

JOINT COMPENSATORY AFFORESTATION SCHEME

Joint Compensatory Afforestation Scheme for forest land diversion cases of 8.50MW LASHPATHRI-I Small Hydro Power (SHP) Project (FP/JK/HYD/47466/2020) & 9.00MW LASHPATHRI II HYDRO ELECTRIC PROJECT (FP/JK/HYD/47448/2020) of Sindh Forest Division Ganderbal, J&K.

Full Title of the Forest Land Diversion Projects :

- (i) 8.50MW LASHPATHRI-I Small Hydro Power (SHP) Project
(ii) 9.00MW LASHPATHRI II HYDRO ELECTRIC PROJECT

File No. : (i) FP/JK/HYD/47466/2020

(ii) FP/JK/HYD/47448/2020

Date of Proposals : 15-07-2020

Name of Forest Division (where forest land is proposed to be diverted) : Sindh Forest Division, Ganderbal

Forest Area to be diverted : (i) 3.10 Hacs for Lashpathri-I (ii) 2.90 Hacs for Lashpathri-II

Forest/NFL area to be planted : 12 Hacs

No. of Trees to be felled = (i) 38 trees for Lashpathri-I (ii) 03 Trees for Lashpathri-II

No. of Plants/poles to be damaged = 01 pole for Lashpathri-I

No. of Plants to be planted in the Scheme = 12000 No's

Details of land where C.A is to be carried out:

Degraded forest land Yes/No : Yes	Area: 12 Hacs
Non-forest land Yes/No : No.	Area: ----
Forest Division : Sindh Forest Division Ganderbal	District: Ganderbal
Range : Sindh Range Kangan	Tehsil : Kangan
Compartment No.63(a)/Sindh	Khasra No (for Non Forest land) : ----
C.A. Site (Name of the location) : Sonamarg, Gadibal	C.A. Area : 12 Hacs

C.A. Site Geo Coordinates

Starting Point: 34°17'58.71"N 75°18'37.49"E

Ending Point: 34°18'5.95"N 75°18'54.10"E

In case of non-forest area identified for CA, then what is distance of C.A site from the adjoining forest boundary: N.A

I. Description of C.A Site.

a. Soil type: Loomy
b) Topography: hilly/undulating/plain: Hilly
c) Slop: steep/medium/gentle : Steep
d) For non forest land-description of existing vegetation/root stock and density:
e) In case of degraded forest land-description of forest type and crown density: Moist Temperate Forest and Crown density = <40%.

II. Plantation Model: CA plan has to be site specific considering all relevant factors including crown density of existing vegetation, type of existing vegetation, and species to be planted on an average, about 1000 plants/ ha will be planted

Modal CA for 12 Hac in Degraded Forest

S.No	Description			Rate (In Rs)	Total Amount (In Rs)
		Unit	No.		
A	1st year cost of Afforestation	No.	12000	60.70	728400.00
1	2nd Year Maintenance (BUC* @ 25%)	No.	3000	60.70	182100.00
2	3rd Year Maintenance (BUC @ 10%)	No.	1200	60.70	72840.00
3	4th Year Maintenance (BUC @ 5%)	No.	600	60.70	36420.00
4	5th Year Maintenance (BUC @ 5%)	No.	600	60.70	36420.00
5	6th Year Maintenance (BUC @ 5%)	No.	600	60.70	36420.00
6	7th Year Maintenance (BUC @ 5%)	No.	600	60.70	36420.00
7	8th Year Maintenance (BUC @ 5%)	No.	600	60.70	36420.00
8	9th Year Maintenance (BUC @ 5%)	No.	600	60.70	36420.00
9	10th Year Maintenance (BUC @ 5%)	No.	600	60.70	36420.00
Sub-Total					1238280.00

