

**OFFICE OF THE PRINCIPAL CHIEF CONSERVATOR OF FORESTS,
(HoFF) MAHARASHTRA STATE, NAGPUR**

Van Bhawan, Ramgiri Road, Civil Lines, Nagpur 440001.

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No.D-14/WP/NR&AR/(13-14)/ 721 /13-14

Nagpur, dated 25/10/2013.

To,
Chief Conservator of Forests (T) (All)

To,
Chief Conservator of Forests,
Working Plans (All)

To,
Conservator of Forest,
Working Plan, (All)

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परिपत्रक

Sub :- Guidelines for carrying out Natural Regeneration, CBO and Cleaning works as per approved Working Plan.

Ref :- This Office Letter No. D-14/WP/NR&AR/(13-14)/708 /dated 24/10/2013.

With reference to this office letter cited above, it is inform you that a meeting was organized to discuss various practical aspects/problems in carrying out operation related to Natural Regeneration /CBO/ Cleaning in forest areas as per approved Working Plans in order to streamline these activities. In this meeting it has been emphasized on the maintenance of existing Natural Regeneration of ecologically valuable important species (both seed origin & coppice origin) and have been concluded that it is very important for protection & development of forests and to restore healthy growing stock & maintaining the overall stocking of forest. These seedlings have to survive overcoming all odds of natural calamity and adverse impacts. Conservation, care & maintenance of these seedlings would result in better Forest cover at low cost. It has also been emphasized that regeneration process is extremely important to restore the health and overall productivity of the forest.

2.00 The officers present in the meeting expressed their views/problems in respect of these activities in their circles/divisions and on the basis of above discussion, the officers present in the meeting unanimously opined to identify important valuable seedlings of seed origin & coppice origin shoots in the first year at the time of main felling & to carry out tending of NR & coppice shoot in B-type of area along with CBO works in harvested area (D-type) next year of main felling, which would give better result.

3.00 On the basis of discussions and decisions taken in the said meeting, following instructions are issued for implementation of Working Plan prescriptions to carry out Natural Regeneration works, CBO and Cleaning in working coupes.

1. For protection & development of natural regeneration of important species (both seed & coppice origin) as well as for management of malformed rooted stock/ shoots, tending of NR & rooted stock

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have to be done properly & in proper time. Estimates will be prepared and technically sanctioned and administratively approved by Competent Authority as per G.R. No. MSC-2011/C.R.175/F-5 dated 30/9/2011. Plantation Registers will be maintained on the lines of AR areas.

2. All seedlings and saplings of seed origin of valuable species, more than 60 cm in height as well as healthy coppice shoots would be identified in the first year, which will be nursed as future crop. Spacing operations, if required, would be carried out to leave nearly 400 saplings per ha at an average of 5 m spacing. Spacing out operation may be in favour of ecologically valuable species and species rarely found in the area.
3. Tending of Natural Regeneration & coppice shoot management, Cut-back-operation (CBO) & Artificial Regeneration may be carried out in the next year of main felling.
4. All treatment type areas will be shown distinctively on the map, including the areas suitable for planting, areas having adequate promising natural regeneration & rooted stock and areas prone to soil erosion. For this purpose, grid maps (100 m X 100 m) with GPS reading should be used, which is available in respective Working Plan office.
5. Immediately, after completion of demarcation of the coupe, RFO should prepare the *Treatment map* of the coupe by clearly showing various *Treatment-type* areas by laying a base line and 100 m X 100 m grid on the ground as well as on the map. The concerned ACF will verify the treatment map and make corrections, if necessary, before submission to the DCF for approval.
6. The treatment map shall bear the date of preparation by the Range Forest Officer and the date of verification by the Assistant Conservator of Forests and their official seals and signature with name.
7. Preparation of treatment map may preferably be done one year in advance of the main felling. Timely preparation would facilitate necessary checking and corrections, if any in time.
8. Demarcation of areas & preparation of treatment map must be carried out under the close supervision of the RFO and under guidance of ACF concerned. DCF should himself inspect at least 50 % of coupes to ensure proper demarcation of areas suitable for *Natural Regeneration & Rooted Stock Management*.
9. *Coupe Demarcation Certificate* for Natural Regeneration should be given by RFO in prescribed format, which would be verified on ground for suitability of such areas for NR works by ACF & countersigned/attested.
10. Immediately after seeking approval of the treatment map, site-specific Work Plan for the entire coupe should be prepared by the RFO, verified by the ACF concerned and approved by the DCF.
11. Action Plan (Estimates) should be prepared for each working coupe on the basis of treatment prescribed for various *Treatment-types areas* marked on the treatment map and got approved by the competent authority, well before the start of main felling.
12. As per requirement of site, weeding, soil working should be proposed and it should be done after inspection of site by CCF. Model estimate for tending of NR as per the prescription of approved Working Plans should be approved by concerned CCF (T).
13. The areas poor in natural regeneration should be artificially regenerated by Teak, important miscellaneous species and Bamboo as per the actual site condition.

14. Involvement of JFMCs, giving benefit to JFMCs from cutback, stump dressing etc. should be considered as per government guidelines.
15. The natural regeneration should be assisted and encouraged by soil working and mulching around them, wherever needed as per provisions of approved Working Plan in the following manner.

16. TENDING OF NATURAL REGENERATION.

First Year Operations i.e. subsequent to main felling year: Weeds in one-meter diameter around saplings of valuable species should be cleared during the first week of July/ August. Uprooted weeds, grasses and leaf-litter should be mixed in the upper layer of soil as the organic mulch and facilitate loosening and aeration of the soil by worms and insects. One soil working should be carried out in October/ November.

