

FINAL REPORT

**SUCCESSFUL CASE STUDIES OF CATALYTIC
DEVELOPMENT PROGRAMME
IMPLEMENTATION**



SPONSORED BY

**CENTRAL SILK BOARD
MINISTRY OF TEXTILES
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**ECONOMIC SERVICES GROUP
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	<i>Study Team</i>		

SUCCESSFUL CASE STUDIES OF CDP IMPLEMENTATION

CASE STUDY - 1

CATEGORY OF SERICULTURE ACTIVITY : PRIVATE MUGA GRAINEUR

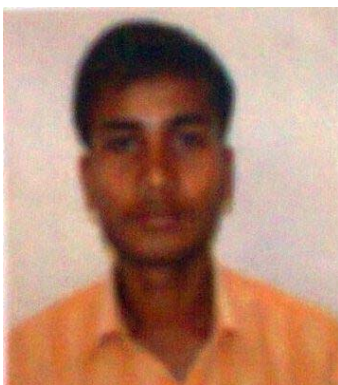
Name and Address of CDP Beneficiary : Shri Luhit Gohain, Dolakhoria Village, Golaghat, Assam

OVERALL FINANCIAL POSITION : Shri Luhit Gohain is a CDP beneficiary (Muga Graineur) having reasonably well off socio economic condition with an average annual income of Rs. 1.5 lakh from Sericulture activities and around Rs. 2.5 lakhs from other activities like agriculture, horticulture and also from the employment of various central government schemes like MNREGA.

EXTENT OF SERICULTURE ACTIVITIES: - Mostly Grainage activities, however, to some extent commercial rearing also undertaken by the beneficiary.

ASSISTANCE RECEIVED UNDER CATALYTIC DEVELOPMENT PROGRAMME

Under the CDP scheme the beneficiary received assistance of Rs. 45000 for construction of Grainage house and Rs. 16000 as revolving capital.



Sh. Luhit Gohain



Grainage house of Sh. Luhit Gohain

Apart from assistance received for the construction of grainage house and revolving fund, equipments required for grainage activities have also been received under CDP such as:

- Microscope
- Inspection and examination Table
- Thermometer
- Hydrometer
- Formaldehyde
- Egg Laying Kharika
- Potassium hydroxide
- Steel Rack etc.

TECHNICAL SUPPORT RECEIVED FROM CSB/DOS

Extensive training on improved technologies of silkworm, seed and grainage activities was imparted to the beneficiary by CMER&TI, Lahdoigarh. Besides, regular monitoring and demonstrations of various techniques also imparted by CSB and DOS officials to carry out the activities in a smooth and efficient manner.

IMPACT OF CDP ON PRODUCTIVITY, QUALITY, TECHNOLOGY, INCOME, MARKETABILITY, INNOVATION ETC.

Sh. Luhit Gohain has been conducting commercial grainage activities from 2008 with 16000 seed cocoon purchased from local seed rearers and produced 4200 DFLs (gm). **Table 1.1** shows the production and income details of Sh. Luhit Gohain since 2008-09 (Data from the records of register maintained by the beneficiary).

Year	No. of batches taken	DFLs produced (gm)	DFLs supplied (gm)	Total Income (Rs.)
2008 – 09	1	4200	4200	27000
2009 – 10	2	15300	15300	102400
2010 – 11	3	17000	17000	131000
2011 – 12	2	15400	15400	117800

BEST PRACTICES FOLLOWED

The CDP beneficiary has been trained by CMER&TI, Lahadoigarh on various technologies and best practices in grainage activities and the beneficiary has readily accepted and implemented these best practices on field.

Stages	Technology
Sorting & preservation	Physical, Visual Examination , improved Moth Cage
Sex Separation	Visual examination under Microscope
Pairing and Egg Laying	Natural
Pupa Moth Examination	Microscopic Examination
Maintenance of records	Properly organized and maintained Register
Surface Sterilization of eggs	Washing with water and disinfectants
Seed Testing	Microscopic examination

RECOGNITION RECEIVED FROM CSB/DOS

The Graineur has been appreciated by the officials of CSB and DOS for his dedication in work and productivity. He has also been awarded for his activities in sericulture. Transformations from a school drop out to an established granieur and silkworm rearer, Shri. Gohain has not only found a better way of life but also helped in promoting sericulture in his area by producing and supplying very good seeds to the commercial reares that resulted in good harvest.

SUGGESTIONS FOR MAKING CDP MORE USEFUL TO BENEFICIARIES

- The amount provided under the CDP scheme is not sufficient to construct a good grainage house due to higher labour charges and material costs. Monetary assistance in the form of annual maintenance cost of the grainage building is required.
- Additional component under CDP has to be added to cover the transportation costs incurred by the beneficiaries
- More awareness campaign and programs should be implemented to cover more and more beneficiaries by enlightening the farmers about the benefits of sericulture and how it can improve their socio economic conditions
- Extensive training should be imparted to the beneficiaries in improved rearing technologies and hygienic practices for handling silkworms.

CASE STUDY – 2

CATEGORY OF SERICULTURE ACTIVITY: SEED COCOON (BIVOLTINE)

Name and Address of CDP Beneficiary: Shri. C Mahadev, S/o Chiakkanaiah, Thendurgam-Village, Uthanpalli-Post, Krishnagiri District, Tamil Nadu

ABOUT THE BENEFICIARY

The beneficiary Shri.C. Mahadev, has 6 years of experience in the sericulture field and is producing Bivoltine Cocoon. He owns 2 acres of irrigated land on which he cultivates mulberry plants.

ASSISTANCE RECEIVED UNDER CDP

During XI five year plan he has received sprayers, Rs. 50,000 subsidy for rearing house, 100 nos of mountages, hygrometer, wet and dry bulb thermometer and room heater/humidifier under CDP Scheme.

Received Rs. 4000/- for mulberry plantation from state government. Supply of rearing appliances/ farm equipments, supply of quality disinfectant and other crop protection measures, assistance for farmer training for one week @Rs.150 per day given by state Government.

TECHNICAL SUPPORT RECEIVED FROM CSB/DOS OFFICIALS

Video conferencing support received for farmers which benefited a lot in enlightening the knowledge on various see cocoon operations.

IMPACT OF CDP ON PRODUCTION, PRODUCTIVITY, QUALITY, TECHNOLOGY, INCOME, MARKETABILITY, INNOVATION ETC.

Variety	Land Holding (acres)		No of Crops /year		No of DFLs Brushed/crop (nos.)		Cocoon Yield/crop (Kg)	
	2007-08	2011-12	2007-08	2011-12	2007-08	2011-12	2007-08	2011-12
Bivoltine	2	2	5	7	200	225	110	126

BEST PRACTICE FOLLOWED BY THE BENEFICIARY

Follows the procedure as per the instructions of the concerned officer/inspector of DOS/R&D officials.

SUGGESTIONS AND RECOMMENDATIONS FOR MAKING CDP MORE USEFUL

- Renovate/replace the old appliances
- Incentive for seed cocoon
- Motivate the farmer sustaining in the sericulture field by arranging study tours.

PROBLEMS FACED BY THE COCOON FARMERS

Lack of water resource, inadequate labour, increase in labour cost, transportation, etc.

CASE STUDY – 3

CATEGORY OF SERICULTURE ACTIVITY : COMMERCIAL COCOON

Name and Address of CDP Beneficiary : Smt Sumangamma, B.G.Kere village, Molakalmuru Taluk, Chitradurga District in Karnataka

Smt. Sumangamma and Sri Veerabhadrapa are progressive sericulturists doing sericulture activity for the past 35 years.

Smt Sumangamma learnt sericulture activities only after her marriage. They have used new technologies in all their sericulture activities.

They have attended many training programs, seri tours to Tamilnadu, Kolkata and other places conducted by DOS and have benefited substantially in improving their knowledge on various operations of sericulture by getting useful information.

Whenever they face any problem in rearing the seeds they contact the officers of the Department of Sericulture and get their problems solved. Here all the DOS officers are working very hard to take the technology and the government benefits to the doorsteps of farmers. Some officers work even on Sundays, if necessary.

Smt. Sumangamma has started a cooperative society and given job to many women. Many people come here from Dharwad, Hubli and other districts to learn the techniques of sericulture

from this couple. To maintain the temperature and humidity in the Chawki Rearing house they use modern equipments. They are updating themselves regularly with new technology which is the main reason for the increase in quality and quantity of cocoons in their CRC.

The sericulturists in this village conduct group meetings regularly to discuss and sort out various day to day problems they face in various operations of sericulture. Technology transfer is made easy in such groups. They also share their experiences.

‘Our life would not have been like this without sericulture’ says Sumangalamma. She has given job to 12 women to assist her in sericulture activities. She also says that this job is suitable for women and more women should take up this job. Inspired by Sumangalamma many women (who are widows and single) have taken up sericulture and are leading peaceful and comfortable life.

Details of benefits taken under different government schemes

Schemes	Year	Details	Subsidy amount
CDP	2001-02	Rearing house (45’*22’ sq ft)	Rs.23,500
	2000-01	Drip irrigation (4 acres)	Rs.47,500
	2006-07	Chawki rearing house	Rs.50,000
	2009-10	Equipments	Rs.30,000
Vardaan	2009-10	Mounting hall	Rs.45,000
Total amount			Rs.1,96,000

Details regarding sericulture activities, productivity and earnings

Year	Number of Acres	Race	DFLs Brushed	Cocoon Production In (KG’s)	Average Yield	Average Rate	Total Value
2008-09	3-00	CSR Hybrid	3400	1766	55	175	Rs.3,00,900
2009-10	5-00	CSR Hybrid	4300	2860	66	230	Rs.6,57,800
2010-11	5-00	CSR Hybrid	3950	2620	66	298	Rs.7,08,070
2011-12	5-00	CSR Hybrid	4900	3275	66	265	Rs.8,67,875

Smt. Sumangalamma has visited European countries in 2008 with Karnataka State Raita Sangha and has given speeches there. She got Best award for her ‘Chawki Rearing House’ in 2004 and ‘Best Rearer’ award in 2005. In 2008-09 she got Central government ‘Baladev das’ award and a cash prize of Rs.12,500. On Jan 1st 2012 she was awarded ‘Best Woman Sericulturist’ by Gujarat Horticulture College. Now she is a member in National executive committee of ‘Bharathiya Kissan Sangha’.

