



*Post-cocoon  
Sector*



SUB-SECTOR 1 : REELING AND SPINNING  
SUPPORT FOR CONSTRUCTION OF REELING SHEDS

POST-COCOON  
COMPONENT 1

Continuation/innovative      Innovative

A Unit cost

#	Items/Particulars	Construction cost / Sq.ft. (Rs.)	Built-up area (Sq.ft.)	Unit cost (Rs.)
a	Improved cottage basin units			
1	36 end units (6 basins of 6 ends each)	600	900	5,40,000
2	48 end units (6 basins of 8 ends each)	600	900	5,40,000
b	Multi-end reeling units			
1	6 basin units (10 ends per basin)	600	900	5,40,000
2	10 basin units (10 ends per basin)	600	1200	7,20,000

Note: Applicable for all zones

B Norms

Eligibility: New beneficiaries identified for setting up of reeling units.

Building plan: Please refer Annexure - I a to I d.

Specifications: Please refer Annexure - I e.

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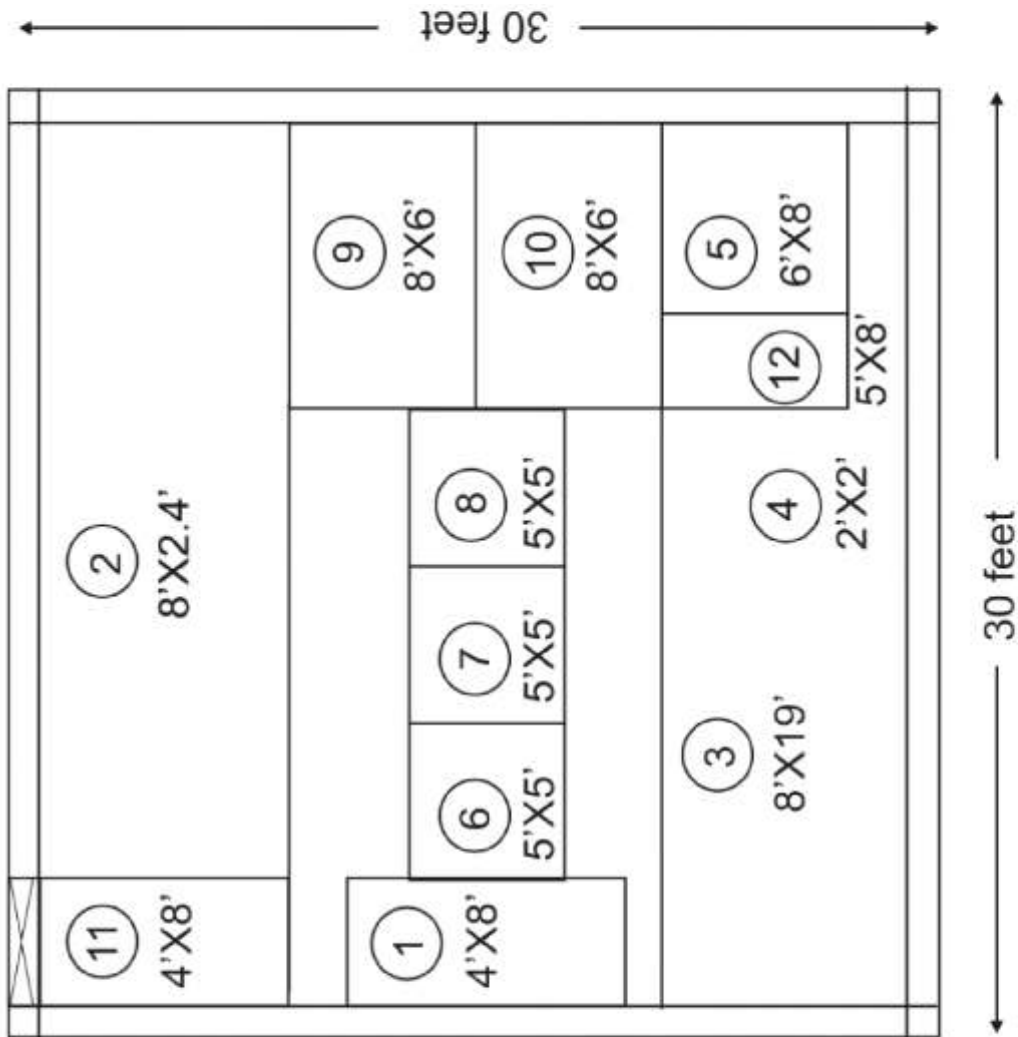
SUB-SECTOR 1 : REELING AND SPINNING  
SUPPORT FOR CONSTRUCTION OF REELING SHEDS

POST-COCOON  
COMPONENT 1

Annexure - I a

Layout plan for 6 end improved cottage basin unit

All the sizes inclusive of working space; all dimensions are in feet; all round ventilated; roof of boiler will be 12 feet high



Scale: 1:2 (1 cm = 2 ft.)  
Size: 30'X30' = 900 sq.ft.  
Without compound

#	Name of item
1	Two pan cooking table
2	6 basins (6 ends) reeling m/c
3	6 windows (6 ends) reeling m/c
4	Generator
5	Boiler
6	Electronic balance
7	Eppovette
8	Book making machine
9	Cocoon storage
10	Office / silk storage
11	Main entrance
12	Fuel storage

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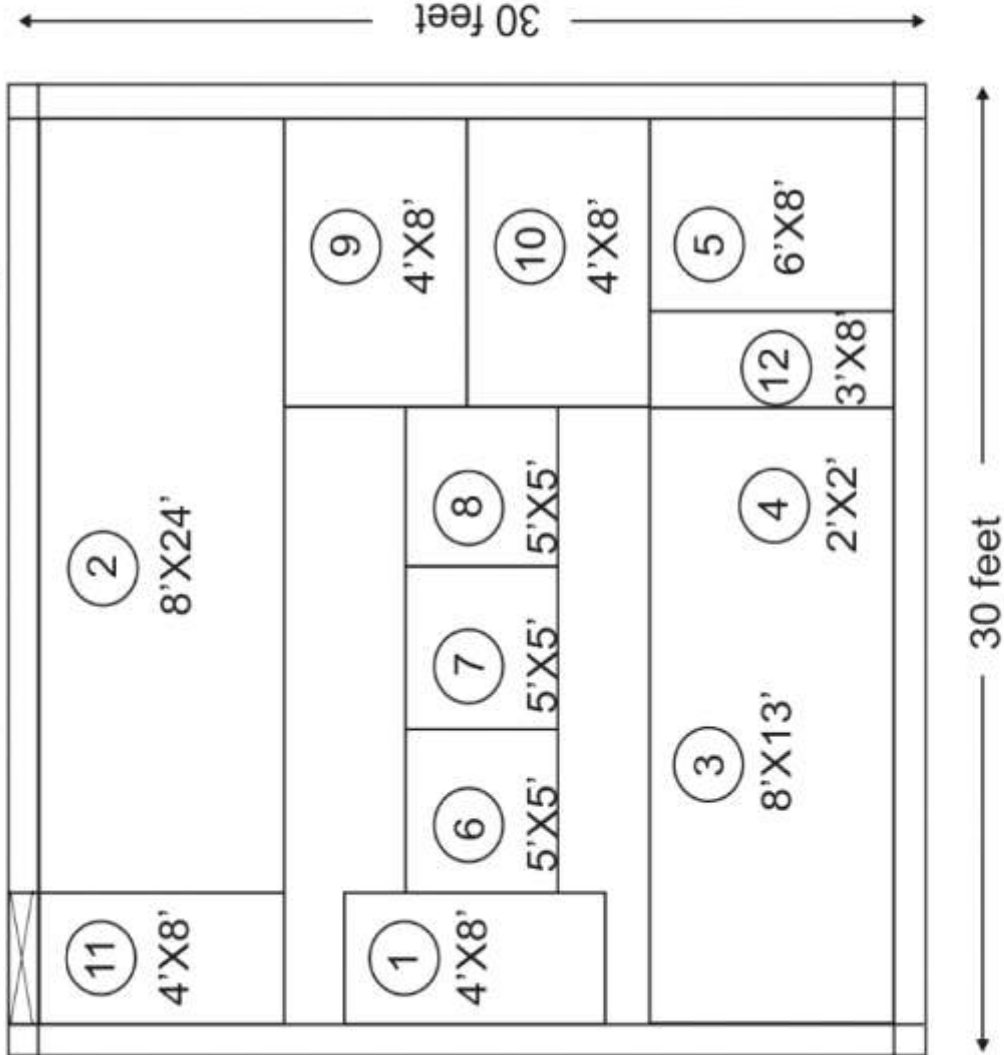
SUB-SECTOR 1 : REELING AND SPINNING  
SUPPORT FOR CONSTRUCTION OF REELING SHEDS

POST-COCOON  
COMPONENT 1

Annexure - I b

Layout plan for 8 end improved cottage basin unit

All the sizes inclusive of working space; all dimensions are in feet; all round ventilated; roof of boiler will be 12 feet high



Scale: 1:2 (1 cm = 2 ft.)  
Size: 30'X30' = 900 sq.ft.  
Without compound

#	Name of item
1	Two pan cooking table
2	6 basins (6 ends) reeling m/c
3	6 windows (6 ends) reeling m/c
4	Generator
5	Boiler
6	Electronic balance
7	Eprouvette
8	Book making machine
9	Cocoon storage
10	Office / silk storage
11	Main entrance
12	Fuel storage

