational Approach:

The TDF supported 17,130 families in tasar based livelihood activities in 17 districts of 5 states directly in selected traditional Tasar production clusters in India. Moreover TDF is also supporting many other families indirectly outside the selected 6 clusters either by capacity building of the engaged professionals/ organizations or by supporting them with quality seeds. TDF's engagement to set up viable Tasar production clusters by organizing producers' collectives and production and marketing services continued this year. A production cluster is conceived as a self-contained unit with provisions for all the key inputs and services built around producers' collectives to support individual silkworm rearer's to carry out silkworm rearing efficiently and with assurances of fair prices from markets.

In these clusters, the producers were organized in to village level activity groups for micro level planning and implementation. These village level groups are aggregated in to collectives to set up systems of seed supply, access to improved technologies for silkworm rearing and achieve capacities to deal with markets on mutual terms. Till March 2017 five such collectives are initiated out of them two are registered and other three are yet to be registered. TDF's plan is to promote such collectives which would comprise of 1,000 to 1,200 families in a cluster. While the plan is to cover 17,130 families under tasar based livelihood in 2017, all the producers would be organized in to 12 collectives.

Capacity Building of Producers and CSPs: In order to facilitate smooth adoption of technology among different groups of producers, there is a focus on creating required technical skills to build self-reliance in the community to manage technologies and management systems in the long run. The Cluster Coordinator along with expert trainers from TDF actively takes part in imparting knowledge and skills among producers. The silkworm rearers receive hands on technical trainings to achieve high quality and productivity standards. The grainage entrepreneurs, in addition to technical trainings for DFL production, also attend entrepreneurship development training. This helps them to keep track of finance and inventory management, optimizing production, understand the market and need for improved client servicing.

| SI. No | Cluster | State | District | No of villages | No of HHs | Proposed Collectives |
|-----------|--------------------|--------------|---|----------------|--------------|----------------------|
| 1 | Jungal Mahal | W. Bengal | W. Midnapore and Bankura | 67 | 1,550 | 2 |
| 2 | Banspal | Odisha | Keonjhar | 45 | 1,405 | 1 |
| 3 | Balrampur | Chhattisgarh | Balrampur | 48 | 1,616 | 1 |
| 4 | Banka | Bihar | Banka | 185 | 2,776 | 2 |
| 5 | Santhal Pargana | Jharkhand | Godda, Dumka | 410 | 7,684 | 4 |
| 6 | Kolhan | Jharkhand | Saraikela, E.singhbhum and W. Singhbhum | 82 | 2,099 | 2 |
| Tota | ıl | 5 | 10 | 837 | 17,130 | 12 |



INSTITUTIONAL FRAMEWORK:

TDF is set up to unleash the potential of Tasar sector for creating sustainable livelihoods for marginalized communities in a manner that builds their stake and effective say in the overall sector. TDF is working on all the fronts to emerge as a strong institution. The priorities of TDF are as following:

- Strengthening Governance functions in order to put in place a strong internal guidance mechanism to stay focused on the purpose of the institution and nurture a culture of collegiality and openness for learning
- System setting for monitoring and evaluation through articulation of goals, pathways and tracking progress against salient milestones,
- Develop perspective plan to articulate vision of success for medium terms and define approaches and strategies for operation, including geography, scale, technology / processes and finance,
- Raising resources for sustainability of the institution including project financing as also building corpus
 to support for carrying out institutional tasks,

Build linkages with key stakeholders relevant for the sector in order to draw knowledge support, facilitate innovation, bring in investments to the sector, influence policies and norms and build a strong institutional identity for TDF.

Status and plan of Human Resource:

The TDF has visualized its interventions mainly in two broad categories;

- i. To expand and manage operations including setting up seed verticals and
- ii. To establish sustainable community Production Clusters to facilitate livelihood expansion in existing and new geographies.

