

INCLUSION OF SERICULTURE UNDER RKVY

Pursuant to the decision taken by the Ministry of Agriculture, Government of India to include Sericulture activities upto the stage of cocoon production and silk yarn production as one of the activities under Agriculture and allied sectors under RKVY Schemes of GOI, a shelf of Schemes have been prepared for availing assistance under RKVY which is likely to provide further fillip to West Bengal Sericulture in the days to come.

ABSTRACT OF PROPOSED RKVY SCHEMES

(I) Government Farm Oriented Schemes				
SL No	Name of the Scheme	Scheme Code	Total Outlay (` in Lakh)	Remarks
1	Erection of Chain Lock Fencing along with Planting of Hedge Plants around the Government Farms	1A	455.15	
2	Development of Irrigation facilities in Government Farms	1B	114.30	
3	Development of Irrigation System with Drip Irrigation	1C	1.50	
4	Farm Mechanization through Power Tiller	1D	18.00	
5	Development of Rearing Facilities at Govt. Farms	1E	125.00	
6	Construction of Tasar Grainage at Govt. Farms	1F	72.00	
7	Development of transportation facilities for Seed Cocoons & Dfls.	1G	42.00	
8	Mulberry Parental Seed Organization in West Bengal	1H	168.00	
9	Installation of Walk-in-Cold Room in Govt. Grainages	1I	50.00	
Sub Total			1045.95	
Administrative Cost @ 1%			10.46	
Total (A)			1056.41	
(II) Beneficiary Oriented Schemes				
1	Mass Disinfection through SHGs/Quality Clubs	2A	10.70	

2	Development of Resource Person (Tasar Bandhu) for effective Transfer of Technology	2B	8.56	
3	Conversion of existing plantation through replacement with widely spaced HYV saplings	2C	49.05	
Sub Total			68.31	
Administrative Cost @ 1%			0.6831	
Total (B)			68.99	
Grand Total (A+B)			1125.40	

Rupees Eleven Crore Twenty Five Lakh Forty Thousand only

STATUS OF RKVY SCHEMES FOR SERICULTURE SANCTIONED DURING 2011-12 (Rs. In lakh)								
Scheme Code	Name of Schemes	Unit	Target		Achievement		Spill Over	
			Physical	Financial	Physical	Financial	Physical	Financial
1A	Erection of Chain Lock Fencing around the Government Farms	R.ft.	48350	455.15	21350	220.68	27000	234.47
1B	Development of Irrigation facilities in Government Farms	No.	9	31.5	0	0	9	31.5
		R.ft.	6900	82.8	1890	22.69	5010	60.11
1C	Development of Irrigation System with Drip Irrigation	No.	1	1.5	0	0	1	1.5
1D	Farm Mechanization through Power Tiller	No.	12	18	12	17.9	0	0.1
1E	Development of Rearing Facilities at Govt. Farms	No.	5	100	5	91.3	0	8.7
				25	0	0	5	25
1F	Construction of Tasar Grainage at Govt. Farms	No.	3	72	3	72.65	0	-0.65
1G	Development of transportation facilities for Seed Cocoons & Dfls.	No.	4	42	0	0	4	42
1H	Mulberry Parental Seed Organization in West Bengal	No.	10	168	0	0	10	168

1I	Installation of Walk-in-Cold Room in Govt. Grainages	No.	10	61.14	0	0	10	61.14
2A	Mass Disinfection through SHGs/Quality Clubs	No.	1	10.7	1	3.75	0	6.95
2B	Development of Resource Person (Tasar Bandhu) for effective Transfer of Technology	No.	16	8.56	9	4.81	7	3.75
2C	Conversion of existing plantation through replacement with widely spaced HYV saplings	Acres	100	49.05	29	14.21	71	34.84
TOTAL				1125.4		447.99		677.41

SCHEME COST FOR PROCUREMENT OF REARING APPLIANCES & EQUIPMENTS UNDER RKVY				
Sl. No.	Item details	Quantity	Rate	Amount
1	Seriheaters from CSR&TI, Mysore	4	5000	20,000
2	Aluminium Ladders	2	2500	5,000
3	Power Sprayers	2	30000	60,000
4	Polythene Rearing Trays (4' X 3')	500	300	1,50,000
5	Plastic Mountages	1,000	100	1,00,000
6	Rearing Stands on wheels	1	50000	50,000
7	Microscopes with Dessicators and Bell jars	2	25000	50,000
8	Larva Examination Table	2	8000	16,000
9	Larva Examination Stool	10	2400	24,000
10	Equipment Storage Safe	2	10000	20,000
11	Hygrometers	2	1500	3,000
12	Flame guns	2	500	1,000
13	Thermometers	1	1000	1,000

TOTAL			5,00,000
N.B. - The aforesaid prices are indicative and as such the quantity of any item may vary. But there should not be any alteration of items.			

