<u>INDEX</u>

S. No	CIRCULAR NO.	DATE	SUBJECT	PAGE NO.	
NURSERIES AND PLANTATIONS.					
1.	04/2002/U1	07-08-02	Technique for raising Avenue and Canal Bank Plantations.	2-3	
2.	06/PMU.1 73/2002	27-09-02	Technique for raising Plantations under Semi-Mechanical method.	4-6	
3.	02/2003/PMU.1/3	13-02-03	Poverty alleviation through sustainable management of Forests.	7-11	
4.	03/2003/U.1	05-03-03	Social Forestry Programme and Guidelines.	12-21	
5.	7/98	20-06-03	Guidelines on Planting Plan.	22-25	
6.	15/2002	24-06-03	Vermi Compost & Organic Manures	26-30	
7.	3/2004/U1	07-04-04	Social Forestry FDA & CFM Plantations – Karthika Vanams.	31-32	
8.	6/2004/U2	28-11-04	Homestead planting – Weaker sections Grafts.	33-34	
9.	Re.No.4775/200 3/F.5	21-02-05	Implementation of Compensatory Afforestation scheme.	35-36	
10.	06-A/G1/3/2005	08-05-05	Raising of plantations under Semi- Mechanical method – Further Guidelines.	37-39	
11.	3/2005/PMU-I/1	12-05-05	APCFM – Introduction of Bamboo in degraded forests.	40-41	
12.	8/2005/FDA.1	24-06-05	NAP – Implementation of FDA project.	42-45	
13.	6B/2005/G.1	16-08-05	Raising of Plantations.	46-48	
14.	01-200/PMU.I/3	19-01-06	Propagation of Palmyrah trees.	49-50	
15.	6-C/2006	25-04-06	Compensatory Afforestation – Guidelines for sloppy land.	51-53	
16.	9/2006/S2	24-07-06	Raising of NWFP Plantations with high yielding grafts.	54-56	
FOREST / WILD LIFE PROTECTION					
17.	8/2002	26-10-02	Forest Protection & Beat Inspections.	58-63	
18.	10/2002/X.2	30-11-02	Certain Guidelines – Case study in Forest Offences.	64-66	
19.	1-A/2003	22-04-06	Guidelines on removal of Timber & Forest produce from Patta lands.	67-82	
20.	07/2006	28-04-06	Instructions on Man-Animal conflict prevention.	83-84	

S. No	CIRCULAR NO.	DATE	SUBJECT	PAGE NO.		
VANA SAMRAKSHANA SAMITHIS						
21.	7/2002/PMU-173	16-10-02	6-10-02 Guidelines on VSS.			
22.	6/2003/PMU.III/2	15-07-03	Functioning and Responsibilities of VSSs.	89-91		
23.	04/2004	15-04-04	Delegation of financial powers – Execution through VSSs.	92-104		
	<u>N</u>		D FOREST PRODUCE	105		
24.	45008/2003/PMU -I/1	17-11-03	Tending of Seethaphal trees.	106-107		
25.	8/2004/PMU-I/2	14-12-04	Convergence of CFM and Velugu – Collection of NTFP not covered by GCC.	108-109		
26.	2/PMU.1/2/2005	28-02-05	NTFP in natural Forests.	110-111		
	<u>SOIL N</u>	IOISTURE	CONSERVATION WORKS	112		
27.	05/2002/PMU- 1/3	23-08-02	Integration of Neeru-Meeru works and Community participation.	113-119		
28.	5-A/2002/PMU- I/3	18-09-02	Integration of Neeru-Meeru works and Community participation.	120-121		
29.	02/J4/2004	08-03-04	Use of CCTs as Fire lines.	122-124		
30.	1/2004/G1	11-10-04	SMC works – Watershed.	125-128		
31.	01 -A/2004 G1	26-01-05	SMC works – Sujalam – Suphalam.	129-131		
32.	7/05/PXA1	15-06-05	Guidelines on execution of SMC works.	132-135		
33.	1-B/2004/G.1	01-08-05	Treatment of Watershed.	136-137		
34.	01-C/2005/G.1	27-10-05	SMC works in Forest areas – Sujalam- Suphalam.	138-139		
ACCOUNTS AND OFFICE PROCEDURES						
35.	5/2005/N2	24-05-05	Cash Accounts.	141-142		
36.	2/2006/J6	15-04-06	Plantation Journal at Range level.	143-144		
37.	8/2006/Y1	16-06-06	Expeditious disposal of Pension cases.	145-157		
MISCELLANEOUS						
38.	01/2004	30-01-04	Departmental Extraction of Eucalyptus.	159-161		
39.	9/2004	16-12-04	Silvicultural practices for improvement of Forests.	162-163		
40.	9/2005/G.1	14-10-05	Enhancement of capabilities to achieve higher targets.	164-166		

NURSERIES & PLANTATIONS

Principal Chief Conservator of Forests.

CIRCULAR NO. 04 / 2002 / U1

Sub: Raising of Avenue / Canal Bank Plantations - Certain instructions issued - Regarding.

Avenue and Canal Bank Plantations are being raised by the Forest Department from time to time. The Conservators of Forests are informed that raising of Avenue / Canal Bank Plantations is one of the most difficult and challenging tasks. To ensure success, proper planning is needed right from the time of site preparation till the plants are established and reach a stage of beyond damage in ordinary sense.

The following points should be kept in mind while taking up Avenue / Canal Bank Plantations:

- 1. a) Treatment Maps:- A treatment map has to be prepared for the stretch of the planting site not to any scale. The main features of the area are to be shown e.g., unsuitable patches, low lying areas, passages to be given to the villagers or cattle etc.
 - b) Site preparation: Adequate site preparation is needed to have a proper size of the pit, the digging of the pit and the treatment required before planting the plant in the pit. A pit of 60 cm cube has been found to be suitable.
- 2. a) Only tall plant of 1 ½ m to 2 m height should be planted, so that the plants go beyond damage from browsing within a short period of time.
 - b) Before planting the pit should be filled with ½ cft dry Cowdung powder and basal dressing of 100 gm SSP should be applied.
 - c) While planting the tall plants, the bag should not be removed, only a few cuts at the bottom may be given by a sharp blade. It has been found by experience / experiment that the planting done with bags has better survival and growth compared to that when the bags are removed. This is because while removing the bag of the tall plant the ball of the earth is broken and consequently transplanting shock is very heavy.
- 3. As far as possible the fruit bearing trees useful to the people like Tamarind, Neredu, Kanuga, Neem and long rotation species like Ficus etc., should be planted. To break the monotony, a few ornamental flowering trees should be planted at regular intervals. Preferably one particular stretch of ½ to 1 Km should be raised with one main avenue species like, Ravi, Marri, Neredu and Tamarind etc.
- 4. Wherever suitable space is available multiple row avenue should be raised at least for a stretch of 200m. In multiple row avenue stretch, the auxiliary species should be

Kanuga, Eucalyptus, Usiri, A.auriculiformis, Glyricidia etc. Espacement of 2m to 5m at a suitable point where soil depth is adequate should be adopted.

- 5. Palmyrah nuts should be dibbled 1m apart on the outer boundary of road margins abutting the agriculture fields.
- 6. Fencing: Adequate measures should be taken to protect the plants from biotic and abiotic pressure. Trees should be provided with proper tree guards wherever needed and with thorny brushwood fencing in multiple row strip.
- 7. Watering: During the period of moisture stress, watering should be taken up to ensure better survival and growth.

Since regular watering is costly and cannot be controlled / supervised very easily, the best way to raise successful plantations is to provide a very effective mulching of ground nut husk to a depth of 25-30cm for each main row avenue plant and for doing so, while planting avenue plant in the pit, upper part of the pit to a depth of 30cm should not be filled with soil.

The cost of mulching will be more than recovered by reducing the frequency of watering by 50%.

8. Adequate seedlings of species like Tamarind, Kanuga, Neem, Ficus etc., should be raised in the primary bed one year in advance from June to August, so that there may be sufficient stock of tall plants for future planting. This should be taken up as a continuous well planned regular programme for every year.

The Conservators of Forests are requested to monitor the planting programme closely while keeping the above points in mind.

Sd/- **(S. K. Das)** Principal Chief Conservator of Forests

Principal Chief Conservator of Forests.

CIRCULAR NO. 06/PMU.1 73/2002

Sub: Raising of Plantations under Semi-Mechanical Method – Certain Guidelines - issued - Regarding.

One of the main activities of the Forest Department is to raise plantations of different species. A plantation should reflect the professional competence and social commitment of the forester and, therefore, there should be an all out effort to reach perfection in this activity.

The choice of species is very important and it has been discussed with the senior officers of the Forest Department and others connected with similar activity.

The necessity has arisen due to the fact that a uniform espacement of 3m X 3m is being followed for all species like Neem, Neredu, Usiri, Seethaphal etc., and the planting area is not being divided into sectors depending upon the topography of the area which is necessary for ploughing of the area by tractor in proper direction for the purpose of soil and moisture conservation. After careful consideration of all the issues, the following guidelines are issued:-

- 1. The proposed planting area should be perambulated thoroughly in order to determine the direction of slope. If the slope of the entire area is in one direction only, the direction of-the slope should be noted in the surveyed sketch and ploughing by the tractor should be done always across the slope. But such instances are very rare.
- 2. The most common site is having slope in more than one direction e.g., in some portion of the area, the slope may be from North to South whereas in some other portion it may run from East to West. In such sites, the planting area should be divided into different sectors in such a manner that **in each sector the slope is in one direction only** and in the surveyed sketch of the site these sectors with slope directions should be marked and **ploughing should be done in these sectors across the slopes.** The whole idea is to do ploughing always across the slope in order to conserve soil and moisture. This idea is explained in a Diagram given below.



The above diagram shows that the plantation area is divided into four sectors A,B,C,D as these sectors have slope in one particular direction only which is shown by an arrow mark as in Sector-A and the ploughing direction by double arrow marks.

In sector B, there are 1st order streams and 2nd order streams which are to be dealt with SMC measures like percolation Tanks etc.

- 3. The gully or stream flow in the planting area should be identified, demarcated on the ground and should not be ploughed to bring the area under plantation, but should be dealt with soil and Moisture Conservation measures like erection of percolation tank (small or big) with or without trench as mentioned in the Circular No.5 / 2002 / PMU.1/3 & Circular No.5-A/2002 / PMU -1/3, communicated by this office RC. No. 17309 / 2000 / PMU. I / 3, dated 23.8.2002. A few CCTs with septa will go a long way in conserving water for the growth of plantation.
- 4. The choice of the species should be done very judiciously so that maximum annual / periodical return accrues to the society. While importance should be given to NTFP species like Neredu (Syzigium cumini), Neem (Azadirachta indica), Usiri (Emblica officinalis), Chinta (Tamarindus indica), Kanuga (Pongamia pinnata), Seethaphal (Anona squamosa). etc., the other valuable species like Teak, Bamboo, Eucalyptus clones etc., should not be ignored. In the agency areas Tapasi (Sterculia urens) should necessarily be raised as plantation at an espacement of 9m X 9m or 10m X 10m.
- 5. A uniform espacement of 3m X 3m is not only inappropriate but it defeats the goal. The genesis of espacement of 3m X 3m is only due to the fact that tractor ploughing is possible from all directions.
- 6. After all considerations, it has been decided that Tamarind, Neredu, and Neem should be raised at an espacement of 9m X 9m or 10m X 10m whereas Kanuga, Usiri, Kunkudu and Bamboo may be raised at an espacement of 5m X 5m. Seethaphal should be raised at an espacement of 3m X 3m. Tellamaddi (Terminalia arjuna) should also be raised with same espacement because it is maintained generally for its leaf. Chinta graft may be raised at an espacement of 7m X 7m. This espacement should be followed in VSS areas also while raising NTFP plantations.

- 7. Species with closer espacement like Usiri, Pongamia, Kunkudu and Seethaphal should be raised in blocks whereas the species with large espacement like Neredu, Neem, Chinta etc. should be raised in blocks with the provisions of planting the species of closer espacement in between these species. This point may be further clarified by saying that we when raise Chinta at an espacement of 10m X 10m, at the same time we can put Usiri in between two Chinta trees so that the overall espacement becomes 5m X 5m and the total number of plants per hectare is 400. However, in such a case if we want to put Seethaphal, we may be able to plant 2 Seethaphal plants in between two Chinta plants at an interval of a little more than 3m. Bamboo should be raised at an espacement of 5m X 5m in block. Bamboo should not be raised as an inter-crop in the same year with the long rotation species of Neem, Neredu etc., of large espacement as Bamboo is very versatile and dominant. However, Bamboo may be introduced only after the 3rd year as an inter crop and the plantation be maintained properly so that the suppression of main species does not take place.
- 8. A small extent of area of 2-5 hectares may be raised with valuable multi-purpose indigenous species like Ravi (Ficus religiosa), Marri (F.bengalensis), Maredu (A.marmelos), Usiri, Neem, Barinka (Stribulus asper) and ornamental plants with the idea to create a 'Forests for Recreation', for the villagers which may be utilized by them as "Karthika Vanam". This part of the plantation should be nearest to the village and easily accessible by the villagers.
- 9. From what has been mentioned above, it is clear that a lot of planning is required to raise a good plantation.

The first stepping stone is a good Nursery where the seedlings should be maintained for more than one year to make them tall and tough.

The seedlings should be genetically superior obtained at least through a process of two cullings - first at the primary bed level and next at the bag plants level.

In permanent nurseries bamboo rhizome banks should be maintained all through out the year in the primary and secondary beds and the bamboo seedlings with more than two year old rhizomes should only be introduced in the plantations.

> Sd/-**(S. K. DAS)** Principal Chief Conservator of Forests

Principal Chief Conservator of Forests.

CIRCULAR No. 02/2003 / PMU. 1/3

- Sub: Forest Management- Poverty Alleviation through sustainable Management of Forests - Watershed Development Programme and raising of high value plantations in the forest areas - Conversion of the forests into a great asset for generating income and employment - Certain guidelines Issued - Regarding.
- Ref: 1. Circular No. 4/2002 / U.I (Communicated in Prl.CCF's ref: No. 19908/2002/U.1, dated 07.08.2002
 - 2. Circular No.5 / 2002 / PMU-I/3 (Communicated in PrI.CCF's ref. No. 17309 / 2000 / PMU.I/3, dated 23.08.2002
 - Circular No. 5-A / 2002 / PMU.I/3 (Communicated in PrI.CCF's ref. No. 17309 / 2000 / PMU. I/3, dated 08.09.2002
 - 4. Circular No.6 / PMU. I/3 / 2000 9Communicated in PrI.CCF's ref. No. 17309/ 2000 / PMU. I/3, dated 27.09.2002
 - 5. Circular No. 7 / 2002 / PMU.I/3 (Communicated in PrI.CCF's ref. No. 34274 / 2000 / PMU.I/3, dated 16.10.2002

1.1 Certain guidelines have been issued in Circular 2nd and 3rd cited to take up watershed development programme intensively in the forest areas by adopting durable and cost effective structures. In the same reference, emphasis has also been given to plant NTFP and commercial species in order to generate income and employment to the local community.

1.2 In the references cited 1st, detailed guidelines have also been issued on how to raise single row and multiple plantations on the highways and the canal banks. Again, detailed guidelines have been issued on how to raise plantations under semi-mechanical method in the reference 4th cited giving due importance to the aspect of Soil and Moisture Conservation.

2.1 Guidelines available in the above circulars cover all types of forest areas for raising plantations except the type "Degraded forest areas on hill slopes which are not fit for raising with plantations under semi- mechanical method"

2.2 The above type of forest area may be divided into two broad categories - (I) Degraded Hill Slopes with viable root stock and (II) Degraded Hill slopes without viable root stock.

The method of afforestation of the above two categories of forest areas are discussed below: -

3.1 **Category- (I):** Degraded Hill Slopes with Viable root stock:

- Step-I: The area should be treated with extensive Soil and Moisture Conservation measures to the saturation level as outlined in Circular Nos.5 and 5-A, Importance should be given on digging of CCTs with septa and erection of percolation tanks mini, small and big from the first order stream to the last order stream. Erection of Rock-fill dams and Check Dams may be taken up, if it is essential.
- Step-II: Cleaning of the stumps and removal of thorny growth, if any and coppicing.
- Step-III: Protection of the area against fire and grazing.
- Step-IV: If there is a blank, planting in the blank should be done, preferably under semi mechanical method. The gap area should not be less than one hectare.
- Step-V: Deep soil working should be done to the coppice shoots at least to a radius of 0.5m. While doing soil working to the plants, care should be taken to see that the old stump is covered with soil sufficiently and coppice shoots appear as of seedling origin.
- Step-VI: This step is applicable to those areas where the annual rain fall is low and the root stock is quite valuable.

In such a situation we provide a semi lunar trench on the lower side of the coppice shoot 0.5 m away with the dimension of 30 cm width and 30 cm depth in order to make more water available to the plant for its rapid growth.

- 3.2 **Category (II): -** Degraded Hill Slopes without viable root stock:
- Step-I: Soil and Moisture Conservation measures should be adopted as indicated above under Category (I) extensively as per the guidelines issued in Circulars cited 2nd and 3rd cited.
- Step-II: Cleaning, removal/burning of thorny growth, if any, should be done.
- Step-III: **Choice of Species**: Long rotation indigenous species of multiple values may be selected, some of which are noted below:

Ravi (Ficus religiosa), Marri (Ficus bengalensis), Neem (Azadirachta indica), Chinta (Tamarindus indica), Neredu (Sygizium cumini), Ippa (Madhuca indica), Usiri (Emblica officinalis), Kanuga (Pongamia pinnata), Kunkudu (Sapindus trifoliatus), Bamboo (Dendrocalamus strictus)

3.3 **Technique**: Planting should be done with more than one year old seedlings in general in a big size pit of 50cm depth and 45cm length and width.

While planting the seedlings, the polythene bags need not be removed. Only a few sharp cuts on the side of the bags will suffice the purpose. This is to be done to reduce the planting shock.

3.4 Planting should be done with the concept of sunken pits i.e., top 20 cm of the pit is to be kept empty after planting of the seedlings in order to use the empty space for mulching before the summer starts.

3.5 In dry districts where the annual rain fall is low, additional inputs may be created for the seedling by terracing with inward slope and digging the pits of the same size at a distance of 60 cm from the boundary (edge). In addition to this pit where the seedling is planted, an additional pit of the 30 cm cube may be dug out little away from the seedling towards the inner side in order to impound the rain water in the pit (catch water pit). While planting the seedlings in each pit $1/4^{\text{th}}$ cft of dry cow dung powder and 100 grams of SSP should be applied. Since unit cost per planted seedlings is high, care should be taken to see that mortality is minimum after planting and if it occurs, casualties have to be replaced in time.

3.6 In the areas where rainfall and soil are good, terracing may not be necessary. Instead, we may go for pit planting in the trench whose dimension is 1m wide X 1m length X 30 cm depth. Suitable size of the pit in the centre of the trench should be decided depending on the size of the bag.

The following espacement should be adopted: -

Ravi, Marri, Neem, Chin	ta, Neredu, Ippa	-10 m x 10 m			
Usiri, Kanuga, Kunkudu	, Bamboo	- 5 m x 5 m			
Seethaphal Eucalyptus clone Teak	}	- 3 m x 3 m			

3.7 On the upper most portion of the hill slope, long rotation species like Ravi, Marri, and Neem may be planted for the purpose of eco-restoration, along with the commercial species like Kanuga, Teak, Bamboo in the middle and on the lower slopes fruit bearing species like Usiri, Seethaphal, Chinta etc. In order to illustrate the above points a diagram is given below:-



Percolation tank – Small or big.

4.1 All these programmes are to be taken up with the participation of local community and the salient features of the technique should be discussed in detail with them.

4.2 The choice of species should also be decided in consultation with the local people with the objective of getting maximum periodical return from the plantation.

5.1 One of the most striking features that we observe when we travel long distances by road from one end of the State to other end is virtually **the non-existence of the Forest Department anywhere.**

Old Avenue Plantations of Ravi, Marri, Chinta raised by PWD are gradually disappearing due to biotic pressure and the forest lands abutting the highways have in most cases become degraded and denuded.

5.2 In view of this situation, it has been decided to take up corrective measures as discussed below.

We have already issued detailed guidelines to take up multiple row avenue plantations in the Circular cited 1st which should be followed scrupulously by the officers of the Social Forestry Wings of the department mainly.

5.3 For the degraded / denuded forest lands abutting the highways, the Divisional Forest Officers are requested to prepare a list of such areas with extents and prepare an action plan for developing these areas as **Bio-aesthetic Plantations** (Karthika Vanam) within a period of 2 to 5 years. Professional competence and social commitment of the forester should reflect in such plantations.

5.4 Care should be taken to raise a variety of species in small blocks with Ravi, Marri, Chinta, Kanuga, Neem, Usiri and a few flowering trees like Turai, Moduga, Peltophorum etc., scattered all over the area.

For each such plantation, the Divisional Forest Officers are requested to take the approval of their Conservator of Forests for the Planting design clearly showing the treatment map of the area.

The subject is of utmost importance as it would be one of the most high visibility programmes of the Department.

6.1 The Divisional Forest Officers (Planning & Extensions) are requested to take up such plantations in the identified community land abutting the highways where multiple row avenue plantations are to be raised.

6.2 In the exigency of the situation, the Divisional Forest Officers (Planning & Extension) may take up such activity in the RF areas also in consultation with the Conservator of Forests (Territorial) and the Conservator of Forests (Planning & Extension) in case no road side community land is available to take up such activity.

6.3 All these activities have to be taken up with the active involvement of the members of the local community / VSS.

7.1 Suitable Boards depicting the importance of forests in Telugu and English should be put up in all such Bio-aesthetic plantations. The Chief Conservator of Forests (Social

Forestry) will issue further instructions on the subject giving the standard size and design of the Board with important messages.

7.2 The guidelines issued in these circulars including the present one if followed properly, it will be possible to manage the forests within a few years as a great asset that will not only generate substantial income and employment to the local community but will serve as the much needed water reservoir and ecological security for the rest of the area.

All this will bring about a sea-change in the perception of the common man about the Forest Department.

Sd/-**(S. K. DAS)** Principal Chief Conservator of Forests

Principal Chief Conservator of Forests.

CIRCULAR NO. 03 / 2003 / U.1

- Sub: Social Forestry Programme of the Forest Department, Andhra Pradesh-Certain Guidelines - Issued - Regarding.
- Ref: 1. Circular No.04/2002/U.1 (ref.no. 19908/2002/U.1), dated 07.08.2002
 - 2. Circular No.02/2003/ PMU -1/5 (ref.no. 17309/2000/PMU.I/5), dated 13.02.03.
 - 3. G.O.Rt.No.6205, General Administration (SC.IFS) Dept., dated 2.12.2002 communicated through PCCF ref.No.210/2002/ M.1, 3.12.2002.
 - 4. G.O. Rt. No. 62, Environment, Forests, Science & Technology (For. III) Department, dated 5.3.2001 communicated in PCCF ref.no52301/94/U.2, dated 28.3.2001.
- 1.1. Since 1968 when the term "Social Forestry" has been introduced in the Common Wealth Forestry Conference, it has assumed more and more importance due to increasing need for forestry activities outside the forest areas in the form of Agro-Forestry, Farm-Forestry, Community Land and Avenue Plantation etc.
- 1.2 The Government of Andhra Pradesh gives utmost importance to the planting programme and therefore "Clean and Green" has been adopted as one of the most important State Government Programmes. The Government has accordingly created three additional posts of Conservators of Forests for Social Forestry activities vide G.O.Ms. 3rd cited above.
- 1.3 The Social Forestry activity which was taken up in a big way under CIDA and NREP programme could not be sustained in the same way after 1990 due to lack of regular flow of funds as the CIDA scheme was completed by that time.
- 1.4 Under NREP and CIDA project a number of plantations have been raised in Tank-Foreshore Areas and other Community Lands and subsequently handed over to Panchayats for further maintenance with all the relevant records by the Forest Department.
- 1.5 In order to derive maximum benefits by the Panchayats from the Social Forestry Programmes of the State and to streamline the activities of the Planning & Extension Divisions in tune with the Government policy the following guidelines are issued :-
- 2. **OLD PLANTATIONS**: The Divisional Forest Officers (Planning & Extension Divisions) should maintain a list of old plantations, which have been raised under

CIDA, NREP or any Scheme. Many of these plantations may not be in good conditions, whereas quite a few of them may be mature or over mature (Eucalyptus, Bamboo etc.) ready for harvesting and a few of them may be giving usufructs (Cashews etc.).

- 2.1 As mentioned already, these plantations were handed over to the Panchayats but could not be maintained due to lack of funds and clear guidelines.
- 2.2. The following actions are to be taken up with respect to these plantations:
 - (i) All the plantations should be inspected by the Forest Range Officer and the Divisional Forest Officer (Planning & Extension) and the present status of the plantations has to be updated for each division in the proforma given in Annexure – I.
 - (ii) The plantations which have attained the rotation age and which are fit for harvesting should be harvested. But this should precede the preparation of a harvesting plan and its approval by the concerned local body authority.
 - (iii) In terms of the G.O. 4th cited, the amount realized from the sale of plantations should be credited to the general funds of the Panchayat and the same should be utilised for carrying out the tending operations like SMC works, cleaning of jungle growth, dressing of coppice stumps, singling of coppice shoots in the harvested plantation and also for replanting activities.
 - (iv) If there is a sizable balance amount after attending to the tending operations etc., the Panchayats may be motivated to take up multiple row avenue planting on the road sides in the jurisdiction of Panchayats.
 - (v) Where the plantations have failed, action should be taken to replant the area with suitable species, by motivating the Panchayats. The Panchayats should prepare the Plan for raising plantations and get approval from the Zilla Parishads for release of funds.
 - (vi) The Whole idea behind the above is to improve the green cover in the State, generate income to the Panchayats and create wage employment to the local people.
- 3.1. **NURSERY:** Nursery is the first important step for tree planting. It should at once reflect the expectation of the people, professional competence and social commitment of the Foresters. The nursery should also serve as the extension centre of the Forest Department to develop tree-consciousness among the people.
- 3.2 The expectation of the people can only be realised by raising a good nursery after a detailed demand survey in order to ascertain **their choice of species**. This is very **important and therefore the demand survey should be carried out regularly**.
- 3.3 The Forest Department resorts to raising of seedlings in two types of Nurseries -Temporary and Permanent - each of which has a few common functions but quite a few are different as discussed below.

3.4 **Temporary Nursery:**

- (i) The temporary nursery raised for the purpose of distribution of seedlings to the public should necessarily be preceded by a **Demand Survey** for the composition of species.
- (ii) The nursery should be raised by SHG (VSS / DWCRA / Schools) as far as practicable under a buy back scheme preferably.
- (iii) It may not be possible to raise the valuable seedlings of species like Teak, Bamboo etc., in all the temporary nurseries from the beginning. However, the demand for the seedlings of these species can be met fully by transporting and transplanting teak stumps and bamboo rhizomes etc. in the polythene bags from the **Permanent Nursery** at an appropriate time during the nursery season.
- (iv) If we plan meticulously, it will be possible on the whole to raise and **distribute** the seedlings of their choice to the people as per the Demand Survey.
- (v) It may be necessary to transport the seedlings from the Nursery to distant villages for distribution to the people.

4 **Permanent Nursery**:

- (i) Permanent Nursery should be a **centre of excellence for the Department** in addition to serving other functions of the Temporary Nursery as mentioned in Para 3.1.
- (ii) There should be a nursery programme for all the year round for certain commercial species like Teak, Bamboo etc., fruit bearing species like Neem, Tamarind, Kanuga, Neredu, Soapnut etc., and indigenous long rotation multipurpose species like Neem, Banyan (Marri), Peepal (Ravi) etc. All efforts should be made to raise rare and valuable species like Tapasi (*Sterculia urens*), Rosewood in **Permanent Nurseries** for planting in tribal VSS areas / Departmental planting programme.
- (iii) CMAs should be established, if essential, otherwise the programme should be taken up to produce clones / grafts.
- (iv) Mist Chambers may be established, if essential, otherwise the programme should preferably be carried out with the establishment of poly propagators which are cheaper, labour intensive and not dependent on continuous power supply.
- (v) Production of Vermi-compost should be taken up in the permanent nursery not only for using in the nursery or planting programme; but as a commercial proposition also.
- (vi) As mentioned earlier, the nursery should serve as an extension centre and therefore it is essential that a few permanent boards are displayed at the important points of the nursery highlighting the importance of forests and tree planting.

- (vii) In the permanent nursery also an identified poor family belonging to weaker section may be involved in the maintenance of a fixed number of seedlings, say 30,000 to 50,000 and a fixed amount be paid to them every month for maintenance of the family. The savings made by the family should be converted into a durable asset for the family for generating income through forward linkages. Our staff may play key role in bringing the family above the poverty line through sustained efforts over a period of time.
- 5. **AVENUE PLANTATIONS:** Every year the Planning & Extension Divisions are raising avenue plantations. Many of these plantations are quite successful although they do not have the impressive effect on the public.
- 5.1 It has, therefore, been decided that Avenue Plantations should be taken up with a lot of planning giving importance to raising of multiple row avenue wherever it is feasible, even if it means only on the part of the total stretch of the avenue plantation. In other words, if we cannot raise the avenue plantation with multiple rows for the entire stretch, certain portion of the stretches must be of multiple rows. **Raising of only single row avenue plantation is totally discouraged.**

Detailed guidelines have been issued in the reference 1st cited which may be followed meticulously.

- 6. KARTHIKAVANAM: Nothing can be said to exaggerate the importance of Bioaesthetic Plantation (Karthika Vanam) on the road side. Karthika Vanam should preferably be located near the road in the community land or RF within a maximum distance of 100 – 200m from the road / highways.
- 6.1 Detailed guidelines have been issued in paragraphs 5.3 to 7.1 of this office ref. 2nd cited above which may be followed meticulously.
- 6.2 The officers are once again requested to note that such a plantation should be raised with meticulous planning, implemented with utmost care and maintained permanently with the involvement of the local community / beneficiary.
- 7. **DISPLAY OF BOARDS OF THE FOREST DEPARTMENT:** Forest Department of Andhra Pradesh has been using boards of different sizes depicting the messages. It is considered necessary to standardize the size and design of the board uniformly for the entire State.
- 7.1 The subject has been discussed thoroughly in the APEX Body of the office of the Principal Chief Conservators of Forests and accordingly, the following instructions are issued :-

The Boards will be three - sizes as follows:-

- (i) 90 cm X 60 cm.
- (ii) 120 cm X 90 cm.
- (iii) 180 cm X 120 cm.

7.2 The boards should be painted in blue and green diagonally. As per the existing practice the diagonal line has to be drawn from the top most position on the left hand side to the bottom most position of the right hand side. The upper portion of the board should be painted in blue and the lower side in green as shown below:



- 7.3 A few boards of the smaller size (90 cm to 60 cm) may be displayed with the messages in fluorescent paint for putting up on the highways where the forestry has been taken up vigorously or the existing forest is quite rich and attractive.
- 7.4 The list of the messages in English/Telugu is given in the **Annexure–II** (enclosed). The officers are requested to display these messages only. On the National Highways a few boards carrying messages in HINDI may also be displayed.
- 8. **Cow Dung Slurry Preparation and its application:** The Cow Dung slurry is a very important and potent fertilizer which can be utilized to boost up the growth of the seedlings in the nursery and in exceptional cases in the plantations like avenue. The method of preparation and its application are given in the **Annexure-III** (enclosed).
- 8.1 **Propagation of Palmyrah**: Palmyrah palm is a very important species, which has played significant role in rural economy. It has been the policy of the State Government to propagate Palmyrah trees extensively.

The Conservators of Forests (Territorial, Wildlife and Planning & Extension) are requested to take up pre-treatment of Palmyrah seedlings before dibbling in the field. In case of avenue plantations, the Palmyrah nuts can be planted on the road boundary abutting the private land in a row of 1m apart. The boundary of the Karthika Vanam may also be dibbled with Palmyrah nuts on 3 sides leaving one side for entry of visitors. The method of pre-treatment of palmyrah nut is given in the **Annexure - IV** (enclosed).

Sd/-(S. K. DAS) Principal Chief Conservators of Forests

ANNEXURE – I

1.	SI. No.					
2.	Name of the Village / Mandal / Range.					
3.	Year of raising species.					
4.	Present survival.					
5.	Condition of Plantation growth.					
6.	Whether fit for harvesting.					
7.	Expected Yield					
	i) Physical.					
	ii) Financial.					
8.	Suggested SMC Works & estimated amount required.					
9.	Remarks.					

ANNEXURE - II

List of the messages in English & Telugu

List of Messages in English

- 1. It's better life with trees.
- 2. He who planteth a tree, is the servant of GOD.
- 3. Tree means water, water means bread, bread means life.
- 4. Life would indeed be dull and colourless, without these magnificent Birds and Animals Jawaharlal Nehru
- 5. The earth provides enough to satisfy every man's need, but not every man's greed Mahatma Gandhi

List of the Messages in Telugu

వన సంపద - మన సంపద.
ఇంటింటా చెట్టు - ఊరూరా వనం.
వన క్షేమం - మన క్షేమం.
ఇద్దరు పిల్లలు హద్దు - ఎన్నో చెట్లు ముద్దు.
పచ్చదనం, పరిశుభం - ప్రగతికి సోపానం.
వృక్షో రక్షతి రక్షితః.
చెట్లు పగతికి మెట్లు.
పచ్చని చెట్లు - లాభాన్నిచ్చు పదిరెట్లు.
నేటి బాలలే రేపటి పారులు - నేటి మొక్కలే రేపటి వృక్షాలు.
మంచి తనం మనిషికి అందం - పచ్చదనం [పకృతికి అందం.
మన సంరక్షణ - మన సంరక్షణ.
చెట్లు పెంచండి కాలుష్యాన్ని నివారించండి.
శమదానంతో మొక్కలు పెంచదాం - అందరికి ఆనందాన్ని పెంచదాం.
సోషించండి నాటిన చెట్లు - పొందండి లాభం పది రెట్లు.
మేక్కలు పెంచండి - కరువును నివారించండి.

