



ANNUAL FELLING & REGENERATION PROPOSAL FOR THE YEAR 2022-23

Forest Development Corporation of Maharashtra Limited, Nagpur
(Government of Maharashtra Enterprise)



FOREST DEVELOPMENT CORPORATION OF MAHARASHTRA LIMITED

(Govt. of Maharashtra Enterprise)

CIN : U45200MH1974SGC017206

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"वनाचा समग्र विकास हाच आमचा ध्यास"

Desk-PLN/F&R Proposal/2022-23/C.R.09/1505

Dated-25.07.2022

To,

The Deputy Director General,
Integrated Regional Office (West Central Zone)
Ministry of Environment and Forest and Climate Change
New Secretariat Building,
Civil Lines, Nagpur-440001.

**Sub-Proposal for Felling/Regeneration Activities to be undertaken
during the year 2022-23.**

The proposal for felling and regeneration in respect of forest areas managed by the Forest Development Corporation of Maharashtra Ltd. (FDCM), is hereby submitted for the approval to the Regional Office of the MoEFCC.

2.00 Timely execution of the forestry operations is key to the effective management of forests. The ultimate objective of Coupe-working is aimed at regeneration of forests and to ensure that felling is commensurate to regeneration. These aims can be achieved if and only if the full working season is available for execution, i.e. the annual operations are commenced immediately after the monsoon. At the outset, the FDCM is grateful to the Central Government for according timely permission for carrying out operations during the year 2021-22. It is because of this single factor, all silvicultural operations prescribed for the year 2021-22 could be completed on time, material harvested could be taken out from forests and brought to jungle depots before the fire season and eventually transported to sale-depots well before the onset of monsoon this year. As a natural consequence, the annual felling and regeneration proposal for the year 2022-23 is also being submitted herewith well in time.

3.00 The FDCM has been managing forest areas leased out to it from time to time by the Maharashtra Forest Department. At present, forest areas with the FDCM is divided into three regions, namely Nagpur, Nashik and Chandrapur, spreading over fourteen Forest Project Divisions. The Management Plans of all above 14 Forest Project Divisions have been duly approved by the Regional office of MoEFCC. Out of the above, Management Plans in respect of eleven Divisions have been approved till the year 2025-26, two are in force till 2023-24 and remaining one has validity up to the year 2026-27.

4.00 The working-circles into which the said forest areas are classified under above said Management Plans are as follows-

1. Teak Plantation Rebioisement Working Circle
2. Improvement Working Circle
3. Afforestation Working Circle
4. Planting Stock Improvement Working Circle
5. Selection cum Improvement Working Circle (Nashik Region only)

5.00 It is worth mentioning that the objectives of various Working Circles under the Management Plans are specific and precise in nature. Each Working Circle lays down prescriptions for tackling forest areas falling under it and crop therein to meet the specific objectives. Working Circles are divided into annual Coupes, having appropriate area, which is required to be tackled, based on management plans prescriptions. The annual yield is therefore regulated based on the area of annual coupes, which are demarcated in advance. General characteristics of vegetation, special objectives management and management prescriptions of various working circles are summarized as under –

6.00 TEAK PLANTATION AND REBOISEMENT WORKING CIRCLE

6.01 GENERAL CHARACTERISTICS OF VEGETATION- The forests are mixed in nature and contain trees of all age-classes. The crop consists mainly of miscellaneous species with varying proportions of teak. In some compartments, pure Teak trees are also present, but they are confined to the well-drained and area consisting of good loamy soil. The major miscellaneous species are Saja (*Terminalia tomentosa*), Bija (*Pterocarpus marsupium*), Kalam (*Mytragyna perviflor*), Haldu (*Adina cordifolia*), Tiwas (*Ougennia oogeinensis*), Dhaoda (*Anogeissus latifolia*), Garadi (*Cleistanthus collinus*), Mowai (*Lannea coromandelica*), Rohan (*Soymida febrifuga*), Bihrra (*Chloroxylon swietenia*), Surya, Lendia (*Lagerstroemia parviflora*), Chichwa (*Albizzia odoratissima*), Parad etc. In the fruit bearing speices Tendu (*Diospyros melanoxylon*), Moha (*Madhuca indica*), Char (*Buchanania lanza*), Aonla (*Embllica officinalis*), Bel (*Aegle marmelos*), Harra (*Terminalia chebula*) and Beheda (*Terminalia bellerica*) are the main species in the under-storey.

6.02 The failed Teak plantation areas are covered with advance growth of Saja (*Terminalia tomentos*), Birra (*Chloroxylon swietenia*), Rohan (*Soymida febrifuga*), Garari (*Cleistanthus collinus*) and other inferior miscellaneous species.

6.03 SPECIAL OBJECTIVES OF MANAGEMENT:

1. To enhance the productivity of the forest by supplemental artificial regeneration of genetically superior stock.
2. To create a normal age-gradation classes.
3. To obtain sustained supply of medium to large size timber and poles.
4. To utilize the land for optimum economic productivity and sustained yield.
5. To generate employment in Rural and Tribal areas.

6.04 Criterion for Felling: The Critical Crop Girth (CCG)—The silvicultural system on which the aforesaid working circle is based is the **Conversion to Uniform System with Supplemental Artificial Regeneration of Genetically Superior Stock**, duly approved by the MoEF vide their letter No. 9-10/2001(RoHQ) Dtd. 20.12.2001 and No. 6-5/2000 (RoHQ) Dtd. 02.08.2001. Copies are collectively enclosed as **Annexure-1** for the ready reference. In this silvicultural system, a sustainability yardstick, succinctly expressed as the **Critical Crop Girth**, is used to determine the availability of a forest patch of definite area, for its harvest. Annual Coupes are therefore harvested section-by-section (grids admeasuring 100 m x 100 m), if and only if the average crop-girth of a given section is found to be greater than the **Critical Crop Girth**, corresponding to the site-quality and crop-composition to which that particular section belongs to. The **Critical Crop Girth** is unique for different site-qualities and crop-composition. In other words, if a crop having crop girth less than the CCG, is harvested, the productivity of the site shall go down in proportion to the difference. Critical Crop Girths for different site-qualities and crop-composition have been prescribed in Management Plans.

6.05 Management practice-- It may be appreciated that among all working-circles, it is primarily the Teak Plantation and Rebiosement Working Circle, which is associated with the planned felling of trees based on pre-determined objective criterion. The entire area is divided into grids of 1 ha. (100m x 100m) and 100% enumeration is carried out. Based on the enumeration, the basal area is calculated. The average crop-girth, based on the basal area in each such grid is calculated and felling is carried out only in those grids wherein the average crop girth so calculated is more than the **Critical Crop Girth** which has been prescribed site-quality wise in the Management Plans. The trees are accordingly marked for felling only in such grids. Trees are not marked for felling in those grids where average crop girth is lesser than the Critical Crop Girth. The site quality wise **Critical Crop Girth** for different site-qualities and crop-compositions (extent of non-teak species in the crop) is prescribed in Management Plans is tabulated as follows---

Table

Sr. No.	Average height of Dominant mature Trees in Crop.	Corresponding All India Teak Site Quality	Proportion of Teak Bija, Ain, Haldu and Kalamb in the Crop	Critical Crop Girth
1	2	3	4	5
1	upto 21 m	Up to III	More than 40%	70 cm
2	upto 21 m	Up to III	20% to 40%	60 cm
3	upto 21 m	Up to III	Below 20%	50 cm
4	21 to 27 m	II/III, II	More than 40%	85 cm
5	21 to 27 m	II/III, II	20% to 40%	75 cm
6	21 to 27 m	II/III, II	Below 20%	65 cm
7	Above 27 m	I/II, I	More than 40%	110 cm
8	Above 27 m	I/II, I	20% to 40%	95 cm
9	Above 27 m	I/II, I	Below 20%	80 cm

6.06 Marking Prescriptions--- Following regulatory principles are followed---

1. All young to middle-aged fruit bearing trees up to 20 trees / ha. are retained.
2. Young to middle-aged trees of semal, khair, rosewood and other superior miscellaneous species upto 20 trees / ha uniformly spread over the area are retained.
3. No felling is done on either side of nallas/streams, river-banks upto 20 m. distance.
4. The section size at a place is kept below 20 ha.
5. 5-meter width strip of natural forest is retained on all sides of sections.
6. Genetically superior planting stock is used.
7. In case, adequate numbers of fruit trees are not available equivalent numbers of miscellaneous trees are retained. All kullu (*Sterculia urens*), mahua (*Madhuca indica*), chinch (*Emblica officinalis*) and mango (*Mangifera indica*) trees, irrespective of their age are reserved and not marked for felling.
8. No felling is carried out in areas having teak site quality IV, water logged areas, and areas having slope more than 25 degrees.

7.00 IMPROVEMENT WORKING CIRCLE

7.01 GENERAL CHARACTERISTICS OF VEGETATION- Areas allocated to this Working Circle are mainly linear strips surrounding teak plantation having density between 0.4 to 0.6, with all India Teak Site Quality varying from **III to IV-b** and partly under stocked. Most of the areas consist of miscellaneous crop. Predominant species are Bija (*Pterocarpus marsupium*), Ain (*Terminalia tomentosa*), Haldu (*Adina cordifolia*), Dhawada (*Anogeissus latifolia*), Salai (*Boswellia serrata*), Mowai (*Lannea coromandelica*), Shisham (*Dalbergia latifolia*), Khair (*Acacia catechu*), Anjan (*Hardwickia binnata*), Garadi (*Cleistanthus collinus*), Bherra (*Chloroxylon swietenia*), Lendia (*Lagerstromia perviflora*) etc. along with **sparse teak**.