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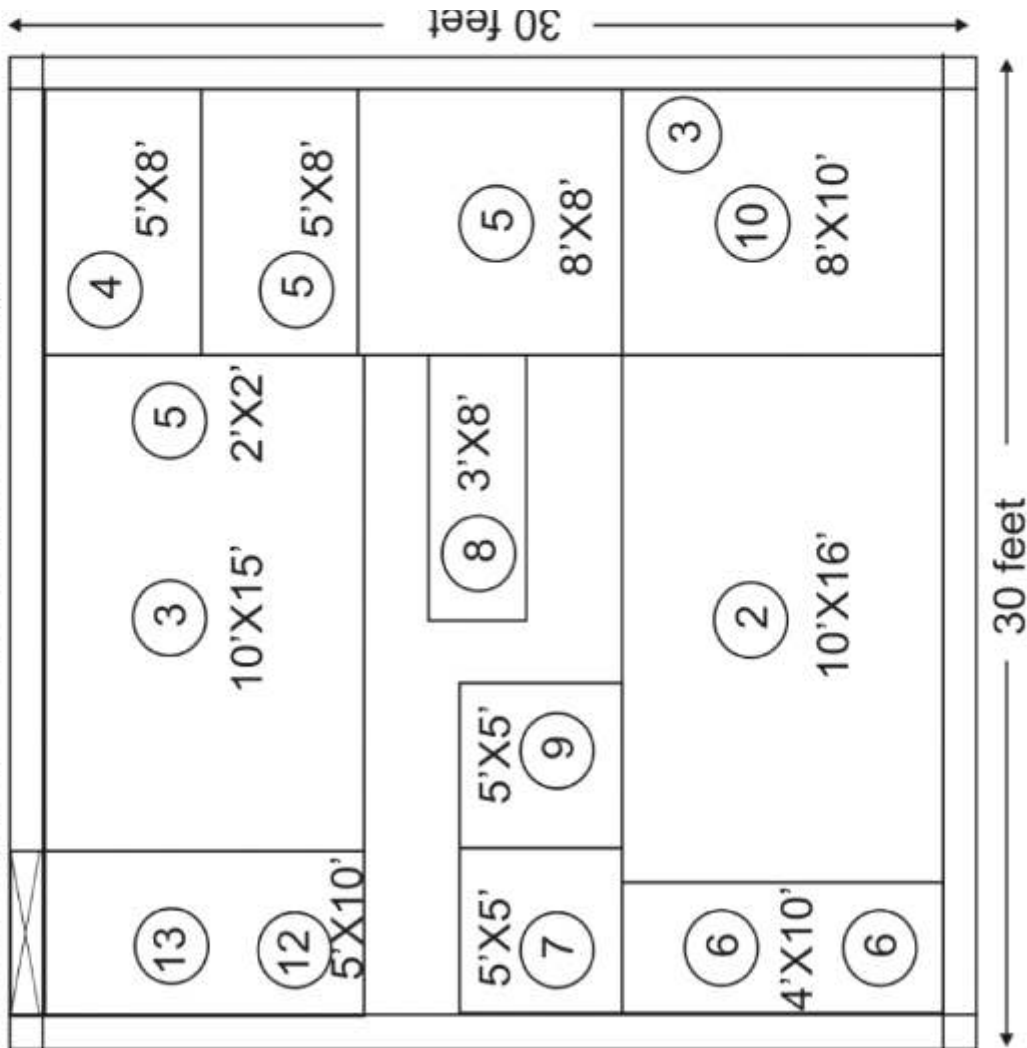
SUB-SECTOR 1 : REELING AND SPINNING  
SUPPORT FOR CONSTRUCTION OF REELING SHEDS

POST-COCOON  
COMPONENT 1

Annexure - I c

Layout plan for 6 basin multi-end reeling unit

All the sizes inclusive of working space; all dimensions are in feet; all round ventilated; roof of boiler will be 12 feet high



Scale: 1:2 (1 cm = 2 ft.)  
Size: 30'X30' = 900 sq.ft.  
Without compound

#	Name of item
1	Hot air drier
2	Multi-end reeling m/c (6 basins)
3	Re-reeling m/c (6 windows)
4	Boiler
5	Generator
6	Two pan cooking table
7	Permeation chamber
8	Cocoon sorting table
9	Pressurized cooking m/c
10	Cocoon storage
11	Silk test
12	Office
13	Fuel

Contd....



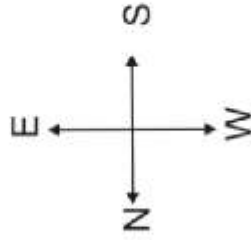
SUB-SECTOR 1 : REELING AND SPINNING  
SUPPORT FOR CONSTRUCTION OF REELING SHEDS

POST-COCOON  
COMPONENT 1

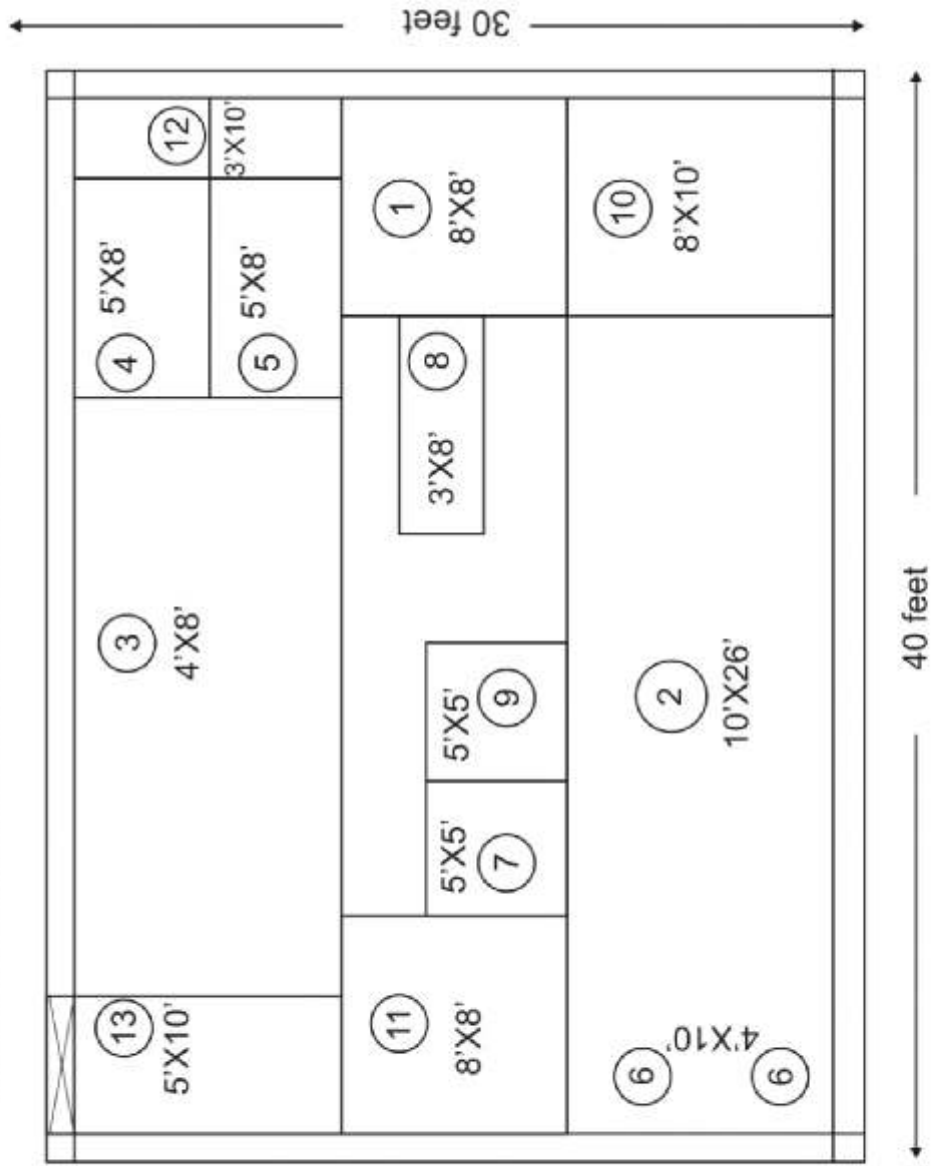
Annexure - I d

Layout plan for 10 basin multi-end reeling unit

All the sizes inclusive of working space; all dimensions are in feet;  
all round ventilated; roof of boiler will be 12 feet high



Scale: 1:2 (1 cm = 2 ft.)  
Size: 30'X40' = 1200 sq.ft.  
Without compound



#	Name of item
1	Hot air oven
2	Multi-end reeling m/c (10 basins)
3	Re-reeling m/c (10 windows)
4	Boiler
5	Generator
6	Two pan cooking table
7	Permeation chamber
8	Cocoon sorting table
9	Pressurized cooking m/c
10	Cocoon storage
11	Office/silk test/store
12	Fuel storage
13	Utility/Reception/entrance

Contd....

SUB-SECTOR 1 : REELING AND SPINNING  
SUPPORT FOR CONSTRUCTION OF REELING SHEDS

POST-COCOON  
COMPONENT 1

Annexure - I e

Specifications

1. The floor level should be minimum 1.5 feet above the approach level road.
2. The flooring may be with minimum of cemented floor with a non skid finish.
3. The plinth size i.e. outer to outer walls should not be less than the CSB plan.
4. The height of the building should be minimum 10 feet to the roof bottom of machines room and for boiler room the height should be minimum of 12 feet to roof bottom.
5. The roof should be covered with molded / zinc / aluminium alloy sheets with suitable beams / guarders / truss work.
6. The wall should be constructed using solid cement block with 1:5 cement mortar or well burnet mud bricks.
7. The thickness of the wall should be 6 inches in case of solid cement block and 9 inches for mud bricks. The wall should be plastered on either side.
8. Constructed beam column structure, regular stone foundation, lintel beam, top beam with guarder or beam roofs without columns.
9. Good cross ventilators and top ventilators arrangement has to be provided.
10. Required capacity sump at underground and overhead tank has to be made.
11. The main door and exit door should be minimum 7.5 feet width with 10 feet height for easy movement of machinery and raw materials.
12. The height of the shed for automatic reeling unit, should be 12 feet. For boiler, hot air drying, cocoon cooking, room should have a height of 16 to 20 feet.
13. Suitable drainage system arrangement has to be provided.
14. The required electric power points have to be provided for connection to individual machinery.
15. The main structural drawing, construction work etc should be as per the concerned authorities.
16. The quality of construction and drawing specifications are to be followed as per the norms fixed by respective state governments.



**SUB-SECTOR 1 : REELING AND SPINNING  
SUPPORT FOR ESTABLISHMENT OF MOTORISED  
CHARKHA TO DISSUADE CHILD LABOUR**

**POST-COCOON  
COMPONENT 2**

Continuation/innovative      Continuation

**A Unit cost**

#	Items/Particulars	Unit	Unit price (Rs.)	Quantity	Total (Rs.)	Unit cost (Rs.)				
						Southern zone	Central and western zone	North-western zone	Eastern zone	North-eastern zone
1	Charkha (single unit) with 1/2 HP single phase electric motor	No.	12,500	1 set	12,500	13,000	13,000	13,000	13,000	14,000
2	Twin Charkha with common shaft run by single 1/2 HP electric motor (single phase)	No.	25,000	1 set	25,000	26,000	26,000	26,000	26,000	27,000

Note: Unit cost rounded off to next thousand

**B Norms**

Objective: Support for establishment of motorised charka units to disuade engaging child labours, besides improving the quality and production of raw silk.

