

Model estimate for Strip Plantation, Roadside & Canal Bank etc.

Nature of soil = Loose & soft soil

No of seedlings/ Row Km =400 (at a spacing of 2.5 m)

No of rows/ Km in each side of the road = 2

No. of seedlings required for 2 rows =400 x2 rows = 800 Nos.

No. of seedlings required for 1 Km having 2 rows in both the sides = 800Nos x 2= 1600

Species may be planted: -

1. Flowering trees = 40% [*Casia fistula*, (Sonalu), *Casia simea* (Minjiri), *Delonex regia* (Krishnachura), *Alostronia scholaris* (Chatian) *Bahaunia* species (Kanchan), *Bombax cieba* (Simul)]
2. Decorative plants = 20%[*Anthocephalus cadamba* (Kadam), Debdaru, *Casurina equisetifolia* (Jhaw), Kushum]
3. Timber Yielding = 30 % [*Dalbergia sissoo* (Sissoo), *Gmelina arborea* (Gamar) *Swietenia macrophylla* (Mehagani) *Albizzia lebbeck* (Siris) , *Tectona grandis* (Segun) , *Ailanthus grandis* (Gakul) , *Chukrasia tabularis* (Chikrasi) &(Neem)
4. Fruit yielding = 10% [*Syzygium cumini* (jam), *Ziziphus jujuba* (Kul) , *Mangifera indica* (Mango)

Sl No.	Particulars of work	Lab our required/ha of plantation (Man days for 1600 seedlings)	Lab our required /100 seedlings (In man days)	Total cost of Lab our for 100 seedlings @ 75.00/ m.d	Cost of labour for 8000 seedlings i.e. 5.0ha
1	Survey & demarcation	1	0.0625	4.6875	375.00
2	Initial Cleaning planting site by cutting bushes, weeds & removing the same ***	16 625 m2 / m d	1.00	75.00	6000.00
3	Digging planting pits of size * 0.45 x 0.45 m x 0.30 m i.e 1.5ft x 1.5 ft x 1 ft= 2.25 cft x 1600 pits =3600 cft/ 99 cft = 36 md (For loose & soft soil soil, digging earth for male 99 cft= 1 md)This is as per order No RD/P/NREGA/18-09/06 DATED 19 TH October/2006	36 44 pits/ m d	2.25	168.75	13500.00
4	Filling planting pits with basal dose application 20 days before planting (50 gram per pit)	16 100 pits/ m d	1.00	75.00	6000.00
5	Planting potted seedlings including carriage from nursery	20 80 plants/ m d	1.25	93.75	7500.00

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7	Live fencing by sowing seeds of Babla/ Khair/Boga medulla/cuttings of Ipomea	12	0.75	56.25	4500.00
8	Filling up vacancies by planting potted seedlings	4	0.250	18.75	1500.00
9	1 st cleaning, mulching with fertilizer	16 100 pits/ md	1.00	75.00	6000.00
10	2 nd cleaning, mulching weeding etc.	14 114 pits/ m d	0.875	65.625	5250.00
11	3 rd cleaning, mulching weeding etc.	12 133 pits / m d	0.750	56.25	4500.00
12	Biological protection of plantation by engaging Mazdoor from August to January 6 months @ 1 labor/month **	180	11.25	843.75	67500.00
	Total labour cost =	327	20.4375	1532.8125	122625.00
	Material component				
13	Cost of fertilizer N: P: K (10:26:26) @ 40 grams/pit-	64 kg			3200.00
14	Cost of insecticides	LS			2000.00
15	Cost of raising seedling (1600 + 10%)= 1760 x 2.0/- seedling x 5 ha				17600.00
16	Cost of seeds/ collection of Ipomea cuttings (5 ha)				2000.00
	Total=				147425.00

*Any other timber species can be planted according to the suitability & adoptability of the locality.

** Beneficiary committee is to be formed before taking up the plantation in the proposed area & after three months the plantation is to be handed over to the beneficiary committee.

Cost of creation of 1.0 ha of plantation: Rs 147425/ 5 = 29485.00 including cost of material & cost seedlings.

*** Weeds are dense in North Bengal compare to the southern zone & central zone.

For creation of successful plantation the following are guidelines, which should be strictly followed.

1. Planning for site selection & submission of initial proposal- up to February
2. Pit digging etc. – December to March
3. Pit Filling- May, June after 2-3 showers.
4. Planting – At onset Monsoon & by 31st July at the latest
5. 1st Mulching- after 21 days of Planting.
6. 2nd Mulching—after 45 days of planting
7. 3rd Mulching – after 65 days of planting
8. Digging well if required – March to June

Precautions before application of Inorganic fertilizer/ Bio fertilizer.

1. Note that there is sufficient moisture in the field before applying Fertilizer.
2. Avoid hot hours while application of fertilizer.
3. Choose fair weather day for application of fertilizer.
4. Place fertilizer at least 8-10 cm below the soil surface.
5. Do not mix bio fertilizer with inorganic fertilizer.
6. Do not keep bio fertilizer directly in the sun keep it in cool place

The estimate is revised on the basis of Agro- Ecological classification of soil in West Bengal for digging pits for creation of plantation under NREGA & also as per schedule of rate issued from P& RD Department vide No-RD/P/NREGA/18S-09/06 dated 19th October/2006.

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06/11/2008

Technical Officer,
Panchyat & Rural Development Department