16.	చెట్లు నాటినవాడు - భగవత్సేవకుడు.
17.	వ్య క్తికొకచెట్టు - భుక్తికొకమెట్టు
18.	వనచైతన్యం - నవచైతన్యం
19.	చెట్లు పెంచితేక్షేమం - చెట్లు నరికితేక్షామం.
20.	సామాజికవనం - పెంచుదాంమనం.
21.	చెట్టును పెంచు - ఆరోగ్యాన్నిపంచు.
22.	ప్రజల సహకారం - ప్రగతికి శ్రీకారం.
23.	శ్రమిస్తే పురోగతి - లేకుంటే అధోగతి.
24.	కృషితోనాస్తి దుర్బిక్షం.
25.	పచ్చదనం పరిశుభం - చెట్టులేనిదే మనంలేం

List of Messages in Hindi

- 1. हरियाली लाइए, खुशहाली पाइये।
- पेड पौधो का करो सम्मान ये है ईश्बर के बरदान।
- 3. बृक्ष करा, जीवन मीठा।
- 4. जीवन दाता वृक्ष बिघाता।
- वन जीबो का रोको भक्षण, परियावरण का करो रक्षण।
- मत लो तुम बृक्ष की जान घरती होगी रेगिस्थान।
- आज समय की यही पुकार बच्चे दो और बृक्ष हजार।

ANNEXURE - III

COW DUNG SLURRY - A METHOD OF PREPARATION

Approximately 20 Kgs of raw Cow Dung (Fresh - not more than 6-8 hours old) should be put into a big pot (preferably an earthen pot - locally called Golem) in the nursery site and mixed with 1 Kg of D.A.P. with a little water so that the entire mixture is of toothpaste like consistency.

This mixture in the pot should be exposed to sun i.e., the pot should not be covered. It takes 7-10 days depending on the temperature to get the entire mixture fermented properly. The sign of it can be seen by movement of air bubbles from the bottom to the top of the pot.

One mug of this fermented mixture should be mixed with 5 mugs of water and the solution should be sieved through a fine cloth in order to get a homogeneous solution. This homogeneous solution is cow dung slurry and this is a very powerful fertilizer to boost the growth of the plants when applied periodically and methodically.

Application:

The cow dung slurry should be applied to the plants once or twice a week at the rate of 100 ml to 250 ml per plant depending on the size of the plants, and 12 hours before and after application watering should not be done.

Precaution:

Sieving should be done through a fine cloth so that no suspended particles can pass through the solution. Some times the subordinate staff with over confidence sieve the solution through gunny bags or other such cloths and as a result a lot of suspended particles pass through the cloth and remain in the solution. This solution if applied to the nursery seedlings **will do enormous damage instead of doing any good to the plants.**

ANNEXURE - IV

PRE - TREATMENT OF PALMYRAH NUTS

It has been a long standing practice in the Forest Department to dibble Palmyrah nuts mainly in the boundary of the forest areas with the idea to keep the line of demarcation of forest area very clear on the ground in addition to getting innumerable benefit from the Palmyrah trees when they grow. In fact the important role of Palmyrah trees can hardly be exaggerated in a rural economy. However the efforts in this have given partial success only. In some cases, the germination is found to be quite satisfactory whereas in most of the cases the germination has been very low. All this has happened due to non-application of proper technique which is described below:

We should give pre-treatment to Palmyrah nuts before they are dibbled in the field. The brief method of pre-treatment is given below:

- 1. The Palmyrah nuts collected from the fruits should be cleaned in water, and dried in the Sun adequately.
- 2. An earthen pit of suitable size should be dug depending on the quantity of Palmyrah nuts to be given pre-treatment. The Palmyrah nuts should be put in the earthen pit and filled to almost ${}^{3}/_{4}$ th of the depth. Fresh cow-dung should be put over these Palmyrah nuts to a thickness of 8" to 10" and it should be covered with soil layer up to the top of the pit to a thickness of 4" to 6". Over this, water should be sprayed once in 2 to 3 days so that the entire mass in the pit is of toothpaste like consistency. The Palmyrah nuts should be kept for 7 to 10 days in the pit, after which they should be removed from the pit and cleaned in water. Immediately after this, the Palmyrah nuts should be taken to the field and dibbled one meter apart by using an iron crowbar in the hole of 6" to 8" deep. Precaution should be taken at the time of dibbling to see that there are no shepherds or graziers around to avoid the probable damage from them as otherwise after some time they may come and dig out the Palmyrah nuts for sake of "thegalu" (kernel) which is liked by them not only as a tasty food but it gives an element of satisfaction to their adventuring spirits.

Within a period of 2 to 3 months, the Palmyrah nuts start germinating. The rate of success is not less than 65%.

This Method has been adopted by me from certain observations in Andhra villages and practiced during the time I worked as Conservator of Forests with a great success. The method is foolproof and the success is assured.

Shri. S. K. DAS., I.F.S., Principal Chief Conservator of Forests.

CIRCULAR No.7/98

(This circular was issued by me as Vice-Chairman & Managing Director, Andhra Pradesh Forest Development Corporation vide ref.no.6.5.1520/WB/98 dated 22-05-1998 for raising Eucalyptus Clonal Plantation successfully. These are equally relevant to planting programmes of the Forest Department.

It does not require any mention that on only one factor the Foresters do not have control in raising a successful plantation is getting the rain fall in appropriate time during the planting programme. This can be eliminated by keeping a small provision for watering to the plants in a planned way limited to 10-20% of the planted seedlings.

The conservators of Forests are requested to go through this circular very carefully, make a thorough review of the existing schedules of operations of different plantations, replace a few not so useful operations by a provision for watering to limited number of plants, keeping the unit cost at the same level.

This was done by me as Vice-Chairman & Managing Director, Andhra Pradesh Forest Development Corporation for Eucalyptus Clonal Project with a very high level of success. Vagaries of monsoon could be mitigated. This is a great challenge; once it is accomplished it will be a source of immense satisfaction to us in achieving our set goals.)

To The Regional Manager Hyderabad / Rajahmundry / Nellore.

Sub: Planting Plan - Preparation of planting plan for Eucalyptus clonal plantations - Implementation – Guidelines Issued -Reg.

Ref: This office Ref. No. 6.5.1520 / WB - 98 dt. 20.5.98

The subject of preparation of planting plan for each site with Eucalyptus clonal plants has been discussed by me with all the Regional Managers and quite a few Divisional Managers on several occasions in my office and during my field inspections.

Since the subject is very important, it is better to communicate a brief but comprehensive outline on the subject so that the field staff is in a better position to realize the importance of it.

Planting plan is basically the management of the Planting programme of an area with the objective of completing the planting work within the prescribed time limit by making the best use of men and materials in order to derive the maximum benefit of the situation with optimum expenditure. Our objective is to get the maximum utilisation of the monsoon rains in the year of planting and higher survival percentage after planting.

* While preparing the planting plan, the following points are to be noted first.

- 1. The name of the Field Officer in-charge of the Plantation (Dy. Plantation Manager / Plantation Manager).
- 2. Location (name) of the site and the extent. Number of seedlings required for planting.
- 3. Date by which the site preparation (dozing, ripping) SMC works to be completed

For South West Monsoon Zone	31/5
For North East Monsoon Zone	30/6

4. Date by which pitting should be completed:

For South West Monsoon Zone	7/6
For North East Monsoon Zone	7/7

5. Transportation of Seedlings from Nursery to Planting site to be completed by the end of 1st spell of monsoon i.e. for South West Monsoon zone by 10th to 15th June, for North East Monsoon zone by 7th July (not corresponding to North East Monsoon).

An exercise should be done properly to arrive at the number of vehicles and trips required to transport the seedlings to the planting site by the end of the 1st spell of monsoon i.e., by 10th to 15th June in South West Monsoon zone and by 7th July in North East Monsoon zone.

6. Broadcast sowing of the seed of Nitrogen fixing annual species (Dhaincha) should be completed by the end of the first spell of monsoon.

Planting of seedlings should be taken up after the first spell of monsoon when the soil has received sufficient moisture to sustain the seedlings. This date may vary from 10th to 15th June in South West monsoon area but in North East monsoon area where the monsoon starts around 15/9, the plantings programme should be taken up by 1st week of July and continue till the end of July taking the advantage of the fact that on an average rainfall received in June, July and August is 75 mm and 120 mm respectively.

It should be noted that in North East monsoon area it may not be possible to complete planting by end of July. However, maximum target should be achieved by end of July and the balance area should be planted from 15th September onwards when North East monsoon breaks in and completed before the end of September. This precaution is necessary as there is possibility of a long dry spell in August that continues till the middle of September when the North East monsoon starts.

7. Once the planting is taken up after the first spell of monsoon, which is over by say 15th of June in South West monsoon zone, the planting should be carried out in a manner so as to complete by 30th June by following a well planned schedule. The

important point is that once the planting has been started, it should not be stopped for want of rains. Planting should be continued at the same level for 4/5 days. If no rains are received during the period of 4/5 days after starting of the planting programme, planting should be continued but the extent of planting should be reduced to half for next 3 to 4 days and after that, even less if dry spell continues. However, once the rain is received, planting programme should be doubled or tripled so as to complete the target by 30th June positively.

8. In the schedule of operations, we have kept the limited provision for watering in the year of raising to meet the exigency when there is a prolonged dry spell immediately after planting. Seedling should be watered once only on the 7th day of planting if there is no rain for 6 day after planting. In case the planting has commenced on 16th June, and there is no rain till 23rd June, the area planted on the 17th June should be watered on 24th June and so on if the dry spell continues.

In our estimate, watering may be necessary at the most to cover 20% of the total planted seedlings. By restructuring the schedule of operation, it has been possible to keep the provision for watering within the existing unit cost. The advantage of this provision is simply enormous as it gives a lot of confidence in taking up planting programme continuously without waiting for rainy days; planting can be completed within specific time so as to get the maximum benefit of monsoon for the plantation and get higher survival percentage by watering.

9. Following example is discussed as an exercise in order to illustrate the above points clearly for South West monsoon zone. For North East monsoon zone similar exercise can be done on the same line.

Example:

South West Monsoon Zone

Area	:	50 ha.
First spell of monsoon over	:	15/6
Planting starts	:	16/6
To be completed on or b	efore:	30/6
(Target date)		

Exercise (Plan):

- a) The goal is to complete the planting on or before 30/6
- b) Planting has to be taken up from 16/6 and continued till it is over.
- c) Since the planting target is 50 ha. and the number of days is 15, the average is 3 to 4 ha. per day.
- d) A person is to be specially engaged for 15 days for collection of tubets after planting to account to Deputy Plantation Manager / Plantation Manager on the condition that shortage will be recovered from his remuneration.

A table may be prepared as given below showing the rainy day by 'R' and non-rainy day by 'NR' against the dates indicating also the extent of area to be planted for each date :-

Date:	16/6	17/6	18/6	19/6	20/6	21/6	22/6	23/6	24/6	25/6
Rainy or Non-Rainy Extent	NR	R	R							
covered by planting	4	4	4	4	2	2	2	2	5	5
Watering	-	-	-	-	-	-	4	4	-	-

The above table shows area coverage of 34 ha. only and the balance 16 ha. can be planted within 3 to 4 days after 25^{th} June, i.e., target may be achieved by 28^{th} / 29^{th} June.

The Regional Managers / Divisional Managers are requested to note that at every stage a lot of thinking is required to prepare the planting plan properly and skill to implement it successfully.

They are requested to guide the field staff for the preparation of the Planting Plan after holding a detailed discussion with them and see that over a period of time, the practice is totally internalised in our planting activity.

> Sd/- (**S.K. DAS**) Vice Chairman & Managing Director

Principal Chief Conservator of Forests.

CIRCULAR NO. 15/2002

(This circular was issued by me as Vice-Chairman & Managing Director, Andhra Pradesh Forest Development Corporation vide ref.no.6.5.1144/DM/2002 dated 14-06-2002. This may be used as a ready reference on the subject).

То

The Regional Managers Visakhapatnam / Rajahmundry / Nellore / Hyderabad & General Manager (P & P) Head Office.

Sub: Establishment of Vermi-compost units in the plantations-certain instructions - Issued - Reg.

We have been applying chemical fertilizers every year to our plantations in general and particularly to the horticultural crops like cashew and coffee in particular to improve the nutrient status of the soil for better yields. But a stage has now come when we should reduce gradually the application of chemical fertilizers to a minimum in order to maintain better health of the soil.

Excessive use of inorganic fertilizers a) kills the beneficial soil microbes, whose presence is conducive to the plant growth, b) increases the pollution levels in the air, water and soil and c) increases the incidence of plant pests and diseases. Hence it is imperative to use eco-friendly organic manures more and replacing correspondingly the quantity of inorganic fertilizer.

We can produce organic manures using agriculture and plantation residues by establishing compost pits and vermi-compost units in strategic locations. In course of my field inspections, instructions have already been issued in this regard. Vermicompost units are already established at places like Bapatla, Diwan cheruvu, Kothagudem, Sathyampeta (Paloncha), Kurnool, and Dulapalli (Ranga Reddy). There is a necessity to increase the number of production units to cater to the needs of more and more plantation areas so as to reduce the usage of chemical fertilizers.

Therefore, the Regional Managers and the General Manager (P&P) may please take action for the establishment of compost pits in our estate series where the contiguous plantation area is 100 ha. or more. Action should be stepped up to establishment of compost pits and Vermi-compost units is described in detail in the **Annexure**.

The establishment of at least one Vermi-compost unit to start in each division is of utmost importance in order to reduce the use of inorganic fertilizers gradually in our plantations - particularly to the horticulture crops like cashew and coffee. While selecting the site, care should be taken to ensure that Vermi-compost unit is located in a place where it is easily accessible and convenient for the purpose of constant supervision and to have a watch and ward for 24 hours. Therefore it is imperative that the units should not be located in remote areas not amenable for proper supervision and the person in-charge of watch and ward may not stay away on the plea of fear of safety and security.

The successful example of Vermi-compost unit established at Bapatla in Kavali division in the year 1999 may be mentioned in this context. The total quantity produced by this unit so far is more than 9 MT, the expenditure and revenue is at the ratio 1:2. Vermi-compost is an important organic manure which has got a very good commercial value. Therefore, all efforts should be made to see that the amount invested is recovered by sale of Vermi-compost besides meeting the application needs of our plantations.

Sd/- **(S. K. DAS)** Vice Chairman & Managing Director

ANNEXURE

COMPOST PITS:

To begin with one compost pit would be ideal for every 100 ha. plantation. The method of preparation of the compost in the pit is as follows:

Dig a pit of 10 m X 5 m and 1.20 m depth. Make leaf litter and twigs available in the plantations into pieces. Organic waste like agricultural residues, vegetable market waste, cow dung, farmyard manure, sugar cane bagasse can be filled up in layers. Apply cow dung slurry and urea solution. A thin layer of local soil over each layer will provide the required soil microbes. Cover the pit with soil. Wet the pit periodically to facilitate early decomposition. Decomposition process may take 45-60 days. Fully decomposed material is warm and does not emit bad odour.

VERMICOMPOST:

Vermi-compost is the excreta of the earthworms, on digesting the organic wastes. Vermi-compost is brownish or blackish in colour, and is odourless and granular in texture. Earth worms feed on agricultural waste, castor and groundnut residues, coir dust, sugar cane bagasse, household wastes, vegetable market wastes, poultry wastes etc. These organic wastes are passed through the digestive system of earth worms and come out as excreta compost. The humuscontain a high percentage of humic and folic acids that facilitate immediate availability of nutrients to plants. Vermi-compost improves the texture and composition of soil. It also acts as a biological insecticide thereby controlling the harmful soil pathogens and insects. Its application will improve the water retention capacity and aeration of the soil, besides biodynamic action which increases the organic functions of plants.

It view of these advantages and benefits to the plant with the application of vermi-compost in addition to avoiding ill effects due to application of chemical fertilizers, it is our responsibility to encourage the usage of compost in our plantations. Therefore, the Regional Managers and the General Manager are advised to establish one vermi-compost unit in each centre / Range. A brief account on Vermi-compost is detailed below:

(A) EARTHWORMS:

Earthworms are classified into 2 categories. (1) Manuring worms (2) Soil procuring worms. Manuring worms are of 2 types - classified as endogenic and epigenic. The endogenic species are burrowing type and the epigenic species are non-burrowing type. It is only the non-burrowing earthworms that are useful for Vermicompost production.

- (a) Eudrilus eugeniae: This earthworm, an African species and bigger in size measuring 8" to 12". It is red or violet in colour. It is voracious eater.
- (b) Eisenia foetida: A European species measuring 2" to 5" in size. It is also red or violet in colour.

Both these species are useful in Vermi-compost production in these areas. These earthworms can feed on 100% organic wastes without soil. Lifespan is 2 to 3 years. One earthworm can produce 200 to 300 earthworms in a year. Earthworm though hermaphrodite, self fertilization does not occur generally. It lays cocoons, which consist of 8 to 20 eggs but only a few are fertile which give rise to juveniles (Baby earthworms). For a cocoon to hatch, grow and in turn to produce, it takes 60 days.

(B) Technology of production:

(i) Components for vermi-compost Production :

- (a) Non-burrowing type earthworms (1000 Nos. for each Sq. m. of bed) *(Eudrilus eugeniae, Eisenia foetida)*
- (b) A shed with thatched or tar sheets roofing with 15' height at centre and 6' at eves. This is essential to protect the earthworms from Sunlight, rain etc.
- (c) One-foot height floor above the ground level to prevent entry of water and slip away of earthworm into the soil.
- (d) The size of the bed is L X 2-3 ft W X 2 ft ht. Preferably brick masonry work is required. If the height of the bed is more than 2 ft, aeration is poor to the earthworms resulting in low production. Width of the bed will be 2-3 ft so that it will be easy to work. The length depends on the length of the shed.
- (e) Fencing in all the sides of the shed (with thorny material) to prevent entry of pigs, cattle, birds, frogs etc.
- (f) Jute bags for spreading on the top of bed to prevent evaporation of moisture and to protect from predators.
- (g) 2-3 mm size sieve for collection of Vermi-compost.
- (h) Fresh cattle dung to start the process of decomposition.
- (i) Lime water for controlling the throat infection of earthworms.
- (j) Bone ash for better reproduction of the earthworms.

(ii) Pre-treatment of the organic wastes:

The organic wastes such as sugarcane bagasse, and cow-dung generate heat if applied fresh. Hence, they should be cooled outside the beds on a solid platform by turning frequently while spraying water. This will result in a good quality feed material. The earthworms may die because of excessive heat generated in the process of decomposition. Add 100 to 150 grams of lime and 1 kg of bone meal per ton of the organic wastes outside the bed.

(iii) Filling the beds:

(1) Sprinkle water on the floor of the bed before filling the pit.

- (2) Form 3" thick bottom layer bed with coconut fiber and pack it by profuse watering.
- (3) Form 2" to 3" second layer with cow dung sludge. This layer will be immediately useful as the feeding material to the earthworms. This is also called starter dose.
- (4) Then, release one Kg of earthworms for each 3 Sqm. on the second layer and spread evenly on the bed. Care should be taken that the earthworm is not damaged.
- (5) On the top of the second layer form 12" to 14" thick organic wastes with green and dry leaf, kitchen wastes, animal wastes, cow dung etc. Partly decomposed Farm Yard Manure can also be used. Care should be taken that the organic wastes do not contain the glass pieces, plastics, vinegar, soaps etc.
- (6) Sprinkle the solution made up of cow-dung, and small quantity of lime powder on the top to activate the earthworms.
- (7) Cover the bed with gunny bags during the day time to provide dark atmosphere and remove it in the night time for better aeration.
- (8) Spray water with rose cans two times a day at 9 a.m and 5 p.m. Earthworms are more comfortable in humid and dark atmosphere and below 35° C. Care should be taken during summer season to maintain temperature and humidity by spraying water and covering the side of the shed with gunny bags or Bamboo mats.

Once the total feed material is eaten away, the earthworms come on top of the bed and attach themselves underneath the gunny bags. At this stage, stop watering for 2 days. Earthworms will go to bottom layer (moisture zone). Now heap the entire bed material in small quantities. Sieve the collected material to separate Vermi-compost from earthworms. Keep the surroundings always free from ants and rodents.

(iv) The rate of Production of Vermi-compost is directly proportional to number of earthworms. Once earthworms reproduce more, production will become faster from the beds. Earthworms reproduce prolifically in humid and low temperature. The production output is generally 60%.

Sd/-**(S. K. Das)** Vice Chairman & Managing Director

Principal Chief Conservator of Forests.

CIRCULAR NO. 3/2004/U1

- Sub: Plantations under Social Forestry, FDA, CFM etc., Kartika vanam Raising of Panchavati Further Instructions issued Regarding.
- Ref: Circular No. 03/2003/U1, Dt. 05-03-2003.

Certain guidelines have been issued in the Circular cited above to raise Kartika vanams in order to cater to bio-aesthetic needs of the people.

Some progress has already been achieved in this direction. Kartika vanams sites have been identified and planting of a few species has also been done leaving a vast scope for further development in both planting of species and development of infrastructure during the next 2-3 years.

Certain long rotation indigenous species of multiple value are considered very useful to plant in Kartika vanam. The following five species which constitute "Panchavati" are believed to be immensely good for the environment and ground water.

- 1. Ravi (Ficus religiosa)
- 2. Marri (Ficus bengalensis)
- 3. Maredu (Aegle marmelos)
- 4. Usiri (Phyilanthus emblica)
- 5. Ashoka (Saraca indica)

All the officers in the address entry are requested to raise "Panchavati" invariably in the Kartika vanams. The Officers are also requested to note that along with the above species, a few more species like Neem (Azardiracta indica), Badam (Terminalia catappa), Neredu (Syzigium cumini), kanuga (Pongamia pinnata), Medi (Ficus glomerata) and a few ornamental species may also be planted in order to make it more attractive.

The officers who are implementing the CFM / FDA projects are requested to note that it will be a good idea to plant these species at the entrance of the VSS Plantations under the entry point activity.

In many Plantations under the VSS, there is no big tree under which the inspecting officer can stand to discuss the important issues with the members of the VSS. It will be a good idea if the seedlings of these species are planted in a block at the entrance of the Plantations with lot of inputs like organic manure / SSP etc., as outlined in Circular No. 004/2002/U1, Dt. 07-08-2002 on Avenue Plantations. This tree grove would eventually become a meeting place of the VSS members and officials in the field.

All the officers are requested to take keen personal interest in order to implement this programme during the 2004 planting season and follow up continuing action in the next few years.

> Sd/- (**S.K. Das**), Principal Chief Conservator of Forests

Principal Chief Conservator of Forests.

CIRCULAR No. 6/2004/U2

Sub: Andhra Pradesh Forest Department - Programme to alleviate the poverty of the rural poor - Planting in the village homesteads particularly those of the weaker Sections with high value grafts - Certain guidelines - issued

The Forestry Projects aim at alleviation of the rural poverty through sustainable management of forests. In this regard, several measures have been taken up to develop the forests with the idea to manipulate the composition of the existing forests in order to generate income and employment to the local community.

The subject of raising high value useful species in the homesteads of all the villagers in the 8000 forest fringe villages (approximately) has been discussed for quite some time. The field level functionaries have been requested to select a few villages of the weaker sections to start with. In this regard, the conservators of Forests and the Divisional Forest Officers (Territorial) / (Planning & Extension) / (Wildlife) have been requesting for clarifications on different issues from time to time. It is therefore, considered necessary to issue clear guidelines as described below so that the programme can be implemented properly within the time frame.

- 1. The forest fringe village where the VSS is in existence should be selected. Preference should be given to a village of weaker section like Tribal/SCs to start with and where the VSS has been functioning quite successfully.
- 2. Once the village is selected, the number of families should be enumerated and the number of planting points in each homestead be assessed.
- 3. In the beginning itself the villagers should be told about the programme i.e., supply of high value grafts and useful species like Drumsticks, Papaya, Banana etc., at free of cost to them for planting in their homesteads so that the individual family would get the benefit within a short time.
- 4. Once the choice of species for each individual family is finalised with the number of planting points, a general discussion should be held among the villagers for digging the pits of the size of 45 x 45 x 45 cm³ and keep ½ cft of dry cow dung powder for each pit ready. The department should supply 100 grams of SSP for each planting point.
- 5. The choice of seedlings may be restricted to following.
 - a. Grafts Mango, Usiri, Guava, Chinta etc.
 - b. Non-Graft: Day-to-Day useful species Drumstick (Munaga), Papaya (Boppai), Banana (Arati), Lemon (lime).

Care should be taken to see that Banana is planted where waste water flows in each homestead.

6. Funds flow for this project will be from SGRY, FDA (Entry Point Activity) and CFM Projects. The Divisional Forest Officers (Territorial) / (Planning & Extension) (Wildlife) are in charge of implementation of this project. The Conservators of Forests / Divisional Forest Officers are requested to note that there will not be any problem to adequate funding of this project.

If any of the officers faces any problem in this regard he/she should immediately contact the concerned officers (Chief Conservator of Forests (SF)/Chief Conservator of Forests (CFM) / Chief Conservator of Forests (FDA)/ Additional Principal Chief Conservators of Forests / Principal Chief Conservator of Forests.

 Once all the homesteads are converted by planting with the species as described in para-5 (a) & (b) we should try to find out whether any community land is available for taking up planting with valuable indigenous NTFP / Non-NTFP species in order to create a bio-aesthetic plantation (Karthika Vanam) (as discussed in the Circular No. 3/2003/U1).

This should be taken up only when the villagers/VSS/Panchayat give full support to this programme. Care should also be taken to see that the grazing field is not totally covered by the planting programme: otherwise our programme will some create other problem for the villagers.

It should be mentioned here that the intention is not only to cover the 8,000 forest fringe villages as mentioned in above paragraph but also to cover all the villages in our State (29,000 villages in the State app.) in due course, but our first target is the forest fringe villages. This programme should be completed by December 2005, After covering the forest fringe villages, a review will be made and the decision taken in consultation with the Government for the other villages.

The Conservator of Forests / Divisional Forest officers are requested to make a detailed exercise with their field level functionaries and assess the requirement of grafts village wise and see that supply of grafts by developing sufficient number in our nurseries and procurement from Horticulture Department is made in time every month so that the planting programme can be taken up through out the year without any interruption. This programme, if implemented properly, will not only create an element of food security to the children of our villagers, improve the aesthetic aspect of the rural landscape but also increase the confidence of the villagers in the functioning of the Forest Department enormously.

Sd/- **(S.K. DAS)** Principal Chief Conservator of Forests
Principal Chief Conservator of Forests.

- Sub: Forest Department Implementation of Compensatory Afforestation Scheme - Semi-Mechanical Method -instructions issued - Reg.
- Ref: 1. Circular No. 05/2002/PMU-1/3, communicated in PrI.CCF ref. No. 17309/02/PMU-1/3, dated 23.08.2002.
 - 2. Circular No.5-A/2002/PMU.1/3,communicated in PrI.CCF ref. No. 17309/2003/PMU.1/3, dated 16.09.2002.
 - 3. Circular No. 06/2002/PMU.13, communicated in Prl.CCF ref. No. 18309/d2000/PMU.1/3,dated 27.09.2002.
 - 4. Circular No. 02/2003/PMU.1/3.02.2003.
 - Government of India, Ministry of Environment & Forests, New Delhi Ir.no.11.9.98-FC dated 23.04.2004 communicated through PrI.CCF ref.no. 4775/2003/F.5, dated 28.5.2004

We have been raising plantations under Compensatory Afforestation Programme for more than a decade after the enactment of Forest (Conservation) Act, 1980.

Under this programme, the User Agency pays the cost of afforestation in advance. Therefore, there is a great scope for raising a very high value plantation with NTFP and other species so that it can generate huge employment and substantial income within the shortest possible time to the local community.

The technique of raising of such plantation has not been uniform in the State from time to time and therefore the quality of the plantation is also varied. In order to achieve exemplary success in this field, the following guidelines are issued:-

- 1. Plantations under this programme have to be raised necessarily under Semi-Mechanical Method. The guidelines issued vide reference 3rd cited should invariably be followed. Poclain should be used preferably for loosening soil.
- 2. The plantations should be raised mainly with high value NTFP species like Usiri, Tamarind, Pongamia, Tapsi, jackfruit, (in suitable area and climate) Neredu etc., and with commercial species like Bamboo, Eucalyptus etc.
- 3. The nearest VSS has to be necessarily involved. If the area is very large it can be divided into two or three parts and allotted to different VSSs located in the area.
- 4. In general 75% of the area should be raised with NTFP species and bamboo and only 25% of the area may be raised with Eucalyptus and other species.

- 5. The VSSs should be encouraged to raise medicinal plants and other NTFP items which can be grown as an inter crop is such plantation.
- 6. For raising bamboo, intensive practices as adopted by Andhra Pradesh Forest Development Corporation Ltd., should be followed. It may be necessary to provide fencing to the bamboo plantation initially for two years.
- 7. If a portion of the area is hilly and not amenable to use of poclain for loosening the soil or full of rocks, guidelines issued in circular cited 4th should be followed to raise the plantations.

Sd/-**(S.K. DAS)** Principal Chief Conservator of Forests

Principal Chief Conservator of Forests.

CIRCULAR No.06-A/G1/3/2005

- Sub: Raising of Plantations under Semi-Mechanical Method -Further guidelines -Issued - Reg.
- Ref: Circular No.06-PMU I-3/2002 (communicated through P.C.C.F. Ref. No.17309/2000/PMUI/3, dated 27-09-2002.

Certain guidelines have been issued in the Circular cited above on how to raise plantations under Semi - Mechanical Method.

From this year onwards considerable investment is proposed in raising plantations under different schemes under Semi-Mechanical Method and it is therefore considered necessary to elaborate the guidelines issued in the above Circular so that it will be easier for the field level functionaries to follow it step-by-step as described below:-

STEP-I: Once the site is selected for raising plantations under Semi-Mechanical method, the site should be perambulated by the field staff in order to have an idea about the drainage of the area. After the clearance of the scrub growth and removal of it from the plantation site, the area should be perambulated thoroughly in order to locate the highest point (ridge) of the plantation area. A pole should be fixed on the highest point. With respect to this highest point the drainage of the area should be growth and again.

If the area has got slope in one direction only the exercise becomes very easy, namely if the direction of the slope is North to South, ploughing direction is East to West. But in practice the area having slope in one direction only is seldom available. What is generally available is an area with slopes in more than one direction.

With respect to ridge point, the slope direction should be fixed for every part of the plantation area having slope in a particular direction and thus sectors I, II, III etc., may be formed - each sector having slope in one direction only. These sectors should be demarcated in the field by fixing stone monoliths. **This is a very important exercise.** The Conservators of Forests / Divisional Forest Officers are requested to do this exercise in the field with their field staff. For each plantation site, it may take one full day.

STEP-II: Once the exercise in Step-I is completed the area has to be again perambulated for location of the Nalas/Vagus in the area i.e., 1st order, 2nd order, 3rd order etc. These Nalas/Vagus should be demarcated on either side by fixing poles with red flags in order to indicate that these areas will not be brought under ploughing. These streams/Nalas are to be treated with SMC measures under cost effective structure with appropriate technology as detailed in Circular No. 5 and 5-A.

STEP-III: For uprootal of stumps poclains should be used and once the stumps are uprooted, these should be taken away from the planting site. The areas which have got very soft soil and few stumps, JCB may be used for uprootal of stumps.

STEP-IV: After the removal of the stumps from the planting site the area should be ploughed in each sector across the slope by tractors with or more than 55 HP.

After ploughing, trenches with septa should be dug out at regular intervals all over the plantation area.

While digging the trenches in the area and constructing the percolation tanks on the Streams/Nalas, a simple thumb rule calculation should be made so that the water harvesting structures may impound at least 10% of the total rain fall of the area on 40% of the total run off in a year. This point may be illustrated in detail for the benefit of the field level functionaries.

Example: - Suppose we have a plantation area where the rain fall is 600 mm/per annum.

- Quantity of rain water to be harvested in the plantation area = 10% of rainfall or 40% run off = 60mm = 0.06 m.
- If the plantation area is 100 hectares, Total quantity of water to be harvested per annum = 100 X 10,000 X 0.06m = 60,000m³.
- 3. Generally the trench will allow the percolation to 10 times of its volume and the percolation tanks 5 times.
- 4. On the streams a series of percolation tanks should be constructed at suitable points.

If the number of percolation tanks in the 100 hectares of plantation area is 100 and volume is 2,000 cu.m, these Percolation Tanks will allow percolation of 2,000 cu.m x 5 = 10,000 cu.m.

5. We are still left with 50,000cu.m of water to be harvested in the plantation area and this has to be done by the trenches with septa. The total volume of the trenches should be 5,000cu.m approximately. The trenches should be well spread over the entire plantation area with more emphasis on the upper side.

