

कार्यालय प्रधान मुख्य वन संरक्षक, (हॉफ), राजस्थान, जयपुर

क्रमांक:एफ 3(13)प्रमुवसं/ट्री/तक0/23-24/

दिनांक:-

बैठक कार्यवाही विवरण

इस कार्यालय के समसंख्यक पत्रांक एफ 3(13) प्रमुवसं/ट्री/तक0/ 2023-24 पत्रांक 325 दिनांक 18.07.2025 के द्वारा वृक्षारोपण के प्रस्तावित मॉडल्स परियोजना निदेशक **CRESEP (RFBP-II)** से प्राप्त Model के अनुमोदन हेतु मॉडल कमेटी की बैठक दिनांक 21.07.2025 को 10.30 AM बजे Hybrid Mode के माध्यम से अरण्य भवन के मीटिंग हॉल (A-115) में श्रीमती टी. जे. कविथा, अतिरिक्त प्रधान मुख्य वन संरक्षक, (विकास) राजस्थान जयपुर की अध्यक्षता में आयोजित की गई, जिसमें निम्न सदस्यों ने भाग लिया:-

1. श्री के.सी.ए. अरुण प्रसाद, अतिरिक्त प्रधान मुख्य वन संरक्षक (परियोजना निदेशक CRESEP) - विशेष आमंत्रित सदस्य
2. श्री राजीव चतुर्वेदी, मुख्य वन संरक्षक, जयपुर - सदस्य (V.C.)
3. श्री पी. काथिरवेल, मुख्य वन संरक्षक, भरतपुर - सदस्य (V.C.)
4. श्री एस.आर.वेंकटेश्वर मूर्थी, मुख्य वन संरक्षक आयोजना, - सदस्य सचिव
5. श्रीमती ख्याति माथुर, मुख्य वन संरक्षक, अजमेर - सदस्य (V.C.)
6. श्री हनुमाना राम, मुख्य वन संरक्षक, बीकानेर - सदस्य (V.C.)
7. श्री आर. के. जैन, मुख्य वन संरक्षक, जोधपुर - सदस्य (V.C.)
8. श्री सुनील, वन संरक्षक उदयपुर, - सदस्य (V.C.)
9. श्रीमती निधि मेहता, वित्तीय सलाहकार, अरण्य भवन, जयपुर - सदस्य
10. श्री कपिल चंद्रावल, संयुक्त परियोजना निदेशक, (आरएफबीपी-2) जयपुर - विशेष आमंत्रित सदस्य
11. श्रीमती सोनल जोरिहार, वन संरक्षक, कोटा - सदस्य (V.C.)
12. श्री संजय प्रकाश भादु, उप परियोजना निदेशक (आरएफबीपी-2) जयपुर - विशेष आमंत्रित सदस्य
13. श्री रेखा राम, उप वन संरक्षक (प्रशासन), प्रमुवसं (ट्री), जयपुर

श्रीमती टी. जे. कविथा, अतिरिक्त प्रधान मुख्य वन संरक्षक, (विकास) राजस्थान, जयपुर ने उपस्थित समिति सदस्यों का स्वागत किया तथा सदस्यगणों से प्रस्तावित मॉडल्स में प्रावधानों पर चर्चा की।

उक्त बैठक में CRESEP के लिये नवसंकलित निम्नलिखित मॉडल्स प्रस्तुत किये गये:-

1. Model Cost Norms for High-Density Short-Rotation Plantations under Irrigated Conditions (Distributary) under CRESEP

2- Model Cost Norms for High-Density Short-Rotation Plantations under Irrigated



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Conditions (Minor) under CRESEP .

3- Model Cost Norms for Eco-Restoration for Woodland Ecosystems under CRESEP.

4- Model Cost Norms for Eco-Restoration for Grassland Ecosystems (Desert Area) under CRESEP.

5- Model Cost Norms for Eco-Restoration for Grassland Ecosystems (Non-Desert Area) under CRESEP.

6- Model Cost Norms for Grassland Development for wildlife Areas in Arid Regions under CRESEP (50Ha.)

7- Model Cost Norms for Grassland Development for wildlife Areas in Arid Regions under CRESEP (100Ha.)

श्री के.सी.ए. अरुण प्रसाद, अतिरिक्त प्रधान मुख्य वन संरक्षक परियोजना निदेशक CRESEP ने सभी CRESEP मॉडल्स के बारे में विस्तृत रूप से तकनीकी प्रावधानों के बारे में सभी सदस्यगणों को अवगत कराया एवं चर्चा के दौरान मुख्य वन संरक्षक (जोधपुर), मुख्य वन संरक्षक (बीकानेर), मुख्य वन संरक्षक (उदयपुर), मुख्य वन संरक्षक (भरतपुर), ने उक्त मॉडल्स में सभी प्रावधानों (मुख्यतः Fencing, Watering) पर विस्तृत बिन्दुवार चर्चा की।

1. Fencing Posts की height 1.5 mt. जो पर्याप्त नहीं होने के कारण 2.40 mt. रखी गयी जिससे नीलगाय एवं अन्य आवारा पशुओं से वृक्षारोपण की प्रभावी सुरक्षा की जा सके।

2. Repairing of Fencing सभी संधारण वर्षों Maintenance-I से अंतिम वर्ष तक रखा गया है ताकि वृक्षारोपण में पशुओं से सुरक्षा सुनिश्चित की जा सके।

3. Model Cost Norms for High-Density Short-Rotation Plantation (HDSR) under Irrigated Conditions (**Distributary**) under CRESEP . एवं Model Cost Norms for High-Density Short-Rotation Plantation under Irrigated Conditions (**Minor**) under CRESEP मॉडल्स में वॉटरिंग का प्रावधान **planting year-5times**, प्रथम वर्ष संधारण-8times, द्वितीय वर्ष संधारण-8times, तृतीय वर्ष संधारण-4times, चतुर्थ वर्ष संधारण-4times, पंचम वर्ष संधारण-2times, रखा गया ताकि वृक्षारोपण सफल हो सके।

4. Model Cost Norms for Eco-Restoration for Woodland Ecosystems under CRESEP. मॉडल में for Advance Action, Sowing year, Planting year, Maintenance-I, Maintenance-II, Maintenance-III, Maintenance-IV, का प्रावधान किया गया है तथा 100 पौधे प्रति हेक्टेयर रोपित करने का प्रावधान रखा गया है।

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5. Model Cost Norms for Eco-Restoration for Grassland Ecosystems (Desert Area/Non-Desert Area) under CRESEP दोनों मॉडल में 50 पौधे प्रति हेक्टेयर रोपित करने का प्रावधान रखा गया है एवं उक्त दोनों मॉडल में वाटरिंग का प्रावधान—वृक्षारोपण वर्ष में-6times, प्रथम वर्ष संधारण-6times, द्वितीय वर्ष संधारण-4times, तृतीय वर्ष संधारण-2times रखा गया है।

6.-Model Cost Norms for Grassland Development for wildlife Areas in Arid Regions under CRESEP (50Ha./100Ha.) मॉडल में विशेषरूप से wildlife Areas in Arid Regions के लिये प्रस्तावित किया गया, जिसमें 50हे.एवं 100हे. यूनिट रखी गई है। विशेष रूप से रेगिस्तान क्षेत्र में 100 हे. की पर्याप्त साईट उपलब्ध है अतः 50हे. के साथ-साथ 100हे.यूनिट का प्रावधान किया गया है।

7. सभी मॉडल्स में Administrative expenditure including office, electricity, stationary, running of vehicles,etc- में 1% का प्रावधान रखा गया है।

8. Price Escalation का प्रति वर्ष 10% का प्रावधान रखा गया है।

9. RDF-II व ANR Model की जगह CRESEP योजना में Eco-Restoration for Woodland Ecosystems Model के तहत वृक्षारोपण कार्य करवाये जाने की सहमति बनी एवं मॉडल कमेटी के सदस्यगणों की सहमति उपरांत उक्त मॉडल्स के अनुमोदन की सहमति प्रदान की गई।

तत्पश्चात बैठक सधन्यवाद समाप्त हुई।

सदस्य सचिव, मॉडल अनुमोदन समिति
मुख्य वन संरक्षक (आयोजना),
राजस्थान, जयपुर।

क्रमांक:-एफ3 (13)प्रमुवसं/ट्री/तक0/23-24/

दिनांक:-

प्रतिलिपि निम्न को सूचनार्थ एवं आवश्यक कार्यवाही हेतु प्रेषित है :-

- 1-निजी सचिव, प्रधान मुख्य वन संरक्षक (हॉफ), राजस्थान जयपुर
- 2-निजी सचिव, प्रधान मुख्य वन संरक्षक (विकास), राजस्थान, जयपुर
- 3-परियोजना निदेशक, RFBP, राजस्थान, जयपुर
- 4-परियोजना निदेशक, RFBDP, राजस्थान, जयपुर
- 5-वित्तीय सलाहकार, वन विभाग, राजस्थान, जयपुर
- 6-संबंधित मुख्य वन संरक्षक/सदस्य गण.....

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सदस्य सचिव, मॉडल अनुमोदन समिति

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Designation: Chief Conservator Of Forest
Date: 2025.08.13 15:16:16 IST
Reason: Approved

कार्यालय प्रधान मुख्य वन संरक्षक, (हॉफ), राजस्थान, जयपुर

क्रमांक एफ 3(13)प्रमुखसं/ट्री/तक0/23-24/ 351-66 दिनांक:- 14.08.2025
निमित्त,

- 1-परियोजना निदेशक, आर.एफ.बी.पी. जयपुर।
- 2-परियोजना निदेशक, आर.एफ.बी.डी.पी. जयपुर।
- 3- समस्त सम्भागीय मुख्य वन संरक्षक जयपुर/अजमेर/भरतपुर/कोटा/
उदयपुर/बीकानेर/जोधपुर/(वन्यजीव) जयपुर/कोटा/उदयपुर/
सवाईमाधोपुर/सरिस्का/जोधपुर/विभागीय कार्य जयपुर

विषय:- परियोजना निदेशक CRESEP (RFBP-II) से प्राप्त हुए मॉडल्स के अनुमोदन कराने (श्रमिक दर 285/रूपये प्रति दिन) बाबत।

महोदय,

उपरोक्त विषयान्तर्गत निवेदन है कि परियोजना निदेशक CRESEP (RFBP-II) से प्राप्त हुए वृक्षारोपण मॉडल को राज्य स्तरीय मॉडल कमेटी की अनुशंसा पर प्रधान मुख्य वन संरक्षक, (हॉफ) राजस्थान, जयपुर के अनुमोदन उपरान्त नवसंकलित मॉडल्स संलग्न कर आवश्यक कार्यवाही हेतु प्रेषित किये जा रहे हैं:-

- (1) Model Cost Norms For High-Density Short-Rotation Plantation(HDSR) under Irrigated Conditions (Distributary) under CRESEP.
- (2) Model Cost Norms For High-Density Short-Rotation Plantation(HDSR) under Irrigated Conditions (Minor) under CRESEP.
- (3) Model Cost Norms For Eco-Restoration for Woodland Ecosystems under CRESEP.
- (4) Model Cost Norms For Eco-Restoration for Grassland Ecosystems (Desert Area)under CRESEP.
- (5) Model Cost Norms For Eco-Restoration for Grassland Ecosystems (Non-Desert Area) under CRESEP.
- (6) Model Cost Norms for Grassland Development for Wildlife Areas in Arid Regions under CRESEP (50Ha.)
- (7) Model Cost Norms for Grassland Development for Wildlife Areas in Arid Regions under CRESEP (100Ha.)

उक्त सभी मॉडल विभागीय वेबसाइट के निम्न लिंक पर उपलब्ध है।

<http://www.forest.rajasthan.gov.in/content/raj/forest/en/forest,-department/departamental-wings/forest-development/model-for-developmental-activities.htm>


संलग्न-मॉडल की प्रति।

भवदीय

मुख्य वन संरक्षक (आयोजना)
राजस्थान, जयपुर।

CRESEP Afforestation Models

S. No.	Name of Model	Page No.
1	High-Density Short-Rotation Plantation (HDSR) under Irrigated Conditions (Distributory)	2
2	High-Density Short-Rotation Plantation (HDSR) under Irrigated Conditions (Minor)	9
3	Eco-Restoration for Woodland Ecosystems	16
4	Eco-Restoration for Grassland Ecosystems (Desert Area)	23
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6	Grassland Development for Wildlife Areas in Arid Regions (50 Ha)	31
7	Grassland Development for Wildlife Areas in Arid Regions (100 Ha)	36



 उ.व.सं. (प्रशासन)
 प्रमुखसं (टी)
 राज. जयपुर


 (एस.आर.वी. मूर्थी)
 मु.व.सं. (आयोजना)
 राजस्थान, जयपुर

**Model Cost Norms for High-Density Short-Rotation Plantation (HDSR) under
Irrigated Conditions (Distributory) under CRESEP
As per Notification issued by GoR dated 28th July 1990**

Unit Area: 50 RKM (15.6 Ha) Perimeter: Average 3324 RM (1.562 Km length on both sides of the Cana
No. of Plants: 250/RKM
Labour Rate: ₹ 285/Day Spacing: 3 M X 4 M (Row to Row spacing: 3M;
Plant to Plant spacing: 4M)
Mandatory Green Belt Width: 50 Meters on both sides of Canal.

YEAR 0: ADVANCE ACTION							
S. No.	Item of Work	Unit	Quantity	Unit Rate	Labour Cost	Material Cost	Total Cost
1	Survey of area for fencing posts, marking of segments/ plots, preparation of plantation card and journal.	Prorata	1	₹ 195.79	₹ 176.43	₹ 19.36	₹ 195.79
2	Site Clearance including removal of unwanted bushes	RKM	1	₹ 402.08	₹ 372.46	₹ 29.62	₹ 402.08
3	Fencing on both sides of canal with RCC Post / Angle iron posts (2.40 mt high, 6 m apart having 4 strand barbed wire and Welded wire mesh of 14 gauge; mesh size 5" x 5"; height 1.50mtr)(0.6 M in foundation and 1.8 M above ground)- 102.4 meters	Meter	66.48	252.57	₹ 2,250.35	₹ 14,540.51	₹ 16,790.85
4	Raising of 275 plants (250 for planting and 10% extra).	Plant	275	₹ 14.00	₹ 2,538.18	₹ 1,311.82	₹ 3,850.00
5	Lay out and digging of pits size (0.45m x 0.45m x 0.45m) in command area	Pit	125	₹ 12.97	₹ 1,467.04	₹ 154.21	₹ 1,621.25
6	Purchase of irrigation equipments-						
6a	Purchase of 5 HP engine	Prorata	1	₹ 840.00	₹ -	₹ 840.00	₹ 840.00
6b	Purchase of HDPE/ LGS pipe - (3 inch diameter) 2 m per RKM	Prorata	1	₹ 313.26	₹ -	₹ 313.26	₹ 313.26
6c	Purchase of PVC pipes of 3 inch dia & 1 inch diameter	Prorata	1	₹ 195.93	₹ -	₹ 195.93	₹ 195.93
7	Purchase of Tools & plants	Prorata	1	₹ 143.24	₹ 40.72	₹ 102.52	₹ 143.24
8	Purchase of Insecticides, Fertilizers - DAP/ NPK/Urea/ vermi compost	Prorata	1	₹ 240.35	₹ -	₹ 240.35	₹ 240.35
9	Sign Board including Painting and Fixing	Prorata	1	₹ 82.29	₹ 15.08	₹ 67.21	₹ 82.29



उ.ब.सं. (प्रशासन)
प्रमुखसं (डी)
राज. जयपुर


(एस.आर.प्र. मूर्धा)
मु.ब.सं. (आयोजना)
राजस्थान, जयपुर

**Model Cost Norms for High-Density Short-Rotation Plantation (HDSR) under
Irrigated Conditions (Distributary) under CRESEP
As per Notification issued by GoR dated 28th July 1990**

10	Watch and Ward for 5 months	Prorata	1	₹ 740.78	₹ 740.78	₹ -	₹ 740.78
11	Construction of Cattle guard hut	RKM	1	₹ 461.91	₹ 342.30	₹ 119.61	₹ 461.91
12	Labour Amenities	Prorata	1	₹ 44.32	₹ 15.19	₹ 29.13	₹ 44.32
13	Misc. and unforeseen expenses related to work and material.	Percent	1.0	₹ 259.22	₹ 207.38	₹ 51.84	₹ 259.22
14	Administrative expenditure including office, electricity, stationary, running of vehicles, etc.,	Percent	1.0	₹ 259.22	₹ -	₹ 259.22	₹ 259.22
Total Expenditure (Year 0)				₹ 8,165.90	₹ 18,274.59	₹ 26,440.50	