SCHEME COST FOR PROCUREMENT OF REARING APPLIANCES & EQUIPMENTS UNDER RKVY				
Sl. No.	Item details	Quantity	Rate	Amount
1	Uprooting and replantation with Mulberry Saplings (3' X 3') in 2 acres of land	LS		40,000
2	Application of Manures and Fertilisers and irrigation thereafter	LS		15,000
3	Installation of Submersible Pump Set	LS		5,00,000
4	Power Tiller with accessories	1	160000	1,60,000
5	Application of Pesticides	LS		10,000
6	Renovation of Silkworm Rearing House	1	200000	2,00,000
7	Installation of Air Conditioners of 2 Ton capacity each	3	75000	2,25,000
8	Seriheaters from CSR&TI, Mysore	4	5000	20,000
9	Aluminium Ladders	2	2500	5,000
10	Power Sprayers	2	30000	60,000
11	Polythene Rearing Trays (4' X 3')	100	300	30,000
12	Plastic Mountages	200	100	20,000
13	Rearing Stands on wheels	1	10000	10,000
14	Microscopes with Dessicators and Bell jars	2	25000	50,000
15	Cocoon Assessment Balance	1	100000	100000
16	Computer system	1	50000	50000
17	Precision Electronic Balance	1	60000	60000
18	Larva/Moth Examination Table	4	8000	32,000
19	Larva/Moth Examination Stool	10	2400	24,000
20	Equipment Storage Safe	4	10000	40,000
21	Working Table	2	7000	14,000
22	Hygrometers	2	1500	3,000
23	Flame guns	2	500	1,000
24	Thermometers	1	1000	1,000
25	Miscellaneous	LS		10,000
TOTAL				16,80,000

N.B. - The aforesaid prices are indicative and as such the quantity of any item may vary. But there should not be any alteration of items.

Name of the Scheme : **Erection of Chain Lock Fencing along with planting of Hedge Plants around the Govt. Farms (Scheme Code 1A)**

Project objective : The basic need of the Sericulture industry is to conduct Silkworm rearing for which production of adequate quantity and better quality mulberry leaves is essential for production of Seed Cocoon qualitatively & quantitatively. The present Scheme aims at erection of Chain Link Fencing along with planting of Hedge Plants around the Govt. Farms to guard the Govt. Units as well as to check the cattle grazing in order to make available sufficient quantity of Mulberry foliage required for Silk worm Rearing.

Present Status: Most of the Govt. Farms are affected with Grazing by domestic cattle of local persons.

Target group : Primarily Govt. Farms where ultimate beneficiaries would be poor rural Sericulturists.

Justification : The Mulberry Plants are highly palatable to the Cattle because of its rich nitrogen content. Since feeding with Mulberry leaves & twigs increase lactation, there is tendency among the local people of intentional grazing by their domestic Cattle in the adjacent Govt. Mulberry Farms. As a result, the production of Mulberry leaves gets hampered to a great extent. To protect the Mulberry plants i.e. food plants of Silkworm, the Govt. Farms need be fenced with **Chain Link fencing along with planting of Hedge plants like *Ingadelsis*** etc around the perimeter. This would also help guarding the Govt. property from theft and other undesirable incidents.

Financial Involvement : The Scheme will be implemented in the following Districts involving the following Government Nurseries:

Sl. No	District/Sub Div	Location	Farm	Running Feet
1	Jalpaiguri	Meteli	Chalsa Sericulture Demonstration Farm(CHL)	5,000
2	Siliguri	Matigara	Matigara Sericulture Complex(MAT)	10,000
3		Naxalbari	Naxalbari Sericulture Farm(NAX)	4,000
4	Malda	Englishbazar	Krishnapur Graft Nursery(KGN)	3,350
5			Jalalpur Technical Service Centre(JLP)	1,000
6	Birbhum	Rampurhat	Boswa Sericulture Composite Unit(BSC)	5,000
7		Bolpur	Sriniketan Sericulture Composite Unit(SSC)	5,000
8	Nadia	Ranaghat	Ranaghat Sericulture Nursery(RNG)	10,000
9	Purulia	Ayodhya	Ayodhya Hill Sericulture Farm (AYO)	5,000
Total				48,350

Sl. No.	Component	Unit cost (₹)	R.Ft.	Amount Required (₹ in Lakh)
1	Chain Lock Fencing along with Planting of Hedge Plants around the Perimeters of Govt. Farms	₹ 900 per R.Ft. (as per PWD Schedule of the GoWB)	48,350	435.15 Say 435.00
2	Cost of <i>Ingadelsis</i> seeds (Hedge seeds) and sowing of the same along the fencing by the Forest Department	LUMPSUM		20.00
TOTAL				455.00

Implementation agency : DOT(S), West Bengal through its Engineering Cell and the Forest Department.

Monitoring & Evaluation : A team of DOT(S) officials will evaluate the progress of the scheme from time to time at district & DOT(S), HQs levels.