The above estimate is only an approximate one but it serves our purpose well. This estimate should be taken as the minimum quantity of excavation. If the area is highly undulating, eroded with low rainfall (< 700 mm / annum), quantity of excavation may be increased.

It should be noted that under Semi - Mechanical Method all the steps mentioned above should be followed as a schedule of pre-planting operations.

A series of trenches with septa is a very important input in the plantations raised under this method as it has been observed that the plantations raised under this method without trenches suffer badly once the ploughing is discontinued after first/second year. We may reduce the cost on ploughing after raising the plantation and spend the savings from ploughing to have a series of trenches. In fact in the plantations raised with these pre planting operations, ploughing is not essential but importance should be given on deep soil working around the plants. This is supported by the experience of Clonal Plantations and Bamboo Plantations raised in APFDC which are examples of success stories.

While digging the trenches in the plantation area care should be taken to design a number of trenches as future fire lines as outlined in our Circular No.02/J4/2004.

Sd/-**S.K. Das** Principal Chief Conservator of Forests

Principal Chief Conservator of Forests.

CIRCULAR No.3/2005/PMU-I/1

- Sub: APCFM Project Introduction of Bamboo in the Degraded Forests for improvement of the species composition and income generation to the local community Guidelines on the techniques for raising such plantation -Issued.
- Ref: 1. Circular No.06/-A/G. 1/3/2005 (Communicated through PrI.CCF ref. no. 17309/2000/G.1 dated 08.05.2005).

Bamboo has been identified as one of the most important species for large scale propagation as it is found very suitable for employment and income generation to the local community.

In addition to raising of pure plantation of bamboo under semi mechanical method on which detailed guidelines have been issued in the reference cited above, a large target has been taken up (more than 30,000 ha.) this year to introduce bamboo in the degraded natural forests, as it has been found that these degraded forests are not generating any significant income to the local community protecting these forests by forming into VSSs. The whole idea of introduction of bamboo in such degraded forests is to improve the composition of the species within a very short time so that a lot of income flows to the local community from the harvesting and value addition of bamboo.

This will be one of the most difficult plantation models and therefore the Conservators of Forests / Divisional Forest Officers will have to plan the plantation programme very meticulously much in advance. The following guidelines are to be invariably followed while introducing bamboo in the degraded natural forests:-

- 1. Total number of plants per hectare will be approximately 125. The distance between the two plants should never be less than 5m. It may vary from 7m to 12m. Variable espacement will help in choosing a planting point where soil is good in a comparatively clear area.
- 2. The plantation area should be divided into sectors. The area of this sector should not be more than 5 ha. On the sector boundary stone monoliths should be fixed giving the sector number inscribed on it. It may be combined with trenches with septa wherever the site is suitable. Each sector will have a plantation Board/Stone giving the details, no. of plants, area etc.
- 3. The dimension of the pit will be as follows:-

Length	Breadth	Depth
45 cm.	45 cm.	60 cm

- 4. Wherever the pit is dug out in the degraded forest area for planting with bamboo rhizomes a red polythene ribbon should be tied up to the nearest tree/Shrub at a height of 2 m (app.) for locating the pit easily by the inspecting officers. In addition to the red polythene ribbon, a red band mark may also be applied to the same tree or shrub, if necessary.
- 5. Best of the planting stock should be separated before actually taking up the planting programme under this model. Only more than two year old rhizomes should be planted. In each pit 1/2 cft of dry cow dung powder/vermi-compost should be mixed with equal quantity of dug out soil and the planting should be done after the first onset of monsoon, leaving the top of the pit at least up to a depth of 20cm empty. In areas where rainfall is heavy (more than 800 mm/annum) only 10cm of the top of the pit may be kept empty. The polythene bag need not be removed while planting the seedling but only a few vertical cuts should be given as mentioned in the Circular No.04/2002/U.1. The reason for keeping the upper portion of the pit empty is for collections of water in the pit during the rains which would help the growth of bamboo rhizomes in clump formation very fast. After some time a few branches of tree around the clump may be cut to allow the bamboo shoots to grow vertically.
- 6. After planting of the seedlings, the local area around the pit should be treated with respect to slope and a little manipulation should be done with a spade so that rain water flows into the pit without any obstruction. In addition to this, a semi lunar bund may be made at a distance of 1m (app.) away from the planting point wherever it is possible with locally available stones on the lower side of the slope in order to harvest more rain water. The stone should be arranged in the form of a wall in a semi lunar trench of 30 cm depth x 30 cm width x L. This should be done only when cutting of tree growth is not necessary and stones are available locally.
- 7. The entire area should be treated with SMC works identifying the streams of 1st order, 2nd order, 3rd order etc. and effort should be made to see that saturation level watershed treatment is obtained by erecting percolation tanks and digging trenches with septa. Some of the trenches should be dug out in such a manner that they may serve the purpose of fire line as outlined in Circular No.02/J.4/2004.
- 8. For each plantation an FBO/FSO should be designated as Plantation Manager and they should be given training by our officers on these techniques in order to understand the technique in a simple manner. Handouts in Telugu with simple sketch should be distributed to our field staff and the leaders of the VSS. The Director, Forest Academy, Dulapally, will organize the training in coordination with the Conservator of Forests, Research and Development Circle.
- 9. The Conservators of Forests/Divisional Forest Officers are requested to plan this programme very sincerely with full interest and see that the model plantations are raised in each range at the earliest and replicated every where as per the target.

Repeated inspections should be taken before and after planting in order to adopt corrective measures, if necessary.

Sd/-**(S.K.DAS)** Principal Chief Conservator of Forests

Principal Chief Conservator of Forests.

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
 - Pri.CCF Circular N0.3/2005/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.

SI.	Model/	Plantation	Soil &	M&F Micro	Overheads	Entry	Total
No.	Intervention	including	Moisture	Planning,	10% of the	Point	
		maint-	Conservati	Fencing,	plantation	Activities	
		enance	on (15%	Awareness	cost	(fixed)	
			of	raising (10%			
			plantation	of the			
			cost)	plantation			
				cost)			
1	2	3	4	5	6	7	8
1.	Aided Natural	9750	1460	975	975	4000	17160
	Regeneration						
2.	Artificial	17100	2565	1710	1710	4000	27085
	Regeneration						
3.	Mixed	17100	2565	1710	1710	4000	27085
	Plantations						
	of tree having						
	MFP and						
	medicinal value		1007			(000	
4.	Bamboo	9300	1395	930	930	4000	16555
	Plantation						
5.	Pasture	11100	1665	1110	1110	4000	18985
	Development/						
	Silvipasture						

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

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.

<u>5.1.Aided Natural Regeneration</u>: 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 5th 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).

<u>5.3. Artificial Regeneration:</u> 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 1st and 5th, 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 <u>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 our Circulars.</u>

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.

<u>5.5. Bamboo Plantation (625 plants per hectare)</u>:- 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 cm³ 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

<u>5.6. Pasture Development/Silvipasture (400 plants per hectare):-</u> 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)** Principal Chief Conservator of Forests

Principal Chief Conservator of Forests.

CIRCULAR No.6B/2005/G.1

- Sub: Raising of Plantations by the Forest Department Management of Planting Programme - certain guidelines Issued - Regarding.
- Ref: 1. Circular No.04/2002/U.1 communicated through PrI.CCF ref.no. 19908/02/U.1, dated 7-8-2002.
 - Circular No.05/2002/PMU.I/3 (communicated through PCCF ref.no.173097 2000/PMU.I/3, dated 23.8.2002 and Circular NO.5-A/2002/PMU.I/3 (communicated through PCCF ref. no. 17309/2000/PMU.I/3, dated 18.9.2002
 - 3. Circular No.06/PMU.I/3/2002 & Circular No.06-A/G.1/3/2005, communicated through PCCF ref.No.17309/2000/G.1, dated 27-9-2002 and 8-5-2005

Plantations are raised during the rains. If the plantations are raised in the beginning of the rainy season, the plants receive more rainfall, get easily established and start growing fast during the rainy season itself. In all such cases plantations become very successful.

However, this does not happen generally for several reasons eg., pre-planting operations not done in time or a long dry spell after the first showers of monsoon or intermittent long dry spell in between the rainy days or the planting programme not organized/ planned properly etc. All these factors lead to late planting and the plantations are not quite healthy and the number of casualties is very high.

In view of the facts stated in the above paragraphs, it is found that the management of planting programme depends on two main factors namely:-

(1) Human factor and (2) Climate factor.

By human factor it is meant about proper planning and implementation of the plan in time for carrying out the pre-planting operations, completing the planting programme within a specified period so that the plantation receives more rainfall during the year of planting and by climate factor it is meant about timely rain or dry spell during the planting period or after planting.

We are in need to over-come both these factors in order to raise very successful plantations because we are committed to do so for value changes of the forest area.

The following guidelines are issued in order to overcome these factors to raise successful plantations in a fool proof method:

(1) (a) Pre-planting operations: Pre-planting operations like clearance of thorny bush growth, uprootal of stumps should be taken up in the previous year of planting during the month of October/November. Once these operations are over, the other operations like ploughing, pitting and SMC works like PTs and trenches could be completed during the month of December/January for the plantations to be raised under Semi-Mechanical Method.

(b) For the plantations to be raised under the techniques other than semi mechanical, all the pre-planting operations like surveying the area, removal of thorny growth, SMC works as discussed in the reference cited 2nd and 3rd and pitting should be completed before the end of January of the previous year.

On the whole, in the year of planting only seedlings are to be planted with / without fencing and subsequent tending operations as prescribed in the FSR.

2. Planting Plan : A great deal of effort has to be made in organizing the planting programme. Each plantation area should be taken as a unit. Once the planting programme is taken up it has to be completed within a period of 10-15 days without any interruption. Therefore it has to be assessed as to how much area has to be covered with planting daily. Once this is known, it should be calculated as to how many persons should be engaged in daily planting programme so that every day they can achieve the target without any difficulty. It is therefore very much <u>necessary to prepare a Planting Plan for each of the plantations</u> indicating as to how many VSS members will participate in the planting programme, how many seedlings will be transported to the planting site and how the seedlings will be distributed in the planting area by VSS members where from the water (the reasons explained below) has to be brought to the planting site etc., etc.

Planting Plan should be prepared by the FRO under the guidance of the DFO. The FSO will be the Plantation Manager to implement the Planting Plan in full consultation with the VSS members.

The Conservators of Forests are requested to see that Planting Plan is approved by the DFO and discussed with the VSS members before the end of May of the planting year in South-West monsoon area and it may be as late as July of the planting year in North-East monsoon area.

(3) (a) Climate factor: One of the biggest problems the Forest Department faces in raising the plantations is the lack of timely rainfall apart from the above two factors discussed above. Once we take up the planting programme the rains may stop and there may be a tong dry spell. Planting is stopped for fear of casualties in the plantations. After a few days when it starts raining, again the planting is taken up. The process goes on. All these lead to a situation where we are totally dependent on the vagaries of monsoon and we are never sure when we can complete the planting programme.

(3) (b) The uncertainty of rainfall at the time of planting can be eliminated by watering the plants at the time of planting. After the first onset of monsoon once the soil is moist, the Planting Plan should be put into operation and an effort should be made to complete the planting programme within ten days. Planting should be done without removing the bags but giving few vertical cuts as mentioned in Circular cited 1st While

planting the seedling watering should be done necessarily. The quantity of water should not be less than 2 litres for each plant. It is hereby clarified that hence from in all South-West Monsoon area the planting has to be completed by 30th June as the monsoons sets in before 15th June thereby giving a clear time of (15) days to take up and complete the planting programme. Similarly in areas under North-East monsoon, planting should be completed by 15thOctober. One watering at the time of planting is fully justified because it will help in timely completion of the work with better results. It may be noted here that we water the avenue Plantations more than 20 times.

(3) (c) Once the seedling is planted in this technique with watering even if there is a dry spell of 10-15 days after planting the seedling would withstand this dry condition and it will be established shortly after receipt of rainfall.

4. Cost of watering for each plant may not be more than Re.1/- plant. Most of our plantations have 400 plants/ha. The cost of watering should be made up by deleting some not so important schedule of operations so that the unit cost remains unchanged.

5. It is pertinent to mention here that a technique similar to this was introduced by me in the planting programme of Eucalyptus clones in APFDC which has proved quite successful with respect to better growth and higher survival percentage of more than 95%.

All the officers are therefore requested to go through the guidelines carefully, discuss with the officials working with them thoroughly and follow them from 2006 planting season onwards very scrupulously for which selection of planting site and preplanting operations should be taken up this year only.

> Sd/-**(S.K. DAS)** Principal Chief Conservation of Forests

Principal Chief Conservator of Forests.

CIRCULAR No.01-200/PMU.I/3

- Sub: Palmyrah Trees Propagation of Palmyrah trees in the Forest Department -Certain guidelines - Issued - Reg.
- Ref: Circular No.03-2003/U.1, dated 5-3-2003 communicated in Prl.C.C.F. Ref.No.9332/2003/U.1

In the reference cited above certain guidelines have been issued (**Annexure.IV**) on how to give pre-treatment to Palmyrah nuts before dibbling in the field. These guidelines are reproduced below:

PRE-TREATMENT OF PALMYRAH NUTS:

It has been a long standing practice in the Forest Department to dibble Palmyrah nuts mainly in the boundary of the forest areas with the idea to keep the line of demarcation of forest area very clear on the ground in addition to getting innumerable benefits from the Palmyrah trees when they grow. In fact the important role of Parlmyrah trees can hardly be exaggerated in a rural economy. However the efforts by the Department in this direction have given partial success only. In some cases, the germination is found quite satisfactory whereas in most of the cases the germination has been very low. All this has happened due to non-application of proper technique which is described below:

We should give pre-treatment to Palmyrah nuts before they are dibbled in the field. The brief method of pre-treatment is given below:

1. The Palmyrah nuts collected from the fruits should be cleaned in water, and dried in the Sun adequately.

2. An earthen pit should be dug out of suitable size depending on the quantity of Palmyrah nuts to be given pre-treatment. The Palmyrah nuts should be put in the earthen pit and filled to almost 3/4th of the depth. Fresh cow-dug should be put over these Palmyrah nuts to a thickness of 8" to 10" and it should be covered with soil layer up to the top of the pit to a thickness of 4" to 6". Over this, water should be sprayed once in 2 to 3 days so that the entire mass in the pit is of toothpaste like consistency. The Palmyrah nuts should be kept for 7 to 10 days in the pit when they should be removed from the pit and cleaned in water. Immediately after this, the Palmyrah nuts should be taken to the field and dibbled.

The reasons for poor germination of palmyrah nuts or the poor establishment of Palmyrah seedlings are the following:

1) Palmyrah nuts are collected and kept in heaps/gunny bags for a longtime

before they are dibbled in the field. The long duration in the heap/gunny bag induces the Palmyrah nuts to germinate inside the heap/gunny bag and within a short time their viability is lost.

2) Some times the graziers or the villagers dig out dibbled palmyrah nuts for the sake of "thegalu" as it is quite a delicious food.

In order to overcome these problems the following procedure/strategy may be adopted for propagation of palmyrah trees by the department:-

- 1. Tender/quotation may be called for raising palmyrah trees for the rate/seedling with two leaves. Full payment should be made only after the seedling attains an age of 1 to 3 months.
- 2. Some VSS members may be given training for pretreatment of palmyrah nuts as described in the beginning of this Circular and they should be encouraged to give tender/quotation.
- 3. Some portion of the tender amount may be advanced to the tenderer to start the work. However, the full payment should be done only after actual count of the established seedlings (aged 1 to 3 months) and entry to this effect in the M.Books.

The procedure outlined above when followed properly will not only result in successful propagation of palmyrah but also it will in a small measure enhance the livelihood opportunities of a few VSS members.

Sd/- (S.K. Das) Principal Chief Conservator of Forests

Principal Chief Conservator of Forests.

CIRCULAR No.6-C/2006

- Sub: Compensatory Afforestation Scheme Certain guidelines for Sloppy Lands Regarding.
- Ref: 1) Circular No.02/2003/PMU.I/3, communicated in PrI.CCF's Ref. No.17309/2000/PMU.I/3, dated 13-2-2003 (Field Companion Vol.I)
 - 2) PrI.CCF Ref.No.4775/2003/F.5, dated 21 -02-2005 (F.C. Vol.II)
 - 3) Circular No.02/2003/PMU-1/3, Dated 13-02-2003.

Certain guidelines have been issued in the reference cited 2nd to raise plantations under Compensatory Afforestation Scheme with the semi mechanical method. These instructions were issued where the land is suitable for raising the plantations under semi mechanical method. This has created an impression among the Divisional Forest Officers and the Conservators of Forests to accept only those lands for Compensatory Afforestation which are suitable for raising, plantations under the semi mechanical method. However the extent of such land available is quite limited.

As the State Government is taking a number of major projects involving forest land, there is need for large extent of compensatory land and since plain land with gentle slope is not available, the next best option will be to accept land where there is very good depth of soil even if the land has different degrees of slopes. Out effort will be to raise very good successful plantations under a sound technique giving full importance to SMC measures with a good choice of species depending upon the rainfall of the area.

The technique for raising plantation the hilly areas has been discussed in the Circular cited 1st. In partial modification of the techniques outlined in the above circular, the following technique should be <u>adopted in the sloppy areas for Compensatory</u> <u>Afforestation Scheme.</u>

TECHNIQUE-I:

The technique involves alternate trenches and terraces with septa at a slope distance of 5m. from the top of the sloppy land. The width of the terrace should be 1.5 m. The terracing should not be continuous. A septum of 1.0-1.5 m may be provided after an interval of every 10-15 m. The terracing should have an inward slope of 10-15%. Abutting the wall inside the terrace, a trench should be dug out with the width and depth of 30 cm in the terrace area. This trench also should be provided with septa after 5 to 7 m. The idea is to conserve rain waters in the trench during the rainy season.

The dimension of the trench should be 1.5 m width and 0.5 m depth with bottom width of 1.20 m. As mentioned already there should be alternate trenches and terraces with an interval of slope distance of 5m from the ridge i.e., at the top the trench should be dug out first and then the terrace and so on.



The planting will be done in the terrace and trenches in the pits of 45 cm X 45 cm X 45 cm. While planting the bag seedling in the pits, there is no need to remove the bags. Only three vertical cuts in the bags may be given before planting. After planting, the base of the seedling may be raised to 5-7cm by putting more soil in order to protect the seedlings from inundation during the rains.

At the time of planting 100 gm of SSP may be applied as basal dressing and $\frac{1}{2}$ cft dry cow dung powder may be put in the pit and mixed well with the soil.

CHOICE OF SPECIES:-

Our choice of species should mainly be restricted to Pongamia and Bamboo only. These two species should be raised as pure crops in blocks at an espacement of 5 m X 5 m. Because of this espacement the slope distance between a trench and terrace has been kept at 5m.

In the Scheduled areas additionally, some fruit bearing species like Jack fruits, Tapsi may also be planted at an espacement of 10 m X10 m and Usiri at an espacement of 5 m X 5 m.

TECHNIQUE-II:

Where the soil depth is not adequate and it is not possible to have intensive terracing and trenching as discussed above, the technique of afforestation is provided under Category-II. Degraded hill slopes without viable root stock in Circular No.02/2003/PMU-1/3 dated 13-02-2003 in the reference 3rd cited shall be followed. Such lands should not be accepted for compensatory afforestation in general. It may happen that out of a large chunk of area, an area of 5-10 ha. falls under this category. However, while afforesting such areas following instructions shall also be kept in mind:-

- i) The area should be closed by providing suitable fencing against biotic pressure.
- ii) The area should be treated fully with suitable soil and moisture conservation measures.
- iii) Trenches of size 2 m length, 1.5 m wide and 0.5 m depth with bottom width of 1 m will be excavated and the planting will be done in these trenches by following trench cum pit method.
- iv) More than one year old seedling at the rate of 300-400 plants per ha of species mentioned above should be planted while ensuring that the distance between the two plants is kept at minimum of 5m.
- v) The planting will be done in 45 cm^3 pits.

MAINTENANCE OF PLANTATIONS :-

All such plantations should be tagged on to the nearest VSS and maintained with usual schedule of operations like soil working, clearance of jungle growth etc. The plantations should be maintained for 3-4 years or till such time when they are fully established.

Sd/-(**S.K. Das**) Principal Chief Conservator of Forests

Principal Chief Conservator of Forests.

CIRCULAR No.9/2006/S2

- Sub: FD-Plantations Raising of NWFP plantations with high yielding grafts -Intensive and regular management for better survival and growth and to obtain maximum returns - Guidelines issued - Regarding.
- Ref: 1. PCCF Rc.No.9308/2005/PMU-I/1 (Circular No.2/2005) dated 28-2-2005.

Conventionally forest resource management and development has been biased in favour of Timber and Pulpwood species for commercial purpose. Not much emphasis was laid on raising successful Non-Wood Forest Products (NWFPs) plantations nor much attention was paid on the requirement of local people. Very seldom we come across a successful NWFP plantation in the department. Although the people living near the forests have been using the NWFP for their own consumption as well as for subsistence income, the resource expansion, domestication and management of NWFP species was not given adequate importance.

It has been our experience that a few species yielding NWFP are found more profitable than firewood/pulpwood or timber species. The NWFP trees provide assured annual income to the Forest dependant communities. Therefore, after the revision of the National Forest Policy during 1988 and after the advent of JFM programme during the nineties, there is a shift in the Silvicultural practices with regard to the planting of NWFP species which are considered main intended products from the degraded fringe forest areas for the forest dependant communities. Accordingly detailed guidelines have been issued in the reference cited, on the preferential treatment of NWFP species in the natural forests.

After the advent of JFM Programme in the state, grafted varieties of NWFP species like Usiri (*Phyllanthus emblica*), Chinta (*Tamarindus indica*), Neredu (*Syzygium cumini*), Kunkudu (*Sapindus emarginatus*), Seethaphal (*Annona squamosa*), Kanuga (*Pongamia pinnata*) etc., were planted as a pure or mixed crop in the plantation programme in degraded forest areas. The benefits from grafted varieties of NWFP are two-fold. First, they start yielding at a very short period. Second, because of clonal origin the quality of usufruct and quantum of yield is high. This gives instant returns and the VSS members need not wait for decades to get sizeable income.

But the performance of NWFP grafts is not uniform in all parts of the state and within the same place also it varies from year to year. Flowering, fruiting and yield are influenced by a wide spectrum of factors like soil type, soil depth, nutrient status of the soil, altitude, photoperiod (day length), intensity and frequency of rainfall, weather conditions prevailing during flowering and fruit setting, self incompatibility, availability of appropriate insect population for pollination, agronomic practices and intensity of management etc.

Among all the above mentioned factors which influence the performance of NWFP trees, intensity and continuity of management is the biggest influencing factor and unfortunately this aspect is given least priority in the departmental plantations. Mere establishment and maintenance of NWFP plantations for a couple of years will not serve the purpose. Unfortunately, we have been treating the NWFP species plantations just like the plantations of Eucalyptus, Casuarina, Teak etc.

Unlike the plantations raised with Timber and Pulpwood species, NWFP plantations require intensive management and constant attention similar to the horticultural crops such as Mango, Guava etc., so that the plantations yield desired results and provide regular yields.

The experience shows that planting of NWFP grafts in the VSS plantation programme is being done in a casual manner without giving proper attention to the nutritional, moisture and other cultural demands of these grafts. The graft is a product of cloning a reproductively matured part on a Juvenile rootstock with a management objective of early flowering and fruiting which have got enormous nutritional demand from the carbon-assimilate sink of the plant system. Therefore, unless the management does have the potential to provide these supplemental demands of the grafted plants, mere establishment of NWFP plantations does not serve the purpose. In view of this factor, it is suggested to view the NWFP plantation as an orchard-related activity and accordingly give due attention to the fertilization, irrigation, weed removal, interploughing, introduction of appropriate Leguminous Cover Crop (LCC), SMC measures, pest-control, canopy architecture designing etc.

The experience gained during the past one decade shows that not much attention is being paid on the maintenance of the NWFP plantations after the prescribed maintenance period is over. Generally the FSR prescribes maintenance for 2-3 years after raising the plantation and thereafter the plantations are left unattended. The plantations are subjected to a lot of biotic interference and competing miscellaneous / weed growth. The initial euphoria fizzles out after planting out the selected clones in a well prepared site due to lack of community ownership of the created resource. This is leading to poor survival/growth of the trees in these plantations thereby the desired results are not achieved often leading to criticism that the planting stock is of poor quality.

Therefore keeping the above points in view, the following guidelines are issued to make the NWFP plantations successful.

1. Yields from the NWFP plantations mainly depend on the single dominant factor of intensive management including site maintenance, nutrition input in the form of Organic manures and Bio-fertilizers, surveillance on disease and pest control, pruning of the branches in different phenological stages of the growth etc. This has to be done by the VSS since the Forest Department can take the onus of providing the necessary financial inputs for initial period of 3-4 years and not beyond that. The field officers have to understand that in all these plantations the key is high input high output strategy. Therefore, after the maintenance period is over as prescribed in the FSR, the local officers should assess the condition of each such plantation in their jurisdiction and if required, can sanction one or two operations like ploughing across the slope, soil working, watering, application of manure, additional SMC works etc.,

as per the delegation of powers vested with the Conservators of Forests and FSR Zonal Committees. All these operations should find place in the revised Micro Plan.

- 2. The designing of the canopy architecture is an essential component in the NWFP plantation. Initial growth of the NWFP grafts for 2-3 years has to be confined to the vegetative growth only and horizontal crown expansion should be the main activity during that period. Thereafter periodical pruning of the branches and lifting the main canopy at least up to 1 -2 m etc., should be taken up.
- 3. Vermi-compost and compost produced by the VSS as an economic activity should be used in the plantations liberally every year.
- 4. The Forest Department staff should regularly visit these plantations and record the pest incidence if any, and guide the community regarding the control measures after due consultation with the Research staff.
- 5. Protection of these plantations from biotic interference is extremely important and this should be ensured by the community.
- 6. The plantations cannot be maintained indefinitely with the departmental funds. It has to be owned by the community. This is possible only when the field level officers demonstrate a sense of commitment by frequently visiting these plantations which require regular inputs such as ploughing, watering, manuring, weeding and disease and pest control measures as long as the usufruct is harvested and the optimum yield depends on the intensity of management schedule. <u>Therefore, the VSSs have to be motivated to plough back part of the amount realized by selling the usufruct for the regular maintenance of these plantations so that they get sustainable income year after year.</u>

Sd/-**(S.K. Das)** Principal Chief Conservator of Forests

FOREST / WILD LIFE PROTECTION

Principal Chief Conservator of Forests.

CIRCULAR No. 8/2002

- Sub: Forest Protection Taking up Beat Inspections to improve protection of forests Reg.
- Ref: 1. PCCF's Ref. No. 11708/2002-72, dt. 24.9.2002.
 - 2. PCCF's Ref. No. 47127/2001-X1, dt. 26.11.2001.

Forest Protection is an important indicator for assessing the performance of the officers at various levels. For assessing the performance under forest protection, two parameters are adopted i.e., Beat Inspections and collection of Compounding Fee. The subject of Beat Inspection was discussed in the Apex Body Meeting and all the officers have felt that unless the Beat Inspections are properly monitored it will not have much impact on the forest protection. Further if this important work is left to the subordinate staff alone they may tend to take up the Beat Inspections in a routine manner.

The attention of the Addl.Prl.CCFs and CCFs is also invited to the Circular No. 13/95, dt.12.11.1995 (PCCF's Ref.No. 23211 / 95 - X3) wherein a detailed procedure for taking up of Beat Inspections is prescribed. As Per this Circular all the vulnerable Beats shall be inspected four times a year and all non-vulnerable Beats twice a year. The annual Beat Inspection programmes are being drawn up accordingly in each of the Circular No.13/95 are reproduced hereunder.

- 1. Any fellings detected during the perambulation of a Beat shall be enumerated and recorded in the Beat Fellings and Enumeration Register (BFER).
- The Forest Beat Officer shall submit a monthly extract of BFER to the Forest Range Officer concerned through the Forest Section Officer. The Forest Range Officer there upon shall submit the consolidated extract of BFER of all the beats under his control to the divisional Forest Officer and the Divisional Forest Officer to the Conservator of Forests.
- 3. All the non-vulnerable Beats must be inspected once in each six months period and vulnerable Beats twice in each six months period.
- 4. Where the value of destruction exceeds Rs.50,000/- the enumeration must be test checked by the concerned Sub-Divisional Forest Officer / Divisional Forest Officer and where it exceeds Rs.75,000/- by the concerned Conservator of Forests.

The Beat Inspections are initially taken up by the concerned Section Officers and under special circumstances by a special party constituted by the concerned DFO. The initial inspection shall be taken up thoroughly by covering all areas in a Beat, which normally takes not less than 4 to 5 days time. On conclusion of each of the inspections, the concerned Forest Range Officer shall take up test checking of enumeration by spending at least 2 days time for the purpose. Besides inspection of the Beats where large scale fellings have occurred as brought out at point 4 above, the Divisional Forest Officer shall take up test checking of at least 5 Beats in a month by spending at least an entire day in each of the Beats and the Conservator of Forests shall take up test checking of at least 2 Beats in a month by spending at least an entire day in each of the Beats and the Spending at least an entire day in each of the Beats in a month by spending at least an entire day in each of the Beats.

Besides the above, as per A. P. Forest Department Code, the Divisional Forest Officers are required to inspect each of the vulnerable Beats in their jurisdiction at least once in a year.

While communicating consolidated instructions on Forest Protection issued from time to time to the Conservators of Forests and Divisional Forest Officers in the ref.2nd cited, all the Addl.Prl.CCFs and CCFs were also requested to review the forest Protection with the concerned CFs and DFOs during their inspection of the districts. They were requested to review the forest protection with reference to the instructions given by the Govt. and by the Prl.CCF from time to time. Some of the instructions given in the said ref. are reproduced below for ready reference.

- In PCCF's Ref. No.38382/2000-X3, dt.14.9.2002 all the DFOs were requested to conduct protection meetings in each of the Ranges every month with all the Range Staff up to the level of ABOs. In the said meetings, besides reviewing the Forest Protection, the posting of Beat Felling and Enumeration Registers and quality of beat Inspections have to be verified. The DFOs shall also verify the POR Books and see whether the cases are being booked regularly and are being finalized with least delay.
- 2. In PCCF's Ref. No.28420 /2000-X1, dt.24.7.2000 detailed instructions were given for taking up of inspection of Saw Mills in the Districts in the Proforma prescribed.

The Addl.Prl.CCFs and CCFs during their inspection on tour are requested to take up inspection of one or two Vulnerable Beats randomly selected and also review the following:

- 1. Whether the Beat Inspections are being carried out as per the annual beat inspection programme drawn. This may be reviewed after obtaining the information in the **Proforma-I** enclosed.
- Whether the test checking of the Beat Inspections is being done by the FRO /Sub-DFO / DFO/ CF. This may be reviewed after obtaining the information in the Proforma-II enclosed.
- 3. Whether Beat Fellings and Enumeration Registers (BFER) are being maintained properly and whether entries are being recorded regularly. Whether the BFER is being checked by the FRO / Sub-DFO / DFO / CF regularly and whether they are recording their comments in the Register on the quality of inspections.
- 4. Whether the FBO / FSO / FRO are booking the Offence cases regularly. This may be verified from the POR Books. Besides this, it may be verified whether FBOs and FSOs are carrying with them Beat / Section Map, Beat / Section

Information Book, Seize Hammer, Diary-cum-Report book, Digit Set / Enamel paint for enumeration, CF 140, Measuring Tape etc.

- 5. Whether the Divisional Forest Officers are conducting Range level Forest Protection meetings every month in each of the Ranges. This may be reviewed after obtaining the information in the **Proforma-III** enclosed.
- 6. The progress of collection of Compounding Fee by each of the Divisions in the Circle. This may be reviewed after obtaining the information in the **Proforma IV** enclosed.
- 7. Whether the Divisional Forest Officers / FROs are regularly inspecting the saw mills as per PCCF's Ref. No. 28420 / 2000 X1, dt. 24.7.2000. This may be reviewed after obtaining the information in the Proforma-V enclosed.
- Whether the Divisional Forest Officers, FSP are performing their duties as per the instructions given in PCCF's Ref. No.43530 / 98- X1,dt. 2.11.1998 and 13359 799- X1, dt.20.10.2000. The DFOs FSP are required to inspect two vulnerable Beats every month besides Inspection of Neeru-Meeru works (100%) in (2) Beats. This may be reviewed, by obtaining the information in **Proforma-VI** enclosed.
- 9. The disposal of OR, UDOR and Vehicle cases may be reviewed in the **Proforma-VII, VIII** and **IX** enclosed.

After inspection and reviewing as above, the field inspection notes pertaining to the Beats visited and review done on the above items shall be communicated to the concerned CFs/ DFOs duly making a copy to the Addl. PrI.CCF (Vig.).