7.02 **Crop is near to maturity and the regeneration of principal species is adequate but is suppressed due to mature top tree canopy.** The forests allotted to this Working Circle are in a degraded stage and require Improvement.

7.03 SPECIAL OBJECTIVES OF MANAGEMENT:

1. To improve the quality and productivity of the existing crops by improvement felling, tending operations in favour of valuable species and supplementary plantation, all these measures are aimed at nursing back these forests to normalcy.
2. To remove dead, malformed and diseased trees with a view to facilitate regeneration.
3. To meet the bonafide needs of the local people by carrying out the hygienic tending and thinning operations, expected to provide small timber, poles and firewood.
4. To conserve the biological diversity of the area.

7.04 Management prescriptions—This Working Circle prescribes removal of matured trees above the harvestable girth to create opening in the tree canopy,

thereby, facilitating tree-growth in the lower girth classes of teak and other valuable light-demanding (shade-intolerant) species.

7.05 Areas containing dense pole crops are thinned during the working. The areas poor in natural regeneration are artificially regenerated by appropriate species as per the requirement of site.

7.06 Considering the general characteristics of crop, basic objective of management and the prescriptions mentioned above, no rotation has been fixed as the basic idea is to improve the growing stock by tending of recruitment, thinning in pole crop removal of dead and diseased trees.

7.07 Harvestable Girth—This working circle aims at improvement of the crop, and therefore, harvesting is not visualized. Nevertheless, for the purpose of managing a few dense patches of over-matured trees, the harvestable girth adopted for the SCI working circle areas has been applied for this working circle. Harvestable girths for Teak and its associates as well as for other species for different site qualities have been prescribed in respective Management Plans, having this Working Circle.

7.08 Silviculturally Available Trees—A tree is said to be silviculturally available if its removal---

- i) does not create a permanent gap in the canopy,
- ii) tends to improve the remaining crop in terms of volume production, or
- iii) helps the growth of young trees down to the saplings stage of any of the valuable species.

7.09 It may therefore be appreciated that the felling is basically aimed at for the purpose of improvement of the crop and not for the yield.

8.00 AFFORESTATION WORKING CIRCLE

8.01 GENERAL CHARACTERISTICS OF VEGETATION—This Working Circle generally comprises of degraded open forest areas interspersed with forest blanks or brushwood. The blank areas have dominance of shrubby growth and inferior grasses. The allotted areas in general are highly degraded, under stocked and open with canopy density less than 0.4.

8.02 The crop consists mainly of scattered trees or patches of open forests. The principal species is Teak (*Tectona grandis*), Saja (*Terminalia tomentosa*) and its common associates are Dhaoda (*Anogeissus latifolia*), Bhirra (*Chloroxylon swietenia*), Rohan (*Soymida febrifuga*), Tendu (*Dispyros melanoxylon*), Lendia (*Lagerstroemia parviflora*), Salai (*Boswellia serrata*), Mowai (*Lannea coromandelica*), Char (*Buchnania lanza*) and Palas (*Butea monosperma*) etc., The dominant teak-site quality is IV. The canopy-density of the vegetation varies from blank to 0.4. The crop is generally young with occasional middle aged or mature trees. Natural regeneration of common species is very less due to compactness of soil because of unregulated grazing and fire and hence their establishment is poor.

8.03 SPECIAL OBJECTIVES OF MANAGEMENT

1. To restore the vegetative cover of the degraded and open areas.
2. To increase their productivity by site protection and tending of natural regeneration and rootstock, supplementing it with plantations of desired species, wherever, necessary.
3. To check the loss of top soil by adopting suitable soil and moisture conservation measures and to increase the water absorption capacity of the soil.
4. To improve the habitat of wild animal and birds.

8.04 It may therefore be seen that in this Working-Circle only wind-fallen dead and extremely malformed trees are removed, without any consideration for the yield as such.

9.00. PLANTING STOCK IMPROVEMENT WORKING CIRCLE—

This Working Circle includes Seed Stands, Seed Production Areas and Seed Orchards mainly of Teak.

9.01 Seed Stand (SS)—The seed stand is a crop raised of vigorously growing, middle aged trees of good quality. It is the crop from seed origin and not from coppice origin.

9.02 Seed Production Areas (SPA)—Seed Stands are gradually converted into SPA by removing inferior trees and regaining best superior trees.

9.03 Seed Orchards—Seed orchard is a stand of trees of selected clones or progenies, which are isolated or managed to avoid or reduce pollination from outside sources, managed to produce frequent abundant and easily harvested crop of seed.

9.04: GENERAL CHARACTERISTICS OF VEGETATION

The selection of seed area has been done as per the technical guidance of the experts. The Seed Stand and Seed Production Areas are selected from phenotypically superior old plantations/natural forest in order to collect the superior quality seeds. Orchards are the clonal progenies of plus trees. Seeds obtained from orchard are supposed to be genetically superior as compared to Seed Stand and Seed Production Areas. The crop in this Working Circle is predominantly of Teak (*Tectona grandis*) with Sisoo (*Dalbergia latifolia*) and Shivan (*Gmelina arborea*).

9.05 SPECIAL OBJECTIVES OF MANAGEMENT:

The primary object of management of this area is to supply quality seeds for the plantation activities in the forestry sector to enhance the productivity of forest. The main objective of teak improvement programme is to produce seed for superior timber

quality, fast growth & higher disease resistance by selection and breeding technology.

10.00 SELECTION CUM IMPROVEMENT WORKING CIRCLE (Only Nashik Region).

10.01 GENERAL CHARACTERISTICS OF VEGETATION-- The forest mostly belongs to the type "Moist Teak Bearing Forest" and this area comprise mostly mixed forest. The density of this forest is between 0.4-0.6 bearing miscellaneous species and sparsely Teak in patches. The crop is conspicuously deficient in the higher girth classes, on account of heavy grazing and the repeated fires. Natural regeneration particularly, of valuable species is also sparse.

10.02 SPECIAL OBJECTIVES OF MANAGEMENT:

1. To maintain and improve the soil cover so as to prevent accelerated soil erosion on steep hill slopes and thus to preserve and improve the site quality.
2. To obtain big size timber of Teak and other valuable species.
3. To increase the proportion of valuable species by proper treatment and by planting in the gaps.
4. To maintain the biodiversity.

11.00 GENERAL

11.01 Taking into consideration the general character of the vegetation, special objectives and management prescriptions under different working circles, it is primarily the Teak Plantation and Rebiosement Working Circle where predetermined felling based on objective criterion is envisaged and therefore it is primarily this working circle, which technically falls in the purview of annual felling permission. Going by the prescriptions of the working plans for rest of the working circles, it is evident that fellings if any, are basically meant for hygiene of the crop by removal of unwanted vegetation/growth, causing undue hindrance to the natural regeneration and vigorous growth of the principal species.

11.02 The Yield-Estimation is relied upon the local Volume Tables for the Teak, which specifies the site-quality wise and girth-class wise apportionment of yield of standing trees in terms of stem-timber (u.b.) and small wood (o.b.) based on quarter-girth measurements. While according the approval for the year 2021-22, the IRO advised that the FDCM should carry out exercise for preparation of the latest local volume tables of all major species to be felled in all regions to get realistic estimation of the yield. As a first step in that direction, the FDCM has come up with the revised and updated edition of the Yield and Stand Tables for the Teak, which has already been published. The FDCM will take further necessary steps for compilation of local Volume Tables for other major species also.

11.03 Thus, depending on the composition of crop, i.e. the extent of non-teak species present in different proportion in different localities, other local composite factors and form of individual trees themselves (malformed, crooked, dead, deceased, dying etc.), the actual yield has been found to be varying to some extent from that of the anticipated yield, if considered strictly on the basis of its classification, namely stem-timber and small-wood. However as stated above, since the yield is purely area-regulated (areas of the annual coupe), the minor aberration on that count is automatically taken care of.

11.04 So far as the deviation of actual yield from the estimated one is concerned, it is worth mentioning that, the yield estimation of standing trees in terms of **stem-timber** and **small wood** is solely based on silvicultural criteria. However, the felled and extracted material is stacked in sale-depots purely on basis of utilization criteria i.e. market considerations. The figures of actual yield are based on material measured in the depots. Under such considerations, the estimated **stem-timber based on silvicultural considerations** may not be the **timber based on market considerations** after harvesting. As a result, based on utilization criteria, it needs to be classified under the category of 'firewood' (small timber). This phenomenon is distinctly observed where the crop is predominantly composed of non-teak species. On the other hand, where the crop predominantly comprises teak and its associates, the major component of actual yield is found to be timber and the small wood component of the actual yield is significantly lower than what was anticipated from the standing trees.

For example, from the market point of view, certain species viz. *garari*, *lendia*, *dhaman*, *ghogar*, *hivar*, *dhoban*, *waranga*, *apta*, *palas* etc. inherently belong to firewood category, irrespective of the girth-class they belong to. As a consequence, the entire volume is considered as small-wood, irrespective of girth-class. On the other hand, material harvested from predominantly timber species like teak and its associates may happen to be small-wood on silvicultural considerations, however from market point of view, they are classified as **timber** and not **firewood**.