In each cluster where the basic seed production unit is present one person is managing the basic seed and nucleus seed production called as seed coordinator while other field staffs are engaged in providing the techno-managerial support to the producers in the field called cluster coordinator. TDFs plan is for optimization of engagement of the human resource where one cluster coordinator would engage with 1000 families in one production cluster and one seed coordinator would manage one or two BSPU. To cater 6 clusters and 15 BSPUs in the coming 3 years, 22 person powers are required out of that 19 person powers are available. In addition to that 3 person powers are on deputation from PRADAN to established TDF as sector support organization. Two office assistances are managing the accounts and MIS of TDF who are also on contract of TDF's payroll.



The placement of employees with family coverage is given below:-

| State | Dist. | Block | Family | Location | Employee |
|-----------|-------|-------|--------|----------|----------|
| | | | | | |
| Jharkhand | 9 | 17 | 9,783 | 4 | 8 |
| Bihar | 1 | 3 | 2,776 | 1 | 4 |
| WB | 2 | 2 | 1,550 | 1 | 3 |
| Odisha | 1 | 3 | 1,405 | 1 | 2 |
| 36garh | 4 | 6 | 1,616 | 2 | 2 |
| Total | 17 | 31 | 17,130 | 9 | 19 |

ACHIEVEMENTS OF TDF-2016-17:

TDF after MKSP has emerged as prominent player in the field of tasar sericulture based livelihoods in the state of Jharkhand, Bihar, Odisha, WB and Chhattisgarh in 6 production clusters. Our main focus was to improve the availability of quality seed to the producers and ensure the fare price realization to the producers for their produce. Presently, TDF is contributing 5.19% of countries total Seed production whereas in the state of Bihar and West Bengal TDF is contributing 48.36% & 23.32% of the total production of seed respectively. TDF produced 17.53 Lakhs Seed across five states and which resulted into production of 6.9 Lakhs pieces of Cocoon. The cocoon produced generated livelihood to 10,780 families and out of which 67% families earned more 10,000 INR. The category wise income generation of the families in 2016-17 due to intervention by TDF is as follows:

| | · · · · · · · · · · · · · · · · · · · | | of families) | | (No. of | Total (No. of families) |
|-----------------|---------------------------------------|-------|--------------|-------|---------|--------------------------------------|
| <8000 | 257 | 602 | 465 | 281 | 715 | 2,320 |
| 8,000 - 10,000 | 89 | 793 | 135 | 138 | 57 | 1,212 |
| 10,000 - 15,000 | 236 | 1,642 | 366 | 414 | 5 | 2,663 |
| 15000 - 20000 | 283 | 2,075 | 210 | 215 | 1 | 2,784 |
| >20,000 | 552 | 796 | 94 | 359 | - | 1,801 |
| Total | 1,417 | 5,908 | 1,270 | 1,407 | 778 | 10,780 |

PROGRESS OF SEED VERTICAL in 2016-17:

Since last three years there is special focus of TDF in streamlining the seed vertical and setting the norms and disease surveillance protocol in seed production. For ensuring the quality standards of seed production we have developed our quality system manual. Out of 13 existing Basic seed preservation centers 6 centers are ISO 9001:2008 certified till date and we are planning to go for the ISO certification of the rest of the centers. There is a continual improvement in the quality and quantity of seed production across the basic seed grainage's observed since last two years.

We have preserved 12.94 lakh nucleus cocoons in 10 Basic seed preservation centers this year and all the seed cocoons were from the nucleus DFLs produced in our nucleus grainage. We have followed the disease surveillance protocol for preservation of the seed cocoons starting from seed DFL rearing to



grainage operation. This has resulted in attaining the success of producing more than 3 lakh basic seed DFLs which helped us not to procure any basic seed DFL from outside. The cocoon to DFL production ratio of this year is 3.45:1, while this year we have discarded 1.12 lakh seed cocoons preserved at Shyamnagar BSPU of West Bengal due to more than 20% disease in the cocoon lot.