Sd/-**(S. K. DAS)** Principal Chief Conservator of Forests

<u> Proforma – I</u>

Beat Inspections:

Name of	Total	No of	No. of times	No. of	No. of times	No. of non
the Division	Be	ats	vulnerable	vulnerable	non-	vulnerable
	Marka a	New	Beats to be	Beat	vulnerable	Beat
	vuine-	Non-	inspected	Inspections	Beats to be	Inspections
	rable	Vulne	up to the end	taken up	Inspected	taken up
		rable	of the	actually	up to the end	actually up
			previous	up to the end	of previous	to the end
			month as per	the previous	month as per	of the month
			programme	month and %	programme	and %
1	2	3	4	5	6	7

(The month wise shortfall may also be discussed)

<u> Proforma – II</u>

Name of Division ______ Name of Range ______ Beat Inspections done during the Month of ______

Name of	Dates of	Value of f	ellings rec	orded	Dates of	Date of	Date of
the Beat	Inspection by FSO/ Spl. Parties.	Present material	sent Missing erial material		test checking by the FRO	test checking by the DFO	test checking by the CF
1	2	3	4	5	6	7	8

(this information shall be reviewed for all the months from April to the date of inspection)

<u> Proforma – III</u>

Range level forest protection meetings held by the DFO :

SI. No.	Name of the Range	Dates on which the meetings held within the Range with all staff up to ABOs.
1	2	3

(The minutes of the meeting drawn shall be verified to find out the specific problems of protection within the Range)

<u> Proforma – IV</u>

Progress of collection of Compounding Fee :

Name of	Target	Target fixed up	Target	% of
the Division	fixed for	to end of	achieved up to	achievement
	the year	previous month	end of	
			previous	
			month	
1	2	3	4	5

(The shortfall in collection in each of the divisions may be reviewed)

<u>Proforma – V</u>

Details of saw mills inspected during the month of _____

SI. No.	DFO(T)/(WL)/FSP/FRO	Name and location of the saw mill inspected	Irregularities if any detected.
1	2	3	4

(This information shall be reviewed for all the months from April till the date of inspection)

<u> Proforma – VI</u>

Performance of Flying squad Party

Month	No. of OR cases booked Qty. & value of material	Compou- nding Fee collected	No. of vehicles seized & value of produce	No. of UDOR cases booked, Qty. & value of material	No. of Beat inspect ions carried out as per Cir. No. 13/95	No. of Beats in which 100% Neeru - Meeru works inspec ted	No. of Saw Mills inspected as per PCCF's Ref.No.28420/ 200 - X 1 , dt. 24.8.2000
1	2	3	4	5	6	7	8

(The performance of the Party may be reviewed for the preceding last 12 months from the date of inspection)

<u> Proforma – VII</u>

OR Cases

Division	No. of Ca pending beginnin year (as April)	ases at the g of the on 1st	No. of Cases added during the year (i.e., up to the month of review)		No. of Ca disposed the year (to the mo review)	the year (i.e., up to the month of review)		cases as on of
	Cases Value		Cases Value		Cases	Value	Cases	Value
1	2	3	4	5	6	7	8	9

(For the cases indicated in col. no. 8 & 9 the year- wise breakup may be given)

<u> Proforma – VIII</u>

UDOR Cases

Division	No. of Cases pending at the beginning of the year (as on 1st April)		No. of Cases added during the year (i.e., up to the month of review)		No. of Ca disposed the year (to the mo review)	disposed during the year (i.e., up to the month of review)		cases as on of
	Cases Value		Cases Value		Cases	Value	Cases	Value
1	2	3	4	5	6	7	8	9

(For the cases indicated in col. no. 8 & 9 the year- wise breakup may be given)

<u> Proforma – IX</u>

Lorry Cases

Division	No. of Cases pending at the beginning of the year (as	No. of Cases added during the year (i.e., up to the	No. of cases during the ye the month of	disposed ear (i.e., up to review)	Balance pending a date of re	case - as on the eview
	on 1st April)	month of review)	Confiscated	Compounded	Pending in the Courts	Pending with Authorized Officer
1	2	3	4	5	6	7

(For the cases in Col.No.5 the nature of cases i.e., timber, bamboo, fuel wood, stone, sand etc., may be indicated with value. For Col. No. 7 year-wise pendency may be indicated)

Principal Chief Conservator of Forests.

CIRCULAR NO. 10/2002/X.2

Sub: Forest Offences - Offences involving fast moving vehicles -Necessity for taking up detailed investigation into the case - Making case studies - for better protection of forests - Certain Guidelines - Issued – Regarding.

The most important duty of a Forest Officer is to protect and develop the forests. In spite of several odds the forest officials have been performing the herculean task of protecting the forests admirably - sometimes even at the cost of their lives.

Although we have lost precious forests in many areas due to illegal removal of trees for different reasons, what still remains is invaluable. We must use our time, energy and all innovative ideas to protect and further develop this invaluable wealth.

2. The incidents of vehicles involved in the offence cases by forest officials are quite common and in this regard our officials have been doing their job quite satisfactorily. In many cases, the vehicles involved in the offence cases are being confiscated by the Government and crores of rupees worth timber are being seized from the smugglers.

The department is also in a position to realize penalties in the form of Compounding Fees to a tune of Rs.7.00 to Rs.8.00 crores per annum from the offenders involved in the commission of forest offences. The Government have recently agreed to allow the Forest Department to utilize this amount as "User Charges" for the sake of better protection of forests.

3. Connivance of the staff at any level in smuggling of forests is ruled out, although few instances have come to our knowledge where the involvement/negligence of the staff could not be totally ruled out. This may be considered rather an exception to the general situation.

4. All the forest staff - territorial, flying squad and vigilance - are engaged in protection of the forests. It is also felt that more valuable the forest is, more vulnerable it is to the pressure of smuggling. It is therefore not uncommon that a vehicle carrying illegal teak timber detected in Guntur, Vijayawada or even in Nellore has the origin in Adilabad district as this district has still the rich teak forests.

5. In our State almost 17.00 lakh hectares of forest area are under the protection of VSS members and there are more than 10 lakh VSS members involved in the community participation for protection and development of forests. The VSSs have become a great source of strength and information to the Forest Department which should be utilized very effectively for the protection / development of the forests.

6. The smuggling of forest wealth by lorries / vehicles occurs in a complicated

way where many of the key figures in the act of smuggling may be quite far off from the spot of forest destruction. It has been our experience that an important person in the society living in a big town/city plays behind the scenes the role of the main smuggler by engaging a few agents who in turn finance the ordinary illiterate persons for smuggling by head loads/cycles. The main smugglers, his agents and the ordinary people may be described as primary, secondary and tertiary smugglers respectively. It may help the department if the list of such agents can be made available confidentially in the local police station.

7. In view of this situation it has become quite imperative to understand the complex process of smuggling by making a few detailed case studies on the forest offence cases involving vehicles. The typical cases should only be picked up. A few important cases of the past may also be compiled. The case studies will be published. This will not only give us better insight about the complicated process of smuggling but it will also help us to take up many corrective measures for better protection of forests.

8. Since the case study may require the movement of staff from one circle to the other and considerable expenditure, it is advised that the Principal Chief Conservator of Forests is kept informed of this from the beginning so that the official who takes up the case study is offered adequate cooperation from all concerned. The case study should in brief, bring out the details of the prevailing situation where the smuggling has taken place, the modus-operandi of the smugglers, failure/negligence of the forest department staff, the role of VSSs, the socio-economic condition of the people etc. A few photographs of the important links of the entire chain will be useful for illustration. If necessary, the cooperation of the experts in the field from the University or NGOs may be sought in this regard.

As mentioned already, only a few cases should be taken up for detailed case studies. However, for all offence cases, involving vehicles, a check list should be maintained which is enclosed with this Circular as Annexure.

9. The Conservators of Forests / Divisional Forest Officers are requested to go through this Circular carefully, devote considerable time and energy to bring out the case studies successfully with all the important details so that the forest wealth could be better protected.

Sd/- **(S. K. DAS)** Principal Chief Conservator of Forests

ANNEXURE

Check Slip information for the Circular No. 10/2002/X2-Dated: 30.11.2002

- 1. Vehicle type and number.
- 2. P.O.R. number and date.
- 3. Vehicle (Offence) detected by whom (Name & Designation).
- 4. Produce involved in the offence and its quantity.
- 5. Value of the produce.
- 6. Place where the produce got loaded.
- 7. Route followed by the vehicle.
- 8. Name of the check post crossed
- 9. Whether the permit is checked at the previous check posts.
- 10. Name of the forest area from where the material was felled.
- 11. Whether the field staff have detected the fellings and registered a case for the destruction?
- 12. Whether there is any involvement of the staff in the fellings and smuggling has come out in the investigation?
- 13. The names of the VSSs located around the areas of destruction.
- 14. Whether VSSs members have any knowledge about smuggling / smugglers?
- 15. Do they contemplate to take action to stop smuggling?
- 16. Destination where the smuggled material is heading.
- 17. Name and address of the persons who have organized the smuggling.
- 18. Is there any mafia or smuggling gang involved in the smuggling?
- 19. Whether this vehicle was involved in any forest offences in the past?
- 20. Whether the accused in the offence is habitual offender?
- 21. Whether any saw mill is involved in the case and if so what is the action taken on the saw mill?
- 22. Whether the said saw mill had previously indulged in any forest offence.
- 23. Further investigation details, if any and remarks.

Principal Chief Conservator of Forests.

CIRCULAR No.1-A/2003

(The Circular on this subject was first issued vide ref.no.5357/2003/F5 dated 25-01-2003. This Circular on the same subject supersedes the first circular.)

- Sub: Patta Lands removal of timber and other produce from patta lands consolidated guidelines issued Reg.
- Ref: 1. The Prl. CCF Circular 1/2003 (Ref.No.5357/2003/F5, Dated 25-01-2003)
 - 2. PCCF, Ref.No.18606/97/F5, Dated 29-4-1997. (Circular No.6/97).

In the reference cited, instructions have been issued, regarding procedure to be followed in dealing with patta cases, for issuing of transit permits for the transportation of timber and other produce from patta lands to outside. The instructions are further reviewed in the light of the experience gained in their implementation. The Red-sander is endemic to Andhra Pradesh and is subjected to heavy biotic pressure and requires adequate protection measures. Therefore in addition to the existing provisions under relevant Act and Rules, for extraction and transit for red sanders wood following further instructions are issued for proper regulation of extraction and transit of red sanders from private patta land.

These instructions are issued in super-session of all previous instructions. The Circular 1/2003 cited in reference 1st cited is withdrawn and the following instructions are to be followed which are in the nature of guidelines and supplementary to the statutory Acts and Rules.

I. <u>PROCEDURE FOR GRANT OF TRANSIT PERMITS IN PATTA LANDS FOR RED</u> <u>SANDER WOOD</u>

The regulation and possession of Red Sanders and Sandal Wood is being dealt under Andhra Pradesh Sandalwood and Red-Sander wood transit Rules, 1969 and Andhra Pradesh Red-sander Wood Possession Rules 1989. These provisions should be followed scrupulously. These Rules provide detailed provisions for verification of the material, issue and checking of transit permit, registration of property marks and fixing of marks on the trees and felled logs etc. The Rules stipulate as follows:

"Rule-6-Checking of permits: (1) All sandal wood or red sanders wood, as the case may be, in transit shall be produced for examination at every checking station en route even without being asked by any officer for it or when called upon to do so".

"Rule 7 Sub Rule 3 (i) - Every application for the registration of property mark in respect of sandalwood or red-sanders wood, as the case may be, to be extracted

from private lands within the State shall be accompanied by a statement in Form-III / Form-IV in which all the particulars therein prescribed shall be furnished to the Divisional Forest Officer concerned and also by six facsimiles of the mark proposed. Form-III/Form-IV (shall be in writing) and shall be prepared by the applicant".

"Rule 7 Sub Rule 3 (ii) - After the receipt of the application referred to in sub-rule 3(1) the Divisional Forest Officer or the subordinate authority authorized by him, shall, if he is satisfied that the Government have no interest in the trees, inspect trees, as soon as possible and with the consent of the owner of the land affix the departmental hammer mark on each tree after blazing it at breast height from ground level and issue written permission for the extraction of the trees and grant a certificate of registration of the property mark in Form V for the transport of the trees to a central place in the nearest village for final clearance if so desired by the applicant".

"Rule 7 Sub Rule 3 (viii) (a) - After receipt of the application for the removal of the sandal wood or the red sanders wood, as the case may be, with the statement in Form VI/Form VII containing all the particulars therein prescribed is received, the Divisional Forest Officer or [any subordinate officer, authorized by him] in this behalf shall as soon as possible, inspect and identify the sandalwood or red-sanders wood, as the case may be, by verifying the girth and the departmental hammer mark put on the standing tree and by assembling all parts of each tree and satisfying himself that the wood is of the same tree that was hammer marked standing and that the details furnished by the applicant in Form-VI/Form-VII are correct and without error and there after mark all sandalwood or the red sanders wood, as the case may be [at the both ends] with Divisional pass hammer. Thereafter, the Divisional Forest Officer shall, subject to provisions of sub clause (b), grant a Certificate of Registration in From-V with as little delay as possible.

"Rule7 Sub Rule 3 (viii) (b) - The Divisional Forest Officer or subordinate authorized by him may require from any person, either when presenting a property mark for registration or at any subsequent time, information as to the source of origin and the quantity of sandalwood or red sanders wood, period of felling, agency, routes, depots, destination and such other details regarding his method of felling, trading or working as the Divisional Forest Officer may think necessary......."

"Rule 7 Sub Rule 4 (c) - All the sandal wood or red sanders wood, as the case may be, in respect of which a property mark is registered under this sub rule shall be marked with Divisional Pass Hammer by the Divisional Forest Officer or by the subordinate authorized by him to do so".

"Rules 5 - Issue of Permits: - Permits in Form-I shall be in quadruplicate and shall have all columns filled up by the Divisional Forest Officer or a subordinate officer duly authorized by him in this behalf. The Divisional Forest Officer or the subordinate officer so authorized, as the case may be, shall handover the original permit to the purchaser, send the duplicate to the Range Officer and the triplicate to the concerned Divisional Forest Officer at destination by Registered Post with Acknowledgment Due before movement of the consignment and retain the quadruplicate as counterfoil for record in his office..... "

In addition to these regulations and provisions, following further instructions are issued for exercising proper control over the movement of red sander from patta lands.

- i. Estimation of yield and verification of record about the authentication of the patta land and ownership of the tree growth will be done by the concerned Divisional Forest Officer and the Divisional Forest Officer (FS) jointly.
- ii. The concerned Divisional Forest Officer shall issue felling permission if the material involved is up to 1 MT and obtain technical approval from following officers if the quantity involved is more than 1 MT as prescribed below :-

a. More than one MT and up to Ten MT – concerned Conservator of Forests.

b. More than Ten MT from the Prl. Chief Conservator of Forests.

- iii. Transit Permits will be issued by the concerned Territorial FRO and the FRO Flying Squad Party jointly only after Red Sanders is loaded into the lorry.
- iv. At the check posts apart from general verification of the material in transit a sample check of 10 to 15 logs shall also be carried out for verifying the dimensions as per invoice enclosed. This should be done within shortest possible time.
- v. In the check post a separate register should be maintained for R.S. wood and the dimension of 10-15 logs as mentioned in (iv) above should be recorded in this register.

II. <u>Procedure for Grant of Transit Permits in all other Types of Patta Lands</u> (Other than Red Sander and Sandal Wood):

- i. Person intending to fell and transport tree growth existing on the patta lands, shall make an application to this effect to the territorial DFO concerned in the proforma prescribed in the **Annexure-I** along with all the relevant information as enclosures.
- ii. On receipt of the application, the DFO shall examine the same, specially the MRO's <u>'Certificate of title on patta produce as'</u> prescribed under rule 5(3) of the A.P. Forest Produce (Transit) Rules,1970 furnished by the applicant.
- iii. The proforma for the above certificate, as per above Rule, is to be prescribed by the CFs concerned. A draft 'Certificate of Title on Patta Produce' is prepared and appended herewith as **Annexure-II.**
- iv. The CFs are requested to examine the same and if deemed fit, adopt the same as such or with modifications depending on the local requirements. The Divisional Forest Officers must ensure that the applicants furnish the certificate in complete shape in all aspects. If the DFOs take action on the incomplete Certificates which later on result into irregular sanction of Transit Permits, **the DFO alone shall be held responsible.**
- v. For verification whether all the required information has been furnished by the land owner in the application form along with annexure, **a check slip** is prescribed and appended herewith as **Annexure-III.**

- vi. With regard to furnishing information in the 'certificate' by MRO, a copy of the instructions issued to Tahsildars, Revenue, Divisional Forest Officers and Collectors of Telangana, by the Commissioner of Civil Supplies and Ryotwari Settlement, from Board of Revenue, regarding enquiry to be conducted by Tahsildars and Revenue Divisional Officers regarding title on timber and other produce on patta lands, during 1964, is enclosed herewith as **Annexure-IV.** The same will be quite useful.
- vii. DFOs shall send a copy of the Application form along with the copy of certified map of the patta land to the FRO for field verification.
 - a) The FRO shall verify the location and extent of patta land and certify to the effect that the same is located outside the RF. If there is any variation, the same shall be reported to the DFO at once. The distance of patta land from nearest RF shall also be reported.
 - b) The applicant shall get all the tree growth enumerated and enumeration list prepared. For preparation of enumeration list, proforma as prescribed in the DET Manual and A.P. Forest Dept. Code Form No.3A on page no. 328 shall be adopted.
 - c) Enumeration list shall be prepared in **triplicate** using carbon paper, each page duly signed by the applicant.
 - d) Forest Section Officer concerned or any other Section Officer deputed for this purpose, shall test check 100% of the enumeration done, by the pattedar and shall put his signatures on every page in token of having test checked the same.
 - e) The FRO shall test check 10% of the enumeration at random sample basis covering the entire area and attest the entries checked by him in the enumeration list putting his dated initials, so that, the date of test check is recorded.
 - f) If the extent of the patta land exceeds 2.00 ha., 10% of the entries shall be test checked by the Sub-DFO/DFO concerned.
 - g) In Patta lands where no yield of timber is expected, and by and large only firewood / root-wood is expected, the pattedar should lay sample plots of 10m x 10m size for every one Acre (0.4ha.) and arrive at the yield of firewood as well as faggot/root wood as the case may be such wood should not be heaped but stacked in regular shaped stacks before arriving at yield figures. All the sample plots and stacks shall be test checked by FSO. Whenever the number of sample plot laid is 5 or more, FRO shall test check 20% of the sample plots i.e. 1 plot for every 5 plots.
 - After due verification, the FRO shall submit the enumeration list along with the estimate of yield of timer and fire/faggot/root-wood, species wise, and bamboo if any to the DFO.
 - i) All the expenses in marking, enumeration etc. will be paid-by the pattedar / applicant.
- j) On receipt of report from the FRO after due verification, the DFO shall accord permission for felling of the growth fixing time limit for execution of the task. The land owner shall take up felling of tree growth only after the due permission is granted.
- k) After felling of the growth, the pattedar shall prepare the list of timbers obtained species wise, as well as fire/faggot/root wood, and bamboo if any, in triplicate and submit to the FRO.
- I) The timber to the transported shall be digit numbered, firewood shall be stacked in regular shaped stacks e.g. square or rectangular stacks.
- m) The timber and firewood etc., so obtained shall be physically verified by the FSO, FRO, and Sub-DFO/DFO, before Transit Permits are issued by the DFO, in the same manner as mentioned in paragraphs (d) to (f) above, i.e., 100% check by FSO deputed for the purpose, 10% check by the FRO covering the entire area and 10% by the Sub-DFO/DFO if the area exceeds 2.00ha. in extent.
- n) The timber and firewood etc. should be stored only at the site of extraction. Normally no permission for intermediate Depot shall be granted for this purpose.
- After physical verification of the timber, fire wood etc., obtained on felling and conversion at site, the required number of transit permits should be issued by the competent authority for removal of the Patta-produce.
- p) The permits shall be issued by the FSO or Forester after the timber is loaded into the lorries.
- q) After completion of the transport of produce, the FRO should submit a Completion report to the DFO giving details of the produce transported and number of T.Ps utilized, duly returning the used and unused T.Ps. Copy of the C.R. should be marked to CF/PCCF if the permits are sanctioned by them.

II-A.<u>ISSUE OF TRANSIT PERMITS</u> : Transit permit is to be sanctioned by the Divisional Forest Officer (Territorial) upon recommendation from the Forest Range Officer after due verification of the material.

- All the transit permits should be written in triplicate, using two sided carbon papers for entries on duplicate and triplicate copies of T.Ps In no case, separate entries be made on the original, duplicate and triplicate copies of the T.Ps.
- ii) All the columns of T.P. should be filled in clearly. Validity period of the T.Ps should be kept at the minimum possible.
- iii) The original T.P. should accompany the vehicle carrying the forest produce; the duplicate should be sent to the DFO within 48 hours of issue and the triplicate retained in the permit book.

iv) The transit permit shall be accompanied by an attested (not a Xerox copy) copy of the proceedings of the DFO.

II-B. ACCOUNT OF PERMITS ISSUED AND PRODUCE TRANSPORTED:

The details of the transit permits issued should be entered in separate register in the Range/Division office to be called as <u>"Watch-Register of T.Ps issued in</u> <u>Patta Cases"</u> in the following proforma.

S. No	Name of the land owner & his complete postal address	Proceedings No & Date of competent authority	Description of forest produce	Quantity
1	2	3	4	5

Place from where	Destination	N	Remarks		
consigned		From SI.No.	To SI.No.	Total	
6	7	8	9	10	11

Extract of the Register should be sent to next higher authority every month.

II-C.TIME FRAME FOR PROCESSING OF THE CASES :

The entire processing of the cases of grant of T.Ps for transport of timber and other produce obtained from patta lands, should be completed within a period of (3) months from the date of receipt of application form in complete shape from the applicant at the earliest possible with a view to avoid undue hardships to the landowners. Following time frame is prescribed for the purpose:

- i. On receipt of application form in complete shape from the applicant, DFO shall forward the same to FRO within a fortnight of its receipt for physical verification of the location and extent of the patta land and the later shall submit his inspection report to the DFO within another fortnight.
- ii. Similarly on receipt enumeration list from the applicant, it shall be sent to FRO within a fortnight of its receipt and the later after due test check shall resubmit it to DFO within another fortnight. Test check by Sub-DFO/DFO shall be completed within a period of one month.
- iii. On receipt of list of timbers, firewood/faggot wood etc., after felling of tree growth, the same shall be inspected by forester, FRO and Sub-DFO if required, within a period of one month.

II-D.REVIEW OF CASES DURING OFFICE INSPECTION :

- i. Review of all the patta cases shall be compulsorily made by CFs during the Annual Division Office inspections in the Questionnaire already communicated.
- ii. Likewise, review of the above case in Rage office shall be made by DFO's and that of the CF's offices by PCCF/CCF during their Annual Office Inspection.

III-A.<u>PROCEDURE FOR WORKING OF TREE GROWTH IN THE PATTA LANDS</u> <u>SITUATED IN SCHEDULED AREA TO WHICH CHAPTER III-A OF A.P FOREST</u> <u>ACT 1967 IS APPLICABLE.</u>

In such cases the procedures as laid down in Chapter III-A of the A.P. Forest Act, 1967, shall be followed by obtaining prior permission from the District Collector, as is being followed.

III-B.LARGE CHUNKS OF PRIVATE LANDS CLASSIFIED AS FORESTS IN GOVERNMENT RECORDS

Such cases will be dealt with as per provisions of the Forest (Conservation) Act. 1980.

The receipt of the circular instructions should be acknowledged by return of post.

Encl: Annexure I, II, III & IV

Sd/-**(S.K. Das)** Principal Chief Conservator of Forests

ANNEXURE - I

APPLICATION FORM FOR GRANT OF TRANSIT PERMITS FOR TRANSPORT OF FROM PATTA LANDS

То

The Divisional Forest Officer

____ Division.

- i. Name of the applicant.
- ii. Father's name and complete Postal address.
- iii. Whether he is a land owner or G.P.A?

(G.P.A. is made null and void, in case <u>of</u> lands situated in Scheduled areas.

- iv. If G.P.A. please enclose the document.
- v. Details of land from where tree growth is to be removed:
- vi. a. Extent (area in Ha/acres)
 - b. Classification of land as per village/Revenue Records.
 - c. Certified copy of map of land issued by L.R.A. of the Assistant Director of Survey and Land Records be furnished.
 - d. Is the land situated in Scheduled area? Yes/No e. Is the land an 1. Estate Land? Yes/No 2. Inam Land? Yes/No Yes/No 3. **Bilmaqtha Land?** 4. If any other category, specify f. Is the land a patta Land? If yes Yes/No has it been granted under I. Bigawan System? Yes/No II. Darkasth Rules? Yes/No III. Leoni Rules? Yes/No IV. Or any other category. Please specify
 - g. Date of Sanction

- h. Authority who sanctioned it.
- i. Survey No. at the time of original sanction and the present S.No.
- j. Whether it is dry or wet land?
- k. Are you entitled over the vegetative growth? Yes/No
 I. If yes, enclose certified copies of patta or any other document & MRO's "Certificate of tittle on Patta Produce".
 m. Are the boundaries of the land clearly demarcated on the ground? Yes/No
 Is the tree growth on the land natural or artificial i.e., plantations? Yes/No
 - a. If natural, what type of tree growth is existing and how old it is?
 - b. If plantation, when was it raised and with what species?
 - c. How much quantity of timber, fire faggot/root wood, bamboo etc. is expected to be obtained from the land? (Mention species wise).
 - d. Enclose a copy of Enumeration list (in triplicate) along with abstract thereof.
- vii. Whether he wants to use the produce for self-consumption or for marketing.

Self-consumption/ Marketing.

viii. Place where the applicant proposes to keep the patta produce and transact the business.

Signature of the Applicant

Date: Place:

vi.

ANNEXURE-II

CERTIFICATE OF TITLE ON PATTA PRODUCE (See. R. 5(3) OF THE A.P. FOREST PRODUCE TRANSIT RULES, 1970

Certified that, I have examined the rights and titles of the applicant

Sri/Smt. ______Son/Wife of ______over the standing timber and other patta produce on the lands held by him/her, the particulars of the same are furnished in the Annexure.

Signature

(Name)
Mandal Revenue Offic	cer
Ma	andal.
	Dist.

- 1. Name of the Applicant or Pattadar.
- 2. Survey No. and extent :
- 3. Whether the land is a pattabilmagta or lnam as the case may be?
- 4. Date of sanction of patta Bilmagta or Inam as the case may be.
- 5. Authority who sanctioned it and whether he was competent to accord such sanction.
- 6. S.No. and extent at the time of the original grant and the corresponding present S.No. and nature of the land i.e., dry or wet.
- 7. Conditions of grant, if any.
- 8. a) If it is a patta granted under the <u>Bigawan system</u> state whether Bigawan amount has been paid and if so, whether fully or in part and whether for the entire area or only a part of it showing the exact extent ?
 - b) Whether any receipt has been produced in support of the claim of the Bigawan amount having been paid? If so, whether its genuineness has been verified from the official records.
 - c) If it is a patta land granted under rule 17 of the <u>Laoni Rules</u> of 1937 F. Please state whether the upset price fixed by the M.R.O. has been paid in full and if so give the credit particulars?
 - d) If it is a patta land granted under the Laoni Rules of 1950 before they were amended making auction of the Forest Produce compulsory before handling over possession to the assignee, state whether the pattadar has paid valuation in full and if so give the credit particulars?
 - e) If the land is lnam or <u>Bilmagta</u> state clearly with reference to the terms of the grants whether the occupant is entitled to the timber and if so to what extent?
 - f) If the patta is situated in the Scheduled area, is the Chapter MIA of AP. Forest Act,1967 applicable to the area?
- 9. Has the occupation of the land been continuous if not give details of the transfer or transfers together with date and also the official sanction for such transfers if necessary at that time?
- 10. Whether the land revenue has been paid continuously, if not, are there any Govt. arrears on the land due from the occupant if so why the arrears should not be recovered by the attachment of the timber under the law in force?
- 11. Is the extent and location of the present S.No. the same as at the time of original sanction of patta if not give reasons thereof?
- 12. If there is enhancement in the area state the reasons therefore and also state clearly whether the occupants entitled to the excess area and the timber there on

according to the rules and if so quote the authority.

- 13. Whether a certified copy of the map issued by the Mandal Surveyor or the Asst. Director, Survey and Land Records has been produced by the applicant?
- 14. Whether the M.R.O. has inspected the lands personally, if not why?
- 15. Has the M.R.O. satisfied himself that the actual location of the land in the enjoyment of the occupant corresponds with that in the certified copy of the map issued by the L.R.A. or DOS?
- 14. Have the boundaries of the land been clearly demarcated and if so by whom?
- 15. State clearly whether any portion of the land is Government land?
- 16. Are there any protected tenets or Shikmidars, if so, give their names the area under their possession and their rights over the tree growth places see Sec.24 of the Hyderabad Tenancy and Agricultural Lands Act, 1950?
- 17. a) Is the land owner entitled to the timber and other produce?
 - b) Is any condition attached to the enjoyment of above titled and what it is?

20. Remarks, if any

Date:	
Place:	

Signature:	
(Name)
Mandal Revenu	e Officer
	Mandal
	Dist.

ANNEXURE-III

CHECK SLIP

- 1. Has the applicant furnished all the information in the Application Form in Annexure-I?
- 2. If not, what action was taken by the DFO to obtain the same?
- 3. Has the M.R.O. furnished all the information in the certificate of Title on Forest produce, in the prescribed proforma in Annexure-II?
- 4. If not what steps were taken by the D.F.O to obtain the same?
- 5. Is the D.F.O fully satisfied about the title of the land owner over the timber and other product over the land?
- 6. In case of farm/private forestry plantation, is the DFO satisfied about the details furnished?

Divisional Forest Officer _____ Divn.

ANNEXURE-IV

Enclosure :-

Copy Board's Ref. 12/4364/63, dated 15th May, 1964 - Board of Rev. AP.

Sri V. Rajeshwara Rao, I.A.S.,

Commissioner of Civil Supplies and Ryotwari Settlements

Sub: Timber on patta lands- Enquiry regarding title - instructions - issued. Ref: Board's R.F.No. 12/4192/60, dated 27-1-1961.

Several instances have come to the notice of the Board wherein a certain collector had granted permission, to pattadars, for felling of timber on their lands. on applications made by them or on the references made by the Dist. Forest Officer. Before granting such permission some information regarding the patta lands concerned was called for from the Tahsildar concerned which was called the "Patta Certificate". The Board has examined the matter and finds that it is incumbent upon pattadar to apply for and obtain permission from the Dist. Forest Officer for transportation of timber from his patta lands, for which he is required to obtain transit from Dist. Forest Officer under the Hyderabad Timber Transit permit Rules of 1993, Fasli. But before issuing such permits the Forest Officers are insisting upon the applicant i.e., the pattadars to furnish them with the required information i.e., whether he is the pattadar to the land in question, whether the patta is genuine, whether he is entitled to the timber etc. It is here that the Revenue Department comes into the picture and the occasion should be utilized for safeguarding the Government interest. There are no rules prescribing the method of enquiry by the Revenue Officers and the conditions to be fulfilled by a pattadar before a Collector can certify his titled to the timber. The so called "Patta Certificate" was neither prescribed by the Board nor by the Government, are the following instructions therefore issued in consultation with the Chief Conservator of Forests for the guidance of Revenue as well as Forest Officers.

- 1. No permission for the felling of timber need be issued by the Collectors or by any other Revenue Officer. The pattadars have to apply for and obtain transit permits for the transportation of timber from their patta lands from the concerned Divisional Forest Officer, when a pattadar applied to the Divisional Forest Officer for permission to tell and transport timber from his patta lands and for issue of transit permits the Divisional Forest officer will refer the matter to the Collector for remarks, regarding the eligibility of the pattadar to the timber. The Collector should direct the Tahsildar concerned to personally inspect the lands and submit a report in the enclosed proforma, through the Revenue Divisional Officer along with the connected records.
- 2. The Tahasildar should not submit his report without having first inspected the land and satisfied himself that the land in question is actually a patta, duly verified, and its position shown in the settlement map etc. The proforma enclosed herewith should be filled in after examining thoroughly all the connected office records and the rules in force. On the receipt of the Tahsildar's report, Revenue Divisional

Officer will after verifying carefully its correctness and inspecting the area, if necessary forwards the same with his remarks to the collector. The latter may after satisfying himself that the applicant has a bonafide right to the timber forward the Tahasildar's report to the Divisional Forest Officers for necessary action.

- 3. The Tahsildar should not issue copies of topo sketches or of phodi or village maps where the survey maps are not available nor should they issue them when the survey maps are available. In either case, the party should be directed to apply to the L.R.A. or D.O.S. obtain the map or a certified copy thereon.
- 4. The Tahsildar should first verify the map or certified copy thereof produced by the party with the map, if any available in his office. If they agree, he should next verify carefully the spot whether the land demarcated the claimed to be in the possession of the applicant tallies with its situation in the map. If there is any variation he should report the matter to the Collector (Land Records) for guidance. It should also be verified whether there is any large, unaccounted for increase in the area of the lands in the revision as against the area noted during the original survey. Such variation should be reported to the Board by the Collector for order explaining the reasons for the same.

In particular, care should be taken to see that the land, the occupancy of which is claimed by the applicant is the land originally granted to him or held by him on patta. This is especially necessary where no phodi (Sub-Division) had taken place and consequently a survey map of the land is not available. In the past assignment were made, in certain inspects, out of large poramboks or gut numbers without clearly demarcating the areas assigned. No phodi was made of the lands so assigned and neither the Revenue nor the Forest Officers were in position to check whether the area so occupied by the assignees in them. It is quite possible that certain assignees had taken possession which contained valuable timber, although the area actually assigned to them might have been totally different.