YEAR 1: PLANTING YEAR							
S. No.	Item of Work	Unit	Quantity	Unit Rate	Labour Cost	Material Cost	Total Cost
1	Maintenance of 275 Plants in Nursery.	Plant	275	₹ 2.74	₹ 598.59	₹ 155.58	₹ 754.18
2	Transport of 275 plants upto site including loading and unloading (upto 5 kms)	Plant	275	₹ 2.12	₹ 553.41	₹ 30.76	₹ 584.17
3	Lay out & digging of pits of size 45cm x 45cm x 45cm in Uncommand area	Pit	125	₹ 8.68	₹ 1,029.00	₹ 56.00	₹ 1,085.00
4	Planting						
4a	Planting of 125 seedlings including local transportation, Treatment of pit with pesticides and fertilizers, making of Thanwala and initial watering with engine in uncommand area.	Plant	125	₹ 19.03	₹ 2,234.42	₹ 144.33	₹ 2,378.75
4b	Planting of 125 seedlings including local transportation, Treatment of pit with pesticides and fertilizers, making of Thanwala and initial watering in command area.	Plant	125	₹ 17.25	₹ 2,021.54	₹ 134.71	₹ 2,156.25
5	Irrigation						
5a	5 times (Sept-to-March) through syphon in command area (125 Plants).	Plant	625	₹ 2.35	₹ 969.38	₹ 499.38	₹ 1,468.75
5b	5 times (Sept-to-March) through engine in uncommand area (125 Plant).	Plant	625	₹ 4.10	₹ 1,691.25	₹ 871.25	₹ 2,562.50
6	Initial Weeding and hoeing of 250 Plants	Plant	250	₹ 3.92	₹ 980.00	₹ -	₹ 980.00
7	Hoeing of 250 Plants (5 times after every irrigation)	Plant	1250	₹ 2.35	₹ 2,937.50	₹ -	₹ 2,937.50


उ.ब.सि. (प्रशासन)
प्रमुखसं (डी)
राज. जयपुर


(एस.आर.वी. मूर्या)
मु.ब.सं. (आयोजना)
राजस्थान, जयपुर

**Model Cost Norms for High-Density Short-Rotation Plantation (HDSR) under
Irrigated Conditions (Distributary) under CRESEP
As per Notification issued by GoR dated 28th July 1990**

8	Application of fertilisers and pesticides (250 plants)	Plant	250	₹ 0.65	₹ 101.03	₹ 60.37	₹ 161.40
9	Raising of 25 plants for replacement (+3; 10 % extra)	Plant	28	₹ 14.00	₹ 258.44	₹ 133.56	₹ 392.00
10	Measures for protection from heat & Frost using locally available material (including collection and local carriage)	Plant	125	₹ 9.40	₹ 1,069.25	₹ 105.75	₹ 1,175.00
11	Labour amenities	Percent	1	₹ 141.85	₹ 121.57	₹ 20.28	₹ 141.85
12	Watch & ward for 12 months	Prorata	1	₹ 1,777.86	₹ 1,777.86	₹ -	₹ 1,777.86
13	Misc. and unforeseen expenses related to work and material.	Percent	1.0	₹ 185.55	₹ 148.44	₹ 37.11	₹ 185.55
14	Administrative expenditure including office, electricity, stationary, running of vehicles, etc.,	Percent	1.0	₹ 185.55	₹ -	₹ 185.55	₹ 185.55
15	Price Escalation	Percent	10	₹ 185.55	₹ 927.76	₹ 927.76	₹ 1,855.52
Total Expenditure (Year 1)					₹ 16,491.68	₹ 2,434.64	₹ 20,781.83

YEAR 2: MAINTENANCE I							
S. No.	Item of Work	Unit	Quantity	Unit Rate	Labour Cost	Material Cost	Total Cost
1	Maintenance of 28 Plants in the Nursery.	Plant	28	₹ 2.74	₹ 60.89	₹ 15.83	₹ 76.72
2	Transport of 28 plants from nursery to site for casualty replacement including loading and unloading	Plant	28	₹ 2.11	₹ 56.53	₹ 2.55	₹ 59.08
3	Re-digging of Pits & Planting for casualty replacement including treatment, local transport and initial watering						
3a	In command area (12 Plants)	Plant	12	₹ 12.18	₹ 146.16	₹ -	₹ 146.16
3b	In uncommand area (13 Plants)	Plant	13	₹ 13.96	₹ 163.12	₹ 18.36	₹ 181.48
4	Irrigation						
4a	3 times Watering (April to June) (250 Plants)	Plant	750	₹ 4.50	₹ 2,227.50	₹ 1,147.50	₹ 3,375.00
4b	5 times (Sept-to-March) through syphon in command area (125 Plants).	Plant	625	₹ 2.35	₹ 969.38	₹ 499.38	₹ 1,468.75
4c	5 times (Sept-to-March) through engine in uncommand area (125 Plants).	Plant	625	₹ 4.10	₹ 1,691.25	₹ 871.25	₹ 2,562.50
5	Weeding and hoeing of 250 plants	Plant	250	₹ 3.92	₹ 980.00	₹ -	₹ 980.00
6	Hoeing of 250 Plants 8 times (after every irrigation)	Plant	2000	₹ 2.35	₹ 4,700.00	₹ -	₹ 4,700.00

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7	Application of fertilisers and pesticides (250 plants)	Plant	250	₹ 0.65	₹ 101.72	₹ 60.78	₹ 162.50
8	Measures for protection from heat & Frost using locally available material (including collection and local carriage)	Plant	50	₹ 9.40	₹ 427.70	₹ 42.30	₹ 470.00
9	Watch & ward for 12 months	Prorata	1	₹ 1,777.86	₹ 1,777.86	-	₹ 1,777.86
10	Repairing of fencing	Percent	1	₹ 167.91	₹ 112.91	₹ 55.00	₹ 167.91
11	Labour amenities	Percent	1	₹ 116.37	₹ 79.22	₹ 37.15	₹ 116.37
12	Misc. and unforeseen expenses related to work and material.	Percent	1.0	₹ 162.44	₹ 129.95	₹ 32.49	₹ 162.44
13	Administrative expenditure including office, electricity, stationary, running of vehicles, etc.,	Percent	1.0	₹ 162.44	-	₹ 162.44	₹ 162.44
14	Price Escalation	Percent	10	₹ 162.44	₹ 812.22	₹ 812.22	₹ 1,624.43
Total Expenditure (Year 2)				₹ 13,494.23	₹ 2,750.10	₹ 18,193.65	

YEAR 3: MAINTENANCE II							
S. No.	Item of Work	Unit	Quantity	Unit Rate	Labour Cost	Material Cost	Total Cost
1	Irrigation						
1a	3 times Watering (April to June) (250 Plants)	Plant	750	₹ 4.50	₹ 2,227.50	₹ 1,147.50	₹ 3,375.00
1b	5 times (Sept-to-March) through syphon in command area (125 Plants).	Plant	625	₹ 2.35	₹ 969.38	₹ 499.38	₹ 1,468.75
1c	5 times (Sept-to-March) through engine in uncommand area (125 Plants).	Plant	625	₹ 4.10	₹ 1,691.25	₹ 871.25	₹ 2,562.50
2	Hoeing of 250 Plants 8 times	Plant	2000	₹ 2.35	₹ 4,700.00	-	₹ 4,700.00
3	Pruning of Plants as per requirement (125 Plants)	Prorata	1	₹ 844.44	₹ 844.44	-	₹ 844.44
4	Watch & ward for 12 months	Prorata	1	₹ 1,777.86	₹ 1,777.86		₹ 1,777.86
5	Repairing of fencing	Percent	1	₹ 167.91	₹ 112.91	₹ 55.00	₹ 167.91
6	Labour amenities	Percent	1	₹ 104.33	-	₹ 104.33	₹ 104.33
7	Misc. and unforeseen expenses related to work and material.	Percent	1.0	₹ 150.01	₹ 120.01	₹ 30.00	₹ 150.01
8	Administrative expenditure including office, electricity, stationary, running of vehicles, etc.,	Percent	1.0	₹ 150.01	-	₹ 150.01	₹ 150.01
9	Price Escalation	Percent	10	₹ 150.01	₹ 750.04	₹ 750.04	₹ 1,500.08
Total Expenditure (Year 3)				₹ 13,193.38	₹ 3,607.50	₹ 16,800.88	


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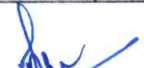
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YEAR 4: MAINTENANCE III							
S. No.	Item of Work	Unit	Quantity	Unit Rate	Labour Cost	Material Cost	Total Cost
1	Irrigation						
1a	Watering Once (April to June) (250 Plants)	Plant	250	₹ 4.50	₹ 742.50	₹ 382.50	₹ 1,125.00
1b	3 times through syphon in command area (125 plants).	Plant	375	₹ 2.35	₹ 881.25	₹ -	₹ 881.25
1c	3 times through engine in uncommand area (125).	Plant	375	₹ 4.10	₹ 1,029.17	₹ 508.34	₹ 1,537.50
2	Hoeing of 250 Plants 4 times	Plant	1000	₹ 2.35	₹ 2,350.00	₹ -	₹ 2,350.00
3	Pruning of Plants (250 Plants)	Prorata	1	₹ 1,501.90	₹ 1,501.90	₹ -	₹ 1,501.90
4	Watch & ward for 12 months	Prorata	1	₹ 1,777.86	₹ 1,777.86	₹ -	₹ 1,777.86
5	Repairing of fencing	Percent	1	₹ 167.91	₹ 112.91	₹ 55.00	₹ 167.91
6	Labour amenities	Percent	1	₹ 66.18	₹ 51.77	₹ 14.40	₹ 66.18
7	Misc. and unforeseen expenses related to work and material.	Percent	1.0	₹ 94.08	₹ 75.26	₹ 18.82	₹ 94.08
8	Administrative expenditure including office, electricity, stationary, running of vehicles, etc.,	Percent	1.0	₹ 94.08	₹ -	₹ 94.08	₹ 94.08
9	Price Escalation	Percent	10	₹ 94.08	₹ 470.38	₹ 470.38	₹ 940.76
Total Expenditure (Year 4)					₹ 8,993.00	₹ 1,543.51	₹ 10,536.51

YEAR 5: MAINTENANCE IV							
S. No.	Item of Work	Unit	Quantity	Unit Rate	Labour Cost	Material Cost	Total Cost
1	Irrigation						
1a	Watering Once (April to June) (250 Plants)	Plant	250	₹ 4.50	₹ 742.50	₹ 382.50	₹ 1,125.00
1b	Once through syphon in command area (125 Plants).	Plant	125	₹ 2.35	₹ 293.75	₹ -	₹ 293.75
1c	Once through engine in uncommand area (125 Plants).	Plant	125	₹ 4.10	₹ 343.06	₹ 169.45	₹ 512.50
2	Hoeing of 250 Plants 2 times (after every irrigation)	Plant	500	₹ 2.35	₹ 1,175.00	₹ -	₹ 1,175.00
3	Pruning of Plants (250 Plants)	Prorata	1	₹ 1,489.84	₹ 1,489.84	₹ -	₹ 1,489.84
4	Watch & ward for 12 months	Prorata	1	₹ 1,777.86	₹ 1,777.86	₹ -	₹ 1,777.86
5	Repairing of fencing	Percent	1	₹ 167.91	₹ 112.50	₹ 55.41	₹ 167.91
6	Labour amenities	Percent	1	₹ 41.57	₹ 32.52	₹ 9.05	₹ 41.57
7	Misc. and unforeseen expenses related to work and material.	Percent	1.0	₹ 65.83	₹ 52.67	₹ 13.17	₹ 65.83
8	Administrative expenditure including office, electricity, stationary, running of vehicles, etc.,	Percent	1.0	₹ 65.83	₹ -	₹ 65.83	₹ 65.83
9	Price Escalation	Percent	10	₹ 65.83	₹ 329.17	₹ 329.17	₹ 658.34
Total Expenditure (Year 5)					₹ 6,348.86	₹ 1,024.57	₹ 7,373.44


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YEAR 6: MAINTENANCE V							
S. No.	Item of Work	Unit	Quantity	Unit Rate	Labour Cost	Material Cost	Total Cost
1	Irrigation						
1a	Watering Once (April to June) (250 Plants)	Plant	250	₹ 4.50	₹ 742.50	₹ 382.50	₹ 1,125.00
1b	Once through syphon in command area (125 Plants).	Plant	125	₹ 2.35	₹ 293.75	₹ -	₹ 293.75
1c	Once through engine in uncommand area (125 Plants).	Plant	125	₹ 4.10	₹ 343.06	₹ 169.45	₹ 512.50
2	Watch & ward for 12 months	Prorata	1	₹ 1,777.86	₹ 1,777.86	₹ -	₹ 1,777.86
3	Repairing of fencing	Percent	1	₹ 167.91	₹ 112.50	₹ 55.41	₹ 167.91
4	Labour amenities	Percent	1	₹ 14.92	₹ 11.67	₹ 3.25	₹ 14.92
5	Misc. and unforeseen expenses related to work and material.	Percent	1.0	₹ 38.92	₹ 31.14	₹ 7.78	₹ 38.92
6	Administrative expenditure including office, electricity, stationary, running of vehicles, etc.,	Percent	1.0	₹ 38.92	₹ -	₹ 38.92	₹ 38.92
7	Price Escalation	Percent	10	₹ 38.92	₹ 194.60	₹ 194.60	₹ 389.19
Total Expenditure (Year 6)					₹ 3,507.07	₹ 851.90	₹ 4,358.97

YEAR 7: MAINTENANCE VI							
S. No.	Item of Work	Unit	Quantity	Unit Rate	Labour Cost	Material Cost	Total Cost
1	Watch & ward for 6 months	Prorata	1	₹ 888.93	₹ 888.93	₹ -	₹ 888.93
2	Repairing of fencing	Percent	1	₹ 167.91	₹ 112.50	₹ 55.41	₹ 167.91
3	Administrative expenditure including office, electricity, stationary, running of vehicles, etc.,	Percent	1.0	₹ 10.57	₹ -	₹ 10.57	₹ 10.57
4	Price Escalation	Percent	10	₹ 10.57	₹ 52.84	₹ 52.84	₹ 105.68
Total Expenditure (Year 6)					₹ 1,054.27	₹ 118.82	₹ 1,173.09

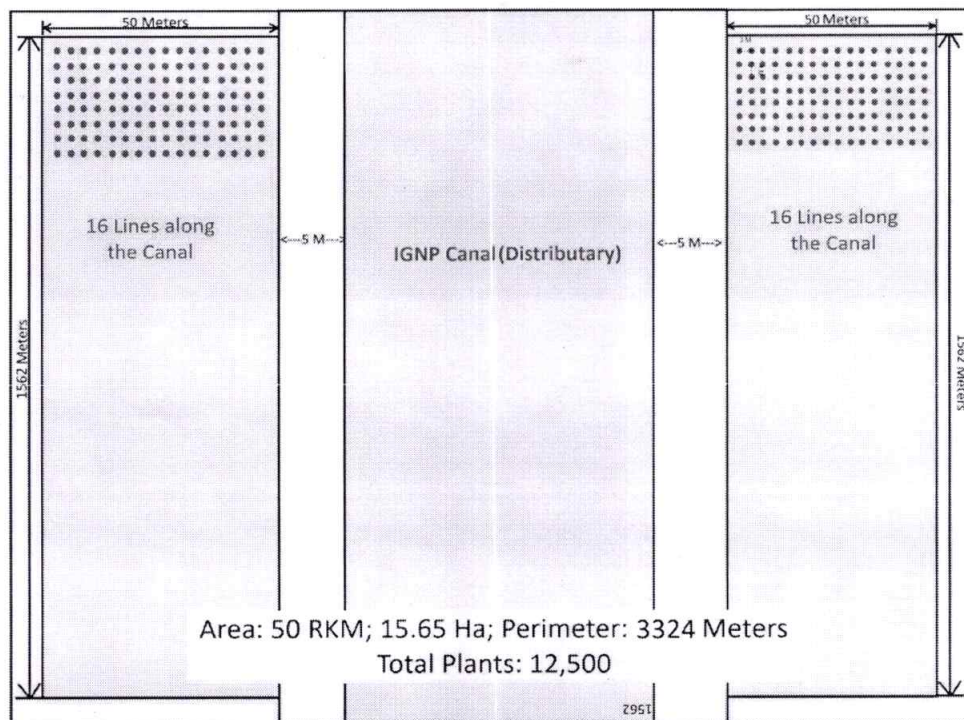
Year-wise Cost Statement: High-Density Short-Rotation Plantation under Irrigated Conditions (Distributory)				
S. No.	Item of Work	Labour Cost	Material Cost	Total Cost
1	ADVANCE ACTION	₹ 8,165.90	₹ 18,274.59	₹ 26,440.50
2	PLANTING YEAR	₹ 16,491.68	₹ 2,434.64	₹ 20,781.83
3	MAINTENANCE I	₹ 13,494.23	₹ 2,750.10	₹ 18,193.65
4	MAINTENANCE II	₹ 13,193.38	₹ 3,607.50	₹ 16,800.88
5	MAINTENANCE III	₹ 8,993.00	₹ 1,543.51	₹ 10,536.51
6	MAINTENANCE IV	₹ 6,348.86	₹ 1,024.57	₹ 7,373.44
7	MAINTENANCE V	₹ 3,507.07	₹ 851.90	₹ 4,358.97
8	MAINTENANCE VI	₹ 1,054.27	₹ 118.82	₹ 1,173.09
	GRAND TOTAL	₹ 71,248.39	₹ 30,605.64	₹ 1,05,658.86

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**Model Cost Norms for High-Density Short-Rotation Plantation (HDSR) under
Irrigated Conditions (Distributory) under CRESEP
As per Notification issued by GoR dated 28th July 1990**

- Note:**
- (1) मॉडल्स कार्यस्थल विशेष पर कार्य सम्पादित कराने के लिये प्राक्कलन नहीं है वरन केवल मार्गदर्शक है। कार्यस्थल पर कार्य सम्पादित कराने के लिए कार्य स्थल की विशेषताओं/परिस्थितियों के अनुसार प्राक्कलन के आधार पर कार्य कराये जावें।
 - (2) सर्दियों में तापमान जमाव बिन्दु तक चला जाता है अतः फ्रॉस्ट कवर का प्राक्धान रखा गया है। इसी प्रकार गर्मियों में तापमान अत्यधिक हो जाने के कारण गर्मियों में भी झोपे बनाये जाने का प्राक्धान रखा गया है।
 - (3) नहर किनारों वृक्षारोपण का निगम द्वारा विदोहन किया जाता है अतः वृक्षारोपण में मुख्यतः इमारती प्रजातियाँ ही रोपित की जावें ताकि परिपक्व वन उपज से अधिकाधिक राजस्व प्राप्तियाँ की जा सकें।
 - (4) Width of Mandatory Green Belt along both sides of Canal is 50 Meters as Notification issues by GoR dated 28th July 1990.
 - (5) Species selection for planation must be done by consulting local farmers by Participatory Rural Appraisal.