We have maintained around 500 hectares of block plantation required for seed cocoon production for the basic seed production centers in Bihar and Jharkhand and in west Bengal, Odisha and Chhattisgarh we are using the plantations raised by DoS. In Jharkhand and Bihar whatever new plantations are getting ready we are using those only for nucleus rearing supplying the good quality DFLs so that those would not get contaminated and we have two to three fold of plantations available for nucleus rearing than the actual requirement. For maintenance and disinfection of the plantations as systematic process of deducting 10% income of tasar from the rearer's and keeping that in the village level tasar Vikash samities is followed in Bihar and Jharkhand.

To cater the nucleus DFL requirement in all the five state we have brushed 14,178 nucleus 1st crop DFLs in Godda, Dumka and Banka districts. We processed 5.3 lakh seed cocoons in 5 nucleus grainage's and produced 78,105 nucleus DFLs and 94,475 commercial DFLs. The entire nucleus DFLs requirement was fulfilled from our own source.

We have tried to develop the nucleus rearing patches in all the 5 states of our intervention following all the protocols of disinfection and field preparation to account for the local ecological factors affecting the basic grainage.

The state wise Nucleus DFL rearing and cocoon production is given bellow:-

| State | District | No. of Nucleus DFLs used | No. of nucleus cocoons produced |
|-------------|----------------|-----------------------------|---------------------------------|
| Odisha | Keonjhar | 2,961 | 1,45,716 |
| 36 garh | Balrampur | 3,975 | 1,35,000 |
| Jharkhand | Godda | 15,080 | 10,22,669 |
| | Dumka | 13,377 | 12,65,521 |
| Bihar | Banka | 34,635 | 27,36,264 |
| West Bengal | West Medinipur | 8,077 | 4,88,283 |
| Total | | 78,105 | 57,93,453 |

For 2017-18 financial year 19,96,740 nucleus seed cocoons preserved in 13 BSPUs after rigorous selection through larval and pupal testing. This will not only fulfill the DFL requirements of TDF's own operational area but also the DFL demand from outside.

Focus on improving the skills of the manpower is increased in the BSPUs than earlier by regular orientation over the process of grainage operation for the better quality assurance. Quality control checking system of the seed cocoons before preservation is improved across the BSPUs.



This year 1,646 basic seed rearers took up seed crop rearing with 2.47 lakh basic seed DFLs to produce 65.74 lakh seed cocoons which resulted in production of more than 12.43 lakh quality commercial DFLs in 189 commercial grainages operated across the five states under direct supervision of TDF.

Piloting business model in community collectives:

For sustainability of the community collectives from this year taken up the business model on pilot basis in three states Bihar, Jharkhand and West Bengal. Based on analysis of past 10 years data of income at different nodes in the entire tasar value chain, it was found out that one revenue generation model can be evolved in the production and sale of the seed. So two models of revenue generation was tried out in the field around this tasar seed production and sale activity;

- Seed production through cooperative largely.
- Seed production through franchise

In both the cases the quality parameters of grainage operation and standard protocols have been obeyed by the Graineurs so that DFL quality can be ensured for the rearer's under direct supervision of TDF. While in the former model the entire operation is controlled by the community collectives and the risk of failure or success is lying on the collective in the second model the grainage entrepreneurs take the risk of operating the grainage business and give a mutually agreed cost to the community collective as royalty against which the community collectives ensures the quality basic seed supply to the Graineurs and provides techno-managerial support in operating the grainage through its experts.