Raw material: Mulberry (Multivoltine pure and /or hybrid) cocoons.

Working period: 1 shift of 8 hours per day; 25 days per month; 300 days per annum.

Raw material requirement: 6.4 kg per day; 1.92 MT per annum.

Raw silk production: 800 g per day; 240 kg per annum.

Silk waste generation: 200 g per day @ 250 g per kg raw silk; 60 kg per annum.

Pupae generation: 5.12 kg per day @ 800 g per kg cocoons; 1.536 MT per annum.

Manpower requirement: 2 skilled workers.

## SUB-SECTOR 1 : REELING AND SPINNING SUPPORT FOR ESTABLISHMENT OF IMPROVED COTTAGE BASIN REELING UNITS

## POST-COCOON COMPONENT 3

Sub-component A	36 end units (6 basin of 6 ends each)
Continuation/innovative	Continuation

### A Unit cost :

#	Items/Particulars	Unit	Unit price (Rs.)	Quantity	Total (Rs.)	Unit cost (Rs.)				
						Southern zone	Central and western zone	North-western zone	Eastern zone	North-eastern zone
1	Two pan cooking table	No.	15,700	2	31,400	31,714	32,028	32,342	32,656	32,970
2	6 basin cottage reeling machine (6 ends per basin)	No.	1,61,000	1	1,61,000	1,62,610	1,64,220	1,65,830	1,67,440	1,69,050
3	3 windows re-reeling machine (6 ends per window)	No.	25,800	1	25,800	26,058	26,316	26,574	26,832	27,090
4.	Small skeining machine	No.	3,000	1	3,000	3,030	3,060	3,090	3,120	3,150
5	Small skein silk book making machine	No.	4,500	1	4,500	4,545	4,590	4,635	4,680	4,725
6	Epprouvette / electronic balance of 600 g capacity with 0.01 g sensitivity	No.	11,300	1	11,300	11,413	11,526	11,639	11,752	11,865
7	2 KVA Petrol start run with kerosene engine	No.	22,000	1	22,000	22,220	22,440	22,660	22,880	23,100
8	Boiler 50 kg capacity with water softener (2 shell)	No.	91,000	1	91,000	91,910	92,820	93,730	94,640	95,550
	Total				3,50,000	3,54,000	3,57,000	3,61,000	3,64,000	3,68,000

Note: Unit cost rounded off to next thousand

### B Norms

Raw material: Mulberry multivoltine or bivoltine cocoons.

Production rate: 800 g per basin per shift of 8 hours.

Working period: 1 shift of 8 hours per day, 25 days per month; 300 days per annum.

Raw material requirement: 36 kg per day; 10.8 MT per annum.

Raw silk production: 4.8 kg per day; 1.44 MT per annum.

Silk waste generation: 1.2 kg per day @ 250 g per kg raw silk; 360 kg per annum.

Pupae generation: 28.8 kg per day @ 800 g per kg cocoons; 8.64 MT per annum.

Manpower requirement: 12 skilled workers.

**SUB-SECTOR 1 : REELING AND SPINNING  
SUPPORT FOR ESTABLISHMENT OF IMPROVED  
COTTAGE BASIN REELING UNITS**

**POST-COCOON  
COMPONENT 3**

Sub component B	48 end units (6 basin of 8 ends each)
Continuation/innovative	Innovative

**A Unit cost**

#	Items/Particulars	Unit	Unit price (Rs.)	Quantity	Total (Rs.)	Unit cost (Rs.)				
						Southern zone	Central and western zone	North-western zone	Eastern zone	North-eastern zone
1	Two pan cooking table	No.	15,700	2	31,400	31,714	32,028	32,342	32,656	32,970
2	6 basin cottage reeling machine (8 ends per basin)	No.	1,74,000	1	1,74,000	1,75,740	1,77,480	1,79,220	1,80,960	1,82,700
3	6 windows re-reeling machine (8 ends per window)	No.	51,000	1	51,000	51,510	52,020	52,530	53,040	53,550
4	Small skeining machine	No.	3,000	1	3,000	3,030	3,060	3,090	3,120	3,150
5	Small skein silk book making machine	No.	4,500	1	4,500	4,545	4,590	4,635	4,680	4,725
6	Epprouvette / electronic balance of 600 g capacity with 0.01 g sensitivity	No.	11,300	1	11,300	11,413	11,526	11,639	11,752	11,865
7	2 KVA petrol start run with kerosene engine	No.	22,000	1	22,000	22,220	22,440	22,660	22,880	23,100
8	Boiler 50 kg capacity with water softener (2 shell)	No.	91,000	1	91,000	91,910	92,820	93,730	94,640	95,550
	<b>Total</b>				<b>3,88,200</b>	<b>3,93,000</b>	<b>3,96,000</b>	<b>4,00,000</b>	<b>4,04,000</b>	<b>4,08,000</b>

Note: Unit cost rounded off to next thousand

**B Norms**

Raw material: Mulberry multivoltine hybrid and /or bivoltine cocoons.

Production rate: 1 kg per basin per shift of 8 hours.

Working period: 1 shift of 8 hours /day; 25 days per month; 300 days / annum.

Raw material requirement: 45 kg per day; 13.5 MT / annum.

Raw silk production: 6 kg per day; 1.8 MT per annum.

Silk waste generation: 1.5 kg per day @ 250 g per kg raw silk; 450 kg per annum.

Pupae generation: 36 kg per day @ 800 g per kg cocoons; 10.8 MT per annum.

Manpower requirement: 12 skilled workers.

SUB-SECTOR 1 : REELING AND SPINNING  
SUPPORT FOR ESTABLISHMENT OF  
MULTI-END REELING UNITS

POST-COCOON  
COMPONENT 4

Sub-component A	6 basin units (10 ends per basin)
Continuation/innovative	Innovative

A Unit cost

#	Items/Particulars	Unit	Unit price (Rs.)	Quantity	Total (Rs.)	Unit cost (Rs.)				
						Southern zone	Central and western zone	North-western zone	Eastern zone	North-eastern zone
1	Multi-end reeling machinery (10 ends per basin)	No.	2,94,000	1	2,94,000	2,96,940	2,99,880	3,02,820	3,05,760	3,08,700
2	Circular pressurised cooking m/c/vacuum permeation cooking equipment	No.	1,28,800	1	1,28,800	1,30,088	1,31,376	1,32,664	1,33,952	1,35,240
3	Two pan cooking table	No.	15,700	3	47,100	47,571	48,042	48,513	48,984	49,455
4	Small reel permeation chamber	No.	82,400	1	82,400	83,224	84,048	84,872	85,696	86,520
5	Re-reeling (6 windows, 5 ends / window)	No.	1,28,200	1	1,28,200	1,29,482	1,30,764	1,32,046	1,33,328	1,34,610
6	Electrical hot air drier / ushnakoti of 50 kg capacity	No.	1,30,000	1	1,30,000	1,31,300	1,32,600	1,33,900	1,35,200	1,36,500
7	Cocoon sorting table	No.	11,300	1	11,300	11,413	11,526	11,639	11,752	11,865
8	Boiler 100 kg capacity with water softener(100 kg steam output / hour)	No.	1,75,000	1	1,75,000	1,76,750	1,78,500	1,80,250	1,82,000	1,83,750
9	Generator (5 KVA capacity)	No.	85,400	1	85,400	86,254	87,108	87,962	88,816	89,670
10	Epprouvette / electronic balance of 600 g capacity with 0.01 g sensitivity	Set	11,300	1	11,300	11,413	11,526	11,639	11,752	11,865
Total					10,93,500	11,05,000	11,16,000	11,27,000	11,38,000	11,49,000

Note: Unit cost rounded off to next thousand

B Norms

Raw material: Mulberry multivoltine or bivoltine cocoons.  
End product: A / 2A grade raw silk.  
By-product: Silk waste and pupae.  
Production rate: 1 kg per basin per shift of 8 hours.  
Working period: 1 shift of 8 hours per day; 25 days per month; 300 days per annum.  
Raw material requirement: 45 kg per day; 13.5 MT per annum.  
Raw silk production: 6 kg per day; 1.8 MT per annum.  
Silk waste generation: 1.5 kg per day @ 250 g per kg raw silk; 450 kg per annum.  
Pupae generation: 36 kg per day @ 800 g per kg cocoons; 10.8 MT per annum.  
Manpower requirement: 13 skilled workers.

**SUB-SECTOR 1 : REELING AND SPINNING**  
**SUPPORT FOR ESTABLISHMENT OF**  
**MULTI-END REELING UNITS**

**POST-COCOON**  
**COMPONENT 4**

Sub-component B	10 basin units (10 ends per basin)
Continuation/innovative	Continuation

**A Unit cost**

#	Items/Particulars	Unit	Unit price (Rs.)	Quantity	Total (Rs.)	Unit cost (Rs.)				
						Southern zone	Central and western zone	North-western zone	Eastern zone	North-eastern zone
1	Multi-end reeling machinery (10 ends per basin)	No.	4,90,000	1	4,90,000	4,94,900	4,99,800	5,04,700	5,09,600	5,14,500
2	Circular pressurised cooking m/c /vacuum permeation cooking equipment	No.	1,28,800	1	1,28,800	1,30,088	1,31,376	1,32,664	1,33,952	1,35,240
3	Two pan cooking table	No.	15,700	4	62,800	63,428	64,056	64,684	65,312	65,940
4	Small reel permeation chamber	No.	82,400	1	82,400	83,224	84,048	84,872	85,696	86,520
5	Re-reeling (10 window, 5 ends / window)	No.	2,13,600	1	2,13,600	2,15,736	2,17,872	2,20,008	2,22,144	2,24,280
6	Electrical hot air drier / ushnakoti of 50 kg capacity	No.	1,30,000	1	1,30,000	1,31,300	1,32,600	1,33,900	1,35,200	1,36,500
7	Cocoon sorting table	No.	11,300	1	11,300	11,413	11,526	11,639	11,752	11,865
8	Boiler 100 kg capacity with water softener (100 kg steam output / hour)	No.	1,75,000	1	1,75,000	1,76,750	1,78,500	1,80,250	1,82,000	1,83,750
9	Generator (5 KVA capacity)	No.	85,400	1	85,400	86,254	87,108	87,962	88,816	89,670
10	Epprouvette / electronic balance of 600 g capacity with 0.01 g sensitivity	Set	11,300	1	11,300	11,413	11,526	11,639	11,752	11,865
	<b>Total</b>				<b>13,90,600</b>	<b>14,05,000</b>	<b>14,19,000</b>	<b>14,33,000</b>	<b>14,47,000</b>	<b>14,61,000</b>

Note: Unit cost rounded off to next thousand

**B Norms**

Raw material: Mulberry multivoltine or bivoltine cocoons.  
 End product: A / 2A grade raw silk.  
 By-product: Silk waste and pupae.  
 Production rate: 1 kg per basin per shift of 8 hours.  
 Working period: 1 shift of 8 hours per day; 25 days per month; 300 days per annum.  
 Raw material requirement: 75 kg per day; 22.5 MT per annum.  
 Raw silk production: 10 kg per day; 3 MT per annum.  
 Silk waste generation: 2.5 kg per day @ 250 g per kg raw silk; 750 kg per annum.  
 Pupae generation: 60 kg per day @ 800 g per kg cocoons; 18 MT per annum.  
 Manpower requirement: 20 skilled workers.