- Name of the Scheme** : **Development of Irrigation facilities in Govt. Farms (Scheme Code 1B)**
- Project objective** : (1) To provide adequate irrigation required for improvement in production of Mulberry leaves qualitatively & quantitatively.
(2) To check wastage of irrigation water due to tillage and thus economize the Water resources and Power (Electricity / HSD) by Erection of underground irrigation channels at Govt. Farms.
- Present Status** : : The irrigation water, wherever available, is supplied from the point of pumping to the Mulberry plot through delivery pipes which get damaged frequently or even kutchra drains at Govt. Farms whereby lot of water and Electricity / HSD required for running the Pump sets are wasted.
- Target group** : Primarily Govt. Farms where ultimate beneficiaries would be poor rural Sericulturists.
- Justification** : Since Mulberry plants require 1 to 1.5 irrigations per week, substantial irrigation facility is required for Govt. Farms for production of superior quality of Mulberry leaves qualitatively & quantitatively. But water and power resources are limited. To economize both the resources, the underground irrigation pipe lines with spouts are required.
- Specification** : 1) Installation of 3" dia. Submersible pump sets wherever required & permitted by the SWID.
2) Underground PVC irrigation pipe lines of 3" diameter laid 6" below the G.L. having spouts at 50 ft. apart fitted with Valve covered with Brick Valve chamber with RCC cover atop.

- Financial Involvement :**
- 1) Cost of installation of Submersible pump set - ` 3.5 lakh
 - 2) ` 1,200 per R.Ft. as per PWD Schedule of the GoWB.

The Scheme will be implemented in the following Districts involving the following Government Nurseries:

Sl. No	District	Location	Farm	Pump Set	Running Feet
1	Jalpaiguri	Maynaguri	Basilardanga Sericulture Demonstration Farm(BSD)	1	300
3		Alipurduar	Birparajheel Sericulture Composite Unit(BPJ)	1	200
3			Pukhuria Ericulture Nursery(PUK)	1	200
4			Kumargram Ericulture Nursery(KMG)	1	200
7	Murshidabad	Berhampore	Berhampore Central Nursery(BCN)	0	1000
8		Mur-Jia	Akherighata Sericulture Complex(ASC)	0	1000
9			Khoshbagh Sericulture Farm(KHS)	1	500
10		Beldanga	Kumarpur Sericulture Complex(KSC)	1	1000
11	Birbhum	Bolpur	Bolpur Sericulture Composite Unit(BCU)	0	300
12		Bolpur	Sriniketan Sericulture Composite Unit(SSC)	1	500
13		Rampurhat-II	Boswa Sericulture Composite Unit(BSC)	1	500
15	Bankura	Bishnupur	Bishnupur Sericulture Complex(BSP)	1	0
16	Midnapore	Jhargram	Jhargram Sericulture Farm(JRG)	0	400
17		Midnapore	Phulpahari Sericulture Farm(PHU)	0	500
		Debra	Debra Sericulture Nursery(DBR)	0	300
Total				9	6900

Sl. No.	Component	Unit cost (₹)	No	R,Ft	Amount Required (in Lakh `)
1	Cost of installation of Submersible pump set	3.50	9	-	31.50
2	Underground PVC irrigation pipe lines of 3" diameter laid 6" below the G.L. having spouts at 50 ft. apart fitted with Valve covered with Brick Valve chamber with RCC cover atop	` 1,200 per R.Ft. (as per PWD Schedule of the GoWB)	-	6900	82.80
Total					114.30

Implementation agency : DOT(S), West Bengal through its Engineering Cell.

Monitoring & Evaluation : A team of DOT(S) officials will evaluate the progress of the scheme from time to time at district & DOT(S), HQs levels.

- Name of the Scheme** : **Development of irrigation system with Drip Irrigation (Scheme Code 1C).**
- Project objective** : Drip irrigation is a modern irrigation system by which plants can be irrigated continuously but with slow release of water at the root level. Such system is appropriate for the areas where the availability of water is very low and as such the project envisages optimal utilization of the available scanty water source.
- Present status** : In the district of Purulia there is a productive Govt. Farm at Ayodhya Hills having 2 hectares of Mulberry plantation where all the plots are rainfed. As a result, production of Mulberry leaves goes down qualitatively as well as quantitatively to a considerable extent during dry months. The Farm has been earmarked for production of Bivoltine Seed Cocoons. Recently a fund of Rs. 7.25 lakh has been sanctioned by the District Magistrate out of MGNREGP fund for construction of 2 masonry wells. The available water out of the well may be utilized for the purpose of irrigation if the proposed Scheme is sanctioned.
- Target Group** : Beneficiaries belonging to ST community residing at Ayodhya Hills in the district of Purulia indirectly. Because the products i.e. Seed Cocoons would be utilized for production of Silkworm Eggs to be utilized by the villagers.
- Justification** : To upgrade the status of Mulberry leaf production qualitatively as well as quantitatively and in turn improve the production of Govt. Farm of the Tribal village at Ayodhya Hills.
- Project inputs:** : The cost of drip irrigation system for 1 ha. is estimated at Rs. 75,000 including cost of installation of Pumping system .
- Financial Involvement** : ` 0.75 lakh X 2 hectares = ` **1.5 Lakh**
- Implementation Agency** : DOT(S), WB through its extension network.
- Monitoring & Evaluation** : A team of DOT(S) officials will evaluate the progress of the scheme from time to time at district & DOT(S), HQs.

Name of the scheme : **Farm Mechanization through Power Tiller(Scheme Code 1D)**

Project objective : The present Scheme aims at procurement of power tiller at Govt. Farms in phased manner to ensure proper cultural operations in the Mulberry plots in view of acute manpower constraints arising out of superannuation of the Resham Karmees in the Govt. Nurseries.