● Alignment of Pits

(Signature)
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**Model Cost Norms for High-Density Short-Rotation Plantation (HDSR) under
Irrigated Conditions (Minor) under CRESEP
As per Notification issued by GoR dated 28th July 1990**

Unit Area: 50 RKM (15.65 Ha)

Perimeter: Average 6360 RM (3.13 Km length on both sides of the Canal)


No. of Plants: 250/RKM

Labour Rate: ₹ 285/Day

Spacing: 3 M X 4 M (Row to Row spacing: 3M;
Plant to Plant spacing: 4M)

Mandatory Green Belt Width: 25 Meters on both sides of Canal.

YEAR 0: ADVANCE ACTION							
S. No.	Item of Work	Unit	Quantity	Unit Rate	Labour Cost	Material Cost	Total Cost
1	Survey of area for fencing posts, marking of segments/ plots, preparation of plantation card and journal.	Prorata	1.0	₹ 241.03	₹ 217.19	₹ 23.84	₹ 241.03
2	Site Clearance including removal of unwanted bushes	RKM	1.0	₹ 402.08	₹ 372.46	₹ 29.62	₹ 402.08
3	Fencing on both sides of canal with RCC Post / Angle iron posts (2.40 mt high, 6 m apart having 4 strand barbed wire and Welded wire mesh of 14 gauge; mesh size 5" x 5": height 1.50mtr)(0.6 M in foundation and 1.8 M above ground)- 204.8 meters	Meter	127.2	252.57	₹ 4,305.72	₹ 27,821.18	₹ 32,126.90
4	Raising of 275 plants (250 for planting and 10% extra).	Plant	275.0	₹ 14.00	₹ 2,538.18	₹ 1,311.82	₹ 3,850.00
5	Lay out and digging of pits size (0.45m x 0.45m x 0.45m) in command area	Pit	125.0	₹ 12.97	₹ 1,467.04	₹ 154.21	₹ 1,621.25
6	Purchase of irrigation equipments-						
6a	Purchase of 5 HP engine	Prorata	1.0	₹ 840.00	₹ -	₹ 840.00	₹ 840.00
6b	Purchase of HDPE/ LGS pipe - (3 inch diameter) 2 m per RKM	Prorata	1.0	₹ 313.26	₹ -	₹ 313.26	₹ 313.26
6c	Purchase of PVC pipes of 3 inch dia & 1 inch diameter	Prorata	1.0	₹ 195.93	₹ -	₹ 195.93	₹ 195.93
7	Purchase of Tools & plants	Prorata	1.0	₹ 143.24	₹ 40.72	₹ 102.52	₹ 143.24
8	Purchase of Insecticides, Fertilizers - DAP/ NPK/Urea/ vermi compost	Prorata	1.0	₹ 240.35	₹ -	₹ 240.35	₹ 240.35
9	Sign Board including Painting and Fixing	Prorata	1.0	₹ 82.29	₹ 15.08	₹ 67.21	₹ 82.29



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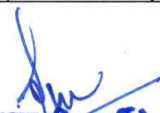

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10	Watch and Ward for 5 months	Prorata	1.0	₹ 740.78	₹ 740.78	₹ -	₹ 740.78
11	Labour Amenities	Percent	1.0	₹ 61.60	₹ 21.11	₹ 40.49	₹ 61.60
12	Construction of Cattle guard hut	Prorata	1.0	₹ 461.91	₹ 342.30	₹ 119.61	₹ 461.91
13	Misc. and unforeseen expenses related to work and material.	Percent	1.0	₹ 413.21	₹ 330.57	₹ 82.64	₹ 413.21
14	Administrative expenditure including office, electricity, stationary, running of vehicles, etc.,	Percent	1.0	₹ 413.21	₹ -	₹ 413.21	₹ 413.21
Total Expenditure (Year 0)					₹ 10,391.15	₹ 31,755.89	₹ 42,147.04

YEAR 1: PLANTING YEAR							
S. No.	Item of Work	Unit	Quantity	Unit Rate	Labour Cost	Material Cost	Total Cost
1	Maintenance of 275 Plants in Nursery.	Plant	275	₹ 2.18	₹ 475.83	₹ 123.67	₹ 599.50
2	Transport of 275 plants upto site including loading and unloading (upto 5 kms)	Plant	275	₹ 2.13	₹ 554.91	₹ 30.84	₹ 585.75
3	Lay out & digging of pits of size 45cm x 45cm x 45cm in Uncommand area	Pit	125	₹ 8.68	₹ 1,029.00	₹ 56.00	₹ 1,085.00
4	Planting						
4a	Planting of 125 seedlings including local transportation, Treatment of pit with pesticides and fertilizers, making of Thanwala and initial watering with engine in uncommand area.	Plant	125	₹ 19.06	₹ 2,237.94	₹ 144.56	₹ 2,382.50
4b	Planting of 125 seedlings including local transportation, Treatment of pit with pesticides and fertilizers, making of Thanwala and initial watering in command area	Plant	125	₹ 17.26	₹ 2,022.71	₹ 134.79	₹ 2,157.50
5	Irrigation						
5a	5 times (Sept.-to-March) through syphon in command area (125 Plants).	Plant	625	₹ 2.35	₹ 969.38	₹ 499.38	₹ 1,468.75
5b	5 times (Sept.-to-March) through engine in uncommand area (125 Plant).	Plant	625	₹ 4.10	₹ 1,691.25	₹ 871.25	₹ 2,562.50
6	Initial Weeding and hoeing of 250 Plants	Plant	250	₹ 3.92	₹ 980.00	₹ -	₹ 980.00
7	Hoeing of 250 Plants 5 times	Plant	1250	₹ 2.35	₹ 2,937.50	₹ -	₹ 2,937.50



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8	Application of fertilisers and pesticides (250 plants)	Plant	250	₹ 0.65	₹ 101.03	₹ 60.37	₹ 161.40
9	Raising of 25 plants for replacement (10 % extra)	Plant	28	₹ 14.00	₹ 258.44	₹ 133.56	₹ 392.00
10	Measures for protection from heat & Frost using locally available material (including collection and local carriage)	Plant	125	₹ 9.40	₹ 1,069.25	₹ 105.75	₹ 1,175.00
11	Labour amenities	Percent	1	₹ 124.45	₹ 106.65	₹ 17.79	₹ 124.45
12	Watch & ward for 12 months	Prorata	1	₹ 1,777.86	₹ 1,777.86	₹ -	₹ 1,777.86
13	Misc. and unforeseen expenses related to work and material.	Percent	1.0	₹ 183.90	₹ 147.12	₹ 36.78	₹ 183.90
14	Administrative expenditure including office, electricity, stationary, running of vehicles, etc.,	Percent	1.0	₹ 183.90	₹ -	₹ 183.90	₹ 183.90
15	Price Escalation	Percent	10	₹ 183.90	₹ 919.49	₹ 919.49	₹ 1,838.97
Total Expenditure (Year 1)					₹ 16,358.86	₹ 2,398.64	₹ 20,596.47

YEAR 2: MAINTENANCE I							
S. No.	Item of Work	Unit	Quantity	Unit Rate	Labour Cost	Material Cost	Total Cost
1	Maintenance of 28 Plants in the Nursery.	Plant	28	₹ 2.18	₹ 48.45	₹ 12.59	₹ 61.04
2	Transport of 28 plants from nursery to site for casualty replacement including loading and unloading	Plant	28	₹ 2.14	₹ 57.33	₹ 2.59	₹ 59.92
3	Re-digging of Pits & Planting for casualty replacement including treatment, local transport and initial watering						
3a	In command area (12 Plants)	Plant	12	₹ 12.18	₹ 146.16	₹ -	₹ 146.16
3b	In uncommand area (13 Plants)	Plant	13	₹ 13.96	₹ 163.12	₹ 18.36	₹ 181.48
4	Irrigation						
4a	3 times Watering (April to June) (250 Plants)	Plant	750	₹ 4.50	₹ 2,227.50	₹ 1,147.50	₹ 3,375.00
4b	5 times (Sept-to-March) through syphon in command area (125 Plants).	Plant	625	₹ 2.34	₹ 965.25	₹ 497.25	₹ 1,462.50
4c	5 times (Sept-to-March) through engine in uncommand area (125 Plants).	Plant	625	₹ 4.11	₹ 1,695.38	₹ 873.38	₹ 2,568.75
5	Weeding and hoeing of 250 plants	Plant	250	₹ 3.91	₹ 977.50	₹ -	₹ 977.50


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6	Hoeing of 250 Plants 8 times (after every irrigation)	Plant	2000	₹ 2.34	₹ 4,680.00	₹ -	₹ 4,680.00
7	Application of fertilisers and pesticides (250 plants)	Plant	250	₹ 0.65	₹ 101.72	₹ 60.78	₹ 162.50
8	Measures for protection from heat & Frost using locally available material (including collection and local carriage)	Plant	50	₹ 9.40	₹ 427.70	₹ 42.30	₹ 470.00
9	Pruning of Plants as per requirement (125Plants)	Prorata	1	₹ 470.48	₹ 470.48	₹ -	₹ 470.48
10	Watch & ward for 12 months	Prorata	1	₹ 1,777.86	₹ 1,777.86	₹ -	₹ 1,777.86
11	Labour amenities	Percent	1	₹ 119.61	₹ 81.43	₹ 38.18	₹ 119.61
12	Repairing of fencing	Percent	1	₹ 321.27	₹ 216.03	₹ 105.24	₹ 321.27
13	Misc. and unforeseen expenses related to work and material.	Percent	1	₹ 168.34	₹ 134.67	₹ 33.67	₹ 168.34
14	Administrative expenditure including office, electricity, stationary, running of vehicles, etc.,	Percent	1	₹ 168.34	₹ -	₹ 168.34	₹ 168.34
15	Price Escalation	Percent	10	₹ 168.34	₹ 841.70	₹ 841.70	₹ 1,683.41
Total Expenditure (Year 2)					₹ 13,819.87	₹ 2,692.93	₹ 18,554.15

YEAR 3: MAINTENANCE II							
S. No.	Item of Work	Unit	Quantity	Unit Rate	Labour Cost	Material Cost	Total Cost
1	Irrigation						
1a	3 times Watering (April to June) (250 Plants)	Plant	750	₹ 4.50	₹ 2,227.50	₹ 1,147.50	₹ 3,375.00
1b	5 times (Sept-to-March) through syphon in command area (125 Plants).	Plant	625	₹ 2.34	₹ 1,462.50	₹ -	₹ 1,462.50
1c	5 times (Sept-to-March) through engine in uncommand area (125 Plants).	Plant	625	₹ 4.11	₹ 1,719.14	₹ 849.61	₹ 2,568.75
2	Hoeing of 250 Plants 8 times	Plant	2000	₹ 2.34	₹ 4,680.00	₹ -	₹ 4,680.00
3	Pruning of Plants as per requirement (125Plants)	Prorata	1	₹ 844.44	₹ 844.44	₹ -	₹ 844.44
4	Watch & ward for 12 months	Prorata	1	₹ 1,777.86	₹ 1,777.86		₹ 1,777.86
5	Labour amenities	Percent	1	₹ 111.50	₹ -	₹ 111.50	₹ 111.50
6	Repairing of fencing	Percent	1	₹ 321.27	₹ 216.03	₹ 105.24	₹ 321.27
7	Misc. and unforeseen expenses related to work and material.	Percent	1	₹ 151.41	₹ 121.13	₹ 30.28	₹ 151.41
8	Administrative expenditure including office, electricity, stationary, running of vehicles, etc.,	Percent	1	₹ 151.41	₹ -	₹ 151.41	₹ 151.41
9	Price Escalation	Percent	10	₹ 151.41	₹ 757.07	₹ 757.07	₹ 1,514.13
Total Expenditure (Year 3)					₹ 13,805.67	₹ 3,152.61	₹ 16,958.27

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YEAR 4: MAINTENANCE III							
S. No.	Item of Work	Unit	Quantity	Unit Rate	Labour Cost	Material Cost	Total Cost
1	Irrigation						
1a	Watering Once (April to June) (250 Plants)	Plant	250	₹ 4.50	₹ 742.50	₹ 382.50	₹ 1,125.00
1b	3 times through syphon in command area (125 plants).	Plant	375	₹ 2.35	₹ 881.25	₹ -	₹ 881.25
1c	3 times through engine in uncommand area (125).	Plant	375	₹ 4.10	₹ 1,029.17	₹ 508.34	₹ 1,537.50
2	Hoeing of 250 Plants 4 times	Plant	1000	₹ 2.35	₹ 2,350.00	₹ -	₹ 2,350.00
3	Pruning of Plants (250 Plants)	Prorata	1	₹ 1,501.90	₹ 1,501.90	₹ -	₹ 1,501.90
4	Watch & ward for 12 months	Prorata	1	₹ 1,777.86	₹ 1,777.86	₹ -	₹ 1,777.86
5	Labour amenities	Percent	1	₹ 67.21	₹ 52.58	₹ 14.63	₹ 67.21
6	Repairing of fencing	Percent	1	₹ 321.27	₹ 216.03	₹ 105.24	₹ 321.27
7	Misc. and unforeseen expenses related to work and material.	Percent	1	₹ 95.62	₹ 76.50	₹ 19.12	₹ 95.62
8	Administrative expenditure including office, electricity, stationary, running of vehicles, etc.,	Percent	1	₹ 95.62	₹ -	₹ 95.62	₹ 95.62
9	Price Escalation	Percent	10	₹ 95.62	₹ 478.10	₹ 478.10	₹ 956.20
Total Expenditure (Year 4)					₹ 9,105.88	₹ 1,603.54	₹ 10,709.43

YEAR 5: MAINTENANCE IV							
S. No.	Item of Work	Unit	Quantity	Unit Rate	Labour Cost	Material Cost	Total Cost
1	Irrigation						
1a	Watering Once (April to June) (250 Plants)	Plant	250	₹ 4.50	₹ 742.50	₹ 382.50	₹ 1,125.00
1b	Once through syphon in command area (125 Plants).	Plant	125	₹ 2.35	₹ 293.75	₹ -	₹ 293.75
1c	Once through engine in uncommand area (125 Plants).	Plant	125	₹ 4.10	₹ 343.06	₹ 169.45	₹ 512.50
2	Hoeing of 250 Plants 2 times	Plant	500	₹ 2.35	₹ 1,175.00	₹ -	₹ 1,175.00
3	Pruning of Plants (250 Plants)	Prorata	1	₹ 1,489.84	₹ 1,489.84	₹ -	₹ 1,489.84
4	Watch & ward for 12 months	Prorata	1	₹ 1,777.86	₹ 1,777.86	₹ -	₹ 1,777.86
5	Labour amenities	Percent	1	₹ 42.60	₹ 33.33	₹ 9.27	₹ 42.60
6	Repairing of fencing	Percent	1	₹ 321.27	₹ 216.03	₹ 105.24	₹ 321.27
7	Misc. and unforeseen expenses related to work and material.	Percent	1	₹ 67.38	₹ 53.90	₹ 13.48	₹ 67.38
8	Administrative expenditure including office, electricity, stationary, running of vehicles, etc.,	Percent	1	₹ 67.38	₹ -	₹ 67.38	₹ 67.38
9	Price Escalation	Percent	10	₹ 67.38	₹ 336.89	₹ 336.89	₹ 673.78
Total Expenditure (Year 5)					₹ 6,462.16	₹ 1,084.20	₹ 7,546.36


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YEAR 6: MAINTENANCE V							
S. No.	Item of Work	Unit	Quantity	Unit Rate	Labour Cost	Material Cost	Total Cost
1	Irrigation						
1a	Watering Once (April to June) (250 Plants)	Plant	250	₹ 4.50	₹ 742.50	₹ 382.50	₹ 1,125.00
1b	Once through syphon in command area (125 Plants).	Plant	125	₹ 2.35	₹ 293.75	₹ -	₹ 293.75
1c	Once through engine in uncommand area (125 Plants).	Plant	125	₹ 4.10	₹ 343.06	₹ 169.45	₹ 512.50
2	Watch & ward for 12 months	Prorata	1	₹ 1,777.86	₹ 1,777.86	₹ -	₹ 1,777.86
3	Labour amenities	Percent	1	₹ 15.95	₹ 12.48	₹ 3.47	₹ 15.95
4	Repairing of fencing	Percent	1	₹ 321.27	₹ 215.25	₹ 106.02	₹ 321.27
5	Misc. and unforeseen expenses related to work and material.	Percent	1	₹ 40.46	₹ 28.32	₹ 12.14	₹ 40.46
6	Administrative expenditure including office, electricity, stationary, running of vehicles, etc.,	Percent	1	₹ 40.46	₹ -	₹ 40.46	₹ 40.46
7	Price Escalation	Percent	10	₹ 40.46	₹ 202.32	₹ 202.32	₹ 404.63
Total Expenditure (Year 6)					₹ 3,615.53	₹ 916.35	₹ 4,531.88

