Copy of letter No.VE3-625/76 dated 11.3.76 from the Conservator of Forests, Evaluation wing, Trivandrum, addressed to the Chief Conservator of Forests, Trivandrum.

Sub:- Evaluation of estimates for Eucalyptus nursery works sanctioned in various divisions- regarding.
Ref:- Nil
Ascrutiny of the estimates sanctioned in various divisions for raising nurseries of Eucalyptus have revealed that estimates conta in provisions for the excess of the actual requirements. For the same item of work the quantum of sanction is different in the divisions even though the items of the schedule of rate are quoted as authority. A few examples are illustrated below:
(1). Formation of seed beds - Sanction of beds - more than what is required and wide variation in cost.

The report of the minimum wages committee for employment in the Forests of Kerala prescribes the detailed job specifications on watering it has been specified (page 134) that 1 sqm. Of nursery may contain 400 seedlings. At this rate a nursery bed of ( $12 \mathrm{x} 1 \mathrm{~m} \times 30 \mathrm{~cm}$ ) which has a surface area of 12 sq . m. may contain 4800 seedlings. One standard bed of 40 ' $44^{\prime} \times 1$ ' which has an area of 14.84 sq . m. can contain 5950 seedlings. As per the planting technique for Eucalyptus prescribed in the project report of the KFDC on standard bed will provide the seedlings for planting 3 ha . At an espacement of 2 mx 2 m also for replacement of casualities. This means that 1 bed will provide 8250 seedlings. One bed of 12 mx 1 mx 30 cm . will give 6500 seedlings. The third Five year plan scheme report of the KFDC prescribes the technique for planting of Eucalyptus (page 24) under nursery technique it is stated that 1 standard bed of $40^{\prime} \times 4^{\prime} \times 18$ is expected to yield about 6000 to 8000 seedlings sufficient to plant 10 to 15 acres at an espacement of 11 ' x11' including casualities.

A comparative statement showing the details of requirements for the planting and the actual sanctions given under estimates sanctioned for raising Eucalyptus nurseries is given Appendix.

The statement is self explanatory. The estimate of the number of seedlings expected per bed varies from 1750 in Kozhikode to 3930 in Trivandrum Division. This is against the number of 4800 seedlings per bed of $12 \mathrm{~m} \times 1 \mathrm{~m} \times 30 \mathrm{~cm}$ as per the schedule stated in the minimum wages report (page 134) Even a nursery bed of teak is supposed to yield 1330 one year old teak stump of plant able size. It is therefore surprising that in the case of Eucalyptus where the seedlings are not kept in the primary bed for more than 5 to 7 weeks it is estimated to contain 1750 to 3900 seedlings. Obviously more number of beds
proportionately increases the cost on seeds, shade pandals, watering and other maintenance charges. The approximate estimated is given in the statement in column 10. It can be seen that the amount are considerably high.

## (2). Variation in the cost of watering.

Another aspect which is noticed is the wide variation in the cost of nursery per bed as seen from the estimates. This varies from Rs.150/ per bed in Calicut division to Rs.487/ in the Trivandrum division.

This vide variation is primarily to be attributed to the varying standard of watering prescribed. The column 11 given comparative figures for cost of watering per bed per day. The item of watering is one on which no check can be exercised unless one is present on the spot at the time of watering. Sri. N.R.Nair's data has prescribing a quantum of 30 litres per sq. m. per day. But this quantum need not be strictly prescribed even incases where the species which does not require this mosch of watering. The prescription can also vary accordingly to the locality and number of rainy days. It is also felt that the quantum of 30 litres per sq. m. is excessive and the schedule requiring revision based on actual experience. It is also to be inferred that this expressive item has by itself boosted up the cost of nursery per bed. Where the number of beds is in excess of actual requirements, to that extent cost of watering also goes high and recorded very high. A comparative study of the sanction given for watering shows that there is wide variation in the sanction. It is lowest at 40 up per bed per day in Trichur Division to Rs.75/ in Thenmala in the case of basket beds. The rate in case of the seed bed nursery is lowest at 96 sq. per day in Trichur and Rs.4.46 in palghat the rate is Rs.3.48 in Calicut division and engaged for watering about 10 seed beds where as in other division is engaged for watering only 2 to 3 beds. In the case of basket beds a mazdoor waters 20 beds in Trichur Division and Calicut while the figure very between 2 to 5 beds in other divisions.
(3). Seedlings bed nursery - sanction of excess platforms for arranging baskets than necessary and also wide variation in cost.
The basketing of seedlings was previously done in polythene bags of $12 \mathrm{~cm} \times 18$ cm . size (100 gauge) In order to save the cost of bags, bags of $15 \mathrm{~cm} \times 8 \mathrm{~cm}$ are being used for basketting in most of the southern divisions. The estimates for Kozhikode divisions do not indicate the size of bags. But from number of platform provided it has to be presumed that the bags of $12 \times 18 \mathrm{~cm}$ have been used. According to Sri.N.R.Nair (page 134 of minimum wages report) 200 baskets of $12 \mathrm{~cm} \times 18 \mathrm{~cm}$ can be arranged on one sq. m. Thus a bed of $12 \mathrm{~m} \times 1 \mathrm{mx} 30 \mathrm{~cm}$. can hold 2400 baskets and a standard bed of $40^{\prime} \mathrm{x} 4^{\prime} \mathrm{x} 1^{\prime}$ can
hold about 800 baskets. The number of basket of $15 \mathrm{~cm} \times 18 \mathrm{~cm}$ that can be arranged in a bed will be about 8000 at last. During the inspection of the nursery at Kattappana by this wing account indicated that the average number of baskets per bed about 6000. A comparative study of few estimate sanctioned in some of the division for raising the basketted seedling nursery is given in the statement furnished in appendix II.

It is evident from the statement furnished that there is no uniform standard maintained in the sanction of expenditure even though there is a prescribed schedule of rate for the items of work. There is wide variation in the average cost sanctioned per bed in various divisions. The average works out from Rs. 71.80 to 207 per seedlings. This wide variation is attributed to the different stands intained in the sanction of expenditure on the number of platform and the charges for watering. Whereas it is possible to hold 2100 basketted seedlings ( $12 \mathrm{~cm} \times 18 \mathrm{~cm}$ size) is a bed of 12 m . x $1 \mathrm{~m} \times 30 \mathrm{~m}$ according to Sr . N.R.Nair, in the estimates sanctioned in Calicut the standard adopted is 1100 and 1500 baskets per bed. This means that more number of beds than what is necessary to hold the baskets are sanctioned and this naturally boosts up the expenditure not only on the cost of beds but also on watering.

From the comparative study conducted it is seen that there is wide variation in the estimate sanctions in the different divisions and even within the same circle and Divisions. These variations do not appear to be due to aby variation in locality factors or the difference in the Silvicultural technique. The major differences, as pointed out in the comparative study, are due to want of scrutiny regarding the requirements under each item which has resulted in varying degrees of excess expenditure.

Sd/-
Conservator of Forests,

Sd/-
For Chief Conservator of Forests,

## Endt. FS.8204/76 DT /31.5.76

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For Conservator of Forests,