11.05 It may therefore be seen that although the actual yield in terms of volume of stem-timber and small-wood may vary from the cubical contents under these categories, if considered individually, however the total volume content in both categories taken together, is by and large within the limits of the total anticipated yield. 

*11.06 The yield figures with respect to small wood have been mentioned in cubic meter instead of in number of beats, as all records in that respect are maintained in terms of cubic meter. A separate sheet showing the yield of small wood in terms of number of beats is also enclosed for ready reference.

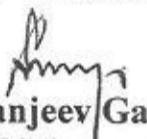
11.07 As an abundant precaution and to ensure closer monitoring on harvesting operations, a system has been brought in place, whereby all Divisions are required to submit weekly report of felling operations. Such weekly reports were regularly scrutinized and analyzed at regional level as well as at the level of the Managing Director.

12.00 All requisite formats for seeking approval for the year 2022-23 are duly enclosed. It is therefore requested to place the proposal for the consideration of the Regional Empowered Committee for its approval.

Encl:-As above.

O.C. approved by Managing Director

Your's sincerely


(Sanjeev Gaur)
Chief General Manager (Planning)

Annexure - I

ATR

(Action Taken Report)

Format for submission of Proposal for carrying out Harvesting Operations

I. Target and Achievement of year 2021-22 (previous year for which felling permission is sought)-

a) Teak Plantation and Reboisement Working Circle

Project Division	No of couples	Total Area as per Management Plan (In ha)	Area Fit for working (In ha)	Area worked (in ha.)	Physical			Expenditure Rs in lacs			Remarks
					Anticipated Yield		Actual Yield obtained.	Target	Achievement		
Gondia	25	639.00	207.66	176.57	Stem Timber M ³	5673.02	3950.21	415.80	415.80	Works could not be executed over an area 31.09 ha. due to opposition from villagers.	
	2021-22 = 4	475.00	72.50	72.50	Poles No.	21185	10244				
	2020-21 = 9	694.00	175.13	175.13	Small-wood M3	9044.15	11341.80				
Yavatmal	13	1169.00	247.63	247.63	Stem Timber M ³	2083.13	1780.35	15.94	44.08		
	2021-22 = 1	203.02	12.13	12.13	Poles No.	22131	22938				
	2020-21 = 1	158.10	20.00	20.00	Small-wood M3	3509.36	2613.60				
Kinwat	2	361.12	32.13	32.13	Stem Timber M ³	5143.93	4394.49	77.47	104.92		
	2021-22 = 1	158.10	20.00	20.00	Poles No.	42344	39883				
	2020-21 = 1	158.10	20.00	20.00	Small-wood M3	7657.52	6993.6				
Total	13	1169.00	247.63	247.63	Stem Timber M ³	7227.06	6174.84	93.41	149.00		
	2021-22 = 1	203.02	12.13	12.13	Poles No.	64475	62821				
	2020-21 = 1	158.10	20.00	20.00	Small-wood M3	11166.87	9607.20				
Kinwat	2	361.12	32.13	32.13	Stem Timber M ³	435.00	219.54	20.44	11.91		
	2021-22 = 1	158.10	20.00	20.00	Poles No.	6510	3116				
	2020-21 = 1	158.10	20.00	20.00	Small-wood M3	473	228				
Total	2	361.12	32.13	32.13	Stem Timber M ³	468.00	289.00	38.33	15.69		
	2021-22 = 1	158.10	20.00	20.00	Poles No.	11905	10704				
	2020-21 = 1	158.10	20.00	20.00	Small-wood M3	265	474				
Total	2	361.12	32.13	32.13	Stem Timber M ³	903.00	508.54	18415	13820		
	2021-22 = 1	158.10	20.00	20.00	Poles No.	508.54		58.77	27.60		
	2020-21 = 1	158.10	20.00	20.00	Small-wood M3	738.00	702.00				

Project Division	No of coupes	Total Area as per Management Plan (In ha)	Area Fit for working (In ha)	Area worked (in ha.)	Physical			Expenditure Rs in lacs	Remarks
					Anticipated Yield		Actual Yield obtained.		
Bhandara	2	40.00	0.00	0.00	Stem Timber M ³	0.00	0.00	0.00	
					Poles No.	0	0	0.00	
					Small-wood M3	0.00	0.00		
					Stem Timber M ³	1256.00	1282.84		
					Poles No.	3160	4093	88.24	
					Small-wood M3	4583.00	5283.60		
					Stem Timber M ³	1471.00	1352.83		
					Poles No.	4640	4292	120.52	
					Small-wood M3	6567.00	8140.80		
					Stem Timber M ³	2727.00	2635.67		
					Poles No.	7800	8385	208.51	
					Small-wood M3	11150.00	13424.40	208.76	
					Stem Timber M ³	158.91	146.84		
					Poles No.	4047	3842	25.95	
					Small-wood M3	432.97	483.60	9.91	
					Stem Timber M ³	546.96	439.86		
					Poles No.	2537	2978	55.19	
					Small-wood M3	1350.08	1496.4	21.08	
					Stem Timber M ³	437.28	315.449		
					Poles No.	10	426	52.38	
					Small-wood M3	1650.54	1572.00	20.01	
					Stem Timber M ³	1143.15	902.15		
					Poles No.	6594	7246	133.52	
					Small-wood M3	3433.59	3552.00	51.00	
	Total	7	131.01	131.01					

Project Division	No of coupes	Total Area as per Management Plan (In ha)	Area fit for working (In ha)	Area worked (in ha)	Physical			Expenditure Rs in lacs	Remarks	
					Anticipated Yield		Actual Yield obtained.			
Pranhita	2021-22 = 5	271.00	167.30	167.30	Stem Timber M ³	5195.89	4831.48	128.94	Majority of the area was not workable and therefore area could not be felled in its entirety.	
	2020-21 = 4	163.00	163.00	20.50	Poles No.	1591	3957			
	Total	9	434.00	330.30	Small-wood M3	7553.26	4854.60	19.93		
					Stem Timber M ³	948.890	549.68			
					Poles No.	318	498			
					Small-wood M3	1982.66	532.20			
Markhanda	2021-22 = 12	831.12	297.29	297.29	Stem Timber M ³	6144.78	5381.16	148.87	Marginal increase in stem timber is compensated in small wood.	
	2020-21 = 2	299.73	140.09	140.09	Poles No.	1909	680.53			
	Total	14	1130.85	437.38	Small-wood M3	9535.92	5386.80	119.11		
					Stem Timber M ³	12518.40	12573.77			
					Poles No.	4327	18720			
					Small-wood M3	23919.62	18012			
Brahmapuri	2021-22 = 6	450.00	118.00	118.00	Stem Timber M ³	5145.38	5693.588	252.74	The entire crop consists of non-teak species only. The anticipated yield is estimated based on the local Volume Table for Teak. However, in absence of teak, the variation in terms of small wood is more. However, this variation is reasonably compensated by the equivalent decrease in the stem timber.	
	2017-18 = 2	151.40	19.00	19.00	Poles No.	969	3670			
	Total	13	809.40	215.10	Small-wood M3	480.96	312.24	371.85		
					Poles No.	0	0			
					Small-wood M3	4315.78	7737.40			
					Stem Timber M ³	757.28	1380.00			
					Poles No.	0	0	29.08		
					Stem Timber M ³	2227.22	1460.44	218.68	119.53	
					Poles No.	0	0			
					Small-wood M3	3378.75	5814.00			
					Stem Timber M ³	5188.40	3561.25			
					Poles No.	0	0	640.14	349.90	
					Small-wood M3	8451.81	14951.40			

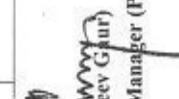
Project Division	No of coupes	Total Area as per Management Plan (In ha.)	Area Fit for working (In ha)	Area worked (in ha.)	Physical			Expenditure Rs in lacs		Remarks
					Anticipated Yield		Actual Yield obtained.	Target	Achievement	
Central Chanda	2021-22 = 5	120.00	90.91	90.91	Stem Timber M ³	1001.58	904.39	89.95	51.48	Increase in stem timber is compensated by the equivalent decrease in small wood.
	2020-21 = 4	105.00	95.00	95.00	Poles No.	3063	15163			
					Small-wood M3	2349	1383			
					Stem Timber M ³	1592.89	2155.48			
					Poles No.	2210	13620	102.47	58.64	
					Small-wood M3	2844.36	2140.80			
	2019-20 = 1	12.00	12.00	12.00	Stem Timber M ³	213.61	205.15			
					Poles No.	214	853	13.87	7.94	
					Small-wood M3	411.62	351.00			
	2018-19 = 1	5.00	5.00	5.00	Stem Timber M ³	34.40	23.99			
W.Nashik					Poles No.	319	653	3.67	2.10	
					Small-wood M3	96.66	33.00			
	Total	11	242.00	202.91	Stem Timber M ³	2842.48	3289.00			
					Poles No.	5806	30289	209.96	120.16	
					Small-wood M3	5701.61	3907.80			
					Stem Timber M ³	76.500	30.23			
					Poles No.	267	159	8.81	4.23	
					Small-wood M3	70.00	70.40			
					Stem Timber M ³	49589.17	44700.36			
					Poles No.	131747	159809	2875.48	1721.27	
	Grand Total	115	5548.98	2133.11	1959.52	92064.02	88790.60			