YEAR 7: MAINTENANCE VI							
S. No.	Item of Work	Unit	Quantity	Unit Rate	Labour Cost	Material Cost	Total Cost
1	Watch & ward for 6 months	Prorata	1	₹ 888.93	₹ 888.93	₹ -	₹ 888.93
2	Repairing of fencing	Percent	1	₹ 321.27	₹ 215.25	₹ 106.02	₹ 321.27
3	Administrative expenditure including office, electricity, stationary, running of vehicles, etc.,	Percent	1	₹ 12.10	₹ -	₹ 12.10	₹ 12.10
4	Price Escalation	Percent	10	₹ 12.10	₹ 60.51	₹ 60.51	₹ 121.02
Total Expenditure (Year 6)					₹ 1,164.69	₹ 178.63	₹ 1,343.32


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**Model Cost Norms for High-Density Short-Rotation Plantation (HDSR) under
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Year-wise Cost Statement: High-Density Short-Rotation Plantation under Irrigated Conditions (Minor)				
S. No.	Item of Work	Labour Cost	Material Cost	Total Cost
1	ADVANCE ACTION	₹ 10,391.15	₹ 31,755.89	₹ 42,147.04
2	PLANTING YEAR	₹ 16,358.86	₹ 2,398.64	₹ 20,596.47
3	MAINTENANCE I	₹ 13,819.87	₹ 2,692.93	₹ 18,854.15
4	MAINTENANCE II	₹ 13,805.67	₹ 3,152.61	₹ 16,958.27
5	MAINTENANCE III	₹ 9,105.88	₹ 1,603.54	₹ 10,709.43
6	MAINTENANCE IV	₹ 6,462.16	₹ 1,084.20	₹ 7,546.36
7	MAINTENANCE V	₹ 3,615.53	₹ 916.35	₹ 4,531.88
8	MAINTENANCE VI	₹ 1,164.69	₹ 178.63	₹ 1,343.32
	GRAND TOTAL	₹ 74,723.81	₹ 43,782.79	₹ 1,22,686.93

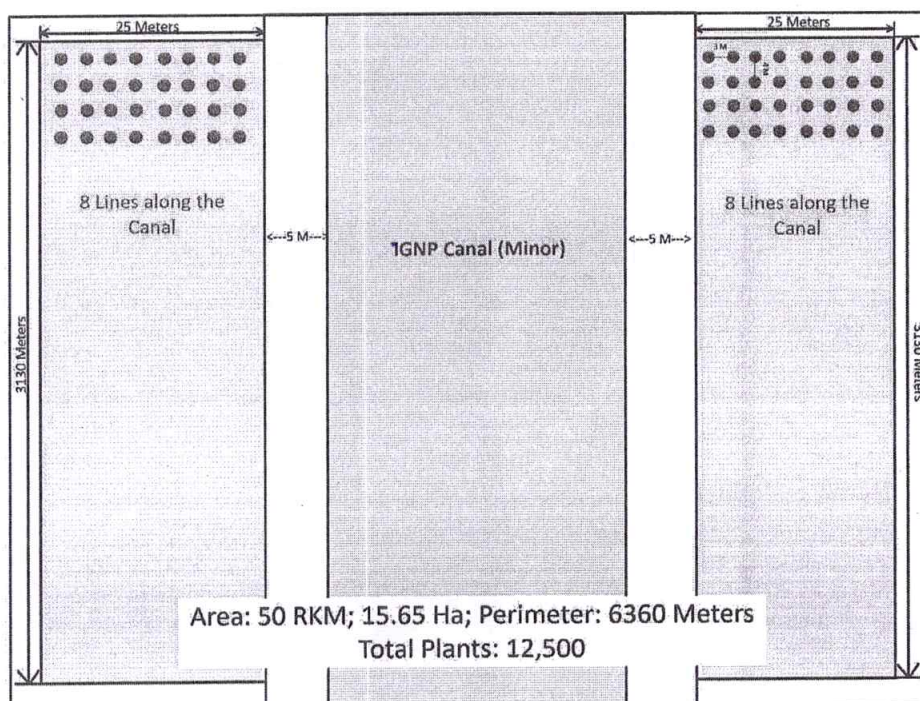
नोट :- (1) मॉडल्स कार्यस्थल विशेष पर कार्य सम्पादित कराने के लिये प्राक्कलन नहीं है वरन केवल मार्गदर्शक है। कार्यस्थल पर कार्य सम्पादित कराने के लिए कार्य स्थल की विशेषताओं/परिस्थितियों के अनुसार प्राक्कलन के आधार पर कार्य कराये जायें।

Note: (2) सर्दियों में तापमान जमाव बिन्दु तक चला जाता है अतः फ़्रोस्ट कवर का प्राक्धान रखा गया है। इसी प्रकार गर्मियों में तापमान अत्यधिक हो जाने के कारण गर्मियों में भी झोपे बनाये जाने का प्राक्धान रखा गया है।

(3) नहर किनारों वृक्षारोपण का निगम द्वारा विदोहन किया जाता है अतः वृक्षारोपण में मुख्यतः इमारती प्रजातियाँ ही रोपित की जायें ताकि परिपक्व वन उपज से अधिकाधिक राजस्व प्राप्तियाँ की जा सकें।

(4) Width of Mandatory Green Belt along both sides of Canal is 25 Meters as Notification issues by GoR dated 28th July 1990.

(5) Species selection for planation must be done by consulting local farmers by Participatory Rural Appraisal.



● Alignment of Pits

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Model Cost Norms for Eco-Restoration for Woodland Ecosystems under CRESEP

Unit Area: 50 Ha
 No. of Plants: 100/Ha
 Labour Rate: ₹ 285/Day

Perimeter: length width Total
 1000 500 3000 Meters

Spacing: As per site conditions and planted species.


YEAR 0: ADVANCE ACTION								
S. No.	Item of Work	Unit	Quantity	Unit Rate	Labour Cost	Material Cost	Total Cost	Remarks
1a	Survey of area, Layout of contour trenches/Furrows, and marking of segments/plots, preparation of Stock Maps of the compartment, treatment plan and GIS maps, etc.,	Prorata	1.0	₹ 600.00	₹ 534.00	₹ 66.00	₹ 600.00	Stock Map (s) of the compartment in which the plantation is sited is to be prepared.
1b	Preparation of drainage maps and assessment of required SMC works	Prorata	1.0	₹ 600.00	₹ 534.00	₹ 66.00	₹ 600.00	
2	Fencing							
2a	Stone wall fencing 1.20m high 0.80m at base & 0.60 at top (on an average 20m/ha.)	Meter	20.0	₹ 285.00	₹ 5,700.00	₹ -	₹ 5,700.00	As per the site conditions type of fencing may be decided.
2b	Ditch fencing 1.20m deep, 1.50m wide at top & 0.90m at bottom (on an average 20m/ha.)	Meter	20.0	₹ 309.03	₹ 6,180.60	₹ -	₹ 6,180.60	
2c	Fencing of plantation area with 2.4 mt high angle iron / RCC post and 4 strand barbed wire/ local thorny material or 1.50 mt angle iron post with two lines of wire and 1.5 m broad welded wiremesh (on an average 20m/ha.)	Meter	20.0	₹ 252.57	₹ 5,051.40	₹ -	₹ 5,051.40	
3	Construction of 3 m wide approach/inspection path/Fire Line	Sq. Mt	240.0	₹ 4.42	₹ 636.48	₹ 424.32	₹ 1,060.80	
4a	Digging up Trenches : 200 RMT Staggered Contour Trenches with cross section size: 0.45 cm X 0.45 cm in areas with 6-20% slope	RMT	200.0	₹ 62.51	₹ 12,502.00	₹ -	₹ 12,502.00	
4b	Digging up V Ditches : 100 RMT V Ditches in slope less than 6 % as per site conditions	RMT	100.0	₹ 91.68	₹ 9,168.00	₹ -	₹ 9,168.00	
5	Construction of 15 mt Contour Dykes with cross section 30 x 30 cm on upper slopes and sowing of suitable thorny shrub species along the inner side (at site with 20%-40% slope)	Meter	15.0	₹ 138.91	₹ 2,083.65	₹ -	₹ 2,083.65	


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6	Cost of collection/purchases of grass, herbs, shrubs, climbers, tuberous and other tree species seeds (To improve <i>in-situ</i> floral-diversity)	Prorata	1.0	₹ 455.65	₹ 45.57	₹ 410.09	₹ 455.65	
7	Raising of 200 Grass Slips/Herbaceous Species	Plant	220.0	₹ 2.49	₹ 328.68	₹ 219.12	₹ 547.80	Sowing Site has to be decided.
8	Cost of raising 77 seedlings of Broad-leaved species. (70% of Total Plants)	Plant	77.0	₹ 9.82	₹ 491.49	₹ 264.65	₹ 756.14	
9	Digging of 30cm x 30cm cross section trench along inner side of stone wall fencing and seed sowing (20 m)	Meter	20.0	₹ 23.85	₹ 462.69	₹ 14.31	₹ 477.00	
10	Restoration of natural regeneration of other species (including RET and 'umbrella' Species) by cutback/singling out, weeding, cultural operations and making crescent shaped mounds (Thawla) on the lower side of seedlings	Prorata	1.0	₹ 1,425.00	₹ 1,425.00	₹ -	₹ 1,425.00	Species has to be mentioned.
11	<i>In situ</i> Soil & Moisture Conservation measures like Check dams, Nadis, Earthen Bunds etc.	Prorata	1.0	₹ 5,455.93	₹ 5,455.93	₹ -	₹ 5,455.93	As per survey done under 1b.
12	Construction/Renovation of Thatched cattle guard hut on a raised platform with Solar lights, chargers, drinking water facility, etc.,	Prorata	1.0	₹ 1,300.00	₹ 650.00	₹ 650.00	₹ 1,300.00	One such hut in a cluster of two or more plantations or for renovation of nearby Chowki or Naka, if present
13	Purchase or construction of Water storage Tank	Prorata	1.0	₹ 1,100.00	₹ 660.00	₹ 440.00	₹ 1,100.00	As per market rate
14	Purchase of tools including fire fighting tools, data loggers & storage devices, survey / mensuration equipments, power backups, battery, solar equipments, etc.,	Prorata	1.0	₹ 550.00	₹ -	₹ 550.00	₹ 550.00	This item shall not be reappropriated.
15	Labour Amenities	Prorata	1.0	₹ 507.96	₹ 253.98	₹ 253.98	₹ 507.96	
16	Watch and ward for 4 months	Prorata	1.0	₹ 693.24	₹ 693.24	₹ -	₹ 693.24	
17	Construction of gate and fixing of sign boards.	Prorata	1.0	₹ 646.00	₹ 258.40	₹ 387.60	₹ 646.00	
18	Soil Health Analysis	Samples	0.1	₹ 300.00	₹ 30.00	₹ -	₹ 30.00	As per Market Rate
19	Misc. and unforeseen expenses related to work & material.	Percent	1.0	₹ 568.91	₹ 455.13	₹ 113.78	₹ 568.91	
20	Administrative expenditure including office, electricity, stationary, running of vehicles, etc.,	Percent	1.0	₹ 568.91	₹ -	₹ 568.91	₹ 568.91	
Total Expenditure (Year 0)					₹ 53,600.23	₹ 4,428.76	₹ 58,028.99	

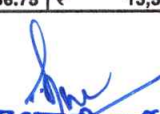

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Model Cost Norms for Eco-Restoration for Woodland Ecosystems under CRESEP

YEAR 1: SOWING YEAR								
S. No.	Item of Work	Unit	Quantity	Unit Rate	Labour Cost	Material Cost	Total Cost	Remarks
1	Maintenance of 77 plants in nursery	Plant	77.0	₹ 2.37	₹ 136.87	₹ 45.62	₹ 182.49	
2	Cost of Raising 33 seedlings of thorny species (30% of Total Plants).	Plant	33.0	₹ 9.82	₹ 210.64	₹ 113.42	₹ 324.06	
3	Repair of Fencing	Percent	1.0	₹ 169.32	₹ 169.32	₹ -	₹ 169.32	
4	Restoration of natural regeneration of other species (including RET and 'umbrella' Species) by cutback/singling out, weeding, cultural operations and making crescent shaped mounds (Thawla) on the lower side of seedlings	Prorata	1.0	₹ 1,425.00	₹ 1,425.00	₹ -	₹ 1,425.00	
5	Sowing/dibbling of seeds of grass/thorny Tree species on the mound of contour trenches (200 RMTX2), V-ditch (100 RMTX2) and ditch fencing (20 MTX3) Total - 660 m	Meter	660.0	₹ 0.64	₹ 422.40	₹ -	₹ 422.40	
6	Weeding on 200 RMT contour trenches, 100 RMT V-ditch, 20 Mt Ditch Fencing and spacement/singling two times	RMT	640.0	₹ 5.02	₹ 3,212.80	₹ -	₹ 3,212.80	
7	Sowing of seeds after making notches of size 20 x 20 x 15 cm	Nos	100.0	₹ 2.34	₹ 234.00	₹ -	₹ 234.00	
8	Weeding on notches, spacement/singling two times	Nos	100.0	₹ 1.27	₹ 127.30	₹ -	₹ 127.30	
9	Digging of pits 0.45 cum including Layout	Plant	100.0	₹ 22.30	₹ 2,230.00	₹ -	₹ 2,230.00	
10	Transport of 200 grass slips including loading from the source and unloading at planting site	Plant	200.0	₹ 0.98	₹ 190.12	₹ 5.88	₹ 196.00	
11	Planting of 200 grass slips	Plant	200.0	₹ 3.13	₹ 438.20	₹ 187.80	₹ 626.00	
12	Maintenance of 3 m wide approach/inspection path/Fire Line	SqMt	240.0	₹ 4.42	₹ 636.48	₹ 424.32	₹ 1,060.80	
13	Labour amenities	Percent	1.0	₹ 92.43	₹ 46.22	₹ 46.22	₹ 92.43	
14	Watch and ward charges for 12 months	Prorata	1.0	₹ 1,782.39	₹ 1,782.39	₹ -	₹ 1,782.39	
15	Soil Health Analysis	Samples	0.1	₹ 300.00	₹ 24.00	₹ 6.00	₹ 30.00	
16	Misc. and unforeseen expenses related to work & material.	Percent	1.0	₹ 121.15	₹ 84.80	₹ 36.34	₹ 121.15	
17	Administrative expenditure including office, electricity, stationary, running of vehicles, etc.,	Percent	1.0	₹ 121.15	₹ -	₹ 121.15	₹ 121.15	
18	Price Escalation	Percent	10.0	₹ 121.15	₹ 605.75	₹ 605.75	₹ 1,211.50	
Total Expenditure (Year 1)					₹ 11,370.54	₹ 986.75	₹ 13,568.79	


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Model Cost Norms for Eco-Restoration for Woodland Ecosystems under CRESEP

YEAR 2: PLANTING YEAR								
S. No.	Item of Work	Unit	Quantity	Unit Rate	Labour Cost	Material Cost	Total Cost	Remarks
1	Maintenance of 33 plants in nursery	Plant	33.0	₹ 2.37	₹ 58.66	₹ 19.55	₹ 78.21	
2	Maintenance of 77 plants in nursery	Plant	77.0	₹ 2.37	₹ 136.87	₹ 45.62	₹ 182.49	
3	Repair of Fencing	Percent	1.0	₹ 169.32	₹ 169.32	₹ -	₹ 169.32	
4	Cutback/singling out and restoration of Natural regeneration of other species	Prorata	1.0	₹ 350.00	₹ 350.00	₹ -	₹ 350.00	
5	Purchase of fertilizers and insecticide and its application	Plant	100.00	₹ 5.38	₹ 430.40	₹ 107.60	₹ 538.00	
6	Transport of 110 seedlings from Nursery to planting site	Plant	110.0	₹ 1.59	₹ 169.65	₹ 5.25	₹ 174.90	
7	Planting of 100 seedlings including refilling of pits	Plant	100.0	₹ 5.11	₹ 511.00	₹ -	₹ 511.00	
8	Making of crescent shaped mounds below 100 planted saplings after planting and dibbling of seeds of tree species.	Plant	100.0	₹ 4.53	₹ 453.00	₹ -	₹ 453.00	
9	Weeding on contour trenches and espacement/singling two times	Prorata	2.0	₹ 586.59	₹ 1,173.18	₹ -	₹ 1,173.18	
10	Weeding and Hoeings of 100 plants two times with repairing plants mound	Plant	200.0	₹ 4.52	₹ 904.00	₹ -	₹ 904.00	
11	Labour amenities	Percent	1.0	₹ 37.56	₹ 18.78	₹ 18.78	₹ 37.56	
12	Watch and ward charges for 12 months	Prorata	1.0	₹ 1,781.02	₹ 1,781.02	₹ -	₹ 1,781.02	
13	Raising of 10% Broad leaved Plants (11) in Nursery for casualty replacement in year 2	Plant	11.0	₹ 9.82	₹ 70.21	₹ 37.81	₹ 108.02	
14	Maintenance of 3 m wide approach/inspection path/Fire Line	SqMt	240.0	₹ 4.42	₹ 636.48	₹ 424.32	₹ 1,060.80	
15	Soil Health Analysis	Samples	0.1	₹ 300.00	₹ 30.00	₹ -	₹ 30.00	
16	Watering of 100 planted saplings upto two times.	Plant	200.0	₹ 4.50	₹ 900.00	₹ -	₹ 900.00	
17	Misc. and unforeseen expenses related to work & material.	Percent	1.0	₹ 84.52	₹ 67.61	₹ 16.90	₹ 84.52	
18	Administrative expenditure including office, electricity, stationary, running of vehicles, etc.,	Percent	1.0	₹ 84.52	₹ -	₹ 84.52	₹ 84.52	
19	Price Escalation	Percent	10.0	₹ 84.52	₹ 422.58	₹ 422.58	₹ 845.15	
Total Expenditure (Year 2)					₹ 7,792.57	₹ 658.93	₹ 9,465.68	