B	Other Afforestation Intervention (As per the requirement of the site condition)				
1	Patch Sowing	No. of Patches	2400	7.18	17232.00
2	Planting of Grass Slips	No. of Slips	2400	6.35	15240.00
C	Fencing				
1	Angle Iron Barbed Wire Fencing	Rft	7200	252	1814400.00
2	Wooden Fencing				0.00
3	Chain Link Fencing				0.00
4	Fencing Repair	Rft	7200	16.74	120528.00
D	Site Preparation : (Cutting, Grubbing and removal of Lantana)	Hacs	0	0	0.00
E	Pruning and Training of existing Root Stocks	No	2400	6.35	15240.00
Total C.A Charges					3220920.00
F	Soil & Water Conservation and protection measures like construction of fire lines and inspection path				600000.00
Total (A+B+C+D+E+F)					3820920.00
G	Overhead Charges : (10% of the C.A Charges)				382092.00
Grand Total: (A+B+C+D+E+F+G)					4203012.00
IV. Net Present Value (NPV) of 3.10 Hacs of forest land to be diverted @ Rs.6,99,000/per Hac in Comptt. 63(b)/Sindh & 64/Sindh Lashpathri-I (as per Annexure-A)					1083450.00
V. Net Present Value (NPV) of 2.90 Hacs of forest land to be diverted @ Rs.6,99,000/per Hac in Comptt. 63(b)/Sindh & 64/Sindh Lashpathri-II (as per Annexure-B)					1013550.00
VI. Additional CA (Biological interventions in Muck disposal plan @ Rs.40,000/-for two projects)					80000.00
Grand Total: (A+B+C+D+E+F+G+IV+V+VI)					6380012.00

III. Technical Details: Technical details of Compensatory Afforestation Scheme are as follows

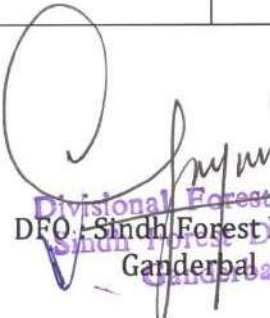
i.	General Details : The area forms part of Co.63(a)/Sindh of Kullam block, Sindh Range Kangan. It is under the Protection Working Circle. The intervention proposed are in accordance with the Working Plan prescriptions including selection of species, soil conservation measures, fire protection etc.
ii.	Plantation Method: Pit Planting with pits of size 45x45x45 Cms
iii.	Spacing: 3mx3m
iv.	Species proposed to be planted: Kail, Fir, Maple etc
v.	Silvicultural Operation: Pruning of existing root stocks
vi.	Soil & Moisture Conservation Works: Dry rubble stone masonry (DRSM) & crate works along the Nallah
vii.	Protection (Fencing, Watch & Ward, People's Participation etc):- Main protection is through fencing which prevents the grazing in the area. Watch & Ward from the locality is already available under normal CAMPAs which shall be utilized for protection along with permanent beat staff. No new watch & ward shall be engaged. Community involvement entails provision of grass and fodder shrubs to encourage stall feeding among the local communities who in lieu ensure protection to saplings planted in the area.
viii.	Proposed Monitoring Mechanism: Internal & 3rd Party Monitoring as per provisions of Department.
ix.	Any other information: -----

* BUC --- Beating Up of Casualties

Divisional Forest Officer
Sindh Forest Division
Gandhinagar

CALCULATION SHEET OF NPV**(9.00 MW LASHPATHRI-II SMALL HYDRO PROJECT)**

S.No.	Division	Comptt. No.	Forest Area (In Hacs)	Canopy Density	Eco Class	NPV Rate (Lac Rs./Hac)	NPV Amount (Rs. In Lacs)
1	2	3	4	5	6	7	8
1	Sindh	64/Sindh	2.20	0	VI	6.99	15,37,800.00
2		65(a)/Sindh	0.70	0	VI	6.99	4,89,300.00
Total			2.90				20,27,100.00
In case of small hydro electric project upto 25 MW, 50% of the normal NPV is applicable.							10,13,550.00

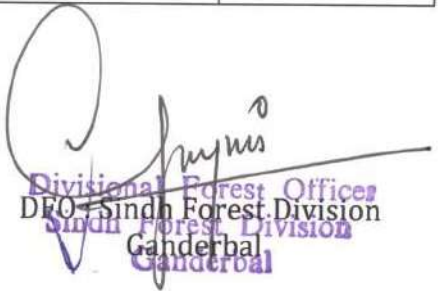

 Divisional Forest Officer
 DFO, Sindh Forest Division
 Ganderal

(Annexure-A)

CALCULATION SHEET OF NPV

(8.5 MW LASHPATHRI-I SMALL HYDRO POWER PROJECT)

S.No.	Division	Comptt. No.	Forest Area (In Hacs)	Canopy Density	Eco Class	NPV Rate (Lac Rs./Hac)	NPV Amount (Rs. In Lacs)
1	2	3	4	5	6	7	8
1	Sindh	63(b)/Sindh	2.20	0	VI	6.99	15,37,800.00
2		64/Sindh	0.90	0	VI	6.99	6,29,100.00
Total			3.10				21,66,900.00
In case of small hydro electric project upto 25 MW, 50% of the normal NPV is applicable.							10,83,450.00


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