**SUB-SECTOR 1 : REELING AND SPINNING**  
**SUPPORT FOR ESTABLISHMENT OF**  
**MULTI-END REELING UNITS**

**POST-COCOON**  
**COMPONENT 4**

Sub-component C	Support for existing multi-end units for procurement of additional equipment / re-conditioning
Continuation/innovative	Innovative

**A Unit cost**

#	Items/Particulars	Unit	Unit price (Rs.)	Quantity	Total (Rs.)	Unit cost (Rs.)				
						Southern zone	Central and western zone	North-western zone	Eastern zone	North-eastern zone
1	Boiler 100 kg capacity with water softener (50 kg steam output/hour)	No.	1,75,000	1	1,75,000	1,76,750	1,78,500	1,80,250	1,82,000	1,83,750
2	Generator (5 KVA capacity)	No.	85,400	1	85,400	86,254	87,108	87,962	88,816	89,670
3	Re-conditioning of equipment	Lump-sum	-	-	1,00,000	1,00,000	1,00,000	1,00,000	1,00,000	1,00,000
	<b>Total</b>				<b>3,60,400</b>	<b>3,64,000</b>	<b>3,66,000</b>	<b>3,69,000</b>	<b>3,71,000</b>	<b>3,74,000</b>

**B Norms**

Some of the existing multi-end units supported earlier are running without the equipments like boiler and generator, since these equipments were optional under IX / X Five Year Plan CDP scheme. Now there is a demand from such multi-end units. Therefore, it is proposed to support procurement of these equipments as per CDP norms.

Multi-end units supported under earlier plans will be considered for re-conditioning of equipments with a view to put the units in to operational mode, provided such requests are recommended by a technical committee consisting of officers from CSB and concerned states.

**SUB-SECTOR 1 : REELING AND SPINNING**  
**SUPPORT FOR ESTABLISHMENT**  
**OF AUTOMATIC REELING UNITS**

**POST-COCOON**  
**COMPONENT 5**

Sub-component A	200 ends unit
Continuation/innovative	Innovative

**A Unit cost**

#	Items/Particulars	Unit	Unit price (Rs.)	Quantity	Unit cost for Southern & North-western zone (Rs.)
1	ZD 101 cocoon peeling machine	No.	50,960	1	50,960
2	ZD 102 cocoon assorting m/c	No.	1,76,800	1	1,76,800
3	Vacuum permeating machine	No.	4,01,440	1	4,01,440
4	ZD 427 cocoon cooking machine (80 cages)	No.	8,16,400	1	8,16,400
5	FY 2008 automatic silk reeling machine (400 ends)	No.	27,50,000	1	27,50,000
6	GSJ-12 reeled silk humidifier	No.	2,68,840	1	2,68,840
7	FY 118 re-reeling machine (20 units)	No.	5,50,000	1	5,50,000
8	Hot air dryer 100 kg capacity	No.	1,80,000	2	3,60,000
9	Spare parts for two years	No.	2,50,000	1	2,50,000
10	Tool of FY 2000 EX	No.	93,600	1	93,600
11	Special tool	No.	3,58,800	1	3,58,800
12	Accessory	No.	50,000	1	50,000
13	Generator (10 KVA capacity)	No.	1,70,000	1	1,70,000
14	Boiler (500 kg capacity)	No.	8,00,000	1	8,00,000
15	Water Softening Plant (2500 l / day)	No.	2,00,000	1	2,00,000
	<b>Total</b>				<b>72,97,000</b>

Note: Unit cost rounded off to next thousand

**B Norms**

Raw material: Mulberry bivoltine cocoons.

End product: 2A grade and above raw silk.

By-product: Silk waste and dried pupae.

Working period: 2 shift of 8 hours each per day; 25 days /month; 300 days /annum.

Raw material requirement: 196 kg per day; 59 MT per annum.

Raw silk production: 28 kg per day; 8.4 MT per annum.

Silk waste generation: 7 kg per day @ 250 g per kg raw silk; 2.1 MT / annum.

Dried pupae generation: 78 kg per day @ 400 g per kg cocoons; 23 MT / annum.

Manpower requirement: 20 skilled workers.



SUB-SECTOR 1 : REELING AND SPINNING  
SUPPORT FOR ESTABLISHMENT  
OF AUTOMATIC REELING UNITS

POST-COCOON  
COMPONENT 5

Sub Component B	400 ends unit
Continuation/innovative	Continuation

A Unit cost

#	Items/Particulars	Unit	Unit price (Rs.)	Quantity	Unit cost for Sothern zone (Rs.)
1	ZD 101 cocoon peeling machine	No.	50,960	1	50,960
2	ZD 102 cocoon assorting m/c	No.	1,76,800	1	1,76,800
3	Vacume permeating machine	No.	4,01,440	1	4,01,440
4	ZD 427 cocoon cooking machine (80 cages)	No.	8,16,400	1	8,16,400
5	FY 2008 automatic silk reeling machine (400 ends)	No.	45,24,000	1	45,24,000
6	GSJ-12 reeled silk humidifier	No.	2,68,840	1	2,68,840
7	FY 118 re-reeling machine (40 units)	No.	7,59,200	1	7,59,200
8	Y 802 N S-basket conditioning oven	No.	76,440	1	76,440
9	Frision scraping machine	No.	51,480	1	51,480
10	HS-19-B frision treatment machine	No.	1,54,960	1	1,54,960
11	Z 752-75 dewater machine	No.	1,50,800	1	1,50,800
12	DB-L 88 bales press	No.	80,080	1	80,080
13	Sekin winder	No.	7,280	1	7,280
14	Reel carried	No.	12,480	4	49,920
15	CL-20 cocoon drying machine	No.	22,88,000	1	22,88,000
16	Spare parts for two years	No.	3,39,000	1	3,39,000
17	Tool of FY 2000 EX	No.	93,600	1	93,600
18	Special tool	No.	3,58,800	1	3,58,800
19	Accessory	No.	52,000	1	52,000
20	Generator (50 KVA capacity)	No.	10,00,000	1	10,00,000
21	Boiler ( one MT capacity)	No.	15,00,000	1	15,00,000
22	Water softening plant (2500 l / day)	No.	3,00,000	1	3,00,000
	Total				1,35,00,000

B Norms

Raw material: Mulberry bivoltine cocoons.

End product: 2A grade and above raw silk.

By-product: Silk waste and dried pupae.

Working period: 2 shift of 8 hours each per day; 25 days /month; 300 days /annum.

Raw material requirement: 392 kg per day; 118 MT per annum.

Raw silk production: 56 kg per day; 16.8 MT per annum.

Silk waste generation: 14 kg per day @ 250 g per kg raw silk; 4.2 MT / annum.

Dried pupae generation: 157 kg per day @ 400 g per kg cocoons; 47 MT / annum.

Manpower requirement: 36 skilled workers.

SUB-SECTOR 1 : REELING AND SPINNING  
SUPPORT FOR ESTABLISHMENT OF  
AUTOMATIC DUPION REELING UNITS (142 ENDS)

POST-COCOON  
COMPONENT 6

Continuation/innovative      Continuation

A Unit cost

#	Items/Particulars	Unit	Unit price (Rs.)	Quantity	Unit cost for Southern zone (Rs.)
1	TF 2005 S automatic dupion silk reeling m/c(142 ends)	No.	36,40,000	1	36,40,000
2	113 A Re-reeling machine (40 units)	No.	5,20,000	1	5,20,000
3	ZD-0807 Vacume permeating machine	No.	8,32,000	1	8,32,000
4	Spare parts for two years	No.	4,50,000	1	4,50,000
5	Tool of TF 2005 S	No.	95,000	1	95,000
6	Special tool	No.	3,13,000	1	3,13,000
7	Accessory	No.	50,000	1	50,000
8	Cocoon drying machine	No.	10,00,000	1	10,00,000
9	Cocoon cooking machine (80 cages)	No.	5,00,000	1	5,00,000
10	Boiler ( 1 MT cap.)	No.	8,50,000	1	8,50,000
11	Water Softening Plant (2500 l per day)	No.	2,50,000	1	2,50,000
	Total				85,00,000

Note: Unit cost rounded off to next thousand

B Norms

Raw material: Double and inferior quality mulberry multivoltine hybrid and / or bivoltine cocoons.

End product: Dupion raw silk of 100-120 Denier.

By-product: Silk waste and dried pupae.

Working period: 2 shift of 8 hours per day; 25 days per month; 300 days per annum.

Raw material requirement: 1050 kg per day; 315 MT per annum.

Dupion raw silk production: 190 kg per day; 57 MT per annum.

Silk waste generation: 19 kg per day @ 100 g per kg dupion silk; 5.7 MT per annum.

Dried Pupae generation: 210 kg per day; 63 MT per annum.

Manpower requirement: 32 skilled workers.

SUB-SECTOR 1 : REELING AND SPINNING  
ASSISTANCE FOR TWISTING UNITS  
(480 SPINDLES)

POST-COCOON  
COMPONENT 7

Continuation/innovative      Continuation

A Unit cost

#	Items/Particulars	Unit	Unit price (Rs.)	Quantity	Total (Rs.)	Unit cost (Rs.)				
						Southern zone	Central and western zone	North-western zone	Eastern zone	North-eastern zone
1	Winding machine (50 spindles capacity)	No.	74,000	2	1,48,000	1,49,480	1,50,960	1,52,440	1,53,920	1,55,400
2	Doubling machine (50 spindles)	No.	80,000	1	80,000	80,800	81,600	82,400	83,200	84,000
3	Twisting machine 480 spindle (200 spindle and 280 spindle one each)	No.	3,40,000	1	3,40,000	3,43,400	3,46,800	3,50,200	3,53,600	3,57,000
4	Twist setting chamber	No.	18,000	1	18,000	18,180	18,360	18,540	18,720	18,900
5	Re-reeling / 120 yards warping machine	No.	45,000	1	45,000	45,450	45,900	46,350	46,800	47,250
6	Spares	Set	1,47,000	1	1,47,000	1,48,470	1,49,940	1,51,410	1,52,880	1,54,350
	Total				7,78,000	7,86,000	7,94,000	8,02,000	8,10,000	8,17,000

Note: Unit cost rounded off to next thousand

B Norms

Raw material: Raw silk.

