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**CIRCULAR No.8/2005/FDA.1**

Sub: National Afforestation Programme (NAP) - Implementation of FDA Project - Treatment of Forest areas under different interventions - Additional inputs - Certain guidelines - issued Regarding.

Ref: 1. Circular No.06/PMU-I/3/2002 Dated 27-09-2002

2. Circular NO.2/2004/J.4, dated 8-3-2004

3. Pri.CCF rc.no.37770/2004FDA-1, dated 6-11 -2004

4. Pri.CCF Circular No.1-A/2004/G.1 issued in ref.no. 33820/2004/G1, dated 26-1-2005

5. Pri.CCF Circular No.6-A/2005/G.1 issued in ref no.17309/2000/G.1, dated 8-5-2005

6. Pri.CCF Circular NO.3/2005/PMU.I/1 issued in ref. No.49335 / 2004 / PMU.I / 1, dated 12-5-2005.

7. Pri.CCF D.O.Ir.No.17309/2000/G.1, dated 26-5-2005

8. Circular No.7/05/PXA.1, dated 15-6-2005

We have been raising plantations of several species under different projects. It is a common knowledge that plantation model for each species should be the same irrespective of the projects under which the plantations are being raised.

2. However, there are certain problems in raising the plantations of all species under different projects with the same schedule of operations, as there is an upper limit on unit cost in certain projects like FDA which is funded by the Government of India whereas, no such upper limit exists for the plantations being raised under other projects like Community Forest Management (CFM) or Compensatory Afforestation (CA) etc.

3. It will be appropriate and technically sound if we can raise the plantation of a particular species with same schedule of operations uniformly irrespective of the project under which it is raised all over the State in order to get optimum production. We may give a little more weightage on Soil and Moisture conservation (SMC) works where the rainfall is low and soil is poor.

The following plantation models are raised under FDA Projects funded by the Government of India.

1) Aided Natural Regeneration.

2) Artificial Regeneration.

- 3) Pasture Development / Silvipasture.
- 4) Bamboo Plantation.
- 5) Planting of Canes.
- 6) Mixed Plantations of trees having MFP and Medicinal Value.
- 7) Regeneration of perennial herbs and shrubs of medicinal value.

Of the above 7 items listed above, item no.5 is not being implemented at all in Andhra Pradesh; whereas item no.7 was taken up in a small area last year. Therefore five items which are important and being implemented in Andhra Pradesh are produced below with respect to cost norms.

#### 4. Cost Norms at Wage Rate of Rs.75/- per day.

Sl. No.	Model/ Intervention	Plantation including maintenance	Soil & Moisture Conservation (15% of plantation cost)	M&F Micro Planning, Fencing, Awareness raising (10% of the plantation cost)	Overheads 10% of the plantation cost	Entry Point Activities (fixed)	Total
1	2	3	4	5	6	7	8
1.	Aided Natural Regeneration	9750	1460	975	975	4000	17160
2.	Artificial Regeneration	17100	2565	1710	1710	4000	27085
3.	Mixed Plantations of tree having MFP and medicinal value	17100	2565	1710	1710	4000	27085
4.	Bamboo Plantation	9300	1395	930	930	4000	16555
5.	Pasture Development/ Silvipasture	11100	1665	1110	1110	4000	18985

5. In order to implement the different plantation models under FDA on par with the plantation models of the same species raised under CFM/CA/RIDF Projects, with respect to schedule of operations, it is necessary to discuss very briefly each model and identify the deficiencies in the model with respect to unit cost and make it up from other sources, if possible following the correct procedure and maintenance of proper record.

5.1.Aided Natural Regeneration: Almost 50% of the total area under FDA Project is covered by this model. As can be seen from the cost table the unit cost is Rs.9750 at

the wage rate of Rs.75/- per day with a provision of Rs.1460/- for SMC works.

So far this model is being raised in a block with proper espacement as per the Circulars issued from the office of the Principal Chief Conservator of Forests in order to have proper supervision and better maintenance of the planted seedlings. The other items like cost on Micro Planning, over head and entry point etc. cannot be used for any schedule of operations.

Under this model bamboo under planting should also be taken up as discussed in our Circular cited 5<sup>th</sup> under CFM Project. Before doing so, the Conservators of forests are requested to study the cost tables in detail with respect to its acquaintance on the schedule of operations as finalized for bamboo under planting.