- 5. In partial modification of the instructions issued in the Board's reference cited, the Board directs that hereafter there should be a joint inspection of the land concerned by the Tahsildar with the concerned Divisional Forest Officers or Sub-Divisional Forest Officers in order to ensure that there are no illicit feelings in the adjoining beroons not yet taken over or not required by the Forest Department. The DFOs or Sub-DFOs should inspect at least 25% of the patta lands where the area exceeds 25 acres. Necessary instructions in this regard to the Divl. Forest Officers will be issued separately by the Chief Conservator of Forests.
- 6. A register of the reports sent by the Tahsildars should be opened in every Tahsil office and the connected filed should be closed as D.Dis, so that they may be available for future reference if an occasion arise.
- 7. For determining the right to timber on Ijara and Bilmaqta lands the rules contained in standing order given on paged 45 to 47 and the standing order 20 on page 50 of the Kawli and Ijara Manuals of 1343 Fasli should be referred to and action taken accordingly. In regard to the Kowli land, the standing order 11 and 12 on pages 86 and 87 of the same manual will apply; utmost care should be taken in examining a case with reference to those rules and see that Government interests are safe

guarded accordingly. In regard to inam lands also, adequate care should be taken to safeguard the Government interests, particularly attention is invited to section 3 of the Hyderabad Abolition of Inam Act 54 according to which all rights, titles and interest vesting in the inamdar to forest etc. shall cause and be vested in the State free from all encumbrances. Attention is also invited to Section 4 of the same Act according to which an Inamdar is not entitled to be registered as an occupant in respect of forest lands be examined with reference to para 482 of Majmu- equaneen Malguzari Vol-I (Rule 20 of the Hyderabad settlement Rules 1818 F) cases concerning the rights of Sethsindhis over the tree growth on their Inam lands should be examined with reference to the Revenue Dept's letter No.4480/4481, dated 19-6-1924 F and No. 137 dated 16-1-1340 Fasli and Chief Conservator of Forests letter No.6229/dt. 9-7-1324 Fasli.

- 8. The attention of the Revenue officers is invited to Circular No.11 dt. Shehewar 1346 Fasli which clarifies the rights of the pattedar and Government over trees situated in patta land, as from 1st Azur 1318 Fasli i.e., date from which the Hyderabad Land Revenue Act came into force. According to Section 29 of the said Act, reads with rule 18 of the Hyderabad Settlement Rules of 1318 Fasli, reads with rule 18 of the Hyderabad Settlement Rules of 1318 Fasli, it shall be incumbent on the Forest Department to sell to the pattadar trees in which the Government have a right, in case he is agreeable, on reasonable amount of Valuation and to fell them that if he is not willing. From the commencement of Fasli 1321 Government will have no right over the Irsali trees standing on patta lands and all such trees which could not be sold felled would deemed to be the property of the pattedar. In regard to the right of the pattedars to timber on land assigned after the Hyderabad Land Revenue Act came into force Section 31 and 32 of the said Act should be referred to. It will be seen there from that it would incumbent on the revenue authorities to have either felled or sold the timber before letting out the land for cultivation.
- 9. Through letter No.700 dated 8-5-1319 Fasli, Government issued orders for assigning lands with timber there on in Adilabad Dist. as per the rate fixed herein. These rates were revised in Government It.No.468, dated 2-3-1326 S.F. Through Cir.No.3, dated 6-2-1328 F Government extended these orders to all other Dists. only. This was called Bigwan System, as it was found that the Bigwan system was not abolished through Circular No.5, dated 18-4-1341 F. Wherein it was further ordered that the instructions issued through No.4 dated: 22-2-1341 F. for the recovery of the value of timber by disposal in auction should be followed. An exception made was that timber on those lands of Ijara which was granted as Bilmagta could be given as usual on valuation to the Ijardars, these expectations were given as usual on valuation to the Ijardars, these expectations were done away with through amending the circular No.1 dated 2-1 -1354 Fasli.

Many assignments were made carelessly without collecting the begwan amount, hence special care has to be taken to verify as laid down in the proforma enclosed whether the bigwan amount has been paid by the pattedar.

In case the valuation under the Bigwan system was fixed for the timber of such land but the pattadar had neither availed of the timber nor paid the valuation and also in case where he had paid the bigwan amount partly but had not permitted to exploit the timber now. Such cases should be referred to Board of Revenue for orders:

- 10. There are also certain pattas which were granted to ex-army personnel prior to 1344 SF. the rights of such personnel over the timber of such patta lands should be examined in the light of the following orders of the Government in the Revenue Department.
 - 1. Revenue Department Lr.No.1339, dated 22-12-1340 F.
 - 2. Revenue Department D.O.No.Nil, dated 18-12-1932.
 - 3. Revenue Department Lr.No.143, dated 17-1 -1347 F.
 - 4. Revenue Department Lr.No.1446, dated 25-2-1351 F.
 - 5. Revenue Department Lr.Cir.No.1, dated 2-1-1354 F.
 - 6. Revenue Department Lr.No.Nil, dated 14-2-1354.
 - 7. Revenue Department Circular Instructions of 1354 F applying Cir.No. 1 of 1354 to he patta cases of Ex-Army personnel (New addition).
- 11. There are some pattas, which were granted by the Jagirdars, during the Jagir days to various individuals, the rights of such individuals over the patta lands and the timber thereon should be examined in the light of Section 6 of Hyderabad Jagir Abolition Regulation of 1358 Land Rules regarding Grant of Pattedari rights. In Non-Khasa village "Published in Gazette No.32, dated 19th Thir 1356 F and the rights of the Government should be safe guarded.
- 12. Attention is next invited to the Laoni Rules of 1347 F. The instructions issued in Rules 11, 17, 19 and 20 should be specially noted. Rule 11 states that in case of general loani the timber should be auctioned along with the land. Rule 17 stated that under special loan! It shall be binding upon the assignee to pay the price of timber possession of the land, it is specifically stated that the possession paid except in the cases where permission has been accorded for payment in installments as per Rules 17.
- 13. These rules were repealed by the Loani Rules of 1950. As these originally stood, timber was disposed of on the basis of valuation since this was unsatisfactory, Rule 9 (f) was amended through Rev. Dept's notification as dt. 8-1 1952 and the Tahsildars were instructed to auction the trees. Similarly, the corresponding Rule 17 dealing with special Loani was amended vide Rev. Dept's notification No.30-55, dated 17-6-1955. Similarly instructions were issued by the Government in their Memo.No.11.11/2866/6041, dated 14-11-1960.
- 14. Certain instances also came to the notice of the Board and the Chief Conservator of Forests wherein permits were issued by certain Divl. Forest Officers of Adilabad Dist. only on the strength of certified copies of pahajs based on the circular No.2092/K/63, dated 26-8-1952 issued by the Chief Conservator of Forests with the approval of the Govt. This circular states that permits of timber for transport of timber should be issued by the Divisional Forest Officer on verifying the certificate issued by the Patwari of that village, panchayat committee or any Gazetted officer, whether in service or retired, produced by the pattadar. Since it is not safe to issue permits on the basis of such certificate the Divisional Forest officers are requested

not to act on them and issue permits. Action is being taken separately to cancel circular No.2892/K/63, dated 26-8-1952.

15. A history of the rules given above dealing with the disposal of timber is intended to enable the Revenue Officers to examine the claims of a pattadar to the timber on his lands and determine his rights. Such examination should be made very thoroughly so that Government interests should not suffer.

Sd/- (M.B. Balaraj), for Joint Secretary

CIRCULAR No.07/2006

- Sub: Forest Department Wildlife Straying of wild animals into the villages and urban areas and Man animal conflict Prevention Further instructions issued Reg.
- Ref: 1. PCCF's Rc.No.8413/2004/WL4, dated 28-2-2004. 2. PCCF's Rc.No.3952/2005/WL4, dated 17-5-2005.

The Conservators of Forests (Territorial & Wildlife) are informed that the straying of wild animals like bears, panthers, deer, etc., in to the villages and the urban areas in the recent times is on increase particularly during summer for various reasons. In the past, instructions have been issued vide reference 2nd cited to all the Conservators of Forests/Divisional Forest Officers (Territorial & Wildlife) to take adequate measures to mitigate these problems by providing sufficient water holes within the R.Fs.

In the event of wild animals straying into the villages and urban areas, the Conservators of Forests have been requested vide reference even No. dated 28-2-2004 to keep trap cages at all Division Head quarters for quick trapping of the wild animals. The funds for preparation of these trap cages were to be met from the Wildlife schemes and other schemes under implementation in their Divisions (Territorial & Wildlife). The Conservators of Forests were requested to ensure that these trap cages are fabricated as per the design communicated vide reference 1st cited. They should also arrange for a couple of people either Forest or Veterinary personnel in the district to be trained at Nehru Zoological Park, Hyderabad in tranquilizing the wild animals and also procure the tranquilizing equipment. The same should be kept always ready in working condition.

However, it is observed that the Territorial Officers are not evincing proper interest in dealing with the straying wild animals. They are under the impression that their duty ends with informing the zoo authorities/Chief Wildlife Warden and requesting them to arrange for the capture. Sufficient assistance is not being extended to the zoo staff in the field when they are out for capturing the wild animals. The Divisional Forest Officers are not even leading the capture teams leaving it to the mercy of the subordinate staff. The Conservators of Forests should realize that they are the Dy. Chief Wildlife Wardens as per the Wildlife (Protection) Act and it is their duty to see that the stray wild animals are properly captured and released back into the forest areas or in the event of injury to be sent to the zoo. They should also realize that the zoo authorities are assisting them in discharging their rightful duties. Owing to the negligence of the Divisional Forest Officers and improper arrangements, lot of hardship is caused to the zoo personnel who assist field officers. At times they find there is no such stray wild animal and it is only a rumour. Proper police bandobust arrangements are also not being made resulting in crowd exciting the animal thereby causing injury to capture staff and public.

The Conservators of Forests are therefore requested to take proper care in such cases in future and ensure that the territorial Divisional Forest Officer should lead the capture team making proper police bandobust.

The Conservators of Forests should develop expertise in their Circles/Divisions to handle such issues without depending on the Zoo staff. They should realize their responsibilities and take all necessary steps to prevent the straying of wild animals into the villages and prevent such man-animal conflict.

Sd/- (**K.S. Rao**) Principal Chief Conservators of Forests (WL) & Chief Wildlife Warden (A.P.).

VANA SAMRAKSHANA SAMITHIS

Shri. S. K. DAS., I.F.S.,

Principal Chief Conservator of Forests.

CIRCULAR No. 7 / 2002 / PMU-173

- Sub: Community participation in Forestry V.S.S Categorization of the V.S.Ss Guidelines for categorization of V.S.Ss and certain modified guidelines on the extent of area of V.S.S. Issued- Reg.
- Ref: 1. This Office Rc.No.34274 / 2000 / PMU-I / 3 dt. 25.09.2002

Attention of the Conservators of Forests / Divisional Forest Officers is invited to the reference cited above wherein detailed guidelines have been issued about the parameters with their weightages for categorization of V.S.Ss. The Four parameters arrived at through a process of detailed deliberations are indicated below with their weightage shown against each:

1.	Improvement of Vegetation -	50
2.	Impact of Neeru-Meeru works taken up in	20
	lile VSS. Aleas -	20
3.	Improvement of Income levels of V.S.S -	20
4.	Social Indicator -	10

 The following norms have been adopted for categorization of V.S.Ss into A, B, C & D Categories:

> 75 Marks	 "A" Category
60-75 Marks	 "B" Category
45-59 Marks	 "C" Category
Below 45 Marks	 "D" Category

The method of evaluation under each parameter has also been finalized as detailed below:

Table: Evaluation of the VSS by parameter: Norms and Procedure.

Improvement of Vegetation - 50	Impact of Neeru- Meeru Work taken up in VSS Areas -20	Increase in Income levels of VSS-20	Social Indicator- 10
1	2	3	4
1. Increase interest cover of more than 50% area = 50	1. High Impact -20	1. Percentage of increase more than 50% 20	1. High-10
 Increase in forest cover of more than 25 - 50% area = 40 	2. Medium Impact- 15	 Percentage of increase between 25-50% 15 	2. Medium - 5
3. Increase in forest cover of more than 1-25% area = 30	3. Low Impact- 10	 Percentage of increase between 0-25%- 10 	3. Low- 3
4. Negative change - 0	4. No Impact - 0	4. Negative change - 0	4. No change -0

3. Instructions have also been issued to send the report on the V.S.Ss classifying them into different categories on or before 16-10-2002 and thereafter the categorization is to be revised after every quarter depending on the performance of the V.S.Ss on the above norms i.e., Categorization of the V.S.Ss into A, B, C & D will be done for the first time up to September 2002 and thereafter for every quarter as on 31.12, 31.3 etc. Assessment will be done once a year only in case of improvement of vegetation.

These instructions should be followed without fail.

4. Attention of the Conservators of Forests / Divisional Forest Officers is also invited to the important issue of allotment of areas to different VSS for protection and improvement of forests under the guidance of the Forest Department. An analysis of the data available in the office of Principal Chief Conservator of Forests, shows that the areas allotted to VSS are all in round figures like 250 ha., 300 ha. etc. The area particulars are also quite different from the ones computed from CIS from out of the VSS layers submitted by the Conservators of Forests.

It is apparent from the above that allotment and reporting of area has been haphazard and does not follow any rationale. It is also clear that the areas have neither been surveyed nor demarcated on the ground. It may be difficult and time consuming to survey and demarcate the areas of each and every VSS as it is expensive and tedious. But this is an issue of utmost importance and has to be settled at the earliest without any further loss of time to avoid future complications. There is an urgent need to reconcile the area statements and reallocate areas wherever needed. A pragmatic approach would be allocating area to VSS based on the compartments of the forest Block which have natural boundaries. This has to be done only in the cases where revision or reallocation of boundaries will not lead to any conflicts and complications. For this purpose, a compartment may be taken as unit.

The following further instructions are to be kept in view while doing the same.

- 1.1 Allotment of area to any VSS should be done on the basis of whole compartments only, may be one or more than one compartments depending upon the extent of area of the compartments.
- 1.2 When there is a left over area in a forest block not allotted to any VSS action should be taken to allot this un-allotted area to a suitable VSS. If the un-allotted area is too large, it may be apportioned between the two VSSs or among all the VSSs in the vicinity.
- 1.3 Where the forest block is very large running into thousands of hectares and all the area cannot be allotted to the VSS because of its large extent, the area under the existing VSS in such blocks may be enlarged. The area for such further enlargement may be decided keeping in view the local conditions like the membership of the VSS, capabilities and level of understanding and awareness among the VSS members. In case of genuine necessity, a new VSS may also be constituted to bring more areas under this programme.
- 1.4 Before doing the above exercise, the VSS layers drawn on myler paper should be superimposed physically on the concerned topo-sheet along with myler layer showing compartment boundary and tentative revision of VSS boundary must be demarcated on the myler sheet with a different colour. Maps of VSS should then be got printed duly indicating features on topo-sheets, compartment and VSS boundaries and then explained to VSS in their general body meeting.
- 1.5 In doing so, if the allotted area is increased to 400 or 500 hectares to any VSS, it will not create any problem, rather it will be for the advantage of the department since the VSS which has been functioning for the last 6-7 years will be able to manage it by experience and skill they have gained.
- 5. This exercise to increase the areas under the VSS in the State has become a necessity in view of our general experience that the forests under the management of the VSS are protected and developed better in comparison to the adjacent forest areas not allotted to VSS.

The Conservators of Forests / Divisional Forest Officers are requested to complete this exercise immediately and report to this office the re-allotted area particulars on or before 15.11.2002. This is also essential for preparation of the Micro Plan for the changed area of the VSS.

Sd/-**(S. K. DAS)** Principal Chief Conservator of Forests

Shri. S. K. DAS., I.F.S.,

Principal Chief Conservator of Forests.

CIRCULAR No. 6/2003/PMU.III/2.

Sub:- APFD - Empowerment of VSSs - strengthening of grass root level functioning in APFD - Certain Guidelines - Issued - Regarding

- 1. Of late, there has been a significant increase in workload of the Forest Department especially with respect to the implementation of the programme of Joint / Community Forest Management, Neeru-Meeru, Clean and Green etc. This is more so because of the workload for documentation and reporting. On the other hand, there has been a steady decline in number of staff at various levels mainly due to retirement without any corresponding recruitment. This calls for evolving a new strategy to strengthen the grass root level functioning of the Forest Department with a view to achieving the task easily and empowering the SHG (VSS & EDC) adequately.
- 2. The forest department has been implementing the initiative of participatory forest management since 1993. Till 2002 this has been implemented through Joint Forest Management after which the programme has been upgraded as Community Forest Management. Village level institutions like Vana Samrakshana Samithis and Eco-Development Committees are actively participating in protection, regeneration and general management of the forests allotted to them. So far we have constituted 7090 such committees. These institutions have democratically elected managing committees and their duties and responsibilities have been detailed in Government orders covering their constitution and functioning. These committees have been functioning as the visible arms of the forest department and assisting the lower level functionaries of the forest department in discharging their duties and responsibilities more successfully.

It is in fitness of things that the institutions of VSS and EDC and the human resources available in these institutions are properly utilized to supplement the efforts of the forest staff especially at grass root level in order to achieve the smooth and successful implementation of different forestry schemes / projects.

After careful examination of the entire issue in details, the following guidelines are issued to all the field level functionaries:-

1. Though VSS is a cohesive group of families living near the forests, a core group of 15 to 20 young and enthusiastic members within the group should be identified and trained in various aspects of forest management as detailed below so that they can act as a catalyst for forming a strong work force for implementation and monitoring of forestry works as per the approved Micro Plan. Members belonging to BPL families may be preferred while giving due importance to gender issues. These core group members within each VSS will be trained in forest

management, financial management and social development issues in order to upgrade their skill for better livelihood opportunity.

2 The role of the forest department functionaries will be to identify the core group members and train them in the above aspects, guide them and monitor their functioning. The entire exercise of identification of these core groups and their trainings must be accomplished and internalized within the shortest possible time. The benefit from the above arrangement will be huge which may be elaborated by a few examples as noted below:-

Example - I : As per the Circular No.5 & 5-A on Water Harvesting Structures inside the forest area, percolation tanks of different sizes mini, medium and big are to be erected on different order streams - 1st order, 2nd order etc.. The forest staff is supposed to select the points where the PTs are to be erected, and demonstrated with full justification as to why a particular point on the stream is selected for erection of a Percolation Tank to the members of the core group. Our staff should demonstrate also as to how to erect a mini, medium and big percolation tanks explaining clearly the steps involved like key trench, scuffling of soil in the bed of the key trench, excavation of soil from the fore shore areas for putting in the key trench, consolidation of soil layer by layer, formation of water passage (by-wash) etc.

Example - II: In the VSS area planting programme is a common item. Our staff will be raising the nursery, doing the alignment and stacking, digging of pits and planting of seedlings and maintenance. All these steps may be explained and demonstrated to the members of the core group, so that after some time the members of the core group can carry out this type of work with a minimum supervision and guidance from the Forester / Range Officer.

3. It may be necessary that required number of planting stock may be shifted to the VSS village before planting season from the Central Nursery under the care of one of the core group members for maintenance, who may be paid the approved maintenance charges.

All these activities are necessary not only for empowerment of the members of the VSS but also to build up the forward linkages for additional income to these members of the group by up-gradation of their skill.

4. It is observed that the functioning of the Forest Beat Officers and Asst. Forest Beat Officers are not integrated so far with the functioning of the other forest staff of higher level with respect to implementation of JFM/CFM programme which is not only most regrettable but also affecting adversely the implementation of the Project and its outcome.

Therefore, the Forest Beat Officers and Assistant Beat Officers should be fully integrated into this system and they should be involved in identification of these groups within each VSS in their territory and in training and monitoring of their functioning;

5. Training programmes will be organized at A P Forest Academy, Dullapalli, Regional Research Centres; Hyderabad, Tirupathi, Warangal and Rajahmundry, designated training centres in each forest division and in each VSS.

The Director A P Forest Academy, in consultation with the Chief Conservator of Forests (T&E) will develop suitable course curricula and training modules and training material which will be finally approved by this office.

Training in forest management: Training will be organized for the identified groups in actual field operations like SMC works, Block plantations, Avenue plantations etc., to be taken up in accordance with various circular instructions issued by this office.

Training in financial management: A separate financial management manual has to be prepared for use by the VSS. This specifies the book keeping activities, registers etc. to be maintained in each VSS. Training has to be imparted to 4 to 5 selected literate members in each VSS on financial management and book keeping activities required to be undertaken at the level of VSSs.

Training in social development: Training under this theme include training in conflict resolution, gender issues, issues of other vulnerable groups, social safeguards needed under the Project, leadership development, communication skills, health, family welfare etc. These trainings will ensure leadership development and better communication skills for the VSS members.

It goes without saying that a suitable member of a VSS may undergo training in more than one or all the subjects.

The subject is of utmost importance and therefore Conservators of Forests and the Divisional Forest Officers are requested to follow these instructions in toto.

Sd/- **(S.K. DAS)**, Principal Chief Conservator of Forests

Shri. S. K. DAS., I.F.S., Principal Chief Conservator of Forests.

CIRCULAR No. 4/2004

Sub: AP Forest Department - delegation of financial powers - execution of works through Vana Samrakshana Samithies- guidelines issued - reg.

Ref: G.O.MS. No. 2 EFS&T (For III) Dept. Dt. 7.1.2004 communicated in Prl. CCF Rc.No. 39274 / 2004/PMU -111/1 Dt. 7.1.2004

Detailed instructions about the procedure of release of funds to Government Account of the Vana Samrakshana Samithies (VSS) for execution of works and accounting at VSS, Range and Division levels have been issued in the reference cited. In continuation of these instructions following guidelines are issued for compliance with immediate effect. These guidelines deal with procedure for sanctioning VSS works, release and recovery of advances and various formats for book keeping in VSS works.

- 1. At the beginning of each financial year, each VSS will prepare Annual Work Plan (AWP) in the format enclosed (VA -1). These AWPs will be forwarded by the concerned FBO/FSO, FRO and Sub DFO to the DFO. These AWPs will have to be approved by the respective DFOs. While approving these AWPs the DFOs shall ensure that the plans are in accordance with approved micro-plans for the respective VSSs. If there are any deviations, the DFOs may consider incorporating and approving them provided they are in conformity with forest laws and policies in vogue. The targets contained in the AWPs will then be apportioned to all the 4 quarters of the year depending on the calendar of operations.
- 2. The concerned FROs will then prepare work estimates for the works included and approved in the AWPs for each VSS and get them sanctioned by appropriate authority. They must ensure that estimates are prepared separately for each sub activity and for each estimate duly identifying key activity as indicated in the guidelines issued separately from this office for capturing physical progress from the cash accounts.
- 3. At the beginning of each quarter, every VSS shall conduct its managing committee meetings and pass resolution requesting for release of funds. While making such a request and passing such resolutions, the Managing committee shall refer to the sanctioned estimates for the concerned works, amount spent till previous quarter (this would be applicable for 2nd and subsequent quarters) and amount required for the respective items of works for the current quarter. To ensure uniformity, model resolution form is prepared and enclosed (VA-2). This can be taken for guidance and wherever necessary, can be further improved upon. The concerned FROs, FSOs/FBOs will maintain a watch register in form VA-2A for monitoring the resolutions and recommendations.

- 4. These resolutions shall be forwarded by the concerned FBO/FSO, FRO and Sub DFO to the DFO along with their observations and recommendations. These resolutions should be recorded (copied) in the meeting and resolution registers available in each VSS. For sake of clarity a format of Meeting and resolution register is enclosed (VA- 3).
- 5. Upon receipt of these resolutions along with the recommendations from the concerned officers of Forest Department as mentioned above and upon due scrutiny, the DFO will issue proceedings releasing funds requested for. For the sake of convenience and as provided for in the reference cited, funds can be released on a quarterly basis. Release of funds shall be in the form of cheques or demand drafts basing on the proceedings as detailed above. For the sake of uniformity, a model format of proceedings is enclosed (VA- 4). If for the purpose of securing demand drafts, any expenditure is to be incurred, the same shall be charged towards administrative expenses in a separate estimate to be prepared at division level and debited to works contingencies. Copies of these proceedings should be marked to the concerned FBO/FSO, FRO and Sub DFO for their information and for subsequent monitoring.
- 6. These releases are to be treated as work advances and are to be recovered in the following manner:
 - a. Upon issue of proceedings for release of funds as detailed above cheques or demand drafts will be prepared and sent to the FRO concerned for handing them over to the respective VSSs. The FRO upon receipt of these cheques or demand drafts will arrange for recording them in the Financial Management module of the FMIS as work advance. He will then send them to the respective VSSs for depositing in the respective Joint Accounts (Government Account). The counterfoil of the pay in slip of the respective bank shall be treated as voucher for this advance and accordingly recorded in the FMIS and in the Receipts and Payments register of the VSSs.
 - b. Upon execution of works, vouchers will be prepared by the VSS (form VA -6) and the work will be recorded by the concerned FBO/FSO/FRO. These works will then be check measured by an officer immediately above the officer recording in seniority of rank. The delegation for recording of works is Rs.25,000/- if recording is to be done by FBO and Rs.50,000/- if recording is done by FSO. If the amount exceeds this, recording will have to be done by FRO.
 - c. Upon recording of the works, the same shall be check measured. If recording is done by FBO, check measurement will be done by FSO and if recording is done by FSO, check measurement will be done by FRO. If recording is done by FRO, check measurement will have to be done by Sub DFO and if there is no Sub DFO, it will have o be done by DFO himself. If check measurement is done by FSO, FRO will carry out 25% test check. Similarly DFO and CF will carry out test check separately as provided in the AP Forest Department Code.
 - d. Upon check measurement, the vouchers / bills will be sent to the FRO along with M.Book (for civil works) or Plantation journal (for regeneration and other operations).

- e. The FRO will pass the bills upon scrutiny, for facilitating payment. He will retain the passed vouchers/bills and send a list of passed vouchers along with the M.Book or plantation journal to the FBO/FSO who will pass them on to the VSS for facilitating withdrawal and for making payment.
- f. Upon receipt of list of passed vouchers/bills, amount will be drawn from the joint account and Chairperson will disburse the amount in a Grama Sabha.
- g. The Chairperson with the help of trained Book keeper of the VSS and / or the CEW assisting the VSS will then post the Receipt and Payment register or VSS cash book incorporating the payments as detailed in the passed vouchers / bills as detailed in the list of passed vouchers / bills. This will be a perforated book with two copies. The original copy will not have perforation and will be retained with the VSS. The duplicate copy from perforated sheet will be taken out and sent to FBO/FSO for record. While sending this, the Chairperson shall get two more copies of the duplicate copies made with the help of CEW. The duplicate, triplicate and quadruplicate copies will be sent to the FBO/FSO who while retaining one copy will send two copies to FRO. FRO will retain one copy and send one copy to DFO for record. All the copies of Receipts and Payments register shall be attested by the Chairperson.
- h. Maintenance of Measurement Books for civil works and Plantation journal for regeneration and other operations will be the responsibility of the concerned FBO or FSO associated with the respective VSS.
- i. As detailed in paragraph c above the FRO upon passing the vouchers /bills will retain all the passed vouchers / bills with him. He will then arrange to record them in the FMIS in the Financial Management module and send the data so entered along with the passed vouchers / bills to the DFO through Sub DFO for further scrutiny and action. Thus entire data entry of advances and recoveries will be made at Range level.
- j. All the other instructions contained in the reference cited and in the A P Forest Department Code shall be followed.
- Release of funds and their recovery by way of work done shall be recorded and watched in a division ledger (VA - 5). Similarly Sub DFOs, FROs and FSOs/ FBOs shall watch the same. For this purpose they should maintain information in form VA - 5A enclosed.
- 8. A model format of voucher for VSS works is given in VA 6 and format of VSS cash book is given in VA -7.
- 9. Though releases are made on a quarterly basis, monthly cash accounts are to be obtained from VSSs as per progress of execution of works. These accounts upon compilation and scrutiny shall be rendered to the respective Pay and Accounts Officers as per procedure already prescribed.
- 10. The CFs and the DFOs are requested to conduct training programmes to all VSS Chairpersons and members of Managing committees, CEWs and all the staff

associated with VSS works on the above procedure. They should evolve a suitable time table for all activities detailed above and closely monitor the same.

11. Receipt of these instructions shall be acknowledged by return post.

Sd/- **S.K.Das.,** Principal Chief Conservator of Forests

Annual Work Plan (VA-1)

Division:	Range:	Secti	on: Vear
Activity	Physical target	Financial target	Remarks
Training programmes conducted	at VSS level	r manolar targot	Romano
Forest management operations			
Rejuvenation of degraded teak for	orests		
Advance operations			
Creation			
1st year maintenance			
2nd year maintenance			
SMC works			
Fire management works			
Rejuvenation of degraded misc.	orests		
Advance operations			
Creation			
1st year maintenance			
2nd year maintenance			
SMC works			
Fire management works			
Rejuvenation of degraded bambo	o forests		
Advance operations			
Creation			
1st year maintenance			
2nd year maintenance			
SMC works			
Fire management works			
Rejuvenation of degraded red sa	nders forests	1	
Advance operations			
Creation			
1st year maintenance			
2nd year maintenance			
SMC works			
Fire management works			
Plantation of MIFPs etc. On plair	lands	1	
Advance operations			
Creation			
1st year maintenance			
2nd year maintenance			
Fire management works			
Advance energian	opes		
1st year maintananco			
isi year maintenance	1	1	

2nd year maintenance								
SMC works								
Fire management works								
Afforestation with medicinal pla	Afforestation with medicinal plants							
Advance operations								
Creation								
1st year maintenance								
2nd year maintenance								
SMC works								
Fire management works								
Harvesting operations								
Nursery works								
Village /Tribal development acti	vities							
Development of infrastructure								
Income Generation Activities								
Resettlement Action Plan								
R&R Grant								
Training Activities								
Income Generating activities								
Administrative costs like contingencies, facilitation, meeting expenses etc.								
Total								

The above works have been incorporated after discussing in the meeting of the VSS held on ______.

Chairperson (signature)

Vice Chairperson (signature)

Managing committee members (signature)

Forwarded after scrutiny for approval

Forest Beat Officer / Forest Section Officer (signature)

Forest Range Officer (signature)

Sub Divisional Forest Officer (signature)

Resolution of VSS for release of funds (Fund application) (VA-2)

Division:		Range:	Section:			
VSS:		Year:	C	Quarter: (in	dicate mo	nths included)
The managing committee of the VSS _			in its meeting held on			
resolved to request the DFO			for rele	ease of fun	ds as deta	ailed below:
Activity	Total	Amount	Expenditure	Balance	Funds	Remarks
	outlay	released till	till previous	available	now	
	for the	previous	quarter		required	
	year	quarter				
Training progra	ammes cor	nducted at VS	S level			
Forest manage	ement oper	ations				
Rejuvenation	of degrade	ed teak forest	S			
Advance						
operations						
Creation						
1st year						
maintenance						
2 nd year						
maintenance						
SMC works						
Fire						
management						
works						
Rejuvenation	of degrade	ed misc. fores	sts			
Advance						
operations						
Creation						
1st year						
maintenance						
2 nd year						
maintenance						
SMC works						
Fire						
management						
works						
Rejuvenation	of degrade	d bamboo fo	rests	1		
Advance						
operations						
Creation						
1st year						
maintenance						
2nd year						
maintenance						

SMC works						
Fire						
management						
works						
Rejuvenation	of degrade	ed red sander	s forests			
Advance						
operations						
Creation						
1st year						
maintenance						
2 nd vear						
maintenance						
SMC works						
Fire						
management						
works						-
Plantation of N	TFPs etc.	On plain land	s	I		
Advance		•				
operations						
Creation						
1st year						
maintenance						
2nd year						
maintenance						
works						
SMC works						
Fire						
management						
works						
Plantation of N	TFPs etc.	along slopes		1	1	1
Advance						
operations						
Creation						
1st year						
maintenance						
2 nd year						
maintenance						
SMC works						
Fire						
management						
works						
Attorestation	with medic	cinal plants	[
Advance						
operations						
Creation						
1st year						
maintenance						

2 nd year						
maintenance						
SMC works						
Fire						
management						
works						
Harvesting						
operations						
Nursery						
works						
Village /Tribal	developm	ent activities		-		
Development						
of						
infrastructure						
Income						
Generation						
Activities						
Resettlement						
Action Plan						
R&R Grant						
Training						
activities						
Income						
Generating						
activities						
Administrative	costs like	contingencies	, facilitation, r	neeting ex	penses et	с.
Total						

It is requested to release the above funds to Joint account No._____ held in _____ (name of bank)

Chairperson (signature)

Vice Chairperson (signature)

Managing committee members (signature)

Forwarded after scrutiny with recommendation to release

Forest Beat Officer / Forest Section Officer (signature)

Forest Range Officer (signature)

Sub Divisional Forest Officer (signature)

Watch Register for recommending advances to VSS (VA-2A)

Division:			Range	:	Section:		
Name of VSS	SO No.	ltem of work	Total amount sanctioned	Unspent amount by end of previous month	Amount now requested	Amount recomm- ended For release	
1	2	3	4	5	6	7	

Register of Meeting and Resolutions (VA-3)

Name of VSS: Range:		Beat: Division:	Section:						
SI.No.	General Body meeting/Managing Committee Meeting & Date of Meeting.	Names of Members Who attended the meeting	Signature/ Left Hand Thumb Impression	Details of resolution Passed.	Action taken (If action is taken, it shall be informed in next meeting and entered)				
1	2	3	4	5	6				

Form for release of funds (VR-4)

Rc.No. _____ Dt. ____ Office of the Divisional Forest Officer_____

- Present: Sri.
- Sub: APCFM Project Execution of works during ____20____ release of fundsregarding.
- Ref:
 1. Resolution dated ______ from _____ VSS of ______ section

 _______ Range ______ Division (insert as many references as no. resolutions)

 2. Letter dt. ______ from ______ FRO _____ (insert as many references as no. resolutions)

In the reference 1st cited, resolutions have been received from VSSs for release of funds for execution of works that are covered by sanction. The same have been recommended by FRO ______in the reference 2nd cited. Upon due scrutiny of these resolutions and in view of the recommendations as detailed above following funds are hereby ordered to be released to the joint accounts of the VSSs as detailed below as advances for execution of works for which funds have been sought:

SI. No.	Range	Name of VSS	Account No. and Name of Bank	SO No. and date	Items of works for which funds are now released	Total amount sanct- ioned	Amount of fund released
1	2	3	4	5	6	7	8

The above releases are for the _____ quarter covering months (_____).