Target group : The Seed Farms under Government of West Bengal

Justification : Adoption of modern package of practices in the Mulberry Garden is a prerequisite for having good quality of foliage which is essential for conducting Bivoltine/CB Rearing. Keeping this in view, raising of high yielding deep rooted Mulberry varieties with wider spacing has been going on at the Govt, Farms for sometime past. Procurement of power tiller to ensure proper cultural operation along with application of proper dosage of manure & fertilizer and irrigation would enhance the production and productivity of Mulberry foliage at the Govt. Farms.

Major Constraints : Most of the Govt. Farms are facing serious manpower constraints as already mentioned in the Project objective. Besides, barring a few farms in North Bengal Districts, almost all are having alluvial and clayey soil making it difficult to undertake cultural operation and necessitating use of power tiller to sort out the problem.

Financial Involvement : The cost of Power Tiller has been estimated at ` 1.50 Lakh each which would be flown in from Scheme share. The Fuel and other miscellaneous expenditure would be met out of OCC. The Scheme will be implemented in the following Districts involving the following 12 (twelve) Government Nurseries:

Sl. No	District/Sub Div.	Location	Farm	Amt. Required (in Lakh)
1	Coochbehar	Dinhata	Baronachina Sericulture Demonstration Farm (BNC)	1.5
2		Khagrabari	Khagrabari Sericulture Composite Unit(KGB)	1.5
3		Mathabhanga	Baxigunj Sericulture Demonstration Farm(BXG)	1.5
4	Siliguri	Naxalbari	Naxalbari Sericulture Farm(NAX)	1.5
5	Malda	English Bazar	Piasbari Central Nursery(PCN)	1.5
6	Murshidabad	Berhampore	Berhampore Central Nursery(BCN)	1.5
7		Mur-Jia	Akherighata Sericulture Complex(ASC)	1.5
8	Birbhum	Nalhati-1	Kalitha Central Nursery(KCN)	1.5
9		Nalhati-2	Bhadrapur Mulberry Garden(BMG)	1.5
10	Nadia	Ranaghat	Ranaghat Sericulture Nursery(RNG)	1.5
11		Karimpore	Karimpur Sericulture Nursery(KRP)	1.5
12	Bankura	Bishnupur	Bishnupur Sericulture Complex(BSP)	1.5
Total				18.00

Implementation agency : DOT(S), West Bengal through its extension network.

Monitoring & Evaluation : A team of DOT(S) officials will evaluate the progress of the scheme from time to time at district & DOT(S), HQs levels.

Name of the scheme : **Development of Rearing Facilities at Govt. Farms(Scheme Code 1E)**

Project objective : The Scheme aims at construction of ideal Rearing Houses at Government farms to maintain proper rearing hygiene as well as to ensure proper storage of farm produced Mulberry foliages in terms of succulence and palatability during feeding of Silk worm which in turn would boost up the cocoon production as well as product quality.

Target group : The proposed Rearing House would be constructed in various Govt. farms which would ultimately benefit the Sericulturists of the State most of whom belong to SC/ST/OBC/Minority community

Justification : Since most of the Govt. farms were established during 2nd and 3rd Plan period, majority of the rearing Houses are either in dilapidated condition or beyond economic repair. As a result of introduction of HYV of Mulberry with wider spacing in most of the Govt. Farms in recent past, the production of mulberry foliage in terms of quality and quantity has been on an increasing trend necessitating increase in the size of Silk worm Rearing. As such the Scheme envisages construction of some additional Model Rearing Houses with modern Rearing Appliances in the form of Plastic Rearing Trays and Plastic Mountages, Dehumidifier, Air Conditioner etc in selected Govt. Farms.

Specification: Pucca Rearing House measuring 48 ft (L) x 18 ft (B) x 13 ft (H) with 7.5 ft wide Verandah on all sides

Financial Involvement : As per current PWD schedule, the cost of construction of each Model Rearing House has been estimated at ` 20.00 Lakh including necessary electrical installations. Besides ` 5.00 Lakh would be required for procurement of Rearing Appliances and Equipments mentioned above. The Scheme will be implemented in the following Districts involving the following 5 (five) Government Nurseries:

Sl. No	District/Sub Div.	Location	Farm	Amount Required (` in Lakh)
1	Siliguri	Naxalbari	Naxalbari Sericulture Farm(NAX)	25.00
2	Birbhum	Nalhati	Kalitha Central Nursery(KCN)	25.00
		Rampurhat	Boswa Sericulture Composite Unit(BSC)	25.00
3	Bankura	Bishnupur	Bishnupur Sericulture Complex(BSP)	25.00
		Patrasayar	Patrasayar Sericulture Demonstration Farm(PTR)	25.00
Total				125.00

Implementation agency : DOT(S), West Bengal through its extension network.

Monitoring & Evaluation : A team of DOT(S) officials will evaluate the progress of the scheme from time to time at district & DOT(S), HQs levels.