The income generated by these collectives from DFL production is given in the below table.

| State | Name of the Producer Organiasation | Legal Status | DFLs produced | Net income (Rs) |
|-------------|---|------------------------------|------------------|--------------------|
| Bihar | Vanwasi Tasar Kitpalak Co-OP Society | Registered Co- operative | 4,16,885 | 12,00,000 |
| Jharkhand | Aven Tasar Kitpalak Co-OP Society | Registered Co- operative | 2,99,157 | 12,17,783 |
| | Birsa Tasar Vikas Samity | Non Registered Collective | 1,27,651 | 3,19,000 |
| | Baijalbaba Tasar Vikas Samity | Non Registered Collective | 2,59,342 | 7,32,000 |
| | Tasar Kitpalak Sablambi samiti, Kuchai | Non Registered Collective | 1,34,588 | 3,20,000 |
| West Bengal | Jungal Mahal Mahila Tasar Chasir Dal | Non Registered Collective | 1,98,000 | 8,50,000 |
| | Total | • | 14,35,623 | 46,38,783 |



RESEARCH AND DEVELOPMENT:

In the field of Research and Development, TDF is trying to find out new technologies which can accelerate the production of cocoon as well as can ease out the process of making seed, yarn etc. TDF engages with many premiere institutions and establishments to bring out these changes at the grass root level. Few of the initiatives are mentioned as below

Development of New yarn production machine (Atal):- The presently available MRTM reeling machines to the reeler's supplied under Spl SGSY project has its own limitation, the average income is generally not more than Rs. 50-60/- per person per day for her 6-8 hrs engagement in yarn making through those machines. Therefore, such a low income is not creating any enthusiasm in the existing reeler's and seems not suitable to introduce to the new mahila kishans under MKSP (Mahila Kisan Swa-Shaktikaran Pariyojana). So TDF with support from CSB has taken up a trial of the existing machines available in market to compare the productivity and efficiency analysis so that the best machine which can able to provide an earning of Rs 120-150 /- for 8 hrs engagement of the reeler in reeling activity, can be introduced under MKSP project to support the reeler's under the project.

For this one trial with 4 types of machines, two units from each type, was conducted at Saraiyahat block of Dumka district for 9 weeks. The machines included for the trial are as follows:-

- Improved reeling cum twisting machine made by Resham Sutra
- Two steps reeling cum twisting machine- made by Amjad ji, Malda
- Unnati reeling cum twisting machine made by Resham Sutra
- Buniyad untwisted reeling machine— made by Resham Sutra

TDF identified 8 experienced reeler's to run the machines, each reeler was asked to run the machines for two weeks as per the trail design. In the first week the reeler was allowed to practice in the machine and in the second week the data of reeling was taken for comparison. The data was analyzed and the summary of the analysis is given below. From the analysis of the data it clearly coming that none of the machine is able to provide even more than Rs 100/- for 8 hrs work, even after considering payment of Rs 700/- for conversion of 1kg yarn which itself is at higher side as per the present market.

| Parameters | Buniyad untwisted reeling machine | Improved reeling cum twisting machine | Unnati reeling cum twisting machine | Two steps reeling cum twisting machine |
|---|--|--|--|---|
| Average time for reeling 100 cocoons (Hr) | 3.16 | 4.75 | 3.72 | 5.42 |
| Average cocoon consumption per reeler per hr | 22.38 | 18.32 | 19.57 | 18.37 |
| Average time required for producing 100 gm yarn with rereeling (Hr) | 5.11 | 7.01 | 6.45 | 6.67 |
| Average recovery of yarn by the machine (cocoon shell wt 1.4 gm) | 62.81 | 56.24 | 57.38 | 58.05 |
| Average earning for 8hrs work considering payment of Rs.700/- per Kg of yarn conversion (Rs.) | 96 | 63 | 70 | 68 |



After running trial of 9 weeks, when the trial committee meeting took place under the Chairmanship of

Director CTR&TI it was found that none of the machines are suitable to be introduced under MKSP project and therefore the committee decided to search for some new machine. One of the participant was the owner of Aryan Industries Ltd, who took the challenge to design a new machine which will be at par of our requirement. He designed and finally completed the machine within 2 months and after that few of our reeler's went to Bangaluru for factory based trial. In the initial factory based trial the result was very encouraging and seems to be a hope for tomorrow. The machine was presently approved by CTR&TI and in an inaugural workshop named by the Present Chief Minister of Jharkhand, Shri Raghubar Das in the name of Ex Prime Minister of India, Shri Atal Bihari Vajpayee as "ATAL". The machine is yet to be trialed at the field level and based on that final verdict can be given, which may be initiate very soon.