‘I would not have achieved so much without the support of DOS officers and CSB and I’m always grateful to them’ she concludes.

CASE STUDY 4

CATEGORY OF SERICULTURE ACTIVITY : COMMERCIAL COCOON

Name and Address of CDP Beneficiary : Sri Ramegowda, Baladare village, Dandiganahalli Hobli, Channarayapatna Taluk, Hassan District, Karnataka

Progressive Sericulturist Sri Ramegowda is a model among youth. He has shown that educated youth can lead a prosperous life by practicing sericulture. Now Baladare village is called '**Silk Village**'. In this village, every house is having irrigated agriculture land and has the facility of bore well for sericulture. In this village throughout the year sericulture activities are going on. Even in the drought season also the farmers in this village are working hard and they are leading a prosperous life. Mr. Ramegowda is an inspiration to many in the village.

Ramegowda's father Sri. Boregowda started sericulture during 1978-79 in a small land of 20 guntas and 75 DFLs. He earned a profit of Rs.750 which was a big amount at that time. Then gradually he extended the land and now he is having 6 acres of land. He is having a Chawki Rearing house and getting upto 480 Kgs of Bivoltine cocoons.



Chawki Rearing Centre

This success was not easy to achieve without his family's support. Ramegowda, who has studied up to SSLC (10th std), has attended many training programs, seri tours conducted by DOS and has immensely benefited in acquiring knowledge from these tours.

In 2000, he shifted from MS seed to V-1. He drilled a borewell and started drip irrigation. He built a separate rearing house of measurement 52ft x 14ft in which he has built rearing stands with seven shelves. To maintain the temperature and humidity he is using modern equipments. His brother who has studied upto PUC (12th std) joined him. In 2004-05 he again bought 2acres of land and introduced another borewell and Trunching and mulching in mulberry garden. In 2008-09 he got subsidy of Rs.30, 000 under CDP and Rs.5, 000/ acre under Vardaan. In 2009-10 he built another Chawki Rearing house by getting Rs.75, 000 subsidies under CDP. Here he has constructed rearing stands with 8 shelves in 4600 sq ft. He is growing good quality of mulberry leaves and is taking very good care of his mulberry garden. He is using good quality of fertilizers and soil testing is done once in two years.



Mulberry garden

Whenever he faces any problem in rearing the seeds he contacts the Department of Sericulture and gets his problems resolved. In Hassan District and its Taluks all the DOS officers are working very hard to provide the technology and the government benefits to the doorsteps of farmers. The farmers are using power sprays to disinfect the CRCs. The farmers are giving more importance to hygiene.

The farmers in this village organize frequent group meetings where they share their experiences. Technology transfer is made easy in such groups.

The brothers are educating other farmers through Radio and Newspapers. They are updating themselves regularly with new technology which is the main reason for the increase in quality and quantity of cocoons. In 2011-12 they bought Montages under CDP by getting a subsidy of Rs.14, 609.



Ramegowda with rearing stands with 8 shelves

Ramegowda's three sisters who are married and settled in other villages have also started sericulture in their homes with the help of their brother. Now their financial status has improved. In 2011-12 Ramegowda and his brother Kumar has built six houses (apartment) in Udayapura village in 50x55 sqft site. They have rented out five houses and are getting Rs.15, 000 rent every month. His house has all the modern facilities with marble flooring and Italian kitchen. He has named his house "Reshme Nilaya" which means 'Silk House'.



Reshme Nilaya

All his children are getting good education. Ramegowda has taken LIC policy for all the family members and he is paying premium of Rs.79, 000/annum.

Ramegowda's father Boregowda who is now 73 year old has not lost interest in sericulture. He is having good health and is helping his sons even today. 'We are no less to IT people' says Ramegowda proudly. He is giving Rs.1, 000/day to his workers.

In this village the people who were idle and alcoholics have got changed because of sericulture. There are no alcoholics in this village now. All are working hard. "Without sericulture this village would not have prospered like this", say the villagers.

In 2005-06 Ramegowda got Second Prize in Bivoltine cocoon production. He got a certificate and a cash prize of Rs.10,000. In 2008 he was honored by a local organization for his achievement in Channarayapatna Taluk on the occasion of Republic day on Jan 26. In 2008-09 he was honored in 'VidhanaSoudha, Banquet Hall' for producing good quality of cocoons (District level).



Ramegowda and his father with DOS officials holding certificates.

Sri Ramegowda is certainly a *'role model'* to all sericulturists in Hasan District of Karnataka.

CASE STUDY 5

CATEGORY OF SERICULTURE ACTIVITY : CHAWKIE REARING CENTRE (CRC)

Name and Address of CDP Beneficiary : Shri T Balasubramaniam , S/o Thailaya Gounder, Manupatti (PO), Udumalpet-642126, Tirupur-District, Tamilnadu

ABOUT THE BENEFICIARY

Shri Balasubramaniam is a CDP beneficiary is having 10 years experience in CRC activities.

ASSISTANCE RECEIVED UNDER CDP

Thermostatic and humidifier- New technology developed by the Research Institute have been extended to the CRC. It is giving very good impact and getting good quality eggs.

FINANCIAL ASSISTANCE RECEIVED DURING XI PLAN CDP SCHEME

Received Rs. 1.5 Lakhs for construction of CRC building under CDP scheme during 2007-12.

TECHNICAL SUPPORT RECEIVED FROM CSB/DOS OFFICIALS

Training received from the department of sericulture during 2010-11 and 2011-12



IMPACT OF CDP ON PRODUCTION, PRODUCTIVITY, QUALITY, TECHNOLOGY, INCOME, MARKETABILITY, INNOVATION ETC.

Year	No of DFLs brushed/crop/year	Silk worm eggs hatched from DFLs (Nos)	Chawkie reared worms supplied (Nos)	Average Cocoon Yield per 100 DFLs (Kg)
	BV	BV	BV	BV
2007-08	3000	92	50000	90
2008-09	3000	92	50000	90
2009-10	5000	93	60000	92
2010-11	10000	94	100000	92
2011-12	12000	94	150000	95

After receiving technology and technique inputs from the Govt agencies, the productivity of the cocoon yield has increased as shown in the table.

BEST PRACTICE FOLLOWED BY THE BENEFICIARY FOR DOING SERICULTURE ACTIVITY

Follows the procedure as per the instructions given by the officer/inspector of DOS/R &D officials

SUGGESTIONS FOR MAKING THE CDP SCHEME MORE USEFUL

Supply of incubator required
Introduction of Moisture free resistant silk worm,
Transport of layings through air-conditioned vehicles
Generator is must for better quality reeling and productivity

PROBLEMS FACED BY THE COCOON FARMERS

Shortage of labour, increase in labour cost, transportation, Power cut, etc.

CASE STUDY 6

CATEGORY OF SERICULTURE ACTIVITY : COMMERCIAL COCOON Name and Address of CDP Beneficiary : Smt. Seema Devi w/o Shri Joginder Pa I, R/O Vill. Dhatoli Khudla, PO. Khudla, District Mandi, Himachal Pradesh

Smt. Seema Devi , 32 years old woman of village Dhatoli Khudla, District Mandi in Himachal Pradesh expressed her views about the Cocoon farming and the benefits she received from it. Her educational qualification is Matric. She married about 10 years back Shri Joginder Kumar, who belongs to a middle class family. The family's monthly income is very small and for more earning, her husband runs a small business. She has two school going children. The Cocoon farming is not a new profession to Smt. Seema Devi, as her in-laws had been Practicing these activities for the last 25 years. Following their motivation, she adopted the profession and now she is very keen and interested in it. She has about 9 years experience in sericulture field and earns a good income to meet her needs. The family has planted Mulberry Tree in their five Bighas of land and also constructed a rearing house. With the financial, and technical assistance of the Govt., her sericulture income is increasing year after year. She was provided with four rearing stands, 20 rearing trays, 100 bed cleaning nets, 50 Mountages and one wet & one dry bulb thermometer and room heater. Guidance and support was given by the Sericulture Department officials, in cocoon farming and now she is a successful cocoon farmer.

ASSISTANCE RECEIVED UNDER CDP

For taking up Cocoon farming in a better way and to achieve good results, Smt. Seema Devi was given financial assistance of Rs.67,500/- for construction of rearing house, by the C.S.B. and D.O.S. In addition to this, she has received assistance of Rs. 4850/- for mulberry plantation and Rs. 1800/- for farm equipments. She has also been given financial assistance under the components of service support schemes and has also been provided T & P material of different varieties and specifications . With this assistance, her income from cocoon farming has increased from Rs. 1800/- in 2007-2008 to Rs. 5800/- in 2011-2012.



TECHNICAL SUPPORT

The Cocoon farmer Smt. Seema Devi has been provided technical support by the Sericulture Department. The officials of the department gives the required information and knowledge on leaf sorting, diet, expansion of silk worm and use of disinfection as well as bed cleaning etc. Similarly sorting of leaf and grading of worms is also carried out, so that there may be good yield of cocoon. Besides this, technical support has also been provided to her in the form of farm equipments, fertilizers, disinfection, farm & rearing equipments and rearing appliances etc. She has also been given rearing stands and trays, bed cleaning nets, mountages, wet and dry bulb thermometer, sprayers and plough tillers. A rearing house has also been constructed by her with Government assistance.

