

Site inspection notes of Compensatory Afforestation area of 154.93 Ha proposed diversion of for construction of 765 KV Double Circuit Power Transmission line from Kadapa to Chilakaluripeta by PSTSL (100% subsidiary of POWERGRID)

The Prl. Chief Conservator of Forests, AP, Guntur issued instructions vide Rc. No. 6969/2016-FCA-3, Dt. 04-01-2017 to identify an area of 155 ha (i.e. double the area of diverted forest land) of degraded forest land for Compensatory Afforestation in lieu of diversion of 77.206 ha of forest land i.e. 59.531 Ha in Proddatur (WL) Division & 17.67 ha in Nellore Division for construction of 765 KV Double Circuit Power Transmission line from Kadapa to Chilakaluripeta by PSTSL. Accordingly 155 ha degraded forest land is identified for Compensatory Afforestation in Proddatur (WL) Division. After DGPS the diversion area was authenticated to an extent of 74.486 Ha i.e. 56.764 Ha in Proddatur (WL) Division & 17.722 ha in Nellore Division. Though the diversion area is authenticated to 74.486 ha, already identified and DGPS authenticated degraded forest areas of 154.93 ha were taken into consideration for raising Compensatory Afforestation in Proddatur (WL) Division. The Range wise details of CA areas are as follows.

Sl No.	Range	Name of the Block	Compt No.	Beat	Area proposed for CA in Ha
1	Porumamilla	K. K. Dasaripalli RF	200 & 201 ✓	Peddabhavi	20.48
2	Porumamilla	Kavalakuntla RF	245 ✓	Tekurpeta	20.88
3	Porumamilla	Kavalakuntla South RF	254 ✓	Siddavaram	21.03
4	Porumamilla	Kalasapadu RF	230 ✓	Kalasapadu	21.75
5	Porumamilla	Sancherla RF	237 ✓	Venkatapuram	20.36
6	Muddanur	Bhanukotamala RF	27 ✓	Mangapatnam	30.12
7	Proddatur	Kamalapuram Block - I	73 ✓	Kamalapuram	20.31
		TOTAL			154.93

1) Peddabhavi Beat of Porumamilla Range

Inspected the area on 24/10/2017 proposed for raising of 20.48 ha compensatory afforestation plantation in Degraded Forest Area of Compt. No. 200 & 201, K. K. Dasaripalli RF, Pebbabhavi Beat of Porumamilla Range in Proddatur Forest Division. K. K. Dasaripalli RF of Porumamilla Range is notified as reserved forest under section 16 of Madras Forest Act 1882 vide notification 338, Dt. 12-06-1895 and Gazette Number 141, Dt. 19-03-1897.

The proposed area mostly consists of hard red loamy soil intermixed with pebbles. The depth of the soil is about 1 Mt.



The compensatory afforestation area falls under Southern Tropical Dry Deciduous Forests and sub type is Dry Mixed Deciduous Forests with density less than 0.2 having forest quality VI with the following species.

- 1) *Hardwickia binata*
- 2) *Anogeissus latifolia*
- 3) *Carissa spinarum*.
- 4) *Zyzyphus xylopyrus*
- 5) *Chloroxylon sweitenia*
- 6) *Webara corymbosa*
- 7) *Soymida febrifuga*

Method of Treatment

The treatment proposed for raising compensatory afforestation area is under Semi Mechanical Method of Plantation depending upon the type of soil, density of vegetation. Tall plants of size 8"x 12" are proposed for planting in 0.60 mt cube pits to facilitate quick establishment and growth. For loosening the top soil and to facilitate water absorption and good growth ploughing is preferred.

Soil & Moisture Conservation works are to be taken up to recharge the ground water by constructing check dams in the proposed compensatory afforestation area. Fencing is proposed for protection from the biotic interference.