 (Sanjeev Gaur)
 Chief General Maanger (Planning)

b) Improvement Working Circle

Project Division	No of coupes	Total Area as per Management Plan (In ha)	Area Fit for working (In ha)	Area worked (in ha.)	Physical		Actual Yield obtained	Target	Expenditure Rs. In lacs
						Anticipated Yield			
Nagpur	2021-22=11	525.00	290.87	290.87	Stem Timber M ³ Poles No.	74.00 940	100.99 621.00	59.60	28.53
	2020-21=7	536.00	317.00	317.00	Small-wood M3 Stem Timber M ³ Poles No.	624.00 42.00 292	50.27 322	55.16	31.11
	Total	18	1061.00	607.87	607.87 Poles No.	579.00 116.00	637.80 151.26	114.76	59.64
Bhandara	7	395.00	236.00	236.00	Small-wood M3 Stem Timber M ³ Poles No.	1260.00 20.22 0	1261.80 15.79 0	1112	7.48
	Gondia	16	818.41	604.91	604.91 Poles No.	1085.00 977	1298.40 114	6.26	6.26
		2021-22=12	662.86	662.81	Small-wood M3 Stem Timber M ³ Poles No.	1290.02 761.00 13000	1669.50 738.27 520.00	30.57	24.42
Kinwat	2020-21=8	674.61	379.54	379.54	Stem Timber M ³ Poles No.	651.66 6856	653.12 3346	482.31	43.86
	Total	20	1337.47	1042.35	1042.35 Poles No.	40.00 1412.66 19856	164.40 1391.39 9047	48.89	25.11
		2021-22=27	702.50	702.50	Small-wood M3 Stem Timber M ³ Poles No.	560.00 592.98 2503	414.00 512.98 2519	100.68	68.97
West Chanda	2020-21=30	858.20	858.20	858.21	Small-wood M3 Stem Timber M ³ Poles No.	450.85 1990 11801.57	412.46 2014 1159.50	48.88	16.05
	Total	57	1560.70	1560.70	Small-wood M3 Stem Timber M ³ Poles No.	1043.83 4493 13000.24	925.44 4533 2318.7	131.93	43.32

Project Division	No of coupes	Total Area as per Management Plan (In ha)	Area Fit for working (In ha)	Area worked (in ha.)	Physical			Expenditure Rs. In lacs
					Anticipated Yield		Actual Yield obtained	
Central Chanda	1	133.07	133.07	133.07	Stem Timber M ³ Poles No.	7.73 1	8.05 0	1.53 0.53
Brahmapuri	18	917.46	867.46	867.46	Small-wood M3 Stem Timber M ³ Poles No.	17.33 225.43 30	19.20 199.45 3.2	
Markanda	2021-22 - 12	795.55	712.54	712.54	Small-wood M3 Stem Timber M ³ Poles No.	1159.31 443.44 0	970.20 499.63 81	48.63 44.19 22.92
Markanda	2020-21 - 1	25.00	25.00	25.00	Small-wood M3 Stem Timber M ³ Poles No.	432.33 12.66 0	246.00 11.50 0	
Total	13	820.55	737.54	737.54	Small-wood M3 Stem Timber M ³ Poles No.	456.10 511.13 0	511.13 45.75 81	0.80 1.56 45.75
Pranhita	11	510.51	510.51	510.51	Small-wood M3 Stem Timber M ³ Poles No.	445.31 57.80 134	255.60 71.68 53	23.72
West Nashik	17	1226.43	1226.43	531.87	Small-wood M3 Stem Timber M ³ Poles No.	90.16 103.50 185	90.00 66.78 0	1.62
Grand Total	178	8780.59	7526.84	6832.28	Small-wood M3 Stem Timber M ³ Poles No.	128.00 3903.97 26908	133.08 3823.27 14972	6.38 547.39 8430.48
					Small-wood M3	18975.37		258.54

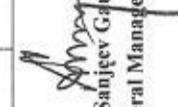

(Samjeet Gaur)

Chief General Manager (Planning)

c) Afforestation Working Circle

Project Division	No of coupes	Physical				Expenditure Rs. In lacs		
		Total Area as per Management Plan (In ha)	Area Fit for working (In ha)	Area worked (in ha)	Anticipated Yield	Actual Yield obtained	Target	Achievement
Nagpur	2021-22 =10	564.00	85.00	85.00	Stem Timber M ³ Poles No.	0.00	0.00	7.69
	2020-21=10	551.02	339.00	339.00	Small-wood M3 Stem Timber M ³ Poles No.	464.00	156.00	22.32
	Total	20	1115.02	424.00	Small-wood M3 Stem Timber M ³ Poles No.	4.00	3.21	30.66
Bhandara	6	189.00	50.00	50.00	Small-wood M3 Stem Timber M ³ Poles No.	175	296	58.23
	2021-22 = 8	282.00	282.00	282.00	Small-wood M3 Stem Timber M ³ Poles No.	126.00	548.40	38.35
	2020-21 = 10	381.60	381.60	381.60	Small-wood M3 Stem Timber M ³ Poles No.	4.00	3.21	80.55
Yavatmal	Total	18	663.60	663.60	Small-wood M3 Stem Timber M ³ Poles No.	175	296	704.40
	2021-22 = 4	155.56	155.56	155.56	Small-wood M3 Stem Timber M ³ Poles No.	62.00	417.00	5.65
	2020-21 = 3	129.58	111.58	111.58	Small-wood M3 Stem Timber M ³ Poles No.	110.00	18.89	5.16
Kirwat	Total	7	285.14	267.14	Small-wood M3 Stem Timber M ³ Poles No.	329	167	1.63
	2021-22 = 4	155.56	155.56	155.56	Small-wood M3 Stem Timber M ³ Poles No.	66.59	20.40	2.00
	2020-21 = 3	129.58	111.58	111.58	Small-wood M3 Stem Timber M ³ Poles No.	66.59	332	1.54
	Total	7	285.14	267.14	Small-wood M3 Stem Timber M ³ Poles No.	128.59	119.48	2.36
	2021-22 = 4	155.56	155.56	155.56	Small-wood M3 Stem Timber M ³ Poles No.	66.59	558	4.36
	2020-21 = 3	129.58	111.58	111.58	Small-wood M3 Stem Timber M ³ Poles No.	125.00	110.00	3.17
	Total	7	285.14	267.14	Small-wood M3 Stem Timber M ³ Poles No.	26.40	60.69	8.96
	2021-22 = 4	155.56	155.56	155.56	Small-wood M3 Stem Timber M ³ Poles No.	5.00	558	13.22
	2020-21 = 3	129.58	111.58	111.58	Small-wood M3 Stem Timber M ³ Poles No.	128.59	519	11.40
	Total	7	285.14	267.14	Small-wood M3 Stem Timber M ³ Poles No.	176.2	119.48	24.62
	2021-22 = 4	155.56	155.56	155.56	Small-wood M3 Stem Timber M ³ Poles No.	130.00	52.80	15.39
	2020-21 = 3	129.58	111.58	111.58	Small-wood M3 Stem Timber M ³ Poles No.			

Project Division	No of coupes	Physical				Expenditure Rs. In lacs	
		Total Area as per Management Plan (In ha)	Area Fit for working (In ha)	Area worked (in ha.)	Anticipated Yield	Actual Yield obtained	Target
W.Chanda	2021-22=16	405.60	405.60	405.60	Stem Timber M ³ Poles No.	199.35 1178	178.23 28.37
	2020-21=16	426.75	426.75	426.75	Small-wood M3 Stem Timber M ³ Poles No.	617.49 212.32 943	601.80 196.57 94.3
					Small-wood M3 Stem Timber M ³ Poles No.	587.52 411.67 2121	562.20 374.80 2052
Total	32	832.35	832.35	832.35	Small-wood M3 Stem Timber M ³ Poles No.	1205.01 1164.00 0.00	19.53 52.38 0.00
C.Chanda	1	20.00	20.00	20.00	Small-wood M3 Stem Timber M ³ Poles No.	0 0 0	0.07 0.08 0
Bramhapuri	14	934.00	895.00	895.00	Small-wood M3 Stem Timber M ³ Poles No.	14.40 75.75 0	8.40 67.96 32
Grand Total	98	4039.11	3152.09	3152.09	Small-wood M3	4489.20	3568.80


(Sanjeev Gaur)
Chief General Manager (Planning)

d) Improvement Felling in Teak Plantation Reboisement Working Circle

Project Division	No of coupes	Total Area as per Management Plan (In ha)	Area Fit for working (In ha)	Area worked'(in ha.)	Physical		Expenditure Rs. In lacs
					Anticipated Yield	Actual Yield obtained	
Yavatmal	2021-22 = 11	330.50	330.50	330.50	Stem Timber M ³ Poles No.	129.17 2361	112.89 5.15
	2020-21=20	391.87	391.87	391.87	Small-wood M3 Stem Timber M ³ Poles No.	486.11 177.60 2586	369.60 139.29 2039
	Total	31	722.37	722.37	Small-wood M3 Stem Timber M ³ Poles No.	521.54 306.77 4947	282.00 252.19 4089
	2021-22 = 4	112.02	112.02	112.02	Small-wood M3 Stem Timber M ³ Poles No.	1007.66 89.00 1473	651.60 90.69 885
	2020-21 = 3	97.00	97.00	97.00	Small-wood M3 Stem Timber M ³ Poles No.	175.00 103.49 1186	52.80 92.47 1024
	Total	7	209.02	209.02	Small-wood M3 Stem Timber M ³ Poles No.	192.49 180.00 2059	183.16 112.80 1909
	2021-22 = 12	332.00	332.00	332.00	Small-wood M3 Stem Timber M ³ Poles No.	104.53 113.21 0	9.95 15.15 18.59
	2018-19 = 1	19.44	19.44	19.44	Small-wood M3 Stem Timber M ³ Poles No.	4.02 5.38 0	666.60 3.13 7.20
	2017-18 = 5	132.40	132.40	132.40	Small-wood M3 Stem Timber M ³ Poles No.	30.51 25.49 0	35.18 26.59 0
	2016-17 = 6	129.90	129.90	129.90	Small-wood M3 Stem Timber M ³ Poles No.	98.35 164.55 0	133.20 178.11 0
Total	24	613.74	613.74	613.74	Small-wood M3	630.00	881.40