End product: Twisted silk yarn.

Production rate: 0.0128 g per spindle per shift of 8 hours.

Working period: 2 shift of 8 hours each per day; 25 days per month; 300 days per annum.

Twisted silk yarn production: 6.144 kg per day; 1.843 MT per annum.

Manpower requirement: 10 skilled workers.

**SUB-SECTOR 1 : REELING AND SPINNING**  
**INTEREST SUBSIDY ON WORKING CAPITAL LOAN**  
**SANCTIONED BY BANKS TO REELING UNITS**

**POST-COCOON**  
**COMPONENT 8**

Sub-component A	Multi-cropping states (All States except Jammu & Kashmir, Himachal Pradesh and Uttarkhand))
Continuation/innovative	Innovative

**A Unit cost**

#	Component	Working capital requirement (Rs.)	Working capital ceiling for interest subsidy (Rs.)	Interest subsidy @ 5% per annum (Rs.)	Unit cost (Rs.)
1	Improved cottage basin reeling units				
a	36 end units (6 basins of 6 ends each)	3,35,000	3,00,000	15,000	30,000
b	48 end units (6 basins of 8 ends each)	4,23,000	4,00,000	20,000	40,000
2	Multi-end reeling units				-
a	6 basin units (10 ends per basin)	4,96,000	4,50,000	22,500	45,000
b	10 basin units (10 ends per basin)	8,18,000	7,50,000	37,500	75,000
c	20 basin units (10 ends per basin)	16,36,000	15,00,000	75,000	1,50,000
3	Automatic reeling units				-
a	200 end units	44,63,000	25,00,000	1,25,000	2,50,000
b	400 end units	89,27,000	50,00,000	2,50,000	5,00,000
4	Automatic dupion reeling units	92,60,000	50,00,000	2,50,000	5,00,000
5	Spun silk mill	9,66,000	7,50,000	37,500	75,000

Note: Unit cost is for 2 years and common for all the zones

**B Norms**

Eligibility: Functional reeling units with working capital loan sanctioned by the scheduled commercial banks indicated in Annexure - II and State Finance Corporations (SFCs). Units sanctioned loan before 1st April 2012 are also eligible.

Ceiling for working capital loan: As indicated in the above table.

Estimate of working capital requirement for cottage basin reeling units: Please refer Annexure - II a.

Estimate of working capital requirement for multi-end reeling units: Please refer Annexure - II b.

Estimate of working capital requirement for automatic reeling units, automatic dupuion reeling units and spun silk mills: Please refer Annexure - II c.

## SUB-SECTOR 1 : REELING AND SPINNING INTEREST SUBSIDY ON WORKING CAPITAL LOAN SANCTIONED BY BANKS TO REELING UNITS

## POST-COCOON COMPONENT 8

Sub-component B	Bi-annual states (Jammu & Kashmir, Himachal Pradesh and Uttarkhand))
Continuation/innovative	Innovative

### A Unit cost

#	Component	Working capital requirement (Rs.)	Working capital ceiling for interest subsidy (Rs.)	Interest subsidy @ 5% per annum (Rs.)	Unit cost (Rs.)				
					Southern zone	Central and Western zone	North Western zone	Eastern zone	North-eastern zone
1	Improved cottage basin reeling units								
a	36 end units (6 basins of 6 ends each)	14,04,000	10,00,000	50,000	-	-	1,00,000	-	-
b	48 end units (6 basins of 8 ends each)	17,73,000	15,00,000	75,000	-	-	1,50,000	-	-
2	Multi-end reeling units								
a	6 basin units (10 ends per basin)	21,46,000	18,00,000	90,000	-	-	1,80,000	-	-
b	10 basin units (10 ends per basin)	35,33,000	25,00,000	1,25,000	-	-	2,50,000	-	-
c	20 basin units (10 ends per basin)	70,67,000	50,00,000	2,50,000	-	-	5,00,000	-	-
3	Automatic reeling units - 200 end units (as estimated for 2c above)	70,67,000	50,00,000	2,50,000	-	-	5,00,000	-	-
4	Wet reeling units (2 basin 6 ends / basin)	3,56,000	3,00,000	15,000	30,000	30,000	30,000	30,000	30,000
5	Two in one reeling-cum-twisting units	1,85,000	1,50,000	7,500	15,000	15,000	15,000	15,000	15,000

Note: Unit cost for 2 years

### B Norms

Eligibility: Functional reeling units with working capital loan sanctioned by the scheduled commercial banks indicated in Annexure - II and State Finance Corporations (SFCs). Units sanctioned loan before 1st April 2012 are also eligible.

Ceiling for working capital loan: As indicated in the above table.

Estimate of working capital requirement for cottage basin reeling units: Please refer Annexure - II a.

Estimate of working capital requirement for multi-end reeling units: Please refer Annexure - II b.

Estimate of working capital requirement for automatic reeling units, automatic dupuion reeling units and spun silk mills: Please refer Annexure - II c.

Estimate of working capital requirement for two-in-one reeling-cum-twisting units and wet reeling units: Please refer annexure - II d.

**SUB-SECTOR 1 : REELING AND SPINNING  
INTEREST SUBSIDY ON WORKING CAPITAL LOAN  
SANCTIONED BY BANKS TO REELING UNITS**

**POST-COCOON  
COMPONENT 8**

Annexure - II

List of scheduled commercial banks

Nationalised Banks	Old Private Sector Banks	New Private Sector Banks
Allahabad Bank	Catholic Syrian Bank	Axis Bank
Andhra Bank	City Union Bank	HDFC Bank
Bank of Baroda	Dhanlaxmi Bank	ICICI Bank
Bank of India	Federal Bank	IndusInd Bank
Bank of Maharashtra	Jammu & Kashmir Bank	ING Vysya Bank
Canara Bank	Karnataka Bank	Kotak Mahindra Bank
Central Bank of India	Karur Vysya Bank	Yes Bank
Corporation Bank	Lakshmi Vilas Bank	
Dena Bank	Nainital Bank	
Indian Bank	South Indian Bank	
Indian Overseas Bank	Tamil Nadu Mercantile Bank	
Oriental Bank of Commerce		
Punjab National Bank		
Punjab and Sind Bank		
State Bank of India		
State Bank of Bikaner & Jaipur		
State Bank of Hyderabad		
State Bank of Mysore		
State Bank of Patiala		
State Bank of Travancore		
Syndicate Bank		
UCO Bank		
Union Bank of India		
United Bank of India		
Vijaya Bank		

**SUB-SECTOR 1 : REELING AND SPINNING**  
**INTEREST SUBSIDY ON WORKING CAPITAL LOAN**  
**SANCTIONED BY BANKS TO REELING UNITS**

**POST-COCOON**  
**COMPONENT 8**

Annexure - II a

Estimate of working capital requirement for improved cottage basin reeling units

I Assumption

#	Details	6 ends / basin (36 ends)	8 ends / basin (48 ends)	Details	Price/kg (Rs.)
				Multivoltine cocoons	225
1	No. of basins installed	6	6	Raw silk (B - A grade)	1,900
2	No. of shift / day (8 hours / shift)	1	1	Silk waste	300
3	Production rate per basin / day) (kg)	0.800	1.000	Defective cocoons	125
4	Production capacity / day @ 100% utilisation (kg)	4.800	6.000	Wages per worker / day	250
5	Renditta	7.5	7.5		
6	Raw material requirement (sorted cocoons) / day (kg)	36.000	45.000		
7	Defective cocoons per kg cocoon @ 5% (kg)	0.050	0.050		
8	Raw material (including defective cocoons) /day (kg)	38.00	48.00		
9	Silk waste generation per kg silk (kg)	0.280	0.280		
10	Power / kg yarn (Rs.)	10.00	10.00		
11	Fuel and water / kg of yarn (Rs.)	30.00	40.00		
12	Consumables / kg of yarn (Rs.)	1.00	1.50		
13	Packing expenses / kg of yarn (Rs.)	2.00	3.00		
14	Skilled workers requirement (No.)	12	12		

II Details of working capital

(Rs.)

#	Details	Multi-cropping states / areas			Bi-annual cropping states / areas			Remarks
		Holding period (days)	6 ends / basin (36 ends)	8 ends / basin (48 ends)	Holding period (days)	6 ends / basin (36 ends)	8 ends / basin (48 ends)	
1	Raw material	25	2,13,750	2,70,000	150	12,82,500	16,20,000	Cost of raw material reckoned on the total quantity of cocoons required (inclusive of defective cocoons). Finished goods are reckoned on the basis of selling price of raw silk. Bills receivable are reckoned on the basis of selling price of raw silk, silk waste and defective cocoons.
2	Wages	25	75,000	75,000	25	75,000	75,000	
3	Power	25	1,200	1,500	25	1,200	1,500	
4	Fuel and water	25	3,600	6,000	25	3,600	6,000	
5	Consumables	25	120	225	25	120	225	
6	Packaging materials	25	240	450	25	240	450	
7	Work-in-process	3	25,650	32,400	3	25,650	32,400	
8	Finished goods	3	27,360	34,200	3	27,360	34,200	
9	Bills receivable	7	68,412	85,953	7	68,412	85,953	
Total (Working capital)			4,15,332	5,05,728		14,84,082	18,55,728	
Loan (100% of # 1, 7, 8, & 9 above)			3,35,172	4,22,553		14,03,922	17,72,553	
Loan rounded off to nearest thousand			3,35,000	4,23,000		14,04,000	17,73,000	



**SUB-SECTOR 1 : REELING AND SPINNING**  
**INTEREST SUBSIDY ON WORKING CAPITAL LOAN**  
**SANCTIONED BY BANKS TO REELING UNITS**

**POST-COCOON**  
**COMPONENT 8**

Annexure - II b

Estimate of working capital requirement for multi-end reeling units

I Assumption

#	Details	6 basin / unit (6 ends)	10 basin / unit (100 ends)	20 basin / unit (200 ends)	Details	Price /kg (Rs.)
					Bivoltine cocoons	275
1	No. of basins installed	6	10	20	Raw silk (2A grade)	2,000
2	No. of shift / day (8 hours / shift)	1	1	1	Silk waste	300
3	Production rate per basin / day kg	1.000	1.000	1.000	Defective cocoons	125
4	Production capacity / day @ 100% utilisation (kg)	6.000	10.000	20.000	Wages per worker / day	250
5	Renditta	7.5	7.5	7.5		
6	Raw material requirement (sorted cocoons) / day (kg)	45.000	75.000	150.000		
7	Defective cocoons per kg of cocoons @ 5% (kg)	0.050	0.050	0.050		
8	Raw material (including defective cocoons) / day (kg)	48.00	79.00	158.00		
9	Silk waste generation per kg of silk (kg)	0.280	0.280	0.280		
10	Power / kg of yarn (Rs.)	12.00	12.00	20.00		
11	Fuel and water / kg of yarn (Rs.)	40.00	50.00	100.00		
12	Consumables / kg of yarn (Rs.)	1.50	2.00	4.00		
13	Packing expenses / kg of yarn (Rs.)	3.00	4.00	8.00		
14	Skilled workers requirement (No.)	12	20	40		

II Details of working capital

(Rs.)