The above funds are to be utilized for the works sanctioned in the respective SOs as detailed above and there shall be no deviation from this.

These funds shall be treated as advance and the same shall be recovered by way of work done in the manner prescribed in G.O Ms. No.2 EFS&T (For III) Dept. Dt. 7-1-2004.

Divisional Forest Officer

To,					
The Chairperson	0		VSS,	Section, drawn on	 Range along
DFO	/	FRO	D	/ FSO	 FBO
	Сору	to	Accounts	Superintendent	 Copy to
sectio	n.				

Division Level Ledger for Receipt And Payment of VSS (V.A - 5)

Page:

Joint Account No:

Name of Bank:

Division:

VSS:

VSS Code:

Section:

Range:

Year:

Details of Receipts.					Details of Expenditure				
	2	3	4	5	6	7	8	9	10
Date	Proc.No. of Divisional Forest Officer.	Date	Details of amount sanctioned	Cheque/ D.D.No. & Date (Rs.)	Date	Vr.No.	Mode of payment Cash/ Cheque No	Details of amount paid.	Page No. of VSS. Cash Book.
Tatal receipts by and of Months Do						Tota	l ovpondituro	by and of Ma	nth: Do
					Balance at the end of Month: Rs.				

Divisional Forest Officer.

Watch register for receipt and passing of vouchers / bills (VA 5 A)

(to be maintained by FBO, FSO, FRO)

Division	:	Section:						
Month	SO No.	ltem of work	Unspent amount by end of previous month	Amount re through v	Balance to be recovered			
				Vr. No.	Amount			
1	2	3	4	5	6	7		
Voucher / Bill Format (VA-6)								
Vouche	r / Bill No.							
Division	:	Ran	ge:	_ Section:_	VS	S:		

Scheme:_____ Head of Account:_____(to be filled by FSO/FRO)

S.O.No.:_____ Date: _____ MOU No.:_____ Date: _____

Nature/Item of Work: ______ Quantity of work: ______

Unit: _____ (give measurement as applicable) Unit Rate: _____ Measured by:_____ Date of measurement:_____ M.Book Page No: _____

Check measured by;_____ Date of Check measurement:_____

Amount: _____(in words as well as figures)

Name(s) of payees: refer page no. of Muster register (Book No. Page No.)

Paid by me

Chairperson

Witnesses:

1.

2.

To be filled up by FSO / FRO

Passed for Rs.	(Rupees	in words)
Date:	Forest Section	Officer / Forest Range Officer
		Section/Range
	Hand Receipt (VA-6A))
Paid by cash		Voucher no.
Paid by me		Dated:

Paid by cheque	
Received from	
the sum of Rs. () in words	
Name of work / purpose for which payment is made	
Date:	
Witnesses:	Signature of payee

VSS Cash Book (VA-7)

(Receipts and Payments Register)

VSS:

VSS Code:

Section:

Range: Year: Division:

Month:

Date	Receipts						Payments		
Amount	Cheque /DD No. and Date	From whom	Purpose	Amount	Resolution No. and date	Vr. No.	Purpose of payment	To whom paid	Amount
1	2	3	4	5	6	7	8	9	10

Chairperson (signature)

Vice Chairperson (signature)

NON WOOD FOREST PRODUCE

Shri. S. K. DAS., I.F.S.,

Principal Chief Conservator of Forests.

Sub: - CFM - Tending of Seethaphal trees in VSS areas - Regarding.

Anona squamosa, the custard apple, popularly called Seethaphal is predominant NTFP species available mostly in the degraded forests of the State especially in drier districts like Rangareddy, Medak, Nizamabad, Nalgonda, Mahabubnagar, Kurnool, Kadapa, Chittoor etc. this species grows in some pockets even in the moister districts like East Godavari, West Godavari, Visakhapatnam etc. It is a native of tropical South America and the West Indies, but has become naturalized in this country through extensive cultivation for the sake of its edible fruit. It is available in wild, particularly near old inhabited sites, in several parts of central and western India and in the Deccan Peninsula.

This species yields high value delicious and nutritive fruit which is much relished for its flavour and tasty custard available within. This fruit is a major NTFP product in the drier tracts fetching substantial revenue to the VSSs. Some of the VSSs earn a couple of lakhs of rupees from the sale of this fruit. In addition the VSS members and their families enjoy consumption of this fruit for its nutritive value.

Over the years, our experience has been that the production of the fruit in the forests is slowly dwindling due to improper management of the forests and the prevailing drought conditions recurring year after year. Because of the prevailing poor soil moisture conditions, the fruits often do not attain big size resulting in reduction in the sale and nutritive value of the fruit. During acute drought years the trees although yield a number of fruits, most of them end up drying on the branches itself.

While the department is encouraging plantations of custard apple in large areas with improved high yielding varieties with short gestation grafted seedlings, hardly anything is done to improve the health of the naturally existing trees in the forests to improve the production and quality of these fruits.

It is a matter of common knowledge that custard apple trees growing in depressions, along the nalas and along the farmers' field bunds with good moisture conditions grow greener, richer and yield more fruit in comparison to the trees that look unhealthy, etiolated with yellow leaves growing in areas under moisture stress conditions.

Under the APCFM project under the treatment components "Improvement of degraded forests", "Rehabilitation of degraded non-teak miscellaneous hardwood forests", in which forests the custard apple trees occur predominantly, there is a provision for Silvicultural prescriptions for promotion of desirable NTFPs with adoption of suitable Silvicultural practices and soil cultivation. With slight Silvicultural interventions and soil working to these custard apple trees, the production and quality of the fruits in the VSS areas can be considerably enhanced. The possible Silvicultural interventions
could be clearing of the thorny weeds around the custard apple trees to avoid congestion and competition from these weeds.

Formation of a deep semi lunar trench at the bases of the plants by digging the soil may be a foot deep and a foot wide and heaping the soil so obtained at the base of the stems will help improving the soil moisture regime. Where the trees grow on slopes, semi lunar trench may be formed on the lower slopes for the water accumulation during rains which improves the soil moisture regime. Application of manure preferably vermi compost will improve the fertility of the soil. These operations will boost up production of quality fruits with bigger eyes and copious custard within the fruits. The increased production and quality of fruits will increase the revenue of the VSSs. Further, the villagers and their children also improve their health due to the consumption of more nutritive fruits.

I am sure you will appreciate the need to tend these naturally growing custard apple trees, improve the productivity of the degraded forests, and increase the income levels of the VSSs, thus ameliorating living conditions of the poor.

This operation may go as one of the FSR items, so that the field officers do not lose sight of this important operation in forest treatment.

Sd/- **(S.K. Das)**, Principal Chief Conservator of Forests

Principal Chief Conservator of Forests.

CIRCULAR No. 8 / 2004 / PMU-I/2

- Sub: Forest Department Convergence of CFM and Velugu Collection of NTFP items not covered by GCC Agreement Issue of permits -Certain guidelines Issued Regarding.
- Ref: G.O. Ms. No. 78, Environment, Forests, Science & Technology (For.III) Dept., Dt. 17-10-2003

Market support has been provided for certain NTFP and medicinal plants under Velugu Project. In terms of Government Order mentioned above, this activity is to be taken up only by the NTFP collectors who are also members of VSSs.

But it is observed more often that despite this prescription, collection of these items is done virtually by every one who may or may not have a stake over forest resources. This is likely to lead to unsustainable harvesting apart from leading to conflicts between VSS and non-VSS villages. But, the Forest Department is being brought into picture only for issue of transit permits. Sharing of information in this regard is grossly inadequate. These issues were discussed with the officers of the Society for Elimination of Rural Poverty (SERP) recently and the following arrangement has been made accordingly: -

- 1. Collection of these NTFP items including medicinal plants is to be confined to only those villagers of the villages where VSSs exist.
- 2. For each item of NTFP to be collected from the forests, a suitable date for commencement of collection and date for closure of collection have to be decided through consultative process by SERP / respective institutions involved in collection / procurement of these items duly involving officials of the Forest Department and of VSSs. This has to be notified in the respective villages.
- 3. Training programmes shall be conducted in all the villages by SERP in Collaboration with Forest Department on sustainable harvest practices.
- 4. Before commencement of collection, species wise quantities being collected and no. of permits required will be assessed by SERP, or its nominees and concerned Divisional Forest Officer informed for giving VSS wise required no. of permits.
- 5. Accordingly Divisional Forest Officers will keep the required no. of permits with the concerned VSSs before commencement of collection duly authorizing the chair person of the respective VSSs to issue permits when needed. As and when required, VSSs will in turn issue these permits for transporting the NTFP and medicinal plant products collected in favour of those who have purchased these products.
- 6. VSS wise details of collection will be recorded in the books of VSSs to document the

harvest and sale of the NTFP items.

7. Divisional Forest Officers are requested to contact the District Collectors and the Project Officers ITDA to discuss the subject to operationalise the modalities.

Sd/- **S.K. Das,** Principal Chief Conservator of Forests.

Shri. S. K. DAS., I.F.S., Principal Chief Conservator of Forests.

CIRCULAR NO. 2 / PMU.1 / 2 /2005

Sub:- Preferential Treatment to NTFP Species in the natural forests – Area allotted to VSS - Certain guidelines - Issued - Regarding.

Ref:- This office ref.no.45008/2003/PMU.I/1, dated 17-11-2003.

Certain guidelines have been issued in the reference cited above to take up preferential treatment to the Seethaphal plants that are available in the VSS area of the forests. The preferential treatment was mainly in the form of soil working / providing semi lunar trench to the plants in order to make more moisture available to the plants as the State is passing through recurrent droughts. It is reported by the field officers that the plants which have been provided with such operations are yielding many fruits of big size.

It is considered necessary that such treatment should be given to other important NTFP species like Usiri, Neredu, Tamarind, Jack fruit etc. The preferential treatment may be one of the following tending operations:-

- (1) Soil working to the plants to a radius of 0.5 Mt to 1 Mt. removing the grass around the plants.
- (2) Soil working and providing a semi lunar trench at least at a distance of 0.5 Mt. at the lower side of the slope. The semi-lunar trench may be of the dimension of 30 cm (width) x 30 cm (depth) x L cm. The semi-lunar trench should form half the circle around the plant.
- (3) In case of Bamboo, decongestion of clump and soil working up to a distance of 0.5 m. from the periphery of the clump may be taken up. A small mound to a height of 25 cmt. may be provided to the clump. A semi-lunar trench on the lower side may be provided and the dug out earth may be used for mound formation to the clump. The dimensions of the trench may be bigger if the clump size is medium to big.

It should be noted that big trees of Usiri, Tamarind, Mango, Neredu, Jack fruit should not be provided with such operations. For the big trees, advice of the Horticulturist may be obtained. These tending operations should be provided only to young seedlings up to the age when they start bearing fruits.

(4) In many VSS forests, profuse regeneration of phoenix species is found in a patch of 1 to 5 hectares of area. Such areas should be protected against fire by digging a series of staggered trenches all over the area and removing the fire hazards every year before the advent of the fire season. With these efforts the palm tope will become a great asset to the local community within a short time. Any of these operations will result in preventing the fire to reach the plant even if it occurs accidentally in the area.

These operations should be taken up only after carrying out enumeration of the NTFP plants in the area and getting the estimates sanctioned by the competent authority.

Sd/- **(S.K. DAS)** Principal Chief Conservator of Forests

SOIL MOISTURE CONSERVATION WORKS

Principal Chief Conservator of Forests.

CIRCULAR NO. 05 / 2002 / PMU -1/3

Sub : NEERU - MEERU Works - Water shed treatment of area -Saturation Level treatment-Andhra Pradesh Community Forest Management - Community Participation in Management of Forests - Integration of Programmes-Creation of durable assets capable of generating Income and employment - Certain guidelines - issued -Regarding.

The Government of Andhra Pradesh have taken up a massive Watershed programme under "Neeru - Meeru " since May 2000 giving a lot of importance to community participation in it in order to conserve scarce water resources which is the surest way to prosperity. The Forest Department of Andhra Pradesh has accordingly taken up Soil and Moisture Conservation (SMC) works in the form of Continuous Contour Trenches (CCTs), Staggered Trenches, Rock Fill Dams, Check Dams, Percolation Tanks etc.

- 2. The Forest Department of Andhra Pradesh has also implemented the Phase-I of Andhra Pradesh Forestry Project (APFP) from 1994 to September, 2000, funded by the World Bank where in the community participation in regeneration of degraded forests has been the main component.
- 3. Although the implementation of the Neeru-Meeru programmes in the forest area has been satisfactory in general given the allocation of the budget, the task assigned and the understanding of the situation prevailing at the time of starting the programme. However, after implementation of the project over a period of more than two years in the department and for a period of four years by the undersigned in the Forest Development Corporation and after a close interaction with Sri T. Hanumantha Rao, Chairman, Technical Committee, Water Conservation Mission, I am of firm conviction that what we are doing for harvesting the water in our forest areas by digging CCTs and erecting Rock Fill Dam/Check Dam / Percolation Tank, is hardly good enough to impound 5 to 10% of the available water. This has been once again reiterated by Sri T. Hanumantha Rao when he addressed the Conservators of Forests and other senior officers of the Department on 03.08.2002 in the Committee Hall of PCCF's office.
- 4. In view of what he has presented on that day which is supported by supply of technical papers and in order to enrich the VSS area with forests and water resources with far reaching consequential benefits to the society, the following guidelines are issued :-
 - (1) The VSS area should be demarcated for the purpose of Watershed with the concept of ridge to valley. The VSS area may have one watershed or more than one watershed or may be even a part of a watershed.

- (2) Once the watershed area is demarcated on the ground and marked on toposheet, the water flow stream should be identified. The water flow stream may be of 1st order, 2nd order, 3rd order etc. The 1st order stream is one which begins at the upper slope of the watershed area and generally the depth of it is quite shallow where as the 2nd order stream is the confluence of two 1st order streams and so on.
- (3). Once all the streams 1st order, 2nd order, 3rd order etc., are identified in the watershed, action should be taken from the 1st order stream first for harvesting of available rain water by erection of earthen bund or sunken gully pits. In general, we have to dispense with the Rock Fill Dam (RFD) as it is not so cost effective for harvesting water compared to other structures.
- (4). In the first order stream, the earthen bund may be a very small one having a catchment area of only 5-10 hectares or much less. The following steps should be taken to erect the earthen bunds: -

Scrapping of the earth to a dept of 15 cm - 20 cm and a width of 1m to 2m or more on the site of the construction of the earthen bund should be done first and this soil should be kept in a separate heap to be utilized at the end of the formation of the bund for spreading over the bund so that the top soil which contains a number of grass seeds and seeds of other species will germinate on the top surface of the bund which will prevent the soil erosion. After digging, trench area should be ploughed or soil scuffled by spade. This is necessary in order to get a good consolidation of soil of earthen bund with ground when soil of earthen bund is rammed layer by layer by tractor/ Roller during the formation.

A typical design of the bund is given below. It may be seen from the design on one side of the bund; there is a passage for water to spill over the bund. This is called by-wash which is 30 cm to 100 cm lower than the level of the bund depending on the size of the bund and this is absolutely necessary for the survival of the bund.



(5). Sunken Gully Pits: Sunken Gully Pits are trenches excavated across the Gully of 1st order and 2nd order streams in order to impound water in the trenches.

The dug out earth may be kept in the trapezoidal shape at a distance of 50 cm (berm) from the trench giving a passage of water as in earthen bund and seed of Kanuga, Seethaphal and Neem may be sown on the dug out earth.

The frequency or the interval between two Sunken Gully Pits will depend on the slope - more the slope more the number of such Sunken Pits.

After every 3 Sunken Gully Pits, one silt trap pit may be provided covering gully which may be of the size of width of the Gully x 1 mm x depth (60 cm).

De-silting has to be done to these Gully Pits by the VSS members and silt may be applied to NTFP plants.

- (6). 2nd Order Stream: The method of the treatment of 2nd order stream will be almost the same as given in the 1st order stream. The only difference here will be that the construction of the earthen bund may be of higher dimension.
- (7). 3rd & 4th Order Stream: These are to be treated with erection of big earthen bunds may be in combination with only few check dams, when it is considered a dire necessity. In fact, there is hardly any need for construction of any check dam.
- (8). There is a very common but false apprehension in the minds of many that earthen bunds are weak and may give away at the time of monsoon due to the force of flowing water. In this regard it has to be remembered that the famous reservoirs like Nagarjunasagar in Nalgonda and Cumbum tanks in Prakasamdistrict of Andhra Pradesh are constructed with earthen bunds and the beauty of the earthen bund is that with the passage of time the bunds become stronger while incase of check dam with the passage of time it becomes weaker.
- (9). The other significant advantage of earthen bund is that at the time of erection of earthen bund, seeds of useful NTFP species like Kanuga, Palmyrah and Neem can be dibbled which come up very well in such freshly dug up soils. typical cross section of the earthen bund is also given.



Drawing II

(10). The most important factor is that while designing the water harvesting structures, the quantity of available rain water should be calculated first and according to the available quantity of rain water the water harvesting structure in the form of percolation tank, sunken gully pits etc. should be planned, designed and erected. In order to make the above points very clear a simple example is given below:

(a) Total Watershed area	100 hectares				
(b) Annual rain fall	600 mm.				
(c) Water loss due to percolation = 10% (App.)=	60 mm				
(d) Water loss due to evaporation &					
Others = 50% (App.) =	300 mm				
(e) Rain water available as run off 40% (App.)= 240 mm					
(f) Total guantity of available water in 100 besteres					

(f) Total quantity of available water in 100 hectares

 $= 10,000 \text{ m}^2 \text{X} 100 \text{X} 0.24 \text{ m} = 24,000 \text{ m}^3$

(11). From the above, it is seen that the total quantity of available water which may be impounded in this watershed is equal to 24000 cubic metres. The facts from hydrology about the capacity / efficacy of the different types of water harvesting structure in a rainy season are that CCTs will get filled 10 times, percolation tanks 4 times, check dams 4 times. The water harvesting structures should be designed to impound required quantity of water with reference to the objective and equally important point is that it should start from upper reaches of water shed to lower reaches uniformly spread over the area almost up to the boundary point of the RF block.

Up to a depth of 500 m from the boundary of the RF in the lower reaches of the watershed, big percolation tanks will naturally become perennial if the water harvesting is done properly from ridge to valley. Drawing-III will illustrate the above points.

(12). Once the area is totally treated with watershed, important programme like raising of valuable NTFP species plantations at the lower side of the watershed should be taken up in a planned manner for a period of 5-10 years in order to augment the income to the members of the VSS and improve the composition of the species in quality. The whole idea is to convert unused / over used eco-system into durable asset capable of generating income and employment to the VSS members and to the local people.

Let us assume that the available area at the lower side of the watershed for raising valuable NTFP species plantation is 100 hectares where there is no valuable tree growth. This area can be divided into several sectors for raising valuable NTFP species plantations and clonal plantations of Eucalyptus, Bamboo, Teak etc. The espacement of NTFP species is generally large i.e.,

5 mX5 m, 7 mX7 m, 10 mX10 m, and therefore the intermediate space can be utilized for raising medicinal plants. While choosing the NTFP species, the following species may be preferred.

- (1) Tamarind graft
- (2) Usiri graft or seed origin (amla)
- (3) Kunkudu (Soapnut)
- (4) Kanuga (Pongamia)
- (5) Neem
- (6) Neredu (Jamun)

In agency area, Tapasi (Sterculia urens) should be raised. Jack fruit trees are also very popular / common

Only in case of Seethaphal, the espacement may be 3 m X 3 m.

- (13) The above plantations should be raised in a series i.e., every year @ one hectare less or more for a period of five years or more in a contiguous patch for each species. Similarly, the Eucalyptus clone, Teak, Bamboo etc. may be raised in a series for a period of 5 -10 years.
- (14). It should be noted here that once the area is treated with watershed at saturation level as outlined above, a few percolation tanks at the valley site of watershed will definitely become perennial water sources and therefore the VSS members will be in a position to take up watering of NTFP plants during the summer months, if necessary. A typical design of such watershed area with NTFP and other plantations is illustrated in **Diagram-IV**.
- (15) It will not be appropriate to assume that all the areas will be identical. But on one point on which there are no two opinions is that all the forest areas should be treated with saturation level watershed treatment in the form of percolation tanks, CCTs and staggered trenches from the ridge to valley and the boundary lines well demarcated by CRTs. The CCTs and CRTs must be provided with septa at regular intervals in order to safeguard any error/ omission in laying out the contour line in case of CCTs, while septa are must in case of CRTs as the boundary line of the forests is never on the contour line. The width of septum should not be less than 1 m which may be increased to 1.5 m in case of soft sandy soil.
- (16) The Conservators of Forests are requested to prepare the VSS wise scheme in two parts – Part-I should contain saturation level watershed treatment of the area whereas the Part-II should deal with raising of NTFP and other valuable species with series concept indicating the physical target and financial requirement.
- (17) The scheme thus prepared may form a part of the Micro-plan. Such schemes need not be confined to the VSS areas only but all the forest blocks can be covered in course of time.





Sd/- (**S.K.DAS**) Principal Chief Conservator of Forests

Principal Chief Conservator of Forests.

CIRCULAR No. 5-A/2002/PMU-I/3

- Sub: NEERU MEERU Works Water shed treatment of area -Saturation Level treatment - Andhra Pradesh Community Forest Management -Community Participation in Management of Forests - Integration of Programmes -Creation of durable assets capable of generating Income and employment - Certain guidelines - Issued - certain additions & corrections - Regarding.
- Ref: Circular No.5 / 2002 / PMU -1 / 3, communicated vide Prl. CCF's ref. no. 17309 / 2002 / PMU -1 / 3, dated 23.08.2002

Detailed guidelines have been issued vide Circular cited above to integrate the Neeru- Meeru programme and the community participation in management of forests with an intention to create durable assets for generating income and employment to the local community.

In this regard, attention is invited to para - 5 of the circular cited wherein "Sunken Gully Pits", have been described. Due to an error, the caption has been given as "Sunken Gully Pits", but it should be read as "**Construction of Mini Percolation Tank with Trench".** It should be noted further that before putting the dug out soil from trench or any pit at a distance of 0.5 m (berm) from the trench or more in a trapezoidal shape, a layer of soil to a depth of 15 cm may be scrapped and kept in a separate heap as described in paragraph -4 (4) in page 2 of the above Circular.

The advantages of having a trench are as follows:-

- (1) Increased capacity of the percolation tank
- (2) Utilization of Earthen Bund for raising plants which would eventually become vegetative barriers.

5 - A - Sunken Gully Pits:

The present method of constructing rough stone rock fill dams in the gullies, is serving a limited purpose only in the first few years. A better method is to provide sunken pits in gullies which serve the twin purpose of erosion control in gullies as well as increasing the recharge.

Such pits have to be excavated in the first order and second order streams. Wherever such pits are excavated, it is found that there is a good base flow in the streams down below and soil erosion in the gullies is reduced to a minimum on account of storage created within gully. The velocity of flow within the gully is also reduced. The length of the pit at the bed level can be about 4 meters and the clear distance from one pit to another pit can also be 4 meters. The width of the pit can be about 2 meters and the excavated soil is to be put on either side of the gully leaving a berm of minimum 30 cms.

A silt trap may be introduced after every three pits. Revetment should also be provided at the entry side of the pit to prevent scours. Also a small rough stone apron should be provided in the bed of pit to withstand the falling flow of water. Detailed diagrammatic sketch as given by Sri Hanumantha Rao, Chairman of the Technical Committee of Water Conservation Mission is enclosed for easy understanding and proper implementation.



Both the above structures are useful. However, the mini percolation tank with trench has the advantage of creating a vegetative barrier in future with useful plants.

Sd/-**(S. K. DAS)** Principal Chief Conservator of Forests

123

Shri. S. K. DAS., I.F.S., Principal Chief Conservator of Forests.

CIRCULAR NO. 02/J4/2004.

- Sub: Protection to Natural forests and Plantations against Fire SMC works in Natural Forests Use of CCTs as fire lines -An integrated approach for more benefits and better results Certain guidelines -Issued Regarding.
- 1. The Forest Department has been taking up fire tracing operations as a measure to prevent fire in Natural Forests and Plantations. The Department has also been taking up creation and maintenance of fire lines of various widths under different schemes. Apart from this, fire watchers are being engaged in many cases for maintenance of fire lines and combating the fires when it occurs.
- 2. Although these measures have given varying degree of success, they are quite temporary in nature namely fire lines are to be formed every season and maintained. More over they are neither effective nor do they serve any other purpose to benefit the forests. Although the forest fire is surface bound in nature in our country, its colossal damage is not adequately highlighted. But it is at least realized that this does not allow the natural regeneration to establish, deforms the existing trees, accelerates the process of soil erosion and reduces the soil fertility.
- 3. The forests have been earmarked as the key area for development not only to ensure the ecological security of the nation but also to provide much needed income and employment to the needy people living in the forest fringe villages. The subject has therefore been given serious thought in order to evolve the concept of a multipurpose fire line that will not only act as an effective fire line but also will give substantial benefit to the existing vegetation directly.
- 4. We have taken up the Watershed Programmes (Neeru Meeru) in a big way for the last three years. We are also implementing the externally aided Projects namely Community Forest Management (CFM) where there is a provision for fire control in the treatment areas. In addition to this, the Government of India has been providing funds under fire control schemes as a centrally sponsored Scheme. If an element of integration is brought out in these projects to evolve the most effective fire line in the form of a CCT with usual septa and natural interruptions depending upon the topography of the area, the forests will not only be immensely benefited due to additional moisture available to the plants but also the fire line in the form of CCT will be almost of permanent nature.
- 5. With the above idea, the following guidelines are issued : -
 - (a) The provision of creation of fire line and maintenance available under fire control scheme of Government of India/ CFM/ FDA can be effectively utilized by

taking up CCTs. The RIDF IX also has a provision of digging up of CCTs. For the purpose of a fire line, it may be sufficient to have a contour trench of top width of 1.5 m, bottom width of 1 m and a depth of 50 cm. This will enable a side slope of 1: $1/_2$ which will prevent the collapse of the trench. In case of extreme difficulty in getting a suitable strip of 1.5 m, the top width of the trench may be reduced to 1 m and the bottom width to 0.8 m.

- (b) The dug out soil should be deposited on the downward slope leaving a clear 1 m distance from the trench. The deposited soil can be made into a trapezium shape where sowing of seed of important species like Pongamia, Neem, Palmyrah etc., can be taken up.
- (c) At the advent of fire season, care should be taken to see that there is no inflammable material in the one m strip between the trench and the deposited soil. This arrangement will result in 3.5 m to 4 m wide fire line and it will be sufficient to prevent the spread of the fire.
- 6. We may face a number of problems in the field while implementing this programme
 - (a) There may be a number of trees on the contour line (fire line)
 - (b) There may be sharp depression/elevation along the ordinary line of contour (fire line)
 - (c) Digging of the contour trench could be done only to a part of the total length of the forest area due to peculiar topography etc.

All these problems can be solved using our common sense and practical experience. For example, the problem in (a) above can be solved by providing septa at the points where trees exist, (b) can be solved by treating the elevation/ depression as the septum and (c) above can be solved by digging a staggered contour trench above or below the first line. The septa, elevation/depression should be cleared off the inflammable material before the fire season starts.

7. Fire watchers can be engaged for keeping a watch on fires. They should be supplied with simple but effective fire fighting implements. The main job of the Fire Watchers is to drag the dry leaves, twigs etc. in the forest floor to the nearest trench (fire line) and carry out control burning repeatedly apart from keeping a vigil on the occurrence of fire.

It may be relevant to mention here that such an approach has been adopted for the plantations of Andhra Pradesh forest Development Corporation (APFDC) wherein the existing net work of trenches is being utilized as fire line and the fire watchers are sweeping the dry leaves/litters from the floor into the trenches for carrying out repeated control burning in the fire season. The whole idea is to keep the floor of the plantations free from fire hazard. This has proved to be a total success.

8. This system of fire tracing will result in the fire line (CCTs) playing the dual role of harvesting rain water and preventing fire. For the large tracks of the forest area, it is a gigantic task and cannot be achieved within *a* short time. But with a determined

will and a proper planning if we put all our efforts to achieve the goal, the face of the entire forests will undergo a sea change within a few years.

The most important point to be noted here is that with no additional cost for any item other than whatever is the existing practice, we get the following benefits by integration of different activities:

- (a) Almost a permanent and more effective fire line.
- (b) Fire lines in the form of CCTs impounding rain water benefit the forest all over the area.
- (c) Sowing of seed in the dug out earth improves the composition of species.
- (d) The fire lines (CCTs) can be utilized for heaping dry leaves/twigs for controlled burning.
- 9. Fire control plans are to be prepared by all Divisional Forest Officers. Maps showing existing fire lines and lines to be created should be available with all the Divisional Forest Officers. Prioritization of fire control lines basing on GIS maps should be done. This work should be taken up whenever funds are available from any source. The GIS wing of the Forest Department has already mapped the forest areas prone to higher risks of fire. All the Conservators of Forests are requested to follow these instructions at least in one block to start with in each division from funds available under different schemes like CFM, FDA, RIDF and fire control schemes of Government of India.

<u>They are requested to prepare a time bound programme for 3 years to cover all the forest blocks in their area. This work has to be taken up on top priority.</u>

Sd/- (**S.K. DAS)** Principal Chief Conservator of Forests

Principal Chief Conservator of Forests.

CIRCULAR NO. 1/2004/G1

- Sub: Soil and Moisture Conservation works Treatment of watershed -Saturation level treatment -An instrument for alleviation of poverty and increase of green cover -certain guidelines issued -Reg.
- Ref: 1. Prl. Secy to Government (W&P) Fin Dept Memo No.17607/250/RIDF/WA-I/2004, Dt. 28.7.04
 - 2. Circular 5 & 5A/2002/PMU I/3 communicated in P.C.C.F Ref. N0.17309/2000/PMU I/3, Dt. 23.8.2002.
 - 3. Circular 2/J4/2004 communicated in Ref. No. 16284/2003/J4, Dt. 8.3.2004.
 - 4. Circular No. 6/2003/PMU HI/2, communicated in ref. no.4483/2002/PMU MI/2, Dt. 15.7.2003

The Government of Andhra Pradesh has taken up massive Watershed Programme since May 2000 giving a lot of importance to the Community Participation in order to conserve the scarce water resource. With a view to increase the crop yield and greenery in the state which would, there by, result in alleviation of poverty & all around economic development, the department has taken up SMC works under RIDF, APCFM project & FDA in the form of Continuous Contour trenches (CCTs), Staggered trenches, Rock Fill Dams, Check Dams, Percolation tanks etc.

Certain guidelines have already been issued in the references cited 2nd to 4th cited. The progress achieved in this regard is satisfactory but in no way commensurates with the problem and therefore we find only few perennial percolation tanks in the discharge area. If the SMC work is done properly or the watershed is treated to the saturation level, the last percolation tank in the discharge area has to be perennial necessarily.

Since the water is the starting point for development it has therefore been decided to treat the watershed to saturation level necessarily instead of doing the SMC works in a fragmented or piecemeal basis.

Often doubts have arisen regarding quantum of earth work to be done to achieve saturation level treatment in a watershed. To arrive at this, the riparian rights of farmers under the existing tanks have to be taken into consideration also. The technical committee set up at water conservation mission recommended that 25% of the yield of existing rains can be tapped in the watershed for equity considerations of people living on ridge portions. Taking the run-off as 40% of total rain fall, this will allow extra impounding of 10% of precipitation. Soil moisture regime remaining same, this will result in more than doubling the percolation of water in the treated watershed (at present

percolation is about 9% of total rain fall in the state). To give more clarity to this concept the following model calculations are given:

Depending on rain fall areas can be categorized into 3 categories, category A areas with annual rainfall more than 900 mm, category B areas with annual rain fall 600 mm-900 mm and the category C areas with rain fall less than 600 mm. Area of microwatershed which is the basis for saturation level treatment varies from 400 ha. to 1000 ha. For the purpose of model calculations the area of watershed is taken as 500 ha. In category A areas 10% of precipitation which is intended to be impounded amounts to 4,50,000 cum of water. In categories B & C this will be 3,00,000 cum. In high rain fall zones, as run-offs will be substantial preference should be given to percolation tanks and in low rainfall zones SMC works like CCTs, SGPs and staggered trenches should be given preference. It can be safely presumed that 1cum of earth work for PTs will give 25 cum of water impounding in a year taking 5 fillings for the PTs annually. CCTs, staggered trenches, taking 10 fillings annually will result in annual impounding capacity of 10 cum of water for 1 cum of earth work done. For impounding 4,50,000 cum of water impounding in category A watersheds, planning should be done to impound 3,50,000 cum through PTs and the rest through trenches. This can be achieved by taking up SMC works i.e., 14000 cum earth work for PTs and 10,000 cum earth work for trenches. In category B & C watersheds 1,00,000 cum of water can be impounded by PTs which require 4000 cum of earth work and 200000 cum of impounding capacity through trenches which require earth work of 20000 cum. For all type of watersheds it can be seen that roughly 24,000 cum of earth work is required to be done to create SMC structures to impound additional 10% of annual precipitation in a watershed of 500 ha. area.