2) Tekurpeta Beat of Porumamilla Range

Inspected the area on 24/10/2017 proposed for raising of 20.88 ha compensatory afforestation plantation in Degraded Forest Area of Compt. No. 245, Kavalakuntla RF, Tekurpeta Beat of Porumamilla Range in Proddatur Forest Division. Kavalakuntla RF of Porumamilla Range is notified as reserved forest under section 16 of Madras Forest Act 1882 vide notification No. 269, Dt. 04-06-1893.

The proposed area is red soil with morrum. The depth of the soil is about less than 1 Mt.



The compensatory afforestation area falls under Southern Tropical Dry Deciduous Forests and sub type is Dry Mixed Deciduous Forests with density is varying from 0.1 to 0.2 having forest quality VI with the following species.

- 1) Hardwickia binata
- 2) Grewia populifolia
- 3) Zyzyphus xylopyrus
- 4) Gardenia gummiferra
- 5) Soyimida febrifuga

Method of Treatment

The treatment proposed for raising compensatory afforestation area is under Semi Mechanical Method of Plantation depending upon the type of soil, density of vegetation. Tall plants of size 8"x 12" are proposed for planting in 0.60 mt cube pits to facilitate quick establishment and growth. For loosening the top soil and to facilitate water absorption and good growth ploughing is preferred.

Soil & Moisture Conservation works are to be taken up to recharge the ground water by constructing rock filled dams in the proposed compensatory afforestation area. Fencing is proposed for protection from the biotic interference.

3) Siddavaram Beat of Porumamilla Range

Inspected the area on 25/10/2017 proposed for raising of 21.03 ha compensatory afforestation plantation in Degraded Forest Area of Compt. No. 254, Kavalakuntla Extn. A & B RF, Siddavaram Beat of Porumamilla Range in Proddatur Forest Division. Kavalakuntla Extn. A & B RF of Porumamilla Range is notified as reserved forest under section 16 of Madras Forest Act 1882 vide notification No. 125, Dt. 23-03-1928.

The proposed area is red loamy soil intermixing with morrum. The depth of the soil is about 1 Mt.



The compensatory afforestation area falls under Southern Tropical Dry Deciduous Forests and sub type is Dry Mixed Deciduous Forests with density is varying from 0.1 to 0.2 having forest quality VI with the following species.

- 1) Hardwickia binata
- 2) Zyzyphus xylopyrus
- 3) Anogeissus latifolia
- 4) Carissa spinarum
- 5) Chloroxylon sweitenia
- 6) Gymnosporia montomous.
- 7) Azadirachta indica
- 8) Ferronia
- 9) Prosopis

Method of Treatment

The treatment proposed for raising compensatory afforestation area is under Semi Mechanical Method of Plantation depending upon the type of soil, density of vegetation. Tall plants of size 8"x 12" are proposed for planting in 0.60 mt cube pits to facilitate quick establishment and growth. For loosening the top soil and to facilitate water absorption and good growth ploughing is preferred.



The compensatory afforestation area falls under Southern Tropical Dry Deciduous Forests and sub type is Dry Mixed Deciduous Forests with density is varying from 0.1 to 0.2 having forest quality VI with the following species.

- 1) Hardwickia binata
- 2) Zyzyphus xylopyrus
- 3) Anogeissus latifolia
- 4) Carissa spinarum
- 5) Chloroxylon sweitenia
- 6) Gymnosporia montomous.
- 7) Azadirachta indica
- 8) Ferronia
- 9) Prosopis

Method of Treatment

The treatment proposed for raising compensatory afforestation area is under Semi Mechanical Method of Plantation depending upon the type of soil, density of vegetation. Tall plants of size 8"x 12" are proposed for planting in 0.60 mt cube pits to facilitate quick establishment and growth. For loosening the top soil and to facilitate water absorption and good growth ploughing is preferred.

Soil & Moisture Conservation works are to be taken up to recharge the ground water by constructing check dams and rock filled dams in the proposed compensatory afforestation area. Fencing is proposed for protection from the biotic interference.