Development of New Microscope (Micro-microscope):- A new microscope was developed/ modified in



collaboration with H M R C (<u>WWW.hmrc.in</u>), H M R C is a Research Organization founded by Mr. Ramendra Lal Mukherjee, an eminent scientist cum manufacturer who is in the business of developing new age microscope over last 2.5 decades. The micro microscope is a hand-held, light weight, pocket-size microscope capable magnification of $100 \times to 1000 \times to 10$

be available to us before the next crop.

Statements of Accounts

TASAR DEVELOPMENT FOUNDATION

(Currency: Indian Rupees)

| | destruction of the said | | | |
|-------------------------------|-------------------------|-------------------------|-------------------------|--|
| Balance Sheet | Notes | Ac at March 31, 2017 | As st Warch 31, 2016 | |
| EQUITY AND LIABILITIES | - TP 12 | | | |
| 1 Shareholders' Funds | | | | |
| (a) Smare Capital | 1 | The second | | |
| (b) Reserves and Surplus | 2 | 488,732 | 371,034 | |
| 2 Current Liabilities | | | | |
| (a) Other Current Vabilities | 3 | 105,456 | 74,001 | |
| TOTAL | | 594,188 | 445,031 | |
| ASSETS | | | | |
| Fixed Assets | | 350,000 | | |
| 1 Current Assets | | | | |
| [a] Cash and Cash Equivalents | 4 5 | 240,888 | 438,43 | |
| (b) Other Current Assets | 1 | 3,300 | 6,60 | |
| TOTAL | | 594,138 | 445,03 | |