Project Division	No of couples	Total Area as per Management Plan (In ha)	Area fit for working (In ha)	Area worked (in ha.)	Physical		Actual Yield obtained	Target	Expenditure Rs. In lacs
					Anticipated Yield	Stem Timber M ³			
Markanda	2021-22 = 12	253.60	253.60	253.60	Poles No.	68	137	221.65	188.45
					Small-wood M3	307.31	238.80		
	2020-21 = 4	291.94	291.94	291.94	Stem Timber M ³	302.68	203.13		
					Poles No.	35	138	237.64	275.37
					Small-wood M3	404.38	160.20		
					Stem Timber M ³	557.90	411.19		
Pranhita	Total	16	545.54	545.54	Poles No.	103	275	459.29	463.82
					Small-wood M3	711.69	399.00		
					Stem Timber M ³	55.06	75.23		
		6	103.70	103.70	Poles No.	145	112	3.00	2.47
					Small-wood M3	60	50.40		
					Stem Timber M ³	1276.77	1099.88		
Grand Total			2194.37	2194.37	Poles No.	7854	6385	536.34	507.67
					Small-wood M3	2589.35	2095.20		


 (Sahjeev Qaur)
 Chief General Manager (Planning)

e) Selection Cum Improvement Working Circle

Project Division	No of coupes	Physical				Expenditure Rs. In lacs		
		Total Area as per Management Plan (In ha)	Area Fit for working (In ha)	Area worked (in ha.)	Anticipated Yield	Actual Yield Obtained	Target	Achievement
Dahanu	2	225.00	90.00	25.00	Stem Timber M ³ Poles No. Small-wood M3	92.28 0 563	68.55 0 1050	5.78 2.52

f) Plantation Management Working Circle

Project Division	No of coupes	Physical				Expenditure Rs. In lacs		
		Total Area as per Management Plan (In ha)	Area Fit for working (In ha)	Area worked (in ha.)	Anticipated Yield	Actual Yield Obtained	Target	Achievement
Pune	4	236.50	236.50	217.70	Stem Timber M ³ Poles No. Small-wood M3	675.00 0 10800	1330.56 0 15493	91.80 225.45

g) Rehabilitation of Degraded Forest Working Circle

Project Division	No of coupes	Physical				Expenditure Rs. In lacs		
		Total Area as per Management Plan (In ha)	Area Fit for working (In ha)	Area worked (in ha.)	Anticipated Yield	Actual Yield	Target	Achievement
Yavatmal	2021-22 = 9	310.00	310.00	310.00	Stem Timber M ³ Poles No. Small-wood M3	178.32 2633 563.232	155.103 1877 345.6	5.68 15.94
	2020-21 = 9	290.00	290.00	290.00	Stem Timber M ³ Poles No. Small-wood M3	123.90 3226 412.27	74.51 2907 249.60	4.59 8.17
	Total	18	600.00	600.00	Stem Timber M ³ Poles No. Small-wood M3	302.22 5859 975.50	229.62 4784 595.20	10.27 24.11


 (Sanjeev Gaur)
 Chief General Manager (Planning)

Abstract of Proforma -1

a) Teak Plantation Reboisement Working Circle

No of coupes	Total Area as per Management Plan (In ha)	Physical			Expenditure Rs. In lacs		
		Area Fit for working (In ha)	Area worked (in ha.)	Anticipated Yield	Actual Yield	Target	Achievement
115	5548.98	2133.11	1959.52	Stem Timber M ³ Poles No.	49589.17 131747	44700.36 159809	1721.27
				Small-wood M3	92064.02	88790.60	

b) Improvement Working Circle

No of coupes	Total Area as per Management Plan (In ha)	Physical			Expenditure Rs. In lacs		
		Area Fit for working (In ha)	Area worked (in ha.)	Anticipated Yield	Actual Yield	Target	Achievement
178	8780.59	7526.84	6832.28	Stem Timber M3 Poles No.	3903.97 26908	3823.27 14972	258.54
				Small-wood M3	18975.37	8430.48	

c) Afforestation Working Circle

No of coupes	Total Area as per Management Plan (In ha)	Physical			Expenditure Rs. In lacs		
		Area Fit for working (In ha)	Area worked (in ha.)	Anticipated Yield	Actual Yield	Target	Achievement
98	4039.11	3152.09	3152.09	Stem Timber M3 Poles No.	667.33 4758	604.74 3956	97.50
				Small-wood M3	4489.20	3568.80	

d) Improvement Felling in Teak Plantation Reboisement Working Circle

No of coupes	Total Area as per Management Plan (In ha)	Physical			Expenditure Rs. In lacs		
		Area Fit for working (In ha)	Area worked (in ha.)	Anticipated Yield	Actual Yield	Target	Achievement
84	2194.37	2194.37	2194.37	Stem Timber M3 Poles No.	1276.77 7854	1099.88 6385	507.67
				Small-wood M3	2589.35	2095.20	

e) Selection Cum Improvement Working Circle

No of coupes	Total Area as per Management Plan (In ha)	Area Fit for working (In ha)	Area worked (in ha.)	Physical		Actual Yield	Target	Expenditure Rs. In lacs
				Anticipated Yield	Achievement			
2	225.00	90.00	25.00	Stem Timber M3 Poles No. Small-wood M3	92.28 0 563.35	68.55 0 1050.00	2.52	15.78

f) Plantation Management Working Circle

No of coupes	Total Area as per Management Plan (In ha)	Area Fit for working (In ha)	Area worked (in ha.)	Physical		Actual Yield	Target	Expenditure Rs. In lacs
				Anticipated Yield	Achievement			
4	236.50	236.50	217.70	Stem Timber M ³ Poles No. Small-wood M3	675.00 0 1080.00	1330.56 0 15492.50	225.45	91.80

g) Rehabilitation of Degraded Forest Working Circle

No of coupes	Total Area as per Management Plan (In ha)	Area Fit for working (In ha)	Area worked (in ha.)	Physical		Actual Yield	Target	Expenditure Rs. In lacs
				Anticipated Yield	Achievement			
18	600.00	600.00	600.00	Stem Timber M ³ Poles No. Small-wood M3	302.22 5859 975.50	229.62 4784 595.20	24.11	10.27

Grand Total

No of coupes	Total Area as per Management Plan (In ha)	Area Fit for working (In ha)	Area worked (in ha.)	Physical		Actual Yield	Target	Expenditure Rs. In lacs
				Anticipated Yield	Achievement			
499	21624.55	15932.91	14980.96	Stem Timber M ³ Poles No. Small-wood M3	56506.73 177126 130456.80	51856.98 189906 120022.78	4411.65	2702.83

Chief General Manager (Planning)

Annexure II

PHO

(Post Harvesting Operation)

2. Post Harvesting Operation (PHO) for the area worked out during year 2020-21

A. Working Circle No-1 (Teak Plantation Reboisement Working Circle)

Division	No. of Coupes/ Compartments	Area Worked (in ha.)	WP Prescription for PHO	Area Treated	PHO done	Budget	
						Allocated during 2021-22 (Rs. in lac)	Expenditure (Rs. in lac)
Bhandara	6	34.50		34.50			
Gondia	24	145.28		145.28			
Bramhapuri	40	201.80	Protection from fire, felling of badly damaged or broken trees and cutting back of malformed advance growth of teak.	201.80	Fire protection and silvicultural works in the complete area were carried out.	921.00	803.00
Markanda	11	313.35			313.35		
Pranhita	8	171.37			171.37		
W.Nashik	5	120.00			120.00		
Total		986.30			986.30	921.00	803.00


(Sanjeev Gaur)
Chief General Manager (Planning)

B. Working Circle No-2 (Improvement Working Circle)

Division	No. of Coupes/ Compartments	Area Worked (in ha.)	WP Prescription for PHO	PHO done		Budget Expenditure (Rs. in lac)
				Area Treated	Works carried out	
Bhandara	10	160.00		160.00		
Gondia	14	779.00	Removal of climbers, removal of high stems, protection for grazing, soil and moisture conservation works and protection from fire	779.00	Climber cutting, closer from grazing and fire protection measures were taken.	6.99
Brahmapuri	33	1306.81		1306.81		
Markanda	10	539.32		539.32		
Pranhita	10	614.09		614.09		
W. Nashik	17	719.49		719.49		
Total		4118.71		4118.71		6.99
						5.88


 (Sanjeev Gaur)
Chief General Manager (Planning)