IMPACT OF CDP ON PRODUCTION, PRODUCTIVITY, QUALITY, TECHNOLOGY AND INCOME, MARKETABILITY, INVENTION ETC.

Although no record is maintained by the farmer, regarding benefits received before and after implementation of CDP Schemes, as per her submission, the productivity of cocoon, and its quality has increased over the years and good income is being earned with introduction of latest modern technology under the CDP programme. The quality of cocoon has also been improved. The facility of technological support and technical equipments is available at all times. However, there is problem of marketability as there is no proper cocoon market exists in the district. The cocoon produced by her is to be sold to private agencies at very low rates. The Government should open centers for collection of the cocoon in the district. With assistance of the government more progress in this field can be achieved which will increase the income, and would improve socio economic status of the people to a greater extent. With the financial assistance and technical support given, her income from Sericulture activities has been increased from Rs. 1800/- in 2007-2008, to Rs. 2700/- in 2008-2009, to Rs. 3900/- in 2009-2010, to Rs. 5000/- in 2010-2011 & to Rs. 5800/- in 2011-2012. With the implementation of CDP, quite great changes in sericulture field have been seen. People have got golden opportunity of silk worm farming and development of silk udyog. Large number of farmers have started worm keeping with a view to increase their income. There has been good yield of cocoon with the help of various components of CDP Schemes.

BEST PRACTICES FOLLOWED

Under the guidance and motivation of the officials of Sericulture Department, the farmer Smt. Seema Devi has followed best practices in rearing of silk worm and keeping of same. She knows the process of leaf sorting and quality of leaf, bed cleaning, selection and providing of diet to silkworms. Leaves of good quality is given to the worms and these are being kept in rearing houses under proper security. The system of bed disinfectant is being followed and infection of diseases has been avoided. The use of mountages is also being made. Rearing house with provisions of latest technology has been constructed by her with government's assistance. With these activities, the silk productivity has been increased and good profit is being earned. The components of the CDP have been stated as very good and leads to the betterment of people.

REWARDS AND RECOGNITION RECEIVED BY THE BENEFICIARY FROM CENTRAL SILK BOARD AND DIRECTOR OF SERICULTURE

Though Smt. Seema Devi has not received any award for her activities in silk worm keeping, but as stated by her, one Smt. Neelam Kumari r/o Village Mohin, District Mandi, has been awarded cash prize of Rs. 10000/- by the government for best activities performed by her in this field. The Extension Officer, Incharge of the concerned C.R Centre has however, informed that in view of her best efforts and activities in Cocoon production field, her name has been nominated to State Govt. for awarding her. She is being given due inspiration and motivation by the officers of the Sericulture department of the concerned C.R.C. and Mandi cluster / Division.

SUGGESTIONS AND RECOMMENDATIONS FOR MAKING THE CDP SCHEME MORE USEFUL FOR BENEFICIARIES

Different components and provisions of the CDP Schemes are very useful for Silk worm keeping and Sericulture farming. Since Himachal Pradesh is a Hilly state, the average income of people in this state is low and their economic status is also not so good. There are not much avenues of income generation activities in this state. The CDP implemented by the State Government is a good step in this direction. It will be in the interest and benefit of the people, if more schemes under the Catalytic Development Programme are implemented here with liberal terms and conditions. Therefore, in order to make the CDP more useful to the beneficiaries, the following suggestions and recommendations are made:-

1. The CDP may be implemented in the whole district i.e. Sericulture Division Mandi.
2. The terms and conditions of the programme should be made more liberal up to the reach of common man.
3. Machineries, tools and plants and other rearing & farm equipments and appliances etc., should be provided to the beneficiaries with full assistance of the government.
4. Govt. land should be provided for cultivation of mulberry plants and construction of rearing houses and assistance for this purpose should be raised to higher limit.
5. Marketing support should be given to people. Cocoon markets should be opened in government sector and reserved prices per unit should be fixed. People should also be provided infrastructure facilities in this connection.
6. The provision of production loss insurance should be made liberal.
7. People should be given training and guidance in the field of cocoon farming.
8. Periodic visits should be made by the officials of Sericulture department to the rearing houses and advise the people for the improvements, reforms and measures to be taken for earning best results from the sericulture and silk worm activities. The CDP should be continued and it is hoped that considerable progress in this sector will be made.

CASE STUDY 7

CATEGORY OF SERICULTURE ACTIVITY : PRIVATE MUGA REARER

Name and Address of CDP Beneficiary : Shri Maheswar Gogoi, Dolakhoria Village, Golaghat, Assam

OVERALL FINANCIAL CONDITION

Shri Maheswar Gogoi has reported impressive growth in socio-economic condition with an average annual income of Rs. 1.8 lakhs since 2007-08 mostly from Sericulture Activities and also from other activities like agriculture, horticulture etc.

ASSISTANCE RECEIVED UNDER CDP

Under the CDP schemes the beneficiary has received an assistance of Rs. 2500 for Raising SOM Plantation and augmentation of SOM .



Shri Maheswar Gogoi



Rearing Activity (Muga)

Rearing of muga

Besides, assistance was also provided in terms of various farming tools and rearing equipments, nylon nets, Bamboo baskets, Polythene covers, Disinfectants, fertilizers etc.

TECHNICAL SUPPORT RECEIVED FROM CSB/DOS OFFICIALS

Training has been imparted to the beneficiary under the beneficiary empowerment programs and other Transfer of Technology to field from time to time. Some of the training received by Shri Gogoi are:

- Plantation Management techniques
- Improved Rearing techniques
- Vermicompost

IMPACT OF CDP ON PRODUCTION, PRODUCTIVITY, QUALITY, TECHNOLOGY, INCOME, MARKETABILITY, INNOVATION ETC.

Sh. Maheswar Gogoi has been performing sericulture activities for over 25 years and was enrolled as a CDP beneficiary in 2008 - 09, and has been producing crops with reasonably good quality. Table below shows the production details and income generated by him five years back and now.

Year	Number of Crops	DFLs Brushed per year (Nos.)	Cocoon Produced (Nos.)	Total Income (Rs.)
2007 – 08	2	200	14000	20000
2011- 12	2	600	45000	67500

BEST PRACTICE FOLLOWED BY THE BENEFICIARY FOR DOING SERICULTURE ACTIVITY

The beneficiary has been trained by CMER&TI, Lahdoigarh on the various technologies and best practices in rearing and farming activities and has been readily accepted and implemented on field.

PLANTATION MANAGEMENT

- Proper plantation techniques with appropriate spacing
- Pruning of plants for ease of rearing activities
- Increasing leaf yield through vermin-compost, etc
- Protection of plants from various pests and diseases

IMPROVED REARING

- Proper handling of silkworms to avoid unhygienic practices
- Protection from pests like uzi flies etc.

RECOGNITION RECEIVED BY THE BENEFICIARY FROM CSB/DOS

Sh. Maheswar Gogoi has been recognised as one of the very productive and effective commercial rearer of the Muga. After being identified as a beneficiary under the CDP scheme, Sh. Gogoi has been able to increase his production and also shared his knowledge with fellow farmers of his area and helped them to improve their Socio- economic conditions.

SUGGESTIONS AND RECOMMENDATIONS FOR MAKING THE CDP SCHEME MORE USEFUL FOR BENEFICIARIES

- Increment in the monetary assistance received by the beneficiaries.
- Component should be added to cover the transportation costs incurred by the beneficiaries
- Very often it happens that the rearing equipments and the assistances for augmentation and raising plantations are not received on time due to cumbersome official procedures.
- More awareness campaign and programs should be undertaken to cover more and more beneficiaries by enlightening the farmers about the benefits of sericulture and how it can improve their socio economic conditions
- Extensive training should be imparted to the beneficiaries in improved rearing technologies and hygienic practices for handling silkworms.

CASE STUDY 8

CATEGORY OF SERICULTURE ACTIVITY : MUGA SEED CUM COMMERCIAL REARER

**Name and Address of CDP Beneficiary : Shri Ghanakanta Saikia, Jaljori
Village, Golaghat, Assam**

EXPERIENCE IN SERICULTURE: - Shri Ghanakanta Saikia has the experience of 15 years in muga seed cum Commercial rearing activities.

OERALL FINANCIAL CONDITION

Reasonably well off socio economic condition with an increase in average annual income (net income) of Rs. 80000 from Sericulture Activities as per lastest date as compared to Rs. 56000 in 2009 – 10.

EXTENT OF SERICULTURE ACTIVITIES: - Shri Ghanakanta Saikia is mainly engaged in rearing Activities (Seed and Commercial).

ASSISTANCE RECEIVED UNDER CDP

Under the CDP schemes the beneficiary has received an assistance of Rs. 4500 for augmentation of SOM plantation, rearing equipments and training under Beneficiary Empowerment program.



Rearing done by Ghanakanta Saikia

TECHNICAL SUPPORT RECEIVED FROM CSB/DOS OFFICIALS

Extensive training on improved technologies of silkworm and seed rearing activities was imparted to Sh. Ghanakanta Saikia by CMERT&TI, Lahdoigarh on improved technologies in Muga culture for a period of 15 days. Apart from these continuous monitoring and guidance visits

of on-field demonstrations arranged by CSB and State sericulture officials helped the beneficiary to carry out the activities in a smooth and efficient manner

IMPACT OF CDP ON PRODUCTION, PRODUCTIVITY, QUALITY, TECHNOLOGY, INCOME, MARKETABILITY, INNOVATION ETC.