4) Kalasapadu Beat of Porumamilla Range

Inspected the area on 25/10/2017 proposed for raising of 21.75 ha compensatory afforestation plantation in Degraded Forest Area of Compt. No. 230, Kalasapadu RF, Kalasapadu Beat of Porumamilla Range in Proddatur Forest Division. Kalasapadu RF of Porumamilla Range is notified as reserved forest under section 16 of Madras Forest Act 1882 vide notification No. 147, Dt. 04-07-1921.

The proposed area is red loamy soil with plain. The depth of the soil is about 1 Mt.



The compensatory afforestation area falls under Southern Tropical Dry Deciduous Forests and sub type is Dry Mixed Deciduous Forests with density is varying from 0.1 to 0.2 having forest quality VI with the following species.

- 1) Hardwickia binata
- 2) Anogeissus latifolia
- 3) Grewia populifolia
- 4) Soyimida febrifuga
- 5) Mimosa hexandra.

Method of Treatment

The treatment proposed for raising compensatory afforestation area is under Semi Mechanical Method of Plantation depending upon the type of soil, density of vegetation. Tall plants of size 8"x 12" are proposed for planting in 0.60 mt cube pits to facilitate quick establishment and growth. For loosening the top soil and to facilitate water absorption and good growth ploughing is preferred.

Soil & Moisture Conservation works are proposed like continuous peripheral trench in the compensatory afforestation area. Fencing is proposed for protection from the biotic interference.

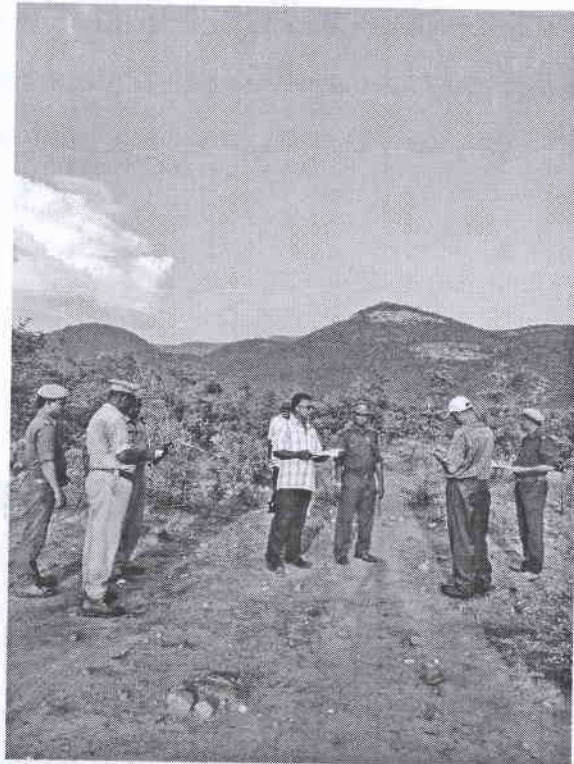
5) Venkatapuram Beat of Porumamilla Range

Inspected the area on 25/10/2017 proposed for raising of 20.36 ha compensatory afforestation plantation in Degraded Forest Area of Compt. No. 237, Sancherla Extn. A RF, Venkatapuram Beat of Porumamilla Range in Proddatur Forest Division. This reserve forest was notified under section 16 of Madras Forest Act 1882 vide notification No. 192, Dt. 06-05-1895.

The proposed area is red loamy soil mixed with pebbles. The depth of the soil is about 1 Mt to 3 Mt.

The compensatory afforestation area falls under Southern Tropical Dry Deciduous Forests and sub type is Dry Mixed Deciduous Forests with density is varying from 0.1 to 0.2 having forest quality VI with the following species.