C. Working Circle No-3 (Afforestation Working Circle)

Division	No. of Coupes/ Compartments	Area Worked (in ha.)	WP Prescription for PHO	PHO done		Budget Expenditure (Rs. in lac)
				Area Treated	Works carried out	
Bhandara	2	0.00	The worked area will be protected from fire and closed for grazing for 5 years	0.00	The worked area will be protected from fire and close for grazing	2.45
Bramhapuri	15	903.00		903.00		1.99
Total		903.00		903.00		2.45
						1.99

(Sanjeev Gaur)
 Chief General Manager (Planning)

D.Working Circle No-4 (Improvement Felling in Teak Plantation Reboisment Working Circle)

Division	No. of Coupes/ Compartments	Area Worked (in ha.)	WP Prescription for PHO	PHO done		Budget Allocated during 2021-22 (Rs. in lac)
				Area Treated	Works carried out	
Bramhapuri	27	621.80	After removal of dead, dying, diseased, malformed and hollow trees, to do fire protection and protection from grazing	621.80	Measures from protection from fire and grazing controls were taken	1.12
Markhanda	7	0.00		0.00		0.91
Pranhita	4	0.00		0.00		
Total		621.80		621.80		1.12
						0.91

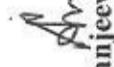


(Sanjeev Gaur)

Chief General Manager (Planning)

E. Working Circle No-5 (Selection cum Improvement Working Circle)

Division	No. of Coupes/ Compartments	Area Worked (in ha)	WP Prescription for PHO	PHO done		Allocated during 2021-22 (Rs. in lac)	Budget (Rs. in lac)
				Area Treated	Works carried out		
Thane	4	80.00	The worked area will be protected from fire and closed for grazing for 5 years	80.00	The worked area will be protected from fire and close for grazing	1.22	1.09
Dahanu	11	45.00		45.00			
Total		125.00			125.00	1.22	1.09


(Sanjeev Gaur)

Chief General Manager (Planning)

F. Working Circle No-6 (Rehabilitation of Degraded Forest Working Circle)

Division	No. of Coupes/ Compartments	Area Worked (in ha.)	WP Prescription for PHO	PHO done		Budget	
				Area Treated	Works carried out	Allocated during 2021-22 (Rs. in lac)	Expenditure (Rs. in lac)
Dahanu	24	704.00	The worked area will be protected from fire and closed for grazing for 5 years	704.00	0.68	0.51	0.51
Total	24	704.00		704.00		0.68	0.51


 (Sanjeev Gaur)
 Chief General Manager (Planning)

G. Working Circle No-7 (Planting Stock Improvement Working Circle)

Division	No. of Coupes/ Compartments	Area Worked (in ha.)	WP Prescription for PHO	PHO done		Budget	
				Area Treated	Works carried out	Allocated during 2021-22 (Rs. in lac)	Expenditure (Rs. in lac)
Markhanda	5	253.96	The worked area will be protected from fire and closed for grazing for 5 years	253.96	The worked area will be protected from fire and close for grazing	0.27	0.24
Total		253.96		253.96		0.27	0.24


 (Sanjeev Gaur)
 Chief General Manager (Planning)

H. Working Circle No-8 (Plantation Management Working Circle)

Division	No. of Coupes/ Compartments	Area Worked (in ha.)	WP Prescription for PHO	PHO done		Budget (Rs. in lac)
				Area Treated	Works carried out	
Pune	11	273.400	Fire protection and silvicultural works in the complete area were carried out.	273.400	Fire protection and silvicultural works in the complete area were carried out.	1.97
Total	11	273.400		273.400		1.97



Chief General Manager (Planning)

Annexure - III

Plantation Maintenance Work

3. Maintenance works carried out for all previous PHO during last 5 years in all Divisions, under different Working Circles-

(a) Working Circle No-1 (Teak Plantation Reboisement working Circle)

(i) Name Of Division:- Nagpur

Year of Working	Plantation Year	Total area worked out 2 years back & was to be treated	Area under Maintenance (ANR/AR)										V th Year				
			I st Year			II nd Year			III rd Year			IV th Year			Budget (Rs. in lac)		
			T	A	Budget (Rs. in lac)	T	A	Budget (Rs. in lac)	T	A	Budget (Rs. in lac)	T	A	Budget (Rs. in lac)	T	A	Budget (Rs. in lac)
2017-18	2018 Rains	86.20	86.20	33.90	33.90	--	--	--	--	--	--	--	--	--	--	--	
2018-19	2019 Rains	93.00	93.00	39.05	64.61	86.20	86.20	44.27	44.27	--	--	--	--	--	--	--	--
2019-20	2020 Rains	100.50	100.50	48.39	49.95	93.00	93.00	24.26	64.41	86.20	86.20	11.78	27.16	--	--	--	--
2020-21	2021 Rains	0	0	0	0	100.5	100.5	117.60	49.00	93.00	93.00	17.01	23.93	86.20	86.20	9.61	11.15
2021-22	2022 Rains	199.00	199.00	199.00	107.85	98.52	0	0	0	100.50	100.50	26.25	25.42	93.00	93.00	10.89	8.72
																	Area Proposed for 2022-23
2022-23	2023 Rains	142.50	142.50	94.05	199.00	120.44	0	0	0	0	100.50	19.47	93.00	10.98			


(Sanjeev Gaur)
Chief General Manager (Planning)

(ii) Name Of Division:- Bhandara

Year of Working	Plantation Year	Area under Maintenance (ANR/AR)												V th Year	
		I st Year				II nd Year				III rd Year					
		Area (in ha.)		Budget (Rs. in lac)		Area (in ha.)		Budget (Rs. in lac)		Area (in ha.)		Budget (Rs. in lac)			
Total area worked out 2 years back & was treated this year	Area (in ha.)	T	A	T	A	T	A	T	A	T	A	T	A	Budget (Rs. in lac)	
2017-18	Rains	80.00	80.00	27.96	24.26	--	--	--	--	--	--	--	--	--	
2018-19	Rains	70.65	70.65	30.32	25.68	80.00	80.00	18.41	15.35	--	--	--	--	--	
2019-20	Rains	79.50	79.50	34.41	25.42	70.65	70.65	27.57	17.35	80.00	80.00	10.68	7.92	--	
2020-21	Rains	34.50	34.50	41.19	35.83	79.50	79.50	27.57	10.78	70.65	70.65	10.68	7.81	80.00	
2021-22	Rains	0.00	0.00	0.00	0.00	34.50	34.50	25.11	14.94	79.50	79.50	7.12	7.32	70.65	
2022-23	Rains	40.49	40.49	--	--	--	--	0.00	0.00	34.50	34.50	14.45	79.50	7.64	
														70.65	
														5.27	

Area Proposed for 2022-23


 (Sanjeev Gaur)
 Chief General Manager (Planning)

(iii) Name Of Division:- Gondia

Area Proposed for 2022-23


(Sanjeev Gajur)
Chief General Manager (Planning)

(iv) Name Of Division:- Yavatmal -

Area under Maintenance (ANR/AR)																		
Year of working	Plantation Year	Total area worked out 2 years back & was to be treated this year	I st Year			II nd Year			III rd Year			IV th Year			V th Year			
			T	A	Budget (Rs. in lac)	T	A	Budget (Rs. in lac)	T	A	Budget (Rs. in lac)	T	A	Budget (Rs. in lac)	T	A	Budget (Rs. in lac)	
2017-18	Rains	290.00	290.00	290.00	143.25	144.70	--	--	--	--	--	--	--	--	--	--	--	
2018-19	Rains	0.00	0.00	0.00	0.00	290.00	290.00	198.0	137.2	--	--	--	--	--	--	--	--	
2019-20	Rains	152.96	152.96	140.00	92.24	0.00	0.00	290.00	290.00	170.00	113.00	--	--	--	--	--	--	
2020-21	Rains	0	0	0	0	152.96	152.96	87.44	63.05	0.00	0.00	290.00	290.00	98.21	92.55	--	--	
2021-22	Rains	247.63	247.63	247.63	135.05	120.04	0	0	0	152.96	152.96	45.06	27.21	0.00	0.00	290.00	290.00	
Area Proposed for 2022-23												0	0	0	0	152.96	23.11	0.00
2022-23	Rains	133.56	133.56	224.53	247.63	51.42	0	0	0	0	0	0	0	0	0	0.00	0.00	



(Sanjeev Gaur)
Chief General Manager (Planning)

(v) Name Of Division:- Kinwat

Year of working	Plantation Year	Area under Maintenance (ANR/AR)												Budget (Rs. in lac)	Budget (Rs. in lac)	Budget (Rs. in lac)	Budget (Rs. in lac)				
		I st Year				II nd Year				III rd Year						IV th Year					
		Area (in ha.)		Budget (Rs. in lac)		Area (in ha.)		Budget (Rs. in lac)		Area (in ha.)		Budget (Rs. in lac)		Area (in ha.)		Budget (Rs. in lac)		Area (in ha.)			
Total area worked out 2 years back & was to be treated this year	Area (in ha.)	T	A	T	A	T	A	T	A	T	A	T	A	T	A	T	A	T	A	Budget (Rs. in lac)	
2017-18	2018 Rains	30.00	30.00	22.81	18.56	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	
2018-19	2019 Rains	0.00	0.00	0.00	0.00	30.00	30.00	9.59	7.60	--	--	--	--	--	--	--	--	--	--	--	
2019-20	2020 Rains	31.00	31.00	29.38	16.44	0.00	0.00	0.00	0.00	30.00	30.00	5.73	3.97	--	--	--	--	--	--	--	
2020-21	2021 Rains	0.00	0.00	0.00	0.00	31.00	31.00	11.47	9.83	0.00	0.00	0.00	0.00	30.00	30.00	3.43	2.56	--	--	--	
2021-22	2022 Rains	32.13	32.13	18.95	12.93	0.00	0.00	0.00	0.00	31.00	31.00	10.22	9.88	0.00	0.00	0.00	0.00	30.00	30.00	2.96	
2022-23	2023 Rains	39.75	39.75	27.28	32.13	11.43	0.00	0.00	0.00	31.00	31.00	7.99	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	