It is desirable that some of the water harvesting structures serve dual purpose. As already instructed in circular No.2/J4/2004 some of the CCTs can serve the purpose of fire lines. For this purpose the dimensions given in the circular should be followed and for locating such fire lines cum CCTs the fire risk zonation done by GIS wing should be used.

The following operational instructions are given for implementation of saturation level treatment concept.

1. Location of Site:

Suitable location for construction of various water harvesting structures are to be identified first and their prioritization as per the local importance and feasibility using the Beat maps prepared for WHS has to be done as per the guidelines supplied by the Geomatic centre in P.C.C.F. Ref. No. 14827/2003/GIS, dt. 14.5.2003 (Copy enclosed).

The treatment should be done on watershed basis. While sanctioning the projects NABARD has given either Range as a unit or the area with VSS as a unit in case of JFM trenches. It may not be possible to completely treat the area with the available project components. Usually the area of Range falls in more than one micro- water shed (area is around 500 ha). Water shed boundaries layer is available with GIS wing and by superimposing the compartment layer we can know the list of compartments falling in particular water shed. While selecting a watershed, priority should be given to watersheds in ridge portion which are more prone to erosion of soil. Once the priority

water shed is demarcated on the ground and marked on the Beat maps, all stream should be identified. The water flow streams may be of 1st order, 2nd order, 3rd order etc. Once the streams are identified in the water shed, action should be taken from the 1st order stream for harvesting of available rain water by suitable Water harvesting structures.

Exact location of water harvesting structures can be decided after actual field inspection of the site after reaching the probable location given in GIS WHS maps by use of GPS. VSS/ User groups should be fully involved in selection of the site. A team consisting of Ground Water Dept., Irrigation Dept. and FD officials should finally select the sites after considering technical feasibility.

If the area of watershed is totally covered by CFM/FDA, funds from these programmes should be used to saturate the watershed. In case of watershed, where part of the area is covered by the CFM/FDA, works in the area falling under jurisdiction of VSS should be carried with CFM/FDA funds and balance area of watershed with RIDF by executing the works through the VSS to saturate watershed.

2. Technical guidelines :

The structures taken up should be as per the guidelines and drawings given by Prof. T. Hanumanth Rao, chairman technical Committee in his four water concept book. As far as possible, cement structures should be avoided (Check-dams) as they are not cost effective for the purpose of percolation of water. While forming PTs simple details like maintaining the side slopes of bund, consolidation of the bund by roller and maintaining the section of the bund as per the drawing should be given importance. Care should be taken to see that the top width of the bund is not more than that specified in the drawings. The length and height of by- wash should be planned as per the ready reckoners available in Four waters concept of Sri T. Hanumantha Rao sunken CCTs/STs must be provided with Septa at regular intervals. The width of the Septa should not be less than 1 m which may be increased to 1.5 m in case of soft sandy soils. It's very important to give sides slopes of at least 1:1 in soft soils and ¹/₂:1 in case of hard soils to the trenches. The dug-out soil should be deposited at least 1 m away from the trench and trapezium shape should be given to the dug-out soil so that seed sowing can be taken up on this dug-out soil.

The instructions given in Circulars 5 & 5 A of on saturation treatment of watershed should be followed scrupulously. As suggested in the circulars, a series of mini PTs and SGPs should planned on 1st and 2nd order steams. If the gradients are more than 3%, CCTs will be effective. Toward the end of the water shed bigger PTs can be planned. The whole exercise should result in at least one PT in the treated area becoming perennial and the streams in the watershed support minimum flows even during non-monsoon months.

3. Method of Execution:

No Contractor shall be engaged or assigned or nominated in execution of these works. Works shall be carried out through User groups (VSS) by depositing money in joint account as is being done in implementation of CFM. Even in non-JFM trenches, works should be entrusted to near by VSSs and if no such VSSs are available, efforts should be made to form new ones and then start the work. No machines should be

engaged to carry out works as one of the objectives of the scheme is to give wage employment to local people during lean seasons. Government instructions given in this regard from time to time should be followed.

4. Training & Capacity Building:

Though VSS is a cohesive group of families living near the forest, a core group of 15 - 20 young and enthusiastic members within the group should be identified and trained in various aspects of the Forest Management. The entire exercise of identification of the core groups and their training must be accomplished and internalized within the shortest possible time. The guidelines issued in P.C.C.F. Ref. No. 4483/2002/PMU III/3, dt. 15.7.03 may be followed.

5. Safeguards:

Payment to the works should be done only after recording the works and checking for technical adherence as per the work order. The recording and test checking officers will be held responsible for deviations, if any, found later. Necessary redeployment of man power shall be done for effective supervision and implementation of the project. Priority should be given to predominantly tribal/agency areas for implementation of the project. Execution of works should be done strictly as per the sanctioned estimates. The progress of work should be closely monitored by Range Officer and reviewed every quarter by the DFOs and CFs. Display boards should be installed at every treatment area duly giving the details of the Project.

As and when the work is completed, a project completion report along with photographs of major items of works depicting pre-project and post-project situation and Geo-referenced maps should be sent. Normally this should not take more than 15 days time from completion of the project.

Sd/- **(S.K. DAS)** Principal Chief Conservator of Forests

Principal Chief Conservator of Forests.

CIRCULAR NO. 01 -A/2004 G1

- Sub: Andhra Pradesh Forest Department SMC works in forest area Saturation level water shed treatment SUJALAM -SUPHALAM- Workshop held on 17-18th December 2004 in the office of the Pri. Chief Conservator of Forests Certain clarifications and guidelines issued Regarding.
- Ref: 1. Circular No. 5 & 5-A/2002/PMU. I /3 communicated in Pri. CCF's ref. No. 17309/2000/PMU. I/3, dated 23.8.2002
 - 2. Circular No. 6 /2003/PMU III/2m Communicated in Pri. CCF's ref. No. 4483/02/PMUIII/2, dated 15-07-2003
 - 3. Circular No. 2 /J.4/2004/ Communicated in Re. No. 16284/2003 J4, dated 08-03-2004
 - 4. Circular No.1/2004/Q1 communicated in Pri. CCF's ref. No. 33820/04/G. 1, dated 11-10-2004
 - 5. Pri. CCF ref. No. 19427/2004/G.1, dated 22-12-2004

The Forest Department aims at alleviation of Rural Poverty through sustainable management of forests with the involvement of the local community.

- 2. One of the strategies to achieve this lofty goal is to treat the forest areas on watershed basis to saturation level. Accordingly, several instructions have been issued in the references cited above.
- 3. In the workshop held on 17-18th December, 2004 the field level functionaries posed a few problems which are coming in the way of treating the forest areas / watershed to saturation level. The problems noted are : -
 - (a) The manual rate of excavation as per the PWD SSR is not workable.
 - (b) The existing instruction is to carry out the work manually and there is a ban on use of machines.
 - (c) In APCFM Project area, there is a ceiling on expenditure for carrying out SMC works and this is coming in the way of carrying out saturation level watershed treatment even where the wage rate is low.
 - (d) The existing instruction from the Head Office not to spend fund from different projects in the same VSS area i.e. if in a VSS area SMC work is being carried out under APCFM project, no fund from any other project like RIDF(SMC) can be spent.

- 4. After detailed discussion, it has been decided that government will be approached for allowing the Department to use machines for carrying out SMC works in the areas where it is feasible to utilize the machines. In this regard, Government order is likely to be received within a few days.
- 5. Regarding inadequacy of manual rate in PWD SSR, the Rural Development Department has already taken up the issue. They took the consultancy of Engineering Staff College of India to collect the data and it is understood that the data has been collected, processed and approval of the appropriate rate is under consideration by the Government. The order in this regard is likely to be issued within a short time.
- 6. Regarding the ceiling on expenditure under APCFM Project, it has been clarified in the workshop that wherever it is essential to exceed the limit to achieve saturation level watershed treatment, the field level functionaries are permitted to do so under APCFM Project. However, while treating the watershed in VSS area under APCFM Project, if certain portion of the watershed falls outside the VSS area, such area should be treated under RIDF.

In this regard, it may however be noted that the quantity and type of SMC works / structures per unit area in different locations is neither equal nor of the same type as it depends on the topography, rainfall, soil etc., and the officers will see to it that cost effective structures with appropriate technology are only used to achieve the saturation level watershed treatment in order to observe economy.

7. It has further been clarified that in the VSS area other than that falling under APCFM project, RIDF (SMC) fund can also be utilized if the amount provided under the project is not adequate to achieve saturation level treatment.

However, the area being treated under different schemes may be demarcated clearly on the ground by creating a fire line/sector line etc.

Thus the VSS areas either under APCFM project or under FDA will not have any fund constraint to be treated on watershed basis up to saturation level. However, only one Measurement Book has to be maintained for a particular VSS area for all SMC works irrespective of source of fund.

- 8. Since the instructions/clarifications issued in the reference 5th cited do not conform to the above outcomes of the workshop, the reference is withdrawn.
- 9. The Conservators of Forests/Divisional Forest Officers are requested to -
 - (1) Divide the forest / VSS areas into watersheds and treat them to saturation level,
 - (2) Carry out certain works manually, and certain other works by machines in the easily accessible discharge area.
 - (3) Once the government approves the revised manual rate and machine is permitted to carry out the SMC works, all efforts should be made by them to achieve substantial progress within a short time.

- (4) All the officers are requested to keep the plan of Action ready for immediate implementation once the order of the Government is received.
- (5) Note that if any area is treated up to saturation level, a perennial tank will be created in the discharge area necessarily. <u>This is the test of saturation level treatment.</u>
- (6) In addition to a perennial tank in the forest/watershed area it may be a good idea to provide tanks to the villages where there is water scarcity under village Development Programme (CFM) / Entry Point Activity (FDA). This may however be decided after thorough discussion with the villagers.
- (7) Water is the starting point for development and the officers are requested not to overlook this point in case of the villages located near the forest area.

Sd/- **(S.K.DAS)** Principal Chief Conservator of Forests

Principal Chief Conservator of Forests.

CIRCULAR No.7/05/PXA1

- Sub: Forest Department A.P. Vigilance Commission Annual Report for the Year 2003-2004 further guidelines in execution of SMC works -Issued.
- Ref: 1) PCCFs Circular No.1/22001/PIC-II/1, dated 20-1-2001(17309/2000)
 - 2) PCCFs Re. No. 17309/2000/PIC. 11/1, dated 2-5-2001
 - 3) PCCFs Re. N0.2881/2002/X1, dated 19-1-2002
 - 4) PCCFs Re. No.2881/2002/X1, dated 24-1 -2002
 - 5) PCCFs Circular No.05/2002/PMU I/3, dated.23-8-002.(17309/2000/ PMUJ/3)
 - 6) PCCFs Circular No.1/2004/G1, dated 11-10-2004 (33820/2004/G1).
 - 7) PCCFs Rc.No.19427/2004G/1, dated 22-12-2004.
 - 8) PCCFs Circular No.1-A/2004/G1, dated 26-01-2005 (33820/2004/G1)
 - 9) Pri. Secretary (Pol) D.O.Lr.No.849/SPTB/04-1, dated 8-12-2004.
 - 10) Pri. Secretary, EFS&T Department, D.O.Lr.No.1143/For.2005-1, dated 9-2-2005.
 - 11) G.O.Ms.No.2, EFS&T (For .III) Department, dated 7-1-2004,

The Andhra Pradesh Vigilance Commission has advised the Government to see that the Forest Department adopts proper procedure while carrying out the conservancy works (SMC and other works). The Commission has also advised that the Department should issue very clear guidelines to the field level functionaries.

Although several communications have been sent from time to time in this office references cited 1st to 8th to the field level staff for carrying out the conservancy works properly and maintain proper records, the subject has once again been discussed by the senior officers of the Department in detail in view of the advice of the Andhra Pradesh Vigilance commission. It is considered necessary once again to issue the guidelines for the benefit of the field staff of the Department. Accordingly, the following guidelines are issued in addition to the existing guidelines:-

- 1. In order to avoid double recording of expenditure and to locate the area easily, it is necessary to prepare location map.
- 2. The works executed should be invariably entered in the beat SMC register in order to maintain record of works carried out in that particular beat in different financial years.
- 3. Photographic documentation of execution of earth work (particularly in case of check

dams) is to be maintained in order to prevent fraudulent expenditure and substandard work.

- 4. It is essential to avoid execution of works without proper planning and without adequate time for execution.
- 5. The latitudes and longitudes of the structures constructed are to be posted in the SMC register along with other details like length, width, expenditure, etc. Latitudes and longitude details should be engraved on check dams.
- 6. Along with the estimates, location sketch (need not be to scale) indicating the proposed structures is also to be submitted.
- 7. Incase of check dams and other structures involving foundation, the work details relating to foundation are to be check measured by the competent authority before taking up superstructure. Also photographic evidence of foundation works carried out is to be maintained.
- 8. While releasing the funds to Forest Range Officer, the Draughtsman and Divisional Forest Officer concerned should thoroughly check the estimates and satisfy themselves about the rates adopted and leads incorporated.
- 9. The Draughtsman of the Divisional Forest officer concerned should verify 100% of estimates sanctioned by the Forest Range Officers compulsorily. Before release of funds for a particular estimate for the first time, the estimate is to be checked for its correctness.
- 10.On check measurement of works, the Forest code provisions should be strictly followed. The same are once again reiterated as follows.
 - i) As per Section 99 of A.P.F.D. Code, the estimates for works should be prepared based on approved schedule of rates. No expenditure shall be incurred without the sanction of estimate.
 - ii) As per Section 101 of A.P.F.D. code, for all works sanctioned, a register of works in form No.28 shall be maintained in the Range Office and Divisional Office. The monthly expenditure incurred under different items of the sanctioned estimate should be posted in it with voucher wise details.
 - iii) As per Section 102 of A.P.F.D. Code, measurement books shall be maintained in form No.29. No bill shall be passed for payment without entries in the Measurement book having been check measured by the Forest Range Officer/Forest Section Officer as the case may be in accordance with the instructions issued in G.O.Ms.No.2, Environment, Forests, Science and Technology (For.III) Department, dated 7-1-2004.
 - a) Check measurement should be done for 100% of works.
 - b) The Divisional Forest Officers should check measure all the works costing Rs.5.00 lakhs and above covering at least 30% of the value of the works done.

- c) The Conservator of Forests should check measure all works costing Rs. 10.00 lakhs and above twice once during execution and the other before payment of final bill covering at least 30% of work done.
- d) The Forest Range Officer shall test check 25% of the works for which he did not do check measurement, the Divisional Forest Officer and Sub-Divisional Forest Officer shall test check 10% each (without overlap of works) of the works costing Rs.1.00 lakh and above and the Conservator of Forests 5% of the works costing Rs.2.00 lakhs and above.
- e) Similarly for the purpose of test check, the concerned officers as stated above should identify corresponding number of works and select such works with items that are susceptible for mischief and fraud and record their observation in M.Book.
- f) A register of check measurements shall be maintained at Sub Division, Division and Circle levels to record the details of works check measured and dates of check measurements. This should be produced to Accountant General and other departmental inspecting officers / agencies on demand.
- 11. The check measurement by Conservator of Forests should cover all the Ranges and all schemes and check measurement by Divisional Forests Officer should cover all sections and all schemes and the sub-Divisional Forest Officers and Forest Range Officers shall cover all schemes and all beats.
- 12. The Forest Range officer should submit his monthly return for the works carried out and the works check measured to the Divisional Forest Officer. Similarly, the Divisional Forest Officer should submit monthly returns for the check measurements of works carried out in different ranges to the Conservators of Forests. (The information on check measurement of works is to be furnished in the following format :-

SI.	Name	SO No.	Work le	ocation	Name of the	Item of	Date of	Remarks/
No.	of	and			scheme	works	check	Deviation
	work	amount	Range	Section	under	check	measure-	s, if any,
		sanctioned			which the	measured	ment	to
					work is			be
					taken up			indicated)
1	2	3	4	5	6	7	8	9

LIST OF WORKS CHECK MEASURED DURING THE MONTH OF:-

13. The Conservators of Forests should mention in their monthly D.O. letters about the check measured works in the prescribed proforma as given below.

LIST OF WORKS CHECK MEASURED DURING THE MONTH OF:-

SI.	Name	SO No.	Work loo	cation	Name of the	Item of	Date of	Remarks/
No.	of	and			scheme	works	check	Deviation
	work	amount	Division	Range	under	check	measure-	s, if any,
		sanctioned		. ton igo	which the	measured	ment	to
					work is			be
					taken up			indicated)
1	2	3	4	5	6	7	8	9

- 14. While digging the CCTs, numbering has to be done from one direction to other and after completion of digging trenches, a sketch (need to be to scale) should be prepared showing the number of trenches. This acts as a location map for verification of the trenches.
- 15. Beat SMC registers have to be posted up date.
- 16. Beat information register is to be maintained with details like;
 - a. Area of the Beat with details of forest blocks and legal status
 - b. Description of the forests.
 - c. List of plantations in the beat with details like area, espacement, expenditure particulars etc.
 - d. List of SMC works taken up year wise (Scheme wise in the beat with measurements and expenditure incurred)
 - e. Abstract of cases registered in the beat indicating the number of cases, produce involved, value of produce etc.
 - f. Beat map indicating the SMC structures, plantations and blanks in the beat.

These instructions will come into force with immediate effect.

Sd/- **S.K. Das,** Principal Chief Conservator of Forests

Principal Chief Conservator of Forests.

CIRCULAR NO.1-B/2004/G.1

- Sub: Soil & Moisture Conservation Works Treatment of water-Shed-Saturation Level Treatment - An instrument for Alleviation of poverty and increase of Green Cover - Certain Guidelines - Issued - Regarding.
- Ref: 1. Circular N0.01/2004/G.1 (communicated through PrI.CCF's ref.no.33820/ 2004/G.1, dated 11.10.2004.
 - G.M.N0.435/F.2 (2)/05-4, Finance (Works & Projects) Department, dated 13-7-2005 communicated through PrI.CCF's ref.no.13841/2001/R1/N.1, dated 21-7-2005.

In the reference cited 1st under "Method of Execution", the following Instruction was issued:-

"No Contractor shall be engaged or assigned or nominated in execution of these works. Works shall be carried out through user Groups (VSS) by depositing money in Joint Account as is being done in case of CFM Project. Even in Non-JFM areas, trenches works should be entrusted to nearby by VSSs and if no such VSSs are available, efforts should be made to form new ones and then start the work".

Several representations have been received from the field officers about the difficulties faced in formation of new VSSs to start the work and as a result, the progress of work is not satisfactory.

After examining all the factors, the following revised instruction is issued:-

"The Department has been taking up saturation level treatment of Watershed in a big way during this year. It may so happen that some of the structures required for saturation level treatment are quite far away from the VSS area of operation. While reiterating the instructions given in the reference cited 1st, it is clarified that in case some crucial structure has to be constructed at a far off place from the VSS for saturation level treatment of watershed and no VSS is coming forward to take up this work, the option left for these works to be carried out are two:-

(A) to take up the works departmentally.

In this regard it should be noted that the work should be carried out by Muster Rolls only and not by Petty Contractors. The Pre-Audit System as envisaged in reference cited 2nd should be followed. Bills are to be passed by PAO (Works).

(B) Otherwise, even if the work falls outside the VSS area which is quite far off from the VSS village and it is not possible to form a new VSS, it will suffice if the amount is

deposited in the near by VSS Joint Account and work is carried out through the VSS members.

Needless to say that Conservation of water is equally necessary inside the forest area even beyond the boundary of the VSS area. In all such cases where SMC works are taken up outside the VSS area, it should be done only by depositing money in the Joint Account of VSS and works should be carried out by VSS members."

With the above clarification it is expected that progress under this scheme will be very satisfactory.

Sd/- **(S.K. DAS)** Principal Chief Conservator of Forests

Principal Chief Conservator of Forests.

CIRCULAR No. 01-C / 2005 G.1

- Sub: Andhra Pradesh Forest Department SMC works in forest areas Saturation level watershed treatment Sujalam Suphalam Certain further clarifications and guidelines Issued Regarding.
- Ref: 1. Circular N0.5&5-A/2002/PMU.I/3, communicated in Prl.CCFs Ref No.17309/2000/PMU.I/3, dated 23-8-2002.
 - Circular No.6/2003/PMU.III/2, communicated in Prl. CCFs Ref.No.4483/ 02/PMU.III/2, dated 15-07-2003.
 - 3. Circular No.2/J.4/2004 communicated in Re. No. 16284/2004/J4 dated 8-3-2004.
 - 4. Circular NMo.1/2004/G.1 communicated in Prl, CCF's ref.No.33820/04/ G.1, dated 11-10-2004.
 - 5. Prl.CCF Ref. No. 19427/2004/G. 1, dated 22-12-2004.
 - Circular No.01 -A/2002, communicated in Prl.CCF's Ref.No.33820/2004 /G.1, dated 26-01-2005,

Detailed guidelines have been issued in the Circulars cited 1st to 6th for carrying out SMC work in forest areas to the Saturation level on Watershed basis with cost effective structures in order to get the maximum productivity from our forest areas.

Many of the Senior Forest Officers from the Office of the Principal Chief Conservator of Forests who have been inspecting the SMC works In the districts have reported that in many Divisions, SMC works in the form of trenches / percolation tanks are not being done in the existing old plantations and consequently the benefits of SMC works like retaining more moisture for the plants, protection against fire and suppression of weed growth are not accruing to the plantations. This should be rectified immediately.

Although detailed guidelines have been issued in the Circulars to carry out SMC works in the forest area and in the current year plantations, it is true that instructions have <u>not been issued specifically to carry out SMC works</u> in the existing old plantations. Whereas it is a common knowledge that plantations are part of the forest area and accordingly SMC works should have been carried out in all the existing plantations also on priority, some of the officers have not yet started perhaps for the lack of clarity. The following instructions are therefore issued for immediate compliance:-

- 1) All the Plantations should be taken up on priority for carrying out SMC works in the form of trenches and small percolation tanks.
- 2) The dimension of the trench should be 1.5 m width at the top with bottom width of 1

m and a depth of 0.5 m. Septa of 1 m to 1.5 m width should be provided after every 7-10 m. The trenches should be dug out across the slope between the two rows of plants from one end to the other end of the plantation.

- 3) Dug out earth should be arranged in a trapezoidal form at a distance of 0.5 m from the trench. Care should be taken to see that these trenches also act as the integrated fire lines as per the instructions contained in the Circular 3rd cited.
- 4) In the plantations, the inspection path becomes sometime the source of soil and moisture erosion, when these paths are aligned along the slope of the area. It is therefore necessary to erect bunds in the form of speed breakers across the inspection paths to divert water to the trenches in the plantations. It will, therefore, be more useful to erect the speed breaker at a place in the inspection path from where the trench is located at a very short distance. The water diverted by the speed breaker should be sent to the trench by a little manipulation. This was introduced by me in the Plantations of Andhra Pradesh Forest Development Corporation (APFDC) and it yielded expected results.
- 5) All the plantations should be covered by SMC works mainly in the form of trenches and a few small percolation tanks across the streams if any in the plantation area.

In the Teak plantations also where thinning has been carried out or which are due for thinning, this exercise should be done very meticulously and the Conservators of Forests / Divisional Forest Officers are requested to plan for introduction of Bamboo at the rate of 200 - 400 plants per Ha. with more than 2 year old rhizomes inside the trenches 5 m to 7 m apart, so that after the teak is harvested at the final rotation or even before that, we may get a pure Bamboo plantation.

All the Conservators of Forests and the Divisional Forest Officers are requested to prepare the plan for SMC works for all the plantations on priority basis and implement it before December, 2005.

Sd/-**(S.K. DAS)** Principal Chief Conservator of Forests

ACCOUNTS & OFFICE PROCEDURES

Principal Chief Conservator of Forests.

CIRCULAR No.5/2005/N2

The government have issued orders vide G.O.Ms.No.60 Fin. & Plg. Department, dt: 30-02-2001 introducing the LOG system and extending the pay and Accounts Officer system in Forest Department w.e.f. 01-04-2001. Instructions were issued in G.M.No.2789/ F3 (2)/2003-1 Fin (W&P) Department dt: 14-08-2003 to the effect that the Divisional Forest Officers will render the cash book extracts along with the vouchers in originals pertaining to the period up to 20th of a given month to the Pay and Accounts Officers, by 26th of the month every month except for March. The cash accounts for the month of March shall be closed on 31st of the month and shall be rendered to the Pay and Accounts Officers/Asst. Pay and Accounts Officers on 31st it self,

However, instances have come to the notice of this Office that, the monthly cash accounts are not being rendered to the Pay and Accounts Officers in time. The entire procedure/system has been discussed in the meeting of Accounts Officers held in this office on 25-04-2005. The Accounts Officers have pointed out that, the Forest Range Officers are closing their cash accounts on 20th of the month and rendering their cash accounts to their Divisional Forest Officers/Dy. Conservators of Forests as late as on 26th of the same month, and that the Divisional Forest Officers and the Division Accountant or the Division Superintendent are not left with any time for scrutiny of the vouchers received from the Forest Range Officers.

As per the Section 89 of the A.P. Forest Department Code, the Accounts Officers have been entrusted with the duty of pre post audit of the cash accounts of the Ranges and Divisions every month and a time bound monthly programme is communicated to all the Accounts Officers for taking up of the pre-post audit of the vouchers of Ranges and Divisions in a given month. The Accounts Officers have pointed out in the meeting that the vouchers and accounts are rendered to the Pay and Accounts Officer by 26th of the month and that when they go to the Divisions for pre-post audit of the vouchers, the vouchers are not received from the Forest Range Officers, and therefore they are not in a position to verify the vouchers.

After detailed discussion in the meeting a way out of this problem has come out with the proposal that if the Forest Range Officers render the cash accounts to their respective Divisional Forest Officers every week, the Accounts Officers/Divisional Forest Officers/Superintendent (Accts) will get time to verify the vouchers physically.

In view of the above, all the Conservators of Forests and Divisional Forest Officers are hereby requested to ensure that the Forest range Officers render the cash accounts along with the vouchers weekly every month. The Forest Range Officers shall render their vouchers to the Divisional Forest Officers on every Monday without fail.

The instructions shall be followed scrupulously. The Accounts Officers are requested to report to the Chief Accounts Officer by FAX with a copy to the concerned

Conservators of Forests and Divisional Forest Officers, the instances, when they are not provided with the vouchers and necessary records for pre-post audit.

The Divisional Forest Officer/Dy. conservator of Forests shall close their cash accounts on 20th of the month and after thorough scrutiny at Division level, render the accounts to the concerned Pay and Accounts Officer/Asst. Pay and Accounts Officer by 26th of the month without any deviation.

These instructions shall come into force immediately.

Sd/- (S.K.DAS),

Principal Chief Conservator of Forests
Principal Chief Conservator of Forests.

CIRCULAR No.2-2006-J6

Sub: Forest Department - Plantation Journal - Proper Maintenance of Plantation Journals etc. at Range level - Instructions issued - Reg.

Following Instructions are issued to ensure proper maintenance of PLANTATION and NURSERY JOURNALS by Range Officers.

Plantation Journals for each of the plantations (including plantation raised by the VSS) are to be maintained by all the Forest Range Officers as per the provisions of A.P. Forest Code Vol.1 (Section 32), in the pattern given in APPENDIX 10 of Forest Code (Vol.II). All details should be posted promptly in the journals.

As the Plantation Journals are permanent Records, they should be maintained in Hard bound Books to withstand wear and tear and passage of time.

Following further guide lines are issued :-

- 1. There are 17 main <u>parameters</u> given for preparation and maintenance of plantation Journal in Appendix-10 (section 32) of Forest Code Vol -II, according to which the Journal has to be prepared and maintained.
- 2. Entries in the Journal have to be made and observations of inspecting Officers are to be recorded periodically and promptly, as required under the Forest code provision.
- 3. Forest Range Officers have to ensure prompt updating of the Journal and produce it before all the inspecting officers for recording their observations/instructions etc.
- 4. Officers inspecting the plantations, should call for plantation journal from the Forest Range Officer and invariably record their observations/instructions/etc, in the Plantation Journal. The Inspecting Officers will communicate separately, the Inspection notes, which should be the same as noted in the plantation journal. This should be done with office reference, so that monitoring can be done by the office for compliance of instructions in the Inspection Notes.
- 5. The Divisional level officers (Divisional Forest Officers / Dy. Conservators of Forests / Curators / State Silviculturists / etc.) should submit an Annual periodical on maintenance of Plantation Journals, to be submitted in the month of April for the succeeding year, in the following proforma, so as to be received through concerned Conservator of Forests, by 30th of April.

Division :				Circle :	For the year:	
SI. No.	Financial year of plantations raised	As per Replantation No. of plantations raised during the year	egister of s & record No. of plantation journals maintained	Were the plantation Journals maintained up to date Yes/No	Are the plantation journals in good conditions & in safe custody of R.O Yes/No	Remarks in case if plantation Journals of any plantation is not maintained
1	2	3	4	5	6	7

The year of information should start from the financial year of the oldest plantation existing in the Range and it should be chronological in the Division report.

Sd/- (**S.K. DAS**), Principal Chief Conservator of Forests

Principal Chief Conservator of Forests.

CIRCULAR No.8/2006/Y1

Sub: Pensions - Expeditious disposal of Pension cases - Issue of instructions -Reg.

According to Para 1 of Appendix I to A.P. Revised Pension Rules 1980, every Head of the Department/Head of an Office shall have the list of all Government servants who are due to retire on attaining the age of superannuation during the next 18 months, prepared once in every 6 months i.e., on the 1st of January and 18th July of each year covering both Gazetted and Non-Gazetted Government servants and forward this list to the Audit Officer/ Pension Verifying Authority concerned not later than the 31st January and the 31st July, as the case may be, of that year.

As per Appendix-I of A.P. Revised Pension Rules 1980, the Officers concerned should forward the pension proposals 6 months prior to the date of retirement, so that necessary authorization can be issued by the Accountant General in the month of retirement of the employees.

The Government/the Accountant General have pointed out that, the time schedule provided for in A.P. Revised Pension Rules 1980 with regard to the finalisation of pension cases are not being adhered to by the Administrative Departments, resulting in considerable delay in the disbursal of pension to the retiring incumbents.

In this connection, it is further informed that, in the past, several instructions were issued by this office regarding expeditious disposal of Pension cases. The Government have also issued various orders on pensions, liberalizing the rules and procedures. Instructions were also issued by this office that the Pension Papers of the Government servants due to retire within 18 months should be prepared and submitted to the pension sanctioning authority 18 months before the expected date of retirement, in a complete shape according to the existing rules.

Several complaints are being received from the subordinates and retired persons for inordinate delay in settlement of Pension Cases of retired persons.

It is noticed that, in several cases action has been initiated after retirement of the employees or just before the date of retirement.

The Conservators of Forests and Divisional Forest Officers are therefore requested to initiate action 18 months before the date of retirement and furnish the list of retiring persons for whom the Principal Chief Conservator of Forests/Government are the Pension Sanctioning Authorities within (18) months by every half year ending as on 1st January & 1st July, so that necessary action may be taken to settle the pension cases on the date of retirement of the Government servant. They are also requested to see that the Pension papers of the employee due for retirement shall be transmitted to the competent authority (Audit Officer, Local Audit/Accountant General/Principal Chief

Conservator of Forests) six months before the due date of the retirement. They are also requested to make special arrangements in their offices for finalizing all issues connected with the Pension cases.

A small booklet is prepared based on the A.P. Revised Pension rules 1980, as a ready reference for the guidance of all the Conservator of Forests, Divisional Forest Officers and Superintendents and the Assistants who are dealing with the pension cases and enclosed herewith. Please be advised that this book cannot be quoted as an authority. The authority should only be drawn from the Revised Pension Rules 1980 and amendments there on.

The above instructions shall be followed strictly.

Sd/- (**S.K.DAS**), Principal Chief Conservator of Forests

ANDHRA PRADESH REVISED PENSION RULES 1980

APPLICABILITY

Andhra Pradesh Revised Pension Rules, 1980 are applicable to the retiring government servants of Andhra Pradesh. APRPRs 80 shall be deemed to have come into force with effect from 29th October, 1979. They shall apply to all government servants who were governed on the 29th October 1979 by

- a) the Old Pension Rules in the Hyderabad Civil Service Rules; (or)
- b) the Pension Rules in the Civil Service Regulation; (or)
- c) the Andhra Pradesh Liberalised Pension Rules, 1961
- d) the All India Services (death cum -retirement benefit) Rules 1958
- e) in so far as members of the State Higher Judicial Service are concerned
- All workers of Government Distillery, Narayanaguda, Hyderabad and Government Distillery, Kamareddy, Nizamabad District who have retired from service on or after 12th September 1983.