- Name of the Scheme** : **Construction of Tasar Grainage at Govt. Farms(Scheme Code 1F)**
- Project objective** : The basic objective of the Scheme is to strengthen the Tasar Seed Organization System for production of commercial seeds in required quantities through construction of some ideal Tasar Grainage Buildings at selected Govt. Farms.
- Present status** : West Bengal has the conducive tropical climate, biosphere, natural resources and required man power for an all round development of Tasar culture into an industry of immense potential. This eco friendly venture is a traditional activity of mainly tribal people residing in the Western part of the state as it is most suited to their life style. Tasar culture now stretches over 15321 acres of land in the districts of Bankura, Purulia, Paschim Midnapore, Birbhum and part of Burdwan with annual production of about 41 MT Tasar Silk as on 31.03.2011
- Target Group** : Selected Govt. Farms in the Tasar producing Districts of the State which would ultimately benefit the tribal beneficiaries of the Tasar producing Districts of the State i.e. Seed Cocoons would be processed in these Grainages for production of Tasar DFLs for distribution among the Tasar Rearers.
- Justification** : The Production of Tasar DFLs in the State stands at around 3 Lakh apart from the production 3.47 Lakh DFLs produced at private level as on 31.03.2011. This is not adequate to meet up the increasing demand of Tasar DFLs in the State. The proposed construction of ideal Tasar Grainages would strengthen the Tasar seed organization system in required quantities.
- Specification** : Pucca Tasar Grainage Building measuring 22.20 mt. (L) x 9.70 mt (B) x 4.10 mt (H) with covered verandah, Store and Laboratory Room
- Financial Involvement** : As per current PWD schedule, the cost of construction of each Model Grainage Building has been estimated at ` 24.00 Lakh including necessary electrical installations. 3(Three) such Buildings are proposed to be constructed one each at **Jhargram, Taldangra & Narayangarh** in the Districts of Midnapore, Bankura and Purulia respectively with financial involvement of ` **72.00 Lakh**.
- Implementation Agency** : DOT(S), WB through its extension network.
- Monitoring & Evaluation** : A team of DOT(S) officials will evaluate the progress of the scheme from time to time at district & DOT(S), HQs.

- Name of the Scheme** : **Development of transportation facilities for Silkworm Seed Cocoons and DFLs(Scheme Code 1G)**
- Project objective** : Production of good quality disease free silkworm layings and distribution of the same amongst the rearers is the key to successful harvest of commercial cocoons. The basic objective of the Scheme is to ensure transportation of Seed Cocoons from Seed areas/Govt. Farms of same/neighbouring Districts to different Government Grainages and the produce i.e. the silk worm layings from these Grainages to Technical Service Centres (TSC) for distribution among the commercial farmers under optimum temperature and humidity through procurement of Air conditioned Vans.
- Present status** : The Seed cocoons and DFLs are presently transported from Seed areas/Govt. Farms of same/neighbouring Districts to different Government Grainages in Government or hired vehicles in uncontrolled environment which results in deterioration of quality and enhancement of mortality percentage of Seed Cocoons and DFLs.
- Target Group** : Selected Govt. Grainages in the traditional Districts would be provided with an Air conditioned Van which would ultimately benefit thousands of poor Sericulturists in the State.
- Justification** : The pupae inside the Seed Cocoons and Silkworm Layings are live materials and owing to their tender and intricate nature, maintenance of specific temperature and relative humidity (25-26°C & 70-80% RH) is required for their survival. Any deviation from these ideal conditions would result in emergence of weak moths with less vigour and consequently it would have impact on the productivity and quality parameters of Silkworm layings. Carrying of Seed Cocoons and DFLs under controlled environment in Air conditioned van would minimize these hazards during transportation which in turn would benefit Sericulturists in rural areas
- Financial Involvement** : The Scheme will be implemented in the main activity Districts involving the Govt. Grainages of Siliguri, Malda, Murshidabad and Birbhum for which 4 Nos. Tata Winger Vans would be procured at a cost of about ` 8 Lakh each along with construction of Garages with an approximate cost of ` 2.5 Lakh each. Thus the total financial involvement stands at ` 10.5 Lakh x 4 i.e. ` 42.00 Lakh
- Implementation Agency** : DOT(S), WB through its extension network.
- Monitoring & Evaluation** : A team of DOT(S) officials will evaluate the progress of the scheme from time to time at district & DOT(S), HQs.

- Name of the Scheme** : **Mulberry Parental Seed Management in West Bengal (Scheme Code 1H)**
- Project objective** : Selection of productive breeds/hybrids and quality of Silkworm seeds play an important role for the success of Silkworm crops since it is the very characteristics of the Silkworm Breeds/Hybrids that directly contribute towards productivity and product quality of cocoons. The basic objective of the present scheme is to streamline the Seed Organization activities in the State by required intervention at various levels (P1, P2 and P3) with a view to maximizing the commercial seed production both in terms of quality and quantity.
- Present Status** : There are 62 Basic Seed Farms, 16 Egg Production Centres (Grainages) & 59 Technical Service Centers throughout the state under this Directorate to serve the Sericulturists. The total production of Seed and commercial DFLs at these Government Grainages was around 42 Lakh during 2010-11.
- Target group** : Primarily Govt. Grainages where ultimate beneficiaries would be poor rural Sericulturists.
- Justification** : The Basic Seed Farms of the State Govt. known as P3, P2 and P1 Farms maintain the defined character and vigour of the Silkworm Breeds (released by the Sericulture Research Institutes under Central Silk Board, Govt. of India) on one hand and releases the silkworm stock lots as per prescheduled programme at regular intervals for further multiplication. This entire chain of processes, termed as Seed Organization System, is not very well knit in the State and often there are overlapping of activities at various levels which result in deterioration of the quality of Basic Pure Race/Lots. The present Scheme which aims at revitalizing the entire Seed Organization System, would definitely contribute towards achieving the desired objective of meeting the increasing demand of qualitatively superior commercial seeds in the State.