Second year operations: The soil working should be repeated in the following year in the month of October in the seedlings of seed origin. However, one scrap weeding of one-meter diameter should be carried out in the first week of August/October around the shoots of seedlings of coppice origin within the rootstock management area.

Third year operations: Singling of coppice shoots, management of damaged and malformed saplings, climber cutting and shrub clearance should be repeated as third year operations.

17. **ROOT STOCK AND COPPICE MANAGEMENT:** In the areas where there are no sufficient seedlings of seed origin (*at least 400 healthy and established saplings*) are found, the existing root stock should be managed to increase the density and productivity of the crop. Preference should be given to encourage the ecologically valuable species. Tending of rootstock (ecologically valuable species) in the B-1 type may be carried out as following :

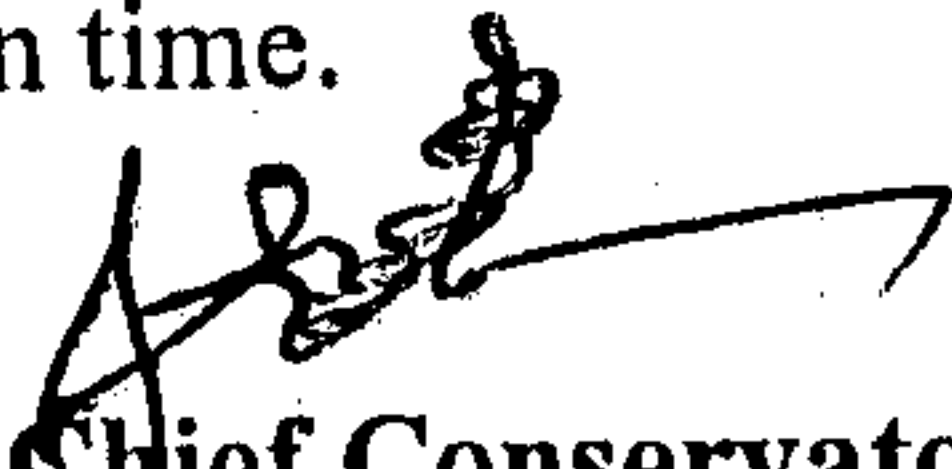
- **Singling of Coppice Shoots:** One healthy and promising coppice shoot will be retained on the stumps and the rest be removed. However, coppice shoots interfering with promising saplings of seed origin would be removed. Such coppice shoots should also be close enough to the ground so that it would not topple after gaining volume and weight and would be able to develop root system of its own subsequently.
- **Coppice Management of Damaged and Malformed Saplings:** The saplings and poles of up to 45 cm gbh having one third of the stem damaged and malformed should be coppiced by cutting flush to the ground. Such coppicing, however, should not expose the ground, causing erosion and leading to soil loss. Poles having at least 2.50 meter of clean bole would not be treated as malformed.

18. Instructions issued by the then APCCF (P &M) M.S., Nagpur dated 2nd July 2010 for demarcation & preparation of treatment map should be followed strictly. The letters issued in this regard from this office as well as from Government have been attached as **Annexure No. I**.
19. All such sites selected for Tending of Natural Regeneration & Root Stock and Coppice Management should be *geo-referenced on the digital map of that division by taking GPS reading* of at least four corners of the said site, which may be compared latter with the Satellite imagery of division for any change in vegetation cover.

20. A proper record, in the form of NR Register, should be maintained at Range level as well as Division level regarding all activities of Regeneration. Records such as Register, No. of seedlings identified, cleaned saplings, maps, GPS reading, operations, photographs etc. should be maintained on regular basis.
21. All entries should be made in the relevant *Coupe Control Forms and Compartment History Forms*. In case of Artificial Regeneration, proper Plantation Registers should be maintained at Range as well as Division levels.
22. In Case of any deviation from the prescriptions of approved Working Plans, proposal for deviation should be submitted and got approved by competent authority in time.

Encl :- As above

Draft approved by PCCF (P & M) M.S., Nagpur


For, Principal Chief Conservator of Forests,
(Production & Management) M.S. Nagpur.

Copy forwarded with compliments along with enclosures to :-

- ✓ 1. Principal Chief Conservator of Forests, (HoFF) M.S., Nagpur,
2. Principal Chief Conservator of Forests, (Wildlife) M.S., Nagpur.

Copy along with enclosures forwarded to :-

1. Additional Principal Chief Conservator of Forests (CAMPA), M.S., Nagpur.
2. Additional Principal Chief Conservator of Forests (NTFP & Evaluation), M.S., Nagpur.
3. Additional Principal Chief Conservator of Forests (BP & D), M.S., Nagpur.
4. Additional Principal Chief Conservator of Forests (Conservation), M.S., Nagpur.
5. Additional Principal Chief Conservator of Forests & Nodal Officer, M.S., Nagpur.
6. Additional Principal Chief Conservator of Forests (R & U), M.S., Nagpur.
7. Additional Principal Chief Conservator of Forests (HRM & Subordinate Services), M.S., Nagpur.
8. Additional Principal Chief Conservator of Forests (IT, Policy & Strategic Planning), M.S., Nagpur.
9. Additional Principal Chief Conservator of Forests (Protection), M.S., Nagpur.
10. Additional Principal Chief Conservator of Forests, (Working Plan-East) Nagpur.
11. Additional Principal Chief Conservator of Forests, (Working Plan-West) Pune.
12. General Manager, WFP & Afforestation Region, FDCM Ltd., Nagpur

Copy along with enclosure forwarded to :-

1. Dy. Conservator of Forests (T) (All)

Draft approved by PCCF (P & M) M.S., Nagpur


For, Principal Chief Conservator of Forests,
(Production & Management) M.S. Nagpur.