DEFINITIONS

- 1. The term 'Pension' has been judicially defined as a stated allowance or stipend made in consideration of past service or a surrender of rights or emoluments to one retired from service. Thus the pension payable to a government employee is earned by rendering along and efficient service and, therefore, can be said to be a deferred portion of the compensation for service rendered. In the event of her/his death, the spouse gets a monthly payment for life in the form of family pension. Other beneficiaries get such payment for limited periods or for life subject to certain conditions.
- 2. Pension Verification Authority means Head of Office wherever the Government servant is employed.
- 3. Pension Sanctioning Authority means Head of Office in case of Non-gazetted Officers and Head of the Department in case of Gazetted Officers (as per G.O.Ms.No.262 F&P (FW PSC) Dept. dated 23-11 -1998.
- 4. Pension Issuing Authority means A.G., A.P., Hyderabad/Local Fund Audit Department.
- 5. Pension Disbursing Authority means the STO/APPO for payment of first pension (as per G.O.Ms.No.65 F&P (FW PSC) Dept., dated 17-05-1999.
- 6. Bank means paying branch which disbursed the pension through SB Account (G.O.Ms.No.213 F&P (FW PSC) Dept. 19-12-97.

Pensionary and Other benefits

Every Government servant is entitled to certain Pensionary Benefits on his finally quitting the service on retirement on account of Superannuation or any other reason except on resignation. The Pensionary Benefits are regulated according to the Andhra Pradesh Revised Pension Rules 1980 issued in G.O. (P) No.88, Finance & Planning (Fin. Wing. PSC-IV) Dept. dated 26-3-1980.

The day on which a Government servant retired or is retired or is discharged or is allowed to resign or voluntarily retires from service, as the case may be, shall be treated as non-working day but the date of death shall be treated as a working day (Rule 5 (b).

The Government servant should have rendered 10 years of qualifying service to be eligible for Service Pension. Service Pension is based on the length of the service and the last pay drawn. Other Pensionary Benefits admissible is Retirement Gratuity which is paid in lump sum. Government servant can also commute 40% of pension. If the service rendered by the government servants is less than 10 years, she/he will be paid Service Gratuity only once, based on the length of the service and last pay drawn.

Other benefits

The retired government employee is entitled to the following benefits.

- i) Encashment of earned leave.
- Encashment of half pay leave (Superannuation pensioners, Retiring pensioners who retire from service voluntarily and Invalid pensioners are also entitled to this benefit. This benefit is not admissible to Compensation pensioners, persons who have retired compulsorily as a measure of punishment, the family of deceased government servant and contingent employees).
- iii) Family Benefit Fund (those appointed prior to 10/1984).
- iv) Group Insurance.
- v) GPF.
- vi) APGLI.
- vii) TA to Home Town

<u>Note</u>: Detailed/Procedural instructions and statutory notification on Revised Pension Rules, 1980 are available on Internet and can be accessed at the address:-

www.aponline.gov.in (Finance Department)

G.O. (P) No.88, Finance & Planning (Fin, wing PSC-IV) Dept., dated 26-3-1980.

SERVICE PENSION under Rule - 45

Every government servant shall retire on superannuation on attaining age of 58 years/60 years

<u>Eligibility :</u>

Those who have completed 10 years of service are eligible for service pension. Employees who have rendered not less than 5 years of qualifying service will be paid service gratuity.

Option :

Every government employee has to exercise an option for pension.

<u>Calculation of Net Qualifying Service</u> (verify the entries as per service register)

1. Date of birth

add: 58 years/60 years

- 2. Date of superannuation
- 3. Date of entry into govt. service
- 4. Total service
- 5. Non-qualifying service
 - i) boy service (rule-13)
 - ii) service rendered in a non-pensionable post (rule-14)
 - iii) service as apprentice (rule-16)
 - iv) e.o.l on private affairs in excess of 36 months (rule-21)
 - v) periods of suspension (rule-23)
 - vi) periods of interruptions (rule-28)
 - vii) absence with out leave (un-authorised absence/period treated as

"dies-non") (rule-27)

deduct: non-qualifying service

- 6. Qualifying service
- 7. Add: weightage (rule-29)
- 8. Gross qualifying service
- 9. Calculation of service pension

last pay drawn x length of service (limited to 33 years service)

Family pension rule-50

Introduction :

Family pension is payable in the event of death of the govt. servant or while in service or after retirement to his/her spouse or eligible children.

<u>Applicability</u>	:	from 29-10-1979
Nomination	:	not required
<u>Family</u>	:	as defined in sub rule-12(b) of rule-50

Types of family pension ;

There are two types of family pension. They are:

- 1. Enhanced rate of family pension Rule 50 (3)
- 2. Normal rate of Family Pension. Rule 50 (2).

Limitations

	Enhanced family pension	Normal family pension
Eligibility	dies after rendering of (7) years continuous service of pensioner dies before attaining age of 65 years.	no minimum qualifying service is required.
Calculations	50% of the last pay drawn limited to s.p.	30% of the last pay drawn
Limitation	for (7) years from the date of death of the govt. servant up to (65) years of age of the govt. servant had he/she been alive which ever takes earlier.	paid to those who cease to receive enhanced rate of family pension.
Minimum	Rs. 1,275/- p.m. w.e.f. 1-7- 1998	Rs. 1,275/- p.m. w.e.f. 1-7- 1998
	Rs. 1925/- pm.	
	w.e.f. 1-4-2005	

Gratuity

One of the pensionary benefits admissible to the govt. servants

1. Retirement gratuity (R.G/r.g) : rule - 46

The length of service for retirement gratuity need not be computed separately for calculation of R.G. The length of service calculated for pension can be taken as q.s. for R.G. also. It should be converted into half years while calculating R.G.

2. Eligibility: Minimum 5 years of qualifying service.

3. Option: Exercise option at any time, one year to the date of superannuation.

Formula:

 $1/4^{th}$ lpd for very half year period of service subject to a maximum of 16 $1/_2$ the emoluments or Rs.2,50,000/- whichever is less (w.e.f. 1-4-1999) the limit has been enhanced to Rs.3,50,000/- w.e.f. 01 -04-2005 as per G.O. (p) no. 249, fin (pen-I) dept. dt. 04-10-2005.

Recovery of dues: All govt. dues can be recovered from retirement gratuity.

Interest: For delay in payment of r.g. subject to certain conditions.

Lapse of retirement gratuity: When the govt. servant does not have family members as defined in rule-49. The retirement gratuity lapses.

Retirement gratuity to minors: It can be paid to the natural guardian. In the absence, it has to be paid to the person who furnishes guardianship certificate.

2. Gratuity of voluntary retirement: rule – 43

Calculation : as per retirement gratuity weightage:

- (i) maximum 5 years or
- (ii) the difference between 33 years & q.s. or
- (iii) date of superannuation retirement (-) date of voluntary retirement.

Which ever is less

3. Anticipatory gratuity: rule-51

l.p.d. x 1/4 x completed half years x 80% of q.s.

- when delay in releasing the pensionary benefits.
- shall not be released when dept./pro. are pending.

4. Provisional gratuity: No provision

5. Gratuity on medical invalidation: rule-37

When the government servant is incapacitated, relieved immediately on receipt of m.c. he can be granted gratuity for the q.s.

weightage is not admissible

6. Compassionate allowance : rule 40

Where an employee dismissed or removed, not exceeding 2/3rds of pension or gratuity or both which would have been admissible if he had retired on medical invalid pension. The amount of compassionate allowance sanctioned under the provision to the above rule shall be subject to rule, 45 (rule, 41).

Note: the rule, 41 is substituted by g.o.ms.no.178 finance & planning (f.w pen-l) dept. dated 22-10-1997 w.e.f. 29-10-1979

Retirement gratuity in death case : rule 46

Eligibility : Minimum qualifying service is not required.

Calculation: rule 46(3)

In the qualifying service is less than one year

	PRESUMING Rule N.Q.S. 3 years 1 ¹ / ₂ time of PLD Rule 46(3)(a)
More than 1 year, But less than 5 years	
	<u>N.Q.S 9 years</u> 4 $^{1}/_{2}$ times of LPD Rule 46(3)(b)
More than 5 years but less	
than 18 years	<u>N.Q.S 18 years</u> 9 times of LPD Rule 46(1)(1)(b)

If the qualifying service is more than 18 years, it is advantageous if Retirement Gratuity is calculated on the actual length of service.

Applicability: These rates are applicable to the family, if the govt. servant dies on or after 1-07-1992.

Compensation pension: Rules-38

Applicability :

Owing to the abolition of the permanent post, if a govt. servant is selected for discharge, owing to abolition of a permanent post and who could not be provided with an alternative appointment of equal cadre/status.

Eligibility: Compensation pension

length of service ÷ 66 x last pay drawn

Ineligibility: Weightage is not admissible.

Notice: At least 3 months notice is not given and the government servant has not been provided with other employment, sanction the payment of a sum not exceeding the pay & allowances for the period by which the notice actually given to him falls short of three months.

Invalid pension

Applicability: Rule-37

A government servant relieved from service due to mental or physical infirmity subject to production of medical certificate issued by prescribed medical authority.

Eligibility:

Invalid pension = <u>length of service x last pay drawn</u> 66

or 30% of the last pay drawn whichever is more.

Ineligibility : Weightage is not admissible.

<u>Conditions:</u> If the invalidation occurred due to irregular habits of the govt. servants the competent authority may deny sanction of invalid pension or he may impose partial cut on invalid pension.

Compassionate allowance

Applicability: Rule-40

A govt. servant who is dismissed or removed from service shall forfeit his pension and gratuity.

Eligibility:

The authority competent to dismiss or remove may sanction, in fit cases, a compassionate allowance not exceeding $2/3^{rds}$ of pension or gratuity or both which would have been admissible if he had retired on invalid pension.

Minimum compassionate allowance: rule-41

Where the amount of allowance less than the minimum pension, the allowance shall be raised to Rs.1,275/- p.m.

(sub-rule (5) of rule-45)

PRO-RATA PENSION Rule 35 & 36

<u>Applicability:</u> A Government servant who has been permitted to be absorbed in a public enterprise wholly or substantially owned or controlled by the Govt., of such absorption is declared by the Govt. in public interest, be deemed to have retired from service from the date of such absorption and shall be eligible to receive retirement benefits.

Liability: The Government shall have to liability for payment to family pension, Rule -35.

Conditions: As laid down in Rule 36.

Anticipatory pension: Rule-51

Pending transmission of pension papers, due to administrative delay, Anticipatory pension at 4/10 Last Pay Drawn by the retired employee provided he has put in a service of not less than (33) years. Where service is less than (33) years, it must be proportionate to the service and Anticipatory Gratuity at 80% may be sanctioned by the Head of the office after adjusting all the dues known to the departmental authority. The same shall be adjusted In full from the final settlement of Pension and Gratuity.

Provisional pension: Rule - 52

May be granted when departmental/Judicial Proceedings are pending, not exceeding the maximum Pension on the basis of Qualifying service.

75% of Service Pension

No gratuity shall be paid

Anticipatory family pension - Rule 51(B)

If a government servant dies while in service, the Head of the Office shall draw and disburse the anticipatory family pension from the day following the date of death of the government servant irrespective of the fact that the family pension papers are sent to the Accountant General or not. The Head of the Office issues sanction letter to the family, and sends a copy to Pension Sanctioning Authority indicating the amount of anticipatory family pension sanctioned to the family of the deceased government servant. Pension Sanctioning Authority on receipt of the copy of sanction from head of the Office issues confirmatory sanction for payment of anticipatory pension to the family till the final pension is authorized.

Anticipatory family pension can be sanctioned up to the extent of 75% of the entitled amount of family pension. The anticipatory family pension will be adjusted in full from the family pension. The Head of the office has to obtain an undertaking from the family pensioner that he/she will refund any amount paid in excess of entitled amount.

Sanction of anticipatory pension has to be recorded in the service book of the individual under proper attestation. When the family pensioner appears before the Pension Issuing Authority for receiving family pension, he/she has to produce a certificate from the Head of the Office whether they have drawn any anticipatory

pension or not. If anticipatory pension is sanctioned, period for which it is sanctioned has to be indicated. Once the above certificate is issued, the Head of the office stops payment of anticipatory pension.

Note: No allowance shall be admissible on the anticipatory family pension referred to above as per Note 1 of Rule 51 (B) of APRPRs 1980.

Application for anticipatory family pension is not necessary.

It is not necessary to apply for anticipatory family pension by the family pensioner. The concerned Head of the Office should take initiative and sanction anticipatory family pension by taking an undertaking from the pensioner to that effect that she/he would refund any amount found to have been paid in excess of his/her title in the shape of anticipatory pension.

Item No. 1 of executive instructions under Rule 51 of APRPRs 1980 and Cir Memo No.34708/H/802/Pen I/83-I F&P (FW Pen I) Dept, dated 3-11 -1983.

Omissions and Commissions

- NDC& LPC in a complete shape
- Rubber stamp and office seal
- SB A/c No. in Form-I.
- Attestation should be done in each and every page of Pension papers
- Date of nominations and the date of its receipt.
- Witness signatures
- Though they are not sanctioning authorities, they are signing the part-II B
- List of employees due for retirement. As per Appendix-I of Andhra Pradesh Revised Pension Rules, 1980, a statement showing list of employees due to retire with in 18 months has to be prepared and sent to the Accountant General, Andhra Pradesh, Hyderabad duly making a copy to the Principal Chief Conservator of Forests and to the concerned Conservator of Forests.
- Retrenchment Register.

The format of the "Questionnaire - Cum - Check-slip" is given here under:-

Annexure-I

CHECK-SLIP to be enclosed with pension proposals

- 1. Name of the Pensioner with Designation.
- 2. Office from where he retires/retired
- 3. Date of retirement/Death
- 4. Nature of retirement and pensionary benefits admissible thereof.
- 5. Pension forms forwarded in triplicate with following

YES/NO

<u>PART- I</u>

- 1. Application Form
- 2. List of family members.
- 3. Declaration

Place & date should be filled in specifically

PART- II

- a) Whether HBA/MCA/Marriage and Bicycle Advance is sanctioned to the Government employee as per G.O.Ms.No.131, Fin. & Pig. Department dated 19-08-1997 communicated through PCCF's Ref.No.48856/97/C1, dated 08-12-1997. If so furnish the Clearance Certificate obtained from the Accountant General and also furnish if any outstanding amount to be recovered from the Individual.
- b) State whether all Columns are filled up. Annexure-I with photos duly pasted and filled all Columns. YES/NO
- c) A separate set of passport size joint photo of the retiree along with the spouse (4 copies in loose) duly attested by the Departmental Authority with their names written on the photography.

Annexure - II nomination

6.	Has the pensioner signed all forms		YES/NO	
7.	Is LPC enclosed in triplicate		YES/NO	
8.	Has the professional tax been deducted as pe	er existing rates	YES/NO	
9.	Whether consolidated NDC for (10) years retirement enclosed in triplicate	prior to the date of	YES/NO	
10.	Whether disciplinary cases pending, if so, the furnished (including ACS cases).	details of each case	YES/NO	
11.	Whether anticipatory pension sanctioned		YES/NO	
12.	YES/NO			
13. Details of appeals pending, if any against the recoveries				
14.	Whether Service Register duly posted up-to-d	ate	YES/NO	
			Signature	
Sta	tion:	Name of the Officer:		
Dat	ted:	Designation:		

(Rubber stamp must be affixed)

<u>Annexure - II</u>

For family pension cases only

1. Name of the family pensioner	
2. Name of the Government Servant & Designation.	
 Last station of working with complete office address. Address after retirement of pensioner. 	
4. Date of death of the employee	
5. Whether original Death-Certificate is enclosed.	YES/NO
Whether the legal heir certificate furnished (both in original and 2 Xerox copies of it duly attested)	YES/NO
7. Whether L.P.C. is enclosed in triplicate?	YES/NO
 Whether N.D.C. is enclosed or not (consolidated) in triplicate. If not, to specify the reasons for its non production. 	YES/NO
Whether Disc. cases are pending, if any. if yes, full details should be furnished.	YES/NO
10. Recoveries, if any	
11. Details of anticipatory family pension sanctioned.	
12. Any other, information to be furnished, if any.	

Signature:

Station :

Dated :

Name of the Officer & Designation :

(Rubber stamp must be affixed)

Note: Any document sent with pension proposals such as LPC, NDC, consent letter copies of the death, legal heir, Guardianship Certificates etc., should be signed/ countersigned/attested by the respective officers duly affixing their rubber stamps. TCBO copies signed by the Manager/Superintendents will not be entertained.

MISCELLANEOUS

Principal Chief Conservator of Forests.

CIRCULAR NO. 01/2004

Sub: **Departmental Extraction of Eucalyptus Plantations -** "Management of Eucalyptus Plantations for maximum returns - Certain guidelines - Issued - Reg.

- 1. It is brought to the notice of all the Officers that Eucalyptus Plantations, which have been raised under different Schemes in the Department in the past with the main objective of meeting the pulpwood requirement of Wood based Industries, have been rendered commercially non-viable in many cases due to surplus production of pulpwood in the Farm sector under Agro-Forestry programmes. This is evident from the fact that there was glut in the price of pulpwood for the last 5-6 years. However, there is an upward trend in the recent past.
- It is further brought to notice of all officers that the Singareni Colleries Company Ltd., Kothagudem, a fully owned State Government Company, requires Eucalyptus wood of high girth classes for making use as Props and Chocks in their mining operations. <u>The rate of wood for Props and Chocks would be at least four times</u> <u>more than that of the Pulpwood</u> of the same weight.
- 3. It is therefore urged to maintain the potentially good Eucalyptus Plantations, wherever the conditions are favourable, for a period of 1 to 3 years more beyond the present rotation age in order to get maximum number of props and chocks. It has therefore been felt appropriate to issue suitable guidelines for the field level functionaries in order to simplify the job of converting the Eucalyptus tree after felling into Props and Chocks so as to get maximum financial returns to the Department as well as the members of Vana Samrakshana Samithis (VSSs).
- 4. Following are the Options to market the Eucalyptus wood:
 - a. Eucalyptus Props: Specifications are as follows:Length2.70 4.90 MetersThinner end girth over bark36 cm- 44 cmMid girth over bankNot more than 55 cm
 - b. Eucalyptus Chocks: Specifications are as follows:Length1.22 MetersMid girth (Under bark)40-60 cm

It is further informed that on an average **60 Chocks will admeasure to 1 CMt. in volume.** The rate for Props per CMT will be higher than that for Chocks. But the demand for Props is limited and the demand of chocks is higher. But **the fact** remains that the rate for chocks is much higher than that of the Eucalyptus pulp wood in the present market situation. <u>Therefore, it is advisable to try to extract maximum number of Chocks once the Props are extracted.</u>

- 5. It is clear from Para 4 that only when thinner end girth of the stem is 36 cm 44 cm, it can be converted as a **Prop**, provided it has the requisite length of 2.70 m to 4.90m. The length of a particular stem may be 10.00m, 9.0m or 8.00m etc. When the thinner end girth is 36cm 44 cm the question that naturally arises as to what will be the best possible way of conversion into props and chocks giving maximum financial return? The answer is illustrated in the following table which should invariably be followed by all field officers as Ready Reference, which has been formulated by the Vice Chairman & Managing Director of Andhra Pradesh Forest Development Limited, Hyderabad in his Circular Dated 01.05.2000.
- 6. Immediately after felling a tree, the point where the thinner end girth is 36 cm (O.B) should be marked and the length of the stem up to this point measured. When the length varies from 2.70 m to 10.00 m the best possible conversion may be seen in Ready Reference Table given below.

S. No	Length in Meters	Props Length	No.	Chocks	Value in	Total Value
		(M)			Rs. (app.)	in Rs.
1	10.00 to 9.90	4.50	1	-	150.00	358.00
		2.70	2		208.00	000.00
2	9.80 to 9.40	4.00	1	-	132.25	340 25
		2.70	2		208.00	010.20
3	9.30 to 8.90	3.50	1	-	106.00	314 00
		2.70	2		208.00	014.00
4	8.80 to 8.50	4.50	1	-	150.00	282 25
		4.00	1		132.25	202.25
5	8.45	4.50	1		150.00	
		2.70	1		104.00	282.00
				1	28.00	
6	8.40 to 8.00	4.00	2	-	132.25	264 5
					132.25	204.5
7	7.95	4.00	1		132.25	
		2.70	1		104.00	264.25
				1	28.00	
8	7.90 to 7.20	4.50	1	-	150.00	254.00
		2.70	1		104.00	234.00
9	7.10 to 6.70	4.00	1	-	132.25	236.25
		2.70	1		104.00	230.23
10	6.65	2.70	2		104.00	
					104.00	236.00
				1	28.00	
11	6.60 to 6.20	3.50	1	-	106.00	210.00
		2.70	1		104.00	210.00
12	6.10 to 5.40	2.70	2	-	104.00	208.00
					104.00	200.00

S. No	Length in Meters	Props Length	No.	Chocks	Value in	Total Value
		(M)			Rs. (app.)	in Rs.
13	5.30	4.00	1	1	132.25	160.25
					28.00	100.25
14	5.20	2.70	1		104.00	
				2	28.00	160.00
					28.00	
15	5.10 to 4.50	4.50	1	-	150.00	150.00
16	4.40 to 4.00	4.00	1	-	132.25	132.25
17	3.90 to 3.50	3.50	1	-	106.00	106.00
18	3.40 to 2.70	2.70	1	-	104.00	104.00

- 7. <u>Copies of the above table should be supplied to all the field staff and</u> <u>Officers.</u> The Conservators of Forests and Divisional Forest Officers are requested to demonstrate in the field about the conversion of Eucalyptus trees into props and chocks with the use of this table to the Forest Range Officers, Forest Section Officers, Forest Beat Officers and the Assistant Beat Officers who are engaged in harvesting of Eucalyptus Plantations.
- 8. It is pertinent to mention here that we do not have the choice to extract any number of Props as the requirement of the SCC Ltd. is limited. SCC Ltd. has entered into MOU with the Andhra Pradesh Forest Development Corporation Limited for supply of Props and Chocks every year for a period of ten years form 2000-01 onwards. Only the requirement of SCC Ltd, in excess of the supply from Andhra Pradesh Forest Development Corporation Limited, can be met from the Forest Department and therefore the Conservators of Forests / Divisional Forest Officers are requested to ascertain the requirement of Props and Chocks form SCC Ltd, before taking up the harvesting plan; as otherwise, if the Chocks and Props are reconverted into pulpwood for want of demand, the Government will be put to heavy financial loss. The balance quantity shall be utilized for conversion into pulpwood or Faggot wood as the case may be.
- 9. The last but the most important point is not only to follow the above instruction for conversion of Eucalyptus wood to the maximum financial advantage of the Department but to maintain certain potentially good Eucalyptus plantations beyond the present rotation age the 8th year for period of 1, 2, or 3 years more so that the maximum number of plant population attains the girth convertible into Props and Chocks which will result in additional revenue to the Government and additional income to the VSS. It should be mentioned here that such Plantations should be maintained only after carrying out the pre-harvesting operations like uprootal of miscellaneous growth, carrying out Soil and Moisture Conservation measures and ploughing the area in between the rows of the Eucalyptus Plantation across the slope. The Conservators of Forests are requested to see that a register is maintained in the Division Office of such Plantations.

All the Conservators of Forests are requested to acknowledge the receipt of the circular instructions by return of post.

Sd/- **(S.K.Das)** Principal Chief Conservator of Forests

Principal Chief Conservator of Forests.

CIRCULAR No. 9/2004

Sub:- A.P Forest Department - Silvicultural practices for improvement of forests - For poverty alleviation - Guidelines issued - Regarding

In the Project Implementation Plan for implementation of A.P Community forest Management Project, instructions have been issued on various silvicultural practices that can be taken up for improvement of degraded forests.

It is also mentioned therein that these practices are only indicative and that they are to be adopted as per site specific requirements. Site specific planning is the essence of planning for the forestry practices under this project. With experience gained and observing the response of forests to these treatment practices, it is felt that innovative prescriptions are needed to maximize return on investments made under the project.

All the forest areas being treated under the project are broadly classified into Teak, Non teak miscellaneous, Red sanders, Bamboo and Scrub forests. In VSS areas, these forest types are not likely to occur in pure forms, treatment models have been defined indicating pure Teak, pure Non-Teak, pure Bamboo, pure Red sanders, Teak mixed with Bamboo, Non teak mixed with Bamboo, pure scrub forests in plain areas for conversion into plantations, pure scrub forests along gentle slopes for conversion into plantations, Teak forests mixed with scrub patches for planting and Non-Teak forests mixed with scrub patches for planting. Treatment and silvicultural practices are designed and described to suit the requirement of these categories of forests. Generally, treatment in scrub forests that occur either in pure form (in plains or along gentle slopes) or in mixture with Teak or Non-Teak forests is their conversion into plantations of NTFP or Short Rotation Woody species and Medicinal Plants. In respect of Teak and Non-Teak forests including Red sanders forests, the recommended practices are aiding natural regeneration through stool dressing (in viable root stock), coppicing and singling, stand management through silvicultural thinning, repeated shrub cutting, Soil and Moisture Conservation works, soil working and moisture conservation measures to give preferential treatment to selected NTFP species that occur naturally, Fire protection measures etc. In respect of Bamboo forests, practices include decongestion, selective thinning of culms, mounding to young clumps, repeated shrub cutting, Soil and Moisture Conservation works, soil working and moisture conservation measures to give preferential treatment to selected NTFP species that occur naturally, Fire protection measures etc.

A review of these practices and the experience gained during the course of implementation of the project has revealed the following:

1. These treatment practices cannot be uniformly applied to all forests of a particular category. Extent of degradation has a major bearing on deciding on specific

treatment practice, eg. in misc. Non-Teak forests in high rainfall zones may not respond only to the prescribed practices. In these areas, there is need to scale up investments on SMC works combined with stand management.

- 2. Planting medicinal plants many of which are climbers and annuals in pure patches is not sustainable and instead they can be included as intercrops in plantations with wider espacement.
- 3. Managing Teak and Non-Teak and Red sanders forests with the above mentioned prescriptions alone may not result in steady flow of returns to VSSs as these species have a long gestation/rotation period and at best they may yield periodic returns.

Considering all these factors and in order to ensure steady flow of income to VSSs towards achieving the Project objective of poverty alleviation, the following additional practices are now recommended:

- 1. Take up planting medicinal plants as intercrops in plantations and as under crops in natural forests in natural forests & under-planting should be taken up only in respect of species that are essentially climbers (eg. Maredu gedda, Shatavari, Tippateega, Podapatri).
- 2. Take up silvicultural thinning to remove congestion in Teak and Non-Teak forests and old plantations under management by VSS and under planting of Bamboo using good quality two year old rhizomes.
- 3. Take up activities to revamp old plantations of NTFP species under management by VSSs to make them procedure age. Activities here should include SMC works, soil working and preferential treatment to NTFP species (as is being done in natural forests), Fire control etc.
- 4. Take up post harvest tending operations in respect of Eucalyptus and Teak plantations under management by VSSs. These operations should include stool dressing, coppicing, singling, SMC works, Fire control, removal of debris, interploughing (if possible), proper watch and ward from grazing, hacking etc.
- 5. Scale up afforestation activities with Bamboo following semi-mechanical methods of land preparation and planting two year old Rhizomes only.

These activities should be discussed with the VSS members and accordingly micro plans should be revised. These activities should be taken up with immediate effect. All the Conservators of Forests and Divisional Forest Offices are requested to bestow personal attention to these new programmes and ensure further success of the Project.

Sd/-**(S.K. DAS)** Principal Chief Conservator of Forests

Principal Chief Conservator of Forests.

CIRCULAR N0.9/2005/G.1

Sub: Achievements by the Forest Department under different Projects -Enhancement of the capability of the Department to achieve higher targets -Certain Guidelines - Issued - Reg.

Of late, it has been observed that the Forest Department is not able to cope with the annual targets under different projects and the review indicates a dismal achievement against the target. This happened last year and it may also happen this year unless we take necessary actions to eliminate the very cause(s).

An in-depth analysis of the present capacity of staff reveals the following critical factor:-

"The field officers from the level of Range Officers to Beat Officers and even the Senior Officers like D.F.O. and Sub-D.F.O.s do not have a clear idea as to what is the annual physical/financial target under each project. Miserable is the condition of the Beat Officers and the Foresters who do not have any idea of the physical and financial target under different projects which they are supposed to achieve during the year not to talk of the VSS members who do not have any idea about the contents of the micro plan for the current year and the next year nor there is any sincere and serious attempt by senior Officers to impart any practical training to the field staff on how to achieve the target."

A U. O. note was issued by me a few months back with an emphasis to distribute the physical and financial target among the officers up to the level of beat officers and prepare the Action Plan and Implementation Plan after distribution of the physical/financial targets. In some of the Divisions this exercise has been attempted with a very limited accuracy. In most of the cases the action plan has been understood as distribution of physical and financial target among the beat officers. IT IS NOT SO. The subject has again been discussed in detail with the conservators of Forests, D.F.O.s and the F.R.O.s in the 1st week of October, 2005. The following guidelines are issued to be followed by the field officers so that it is internalized at the earliest.

Target Distribution:

The Physical and Financial target should be distributed up to the level of Beat Officers and these targets should be again distributed in all the VSSs under each beat.

Interactions should be held among the field level functionaries and the VSS members so that there is a clear idea about the physical and financial target in each VSS. A tabular statement of the physical / financial target under different components like SMC, maintenance / raising of plantations, advance works should be entered as the revised Micro Plan.

Action Plan:

Action plan should be understood as the working plan for achieving the physical and financial targets indicating clearly as to how much work has to be done in each VSS with the Location map/Compartment No. of the forest area. This should be discussed among the VSS members in detail so that the VSS members particularly the Chair Persons/Vice Chair Persons etc. can clearly describe the action plan. <u>Accordingly the micro plan should also be revised.</u>

As per the physical and financial target, Action Plan has to be prepared indicating very clearly how much target has to be achieved already been supplied to them. If not, free supply should be done immediately.

Implementation Plan:

The Implementation plan will indicate the monthly target with the requirement of daily work force. While preparing the Implementation Plan, it will be prudent to keep higher targets in the beginning and lower targets at the end.

The Implementation Plan should clearly indicate as to how many VSS members will go for SMC works, how many for maintenance of plantations, how many for raising plantations and how many for doing advance works for the next year plantations etc.

If a proper planning is done by upgrading the skill of the VSS members, all the works can be taken up simultaneously.

A few more tips as noted below will be useful to achieve higher progress:-

- 1. The location of the PTs and CCTs may be peg-marked in the VSS area. Similarly the location of the planting site for the next year should also be demarcated.
- 2. The maximum number of work force of VSS may be first put to digging of CCTs. This should go on continuously.

After completion of the Action Plan, the implementation plan should be prepared to complete the works in a time bound manner. Therefore the details of daily work force required should be calculated. <u>This is very important</u>. The No. of VSS members who should go to the forest area every day for works should form part of the Work Plan. The number and types of works they would attend with the location map should be clearly described. The VSS members who would attend to this work should be given proper training to upgrade their skill to carryout the works like digging of trenches, construction of percolation tanks etc.

In one of the Circulars (6/PMU), it has been pointed out that the people below the poverty line among the VSS members who are in need of job every day should be identified and a Core Group should be formed. They should be given simple training on forestry operations. Instructions have already been issued to supply implements like spade, crowbar, pick-axes etc., at free of cost to the members of the Core Group. The **C.Fs/D.F.Os are requested to monitor as to how many such members are available in each VSS and whether the implements have been supplied and how many VSS members are willing to attend to manual works every day.** All illustration given below will make it amply clear.

Example:

If a FRO has a target of Rs.30.00 lakhs under SMC Works and the same has to be achieved in 4 months of time. He has 50 VSSs in his Range.

Exercise :-

- a) Each VSS will have to carry out SMC works worth Rs.30.0 lakhs / 50 = Rs.60,000/in 4 months.
- b) Expenditure per month = Rs.60,000 / 4 = Rs. 15,000/-
- c) Expenditure every day = Rs.15,000 / 20 (Taking 20 working days in a month) = Rs.750/-
- d) Taking on an average that a VSS member can earn Rs.100/- per day from SMC works, it indicates that 7.5 VSS member or 8 VSS members will have to attend to SMC works in the VSS, 20 days a month.
- e) This group of 8 VSS members should be given training to upgrade their skill in addition to supplying of implements like spades etc., as mentioned already. They should be formed into small groups of 2-4 persons and sent to different locations of the VSS area, may be in separate compartments.
- f) Since the payment is on the basis of unit of work, there is no need to insist on the regulation of time. This freedom given to VSS members to work as per their convenience will act as an incentive to them. Workers should be supplied with two sticks of lengths which should correspond to top and bottom width of trench.

Separate group of workers should take up the construction of PTs under the supervision of the staff.

Similarly separate group should take up the maintenance of the plantations etc.

The Conservators of Forests and the Divisional Forest Officers may appreciate that this is one of the most important aspects of practical training and they should take up this training programme with their officers and staff first and then with the VSS members.

The Director, A.P. forest Academy, Dulapally is also requested to take up this training programme in each circle in this aspect at the earliest.

Sd/-**(S.K. Das)** Principal Chief Conservator of Forests