Financial Involvement: The Scheme will be implemented in the following Districts involving the following

Basic Seed Farms:

Sl. No	District/Sub Div	Location	Name of the Basic Seed Farms
1	Coochbehar	COB-II	Khagrabari Sericulture Composite Unit(KGB)
2	Jalpaiguri	Meteli	Chalsa Sericulture Demonstration Farm(CHL)
3	Siliguri	Naxalbari	Naxalbari Sericulture Farm(NAX)
4	Malda	Englishbazar	Sadullapur Graft Nursery(SGN)
5			Krishnapur Graft Nursery(KGN)
6	Murshidabad	Mur-Jia	Khosbag Sericulture Nursery(KHS)
8	Midnapore	Debra	Debra Sericulture Complex(DBR)
9	Birbhum	Rampurhat II	Boswa Sericulture Nursery(BSC)
10	Nadia	Karimpur	Karimpur Sericulture Nursery(KRP)

Sl. No.	Component	Unit cost (`)	No. of Farms to be revamped	Amount Required (in Lakh `)
1	Revamping of the Basic Seed Farms with procurement of modern equipments and machinery (Detail Scheme enclosed)	16.80	10	168.00

Implementation agency : DOT(S), West Bengal.

Monitoring & Evaluation : A team of DOT(S) officials will evaluate the progress of the scheme from time to time at district & DOT(S), HQs levels.

- Name of the Scheme** : Installation of Walk-in Cold Room for Govt. Grainages (Scheme Code 1I)
- Project objective** : The basic objective of the scheme is to bring about technological absorption, productivity improvement and quality upgradation in Silkworm Seed sector through installation of Walk in Cold room in the Government Grainages which would not only make a boost in the total production of DFLs but also reduce the cost of production in the Grainages.
- Present Status** : There are 62 Basic Seed Farms, 16 Egg Production Centres (Grainages) & 59 Technical Service Centers throughout the state under this Directorate to serve the Sericulturists. The total production of Seed and commercial DFLs at these Government Grainages was around 42 Lakh during 2010-11. Only a very few Govt, Grainages are equipped with cold storage facilities
- Target group** : Primarily Govt. Grainages where ultimate beneficiaries would be poor rural Sericulturists.
- Justification** : At the time of preparation of cross breed DFLs in the Grainages, the Seed Cocoons and Male Moths are often required to be preserved in variable temperature zones (5 to 10° C) so as to synchronize emergence of moths of two different varieties/combinations to facilitate their subsequent mating on a given day. The male moths, if rested at the aforesaid temperature for a given period, can be re used to increase their mating efficiency which would lead to more production of DFLs in the Grainages. The resultant DFLs are also required to be refrigerated for a particular period to get the hatching of Silkworms on the desired dates as per the predetermined crop schedule of the State. Thus, the present scheme envisages production of quality DFLs in required quantities through optimizing the use of male components within the specified time period to meet up the increasing demand of commercial DFLs in the State.

Financial Involvement: The Scheme will be implemented in the following Districts involving the following Government Grainages:

Sl. No	District/Sub Div	Location	Name of the Grainage
1	Coochbehar	COB-II	Khagrabari Sericulture Composite Unit(KGB)
2	Jalpaiguri	Meteli	Chalsa Sericulture Demonstration Farm(CHL)
3	Siliguri	Naxalbari	Naxalbari Sericulture Farm(NAX)
4	Malda	Englishbazar	Piasbari Central Nursery(PCN)
5			Amrity Sericulture Nursery(AMR)
6	Murshidabad	Mur-Jia	Akherighata Sericulture Complex(ASC)
7		Jalangi	Model Grainage, Sagarpara (MGS)
8	Midnapore	Midnapore	Phulpahari Sericulture Farm(PHU)
9	Birbhum	Bolpur	Bolpur Sericulture Composite Unit(BSC)
10	Nadia	Ranaghat	Ranaghat Sericulture Nursery(RNG)

Sl. No.	Component	Unit cost (`)	No. of Sets required	Amount Required (in Lakh `)
1	Installation of Walk-in-Cold room along with Generator set	` 5.00 Lakh	10	50.00

Implementation agency : DOT(S), West Bengal through its Engineering Cell.

Monitoring & Evaluation : A team of DOT(S) officials will evaluate the progress of the scheme from time to time at district & DOT(S), HQs levels.