The Notes referred to above are an integral part of the Financial Statements

As per our report of even data attached. for N E W & ASSOCIATES

Chartered Accountants Firm Res No: 033043N

Place: New Delhi Date: July 31, 2017

Nandan S.Bisht Pertner M. No. 099805 For and on behalf of the Board of Directors

Director

Director Denograsian



Fina notal Statement for the year ended worch 31, 2017



| Cash Flow from Operating Activities Jet Profit Before Taxistion Adjustments For: Depreciation on Floed Assets Operating Profit before Working Capital Changes Adjustments For: Increase / (Decrease in Other Current Assets Increase/(Decrease) in Other Current Liabilities Cash Generated from Operations | Year ended March 31, 2017 (Curre (232,304) | Year ended March 31, 2016 ncy: Indian Rupees) (974,895) |
|--|---|--|
| Jet Profit Before Taxation Missiments For: Depreciation on Fixed Assets Operating Profit before Working Capital Changes Adjustments For: Increase /Decrease in Other Current Assets Principals /Decrease in Other Current Liabilities | (Currer (232,304) | ncy: Indian Rupees) |
| Jet Profit Before Taxation Missiments For: Depreciation on Fixed Assets Operating Profit before Working Capital Changes Adjustments For: Increase /Decrease in Other Current Assets Principals /Decrease in Other Current Liabilities | (232,304) | |
| Jet Profit Before Taxation Missiments For: Depreciation on Fixed Assets Operating Profit before Working Capital Changes Adjustments For: Increase /Decrease in Other Current Assets Principals /Decrease in Other Current Liabilities | | (974,895) |
| Adjustments For: Depreciation on Fixed Assets Operating Profit before Working Capital Changes Adjustments For: Increase /Decrease in Other Current Assets Increase /Decrease In Other Current Liabilities | | (214,633) |
| Depreciation on Fixed Assets Depreciation on Fixed Assets Depreciating Profit before Working Capital Changes Adjustments For: Increase / (Decrease in Other Current Assets Increase/(Decrease) in Other Current Liabilities | (232,304) | |
| Operating Profit before Working Capital Changes Adjustments For: Increase /Decrease in Other Current Assets Increase /(Decrease in Other Current Liabilities | (232,304) | |
| Adjustments For: Increase] /Decrease in Other Current Assets norease/(Decrease) in Other Current Liabilities | (232,304) | |
| Adjustments For: Increase] /Decrease in Other Current Assets norease/(Decrease) in Other Current Liabilities | | (974,895) |
| ncresse/(Decresse) in Other Current Liabilities | | |
| ncresse/(Decresse) in Other Current Liabilities | 3,300 | 3,300 |
| Each Generated from Operations | 31,455 | (141,238) |
| | (197,549) | (1,112,433) |
| Net Cash Inflow from/(Outflow) from Operating Activities (A) | (197.549) | (1.112.833) |
| Vet Cash Innow Irrom/(Outnow) from Operating Acceptosis (A) | (ADJ, Jane) | 12,222,033 |
| Each Flow from Investing Activities | | |
| Purchase of Fixed Assets | | |
| Net Cash Inflow From/(Outflow) From Investing Activities (6) | * | |
| Cash Flow from Financing Activities | | |
| Inflow of Share Application Money | | |
| Interest Paid | - | 1.5 |
| Net Cach Inflow from/(Outflew) from Financing Activities (C) | | |
| Net Increase /(De-crease) in Cash and Cash Equivalents (A+0+C) | [197,549] | (1,112,833) |
| the ministrative report in contains and an advantage of | | |
| Cash and Cash Equivalents at the Beginning of the Year | 438,437 | 1,551,270 |
| Cash and Cash Equivalents at the Closing of the Year | 240,888 | 438,437 |
| for N S B & ASSOCIATES Chartered Accountants Firm Reg No: 023043N ce: New Delhi ta: July 31, 2017 | For and on behalf of the | E Boomd of Directors St. Late Joseph SatyAERATA ROLL Director |
| Nandan S.Bisht Partner M. No. 099805 | 137 | DIN COPROTE |



Notes to Financial Statements for the Year Ended

1- Share Capital

(Currency: Indian Rupees)

| Particulars | As at March 31, 2017 | As at March 31, 2016 |
|--|-------------------------|-------------------------|
| Authorised Shares Issued, Subscribed and Fully Paid-up Shares | | |
| | | |

a. Details of Shares Held by the Holding Company, Ultimate Holding Company, their Subsidiaries and

| Particulars | Equity Shares with Voting Rights | Other Securities | Equity Shares with Voting Rights | Other Securities |
|-------------|---|---------------------|-------------------------------------|------------------|
| | Number of Shares As at March 31, 2017 | | Number of Shares | |
| | | | SAs at March | h 31, 2016 |
| | | NIL | | NIL |

b. Details of Shares Held by Each Shareholder Holding More than 5% Shares

| PARTY OF THE PROPERTY OF THE PARTY OF THE PA | As at March 31, 2017 | As at March 31, 2016 | |
|--|----------------------|--------------------------|-----------------------------|
| Name of Shareholder | 1 6 | Percentage of Holding | No of Equity shares held |

c. Reconciliation of the Shares Outstanding

| 10 10 10 10 10 10 10 10 10 10 10 10 10 1 | Equity S | Equity Shares | | ares |
|---|----------------|---------------|--------|------|
| Particulars | Number | Rs. | Number | Rs. |
| Shares Outstanding at the Beginning of the year | | | | - |
| Skares Issued during the Year | | | | |
| Shares Bought Back During the Year | | | | |
| Shares Outstanding at the Er | nd of the Year | | | - |

2- Reserves and surplus

| Particulars | As at March 31, 2017 | As at March 31, 2016 | |
|---|---------------------------------|-------------------------|--|
| Surplus Opening Balance (+) Net Profit/(Net Loss) for the Current Year (+) Previous year adjustment | 371,036 (232,304) 350,000 | 1,345,931 (974,895 | |
| Closing Balance | 488,732 | 371,036 | |