#	Details	Multi-cropping states / areas				Bi-annual cropping states/areas				Remarks
		Holding period (days)	6 basin unit (60 ends)	10 basin unit (100 ends)	20 basin unit (200 ends)	Holding period (days)	6 basin/ unit (60 ends)	10 basin/ unit (100 ends)	20 basin unit (200 ends)	
1	Raw material	25	3,30,000	5,43,125	10,86,250	150	19,80,000	32,58,750	65,17,500	Cost of raw material reckoned on the total quantity of cocoons required (inclusive of defective cocoons). Finished goods are reckoned on the basis of selling price of raw silk. Bills receivable are reckoned on the basis of selling price of raw silk, silk waste and defective cocoons.
2	Wages	25	75,000	1,25,000	2,50,000	25	75,000	1,25,000	2,50,000	
3	Power	25	1,800	3,000	10,000	25	1,800	3,000	10,000	
4	Fuel and water	25	6,000	12,500	50,000	25	6,000	12,500	50,000	
5	Consumables	25	225	500	2,000	25	225	500	2,000	
6	Packaging materials	25	450	1,000	4,000	25	450	1,000	4,000	
7	Work in process	3	39,600	65,175	1,30,350	3	39,600	65,175	1,30,350	
8	Finished goods	3	36,000	60,000	1,20,000	3	36,000	60,000	1,20,000	
9	Bills receivable	7	90,720	1,49,450	2,98,900	7	90,720	1,49,450	2,98,900	
Total (Working capital)			5,79,795	9,59,750	19,51,500		22,29,795	36,75,375	73,82,750	
Loan (100% of # 1, 7, 8 & 9 above)			4,96,320	8,17,750	16,35,500		21,46,320	35,33,375	70,66,750	
Loan (rounded off to nearest thousand)			4,96,000	8,18,000	16,36,000		21,46,000	35,33,000	70,67,000	

SUB-SECTOR 1 : REELING AND SPINNING  
INTEREST SUBSIDY ON WORKING CAPITAL LOAN  
SANCTIONED BY BANKS TO REELING UNITS

POST-COCOON  
COMPONENT 8

Annexure - II c

Working capital requirement for automatic reeling unit,  
automatic dupion reeling unit and spinning mill

I Assumption

#	Details	Automatic reeling unit (200 ends)	Automatic reeling unit (400 ends)	Automatic dupion reeling unit	Spinning mill
1	No. of ends / spindles installed	200	400	142	240
2	No. of shift / day (8 hours / shift)	2	2	2	1
3	Production rate per end / spindle per day (kg)	0.280	0.280	2.000	0.065
4	Production capacity / day @ 100% utilisation (kg)	56.000	112.000	284.000	15.600
5	Renditta	7.0	7.0	5.0	-
6	Raw material (sorted cocoons / eri shell) / day (kg)	392.000	784.000	1,420.000	50.000
7	Defective cocoons per kg of cocoons @ 5% (kg)	0.050	0.050	-	-
8	Total raw material requirement / day (kg)	413.000	826.000	1,420.000	50.000
9	Silk waste generation per kg of silk (kg)	0.280	0.280	0.050	-
10	Power / kg of yarn (Rs.)	30.00	40.00	30.00	40.00
11	Fuel and water / kg of yarn (Rs.)	35.00	70.00	60.00	25.00
12	Consumables / kg of yarn (Rs.)	2.00	2.00	2.00	25.00
13	Packing expenses / kg of yarn (Rs.)	2.00	2.00	2.00	10.00
14	Skilled workers requirement (No.)	36	72	35	32.00

Details	Price/kg (Rs.)
Bivoltine cocoons	275
Double and inferior quality	125
Eri shell	400
Raw silk produced on ARM	2,200
Dupion raw silk produced on ADRM	1,500
Spun silk produced on spinning mill	2,600
Silk waste generated on ARM	300
Silk waste generated on ADRM	300
Silk waste generated on SM	-
Defective cocoons	125
Wages per worker / day	250

Contd....

**SUB-SECTOR 1 : REELING AND SPINNING**  
**INTEREST SUBSIDY ON WORKING CAPITAL LOAN**  
**SANCTIONED BY BANKS TO REELING UNITS**

**POST-COCOON**  
**COMPONENT 8**

Annexure - II c

Working capital requirement for automatic reeling unit,  
 automatic dupion reeling unit and spinning mill

II Details of working capital

#	Details	Automatic reeling unit (200 ends)		Automatic reeling unit (400 ends)		Automatic dupion reeling unit		Spinning mill		Remarks
		Holding period (days)	Amount (Rs.)	Holding period (days)	Amount (Rs.)	Holding period (days)	Amount (Rs.)	Holding period (days)	Amount (Rs.)	
1	Raw material	25	28,39,375	25	56,78,750	25	44,37,500	25	5,00,000	Cost of raw material reckoned on the total quantity of cocoons required (inclusive of defective cocoons). Finished goods are reckoned on the basis of selling price of raw silk. Bills receivable are reckoned on the basis of selling price of raw silk, silk waste and defective cocoons.
2	Wages	25	2,25,000	25	4,50,000	25	2,18,750	25	2,00,000	
3	Power	25	42,000	25	1,12,000	25	2,13,000	25	15,600	
4	Fuel and water	25	49,000	25	1,96,000	25	4,26,000	25	9,750	
5	Consumables	25	2,800	25	5,600	25	14,200	25	9,750	
6	Packaging materials	25	2,800	25	5,600	25	14,200	25	3,900	
7	Work in process	3	3,40,725	3	6,81,450	3	5,32,500	3	60,000	
8	Finished goods	3	3,69,600	3	7,39,200	3	12,78,000	3	1,21,680	
9	Bills receivable	7	9,13,703	7	18,27,406	7	30,11,820	7	2,83,920	
Total (Working capital)			47,85,003	-	96,96,006	-	1,01,45,970	-	12,04,600	
Loan (100% of # 1, 7,8 & 9 above)			44,63,403	-	89,26,806	-	92,59,820	-	9,65,600	
Loan (rounded off to nearest thousand)			44,63,000	-	89,27,000	-	92,60,000	-	9,66,000	

**SUB-SECTOR 1 : REELING AND SPINNING**  
**INTEREST SUBSIDY ON WORKING CAPITAL LOAN**  
**SANCTIONED BY BANKS TO REELING UNITS**

**POST-COCOON**  
**COMPONENT 8**

Annexure - II d

Working capital requirement for *Vanya* reeling / twisting units

I Assumption

#	Details	Two-in-one reeling-cum-twisting unit	Wet reeling unit
1	No. of basins installed	1	2
2	No. of shift / day (8 hours / shift)	1	1
3	Production rate per basin / day (kg)	0.600	0.600
4	Production capacity / day @ 100% utilisation (kg)	0.600	1.200
5	No.of cocoon required to produce 1 kg of yarn	1,170	1,170
6	No.of cocoon required / day	702	1,404
7	Production of twisted silk yarn / day (kg)	0.250	-
8	Silk waste generation per kg of silk (kg)	0.250	0.250
9	Power / kg of yarn (Rs.)	30.00	30.00
10	Fuel and water / kg of yarn (Rs.)	30.00	30.00
11	Consumables / kg of yarn (Rs.)	50.00	50.00
12	Packing expenses / kg of yarn (Rs.)	2.00	2.00
13	Skilled workers requirement (No.)	4	12

Details	Price of cocoons/ silk/kg (Rs.)
Tasar cocoons	1.50
Tasar raw silk	2,750.00
Tasar twisted silk yarn	3,000.00
Silk waste	200.00
Wages per worker (per day)	150.00

II Details of working capital

#	Details	Two-in-one reeling-cum-twisting unit		Wet reeling unit		Remarks
		Holding period (days)	Amount (Rs.)	Holding period (days)	Amount (Rs.)	
1	Raw material	150	1,57,950	150	3,15,900	Cost of raw material reckoned on the No. of cocoons required per day. Finished goods are reckoned on the basis of selling price of raw / twisted silk. Bills receivable are reckoned on the basis of selling price of raw silk, twisted silk and silk waste.
2	Wages	25	15,000	25	45,000	
3	Power	25	450	25	900	
4	Fuel and water	25	450	25	900	
5	Consumables	25	750	25	1,500	
6	Packaging materials	25	30	25	60	
7	Work in process	3	3,159	3	6,318	
8	Finished goods	3	7,200	3	9,900	
9	Bills receivable	7	17,010	7	23,520	
Total (Working capital)			2,01,999		4,03,998	
Loan (100% of # 1, 7, 8, & 9 above)			1,85,319		3,55,638	
Loan rounded off to nearest thousand			1,85,000		3,56,000	

**SUB-SECTOR 1 : REELING AND SPINNING**  
**INCENTIVE FOR PRODUCTION OF BIVOLTINE SILK**

**POST-COCOON**  
**COMPONENT 9**

Continuation/innovative      Continuation

**A Unit cost**

#	Component	Unit	Unit cost (Rs.)
a	Gradable bivoltine silk reeled on multi-end reeling units	kg	100.00
b	Bivoltine silk of 2A grade & above reeled on automatic reeling units	kg	150.00

Note: Applicable for all zones

**B Norms**

Gradable bivoltine silk reeled on multi-end reeling machine is eligible for incentive of Rs.100.00 per kg.