Name of the scheme : **Mass Disinfection through SHGs/Quality Clubs(Scheme Code 2A)**

Project objective : i) To popularize and to create awareness among the Sericulturists regarding use of disinfectants.
ii) To disseminate latest technology among the farmers with the object of improving productivity and product quality.

Target group : The Silkworm rearers of Nadia District of the state who mostly belong to minority community and weaker section of the society.

Justification : The success of Silk worm rearing largely depends on effective disease management since Silk worm races are very much susceptible to various diseases. Due to increase in cost of disinfecting materials, the farmers usually have a tendency not to apply the same at all or at a lower dose than the recommended one which often results in outbreak of diseases and subsequent crop loss. Thorough and proper disinfection of their Rearing House and Rearing Appliances by an external Agency at a nominal cost would help in eliminating/minimizing disease occurrence to a large extent, thus ensuring a good harvest.

Operational Modalities:

- Interested 5 No. SHGs having knowledge in Sericulture will be identified and will be provided with a Paddle Van fitted with Power Sprayer & other accessories, Disinfectants, etc at free of cost to offer disinfection service of Rearing House and Rearing Appliances at the doorsteps of the farmers against collection of a nominal amount as service charge from the concerned farmer.
- Each such Unit will cater Disinfection service to at least 100 beneficiaries per crop i.e. 500 beneficiaries would be covered in one crop
- The concerned TSC officials would keep necessary records/account of the farmers being benefited under the scheme and certify that the concerned SHG/SQC/Individual has satisfactorily provided the disinfection service.

Financial Involvement:

Sl. No	Item	Qty	Unit Cost (₹)	Amount Required (₹ in lakh)
1.	Cost of Paddle Van along with Power Sprayer and other accessories	5 Nos	75000	3.75
2.	Cost of Sanitech 1 lit x 5 crops X 1,095 farmers per annum	5,000 Ltrs.	₹125/lit	6.84
4	Repairing and Maintenance of Machinery	5	₹ 2000	0.1
Total				10.69

Say ₹ 10.70 Lakh i.e. the Unit Cost for each SHG will stand at ₹ 2.14 Lakh

- Operating Details** :
- Implementation agency** : DOT(S), West Bengal through its extension network.
- Monitoring & Evaluation** : A team of DOS officials will evaluate the progress of the scheme from time to time at district & DOS, HQs levels.

- Name of the scheme** : **Deployment of Resource person (Tasar Bandhu) for effective transfer of technology(Scheme Code 2B)**
- Project objective** : The basic objective of the Scheme is to promote entrepreneurial opportunities in Tasar culture for economic empowerment of Tribal people through formation and capacity building of Self Help Group (SHG) and to disseminate the latest technology of Tasar culture at grass root level through identification and engagement of *Tasar Bandhu* in line with Prani Bandhu Scheme being under implementation in the Department of Animal Resources. To popularize and to create awareness among the Sericulturists regarding use of disinfectants.
- Target group** : The Tasar Silkworm rearers of Paschim Midnapore, Purulia & Bankura Districts of the state who mostly belong to Tribal community and economically disadvantaged section of the society.
- Present Status** : Tasar culture is a traditional activity of the tribal people residing in the Western Districts of the State as it aptly suits with their life style. This occupation is eco-friendly and helps to conserve our natural resources. The abundant Tasar Host Plantations which exist in patches or in mixed form with Forest Plantation are marginally exploited for Tasar Silk Cultivation & Production. Still there are tremendous scopes of further development & expansion of this agro based industry in Forest adjacent and in available dry barren lands in that areas. As such attempts may be made to raise host plant of Tasar Silkworm, i.e. Arjun, Asan, Sidha etc. as Polyculture in the degraded or unused Forest Land in the Western Districts of the State.
- Justification** : The Tasar Silkworm Rearers mostly reside in the remote jungle mahal areas of the State. The inaccessible nature of their distribution often restrict them to avail institutional support and as such it has been felt that there is a need to facilitate various profitable and replicable models of Tasar culture as a livelihood activity among them through formation of SHG. Simultaneously,

identification and training of village level resource persons to act as service providers (Tasar Bandhu) in those far-flung areas on cost basis would help in disseminating latest technologies at the doorstep of those tribal people and maintaining the necessary input-output linkages.

Operational Modalities : It has been conceived that 100 SHGs would be formed comprising 10-15 Tasar rearers in the Districts of Midnapore, Bankura and Purulia and 20 such service providers (Tasar Bandhu) [Each service provider would cater 5 SHGs] would be engaged to maintain necessary liaison with these SHGs in the following manner

SL. No.	District	No. of SHG to be formed	No. of Tasar Bandhu to be engaged
1	Paschim Midnapore	40	8
2	Bankura	30	6
3	Purulia	10	2
Total		80	16

Financial Implication :

Sl. No	Components	Target	Unit Cost (₹)	Amount Required (₹ in lakh)
1	Formation & capacity building of tribal SHG	80	4000	3.20
2	Subsidized credit facility for Working Capital to SHGs	80	4500	3.60
3	Village level Resource Person (Tasar Bandhu)	16	11000	1.76
Total				8.56

Operating Details :

Implementation agency : DOT(S), West Bengal through its extension network.