Sh. Ghanakanta Saikia has been associated with sericulture activities since 1996. He was adopted as a beneficiary of CDP in 2009. A comparative analysis of the production details before and after the receipt of CDP assistance as given below.

Year	Number of crops	DFLs brushed (gm)	Cocoons harvested
1996	1	250	Very less due to crop failure
2009 – 10	2	400	20000
2010 – 11	3	600 (approx)	32000 (approx)

BEST PRACTICE FOLLOWED BY THE BENEFICIARY FOR DOING SERICULTURE ACTIVITY

The beneficiary has been trained by CMER&TI, Lahdoigarh on the various technologies and best way to fight diseases in silkworm which finally leads to the death of silkworms and ultimately to crop failure.

Sh. Saikia had applied these practices and rearing technologies taught to him in an efficient manner and resulted in good quality seed cocoon. This has also earned him laurels among the local private granieurs as his quality is best in class.

REWARD/RECOGNITION RECEIVED BY THE BENEFICIARY FROM CSB/DOS

The Granieur has been highly appreciated by the officials of CSB and DOS and also from local private graneurs for the quality of seed cocoons produced. With the help of the sericulture activities Sh. Ghanakanta Saikia has been able to improve his socio economic condition.

SUGGESTIONS AND RECOMMENDATIONS FOR MAKING THE CDP SCHEME MORE USEFUL FOR BENEFICIARIES

- There is delay in the release of funds by the DoS officials due to official procedures.
- Component should be added to cover the transportation costs incurred by the beneficiaries
- Extensive training should be imparted to the beneficiaries in improved rearing technologies and hygienic practices for handling silkworms
- As Muga silkworm rearing is an outdoor activity, the rearing activity is highly influenced by the climatic conditions. So the rearer has to face a lot of problem fighting with nature and from pests which sometimes leads to mass scale crop loss. This ultimately demotivates the farmers from continuing the sericulture activities. To

cope up with risks the scheme should have a component to cover crop losses, via crop insurance or any other method as may be suitable.

CASE STUDY 9

CATEGORY OF SERICULTURE ACTIVITY : RESHAM DOOT

Name and Address of CDP Beneficiary : Shri Pradan Hansda, S/o Late Shri Boro Hansda, Village Maysaa Mungar, Panchayat Baliyajor, Block Masliya, Dumka District, Jharkhand

ABOUT THE BENEFICIARY

Shri Pradan Hansda is around 40 years old. He has two children. He owns one acre of land and approx 2 acres he takes on rent from forest. He had been surviving mainly on Agriculture and growing only one crop on tasar plantation in traditional ways in forest areas.

Type of Land	Area Under Cultivation (Acre)		
	Agriculture	Sericulture	Total
Rain-fed	1	2	3

Due to absence of proper marketing network he was not able to get reasonable income from tasar activities. But after becoming Resham Doot, he is growing two crops of tasar and has been able to market his produce regularly and his income from tasar has increased many folds.

Sl. No.	Source of Income	Approximate Annual Income (Rs. thousands)				
		2007-08	2008-09	2009-10	2010-11	2011-12
a)	Sericulture	8000	10000	50000	60000	70000
b)	Income from Other activities	5000	7000	8000	10000	12000
	Total:	13000	17000	58000	70000	82000

ASSISTANCE RECEIVED UNDER CDP

He has been enrolled by Department of Sericulture, Jharkhand as one of the Resham Doot around four years back. He has not received any cash but has received training and various equipments like microscope, net, wooden table, stool, sprayer, plastic bucket etc along with consumables like chemicals, soaps etc. under Catalytic Development Programme. He is well trained with microscope usage.



He is also getting the medical benefits as doctor visit once every week in his village.



TECHNICAL SUPPORT RECEIVED FROM CSB/DOS OFFICIALS

He has received training for seed rearing. He has also received trained for working in group and in handling of various administrative responsibilities of Resham Doot.

IMPACT OF CDP ON PRODUCTION, PRODUCTIVITY, QUALITY, TECHNOLOGY, INCOME, MARKETABILITY, INNOVATION ETC

Over the last 3-4 years, his income has been continuously increasing because of his involvement as Resham Doot.

On the basis of training and regular interactions with the department, he takes 200 DFLs from the office of pilot project and raises them in the month of July every year. He collects around 18000-20000 healthy cocoons for seed in the last week of August and from these cocoons he produces approx 4500-5000 DFLs within 15 days. The seed rearing exercise is generally carried out by 8-9 Resham Doot in rented grainage house.

At a rate of Rs 5 per DFL he gets about Rs 23000-25000/- Besides, he also earns from the sale of pierced cocoons @ Rs 0.50-0.55 per cocoon he gets about Rs. 9000-10000/- in a period of 2-3 months he gets around Rs. 33000-35000/-.

Shri Pradan Hansda also raises the second crop with 200 DFLs in the month of Oct-Nov every year. In the month of Dec, he gets higher production of around 20000-22000 healthy cocoons as compared to his first crop. Around 60 percent (12000-13000 cocoons), he sells for seed production @ Rs 1.90 per cocoon and 40 percent (8000-9000 cocoons), sells on the basis of quality /grade @ ranging from Rs 1.0 to Rs 1.50 per cocoon, he gets about Rs. 30000-33000/- in a period of 2-3 months again. In a year, combining both the crops he gets around Rs. 65000-70000/- every year.

His cocoon production has also increased over the years, he was getting only 3000-4000 DFLs but now he easily manages 4500-5000 DFLs from first crop.

Crop	Duration	Appox. Earning (Rs.)				Total
		Sale of DFL	Sale of seed cocoon	Sale of commercial cocoon	Sale of pierced cocoon	
First	July-Aug.	23000-25000	-	-	9000-10000	33000-35000
Second	Oct-Nov.	-	24000-25000	8000-10000	-	32000-35000
Total Earning						65000-70000

After getting engaged in tasar seed rearing as Resham Doot, he has been able to support the education of his school going boy and college going daughter.

BEST PRACTICE FOLLOWED BY THE BENEFICIARY

Shri Pradan Hansda is being trained for seed rearing and over the years has become very efficient in the field of seed rearing. He has developed expertise in getting samples from seed rearing cocoons for identifying the diseases with the help of microscope. He chooses about 10 percent cocoons from the lot for sampling for identifying the diseases.

RECOGNITION RECEIVED BY THE BENEFICIARY FROM CSB/DOS

Although he has not received any reward as of now, but state administration is highly praising his efforts in spreading information regarding Tasar seed rearing among other Resham Dhoots. He is very popular among tasar farmers. As per information received from project officer; he is actively taking part in Arjun plantation in the area as well.

SUGGESTIONS AND RECOMMENDATIONS FOR MAKING THE CDP SCHEME MORE USEFUL FOR BENEFICIARIES

- Since the Resham Dhoots are taking rented shed every year @ about Rs 3000 for some period for seed rearing therefore structured permanent individual shed for seed rearing of first crop may be provided..
- Provision of nearby collection centre: Pilot Project Office (PPO) of state government is very far about 30 km from their production centre. For any help they have to travel all the way wasting a lot of time, Similarly for marketing they have to carry all the cocoon as well DFLs to PPO by their own, a nearby collection centre will be of great help.

CASE STUDY 10

CATEGORY OF SERICULTURE ACTIVITY : HIGH YIELD MULBERRY PLANTATION

Name and Address of CDP Beneficiary : Mr.Joshimuddin, AT Nagram Block, Berhampore, West bengal

Mr. Joshimuddin is a traditional sericulture farmer, 33 years of age and is a Honors Graduate in History. He lives with his wife, 6 years old daughter and sister at Nabgram block Berhampore. He was inducted as one of the beneficiaries under the Nabgram, Cluster, and Monitored from CSR & TI Berhampore. His qualification and his flexibility on adopting and inducting the new technologies that was provided under the Cluster Promotion Programme, earned him a place as one of the members under the cluster. As a result of his urge for betterment by using modern scientific technology for Sericulture cultivation his profit has increased to Rs. 85,000/

At present Mr. Joshimuddin is holding 0.66 acre of land, exclusively for cultivation of S1635 mulberry (2'X2') and thus sericulture is the only source of livelihood for his family. For

maintenance of soil nutrition status he was applying the dosage of FYM (20 mt/ha/Yr) and chemical fertilizers (Urea, SSP, MOP). However, due to his Biofertilizer application, presently he is applying reduced dosage of chemical fertilizers along with foliar spray of Morizyme -B.

ACTIVITIES INITIATED

Under the cluster Promotion Programme he was provided with a rearing House, Plastic rearing trays, Rearing Nets, Mountages, foam Pads, Knapsack spray, Pump set, etc. He is having all the basic requisites which has helped him in becoming a successful sericulture farmer and a projection model under CPP. Moreover the shallow tube well provided is covering the mulberry area of the village of irrigation.

The critical inputs he used during the rearing are Bleaching Powder, Labex/Vijeta, Sanitech & Vetcare supplement etc.

Regular suggestions through awareness programmes and group discussion have taught him to practice disinfection of his rearing house and appliances and adjoining areas. This has led to maintenance of proper hygiene, a basic requisite for successful rearing . as a dedicated sericulturist he is following the recommended spacing and micro- climatic conditions in his rearing house.

During the year he undertook all the 5 Crops seasons viz. Chaitra, Baisakhi, Shravani, Aswina and Aghrayani, reared a total of 1300 dfls, In the Chaitra/Falguni crop 200 dfls of MXB; in Baisakhi 200 dfls of MXM & 100 dfls of MXB was reared by him; in Shravani he undertook rearing of 150 dfls of MXM 100 dfls of MXB; in Aswina 250 dfls of MXM was reared by him and in Aghrayani he successfully reared 200 dfls of MXB & 100 dfls of BXB.