Bivoltine silk of 2A grade & above reeled on automatic reeling machine is eligible for incentive of Rs.150.00 per kg.

SUB-SECTOR 1 : REELING AND SPINNING  
SUPPORT FOR VANYA REELING/SPINNING SECTOR

POST-COCOON  
COMPONENT 10

Sub-component A	Reeling-cum-twisting machine
Continuation/innovative	Continuation

A Unit cost

#	Items/Particulars	Unit	Unit price (Rs.)	Quantity	Total (Rs.)	Unit cost (Rs.)				
						Southern zone	Central and western zone	North-western zone	Eastern zone	North-eastern zone
1	Reeling-cum-twisting machine (6 spindles)	No.	26,000	1	26,000	26,260	26,520	26,780	27,040	27,300
2	Reeling-cum-twisting machine (5 ends)	No.	18,000	1	18,000	18,180	18,360	18,540	18,720	18,900
	Total				44,000	45,000	45,000	46,000	46,000	47,000

Note: Unit cost rounded off to next thousand

B Norms

Raw material: Tasar / muga cocoons.

End product: Tasar / muga twisted silk yarn.

By-product: Silk waste and pupae.

Working period: 1 shift of 8 hours per day; 25 days per month; 300 days per annum.

Raw material requirement: 400 cocoons per day; 1,20,000 cocoons per annum.

Twisted tasar silk yarn production: 350 g per day; 105 kg per annum.

Workers requirement: 2 skilled workers.

SUB-SECTOR 1 : REELING AND SPINNING  
SUPPORT FOR VANYA REELING/SPINNING SECTOR

POST-COCOON  
COMPONENT 10

Sub-component B	Wet reeling machine (2 basins of 6 ends each)
Continuation/innovative	Innovative

A Unit cost

#	Items/Particulars	Unit	Unit price (Rs.)	Quantity	Total (Rs.)	Unit cost (Rs.)				
						Southern zone	Central and western zone	North-western zone	Eastern zone	North-eastern zone
1	2 basin wet reeling machine (6 ends/basin)	No.	45,000	1	45,000	46,000	46,000	47,000	47,000	48,000

Note: Unit cost rounded off to next thousand

B Norms

Raw material: Tasar / muga cocoons.

End product: Tasar / muga silk yarn.

By-product: Silk waste.

Working period: 1 shift of 8 hours per day; 25 days per month; 300 days per annum.

Raw material requirement: 1,404 cocoons per day; 4,21,200 cocoons per annum.

Tasar raw silk production: 1.2 kg per day; 360 kg per annum.

Silk waste generation: 300 g per day; 90 kg per annum.

Manpower requirement: 12 skilled workers.



SUB-SECTOR 1 : REELING AND SPINNING  
SUPPORT FOR VANYA REELING/SPINNING SECTOR

POST-COCOON  
COMPONENT 10

Sub-component C	Two-in-one reeling-cum-twisting machine
Continuation/innovative	Innovative

A Unit cost

#	Items/Particulars	Unit	Unit price (Rs.)	Quantity	Total (Rs.)	Unit cost (Rs.)				
						Southern zone	Central and western zone	North-western zone	Eastern zone	North-eastern zone
1	Two-in-one reeling-cum-twisting machine (6 ends / basin6 spindle)	No.	45,000	1	45,000	45,450	45,900	46,350	46,800	47,250
2	Re-reeling machine (5 ends)	No.	18,000	1	18,000	18,180	18,360	18,540	18,720	18,900
	Total				63,000	64,000	65,000	65,000	66,000	67,000

Note: Unit cost rounded off to next thousand

B Norms

Raw material: Tasar / muga cocoons.

End product: Tasar / muga silk yarn and twisted yarn.

By-product: Silk waste.

Working period: 1 shift of 8 hours per day; 25 days per month; 300 days per annum.

Raw material requirement: 702 cocoons per day; 2,10,600 cocoons per annum.

Tasar silk yarn production: 600 g per day; 180 kg per annum.

Twisted yarn production: 250 g per day; 75 kg per annum

Silk waste generation: 150 g per day; 45 kg per annum.

Manpower requirement: 4 skilled workers.

Sub-component D	Tasar cocoon sorting machine for NGOs / co-operatives/SHGs
Continuation/ Innovative	Innovative

A Unit cost

#	Items/Particulars	Unit	Unit price (Rs.)	Quantity	Total (Rs.)	Unit cost (Rs.)				
						Southern zone	Central and western zone	North-western zone	Eastern zone	North-eastern zone
1	Tasar cocoon sorting machine	No.	50,000	1	50,000	51,000	51,000	52,000	52,000	53,000

Note: Unit cost rounded off to next thousand

B Norms

A person can sort around 10,000 cocoons per day (8 hours), whereas this machine can sort 3,37,500 cocoons per day (8 hours) for which only 2 skilled workers are required per unit / day. Support will be provided to state governments or state identified societies, NGOs, SHGs etc. and not for individuals.

**SUB-SECTOR 1 : REELING AND SPINNING**  
**SUPPORT FOR VANYA REELING / SPINNING SECTOR**

**POST-COCOON**  
**COMPONENT 10**

Sub-component E	Motorised / pedal operated spinning machine
Continuation/ Innovative	Continuation

**A Unit cost**

#	Items/Particulars	Unit	Unit price (Rs.)	Quantity	Total (Rs.)	Unit cost (Rs.)				
						Southern zone	Central and western zone	North-western zone	Eastern zone	North-eastern zone
1.	Single head motorised / operated spinning machine	Nos.	6,000	1	6,000	7,000	7,000	7,000	7,000	7,000

Note: Unit cost rounded off to next thousand

**B Norms**

Raw material: Degummed eri cocoon and silk waste of tasar and muga  
 End product: Hand spun silk yarn.  
 Working period: 1 shift of 8 hours per day; 25 days per month; 300 days per annum.  
 Raw material requirement: 200 g.  
 Spun silk yarn production: 200 g per day; 60 kg per annum.  
 Manpower requirement: 1 skilled worker.

Sub-component F	Solar operated spinning machine
Continuation/ Innovative	Innovative

**A Unit cost**

#	Items/Particulars	Unit	Unit price (Rs.)	Quantity	Total (Rs.)	Unit cost (Rs.)				
						Southern zone	Central and western zone	North-western zone	Eastern zone	North-eastern zone
1	Solar operated spinning machine	No.	18,000	1	18,000	19,000	19,000	19,000	19,000	19,000

Note: Unit cost rounded off to next thousand

**B Norms**

Raw material: Degummed eri cocoons and silk waste of tasar and muga.  
 End product: Hand spun silk yarn.  
 Working period: 1 shift of 8 hours per day; 25 days per month; 300 days per annum.  
 Raw material requirement: 200 g.  
 Spun silk yarn production: 200 g per day; 60 kg per annum.  
 Manpower requirement: 1 skilled worker.

SUB-SECTOR 1 : REELING AND SPINNING  
 PROVIDING SERVICES OF MASTER REELERS/  
 TECHNICIANS TO REELING UNITS

POST-COCOON  
 COMPONENT 11

Continuation/ Innovative Continuation

A Unit cost

#	Particulars	Remuneration per month (Rs.)	Unit cost per year (Rs.)
1	Wages @ Rs.250.00 per day	7,500	90,000
2	House rent allowance	2,000	24,000
3	Medical allowance	500	6,000
4	Lumpsum (to be paid on completion of specified tenure)	2,000	24,000
	Total	12,000	144,000

Note: Applicable for all zones

B Norms

The concept is aimed at increasing the skill level of operatives at work place by engaging field experts for a specific period.

The master reelers / technicians will be empanelled by CSB based on their experience in the particular field.

The person to be empanelled shall have minimum experience of 5 years in the field.

Based on request received from the states / NGOs/ societies, master reelers / technicians will be deployed by CSB.

SUB-SECTOR 2 : POST-YARN  
SUPPORT FOR HANDLOOM SECTOR

POST-COCOON  
COMPONENT 12

Sub-component A	Loom up-gradation through jacquards and other equipments
Continuation/ Innovative	Continuation

A Unit cost

Description	Unit cost lumpsum (Rs.)
Upgradation of the existing handlooms with additional equipments like Jacquards, Dobby, Ashu Machine, Ball to Beam warping machine and Motorized pirn winding machines for creating designs and preparatory purpose, besides increasing the productivity and quality.	15,000
Note: Applicable for all zones	

Sub-component B	Pneumatic lifting mechanism for handlooms
Continuation/ Innovative	Innovative

A Unit cost

Description	Unit	Quantity	Unit cost (Rs.)
Pneumatic lifting mechanism for handlooms 2 looms unit	No.	1	33,000
Pneumatic lifting mechanism for handlooms 4 looms unit	No.	1	50,000
Note: Applicable for all zones			

**SUB-SECTOR 2 : POST-YARN  
SUPPORT FOR SETTING UP OF  
COMMON FACILITY CENTRE FOR  
YARN DYEING AND FABRIC PROCESSING**

(Special technology package developed by CSTRI, Bangalore)

**POST-COCOON  
COMPONENT 13**

Sub-component A	Computer aided textile designing (CATD)
Continuation/ Innovative	Continuation

**A Unit cost**

#	Items/Particulars	Unit	Unit price (Rs.)	Quantity	Unit cost (Rs.)
1	Computer card punching machine	No.	2,85,000	1	2,85,000
2	Colour lazer / ink jet printer	No.	8,400	1	8,400
3	Computer (laptop / desktop)	No.	46,000	1	46,000
4	Scanner	No.	6,000	1	6,000
5	UPS 1 KVA (one hour back-up)	No.	18,600	1	18,600
6	Software specific to textiles design	No.	32,000	1	32,000
	Total				3,96,000

Note: Applicable for all zones

Sub-component B	Tub dyeing 25 kg capacity units
Continuation/ Innovative	Continuation

**A Unit cost**

#	Items/Particulars	Unit	Unit price (Rs.)	Quantity	Unit cost (Rs.)
1	Boiler 100 kg capacity	No.	1,25,000	1	1,25,000
2	Water softening plant 100 l resign capacity	No.	30,000	1	30,000
3	Water tank 2500 l capacity	No.	20,000	1	20,000
4	Stainless steel tubs 2 kg-1 No.; 5 kg-1 No.; 10 kg-1 No. or as per beneficiary requirement	No.	1,20,000	1	1,20,000
5	Hydro extractor 5 kg capacity	No.	65,000	1	65,000
6	Electronic balance 2 kg capacity	No.	16,000	1	16,000
7	Platform balance 25 kg capacity	No.	16,000	1	16,000
	Total				3,92,000

Note: Applicable for all zones

**B Norms**

Raw material: Raw silk .