- 1) *Hardwickia binata*
- 2) *Zyzyphus xylopyrus*
- 3) *Carissa spinarum*.
- 4) *Gymnosporia montomous*
- 5) *Soymida febrifuga*



Method of Treatment

The treatment proposed for raising compensatory afforestation area is under Semi Mechanical Method of Plantation depending upon the type of soil, density of vegetation. Tall plants of size 8"x 12" are proposed for planting in 0.60 mt cube pits to facilitate quick establishment and growth. For loosening the top soil and to facilitate water absorption and good growth ploughing is preferred.

Soil & Moisture Conservation works are to be taken up to recharge the ground water by constructing check dams and continuous peripheral trench in the proposed compensatory afforestation area. Fencing is proposed for protection from the biotic interference.

6) Mangapatnam Beat of Muddanur Range

Inspected the area on 05/11/2017 proposed for raising of 30.12 ha compensatory afforestation plantation in Degraded Forest Area of Compt. No. 27, Bhanukotamala RF, Mangapatnam Beat of Muddanur Range in Proddatur Forest Division. This reserve forest was notified under section 16 of Madras Forest Act 1882 vide notification No. 598, Dt. 07-12-1894.

The proposed area is located on the hill top and inaccessible unless the road is laid. The area is mostly consists of patches of Red soil with gravel and rocky out crop seen. The soil depth may not more than 0.5 mt to 1 mt. The area was once worked for agriculture.



The compensatory afforestation area falls under Southern Tropical Dry Deciduous Forests and sub type is Dry Mixed Deciduous Forests with density is varying from 0.1 to 0.3 having forest quality VI with the following species.

- 1) *Alberzia amara*
- 2) *Hardwickia binata*
- 3) *Cassia tora*
- 4) *Prosopis*
- 5) *Dolichandrone crispera*
- 6) *Carissa spinarum*
- 7) *Ficus species*

Method of Treatment

The treatment proposed for raising compensatory afforestation area is under Semi Mechanical Method of Plantation depending upon the type of soil, density of vegetation. Tall plants of size 8"x 12" are proposed for planting in 0.60 mt cube pits to facilitate quick establishment and growth. For loosening the top soil and to facilitate water absorption and good growth ploughing is preferred.

Approach road is proposed to the plantation site since the area is on hill top and there is no proper road connectivity. Fencing is proposed for protection from the biotic interference.

7) Kamalapuram Beat of Proddatur Range

Inspected the proposed area on 02/11/2017 for raising of 20.31 ha compensatory afforestation plantation in Degraded Forest Area of Compt. No. 73, Kamalapuram Block - I RF, Kamalapuram Beat of Proddatur Range in Proddatur Forest Division. This reserve forest was notified under section 16 of Madras Forest Act 1882 vide notification No. 206, Dt. 19-07-1922.

The proposed area is with sandy loamy soil. The soil depth is upto 1 mt. Part of proposed area is under encroachment. The encroachments are under replenishment process.




The compensatory afforestation area falls under Southern Tropical Dry Deciduous Forests and sub type is Dry Mixed Deciduous Forests with density varying 0.1 to 0.3 with the following species.

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|----------------------|--------------------------|
| 1) Dalbergia sissoo, | 2) Zyzyphus xylopyrus, |
| 3) Cassia auriculata | 4) Cymbopogan coloratus. |
| 5) Eucalyptus | 6) Casaurina |

Method of Treatment

The treatment proposed for raising compensatory afforestation area is under Semi Mechanical Method of Plantation depending upon the type of soil, density of vegetation. Tall plants of size 8"x 12" are proposed for planting in 0.60 mt cube pits to facilitate quick establishment and growth. For loosening the top soil and to facilitate water absorption and good growth ploughing is preferred. Provision for 100% imported soil is made to make up the sandy loamy soil.

The area selected for raising compensatory Afforestation plantation in the Kamalapuram Beat is located in the prime area and prone to encroachment. More than 70% of the area selected for raising CA plantation is under encroachment and highly susceptible for repeated encroachment, even if it is replenished. Hence protection wall is proposed all around the proposed CA in order to check further encroachments.



Divisional Forest Officer
Proddatur (WL) Division