Monitoring & Evaluation : A team of DOS officials will evaluate the progress of the scheme from time to time at district & DOS, HQs levels.

Name of the Scheme : Conversion of existing plantation through replacement with widely spaced HYV saplings(Scheme Code 2C)

Project objective : 1) Replacement of the existing local variety of Mulberry with high yielding variety Mulberry saplings like S1, S1635, BC259 in phased manner.
2) Maximization of leaf yield per unit area
3) Qualitative and quantitative improvement in production of Cocoons
4) To ensure raising of more number of Multi X Bi hybrid crops

Present Status : Out of total Mulberry area of 32,467 acres in West Bengal, over 85% is situated in the districts of Malda, Murshidabad & Birbhum where most of the plantations are closed type and the leaf quality is very poor owing to age old practice of basal pruning and improper manurial and cultural practices adopted by the farmers. With the present quality of leaves the Sericulturists are able to raise not more than 2.5 Nos. Multi X Bi hybrid crops per annum with average yield of only 33 kgs. of Cocoons.

Target group : Existing Sericulturists of the districts of Malda, Murshidabad and Birbhum most of whom are small & marginal farmers and belong to SC and Minority communities.

Justification : It has been observed that closed uneven spacing of Mulberry plants in the field results in maximum unhealthy competitive growth among plants which ultimately leads to production of less quantum of leaf having different maturities and consequently the Cocoons harvested are of inferior nature both in terms of quality and quantity. The Research Institutes of the Central Silk Board have reported that establishment of plantation with HYV and wider spacing would result in more than 60% increase in the total leaf yield which would ultimately make significant enhancement in qualitative and quantitative parameters of Cocoons.

The present Scheme envisages replacement of 10,000 acres of closed Mulberry plantation at farmers' level with wide spaced HYV saplings covering 6 years from 2011-12 to 2016-17 i.e. till the last year of the XII Plan period. Since the farmers

opting for such changes would suffer crop loss, a provision of compensation package has been made for the farmers taking into consideration the present scale of profit @ ` 30,000 per acre of plantation. It has also been decided that in view of extreme shortage of the manpower in the Sericulture Division under Directorate of Textiles, the entire operation would be accomplished through engagement and imparting training to local SHGs.

Project inputs :

- A total of 10,000 acres would be replaced in the phased manner
- A total of 100 SHGs would be engaged with average command area of 100 acres each in cluster approach
- Awareness camps would be organized for motivation of the Farmers
- SHGs would be suitably trained for a week for this purpose
- The replacement would be carried out exclusively through Saplings which would be raised by the farmers under direct supervision of the respective SHGs
- Provision of intercropping has been kept to improve soil health, mulching and accrual of additional income to the farmers
- The administrative cost for each SHG has been estimated at ` 14,000 per acre over a period of 3 years

Financial implication :

Sl. No.	Component	Assistance per acre year wise (`)			
		1 st . year	2 nd . year	3 rd . year	TOTAL
1	Compensation	18,000	8,000	4,000	30,000
2	Labour cost for uprooting + plantation	7,000	0	0	7,000
3	Cost of saplings + carrying upto site	12,000	0	0	12,000
4	Cost of Manure + Irrigation	5,000	0	0	5,000
5	Cost of seeds for intercropping	800	550	400	1,750
6	Organisation of awareness camp	150	0	0	150
7	Imparting Training to SHG	100	0	0	100
8	Administrative cost for SHG	6,000	4,000	4,000	14,000
TOTAL		49,050	12,550	8,400	70,000

Target : 10,000 acres
Unit Cost : ` 0.70 lakh / acre
Total Expenditure (Project assistance) : ` 7,000 lakh or ` 70 crore

Sl. No.	Year	Area to be covered (in acre)	No. of farmers	Total expenditure (in lakh `) @ ` 0.70 lakh/acre
1	2011 – 12	100	250	70
2	2012 – 13	500	1,250	350
3	2013 – 14	1,000	2,500	700
4	2014 – 15	2,000	5,000	1,400
5	2015 – 16	3,000	7,500	2,100
6	2016 - 17	3,400	5,100	2,380
	TOTAL	10,000	25,000	7,000

YEAR	1st. Year		2nd. Year		3rd. Year		Total Fund required (` in lakh)
	Target (acres)	Fund required (` in lakh)	Target (acres)	Fund required (` in lakh)	Target (acres)	Fund required (` in lakh)	
2011-12	100	49.050	0	0.000	0	0.000	49.050
2012-13	500	245.250	100	12.550	0	0.000	257.800
2013-14	1,000	490.500	500	62.750	100	8.400	561.650
2014-15	2,000	981.000	1,000	125.500	500	42.000	1,148.500
2015-16	3,000	1,471.500	2,000	251.000	1,000	84.000	1,806.500
2016-17	3,400	1,667.700	3,000	376.500	2,000	168.000	2,212.200
2017-18	0	0.000	3,400	426.700	3,000	252.000	678.700
2018-19	0	0.000	0	0.000	3,400	285.600	285.600
TOTAL	10,000	4,905.000	10,000	1,255.000	10,000	840.000	7,000.000