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Amrit Mahotsav

सत्यमेव जयते

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THE ADMINISTRATION OF UNION TERRITORY OF LADAKH
OFFICE OF CHIEF CONSERVATOR OF FORESTS
E-mail: ccf-ladakh@ladakh.gov.in

Subject: Compensatory Afforestation norms for plantation in UT Ladakh.
Ref: e-file No. E 23998 M/1567/2024-OFFICE OF DFO KARGIL.

ORDER NO: 262-CCFL of 2024
DATED: 20 /08/2024

Sanction is hereby accorded to the following Compensatory Afforestation (CA) plantation norms in UT Ladakh:

1. Plantation density of **2500 plants per hectare** for all non-forest land selected in lieu of forest land diverted under FCA (*Van Sanrakshan Evam Samvardhan Adhiniyam, 1980*).
2. Species to be planted under CA: - Willow, Poplar, Robinia, and Seabuckthorn.
3. Other component-wise activities to be carried out under CA in the Union Territory of Ladakh are enclosed as Annexure A.

The CA norm has been formulated taking into account the topographical, climatic and soil conditions prevalent in UT Ladakh and based on existing rates of different components of afforestation activity like plantation, fencing, construction of irrigation networks like khuls, etc.

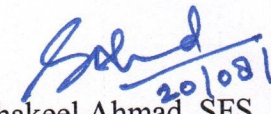**This issues with the approval of Competent Authority.**

Encl: Annexure A.

Sd/-
(Sajjad Hussain Mufti, IFS)
Chief Conservator of Forests
Union Territory of Ladakh

No: CCFL/2024-25/1127 - 131   Dated: 20/08/2024.

Copy to:
1. Commissioner/Secretary, Forest, Ecology & Environment, UT of Ladakh for favour of information.
2. Additional Principal Chief Conservator of Forests, UT Ladakh for information.
3. Divisional Forest Officer, Leh for information and compliance.
4. Divisional Forest Officer, Kargil for information and compliance.
5. Office Order file/e-file for reference.

20/08/2024
Shakeel Ahmad, SFS
Assistant Conservator of Forests
O/o Chief Conservator of Forests
UT of Ladakh

THE ADMINISTRATION OF UNION TERRITORY OF LADAKH,
LADAKH AUTONOMOUS HILL DEVELOPMENT COUNCIL, (LAHDC) LEH.
OFFICE OF THE DIVISIONAL FOREST OFFICER, LEH
Phone/Fax No: 01982-252038 E-mail: lehforestdivision@gmail.com

The Chief Conservator of Forest.
UT Ladakh.

No: FDL/CA/24/ 88.1
Dated 2.4.7.24.

Subject: - Seeking comments under Compensatory Afforestation (CA)-reg.

Sir,

Since the inception of the Forest Department in Leh District, the department has been engaged in afforestation activities under various schemes and has significantly increased the vegetal cover of the region in both departmental and community areas.

It is understood that the species predominantly planted by the department are willow and poplar, and in recent decades, seabuckthorn. These species are light-demanding and are primarily used for timber and other construction purposes by the local community. According to records, there are no written guidelines for the spatial distance between plants/green willow cuttings. However, as per the past practice and estimate that the standard spatial distance followed by the department is 6'x6' for willow and poplar green cuttings (plant-to-plant and row-to-row distance) as follows:

A. Plantation:-

S.no	Species /	Spatial distance(plant To plant	Row to Row distance	Number of plants per hectares as per 6'.00"x6'.00"	Remarks	Actual Number of plants per hectares	Cost per hectares
1	Willow /poplar green cutting /SBT Root shoot cutting and sapling	6'.00"x6'.00"	6'.00"x6'.00"	3022/hect.	15% of the area is kept for provision of irrigation networks, paths, and roads, etc.	2500/hectares	Rs 111700/hect(estimate separately enclosed)

B. Fencing:-

S.no	Particular of materials	Spatial distance post to post	Total no post fence post	Total periphery in one hectares	Remarks	Actual Number of length per hectares	Cost per hectares
1	1.P/L of Chain-link (4"x4") mesh with angle iron post(50mmx50 mmx6mm)	10'.00"x10'.00"	135 iron angle post	330x4sides 1320rfts	Add 5% for undulated lands	1386 rfts/hect.	Rs609840/hect(estimate separately enclosed)

including entrance gate ad sign board				

C. Irrigation networks:-

S.no	Particular of work	Spatial distance (plant To plant	Row to Row distance	Total length of irrigational network	Actual earth excavation per hectares	Cost per hectares
1	Earth excavation for irrigation network by Mechanical means	6'.00"x6'.00"	6'.00"x6'.00"	Main khul- 4x330'.00''x2'.0''0x1'.6''= 3960 side khul- 55x280'.00"x1'.0"x1'.00"=15400.000	547.88cum /hectares	Rs 113753/hect(estimate separately enclosed)

D.Watch and wards.