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Model Cost Norms for Eco-Restoration for Woodland Ecosystems under CRESEP

YEAR 3: MAINTENANCE I								
S. No.	Item of Work	Unit	Quantity	Unit Rate	Labour Cost	Material Cost	Total Cost	Remarks
1	Repair of Fencing	Percent	1.0	₹ 169.32	₹ 169.32	₹ -	₹ 169.32	
2	Maintenance of 11 Plants (10%)	Plant	11.0	₹ 2.51	₹ 20.67	₹ 6.89	₹ 27.56	
3	Casualty replacement of 10 plants (10%) including redigging of pits, transportation planting, watering and application of insecticide	Plant	10.0	₹ 14.76	₹ 140.22	₹ 7.38	₹ 147.60	
4	Making/Repairing of crescent shaped mounds below 50 planted saplings after planting and dibbing of 3 seeds of thorny tree species.	Plant	50.0	₹ 4.53	₹ 215.18	₹ 11.33	₹ 226.50	Only if required
5	Preparing and Sowing of pellets of grass seeds / pieces of seed mud cakes in between rows & pits	Prorata	1.0	₹ 650.00	₹ 650.00	₹ -	₹ 650.00	
6	Weeding on contour trenches and espacement/singling one time	Prorata	1.0	₹ 586.59	₹ 586.59	₹ -	₹ 586.59	
7	Weeding and Hoeing in 100 plants two times and repairing of mounds	Plant	200.0	₹ 4.52	₹ 858.80	₹ 45.20	₹ 904.00	
8	Watering of 100 planted saplings twice.	Plant	200.0	₹ 4.50	₹ 900.00	₹ -	₹ 900.00	
9	Labour amenities	Percent	1.0	₹ 41.77	₹ 20.89	₹ 20.89	₹ 41.77	
10	Maintenance of 3 m wide approach/inspection path/Fire Line	SqMt	240.0	₹ 4.42	₹ 636.48	₹ 424.32	₹ 1,060.80	
11	Watch and ward charges for 12 months	Prorata	1.0	₹ 1,781.02	₹ 1,781.02	₹ -	₹ 1,781.02	
12	Soil Health Analysis	Samples	0.1	₹ 300.00	₹ 30.00	₹ -	₹ 30.00	
13	Misc. and unforeseen expenses related to work & material.	Percent	1.0	₹ 65.25	₹ 52.20	₹ 13.05	₹ 65.25	
14	Administrative expenditure including office, electricity, stationary, running of vehicles, etc.,	Percent	1.0	₹ 65.25	₹ -	₹ 65.25	₹ 65.25	
15	Price Escalation	Percent	10.0	₹ 65.25	₹ 326.26	₹ 326.26	₹ 652.52	
Total Expenditure (Year 3)					₹ 6,387.62	₹ 920.56	₹ 7,308.19	

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Model Cost Norms for Eco-Restoration for Woodland Ecosystems under CRESEP

YEAR 4: MAINTENANCE II								
S. No.	Item of Work	Unit	Quantity	Unit Rate	Labour Cost	Material Cost	Total Cost	Remarks
1	Weeding and Hoeing in 100 plants one time and repairing of mounds	Plant	100.0	₹ 4.52	₹ 452.00	₹ -	₹ 452.00	
2	Repair of Fencing	Percent	1.0	₹ 169.32	₹ 169.32	₹ -	₹ 169.32	
3	Labour amenities	Percent	1.0	₹ 6.21	₹ 3.11	₹ 3.11	₹ 6.21	
4	Maintenance of 3 m wide approach/inspection path/Fire Line	SqMt	240.0	₹ 4.42	₹ 636.48	₹ 424.32	₹ 1,060.80	
5	Watch and ward charges for 12 Months	Prorata	1.0	₹ 1,781.02	₹ -	₹ 1,781.02	₹ 1,781.02	
6	Soil Health Analysis	Samples	0.1	₹ 300.00	₹ 30.00	₹ -	₹ 30.00	
7	Misc. and unforeseen expenses related to work & material.	Percent	1.0	₹ 34.99	₹ 27.99	₹ 7.00	₹ 34.99	
8	Administrative expenditure including office, electricity, stationary, running of vehicles, etc.,	Percent	1.0	₹ 34.99	₹ -	₹ 34.99	₹ 34.99	
9	Price Escalation	Percent	10.0	₹ 34.99	₹ 174.97	₹ 174.97	₹ 349.94	
Total Expenditure (Year 4)					₹ 1,493.87	₹ 2,425.41	₹ 3,919.28	

YEAR 5: MAINTENANCE III								
S. No.	Item of Work	Unit	Quantity	Unit Rate	Labour Cost	Material Cost	Total Cost	Remarks
1	Watch and ward charges for 12 Months	Prorata	1.0	₹ 1,781.02	₹ -	₹ 1,781.02	₹ 1,781.02	
2	Repair of Fencing	Percent	1.0	₹ 169.32	₹ 169.32	₹ -	₹ 169.32	
3	Maintenance of 3 m wide approach/inspection path/Fire Line	SqMt	240.0	₹ 4.42	₹ 636.48	₹ 424.32	₹ 1,060.80	
4	Soil Health Analysis	Samples	0.1	₹ 300.00	₹ 30.00	₹ -	₹ 30.00	
5	Misc. and unforeseen expenses related to work & material.	Percent	1.0	₹ 30.41	₹ 24.33	₹ 6.08	₹ 30.41	
6	Administrative expenditure including office, electricity, stationary, running of vehicles, etc.,	Percent	1.0	₹ 30.41	₹ -	₹ 30.41	₹ 30.41	
7	Price Escalation	Percent	10.0	₹ 30.41	₹ 152.06	₹ 152.06	₹ 304.11	
Total Expenditure (Year 5)					₹ 1,012.19	₹ 2,393.89	₹ 3,406.08	


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Model Cost Norms for Eco-Restoration for Woodland Ecosystems under CRESEP

YEAR 6: MAINTENANCE IV								
S. No.	Item of Work	Unit	Quantity	Unit Rate	Labour Cost	Material Cost	Total Cost	Remarks
1	Watch and ward charges for 12 Months	Prorata	1.0	₹ 1,781.02	₹ -	₹ 1,781.02	₹ 1,781.02	
2	Repair of Fencing	Prorata	1.0	₹ 169.32	₹ 169.32	₹ -	₹ 169.32	
3	Maintenance of 3 m wide approach/inspection path/Fire Line	SqMt	240.0	₹ 4.42	₹ 636.48	₹ 424.32	₹ 1,060.80	
4	Soil Health Analysis	Samples	0.1	₹ 300.00	₹ 30.00	₹ -	₹ 30.00	
5	Misc. and unforeseen expenses related to work & material.	Percent	1.0	₹ 30.41	₹ 24.33	₹ 6.08	₹ 30.41	
6	Administrative expenditure including office, electricity, stationary, running of vehicles, etc.,	Percent	1.0	₹ 30.41	₹ -	₹ 30.41	₹ 30.41	
7	Price Escalation	Percent	10.0	₹ 30.41	₹ 152.06	₹ 152.06	₹ 304.11	
Total Expenditure (Year 6)					₹ 1,012.19	₹ 2,393.89	₹ 3,406.08	

Year-wise Cost Statement: Eco-Restoration for Woodland Ecosystems				
S. No.	Item of Work	Labour Cost	Material Cost	Total Cost
1	ADVANCE ACTION	₹ 53,600.23	₹ 4,428.76	₹ 58,028.99
2	SOWING YEAR	₹ 11,370.54	₹ 986.75	₹ 13,568.79
3	PLANTING YEAR	₹ 7,792.57	₹ 658.93	₹ 9,465.68
4	MAINTENANCE I	₹ 6,387.62	₹ 920.56	₹ 7,308.19
5	MAINTENANCE II	₹ 1,493.87	₹ 2,425.41	₹ 3,919.28
6	MAINTENANCE III	₹ 1,012.19	₹ 2,393.89	₹ 3,406.08
7	MAINTENANCE IV	₹ 1,012.19	₹ 2,393.89	₹ 3,406.08
GRAND TOTAL		₹ 82,669.21	₹ 14,208.19	₹ 99,103.08

Note:

- 1 1 % of amount provisioned for only field works is taken calculating Labour Amenities.
- 2 Except Prorata rates all others are taken from the existing Model.
- 3 Purchase of tools, seeds, etc., shall be done only by the Department.
- 4 5 % of amount provisioned for fencing is provided for repair of fencing till one year after planting.


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Model Cost Norms for Eco-Restoration for Grassland Ecosystems (Desert Area) under CRESEP

Unit Area: 50 Ha
 No. of Plants: upto 50/Ha
 Labour Rate: ₹ 285/Day

Perimeter: length 1000 width 500 Total 3000 Meters
 Spacing: As per site conditions and planted species.

YEAR 0: ADVANCE ACTION								
S. No.	Item of Work	Unit	Quantity	Unit Rate	Labour Cost	Material Cost	Total Cost	Remarks
1a	Survey of area, Layout of contour trenches/Furrows, and marking of segments/plots, preparation of Stock Maps of the compartment, treatment plan and GIS maps, etc.,	Prorata	1.0	₹ 600.00	₹ 534.00	₹ 66.00	₹ 600.00	Stock Map (s) of the compartment in which the plantation is sited is to be prepared.
1b	Preparation of drainage maps and assessment of required SMC works	Prorata	1.0	₹ 600.00	₹ 534.00	₹ 66.00	₹ 600.00	
2	Fencing of plantation area with 1.5 mt high angle iron / RCC post and 4 strand barbed wire/ local thorny material or 1.50 mt angle iron post with two lines of wire and 1.2 m broad welded wiremesh	Meter	60.0	179.62	₹ 4,849.74	₹ 5,927.46	₹ 10,777.20	
3	Cost of collection / purchase of grass seeds (~5 Kg/Ha)	Prorata	1.0	₹ 1,200.00	₹ 120.00	₹ 1,080.00	₹ 1,200.00	
4	Raising of Grass Slips (1000 Nos) (20% extra)	Plant	1200.0	₹ 2.49	₹ 1,792.80	₹ 1,195.20	₹ 2,988.00	
5	Cost of raising 55 seedlings (Fodder Species)	Plant	55.0	₹ 9.82	₹ 351.07	₹ 189.04	₹ 540.10	Only indigenous plant species to be raised and planted (eg. <i>Tecomella undulata</i> , <i>Prosopis cineraria</i> , <i>Salvadora persica</i> , etc.) Refrain from planting <i>Acacia tortilis</i> .
6	Construction of 3 m wide approach/inspection path/Fire Line	Sq. Mt	240.0	₹ 4.42	₹ 636.48	₹ 424.32	₹ 1,060.80	
7	Creation of percolation ponds/water storage ponds, etc.,	Prorata	1.0	₹ 1,921.44	₹ 1,921.44	₹ -	₹ 1,921.44	As per survey done under 1b.
8	Construction/Renovation of Thatched cattle guard hut on a raised platform with Solar lights, chargers, drinking water facility, etc.,	Prorata	1.0	₹ 1,300.00	₹ 650.00	₹ 650.00	₹ 1,300.00	One such hut in a cluster of two or more plantations or for renovation of nearby Chowki or Naka, if present
9	Purchase or construction of Water storage Tank	Prorata	1.0	₹ 1,100.00	₹ 968.00	₹ 132.00	₹ 1,100.00	


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Model Cost Norms for Eco-Restoration for Grassland Ecosystems (Desert Area) under CRESEP

10	Purchase of tools including fire fighting tools, data loggers & storage devices, survey / mensuration equipments.	Prorata	1.0	₹ 550.00	₹ 550.00	₹ -	₹ 550.00	
11	Labour amenities	Percent	1.0	₹ 83.76	₹ 41.88	₹ 41.88	₹ 83.76	
12	Watch and ward for 5 months	Prorata	1.0	₹ 742.66	₹ 742.66	₹ -	₹ 742.66	
13	Construction of gate and fixing of sign boards	Prorata	1.0	₹ 646.00	₹ 258.40	₹ 387.60	₹ 646.00	
14	Misc. and unforeseen expenses related to work & material.	Percent	1.0	₹ 241.10	₹ 192.88	₹ 48.22	₹ 241.10	
15	Administrative expenditure including office, electricity, stationary, running of vehicles, etc.,	Percent	1.0	₹ 241.10	₹ -	₹ 241.10	₹ 241.10	
Total Expenditure (Year 0)				₹ 14,143.34	₹ 10,448.81	₹ 24,592.16		

YEAR 1: PLANTING YEAR								
S. No.	Item of Work	Unit	Quantity	Unit Rate	Labour Cost	Material Cost	Total Cost	Remarks
1	Removal of Invasive Species & Weeds	Prorata	1.0	₹ 500.00	₹ 500.00	₹ -	₹ 500.00	
2a	Maintenance of 55 plants in nursery	Plant	55.0	₹ 2.37	₹ 97.76	₹ 32.59	₹ 130.35	
2b	Maintenance of 1000 Grass Slips (in 10cm X 15 cm Bags) (includes 20% Extra)	Plant	1200.0	₹ 1.49	₹ 1,341.00	₹ 447.00	₹ 1,788.00	
3	Repair of Fencing	Percent	1.0	₹ 107.77	₹ 107.77	₹ -	₹ 107.77	
4	Digging up Trenches : 50 RMT Digging up Staggered Contour Trenches as per site requirement with cross section size: 0.45 m X 0.45 m in inter-dunal areas	Meter	50.0	₹ 62.51	₹ 3,125.50	₹ -	₹ 3,125.50	
5a	Transport of 1000 grass slips including loading and unloading	Plant	1000.0	₹ 0.98	₹ 978.20	₹ -	₹ 978.20	
5b	Transportation of 50 Saplings from Nursery to Planting Sites	Plant	50.0	₹ 2.15	₹ 107.50	₹ -	₹ 107.50	
6	Preparing and Sowing of pellets of grass seeds / pieces of seed mud cakes in between rows & pits	Prorata	1.0	₹ 650.00	₹ 650.00	₹ -	₹ 650.00	
7a	Preparation of Soil (furrows, ploughing, etc.) and Sowing of Grass Seeds (Broadcasting/dibbling/pellets/seed drilling, etc.)	Prorata	1.0	₹ 3,000.00	₹ 3,000.00	₹ -	₹ 3,000.00	Enrichment grass sowing in moderately stocked area.
7b	Resowing of grass seeds (For Casualty Replacement)	Prorata	1.0	₹ 500.00	₹ 500.00	₹ -	₹ 500.00	
8	Planting							
8a	Planting: Digging of pits 0.45MX0.45MX0.45M and planting of 50 Plants	Plant	50.0	₹ 17.22	₹ 861.00	₹ -	₹ 861.00	
8b	Planting of 1000 grass slips	Plant	1000.0	₹ 3.13	₹ 2,191.00	₹ 939.00	₹ 3,130.00	

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9	Making of crescent shaped mounds below 50 planted saplings after planting and dibbing of 3 seeds of fodder tree species.	Plant	50.0	₹ 4.52	₹ 226.00	₹ -	₹ 226.00	
10	Maintenance of 3 m wide approach/inspection path/Fire Line.	Sq. Mt	240.0	₹ 4.42	₹ 636.48	₹ 424.32	₹ 1,060.80	
11	Weeding and Hoeings of 50 plants two times with repairing plants mound	Plant	100.0	₹ 3.91	₹ 391.00	₹ -	₹ 391.00	
12	Watering of 50 plants (6 times)	Plant	300.0	₹ 4.50	₹ 1,161.00	₹ 189.00	₹ 1,350.00	
13	Hoeing of 50 plants for six times	Plants	300.0	₹ 2.35	₹ 705.00	₹ -	₹ 705.00	
14	Purchase of fertilizers and insecticide and its application	Plants	50.00	₹ 5.38	₹ 215.20	₹ 53.80	₹ 269.00	
15	Labour amenities	Percent	1.0	₹ 167.94	₹ 83.97	₹ 83.97	₹ 167.94	
16	Watch and ward charges for 12 months	Prorata	1.0	₹ 1,782.39	₹ 1,782.39	₹ -	₹ 1,782.39	
17	Misc. and unforeseen expenses related to work & material.	Percent	1.0	₹ 208.30	₹ 166.64	₹ 41.66	₹ 208.30	
18	Administrative expenditure including office, electricity, stationary, running of vehicles, etc.,	Percent	1.0	₹ 208.30	₹ -	₹ 208.30	₹ 208.30	
19	Price Escalation	Percent	10.0	₹ 208.30	₹ 1,041.52	₹ 1,041.52	₹ 2,083.05	
Total Expenditure (Year 1)					₹ 19,368.94	₹ 3,461.17	₹ 22,830.11	