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Estypulante Administration Company Com



TASAR DEVELOPMENT FOUNDATION

Notes to financial statements for the year ended

3 - Other Current Liabilities

(Currency Indian Rupees).

| | (Section 1 to grant and a section 1 to section 2 to sect | | | |
|---------------------------|--|-------------------------|-------------------------|--|
| Particulars | | As at March 31, 2017 | As at March 31, t016 | |
| N S II and Associates | - 1 | 31,500 | 44,179 | |
| Other Current Liabilities | | 23,232 | 25,482 | |
| TDS Payable | | 17,048 | 3,500 | |
| Expenses Payable | | 36,465 | 840 | |
| PRADAN - TASAR Deoghar | | (2,784) | | |
| Total | | 105,456 | 74,001 | |

4 - Cash and Cash Equivalent

(Currency Indias Rupees)

| Particulars | Asat March 31 2017 | As at March 31, 2016 | |
|---|-----------------------|-------------------------|--|
| Balances with Axis Bank Cash In Hand | 240,888 | 436,187 2,250 | |
| Total | 240,888 | 438,437 | |

5 - Other Current Assets

(Currency: Indian Rupers)

| | Action to the section of the section of | | | |
|----------------------|---|-------|--|--|
| Pariiculars | As at As at March 31, 2017 March 31, | | | |
| Preliminary Expenses | 3,300 | 6,600 | | |
| Total | 3,300 | 6,600 | | |



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Financial Statement for the year ended March 31, 2013

List of Board of Directors of Tasar Development Foundation

| S.N o | Name & DIN | Father's Name | Qualification | Address | Occupation | Companies/Associations And Institutions Where They Held Responsible Position | Position Held |
|----------|--|-----------------------------------|--|---|------------|---|--|
| 1 | Anish Kumar Srivastava 02599705 | Shailender Kumar Srivastava | Post Graduate In Forest Mgmt. (PGDFM) From Indian Institute Of Forest Management, Bhopal | G-302, Sri Ganesh Co-Operative Group Housing Society, 93, Patparganj New Delhi Delhi India 110092 | Service | 1.Transform Rural India (TRI), NGO 2. Eco Tasar Silk Private Limited | Co-Lead & Member of TRI's advisory Council |
| 2 | Satyabrata Acharyya 01736177 | Subodh Chandra Acharyya | Masters Of Sciences (Agriculture, Plant Pathology)Bidhan Chandra Krishi Viswa Vidyalaya, West Bengal | C/O -Pradan , E1-A, Kailash Colony New Delhi -110048 | Service | Pradan, NGO 2.Eco Tasar Silk Private Limited | Member of Pradan's Management Unit & Mentor Director |
| 3 | Khitish Kumar Pandya 01718346 | Kanti Prasad HirjeePandya | MBA From Xavier Institute Of Management, Bhubaneswar | P2A 154 Princeton Estate Phase V DLF Gurgaon Haryana India 122002 | Service | 3.Eco Tasar Silk Private Limited | Director |





REGISTERED OFFICE

Tasar Development Foundation (TDF)

C/O Transform Rural India (TRI)

3, Community Shopping Centre

Neeti Bagh

New Delhi-110049

011-41630455

shamshad.tdf@gmail.com

HEAD OFFICE

Tasar Development Foundation (TDF)

C/O PRADAN

First Floor, Sunder Sadan

Near Chetna Apartment

Opposite to DC's Residence

Circular Road, Barmasia

Deoghar - 814 112

06432-275642

shamshad.tdf@gmail.com

COORDINATING OFFICE

Tasar Development Foundation (TDF)

C/O PRADAN, Ram Ayodhya Singh

Natraj Classic, Flat no- G/1

Vidya Sagar Path, Uliyan Kadma

Jamshedpur - 831005

0657-2314775

ashis752009@gmail.com