S.no	Species /	Number of watch and wards to be engaged	Period of months to be engaged	Rate per months	Actual Number of plants per hectares	Cost per hectares
1	Labour charges for watch and ward for 2500 nod plants	One watchand ward	8 months	13500/month	2500/hectares	Rs 108000/hect/ (estimate separately enclosed)

E. soil and moisture conservation works.

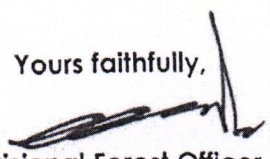| S.no	Species /	Number of crate required in one hect plantation area,	Rate per units	Cost per hectares
1	Constructing vertical bund of given shape by boulder filling /dry hand packed tightly including the cost of crate mesh, stone and carriage etc.(5nox 16'.00x4'.00x4'.00)	One watch and ward	2500/hectares	Rs 135000/hectare (estimate separately enclosed)

F. Maintenance

S.no.	Description	Unit	No.	Rate (in Rs.)	Total Amount (in Rs.)
1.	2nd year Maintenance	Nos	2500	58.24	145600
2.	3rd year Maintenance	Nos	625	58.24	36400
3.	4th year Maintenance	Nos	375	58.24	21840
4.	5th year Maintenance	Nos	250	58.24	14560
5.	6th year Maintenance	Nos	250	58.24	14560
6.	7th year Maintenance	Nos	250	58.24	14560
7.	8th year Maintenance	Nos	250	58.24	14560
8.	9th year Maintenance	Nos	250	58.24	14560
9.	10th year Maintenance	Nos	250	58.24	14560
	Total Maintenance				291200

Therefore A+B+C+D+E+F =Rs 111700+ Rs 609840+ Rs 113753+ Rs 108000+ Rs 135000+ Rs 291200 = **Rs 1369493/hect.**

The carriage charges of fencing material and crate wire mesh will vary from location to location depending upon the distance from the district headquarter.

Considering the lack of expansion/availability of land for plantation activities, scarcity of irrigation facilities, vigorous supervision, and high costs for plantation, the above-mentioned plant per hectare ratio is quite feasible for the conditions in Ladakh.

Yours faithfully,

**Divisional Forest Officer,
Leh Forest Division**

Abstract of component wise work plantation per hectares as under .

A. Plantation :-

S.no	Particular of works	Qty	Rate per unit	Total amounts
1	Extraction and Pits Planting of willow green cutting this including excavation of pits 0.45x0.45x0.45m along the contour as well as on flat surface.	2500no	42.68/plant	103700.00
2	Carriage of planting materials from near sources to planting site by M. transport, this includes loading and unloading charges etc.	2500/1trip	5000/trip	5000.00
	G.total Rs 111700.00			

B. Fencing :-

S.no	Particular of works	Qty	Rate per unit	Total amounts
1	1.P/L of Chain-link (4"x4") mesh with angle iron post(50mmx50mmx6mm) including entrance gate ad sign board	1386rfts	440/rft	609840.00
	.G.total Rs 609840.00			

c.Irrigational networks :-

S.no	Particular of works	Qty	Rate per unit	Total amounts
1	Earth work in excavation by mechanical means (hydraulic excavator) in trenches for foundations, drains, pipes, cables etc. (not exceeding 1.5 m in width) and for shafts, wells, cesspits and the like not exceeding 10 sqm on plan, including dressing of sides and ramming of bottoms lift upto 1.5 m, including getting out excavated earth and disposal of surplus excavated earth as directed 1.Main khul- 4x330'.00''x2'.0''0x1'.6''= 3960.00 cfts 2.sidekhul- 55x280'.00''x1'.0''x1'.00''=15400.00cfts G. total =1919360.00cfts 547.88cum	547.88cum	188.75+10%/ cum	113753.00
	G.total Rs 113753.00			

D.Watch and ward :-

S.no	Particular of works	Qty	Rate per unit	Total amounts
1	One Labour engaged for maintenance of raised plantation including irrigation, and other protection work etc.	One watch and ward x 8 months	13500/month	108000.00
	G.total Rs 108000.00			

E. soil and moisture conservation works:-

S.no	Particular of works	Qty	Rate per unit	Total amounts
1	1.Constructing vertical bund of given shape by boulder filling /dry hand packed tightly including the cost of crate mesh, stone and carriage etc.(5x 16'.00x4'.00x4'.00)	5nos	27000/no	135000.00
	G.total Rs 135000.00			

F. Maintenance

S.no	Particular of works	Qty	Rate per unit	Total amounts
1	Maintenance of the work	5000 nos	58.24/no	291200.00
	G.total Rs 291200.00			

Therefore A+B+C+D+E+F =Rs 111700+ Rs 609840+ Rs 113753+ Rs 108000+ Rs 135000+ Rs. 291200 = **G.total Rs 1369493/hect** .

