

**ESTIMATE FOR COMPENSATORY AFFORESTATION SCHEME FOR
DIVERSION OF 116.1HA OF FOREST LAND FOR WIDENING/ UPGRADATION
OF EXISTING ROAD (NH 310A) TO NHDL SPECIFICATION WITH PAVED
SHOULDER FROM YUMTHANG OF DESIGN KM 52+808 TO YUMESAMDONG
BORDER (ZERO POINT) OF DESIGN 84.160KM IN MANGAN DISTRICT OF
SIKKIM BY BRO 86 RCC (GREF) GOVERNMENT OF INDIA**

INTRODUCTION:

The **BRO** (User Agency) Govt. Of India, has proposed for diversion of 116.1ha of forest land for widening/ upgradation of existing road (NH 310A) to NHDL specification with paved shoulder from Yumthang of design km 52+808 to Yumesamdong border (Zero point) of design 84.160km in Mangan district of Sikkim by BRO 86 RCC (GREF) Government of India

LOCATIONS / SITES FOR COMPENSATORY AFFORESTATION:

The proposed locations/site selected for Compensatory Afforestation Scheme (Block Plantation) is Reserved land within the Lachung Territorial Range. The areas need to be treated with priority to enhance the environment & ecology in the region. The proposed locations are as under: -

Sl No	Range	Location	Block Plantation	GPS Coordinates	Fencing area in Km
1	Lachung	Yumesamdong	40Ha	88° 41' 50.81'' E 27° 50' 27.90'' N	10Km
2	Lachung	Yumthang	30Ha	88° 42' 9.03'' E 27° 47' 42.02'' N	7Km
3.	Lachung	Serum	20Ha	88° 45' 43.38'' E 27° 44' 5.03'' N	5Km
4	Lachung	Namdasha	20Ha	88° 44' 50.40'' E 27° 43' 7.67'' N	5Km
5	Lachung	Namdasha	6Ha	88° 44' 56.61'' E 27° 42' 51.41'' N	2Km
			116Ha		29Km

Integrated approach for Block Plantation would be taken up in the above mentioned area. While implementing this scheme, if the above mentioned location needs to be changed based on technical ground and priority, due approval from the government would be taken before starting the works.

1. INTEGRATED PROGRAMME/METHODOLOGY OF WORKS FOR EXECUTION

a. The seedlings requirement: The seedlings required for the Block Plantation will be used from the nearest forest nursery on the payment of Department norms.

b. Block Plantation: The planting work will start in the month of May to July by preparing the site with cutting cleaning of bushes & digging of pits of size 45cmx45cmx45cm in a staggered manner.

c. Choice of Sapling: Locally suitable species like Chaap, Uttis, Okhar and any other Suitable species will be raised in the pits.

d.Fencing: The area under the plantation will be fenced with Stone wall fencing usually locally available stone all around the plantation at vulnerable points. It is necessary to protect the plantation from biotic interference.

e.Protection: The newly created afforestation shall be protected in biotic interference by providing Dry stone wall fencing at vulnerable point and locals as watch and wards. Entire stretches of forest area of high altitude area shall also be protected.

f.Maintenance: The maintenance of plantation will be carried up to 10years for successful establishment of plantation.

g.Executing Agency: The work will be executed by the Department.

h.Monitoring and Evaluation: The monitoring and evaluation of the project will be done by the Regional Office, Meghalaya, Shillong, Government of India and State Forest Department, Government of Sikkim at interval.

i.Schedule of Time: The work will be executed during the month of June & August in the year 2020-21 subject to availability of fund from User Agency in time.

4. Revised Cost Structure & Financial Forecast for CA Scheme.

(A) Block Plantation (Artificial Regeneration)

Block Plantation: Area = 116.1Ha (High Altitude)