Under the beneficiaries empowerment programme he along with other CDP farmers of his village received need based training and supplied with publicity materials (Booklets, leaflets etc.)for knowledge and skill up gradation.

His exposure visits to Karimpur seed Zone, Malda Cocoon Market, CSR&TI Berhampore and other districts of West Bengal , Bangalore enriched his knowledge and he proudly shares his experience with his counterparts of that areas.

Table below provides details regarding the appliances provided, yield and net profit

SL NO	CULTIVATION/ REARING DETAILS	No. VALUE	
1	Total Land holding (Acre)	0.66	
2	Mulberry area (Acre)	0.66	
3	Mulberry variety	S1635	
4	Plantation Pattern	2'x2'	
5	Leaf Yeild (mt/ha/yr)	36-40	
6	No of rearings per year	5	
7	No of dfls brushed/year	MxM: (NXM12W)	500
		MxB: [N x(SK6xSK7)]	900
		BxB : [SK6xSK7]	100

8	Cocoon Yield (kg/100 dfls)	MxM	28-32
		MxB	47-52
		BxB	40-45
9	Revenue Generated /year (Rs)		99,000/-
10	Cost of production (Rs)		14,000/-
11	Net Profit (Rs)		85,000/-

REASONS FOR HIS SUCCESS

- His association with Central Silk Board provided him with necessary knowledge updation received.
- Technological intervention through Cluster Promotion Programme by REC Nabgram/ CSR&TI, Berhampore
- Plantation High Yielding Mulberry Varieties
- Use of recommended doses of FYM and fertilizers
- Critical suggestions received as precautionary / follow-up action, with regard to pest and disease control
- Good quality DFLs purchased from CSB grainages
- Regular monitoring by REC Nabgram and critical supervision by CSR&TI Berhampore, periodically
- Future Strategies

FUTURE STRATEGIES

- Shri Joshimuddin is thinking of increasing his mulberry acreage and rearing capacity
- In future, he intends to form a Self Help group through which he want to expand and enrich sericulture in the region.

CONCLUSION

This case study narrated an educated farmer's effort to increase yield and also productivity in his 0.66 acre land with the help of CPP. There are so many farmers in the vicinity of Nabgram – Murshidabad-Berhampore. Proper education, clear scientific thinking and CSB/DOS officials' interventions may go a long way to raise profitability.

CASE STUDY 11

CATEGORY OF SERICULTURE ACTIVITY : POST COCOON CATEGORY (COMPUTER- AIDED TEXTILE DESIGNER)

Name and Address of CDP Beneficiary : K. Nagraj, Door No. 15-363 Sali Street, Dharmavaram, Ananthpur, AP

ABOUT THE BENEFICIARY

Shri K.Nagraj is a beneficiary of Catalytic Development Programme (CDP) under 11th Plan in post cocoon category (Computer Aided Textile Designing). He is 39 years old, graduate designer



and is involved in designing for the last 8 years. He has undergone on the job training under a Private Textile Designer. He has also undergone 15 days training in Central Silk Technological Research Institute. Total unit cost of Computer aided textile designing equipment is Rs.5 Lakhs. Under Catalytic Development Programme, he got the assistance of Rs.3.75 Lakhs from the Department of Sericulture, Andhra Pradesh and Central Silk Board. The balance Rs.1.25 Lakhs was the beneficiary's contribution.

ASSET/INCOME RELATED INFORMATION

Computer- Aided Textile Designing has (CATD) become the primary source of income for Shri. K. Nagraj and his family. Before the introduction of CATD,, the beneficiary was involved in hand designing, which generally used to take more time and the income was not much. After getting the CATD machine installed in 2009-10 under CDP scheme, his income has grown almost thrice as shown in **Table below**.

Table : Annual Income from Designing (Post Cocoon Sector)

Source of Income	Approximate Annual Income (`)				
	2007-08	2008-09	2009-10	2010-11	2011-12
Designing (Post Cocoon)	72,000	72,000	1,80,000	2,00,000	2,00,000

IMPACT OF TECHNOLOGICAL INPUT

Designs form an integral part of textiles and offer an edge to the product in the market. The aesthetic design starts with a creative idea which goes through a period of detailed development of the total design before it is put on to the textiles. A lot of effort is involved in the design development which can be minimized with the use of computers. CATD has provided freedom to the beneficiary to get the best out of his artistic ingenuity and better flexibility for his creativity. The use of CATD has facilitated him with ease and quickness of operations besides making available innumerable options. According to the beneficiary, it has equipped the textile designer with a tool to react to the changes in the market trend in a faster way. The CATD package includes hardware, textile designing software and computerized card punching facility.

FEATURES OF COMPUTER AIDED TEXTILE DESIGNING

- Windows 95/NT based user friendly software
- Menu driven with on line help by using mouse, digitizer and/or keyboard
- Powerful editing tools
- Data can be stored on storage media like floppy disk or hard disk
- Hardcopy of designs on high resolution Dot Matrix, Printer, Laser or Colour inkjet printer
- Plotter support for large design
- 3D Texture mapping
- Production information in digital form for CAM support.

The package includes a software which is user friendly Windows/NT based. With the help of this software, designs are prepared as given in **Picture 1**.

Picture 1 Design created using the Software



After this with the help of hardware (**Picture 2**) these designs are converted into suitably located punches on a card.

Picture 2: Hardware that converts designs into Punches



Picture 3 shows the electronic punching machine which is attached with the hardware. Generally a Designer Saree consists of around 4500-5000 punched cards. To make the design for that kind of Sarees, a large number of punch cards are to be laced together. For this punched cards need to be numbered sequentially. The new punching machine has got a stamping feature which can put the serial numbers on the card. It reduces manual labour and chances of human errors.

Picture 3: Punching Machine



Picture 4: Lacing Machine**Picture 5 Weaving of a Saree from these cards**

Before introduction of CATD the beneficiary used to produce around 300 Cards per day. Now the output has increased to around 1500 cards per day. The beneficiary sells these punched cards at Rs. 2.40 per card with a profit of around Rs.0.70 per card.

CATD has given tremendous scope and opportunities to the beneficiary to showcase his talent and create innovative designs which has brought in better market acceptability for the weavers particularly handloom weavers. This has significantly improved the marketability of silk woven fabrics.

The beneficiary keeps a large library of predefined patterns. As already stored patterns are used repetitively, a lot of time and labour has been saved. Variety can be in the form of same design with different colours or altogether different kind of designs. He also creates the designs on the conceptualization of master weavers.

Complete view of the end fabric by simulating the design on monitor screen or by taking a hardcopy on a colour printer prior to the actual production decreases the chances of error.

CUSTOMERS/MARKET

The end users of the designs are organized mill sectors, power loom and handloom sectors, freelance designers, Master weavers.

IMPORTANCE OF COMPUTER AIDED TEXTILE DESIGNING (CATD)

In order to remain competitive both in the global and domestic markets, the Indian textile industry must explore ways and means to upgrade overall productivity and quality as well as

develop a quick response strategy to meet the demands of fast changing markets. The Indian textile industry is broadly divided into the high-tech organised mill sector and the low-tech decentralized powerloom and handloom sectors. In India, few modern mills in organised sector have started modernizing their various departments to remain competitive. However, in the decentralized powerloom and handloom sector, which is the largest sector of the Indian textile Industry, modernization is making very slow progress.

Designing textile samples in the traditional way is very time consuming, tedious and costly affair. Consequently designers find difficult in keeping pace with the "quick response" trends of the market. Introduction of high resolution color graphics computer in textile design all over the world has helped in reducing the time required from design conception to sample production.

CASE STUDY 12

CATEGORY OF SERICULTURE ACTIVITY : POST COCOON CATEGORY

Name and Address of CDP Beneficiary : Himalayan Silks Reeling & Weaving Unit, Shri. Ghulam Qadir Vani, Village Maschu Th. Chadora, Srinagar Division, District Badhgam (J & K)

The Himalayan Silk Weaving & Reeling Unit established by Shri Ghulam Qadir Vani in Maschu Th. Chadera village, of Jammu & Kashmir is a role model among the entire Post Cocoon sector. He has shown that a man can lead a prosperous life depending on sericulture. Now the unit is one of the leading raw silk producer in the state. The owner Shri Ghulam Qadir Vani who is presently 47 years old and studied only upto Secondary level had learnt sericulture during his early childhood from his ancestors. The company undertakes both the activities of reeling as well as weaving. After understanding the aspect of development of mastering the art of reeling the company further ventured in the area of production of silk fabric with the help of powerlooms. One great feature of the unit has been the development and involvement of the younger generation of the family as the second line of management.



The major types of silk clothes produced by the company include Tabi-chinan, Creape, Shatlen, Cheane, tab. The unit has been a source of inspiration for many in Srinagar to take up post

cocoon activities in the valley. They have integrated weaving alongwith the reeling operations in all their sericulture activities utilizing the powerlooms alongwith the continuation of reeling activities throughout the year given including the peak winter season with the existing infrastructure using Cottage basin reeling units and a wood fired boiler. The unit is a regular beneficiary of Rs. 100/- per kg. of raw silk for a total of 1500 kg of raw silk produced as Incentive for production of Bivoltine Silk (physical MTs) under CDP scheme. All the equipment and machines procured by the company have been self financed.

The owner of the unit has have attended various training programs, conducted by Department of Sericulture and Central Silk Board which has benefited the unit by getting useful information regarding the new developments in the sector.