YEAR 2: MAINTENANCE I								
S. No.	Item of Work	Unit	Quantity	Unit Rate	Labour Cost	Material Cost	Total Cost	Remarks
1	Follow-up Operations for eradication of Invasive weeds	Prorata	1.0	₹ 300.00	₹ 300.00	₹ -	₹ 300.00	
2	Repair of Fencing	Percent	1.0	₹ 107.77	₹ 107.77	₹ -	₹ 107.77	
3	Resowing of grass seeds (Casualty Replacement)	Ha	1.0	₹ 500.00	₹ 500.00	₹ -	₹ 500.00	
4	Watering of 50 plants (4 times)	Plant	200.0	₹ 4.50	₹ 774.00	₹ 126.00	₹ 900.00	
5	Maintenance of 3 m wide approach/inspection path/Fire Line.	Sq. Mt	240.0	₹ 4.42	₹ 636.48	₹ 424.32	₹ 1,060.80	
6	Weeding and Hoeings of 50 plants two times with repairing plants mound	Plant	100.0	₹ 3.91	₹ 391.00	₹ -	₹ 391.00	
7	Hoeing of 50 plants for four times	Plants	200.0	₹ 2.35	₹ 470.00	₹ -	₹ 470.00	
8	Labour amenities	Percent	1.0	₹ 31.79	₹ 15.90	₹ 15.90	₹ 31.79	
9	Watch and ward charges for 12 months	Prorata	1.0	₹ 1,782.38	₹ 1,782.38	₹ -	₹ 1,782.38	
10	Misc. and unforeseen expenses related to work & material.	Percent	1.0	₹ 55.44	₹ 44.35	₹ 11.09	₹ 55.44	
11	Administrative expenditure including office, electricity, stationary, running of vehicles, etc.,	Percent	1.0	₹ 55.44	₹ -	₹ 55.44	₹ 55.44	
12	Price Escalation	Percent	10.0	₹ 55.44	₹ 277.19	₹ 277.19	₹ 554.37	
Total Expenditure (Year 2)					₹ 4,999.07	₹ 909.93	₹ 5,908.99	


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YEAR 3: MAINTENANCE II								
S. No.	Item of Work	Unit	Quantity	Unit Rate	Labour Cost	Material Cost	Total Cost	Remarks
1	Follow-up Operations for eradication of Invasive weeds	Prorata	1.0	₹ 200.00	₹ 200.00	₹ -	₹ 200.00	
2	Repair of Fencing	Percent	1.0	₹ 107.77	₹ 107.77	₹ -	₹ 107.77	
3	Watering of 50 plants (4 times)	Plant	200.0	₹ 4.50	₹ 774.00	₹ 126.00	₹ 900.00	
4	Maintenance of 3 m wide approach/inspection path/Fire Line.	Sq. Mt	240.0	₹ 4.42	₹ 636.48	₹ 424.32	₹ 1,060.80	
5	Weeding and Hoeings of 50 plants two times with repairing plants mound	Plant	100.0	₹ 3.91	₹ 391.00	₹ -	₹ 391.00	
6	Hoeing of 50 plants for 4 times	Plants	200.0	₹ 2.35	₹ 470.00	₹ -	₹ 470.00	
7	Labour amenities	Percent	1.0	₹ 25.79	₹ 12.90	₹ 12.90	₹ 25.79	
8	Watch and ward charges for 12 months	Prorata	1.0	₹ 1,782.38	₹ 1,782.38	₹ -	₹ 1,782.38	
9	Misc. and unforeseen expenses related to work & material.	Percent	1.0	₹ 49.38	₹ 39.50	₹ 9.88	₹ 49.38	
10	Administrative expenditure including office, electricity, stationary, running of vehicles, etc.,	Percent	1.0	₹ 49.38	₹ -	₹ 49.38	₹ 49.38	
11	Price Escalation	Percent	10.0	₹ 49.38	₹ 246.89	₹ 246.89	₹ 493.77	
Total Expenditure (Year 3)					₹ 4,460.92	₹ 869.36	₹ 5,330.27	

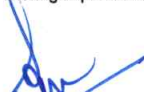
YEAR 4: MAINTENANCE III								
S. No.	Item of Work	Unit	Quantity	Unit Rate	Labour Cost	Material Cost	Total Cost	Remarks
1	Maintenance of 3 m wide approach/inspection path/Fire Line.	Sq. Mt	240.0	₹ 4.42	₹ 636.48	₹ 424.32	₹ 1,060.80	
2	Watering of 50 plants two times	Plant	100.0	₹ 4.50	₹ 387.00	₹ 63.00	₹ 450.00	
3	Hoeing of 50 plants for two times	Plants	100.0	₹ 2.35	₹ 235.00	₹ -	₹ 235.00	
4	Removal (culling/pricking out) of new Tree species regeneration.	Prorata	1.0	₹ 200.00	₹ 200.00	₹ -	₹ 200.00	
5	Watch and ward charges for 12 Months	Prorata	1.0	₹ 1,782.38	₹ -	₹ 1,782.38	₹ 1,782.38	
6	Administrative expenditure including office, electricity, stationary, running of vehicles, etc.,	Percent	1.0	₹ 37.28	₹ -	₹ 37.28	₹ 37.28	
7	Price Escalation	Percent	10.0	₹ 37.28	₹ 186.41	₹ 186.41	₹ 372.82	
Total Expenditure (Year 4)					₹ 186.41	₹ 2,006.07	₹ 2,192.48	

Year-wise Cost Statement: Eco-Restoration for Grassland Ecosystems (Desert Area)				
S. No.	Item of Work	Labour Cost	Material Cost	Total Cost
1	ADVANCE ACTION	₹ 14,143.34	₹ 10,448.81	₹ 24,592.16
2	PLANTING YEAR	₹ 19,368.94	₹ 3,461.17	₹ 22,830.11
3	MAINTENANCE I	₹ 4,999.07	₹ 909.93	₹ 5,908.99
4	MAINTENANCE II	₹ 4,460.92	₹ 869.36	₹ 5,330.27
5	MAINTENANCE III	₹ 186.41	₹ 2,006.07	₹ 2,192.48
GRAND TOTAL		₹ 43,158.68	₹ 17,695.34	₹ 60,854.01

Note:

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|--|---|
| <p>1 1 % of amount provisioned for only field works is taken calculating Labour Amenities.</p> <p>2 Except Prorata rates all others are taken from the existing Model.</p> | <p>3 Purchase of tools, seeds, etc., shall be done only by the Department.</p> <p>4 5 % of amount provisioned for fencing is provided for repair of fencing till one year after planting.</p> |
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Model Cost Norms for Eco-Restoration for Grassland Ecosystems (Non-Desert Area) under CRESEP

Unit Area: 50 Ha	Perimeter:	length	width	Total	
No. of Plants: upto 50/Ha		1000	500	3000	Meters
Labour Rate: ₹ 285/Day	Spacing:	As per site conditions and planted species.			

YEAR 0: ADVANCE ACTION								
S. No.	Item of Work	Unit	Quantity	Unit Rate	Labour Cost	Material Cost	Total Cost	Remarks
1a	Survey of area, Layout of contour trenches/Furrows, and marking of segments/plots, preparation of Stock Maps of the compartment, treatment plan and GIS maps, etc.,	Prorata	1.0	₹ 600.00	₹ 534.00	₹ 66.00	₹ 600.00	Stock Map (s) of the compartment in which the plantation is sited is to be prepared.
1b	Preparation of drainage maps and assessment of required SMC works	Prorata	1.0	₹ 600.00	₹ 534.00	₹ 66.00	₹ 600.00	
2a	Stone wall fencing 1.20m high 0.80m at base & 0.60m at top (on an average 30m/ha.)	Meter	30.0	₹ 285.00	₹ 8,550.00	₹ -	₹ 8,550.00	
2b	Ditch fencing 1.20m deep, 1.50m wide at top & 0.90m at bottom (on an average 30m/ha.)	Meter	30.0	₹ 309.02	₹ 9,270.60	₹ -	₹ 9,270.60	
3	Cost of collection / purchase of grass seeds, indigenous herbaceous legumes (~5 Kg/ha)	Prorata	1.0	₹ 1,200.00	₹ 120.00	₹ 1,080.00	₹ 1,200.00	
4	Raising of Grass Slips (800 Nos) (20% Extra)	Plant	960.0	₹ 2.49	₹ 1,434.24	₹ 956.16	₹ 2,390.40	
5	Cost of raising 55 seedlings (Fodder Species)	Plant	55.0	₹ 9.82	₹ 351.07	₹ 189.04	₹ 540.10	
6	Construction of 3 m wide approach/inspection path/Fire Line.	Sq. Mt	240.0	₹ 4.42	₹ 636.48	₹ 424.32	₹ 1,060.80	
7	Creation of percolation ponds/water storage ponds, etc.	Prorata	1.0	₹ 1,021.09	₹ 1,021.09	₹ -	₹ 1,021.09	
8	Construction of Thatched cattle guard hut on a raised platform with Solar lights, chargers, drinking water facility, etc.	Prorata	1.0	₹ 1,300.00	₹ 650.00	₹ 650.00	₹ 1,300.00	One such hut in a cluster of two or more plantations or for renovation of nearby Chowki or Naka, if present
9	Purchase or construction of Water storage Tank	Prorata	1.0	₹ 1,100.00	₹ 968.00	₹ 132.00	₹ 1,100.00	
10	Purchase of tools including fire fighting tools, data loggers & storage devices, survey / mensuration equipments	Prorata	1.0	₹ 550.00	₹ 550.00	₹ -	₹ 550.00	

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Model Cost Norms for Eco-Restoration for Grassland Ecosystems (Non-Desert Area) under CRESEP

11	Labour amenities	Prorata	1.0	₹ 224.90	₹ 112.45	₹ 112.45	₹ 224.90	
12	Watch and ward for 5 months	Prorata	1.0	₹ 742.50	₹ 742.50	₹ -	₹ 742.50	
13	Construction of gate and fixing of sign boards	Prorata	1.0	₹ 646.00	₹ 258.40	₹ 387.60	₹ 646.00	
14	Misc. and unforeseen expenses related to work & material.	Percent	1.0	₹ 297.96	₹ 238.37	₹ 59.59	₹ 297.96	
15	Administrative expenditure including office, electricity, stationary, running of vehicles, etc.	Percent	1.0	₹ 297.96	₹ -	₹ 297.96	₹ 297.96	
Total Expenditure (Year 0)				₹ 25,971.20	₹ 4,421.12	₹ 30,392.32		

YEAR 1: PLANTING YEAR								
S. No.	Item of Work	Unit	Quantity	Unit Rate	Labour Cost	Material Cost	Total Cost	Remarks
1a	Maintenance of 55 plants in nursery	Plant	55.0	₹ 2.37	₹ 97.76	₹ 32.59	₹ 130.35	
1b	Maintenance of 1000 Grass Slips (in 10cm X 15 cm Bags) (includes 20% Extra)	Plant	1200.0	₹ 1.49	₹ 1,341.00	₹ 447.00	₹ 1,788.00	
2	Repair of Fencing	Percent	1.0	₹ 178.21	₹ 178.21	₹ -	₹ 178.21	
3	Removal of Exotic-Invasive Weeds and Unwanted species	Prorata	1.0	₹ 500.00	₹ 500.00	₹ -	₹ 500.00	
4	Digging up Trenches : 50 RMT Digging up Staggered Contour Trenches as per site requirement with cross section size: 0.45 m X 0.45 m in inter-dunal areas	Meter	50.0	₹ 62.51	₹ 3,125.50	₹ -	₹ 3,125.50	
5a	Transport of 1000 grass slips including loading and unloading	Plant	1000.0	₹ 0.98	₹ 978.20	₹ -	₹ 978.20	
5b	Transportation of 50 Saplings from Nursery to Planting Sites	Plant	50.0	₹ 2.15	₹ 107.50	₹ -	₹ 107.50	
6	Preparing and Sowing of pellets of grass seeds / pieces of seed mud cakes in between rows & pits	Prorata	1.0	₹ 650.00	₹ 650.00	₹ -	₹ 650.00	
7a	Preparation of Soil (furrows, ploughing, etc.) and Sowing of Grass Seeds (Broadcasting/dibbling/pellet s/seed drilling, etc.)	Prorata	1.0	₹ 3,000.00	₹ 3,000.00	₹ -	₹ 3,000.00	Enrichment grass sowing in moderately stocked area.
7b	Resowing of grass seeds (For Casualty Replacement)	Prorata	1.0	₹ 500.00	₹ 500.00	₹ -	₹ 500.00	
8	Planting							
8a	Planting: Digging of pits 0.45MX0.45MX0.45M and planting of 50 Plants	Plant	50.0	₹ 17.22	₹ 861.00	₹ -	₹ 861.00	
8b	Planting of 1000 grass slips	Plant	1000.0	₹ 3.13	₹ 2,191.00	₹ 939.00	₹ 3,130.00	
9a	Digging of Contour furrows by Tractor (15 x 15 cm)	RMT	200.0	₹ 1.06	₹ -	₹ 212.00	₹ 212.00	
9b	Digging of Contour Furrows (Manual)	RMT	200.0	₹ 2.15	₹ 430.00	₹ -	₹ 430.00	
10	Watering of 50 plants (6 times)	Plant	300.0	₹ 4.50	₹ 1,161.00	₹ 189.00	₹ 1,350.00	

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Model Cost Norms for Eco-Restoration for Grassland Ecosystems (Non-Desert Area) under CRESEP

11	Weeding and Hoeings of 50 plants two times with repairing plants mound	Plant	100.0	₹ 3.91	₹ 391.00	₹ -	₹ 391.00	
12	Hoeing of 50 plants for six times	Plants	300.0	₹ 2.35	₹ 705.00	₹ -	₹ 705.00	
13	Making of crescent shaped mounds below 50 planted saplings after planting and dibbing of 3 seeds of fodder tree species.	Plant	50.0	₹ 4.52	₹ 226.00	₹ -	₹ 226.00	
14	Maintenance of 3 m wide approach/inspection path/Fire Line.	Sq. Mt	240.0	₹ 4.42	₹ 636.48	₹ 424.32	₹ 1,060.80	
15	Purchase of fertilizers and insecticide and its application	Plants	50.00	₹ 5.38	₹ 215.20	₹ 53.80	₹ 269.00	
16	Labour amenities	Percent	1.0	₹ 166.58	₹ 83.29	₹ 83.29	₹ 166.58	
17	Watch and ward charges for 12 months	Prorata	1.0	₹ 1,782.39	₹ 1,782.39	₹ -	₹ 1,782.39	
18	Misc. and unforeseen expenses related to work & material.	Percent	1.0	₹ 215.42	₹ 172.33	₹ 43.08	₹ 215.42	
19	Administrative expenditure including office, electricity, stationary, running of vehicles, etc.,	Percent	1.0	₹ 215.42	₹ -	₹ 215.42	₹ 215.42	
20	Price Escalation	Percent	10.0	₹ 215.42	₹ 1,077.08	₹ 1,077.08	₹ 2,154.15	
Total Expenditure (Year 1)					₹ 20,409.94	₹ 3,716.57	₹ 24,126.51	

YEAR 2: MAINTENANCE I								
S. No.	Item of Work	Unit	Quantity	Unit Rate	Labour Cost	Material Cost	Total Cost	Remarks
1	Follow-up Operations for eradication of Invasive weeds	Prorata	1.0	₹ 200.00	₹ 200.00	₹ -	₹ 200.00	
2	Repair of Fencing	Percent	1.0	₹ 178.21	₹ 178.21	₹ -	₹ 178.21	
3	Resowing of grass seeds (For Casualty Replacement)	Ha	1.0	₹ 500.00	₹ 500.00	₹ -	₹ 500.00	
4	Watering of 50 plants (4 times)	Plant	200.0	₹ 4.50	₹ 774.00	₹ 126.00	₹ 900.00	
5	Weeding and Hoeings of 50 plants two times with repairing plants mound	Plant	100.0	₹ 3.91	₹ 391.00	₹ -	₹ 391.00	
6	Hoeing of 50 plants for four times	Plants	200.0	₹ 2.35	₹ 470.00	₹ -	₹ 470.00	
7	Maintenance of 3 m wide approach/inspection path/Fire Line.	Sq. Mt	240.0	₹ 4.42	₹ 636.48	₹ 424.32	₹ 1,060.80	
8	Labour amenities	Percent	1.0	₹ 31.50	₹ 15.75	₹ 15.75	₹ 31.50	
9	Watch and ward charges for 12 months	Prorata	1.0	₹ 1,782.38	₹ 1,782.38	₹ -	₹ 1,782.38	
10	Misc. and unforeseen expenses related to work & material.	Percent	1.0	₹ 55.14	₹ 44.11	₹ 11.03	₹ 55.14	
11	Administrative expenditure including office, electricity, stationary, running of vehicles, etc.,	Percent	1.0	₹ 55.14	₹ -	₹ 55.14	₹ 55.14	
12	Price Escalation	Percent	10.0	₹ 55.14	₹ 275.69	₹ 275.69	₹ 551.39	
Total Expenditure (Year 2)					₹ 5,067.62	₹ 907.93	₹ 5,975.55	

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Model Cost Norms for Eco-Restoration for Grassland Ecosystems (Non-Desert Area) under CRESEP