Sl.No	Particular	Area(ha/ km)	Rate	Amount
(i) (a)	Cost of Block Plantation (including casualty replacement and weeding during the planting year)	116.10	₹ 93,302.00	₹ 1,08,32,362.20
(b)	Carriage of Seedling	116.10	₹ 3,500.00	₹ 4,06,350.00
(ii)	Providing and Laying Dry stone wall fencing as per direction including carriage of stones up to worksite	29	₹ 15,14,355.00	₹ 4,39,16,295.00
(iii)	Soil and Moisture Conservation work though vegetative measure ha	58	₹ 1,34,596.00	₹ 78,06,568.00
Sub-total-A				6,29,61,575.20
(B) Maintenance for 10 years				
Sl.No	Particulars	Area(ha)	Rate(Rs./Ha)	Amount (In rupees)
1	1st year maintenance	116.1	2	₹ 26,916.00
2	2nd year maintenance	116.1	2	₹ 20,468.00
3	3rd year maintenance	116.1	2	₹ 20,468.00
4	4th year maintenance	116.1	1	₹ 10,900.00
5	5th year maintenance	116.1	1	₹ 10,900.00
6	6th year maintenance	116.1	1	₹ 10,900.00
7	7th year maintenance	116.1	1	₹ 7,954.00
8	8th year maintenance	116.1	1	₹ 7,954.00
9	9th year maintenance	116.1	1	₹ 7,954.00
10	10th year maintenance	116.1	1	₹ 7,954.00

11	maintenance of dry stone wall for next 4 years (10 % of the cost)	4,39,16,295	10%	₹ 43,91,629.50
Sub-total-B				₹ 1,97,59,554.30
Sub-total-(A+B)				₹ 8,27,21,129.50

(C) For Protection

Sl. NO	Particular	Rate (per day)	Amount
(i)	Engagement of Plantation Supervisor 2 Nos 520/day for 10 Years	520	₹ 37,96,000.00
Sub-total-(C)			₹ 37,96,000.00
Sub-total-(A+B+C)			₹ 8,65,17,129.50

(D) INFRASTRUCTURE

		Unit	Per cost	
1	Renovation of Yumthang Forest Rest House	1	4000000	₹ 40,00,000.00
2	Renovation of Inspection Hut at Yumthang Hot Spring	1	3000000	₹ 30,00,000.00
3	Range Office and Block Office Renovation at Lachen	1	4000000	₹ 40,00,000.00
4	Range Office and Block Office Renovation at Lachung	1	6000000	₹ 60,00,000.00
5	Range Office and Block Office Renovation at Chungthang	1	5000000	₹ 50,00,000.00
6	Nursery Maintenance (low altitude) at Munsithang (2.5 ha.) for 10 years	1	607818	₹ 6,07,818.00
7	Nursery Maintenance (high altitude) at Lachen and Lachung (total 2 ha.)for 10 years	2	910227	₹ 18,20,454.00
8	Anti venom kit (at Range Office, check post)	10	100000	₹ 10,00,000.00
9	New Forest Rest House at Chungthang	1	7000000	₹ 70,00,000.00
10	Check post upgradation	2	1000000	₹ 20,00,000.00
11	Patrolling Bikes	5	200000	₹ 10,00,000.00
TOTAL (D)=				₹ 3,54,28,272.00
TOTAL A+B+C+D=				₹ 12,19,45,401.50

(E) Over Head/monitoring & Evaluation/Contingencies

Sl.No	Particular	Area(ha)	Rate	Amount
1	Office expenses, stationery, TA/DA, repair of vehicles	5%	₹ 12,19,45,402.00	₹ 60,97,270.10
2	Monitoring & evaluation of scheme/project by the Central Government as well as by the State Government.	2%	₹ 12,19,45,402.00	₹ 24,38,908.04
3	Contingencies & unforeseen expenditure	4%	₹ 12,19,45,402.00	₹ 48,77,816.08
Sub-total-E				₹ 1,34,13,994.22
Grand Total (A+B+C+D+E)				₹ 13,53,59,395.72
(Rupees Thirteen crore Fifty three lakh Fifty nine thousand three hundred and ninety six only)				

Assistant Conservator of Forest
Sub-Division(T) Chungthang
Chungthang Territorial Sub Division
Forest and Environment Department
Govt of Sikkim

Divisional Forest Officer
Territorial Division Mangan
Territorial Division Mangan
Forest & Environment Department

MAP SHOWING THE LOCATION OF COMPENSATORY AFFORESTATION AGAINST THE DIVERSION OF FOREST LAND OF 116 HA FOR WIDENING / UPGRADATION OF EXISTING ROAD (NH310 A) TO NHDL, SPECIFICATION WITH PAVED SHOULDER FROM YUMTHANG OF DESIGN KM 52+898 TO YUMESAMDONG BORDER (ZERO POINT) OF DESIGN KM 84+160 UNDER LACHUNG (T) RANGE IN MANGAN DISTRICT.