Asset/Income Related Information						
Sources of income for the family						
Sl.No.	Source of Income	Approximate Annual Income (In Rs.)				
		2007-08	2008-09	2009-10	2010-11	2011-12
a)	Sericulture	150000	200000	250000	250000	250000
b)	Income from other activities	50000	50000	75000	80000	100000
	Total:	200000	300000	325000	330000	350000

Income Utilization						
Sl.No.	Income Utilization	Approximate Utilization (In Rs.)				
		2007-08	2008-09	2009-10	2010-11	2011-12
a)	Sericulture	100000	150000	162500	165000	175000
b)	Food and other expenses	100000	150000	162500	165000	175000
	Total:	200000	300000	325000	330000	350000



Raw Silk Production (for Reelers)

Year	Quantity of Silk yarn produced per annum	Cocoon Used per annum Mulberry(Kg)	Renditta (Quantity of cocoon required to produce 1 Kg of raw silk yarn)	Average Price of cocoon procured (Rs/Kg)	Average Price of raw silk sold (Rs/Kg)
2007-08	1800 kg	6480	3.6	300	1800
2008-09	1800 kg	6300	3.5	300	1900
2009-10	2000 kg	6800	3.4	350	2000
2010-11	2000 kg	6600	3.3	420	2300
2011-12	2500 kg	8000	3.2	470	2300

Note: The Renditta has been calculated based upon the utilization of dry cocoons.



ISSUES & PROBLEMS

Problem areas that are of immediate concern include shortage of skilled manpower in the sector with lesser working hours and higher wages. Further, the cost of production has steeply increased due to high inflation rates. The boiler is wood based and the Wood price is quite high causing the cost of production to rise.

The unit has a problem of disposing the dead pupae as the pupae is not being taken by any fishery or allied departments. Further, the pollution control board considers the dead pupae as a pollutant. This is creating a hinderance and requires an early solution.

The company considers the job to be a traditional activity and means of generating employment for the young generation with impetus on the social nature of the job rather than simply being a revenue generating activity.

The owner of the Himalayan Silk Weaving & Reeling Unit believes that the activity can be more profitable if the limit of Incentive for production of Bivoltine Silk (physical MTs) under CDP scheme for a maximum of 1500 kg of raw silk produced can be increased to 2500 Kgs during the XII plan period under CDP as this would be an incentive for higher production. Secondly, the facility of cocoon bank was extended when the price of cocoon was Rs. 250/kg now the price of cocoon has gone up to Rs. 500-550/kg. Therefore the amount of funds allocated under cocoon bank facility also needs to be revised.

Himalayan Silk Weaving & Reeling Unit has been a pioneer entrepreneurial venture steering its way through the volatile political condition in the valley and acting as a role model to the entire post cocoon community in J&K.

CASE STUDY 13

CATEGORY OF SERICULTURE ACTIVITY : POST COCOON CATEGORY (TWISTING OF SILK YARN)

**Name and Address of CDP Beneficiary : Shri Devi Shankar Patel, Vill./PO: Bhatti,
Lohta, Varanasi, Uttar Pradesh**

Shri Devi Shankar Patel has worked in various activities related to post cocoon sector such as reeler, twister and weaver since long. He has vast experience of around 22 years in sericulture related activities. But, he was a mere laborer in the looms owned by others. He was trying to establish his own unit but was unable to do so due to financial constraints.

He got awareness regarding CDP scheme from others villagers. Majority of people in his village are reelers and weavers. Some of them have availed assistance under Catalytic Development Programme (CDP).



He contacted the local CSB office at Varanasi. The officials at CSB office assessed his knowledge and experience. During the course of interaction, it was found that he is an experienced worker and has the caliber to run a unit on his own. He was given assistance to establish a twisting unit for silk yarn. As components of twisting and dyeing does not have state share, so he could receive only CSB's share. He was given a subsidy of Rs. 4.5 lakhs for buying

a twisting unit. His own contribution was Rs. 4 lakhs. He said that he could not secure bank loans for making his own share, however, with the help of his relatives and friends, he could arrange for his contribution.



Twisting machine sanctioned under CDP

Though he has received the assistance during the financial year 2010-11, the machine got installed on 10th July 2012 only. He is quite enthusiastic about the project and affirms that he will be able to run the unit successfully and profitably. He says that Catalytic Development Programme (CDP) is an excellent scheme and is of great use for the people involved in sericulture related activities.

He suggested that Zari thread making machine should also be included in the CDP scheme so that Zari making could also be taken up by the entrepreneurs of Varanasi.

CASE STUDY 14

CATEGORY OF SERICULTURE ACTIVITY : SERICULTURE FARMER/REARER CUM REELER

**Name and Address of CDP Beneficiary : Shri Sachin Bhanudas Thorat
S/O Shri Bhanudas Dudhaji Thorat, At & Post :Neknur, Survey No:704,
Taluka District: Beed, State: Maharashtra, Pin:431125**

Age:	32 years
Sex:	Male
Caste:	SC
Family Type:	Joint
Household Members (Total):	Seven

Occupation: Sericulture & Agriculture

Educational Qualification: Graduation

Training in Sericulture: 20 days Training on Reeling and Twisting received

from BAIF Pune

Experience in Sericulture:	5 Years
Sericulture Activity:	Mulberry
Category of Farmers (based on Land Holdings):	Semi medium
Land Holdings -Irrigated(2011-12)	Area under Agriculture: 1.60 Ha Area under Sericulture: 0.80 Ha

Financial Assistance Received under Catalytic Development Programme (CDP) during XI plan period (2007-12)

Schemes and Components	Assistance Received (Rs)
I. Silk Reeling and Spinning	
Support for Establishment of Cottage Basin Reeling Unit	1,87,500/-
II. Mulberry Cocoon Sector:	
Supply of Rearing Appliances/farm equipments	30,000/-
Assistance for construction of Rearing House	75,000/-

Assets Available with the cocoon farmer/rearer:

Sl no:	Asset	Equipment/Tools	
		Own Purchase	Under CDP
1.	Farm Equipment/implements	Ploughs	Sprayers
		Bore well/ tube well	
2.	Rearing Equipment	Bed Cleaning Nets	Rearing House
		Others(Uzi mesh/Nylon nets/ Leaf chamber/ Basin stand/ Feeding stand/Bamboo basket/ Leaf chopping knife & Board/ Foam pad/ Ant well/ Mask / Thermo stat/ Mats/ Foot mat etc) farm appliances etc	Rearing Stand
			Rearing Trays
			Mountages

List of Equipments/machineries owned by the beneficiary Reeler:

Own Purchase	Under CDP	RKVY Scheme
400 Spindle Twisting Machine	Cottage Basin Reeling Unit	Complete Set Multiend Reeling Machine
100 Spindle Winding Machine		
50 Spindle Doubling Machine		
30 Reeling Machine		
120 Yard Warp Charkha		
2 Doupion charkha		



Technical support received from CSB/DOS officials

Technical support is being provided to the beneficiary as and when required by CSB/DOS officials.

Impact of Catalytic Development Programme:

Productivity Details (2011-12)

Variety	Plantation Variety	Land Holding (ha)	No. of Crops per year	No. of DFLs brushed per crop (Nos.)	Cocoon yield per crop (MT)
Mulberry (Bivoltine)	V1	0.80	7	300	0.150

Raw Silk Production

Year	Quantity of Silk Yarn Produced per Annum (MT)	Cocoon used per annum (Mulberry in Kg)	Renditta (Quantity of cocoon required to produce 1 kg of silk yarn)	Average price of Cocoon procured (Rs/Kg)	Average Price of Raw silk Sold (Rs per Kg)
2009-10	1.00	9500	9.5	160/-	1600
2010-11	2.3	21000	9.13	190/-	1800
2011-12	2.6	25000	9.60	220/-	2000

Best practice followed by the beneficiary for doing sericulture activity:

The beneficiary took training in Reeling & Twisting and he has been acquiring the latest available technology to improve productivity. At present, the beneficiary is mainly selling his produce (silk yarn) in nearby markets viz., Yeola in Nashik. However, he is making efforts to strengthen the backward linkages and develop forward market network.

Recognition received by the beneficiary from CSB/DOS

The beneficiary has so far not received any reward or recognition from CSB/DOS. It is observed that in this area private reelers are not coming up in the post cocoon sector. But this beneficiary is very enterprising and keen in expanding his business. The extension officer of the cluster is satisfied with the performance of this beneficiary and would like to showcase his progress for motivating potential/future reelers from the state.

Suggestions and Recommendations for making the CDP scheme more useful for beneficiaries

1. At present, the subsidy towards construction of rearing house is paid by State government/CSB only after construction of the shed and minimum two crops is grown. The beneficiary suggests that the government contribution towards construction of rearing house may be disbursed to the beneficiaries after they have put their share in it.
2. In order to avail the financial assistance under CDP scheme, the beneficiaries may be provided with a list of equipment /machinery from which it can be selected as per their requirement.
3. There is acute shortage of skilled manpower for reeling activities. Through CDP Scheme training may be imparted to local people so that they can work in the reeling units.
4. The market for cocoon sector needs to be developed through CDP.
5. The CDP scheme may provide financial assistance as well as business intelligence for developing the marketing network for the post cocoon sector.

CASE STUDY 15

CATEGORY OF SERICULTURE ACTIVITY: POST COCOON CATEGORY (HANDLOOM WEAVING)

**Name and Address of CDP Beneficiary: Marhati Paithani Centre, 7 Banglow,
Santh Dyaneshwar Udyan Road, Paithan Dist. Aurangabad**

ABOUT THE BENEFICIARY

Marhati Paithani Centre (MPC) (formally known as Trimurthy Paithani Centre) is a production-cum-training centre under MSSIDC. MSSIDC is a Government of Maharashtra Undertaking established in October, 1962. MSSIDC assists MSME Enterprises and Handicraft Artisans to Grow and Expand their Market, Revenues, Business and Operations through services such as marketing, warehousing, supply of scarce raw materials. MSSIDC plays a vital role in revival, development and growth of traditional handicrafts of Maharashtra by responding to the diversified needs of rural artisans and marketing their products in India as well as abroad.