Divisional Forest Officer,
Leh.

The Chief Conservator of Forest
UT Ladakh

No:-FDK/Estt/2024/(03)   Dated:- 12 -08-2024

Subject:- Seeking comments under compensatory Afforestation (CA)-reg.

Ref: Your letter No. CCFL/2024-25/918-20 , dated: 22-07-2024

Sir,

Regarding the subject and reference cited above , in this connection it is submitted that there is no such guide lines is available as per record in this division for CA norms for plantation , however as per past practice adopting in other schemes in the division the plantation per hectare for Kargil district considering the local topography , climate and soil conditions is as under:

A. Plantation:-

S.no	Species /	Spatial distance(plant To plant	Row to Row distance	Number of plants per hectares as per 6'.00"x6'.00"	Remarks	Actual Number of plants per hectares	Cost per hectares
1	Willow /poplar green cutting /SBT Root shoot cutting and sapling	6'.00"x6'.00 "	6'.00"x6'.00"	3022/hect.	15% of the area is kept for provision of irrigation networks, paths, and roads, etc.	2500/hectare s	Rs 145600/hec t @Rs. 58.24/plant

B. Fencing:-

S.no	Particular of materials	Spatial distance post to post	Number of plants per hectares as per 10'.00"x10'.00"	Total periphery in one hectares	Remarks	Actual Number of plants per hectares	Cost per hectares
1	1.P/L of Chain-link (4"x4") mesh with angle iron	6'.00"x6'.00 "	140 iron angle post	333x4sides 1332rfts	Add 5% for undulated land	1399 rfts/hect.	Rs. 615560/hec t (@440/rft)

	post(50mmx50 mmx6mm) including entrance gate ad sign board						

C. irrigation networks:-

S.no	Particular of work	Spatial distance (plant To plant	Row to Row distance	Total length of irrigational network	Rate	Cost per hectares
1	Earth excavation for irrigation network by Mannual means	6'.00"x6'.00 "	6'.00"x6'.00"	Main khul-4x333'.00''x2'.0"0x1'.6"= 3996cft=113.13 cum side khul-55x280'.00"x0'.6"x0'.6"= 3850cft=109 cum (113.13+109=222.13cum)	647.61/ cum as per Ladakh schedule of rate-2024	Rs 143853/hect

D.Watch and wards.

S.no	Species /	Number of watch and wards to be engaged	Period of months to be engaged	Cost /months	Actual cost per hectares	Cost per hectares
1	Labour charges for watch and ward for 2500 no. plants	One watch and ward	8 months	13500/hect.	Rs. 108000	Rs 108000/hect/2500 plant

E. soil and moisture conservation works.

S.no	Species /	Number of crate required in one hect plantation area,	Rate per units	Cost per hectares
1	Constructing vertical bund of given shape by boulder filling /dry hand packed tightly including the cost of crate mesh, stone and carriage etc.(5x 16'.00x4'.00x4'.00)	5 crates	27000/crate	Rs. 135000

F. Maintenance				1.00	
S No	Description	unit	no	Rate (in Rs)	Total Amount (in Rs)
1	2nd Year maintenance	Nos	2500	58.24	145600
2	3rd Year maintenance (25%)	Nos	625	58.24	36400
3	4th Year maintenance(15%)	Nos	375	58.24	21840
4	5th Year maintenance (10%)	Nos	250	58.24	14560
5	6th Year maintenance(10%)	Nos	250	58.24	14560
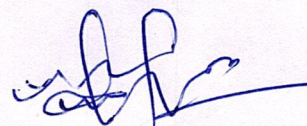
6	7th Year maintenance(10%)	Nos	250	58.24	14560
7	8th Year maintenance(10%)	Nos	250	58.24	14560
8	9th Year maintenance(10%)	Nos	250	58.24	14560
9	10th Year maintenance(10%)	Nos	250	58.24	14560
	Total Maintt.				291200

Therefore A+B+C+D+E+F =Rs 145600+ Rs 615560+ Rs 143853+ Rs 108000+ Rs 135000+291200= **Rs 1439213/hect** .

The carriage charges of fencing material and crate wire mesh will vary from location to location depending upon the distance from the district hear quarter.

Considering the lack of expansion/availability of land for plantation activities, scarcity of irrigation facilities, vigorous supervision, and high costs for plantation, the above-mentioned plant per hectare ratio is quite feasible for the conditions in Ladakh . .

Yours faithfully

Mohd Ali (SFS)
Divisional Forest Officer
Forest Division Kargil