YEAR 3: MAINTENANCE II								
S. No.	Item of Work	Unit	Quantity	Unit Rate	Labour Cost	Material Cost	Total Cost	Remarks
1	Follow-up Operations for eradication of Invasive weeds	Prorata	1.0	₹ 200.00	₹ 200.00	₹ -	₹ 200.00	
2	Repair of Fencing	Percent	1.0	₹ 178.21	₹ 178.21	₹ -	₹ 178.21	
3	Watering of 50 plants (4 times)	Plant	200.0	₹ 4.50	₹ 774.00	₹ 126.00	₹ 900.00	
4	Weeding and Hoeings of 50 plants two times with repairing plants mound	Plant	100.0	₹ 3.91	₹ 391.00	₹ -	₹ 391.00	
5	Hoeing of 50 plants for four times	Plants	200.0	₹ 2.35	₹ 470.00	₹ -	₹ 470.00	
6	Maintenance of 3 m wide approach/inspection path/Fire Line.	Sq. Mt	240.0	₹ 4.42	₹ 636.48	₹ 424.32	₹ 1,060.80	
7	Labour amenities	Percent	1.0	₹ 26.50	₹ 13.25	₹ 13.25	₹ 26.50	
8	Watch and ward charges for 12 months	Prorata	1.0	₹ 1,782.38	₹ 1,782.38	₹ -	₹ 1,782.38	
9	Misc. and unforeseen expenses related to work & material.	Percent	1.0	₹ 50.09	₹ 40.07	₹ 10.02	₹ 50.09	
10	Administrative expenditure including office, electricity, stationary, running of vehicles, etc.,	Percent	1.0	₹ 50.09	₹ -	₹ 50.09	₹ 50.09	
11	Price Escalation	Percent	10.0	₹ 50.09	₹ 250.44	₹ 250.44	₹ 500.89	
Total Expenditure (Year 3)					₹ 4,535.83	₹ 874.12	₹ 5,409.95	

YEAR 4: MAINTENANCE III								
S. No.	Item of Work	Unit	Quantity	Unit Rate	Labour Cost	Material Cost	Total Cost	Remarks
1	Removal (culling/pruning) of new Tree species regeneration.	Prorata	1.0	₹ 200.00	₹ 200.00	₹ -	₹ 200.00	
2	Watering of 50 plants two times	Plant	100.0	₹ 4.50	₹ 387.00	₹ 63.00	₹ 450.00	
3	Hoeing of 50 plants for two times	Plants	100.0	₹ 2.35	₹ 235.00	₹ -	₹ 235.00	
4	Maintenance of 3 m wide approach/inspection path/Fire Line.	Sq. Mt	240.0	₹ 4.42	₹ 636.48	₹ 424.32	₹ 1,060.80	
5	Watch and ward charges for 12 Months	Prorata	1.0	₹ 1,782.38	₹ -	₹ 1,782.38	₹ 1,782.38	
6	Administrative expenditure including office, electricity, stationary, running of vehicles, etc.,	Percent	1.0	₹ 37.28	₹ -	₹ 37.28	₹ 37.28	
7	Price Escalation	Percent	10.0	₹ 37.28	₹ 186.41	₹ 186.41	₹ 372.82	
Total Expenditure (Year 4)					₹ 1,644.89	₹ 2,493.39	₹ 4,138.28	

Year-wise Cost Statement: Eco-Restoration for Grassland Ecosystems (Non-Desert Area)				
S. No.	Item of Work	Labour Cost	Material Cost	Total Cost
1	ADVANCE ACTION	₹ 25,971.20	₹ 4,421.12	₹ 30,392.32
2	PLANTING YEAR	₹ 20,409.94	₹ 3,716.57	₹ 24,126.51
3	MAINTENANCE I	₹ 5,067.62	₹ 907.93	₹ 5,975.55
4	MAINTENANCE II	₹ 4,535.83	₹ 874.12	₹ 5,409.95
5	MAINTENANCE III	₹ 1,644.89	₹ 2,493.39	₹ 4,138.28
GRAND TOTAL		₹ 57,629.47	₹ 12,413.13	₹ 70,042.61

Note:

- 1 % of amount provisioned for only field works is taken calculating Labour Amenities.
- Except Prorata rates all others are taken from the existing Model.
- Purchase of tools, seeds, etc., shall be done only by the Department.
- 5 % of amount provisioned for fencing is provided for repair of fencing till one year after planting.

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Model Cost Norms for Grassland Development for Wildlife Areas in Arid Regions under CRESEP

Unit Area: 50 Ha Perimeter: length width Total
 No. of Grass Slip: 1000/Ha 1000 500 3000 Meters
 Labour Rate: ₹ 285/Day

YEAR 0: ADVANCE ACTION								
S. No.	Item of Work	Unit	Quantity	Unit Rate	Labour Cost	Material Cost	Total Cost	Remarks
1a	Survey of area, Layout of contour trenches/Furrows, and marking of segments/plots, preparation of Stock Maps of the compartment, treatment plan and GIS maps, etc.,	Prorata	1	₹ 600.00	₹ 534.00	₹ 66.00	₹ 600.00	Stock Map (s) of the compartment in which the plantation is sited is to be prepared.
1b	Preparation of drainage maps and assessment of required SMC works	Prorata	1.0	₹ 600.00	₹ 534.00	₹ 66.00	₹ 600.00	
2	Fencing of Closure area with 2.40 mt height angle iron / RCC post and 5 strand barbed wire/ local thorny material or 2.40 mt angle iron post with 5 lines of Barbed wire and 1.80 m Chainlink mesh(4"x4" Square, 12 Gauge) 60m/Ha	Meter	60	₹ 352.00	₹ 9,504.00	₹ 11,616.00	₹ 21,120.00	Per 60 meter fence rate calculation : 1. No of post 12 @553.34 FD BSR = 6640.08 2. Barbed wire 60 m x 5 strands = 300 Rmt or 43 kg @100 = 4300 3. Chainlink (4"x4") 60 meter x 110 = 6600 4. RCC Post Loading unloading, Transport from store to site upto 10 km and fixing = 12 Post @152.59 FD BSR = 1831.08 5. Barbed wire stretching = 300 Rmt @2.60 = 780 6. Chainlink Stretching (with 5 strands) 60 meter @ 16.15 = 969 Total Cost of 60 Meter fence = 21120.16 or per meter cost = 352.00 Rs
3	Removal of Exotic-Invasive Weeds and Unwanted species like Prosopis juliflora, Cassia angustifolia etc. (As per requirement)	Prorata	1	₹ 4,933.00	₹ 4,401.22	₹ 531.78	₹ 4,933.00	
4	Cost of collection and purchases of grass and other seeds	kg	6	₹ 250.00	₹ 150.00	₹ 1,350.00	₹ 1,500.00	
5	Raising of Grass Slips (1000 Nos) (10cm x 15 cm) (20% extra)	Plant	1200	₹ 2.71	₹ 1,948.90	₹ 1,299.26	₹ 3,248.16	
6	Construction of 3 m wide approach/inspection path /Fire Line	Sq. Mt	240	₹ 4.42	₹ 636.48	₹ 424.32	₹ 1,060.80	
7	Digging up 200 Rmt V-ditch with cross section in interdunal area, size 1.20 m x(0+0.30)/2 cum (0.18 cum per Rmt)	Rmt	200	₹ 28.49	₹ 5,698.00	₹ -	₹ 5,698.00	
8	Digging of Contour furrows (15 cm x 15 cm)	RMT	200	₹ 3.65	₹ 730.00	₹ -	₹ 730.00	
9	Creation of percolation ponds/water storage ponds, Nadi etc.	Prorata	1	₹ 5,471.30	₹ 5,471.30	₹ -	₹ 5,471.30	

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10	Construction of Thatched cattle guard hut on a raised platform with Solar lights, chargers, drinking water facility, etc.	Prorata	1	₹ 1,300.00	₹ 650.00	₹ 650.00	₹ 1,300.00	
11	Sign board including painting and fixing	Prorata	1	₹ 117.30	₹ -	₹ 117.30	₹ 117.30	
12	Purchase or construction of Water storage Tank	Prorata	1	₹ 1,100.00	₹ 968.00	₹ 132.00	₹ 1,100.00	
13	Purchase of tools including fire fighting tools, data loggers & storage devices, survey / mensuration equipments	Prorata	1	₹ 550.00	₹ 550.00	₹ -	₹ 550.00	
14	Labour amenities	Prorata	1	₹ 293.58	₹ 146.79	₹ 146.79	₹ 293.58	
15	Watch and ward for 5 months	Prorata	1	₹ 742.09	₹ 742.09	₹ -	₹ 742.09	
16	Construction of gate and fixing of sign boards	Prorata	1	₹ 739.55	₹ 295.82	₹ 443.73	₹ 739.55	
17	Misc. and unforeseen expenses related to work & material	Percent	1	₹ 498.04	₹ 398.43	₹ 99.61	₹ 498.04	
18	Administrative expenditure including office, electricity, stationary, running of vehicles, etc.,	Percent	1	₹ 498.04	₹ -	₹ 498.04	₹ 498.04	
Total Expenditure (Year 0)					₹ 33,359.03	₹ 17,440.82	₹ 50,799.85	

YEAR 1: PLANTING YEAR

S. No.	Item of Work	Unit	Quantity	Unit Rate	Labour Cost	Material Cost	Total Cost	Remarks
1	Repair of Fencing	Percent	1	₹ 211.20	₹ 211.20	₹ -	₹ 211.20	
2	In subsequent removal of Exotic-Invasive Weeds and Unwanted species like Prosopis juliflora, Cassia angustifolia etc. (As per requirement)	Prorata	1	₹ 3,726.00	₹ 3,301.24	₹ 424.76	₹ 3,726.00	
3	Purchase of fertilizers and insecticide and its application	Prorata	0.15	₹ 2,831.57	₹ 339.79	₹ 84.95	₹ 424.74	
4	Preparing and Sowing of pellets of grass seeds / pieces of seed mud cakes in between rows & pits	Prorata	1	₹ 646.35	₹ 646.35	₹ -	₹ 646.35	
5	Mulching 300 Rmt	RMT	300	₹ 13.66	₹ 3,278.40	₹ 819.60	₹ 4,098.00	
6	Digging of Contour furrows (15 x 15 cm)	RMT	300	₹ 3.65	₹ -	₹ 1,095.00	₹ 1,095.00	
7	Maintenance of 3 m wide approach/inspection path/Fire Line	Sq Mt	240	₹ 4.42	₹ 954.72	₹ 106.08	₹ 1,060.80	
8	Preparation of Soil (furrows, ploughing, etc.) and Sowing of Grass Seeds with a mix of nitrogen-fixing wild legumes (Broadcasting/dibbling/pellets/seed drilling, etc.)	Prorata	1	₹ 518.55	₹ 518.55	₹ -	₹ 518.55	
9	Resowing of grass seeds (For Casualty Replacement)	Prorata	1	₹ 515.71	₹ 515.71	₹ -	₹ 515.71	
10	Raising of Grass Slips (200 Nos) (10cm x 15 c) (20% extra)	Plant	240	₹ 2.71	₹ 389.78	₹ 259.85	₹ 649.63	
11	Maintenance of 1200 grass slip in nursery	Prorata	1200	₹ 1.094	₹ 1,100.13	₹ 212.67	₹ 1,312.80	

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12	Transport of 1100 grass slips including loading and unloading	Slip	1100	₹ 0.98	₹ 1,076.02	₹ -	₹ 1,076.02	
13	Planting of 1000 grass slips including local transportation and initial watering	Slip	1000	₹ 5.63	₹ 3,941.00	₹ 1,689.00	₹ 5,630.00	
14	Watering of 1000 Slips (2 times) (7.5 Liter per slip)	Slip	2000	₹ 4.03	₹ 5,642.00	₹ 2,418.00	₹ 8,060.00	1. Cost of 7.5 Liter water = 1532.44/5000 FD BSR *7.5 = 2.29 Rs 2. Slip watering cost = (1.54+1.75+1.93)/3 = 1.74 Total = 2.29 + 1.74 = 4.03 Rs
15	Labour amenities	Percent	1	₹ 172.21	₹ 86.10	₹ 86.10	₹ 172.21	
16	Watch and ward charges for 12 months	Prorata	1	₹ 1,781.02	₹ 1,781.02	₹ -	₹ 1,781.02	
17	Misc. and unforeseen expenses related to work & material	Percent	1	₹ 309.78	₹ 247.82	₹ 61.96	₹ 309.78	
18	Administrative expenditure including office, electricity, stationary, running of vehicles, etc.,	Percent	1	₹ 309.78	₹ -	₹ 309.78	₹ 309.78	
19	Price Escalation	Percent	10	₹ 309.78	₹ 1,548.90	₹ 1,548.90	₹ 3,097.80	
Total Expenditure (Year 1)					₹ 25,578.73	₹ 9,116.66	₹ 34,695.39	

YEAR 2: MAINTENANCE I								
S. No.	Item of Work	Unit	Quantity	Unit Rate	Labour Cost	Material Cost	Total Cost	Remarks
1	Repair of Fencing	Prorata	1	₹ 211.20	₹ 211.20	₹ -	₹ 211.20	
2	In subsequent removal of Exotic-Invasive Weeds and Unwanted species like Prosopis juliflora, Cassia angustifolia etc. (As per requirement)	Prorata	1	₹ 3,282.00	₹ 2,750.32	₹ 531.68	₹ 3,282.00	
3	Maintenance of 240 grass slip in nursery	Prorata	240	₹ 1.094	₹ 220.03	₹ 42.53	₹ 262.56	
4	Transport of 240 grass slips including loading and unloading	Slip	240	₹ 0.98	₹ 234.77	₹ -	₹ 234.77	
5	Planting of 200 grass slips including local transportation and initial watering	Slip	200	₹ 3.34	₹ 467.12	₹ 200.20	₹ 667.32	
6	Watering of 1000 Slips (1 times) (7.5 Liter per slip)	Slip	1000	₹ 4.03	₹ 2,821.00	₹ 1,209.00	₹ 4,030.00	

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7	Resowing of Grass Seeds on V-ditch and furrows	Ha	1	₹ 777.83	₹ 777.83	₹ -	₹ 777.83	
8	Maintenance of 3 m wide approach/inspection path/Fire Line	Sq Mt	240	₹ 4.42	₹ 954.72	₹ 106.08	₹ 1,060.80	
9	Labour amenities	Percent	1	₹ 82.02	₹ 41.01	₹ 41.01	₹ 82.02	
10	Watch and ward charges for 12 months	Prorata	1	₹ 1,781.02	₹ 1,781.02	₹ -	₹ 1,781.02	
11	Misc. and unforeseen expenses related to work & material	Percent	1	₹ 123.90	₹ 99.12	₹ 24.78	₹ 123.90	
12	Administrative expenditure including office, electricity, stationary, running of vehicles, etc.,	Percent	1	₹ 123.90	₹ -	₹ 123.90	₹ 123.90	
13	Price Escalation	Percent	10	₹ 123.90	₹ 619.48	₹ 619.48	₹ 1,238.95	
Total Expenditure (Year 2)					₹ 10,977.61	₹ 2,898.66	₹ 13,876.26	

YEAR 3: MAINTENANCE II								
S. No.	Item of Work	Unit	Quantity	Unit Rate	Labour Cost	Material Cost	Total Cost	Remarks
1	Repair of Fencing	Prorata	1	₹ 211.20	₹ 211.20	₹ -	₹ 211.20	
2	Maintenance of 3 m wide approach/inspection path/Fire Line	Sq Mt	240	₹ 4.42	₹ 954.72	₹ 106.08	₹ 1,060.80	
3	Labour amenities	Percent	1	₹ 11.66	₹ 5.83	₹ 5.83	₹ 11.66	
4	Watch and ward charges for 12 months	Prorata	1	₹ 1,781.02	₹ 1,781.02	₹ -	₹ 1,781.02	
5	Misc. and unforeseen expenses related to work & material	Percent	1	₹ 30.65	₹ 24.52	₹ 6.13	₹ 30.65	
6	Administrative expenditure including office, electricity, stationary, running of vehicles, etc.,	Percent	1	₹ 30.65	₹ -	₹ 30.65	₹ 30.65	
7	Price Escalation	Percent	10	₹ 30.65	₹ 153.23	₹ 153.23	₹ 306.47	
Total Expenditure (Year 3)					₹ 3,130.52	₹ 301.92	₹ 3,432.44	

YEAR 4: MAINTENANCE III								
S. No.	Item of Work	Unit	Quantity	Unit Rate	Labour Cost	Material Cost	Total Cost	Remarks
1	Watch and ward charges for 12 Months	Prorata	1	₹ 1,781.02	₹ 1,781.02	₹ -	₹ 1,781.02	
2	Maintenance of 3 m wide approach/inspection path/Fire Line	Sq Mt	240	₹ 4.42	₹ 954.72	₹ 106.08	₹ 1,060.80	
3	Administrative expenditure including office, electricity, stationary, running of vehicles, etc.,	Prorata	1	₹ 17.81	₹ -	₹ 17.81	₹ 17.81	
4	Price Escalation	Percent	10	₹ 17.81	₹ 89.05	₹ 89.05	₹ 178.10	
Total Expenditure (Year 4)					₹ 2,824.79	₹ 212.94	₹ 3,037.73	

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Year-wise Cost Statement: Grassland Development for Wildlife Areas in Arid Regions (50 Ha) under CRESEP				
S. No.	Item of Work	Labour Cost	Material Cost	Total Cost
1	ADVANCE ACTION	₹ 33,359.03	₹ 17,440.82	₹ 50,799.85
2	PLANTING YEAR	₹ 25,578.73	₹ 9,116.66	₹ 34,695.39
3	MAINTENANCE I	₹ 10,977.61	₹ 2,898.66	₹ 13,876.26
4	MAINTENANCE II	₹ 3,130.52	₹ 301.92	₹ 3,432.44
5	MAINTENANCE III	₹ 2,824.79	₹ 212.94	₹ 3,037.73
	GRAND TOTAL	₹ 75,870.68	₹ 29,971.00	₹ 1,05,841.68

Note:

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|--|---|
| <p>1 1 % of amount provisioned for only field works is taken calculating Labour Amenities.</p> <p>2 Except Prorata rates all others are taken from the existing Model.</p> | <p>3 Purchase of tools, seeds, etc., shall be done only by the Department.</p> <p>4 5 % of amount provisioned for fencing is provided for repair of fencing till one year after planting.</p> |
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Model Cost Norms for Grassland Development for Wildlife Areas in Arid Regions under CRESEP

Unit Area: 100 Ha
 No. of Grass Slip: 1000/Ha
 Labour Rate: ₹ 285/Day
 Perimeter: length 1000 width 1000 Total 4000 Meters


YEAR 0: ADVANCE ACTION								
S. No.	Item of Work	Unit	Quantity	Unit Rate	Labour Cost	Material Cost	Total Cost	Remarks
1a	Survey of area, Layout of contour trenches/Furrows, and marking of segments/plots, preparation of Stock Maps of the compartment, treatment plan and GIS maps, etc.,	Prorata	1	₹ 600.00	₹ 534.00	₹ 66.00	₹ 600.00	Stock Map (s) of the compartment in which the plantation is sited is to be prepared.
1b	Preparation of drainage maps and assessment of required SMC works	Prorata	1.0	₹ 600.00	₹ 534.00	₹ 66.00	₹ 600.00	
2	Fencing of Closure area with 2.40 mt height angle iron / RCC post and 5 strand barbed wire/ local thorny material or 2.40 mt angle iron post with 5 lines of Barbed wire and 1.80 m Chainlink mesh(4"x4" Square, 12 Gauge) 40m/Ha	Meter	40	₹ 352.00	₹ 6,336.00	₹ 7,744.00	₹ 14,080.00	Per 40 meter fence rate calculation : 1. No of post 08 @553.34 FD BSR = 4426.72 2. Barbed wire 40 m x 5 strands = 200 Rmt or 28 kg @100 = 2800 3. Chainlink (4"x4") 40 meter x 110 = 4400 4. RCC Post Loading unloading, Transport from store to site upto 10 km and fixing = 08 Post @152.59 FD BSR = 1220.72 5. Barbed wire stretching = 200 Rmt @2.60 = 520 6. Chainlink Stretching (with 5 strands) 40 meter @ 16.15 = 646 Total Cost of 40 Meter fence = 14013.44 or per meter cost = 352.00 Rs
3	Removal of Exotic-Invasive Weeds and Unwanted species like Prosopis juliflora, Cassia angustifolia etc. (As per requirement)	Prorata	1	₹ 4,933.00	₹ 4,401.22	₹ 531.78	₹ 4,933.00	
4	Cost of collection and purchases of grass and other seeds	kg	6	₹ 250.00	₹ 150.00	₹ 1,350.00	₹ 1,500.00	
5	Raising of Grass Slips (1000 Nos) (10cm x 15 cm) (20% extra)	Plant	1200	₹ 2.71	₹ 1,948.90	₹ 1,299.26	₹ 3,248.16	
6	Construction of 3 m wide approach/inspection path /Fire Line	Sq. Mt	240	₹ 4.42	₹ 636.48	₹ 424.32	₹ 1,060.80	
7	Digging up 200 Rmt V-ditch with cross section in interdunal area, size 1.20 m x(0+0.30)/2 cum (0.18 cum per Rmt)	Rmt	200	₹ 28.49	₹ 5,698.00	₹ -	₹ 5,698.00	
8	Digging of Contour furrows (15 cm x 15 cm)	RMT	200	₹ 3.65	₹ 730.00	₹ -	₹ 730.00	
9	Creation of percolation ponds/water storage ponds, Nadi etc.,	Prorata	1	₹ 5,471.30	₹ 5,471.30	₹ -	₹ 5,471.30	
10	Construction of Thatched cattle guard hut on a raised platform with Solar lights, chargers, drinking water facility, etc.,	Prorata	1	₹ 1,300.00	₹ 650.00	₹ 650.00	₹ 1,300.00	
11	Providing & Fixing Sign board	Prorata	1	₹ 117.30	₹ -	₹ 117.30	₹ 117.30	
12	Purchase or construction of Water storage Tank	Prorata	1	₹ 1,100.00	₹ 968.00	₹ 132.00	₹ 1,100.00	

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13	Purchase of tools including fire fighting tools, data loggers & storage devices, survey / mensuration equipments,	Prorata	1	₹ 550.00	₹ 550.00	₹ -	₹ 550.00	
14	Labour amenities	Prorata	1	₹ 242.41	₹ 121.21	₹ 121.21	₹ 242.41	
15	Watch and ward for 5 months	Prorata	1	₹ 742.09	₹ 742.09	₹ -	₹ 742.09	
16	Construction of gate	Prorata	1	₹ 739.55	₹ 295.82	₹ 443.73	₹ 739.55	
17	Misc. and unforeseen expenses related to work & material	Percent	1	₹ 427.13	₹ 341.70	₹ 85.43	₹ 427.13	
18	Administrative expenditure including office, electricity, stationary, running of vehicles, etc.,	Percent	1	₹ 427.13	₹ -	₹ 427.13	₹ 427.13	
Total Expenditure (Year 0)					₹ 30,108.72	₹ 13,458.15	₹ 43,566.86	

YEAR 1: PLANTING YEAR								
S. No.	Item of Work	Unit	Quantity	Unit Rate	Labour Cost	Material Cost	Total Cost	Remarks
9	Repair of Fencing	Percent	1	₹ 140.80	₹ 140.80	₹ -	₹ 140.80	
1	In subsequent removal of Exotic-Invasive Weeds and Unwanted species like Prosopis juliflora, Cassia angustifolia etc. (As per requirement)	Prorata	1	₹ 3,726.00	₹ 3,301.24	₹ 424.76	₹ 3,726.00	
2	Purchase of fertilizers and insecticide and its application	Prorata	0.15	₹ 2,831.57	₹ 339.79	₹ 84.95	₹ 424.74	
3	Preparing and Sowing of pellets of seeds of grasses and nitrogen-fixing wild legumes / pieces of seed mud cakes in between rows & pits	Prorata	1	₹ 646.35	₹ 646.35	₹ -	₹ 646.35	
4	Mulching 300 Rmt	RMT	300	₹ 13.66	₹ 3,278.40	₹ 819.60	₹ 4,098.00	
5	Digging of Contour furrows (15 x 15 cm)	RMT	300	₹ 3.65	₹ -	₹ 1,095.00	₹ 1,095.00	
6	Preparation of Soil (furrows, ploughing, etc.) and Sowing of Grass Seeds with a mix of nitrogen-fixing wild legumes (Broadcasting/dibbling/pellet s/seed drilling, etc.)	Prorata	1	₹ 3,000.00	₹ 3,000.00	₹ -	₹ 3,000.00	
7	Resowing of grass seeds (For Casualty Replacement)	Prorata	1	₹ 500.00	₹ 500.00	₹ -	₹ 500.00	
8	Raising of Grass Slips (200 Nos) (10cm x 15 c) (20% extra)	Plant	240	₹ 2.71	₹ 389.78	₹ 259.85	₹ 649.63	


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9	Maintenance of 1200 grass slip in nursery	Prorata	1200	₹ 1.094	₹ 1,100.13	₹ 212.67	₹ 1,312.80	
10	Transport of 1000 grass slips including loading and unloading	Slip	1000	₹ 0.98	₹ 978.20	₹ -	₹ 978.20	
11	Planting of 1000 grass slips inside the furrow, including local transportation and initial watering	Slip	1000	₹ 5.63	₹ 3,941.00	₹ 1,689.00	₹ 5,630.00	
12	Watering of 1000 Slips (2 times) (7.5 Liter per slip)	Slip	2000	₹ 4.03	₹ 5,642.00	₹ 2,418.00	₹ 8,060.00	1. Cost of 7.5 Liter water = 1532.44/5000 FD BSR *7.5 = 2.29 Rs 2. Slip watering cost = (1.54+1.75+1.93)/3 = 1.74 Total = 2.29 + 1.74 = 4.03 Rs
13	Maintenance of 3 m wide approach/inspection path/Fire Line	Sq Mt	240	₹ 4.42	₹ 954.72	₹ 106.08	₹ 1,060.80	
14	Labour amenities	Percent	1	₹ 190.85	₹ 95.43	₹ 95.43	₹ 190.85	
15	Watch and ward charges for 12 months	Prorata	1	₹ 1,781.02	₹ 1,781.02	₹ -	₹ 1,781.02	
16	Misc. and unforeseen expenses related to work & material	Percent	1	₹ 332.94	₹ 266.35	₹ 66.59	₹ 332.94	
17	Administrative expenditure including office, electricity, stationary, running of vehicles, etc.,	Percent	1	₹ 332.94	₹ -	₹ 332.94	₹ 332.94	
18	Price Escalation	Percent	10	₹ 332.94	₹ 1,664.71	₹ 1,664.71	₹ 3,329.42	
Total Expenditure (Year 1)					₹ 28,019.91	₹ 9,269.58	₹ 37,289.49	

YEAR 2: MAINTENANCE I

S. No.	Item of Work	Unit	Quantity	Unit Rate	Labour Cost	Material Cost	Total Cost	Remarks
1	Repair of Fencing	Prorata	1	₹ 140.80	₹ 140.80	₹ -	₹ 140.80	
2	In subsequent removal of Exotic-Invasive Weeds and Unwanted species like Prosopis juliflora, Cassia angustifolia etc. (As per requirement)	Prorata	1	₹ 3,282.00	₹ 2,750.32	₹ 531.68	₹ 3,282.00	
3	Maintenance of 3 m wide approach/inspection path/Fire Line	Sq Mt	240	₹ 4.42	₹ 954.72	₹ 106.08	₹ 1,060.80	
4	Maintenance of 240 grass slip in nursery	Prorata	240	₹ 1.094	₹ 220.03	₹ 42.53	₹ 262.56	
5	Transport of 200 grass slips including loading and unloading	Slip	200	₹ 0.98	₹ 195.64	₹ -	₹ 195.64	
6	Planting of 200 grass slips including local transportation and initial watering	Slip	200	₹ 3.34	₹ 467.12	₹ 200.20	₹ 667.32	
7	Watering of 1000 Slips (1 times) (7.5 Liter per slip)	Slip	1000	₹ 4.03	₹ 2,821.00	₹ 1,209.00	₹ 4,030.00	
8	Resowing of Grass Seeds on V-ditch and furrows	Ha	1	₹ 777.83	₹ 777.83	₹ -	₹ 777.83	
9	Labour amenities	Percent	1	₹ 81.32	₹ 40.66	₹ 40.66	₹ 81.32	
10	Watch and ward charges for 12 months	Prorata	1	₹ 1,781.02	₹ 1,781.02	₹ -	₹ 1,781.02	
11	Misc. and unforeseen expenses related to work & material	Prorata	1	₹ 122.79	₹ 98.23	₹ 24.56	₹ 122.79	
12	Administrative expenditure including office, electricity, stationary, running of vehicles, etc.,	Prorata	1	₹ 122.79	₹ -	₹ 122.79	₹ 122.79	
13	Price Escalation	Percent	10	₹ 122.79	₹ 613.96	₹ 613.96	₹ 1,227.93	
Total Expenditure (Year 2)					₹ 10,861.33	₹ 2,891.47	₹ 13,752.80	

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YEAR 3: MAINTENANCE II								
S. No.	Item of Work	Unit	Quantity	Unit Rate	Labour Cost	Material Cost	Total Cost	Remarks
1	Repair of Fencing	Percent	1	₹ 140.80	₹ 140.80	₹ -	₹ 140.80	
2	Labour amenities	Percent	1	₹ 10.96	₹ 5.48	₹ 5.48	₹ 10.96	
3	Maintenance of 3 m wide approach/inspection path/Fire Line	Sq Mt	240	₹ 4.42	₹ 954.72	₹ 106.08	₹ 1,060.80	
4	Watch and ward charges for 12 months	Prorata	1	₹ 1,781.02	₹ 1,781.02	₹ -	₹ 1,781.02	
5	Misc. and unforeseen expenses related to work & material	Percent	1	₹ 29.94	₹ 23.95	₹ 5.99	₹ 29.94	
6	Administrative expenditure including office, electricity, stationary, running of vehicles, etc.,	Percent	1	₹ 29.94	₹ -	₹ 29.94	₹ 29.94	
7	Price Escalation	Percent	10	₹ 29.94	₹ 149.68	₹ 149.68	₹ 299.36	
Total Expenditure (Year 3)					₹ 3,055.65	₹ 297.16	₹ 3,352.81	

YEAR 4: MAINTENANCE III								
S. No.	Item of Work	Unit	Quantity	Unit Rate	Labour Cost	Material Cost	Total Cost	Remarks
1	Removal (culling/pricking out) of new Tree species regeneration.	Prorata	1.0	₹ 200.00	₹ 200.00	₹ -	₹ 200.00	
2	Watch and ward charges for 12 Months	Prorata	1	₹ 1,781.02	₹ 1,781.02	₹ -	₹ 1,781.02	
3	Maintenance of 3 m wide approach/inspection path/Fire Line	Sq Mt	240	₹ 4.42	₹ 954.72	₹ 106.08	₹ 1,060.80	
4	Administrative expenditure including office, electricity, stationary, running of vehicles, etc.,	Percent	1	₹ 19.81	₹ -	₹ 19.81	₹ 19.81	
5	Price Escalation	Percent	10	₹ 19.81	₹ 99.05	₹ 99.05	₹ 198.10	
Total Expenditure (Year 4)					₹ 3,034.79	₹ 224.94	₹ 3,259.73	

Year-wise Cost Statement: Grassland Development for Wildlife Areas in Arid Regions (100 Ha) under CRESEP				
S. No.	Item of Work	Labour Cost	Material Cost	Total Cost
1	ADVANCE ACTION	₹ 30,108.72	₹ 13,458.15	₹ 43,566.86
2	PLANTING YEAR	₹ 28,019.91	₹ 9,269.58	₹ 37,289.49
3	MAINTENANCE I	₹ 10,861.33	₹ 2,891.47	₹ 13,752.80
4	MAINTENANCE II	₹ 3,055.65	₹ 297.16	₹ 3,352.81
5	MAINTENANCE III	₹ 3,034.79	₹ 224.94	₹ 3,259.73
GRAND TOTAL		₹ 75,080.40	₹ 26,141.30	₹ 1,01,221.70

Note:

- 1 % of amount provisioned for only field works is taken calculating Labour Amenities.
- Except Prorata rates all others are taken from the existing Model.
- Purchase of tools, seeds, etc., shall be done only by the Department.
- 5 % of amount provisioned for fencing is provided for repair of fencing till one year after planting.

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Summary of Year-wise Cost Statements for CRESEP Afforestation Models

S. No.	Name of Model	Year-wise Cost Statement								
		Year 0	Year 1	Year 2	Year 3	Year 4	Year 5	Year 6	Year 7	Total
1	High-Density Short-Rotation Plantation under Irrigated Conditions (Distributary)	₹ 26,440.50	₹ 20,781.83	₹ 18,193.65	₹ 16,800.88	₹ 10,536.51	₹ 7,373.44	₹ 4,358.97	₹ 1,173.09	₹ 1,05,658.86
2	High-Density Short-Rotation Plantation under Irrigated Conditions (Minor)	₹ 42,147.04	₹ 20,596.47	₹ 18,854.15	₹ 16,958.27	₹ 10,709.43	₹ 7,546.36	₹ 4,531.88	₹ 1,343.32	₹ 1,22,686.93
3	Eco-Restoration for Woodland Ecosystems	₹ 58,028.99	₹ 13,568.79	₹ 9,465.68	₹ 7,308.19	₹ 3,919.28	₹ 3,406.08	₹ 3,406.08	-	₹ 99,103.08
4	Eco-Restoration for Grassland Ecosystems (Desert Area)	₹ 24,592.16	₹ 22,830.11	₹ 5,908.99	₹ 5,330.27	₹ 2,192.48	-	-	-	₹ 60,854.01
5	Eco-Restoration for Grassland Ecosystems (Non-Desert Area)	₹ 30,392.32	₹ 24,126.51	₹ 5,975.55	₹ 5,409.95	₹ 4,138.28	-	-	-	₹ 70,042.61
6	Grassland Development for Wildlife Areas in Arid Regions (50 Ha)	₹ 50,799.85	₹ 34,695.39	₹ 13,876.26	₹ 3,432.44	₹ 3,037.73				₹ 1,05,841.68
7	Grassland Development for Wildlife Areas in Arid Regions (100 Ha)	₹ 43,566.86	₹ 37,289.49	₹ 13,752.80	₹ 3,352.81	₹ 3,259.73				₹ 1,01,221.70

S. No.	Name of Model	Unit Area, No. of Plants
1	High-Density Short-Rotation Plantation under Irrigated Conditions (Distributary)	50 RKM, 250 Plants/RKM
2	High-Density Short-Rotation Plantation under Irrigated Conditions (Minor)	50 RKM, 250 Plants/RKM
3	Eco-Restoration for Woodland Ecosystems	50 Ha, 100 Plants/ Ha
4	Eco-Restoration for Grassland Ecosystems (Desert Area)	50 Ha, upto 50 Plants/ Ha
5	Eco-Restoration for Grassland Ecosystems (Non-Desert Area)	50 Ha, upto 50 Plants/ Ha
6	Grassland Development for Wildlife Areas in Arid Regions (50 Ha)	50 Ha, 1000 grass slips/ Ha
7	Grassland Development for Wildlife Areas in Arid Regions (100 Ha)	100 Ha, 1000 grass slips/ Ha

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