Marhati Paithani Centre (MPC) is located at Paithan, the place where ancient weaving art of Paithani originated. However, over the years the Paithani weaving activity grew weaker and in the face of mechanization and changing economic pattern, the Paithani had to fight for its survival. A Paithani Training and production center was established at Paithan in 1968 with a view to promoting the weaving of the Paithani. In order to survive this ancient art, the Government of Maharashtra entrusted the responsibility of running Paithani Center to MSSIDC. Accordingly, MSSIDC shouldered this important task of running the centre in the year 1973 with 7-8 handlooms. Since then MSSIDC is working for preservation of this ancient traditional art and succeeded in expanding the activity of the centre. Corporation has imparted training to thousand of weaver and succeeded to give rebirth to these traditional arts.

Organisational Chart for Paithani Activity

Managing Director, MSSIDC, Mumbai
General Manager, Mumbai
Manager (Handicraft) Mumbai
Nodal Officer, Nashik
Divisional Manager, Aurangabad
Manager, MPC Paithan
SGA, MPC Paithan
Asstt. MPC Paithan

Assistance received under Catalytic Development Programme

During the month of December, 2009 MSSIDC made an application for availing subsidy under 11th Plan scheme for purchase of 100 nos. of Handlooms for Marhati Paithani Centre, Paithan to Central Silk Board, Government of India, Bilaspur, Chhattisgarh and received a payment of Rs.21,00,000/- from CSB and State subsidy under 11th Plan. With great support from CSB and



state, 100 Nos. of Handlooms were bought and at present MSSIDC is having total 204 Nos. of Handlooms.

Technical support received from CSB/DOS Officials

The technical support for finalization drawing and design of the Looms was received from Central Silk Board and DKTE Textile & Engineering Institute located at Ichalkaranji, Maharashtra.

Impact of Catalytic Development Programme on production, Productivity quality, technology, income, marketability, innovation etc.

Table gives the production and sales of Paithani sarees produced from Handloom. It is clear that there is a continuous upward trend in the production. After purchases of 100 looms with the CSB and government subsidy, the Corporation has reached a position to enhance its production capacity and also numbers of trainees. Corporation is continuously making efforts to improve productivity of the Centre and bringing new techniques/ideas.

Table : Progress of Marhati Paithani Centre at Paithan (1991-92 to 2011-12)

(Value in Lakhs)

Sl no.	Year	Paithani Production		Paithani Sale		Paithani Stock Transfer	
		QTY.	VALUE	QTY.	VALUE	QTY.	VALUE
1	1991-92	21	2.28	6	0.57	32	4.4
2	1992-93	26	1.85	0	0	30	1.7
3	1993-94	54	2.49	1	0.07	43	2.54
4	1994-95	62	2.88	15	1.48	49	2.21
5	1995-96	95	4.57	61	5.82	34	1.63
6	1996-97	85	4.64	78	7.88	12	0.61
7	1997-98	113	6.48	104	10.94	1	0.09
8	1998-99	128	7.76	82	9.96	37	2
9	1999-00	119	7.53	84	12.86	17	1.08
10	2000-01	138	9.26	123	14.7	19	1.49
11	2001-02	145	9.75	137	17.09	8	0.52
12	2002-03	195	11.98	151	17.06	34	1.96
13	2003-04	157	9.17	125	13.72	38	2.18
14	2004-05	207	13.22	139	16.37	56	3.55
15	2005-06	197	14.74	184	24.04	18	1.4
16	2006-07	294	19.94	214	31.02	29	1.97
17	2007-08	342	24.38	248	34.94	68	5.13
18	2008-09	340	26.42	235	34.04	83	7.06
19	2009-10	422	29.42	193	33.27	24	3

20	2010-11	231	28.58	206	41.29	15	1.7
21	2011-12	237	30.44	202	46.91	478	40.75

Further MSSIDC have endeavored to bring new designs for Paithani Saree by engaging commercial artist and diversified Paithani production activity by manufacturing Wall Hanging, Dress Material, Scarf etc. in Paithani pattern to cope up with the demand of new generation.

All the fabrics and handicrafts produced at the centre are marketed through Marhati Emporium at Paithan, Mumbai and Delhi. Further, MSSIDC participate on behalf of artisans in national and international exhibitions viz., IIFT, Pragati Maidan, New Delhi and held abroad. Corporation is also organizing its own exhibitions at various locations throughout India for exhibiting and selling Handloom/Handicraft products.

MSSIDC is imparting Paithani weaving training to the candidates at MPC, Paithan, Nanded and Latur. MSSIDC is having 204 Handlooms. Out of which 110 Handlooms are being utilized for regular production of Paithani saree and nearly 70 Nos. of Handloom are reserved for training purpose at Paithan, Nanded and Latur in Maharashtra. Corporation is imparting training to nearly 25 candidates for traditional Paithani and 60 candidates for brocade Paithani every year and also giving them stipend of Rs.1500/- per month.

Table 2: Development of Paithani by Training

Sr. No.	Year	No. of Trainees	Grants from
1.	1986-1987	12	Govt. of Norvye
2.	1991-1992	15	Central Govt.
3.	1993-1994	15	Central Govt.
4.	1999-2000	30	Govt. of Maharashtra
5.	2000-2001	30	Govt. of Maharashtra
6.	2001-2002	30	Govt. of Maharashtra
7.	2002-2003	30	Govt. of Maharashtra
8.	2003-2004	30	Govt. of Maharashtra
9.	2004-2005	30	Govt. of Maharashtra
10.	2005-2006	30	Govt. of Maharashtra
11.	2006-2007	30	Govt. of Maharashtra
12.	2007-2008	159	Govt. of Maharashtra
13.	2008-2009	40 60	Municipal Council Paithan CSB Banglore
14.	2009-2010	90	Govt. of Maharashtra
15.	2010-2011	40	Govt. of Maharashtra
16.	2011-2012	70	Govt. of Maharashtra

With assistance of Government grants MSSIDC had organized various training programme and brought various expert weavers for this training. The new Paithani training scheme evolved by MSSIDC has attracted the younger generation. The training period was 16 months, a higher stipend was offered, and the trainees were absorbed in the production programme on completion of training.

As a result of various MSSIDC training programme related to Paithani Saree, there are about 700 to 800 female weavers in and around Paithan Region and employment opportunity has been generated in Paithani Weaving at the centers and outside the centre. The acknowledgment of this work has given an exclusive place to Marhati Paithani Centre on the map of India.

Moreover, the candidates selected for learning this ancient art are mainly from poor section of the society. They are trained by expert weavers appointed by corporation on fixed remuneration basis. By this activity the poor people mainly woman from rural areas have got a platform to learn this arts and to become skilled worker and are assured to get the job at the Paithani Centre or may go for self employment.

The trainees are given raw materials after completion of training to weave Paithni sarees and marketing of the Paithani saree is done by MSSIDC. This has given livelihood to the weakest section of the society and Paithani weaving art is also revived.

Corporation is giving utmost importance to the quality of the products; the centre is manufacturing Brocade Paithani by using real Zari, as well as traditional Paithani.

Preservation of extinguishing art of Paithan

The Paithani derives its name from where it has been produced for 2000 years. It is a Silk Saree with ornamented Zari Pallav and border and traditional Motifs. A special feature of Paithani is that no mechanical means are used to produce the designs. It takes a month and a half to weave the simplest Paithani and from five to nine months to make the brocade one. The price of such painstaking workmanship is bound to be high. Normally, Paithani is woven using silk yarn and the Zari is drawn from pure gold. But now-a-days economically viable Paithani sarees are woven using pure Zari drawn by using silver and coated with pure gold in different percent. Silk yarn is dyed by using natural or chemical dyes.

Social aspect

While executing this important task of reviving of Paithani arts, Corporation has also succeeded in providing employment to the woman of weaker section of the society. By implementing Paithani Training Programme Corporation has open a platform for employment and self employment to the woman from weaker section of rural area as well as widows and divorcee. There are near about 90% woman weaver in Paithani centre. MSSIDC under its labour welfare activity with the help of local NGO extend medical checkup facility once in a year. In order to take care of weaver eye-sight, MSSIDC also provides spectacles and also to motivate weaver, MSSIDC also give production based incentive too.

Best practice followed by the beneficiary for doing Handloom activity

MSSIDC has purchased the Improved Handlooms. MSSIDC has also plan to increase efficiency of weaver and reduce production cost and time for weaving. We have future plan to purchase new improved loom with able guidance of Central Silk Board.

Recognition received by the beneficiary from CSB/DOS and the view of Extension officer of the cluster towards the beneficiary

MSSIDC has been awarded ISO 9001-2008 Certification from TUV authority for Marhati Paithani Centre, Paithan.

MSSIDC has been also awarded SILK MARK for the Marhati Paithani Centre, Paithan during the year 2007-08.

Maharashtra is one of the leading states in Silk Production but the post cocoon activities are relatively less developed in the state. The Extension officer, from Directorate of Sericulture, Aurangabad is of the view that an integrated sericulture cluster can be developed in the area by strengthening the linkages between cocoon farmers and post cocoon activities. The Marhati Paithani Centre, Paithan which is currently engaged in weaving activities only, may be involved in other post cocoon activities like reeling, marketing of silk products etc. The integrated sericulture clusters may be developed with technical and financial assistance from Central Silk Board.

Suggestions and Recommendations for making the CDP scheme more useful for beneficiaries.