5.2 If it is concluded that unit costs provided are insufficient for uniform schedule of operations, the SMC component available in FDA planting models should be used for essential planting operations. Before doing so the concerned FRO should certify in writing to the effect that SMC component of FDA model has been used for essential planting operations. It should be noted in the plantation journal and separate Measurement Book (MB) maintained. The RIDF projects which are sanctioned with Range as a unit having similar sanctioned SMC components can be used for saturation level treatment of the planting area (10% of harvesting of rain water).

5.3. Artificial Regeneration:- The unit cost is Rs.17,100 with a provision of Rs.2,565 for SMC works.

This is a very important model and gradually we will have to take up more and more area under this model. This model should be followed exactly as discussed in details in our Circulars cited in the reference 1<sup>st</sup> and 5<sup>th</sup>, on Semi-Mechanical Method. The Conservators of Forests are requested to see that the standard espacement of a particular species is followed as communicated in the Circulars issued from the office of the Principal Chief Conservator of Forests. However, the norm of 1100 plants per hectare as set by the Government of India should be followed by raising Shelter-belts around the plantation area with the species like Eucalyptus. Casuarina. Subabul. Bamboo and Palmyrah (palm) at a close espacement in order to have 1100 plants per hectare on an average for the entire plantation area. The strip of the Shelter-belt can also be raised around the individual blocks inside the plantation area. It may also be considered to raise suitable species which require small espacement in between the plants which require large espacement as discussed already in our Circulars.

In case unit costs provided are insufficient, instructions at Para 5.2 should be followed

5.4. Mixed Plantations of Trees having MFP and Medicinal Value (1100 Plants per hectare):-

This plantation has to be raised under Semi Mechanical Method as discussed in item no. 5.3 above. The medicinal plants like Usiri, Pongamia, Tamarind, Neredu, Seethaphal etc. have to be raised. As discussed in our Circulars already inter-cultivation of medicinal plants may also be taken up. Here also the norms of 1100 plants per hectare should be ensured by raising a Shelter-belt with species having medicinal value or by inter-cultivation of medicinal plants/MFP.

In case unit costs provided are insufficient, instructions at Para 5.2 should be followed.

5.5. Bamboo Plantation (625 plants per hectare):- The unit cost is Rs.9,300/- with a provision of SMC works for Rs.1,395.

With this unit cost, the plantation cannot be raised under Semi-Mechanical method by uprootal of stumps. Here the plantation has to be raised after clearing bush growth and planting in the pit or planting in the trench cum pit.

The Conservators of Forests are requested to study the unit cost in depth remembering the fact that bamboo requires a lot of water for good growth. Therefore, proper importance has to be given on SMC works.

In all probability the amount provided for SMC works may also be diverted for raising plantations on some essential item and the entire SMC works like erecting Percolation Tanks and trenches at a regular interval with a depth of 50cm and width of 1.5m as prescribed for Integrated Fire Line in our Circular No.02/J4/2004 issued in Prl. CCF.Rc.No.16284/2004/J4 Dated 08.03.2004, may be dug out all over the area. Pits of 45 cm<sup>3</sup> may be dug out in the trench and outside the trench at an espacement of 5 m X 5 m in order to obtain 400 plants per hectare for the entire plantation area. It should be considered to raise Shelter-belt of bamboo at a closer espacement around plantation area, in order to get 625 plants per ha. in the entire plantation area.

In case unit costs provided are insufficient, instructions at Para 5.2 should be followed

5.6. Pasture Development/Silvipasture (400 plants per hectare):- The unit cost is Rs.11,100/- with a provision of Rs.1,665/- for SMC works. This plantation model is being raised in Semi-mechanical Method after ploughing the area with a heavy duty tractor. The Conservators of Forests may study the unit cost very carefully and find out whether this unit cost is sufficient. In case unit costs provided are insufficient, instructions at Para 5.2 should be followed.

Apart from what is being practiced today, the long rotation species like Ravi, Marri and Dirisinam etc., may also be planted at an espacement of 20 m X 20 m all over the area. Also a small plot may be raised with Bamboo only under this model for which fencing has to be done necessarily in the beginning.

6. All these guidelines are being issued in order to raise the plantations of all species with a uniform schedule of operations irrespective of the source of funding. It may be noted that the goal is to achieve exemplary success in raising plantations so that maximum yield goes to the local community for income generation/poverty alleviation. The Conservators of Forests are also requested to observe utmost care in formulating the schedule of operations so that all non-essential expenditure is eliminated.

Sd/- **(S.K.DAS)**  
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