Area Proposed for 2022-23

2022-23	2023 Rains	39.75	39.75	27.28	32.13	11.43	0.00	0.00	0.00	31.00	31.00	7.99	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
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(Sanjeev Gaur)
Chief General Manager (Planning)

(vi) Name Of Division:- West Chanda

Year of working	Plantation Year	Area under Maintenance (ANR/AR)												Budget (Rs. in lac)	
		I st Year				II nd Year				III rd Year					
		Area (in ha.)		Budget (Rs. in lac)		Area (in ha.)		Budget (Rs. in lac)		Area (in ha.)		Budget (Rs. in lac)			
Total area worked out 2 years back & was to be treated this year	Area (in ha.)	T	A	T	A	T	A	T	A	T	A	T	A	Budget (Rs. in lac)	
	T	--	--	--	--	--	--	--	--	--	--	--	--		
2017-18 Rains	189.59	189.59	189.59	136.0	127.39	--	--	--	--	--	--	--	--	--	
2018-19 Rains	321.33	321.33	321.33	230.92	212.67	189.59	189.59	61.32	54.68	--	--	--	--	--	
2019-20 Rains	119.00	119.00	119.00	104.32	90.69	321.33	321.33	101.49	93.29	189.59	189.59	33.95	30.63	--	
2020-21 Rains	0	0	0	0	0	119.00	119.00	77.02	59.05	321.33	321.33	22.15	17.05	189.59	
2021-22 Rains	131.01	131.01	131.01	65.21	55.19	0	0	0	0	119.00	119.00	88.42	321.33	22.29	
														18.79	
														189.59	
														21.85	
														19.07	

Area Proposed for 2022-23

2022-23	2023 Rains	43.49	43.49	65.21	131.01	43.11	0	0	0	0	119.00	11.99	321.33	21.99
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(Sanjeev Gaur)
Chief General Manager (Planning)

vii) Name Of Division:- Central Chanda

Year of working	Plantation Year	Total area worked out 2 years back & was to be treated this year	Area under Maintenance (ANR/AR)											
			I st Year				II nd Year				III rd Year			
			Area (in ha.)	Budget (Rs. in lac)	Area (in ha.)	Budget (Rs. in lac)	Area (in ha.)	Budget (Rs. in lac)	Area (in ha.)	Budget (Rs. in lac)	Area (in ha.)	Budget (Rs. in lac)	Area (in ha.)	Budget (Rs. in lac)
2017-18	2018 Rains	89.00	89.00	78.06	20.87	--	--	--	--	--	--	--	--	--
2018-19	2019 Rains	0.00	0.00	0.00	0.00	89.00	89.00	65.35	63.67	--	--	--	--	--
2019-20	2020 Rains	295.02	295.02	97.22	88.78	0.00	0.00	89.00	89.00	49.30	39.79	--	--	--
2020-21	2021 Rains	0.00	0.00	0.00	0.00	295.02	295.02	21.77	15.67	0.00	0.00	89.00	89.00	29.52
2021-22	2022 Rains	202.91	202.91	191.19	142.22	0	0	0	295.02	295.02	25.58	23.11	0.00	0.00
Area Proposed for 2022-23														
2022-23	2023 Rains	20.00	20.00	91.19	202.91	103.31	0	0	0	295.02	12.99	0.00	0.00	0.00

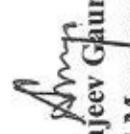


(Sanjeev Gaur)

Chief General Manager (Planning)

(viii) Name Of Division:- Bramhapuri

Year of Working	Plantation Year	Area under Maintenance (ANR/AR)																
		I st Year				II nd Year				III rd Year				IV th Year				
		Total area worked out 2 years back & was to be treated this year	Area (in ha.)	Budget (Rs. in lac)	Area (in ha.)	Budget (Rs. in lac)	A	T	A	T	A	T	A	T	Area (in ha.)	Budget (Rs. in lac)	Area (in ha.)	Budget (Rs. in lac)
2017-18	Rains	253.00	253.00	361.17	208.85	--	--	--	--	--	--	--	--	--	--	--	--	--
2018-19	Rains	340.00	340.00	229.00	230.68	253.00	197.16	83.33	--	--	--	--	--	--	--	--	--	--
2019-20	Rains	197.00	197.00	167.72	149.71	340.00	113.96	75.31	253.00	253.00	66.68	60.49	--	--	--	--	--	--
2020-21	Rains	201.80	201.80	178.00	159.00	197.00	54.06	60.61	340.00	340.00	55.13	47.85	253.00	48.07	42.39	--	--	--
2021-22	Rains	215.10	215.10	215.10	175.31	126.69	201.80	79.74	66.69	197.00	43.07	60.00	340.00	45.57	28.02	253.00	253.00	21.42
															Area Proposed for 2022-23			
2022-23	Rains	2023	325.35	325.35	178.00	215.10	175.31	201.80	79.74	197.00	43.07	340.00	45.57					


 (Sanjeev Gaur)
 Chief General Manager (Planning)

(ix) Name Of Division:- Markhana

Year of working	Plantation Year	Area under Maintenance (ANR/AR)												
		I st Year				II nd Year				III rd Year				
		Total area worked out 2 years back & was to be treated this year	Area (in ha.)	Budget (Rs. in lac)	Area (in ha.)	T	A	T	A	T	A	T	A	T
2017-18	2018 Rains	252.05	252.05	163.17	145.92	--	--	--	--	--	--	--	--	--
2018-19	2019 Rains	326.28	326.28	250.52	210.21	252.05	83.23	66.78	--	--	--	--	--	--
2019-20	2020 Rains	297.35	297.35	166.00	148.00	326.28	118.87	91.77	252.05	252.05	52.83	38.33	--	--
2020-21	2021 Rains	313.35	313.35	251.85	218.53	297.35	101.09	97.04	326.28	326.28	50.37	53.99	252.05	23.39
2021-22	2022 Rains	437.38	437.38	366.92	245.43	313.35	145.44	93.45	297.35	297.35	67.99	39.77	326.28	40.10
														Area Proposed for 2022-23
2022-23	2023 Rains	470.71	470.71	378.00	437.38	158.00	313.35	57.00	297.35	43.00	326.28	19.18		


(Sanjeev Gaur)
Chief General Manager (Planning)

(x) Name Of Division:- Pranhita

Area Proposed for 2022-23


(Sanjeev Qaur)
Chief General Manager (Planning)

(xi) Name Of Division:- West Nashik

Year of working	Plantation Year	Total area worked out 2 years back & was to be treated this year	Area under Maintenance (ANR/AR)												
			I st Year			II nd Year			III rd Year			IV th Year			
			Area.(in ha.)	Budget (Rs. in lac)	Area (in ha.)	Area.(in ha.)	Budget (Rs. in lac)	Area (in ha.)	Area.(in ha.)	Budget (Rs. in lac)	Area (in ha.)	Area.(in ha.)	Budget (Rs. in lac)	Area (in ha.)	Budget (Rs. in lac)
2017-18	2018 Rains	150.00	150.00	150.00	134.14	36.02	--	--	--	--	--	--	--	--	--
2018-19	2019 Rains	200.00	200.00	133.32	58.23	150.00	150.00	39.73	47.96	--	--	--	--	--	--
2019-20	2020 Rains	150.00	150.00	250.46	14.35	200.00	200.00	149.73	66.06	150.00	150.00	23.33	79.17	--	--
2020-21	2021 Rains	175.00	175.00	135.12	79.12	150.00	150.00	56.07	30.70	200.00	200.00	37.38	22.62	150.00	14.95
2021-22	2022 Rains	130.00	130.00	145.49	67.81	175.00	175.00	24.20	22.11	150.00	150.00	25.01	21.99	200.00	8.20
2022-23	2023 Rains	30.00	30.00	181.36		130.00		33.77	175.00	23.11		150.00	11.99	200.00	17.66

Area Proposed for 2022-23


(Sanjeev Gaur)
Chief General Manager (Planning)

(xii) Name Of Division:- Pune


Ranjeet Gaur
General Manager (I)

Chief General Manager (Planning)

3 . Maintenance works carried out for all previous PHO during last 5 years in all Divisions, under different Working Circles-