Nodal Corporation like MSSIDC may be motivated for backward and forward linkages as below:

Backward Linkages:

1. Reeling of silk units
2. Winding unit
3. Dying House
4. Warping units
5. Card Punching Machinery

Forward Linkages :

1. Technical assistance for supervision of production
2. Technical assistance for improvement of quality and speed of production
3. Sales outlets

The Photographs of the Marhati Paithani Centre, Handloom Production Centre and Handloom Training centre are given below:



CASE STUDY 16

CATEGORY OF SERICULTURE ACTIVITY : POST COCOON CATEGORY (“MULBERRY / ERI REELER”)

Name and Address of CDP Beneficiary : Shri W Shanta, Shamrou Village, Wong Lekai, Imphal West, Manipur

EXPERIENCE IN SERICULTURE: - Shri W Shanta has 5 years of experience in sericulture activities.

OVERALL FINANCIAL CONDITION: - Shri Shanta has shown an impressive development and growth in socio economic condition with an average annual net income of Rs. 80,000 in 2011-12 as compared to around Rs. 40000 in 2007-08 mostly from Sericulture Activities and also from other activities like agriculture, horticulture etc.

EXTENT OF SERICULTURE ACTIVITIES: -He is a Commercial Eri / Mulberry Reeler.

ASSISTANCE RECEIVED UNDER CATALYTIC DEVELOPMENT PROGRAMME

Under the CDP schemes the beneficiary was assisted with a subsidized Reeling Machine at a price of Rs. 4800 collected from beneficiary. This has helped him to increase his production considerably with the help of other reeling machines which he already had. His annual production has increased to around 20kg of Eri and Mulberry Yarn from a previous figure of 7Kg in 2009 - 2010

Apart from this it is also noticeable that the beneficiary also has weaving units which his run by his brother. Since large quantity of yarn could be produced, the surplus amount produced could be utilized for his own needs for silk yarn.

TECHNICAL SUPPORT RECEIVED FROM CSB/DOS OFFICIALS

Training has been imparted to the beneficiary under the beneficiary empowerment programs for silk reelers which has helped him in improving his production both quantitatively and qualitatively.

IMPACT OF CDP ON PRODUCTION, PRODUCTIVITY, QUALITY, TECHNOLOGY, INCOME, MARKETABILITY, INNOVATION ETC.

Sh. W Shanta has been performing sericulture activities for over 5 kg silk yarns of reasonably good quality. Table below shows a comparative description of the production details and income generated by him five years back and now.

(Income figures are only approximate figures as told by the beneficiary)

Year	Quantity of Silk Yarn Produced (Kg)	Average price of cocoon per Kg (Rs.)	Average price of Raw Silk Sold per Kg (Rs.)	Total Income (Rs.)
2008 – 09	7	150	2500	20000
2011- 12	20	200	3000	60000

RECOGNITION RECEIVED BY THE BENEFICIARY FROM CSB/DOS

Sh. W Shanta is appreciated by the officials for his contribution to sericulture as an effective reeler. It is also reported that the reeler has also been able to utilize the income generated through sericulture activities into his welding business and has prepared a number of hand reeling machines. These machines have been accepted by the state officials of quite good quality and DoS has agreed to purchase his machines for distribution to other beneficiaries under state scheme

SUGGESTIONS AND RECOMMENDATIONS FOR MAKING THE CDP SCHEME MORE USEFUL FOR BENEFICIARIES

Increment in the monetary assistance received by the beneficiaries.

Component should be added to cover the transportation costs incurred by the beneficiaries especially in hilly areas.

More awareness campaign and programs should be carried to cover more and more beneficiaries by enlightening the farmers about the benefits of sericulture and how it can improve their socio economic conditions

Extensive training should be imparted to the beneficiaries in improved rearing technologies and hygienic practices for handling silkworms

CASE STUDY 17**CATEGORY OF SERICULTURE ACTIVITY : PRADAN
INTERVENTIONS IN TASAR SECTOR IN DUMKA**

Name and Address of CDP Beneficiary : PRADAN (Professional Assistance for Development Action), DUMKA, JHARKHAND

Project background

PRADAN (Professional Assistance for Development Action) is an NGO which has taken activities from nursery raising to silk production including pre-cocoon, seed and post-cocoon sectors in the States of Jharkhand since the year 2003-04 with a holistic approach under Swarnajayanti Gram Swarozgar Yojana (SGSY) special Projects with financial assistance from Ministry of Rural Development, Government of India and Central Silk Board. They have taken some innovative ideas viz., large scale raising of block plantations of tasar host plants in private lands of tribals, nucleus seed rearing by Adopted Seed Rearers, nucleus seed cocoon preservation and basic seed production by private individuals, organization of private graineurs etc in order to meet the project objectives.

During field visit to of Dumka district of Jharkhand by NPC team, two locations of PRADAN in Dhaka and Sahritola were visited. In Dhaka, they have raised large scale block plantations of tasar host plants in private lands of tribals. There are one set of farmers who do nucleus crop rearing with intensive care on these block plantations.

They collect eggs from CSB, these eggs are reared in this isolated area. There are around 100 families who rears this crop and supply the cocoons produced from these area to the preservation unit i.e Masuta cooperative floated by PRADAN. The discussions with some of



these farmers revealed that the rates are decided by these farmers forming a committee by themselves after getting information from nearby areas. Although the rates at which they are selling the cocoons to Masuta cooperative are about 20-25% less than market rates.

In Sahritola area, NPC team has seen big

preservation unit of PRADAN - (with 250,000 cocoon preservation capacity) used for seed rearing. It is two storey building having two halls. Each hall has capacity of 1,25,000 lacs cocoons. The families of nearby areas are producing reeled and spun yarn. The company is taking care of back ward and forward linkages.

Masuta Producers Company promoted by PRADAN is taking care of the activity.



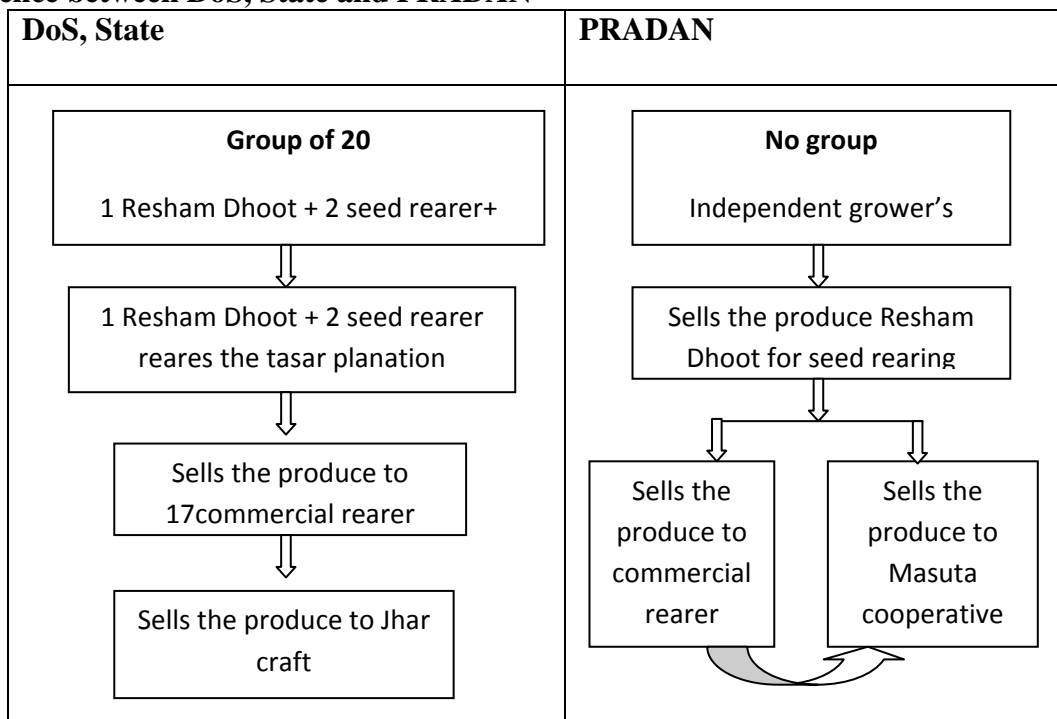
Project with financial assistance from National Bank for Agriculture and Rural Development (NABARD)

On the similar line of Swarnajayanti Gram Swarozgar Yojana (SGSY) special Projects model, PRADAN has now undertaken new project from NABARD, whereby they are raising large scale block plantations of tasar host plants in ten hectares of private lands of tribals. This project has started last year, it is for three years, first year for plantation and 2nd as well 3rd years for maintenance, NPC study team has visited the site and has seen the progress in this project as well. The plantation in the project is in initial stages only.

On the ridges they are planting pulses and wood based trees to provide extra income to the farmers in the coming years. On discussion with officials of PRADAN it was found that they have divided the land in three parts. The upper/ higher part which is generally not fertile is used

for tasar plantation, they are creating reservoir in between 2nd and 3rd part, water pond for watering the areas in second/ middle part of land whereas the lower / third part is used for agriculture purposes.

Difference between DoS, State and PRADAN



Although PRADAN has sufficient number of seed reares with them but not sufficient number of commercial rearers. They are increasing the number of commercial rearers by imparting training, handholding, exposure etc in collaboration with CSB. From 550 families to 1950 Familes in 2010, they are planning to reach 2500 families in 2012 year end.

Road ahead:

During discussion with PRADAN and the Pilot Project Centre (PPC) of state government in Dumka district, it has been noticed that there is no synergy between different entities working in the area of tasar plantation or rearing. Some of the villages which are already covered or being developed for tasar rearing by PPC is being approached by PRADAN for either tasar plantation or enrolling commercial reares.

It would be resource saving and at the same time avoid duplication of beneficiaries if the areas/ villages for adopting tasar cultivation are demarcated. This will help in providing benefits to more number of tribals under the tasar cultivation.

STUDY TEAM

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