End product: Quality degummed silk.

Working period: 1 shift of 8 hours per day; 25 days per month; 300 days per annum.

Raw material requirement: 25 kg per day; 7.5 MT per annum.

Production: 20 kg per day; 6 MT per annum.

Manpower requirement: 2 unskilled and 1 skilled worker.

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**SUB-SECTOR 2 : POST-YARN  
SUPPORT FOR SETTING UP OF  
COMMON FACILITY CENTRE FOR  
YARN DYEING AND FABRIC PROCESSING**  
(Special technology package developed by CSTRI, Bangalore)

Sub-component C	Tub dyeing 50 kg capacity units
Continuation/ Innovative	Continuation

**A Unit cost**

#	Items/Particulars	Unit	Unit price (Rs.)	Quantity	Unit cost (Rs.)
1	Boiler 200 kg capacity	No.	2,00,000	1	2,00,000
2	Water softening plant 100 l resign capacity	No.	30,000	1	30,000
3	Water tank 2500 l capacity	No.	20,000	2	40,000
4	Stainless steel tubs 2 kg-2 No.; 5 kg-2 No.; 10 kg-1 No.; 20 kg-1 No. or as per requirement of beneficiary	Set	2,25,000	1	2,25,000
5	Hydro extractor 5 kg capacity	No.	65,000	1	65,000
6	Colour matching cabinet	No.	45,000	1	45,000
7	Electronic balance 2 kg capacity	No.	16,000	1	16,000
8	Platform balance 25 kg capacity	No.	16,000	1	16,000
	Total				6,37,000

Note: Applicable for all zones

**B Norms**

Raw material: Raw silk.

End product: Quality degummed silk.

Working period: 1 shift of 8 hours per day; 25 days per month; 300 days per annum.

Raw material requirement: 50 kg per day; 15 MT per annum.

Production: 40 kg per day; 12 MT per annum.

Manpower requirement: 2 unskilled and 1 skilled worker.

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**SUB-SECTOR 2 : POST-YARN  
SUPPORT FOR SETTING UP OF  
COMMON FACILITY CENTRE FOR  
YARN DYEING AND FABRIC PROCESSING**  
(Special technology package developed by CSTRI, Bangalore)

**POST-COCOON  
COMPONENT 13**

Sub-component D	Arm dyeing 50 kg capacity units
Continuation/ Innovative	Continuation

**A Unit cost**

#	Items/Particulars	Unit	Unit price (Rs.)	Quantity	Unit cost (Rs.)
1	Boiler 200 kg capacity	No.	2,00,000	1	2,00,000
2	Water softening plant 100 l resign capacity	No.	30,000	1	30,000
3	Water tank 2,500 l capacity	No.	20,000	2	40,000
4	Arm dyeing machine	No.	6,50,000	2	13,00,000
5	Hydro extractor 5 kg capacity	No.	65,000	1	65,000
6	Colour matching cabinet	No.	45,000	1	45,000
7	Electronic balance 2 kg capacity	No.	16,000	1	16,000
8	Platform balance 25 kg capacity	No.	16,000	1	16,000
	Total				17,12,000

Note: Applicable for all zones

**B Norms**

Raw material: Raw silk.

End product: Quality degummed silk.

Working period: 1 shift of 8 hours per day; 25 days per month; 300 days per annum.

Raw material requirement: 50 kg per day; 15 MT per annum.

Production: 40 kg per day; 12 MT per annum.

Manpower requirement: 2 unskilled and 1 skilled worker.

Savings compared with conventional yarn processing system: Around 500 l of water per day (1,50,000 l per annum) and 50% savings in fuel, chemicals and auxiliaries usage. Repeatability is possible with this package.

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**SUB-SECTOR 2 : POST-YARN  
SUPPORT FOR SETTING UP OF  
COMMON FACILITY CENTRE FOR  
YARN DYEING AND FABRIC PROCESSING**

(Special technology package developed by CSTRI, Bangalore)

Sub-component E	Fabric processing 250 kg capacity units
Continuation/ Innovative	Continuation

**A Unit cost**

#	Items/Particulars	Unit	Unit price (Rs.)	Quantity	Unit cost (Rs.)
1	Winch 25 kg	No.	3,15,000	1	3,15,000
2	Winch 50 kg or jigger 50 kg capacity	No.	5,00,000	1	5,00,000
3	Calendaring machine / mini felt calendaring or decotising	No.	5,75,000	1	5,75,000
4	Boiler 750 kg capacity	No.	9,22,000	1	9,22,000
5	Water softening plant 2500 l capacity	No.	30,000	1	30,000
6	Water tank 2,500 l capacity	No.	20,000	2	40,000
7	Hydro extractor 25 kg capacity 1No. or 15 kg-1 No. and 10 kg-1No.	No.	1,50,000	1	1,50,000
8	Colour matching cabinet	No.	45,000	1	45,000
9	Electronic balance 2 kg capacity	No.	16,000	1	16,000
10	Electronic balance 50 kg capacity	No.	16,000	1	16,000
11	Stainless steel tubs 2 kg / 5 kg / 10 kg / 20 kg or as per the requirement of the beneficiary	Set	1,05,300	1	1,05,300
	<b>Total</b>				<b>27,15,000</b>

Note: Applicable for all zones

**B Norms**

Raw material: Silk fabric.

End product: Quality degummed silk fabric.

Working period: 1 shift of 8 hours per day; 25 days per month; 300 days per annum.

Raw material requirement: 250 kg per day; 75 MT per annum.

Production: 188 kg per day; 56.4 MT per annum.

Manpower requirement: 2 unskilled and 1 skilled worker.

Savings compared with conventional fabric processing system: Around 500 l of water per day (1,50,000 l per annum) and 50% savings in fuel, chemicals and auxiliaries usage. Repeatability is possible with this package.

Sub-component F	Effluent treatment plant for yarn dyeing and fabric processing units (existing and new units)
Continuation/ Innovative	Continuation

**A Unit cost**

#	Items/Particulars	Unit	Unit price (Rs.)	Quantity	Unit cost (Rs.)
1	Zero discharge type (5,000 l / day)	No.	7,00,000	1	7,00,000
2	Discharge to ground type (5,000 l / day)	No.	4,00,000	1	4,00,000

Note: Applicable for all zones

**SUB-SECTOR 2 : POST-YARN  
PROVIDING SERVICES OF MASTER WEAVERS/  
DYERS/DESIGNERS/TECHNICIANS TO WEAVING/  
WET PROCESSING UNITS**

**POST-COCOON  
COMPONENT 14**

Continuation/ Innovative      Continuation

**A Unit cost**

#	Items/Particulars	Remuneration per month (Rs.)	Unit cost per year (Rs.)
1	Wages @ Rs.250.00 per day	7,500	90,000
2	House rent allowance	2,000	24,000
3	Medical allowance	500	6,000
4	Lumpsum (to be paid on completion of specified tenure)	2,000	24,000
	Total	12,000	1,44,000

Note: Applicable for all zones

**B Norms**

The concept is aimed at increasing the skill level of operatives at work place by engaging field experts for a specific period.

The master weavers / designers / dyers / technicians will be empanelled by CSB based on their experience in the particular field.

The person to be empanelled shall have minimum experience of 5 years in the field.

Based on request received from the states / NGOs / societies, master weavers / designers / dyers / technicians will be deployed by CSB.

**SUB-SECTOR 3 : MARKETING SUPPORT**  
**SUPPORT TO STATES FOR CREATING/UP-GRADING**  
**MARKETING INFRASTRUCTURE FOR**  
**COCOONS AND RAW SILK**

**POST-COCOON**  
**COMPONENT 15**

Continuation/ Innovative      Continuation

**A Unit cost**

The component envisages support with the lump sum unit cost of Rs.1.50 crore for the traditional states and Rs.0.70 crore for the non-traditional states for various purpose indicated below:

1	Establishment of new cocoon markets / silk exchange Construction of building and procurement of market related equipment like cocoon bins / baskets, electronic balance, computers with printers, kiosk (information desk), public audio system, trolleys, generator, hot air dryers, cocoon / raw silk testing equipment, fixture, furniture etc.
2	Up-gradation of existing cocoon markets / silk exchanges Renovation / expansion of building and procurement of market related equipment.
3	Establishment of cocoon banks / warehouses Renovation / expansion of building, procurement of market related equipment and creation of non-erodable revolving fund for purchase of cocoons from farmers and raw silk from reelers on quality linked pricing system.
4	Vanya cocoon marketing outlets Organisation of marketing outlets for muga and eri cocoons.
5	Development of IT solution Development of IT solution in quality linked price support system / marketing aspects, the states shall send a detailed proposal.

SUB-SECTOR 3 : MARKETING SUPPORT  
SUPPORT FOR SETTING UP OF HOT AIR DRYERS

POST-COCOON  
COMPONENT 16

Continuation/ Innovative      Continuation

A Unit cost

#	Items/Particulars	Unit	Unit price (Rs.)	Quantity	Total (Rs.)	Unit cost (Rs.)				
						Southern zone	Central and western zone	North-western zone	Eastern zone	North-eastern zone
1	50 kg capacity units (electrical)	No.	1,30,000	1	1,30,000	1,32,000	1,33,000	1,34,000	1,36,000	1,37,000
2	100 kg capacity units (electrical)	No.	1,80,000	1	1,80,000	1,82,000	1,84,000	1,86,000	1,88,000	1,89,000
3	50 kg capacity units (multi-fuel)	No.	60,000	1	60,000	61,000	62,000	62,000	63,000	63,000
4	100 kg capacity units (multi-fuel)	No.	80,000	1	80,000	81,000	82,000	83,000	84,000	84,000
5	2 MT capacity conveyor hot air dryer (imported)	No.	22,88,000	1	22,88,000	-	-	22,88,000	-	-

Note: Unit cost rounded off to next thousand

B Norms

Electrical hot air dryers are operated by electricity.

Multi-fuel hot air dryers are operated by use of fuels like fire wood, paddy husk, groundnut husk, wood chips etc.

Conveyor hot air dryers operated by use of fuels like fire wood, wood chips, coconut shell, coal, briquette etc.

50 kg of live cocoons can be dried (40%) in a span of 6 hours in different temperature in 50 kg hot air dryer.

100 kg of live cocoons can be dried (40%) in a span of 6 hours in different temperature in 100 kg hot air dryer.

2 MT of live cocoons can be dried (40%) per shift of 16 hours.