(b) Working Circle No-1 (Improvement working Circle)

i) Name Of Division- Nagpur

Year of Working	Plantation Year	Total area worked out 2 years back & was to be treated this year	Area under Maintenance (ANR/AR)												
			I st Year				II nd Year				III rd Year				
			Area (in ha.)		Budget (Rs. in lac)		Area (in ha.)		Budget (Rs. in lac)		Area (in ha.)		Budget (Rs. in lac)		
T	A	T	A	T	A	T	A	T	A	T	A	T	A	T	
2017-18	Rains	75.00	75.00	27.95	16.82	--	--	--	--	--	--	--	--	--	
2018-19	Rains	25.00	25.00	1.94	8.16	75.00	27.95	27.9	5	--	--	--	--	--	
2019-20	Rains	0.00	0.00	0.00	0	25.00	25.00	4.93	4.69	75.00	9.36	5.88	--	--	
2020-21	Rains	0.00	0.00	0.00	0	0	0	0	0	25.00	3.14	3.75	75.00	8.36	
2021-22	Rains	50.00	50.00	15.00	18.21	7.42	0.00	--	0.00	--	--	25.00	25.00	1.47	
														75.00	
														5.26	
														4.22	
Area Proposed for 2022-23															
2022-23,	Rains	2023	52.41	52.41	33.30	--	15.00	9.08	--	--	--	--	--	25.00	2.95


(Sanjeev Gaur)

Chief General Manager (Planning)

3 . Maintenance works carried out for all previous PHO during last 5 years in all Divisions, under different Working Circles-

(c) Working Circle No-1 (Afforestation working Circle)

i) Name Of Division -Nagpur

Year of Working	Plantation Year	Total area worked out 2 years back & was to be treated this year	Area under Maintenance (ANR/AR)													
			I st Year			II nd Year			III rd Year			IV th Year				
			Area (in ha.)	Budget (Rs. in lac)	Area (in ha.)	A	T	A	A	T	A	T	A	T	A	
2017-18	Rains	122.00	122.00	12.50	12.50	--	--	--	--	--	--	--	--	--	--	
2018-19	Rains	153.00	153.00	12.96	12.96	122.00	122.00	30.36	30.36	--	--	--	--	--	--	
2019-20	Rains	50.00	50.00	37.83	37.80	153.00	153.00	61.50	61.71	122.00	15.22	26.39	--	--	--	
2020-21	Rains	0.00	0.00	0.00	0.00	50.00	62.89	23.17	153.00	153.00	19.28	38.94	122.00	122.00	12.78	
2021-22	Rains	50.00	50.00	15.00	16.56	10.47	0.00	--	--	50.00	50.00	6.61	5.99	153.00	153.00	17.91
Area Proposed for 2022-23																
2022-23	Rains	2023	169.73	169.73	107.86		15.00	9.08		--	--	--	50.00	* 9.69	153.00	18.06



(Sanjeev Gaur)

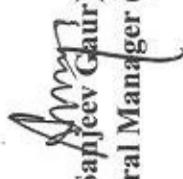
Chief General Manager (Planning)

3 . Maintenance works carried out for all previous PHO during last 5 years in all Divisions, under different Working Circles-

(d) Name of Working Circle-RDF

(i) Name Of Division:- Thane

Year of Working	Plantation Year	Total area worked out 2 years back & was to be treated this year	Area under Maintenance (ANR/AR)											
			I st Year				II nd Year				III rd Year			
			Area (in ha.)		Budget (Rs. in lac)		Area (in ha.)		Budget (Rs. in lac)		Area (in ha.)		Budget (Rs. in lac)	
T	A	T	A	T	A	T	A	T	A	T	A	T	A	T
2017-18	Rains	210.00	210.00	62.17	49.76	--	--	--	--	--	--	--	--	--
2018-19	Rains	150.00	150.00	68.93	55.14	210.00	67.12	34.80	--	--	--	--	--	--
2019-20	Rains	110.00	110.00	47.39	26.42	150.00	150.00	45.20	40.55	210.00	37.12	37.80	--	--
2020-21	Rains	136.30	136.30	40.79	42.33	110.00	110.00	20.81	18.17	150.00	26.51	24.33	210.00	32.40
2021-22	Rains	175.00	175.00	75.39	69.03	136.30	136.30	14.21	13.67	110.00	9.81	9.88	150.00	13.15
														12.13
														210.00
														15.26
														14.07
Area Proposed for 2022-23														
2022-23	Rains	130.00	130.00	65.79	175.00	19.33	136.30	11.17	11.00	12.43	* 150.00	11.67		


(Sapneev Gaur)
 Chief General Manager (Planning)

Annexure - IV

APO

(Annual Plan Operation)

In View of 1,2 and 3 above and also as per prescribed Working Plan provisions the proposal for 2022-23

a) Teak Plantation and Reboisement Working Circle

Project Division	No of coupes	Physical		Expected Yield as per marking	Financial Allocation (Rs. in lac)
		Total Area as per Management Plan (In ha)	Area Fit for working (In ha)		
Nagpur	6	185.00	142.50	Stem Timber M ³	2482.05
				Poles No.	9964
				Small-wood M3	17990.40
Bhandara	2	211.00	40.49	Stem Timber M ³	786.04
				Poles No.	3109
				Small-wood M3	2335.17
Gondia	2022-23 = 14	625.00	243.22	Stem Timber M ³	5534.57
				Poles No.	32754
				Small-wood M3	12496.43
Yavatmal	2019-20=1	25.00	11.30	Stem Timber M ³	463.71
				Poles No.	1248
				Small-wood M3	479.39
Total	15	650.00	254.52	Stem Timber M ³	5998.28
				Poles No.	34002.00
				Small-wood M3	12975.81
Kamvat	6	171.04	133.56	Stem Timber M ³	3566.23
				Poles No.	45027
				Small-wood M3	5835.32
Kinwat	3	166.00	39.75	Stem Timber M ³	992.85
				Poles No.	13533
				Small-wood M3	3121.89

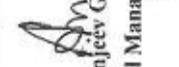
Project Division	No of coupes	Physical		Expected Yield as per marking	Financial Allocation (Rs. in lac)
		Total Area as per Management Plan (In ha)	Area Fit for working (In ha)		
W.Chanda	2	43.49	43.49	Stem Timber M ³ Poles No.	225.64 2190
Central Chanda	1	280.00	20.00	Small-wood M3 Stem Timber M ³ Poles No.	948.41 207.14 285
Brahmapuri	13	485.00	325.35	Small-wood M3 Stem Timber M ³ Poles No.	396.44 4324.07 54
Markhanda	10	891.23	470.71	Small-wood M3 Stem Timber M ³ Poles No.	10193.88 19771.80 5975
Pranhita	6	266.99	204.10	Small-wood M3 Stem Timber M ³ Poles No.	35023.10 5653.55 13270
W.Nashik	5	210.00	30.00	Small-wood M3 Stem Timber M ³ Poles No.	6393.20 143.20 276
Grand Total	69	3559.75	1704.47	Small-wood M3	2808.09 95672.61


 (Sanjeev Gaur)
 Chief General Manager (Planning)

b) Improvement Working Circle

Project Division	No of coupes	Total Area as per Management Plan (In ha)	Physical		Expected Yield as per marking	Financial Allocation (Rs. in lac)
			Area Fit for working (In ha)			
Nagpur	8	524.18	514.03		Stem Timber M ³ Poles No.	114.70 43.86
Bhandara	1	50.00	50.00		Small-wood M3 Stem Timber M ³ Poles No.	1656 2863.20 19.56 148
Gondia	9	784.36	472.00		Small-wood M3 Stem Timber M ³ Poles No.	469.23 632.18 73.67
Kinwat	10	690.95	653.19		Small-wood M3 Stem Timber M ³ Poles No.	968.09 364.49 3313 116.30
West Chanda	21	532.20	532.20		Small-wood M3 Stem Timber M ³ Poles No.	1184.06 227.832 413 39.48
Central Chanda	2	1226.92	74.72		Small-wood M3 Stem Timber M ³ Poles No.	841.58 4.40 0 1.46
Bramhapuri	12	541.10	505.11		Small-wood M3 Stem Timber M ³ Poles No.	268.80 0 30.18
						959.48

Project Division	No of coupes	Physical		Expected Yield as per marking	Financial Allocation (Rs. in lac)
		Total Area as per Management Plan (In ha)	Area Fit for working (In ha)		
Markhana	13	767.82	767.82	Stem Timber M ³	642.55
				Poles No.	94
				Smallwood M3	602.74
Pranhita	7	503.73	503.73	Stem Timber M ³	76.75
				Poles No.	72
				Smallwood M3	115.20
West Nashik	17	1158.24	809.20	Stem Timber M ³	50.00
				Poles No.	6
				Smallwood M3	143.20
Grand Total	100	6779.50	4882.00	Stem Timber M³	2401.25
				Poles No.	6765
				Smallwood M3	8212.52



(Sanjeev Gapur)

Chief General Manager (Planning)

c) Afforestation Working Circle

Project Division	No of coupes	Total Area as per Management Plan (In ha)	Area Fit for working (In ha)	Physical		Expected Yield as per marking	Financial Allocation (Rs, in lac)
Nagpur	11	565.76	485.76	Stem Timber M ³	29.56		19.71
Bhandara	3	190.00	140.00	Poles No.	184		
Yavatmal	10	309.79	154.79	Small-wood M3	1075.20		
Kirwat	3	140.00	140.00	Stem Timber M ³	119.80		
W.Chanda	11	208.94	208.94	Poles No.	2166		38.05
C.Chanda	2	385.00	55.00	Small-wood M3	1469.29		
Bramhapuri	15	879.86	879.86	Stem Timber M ³	17.88		
Grand Total	55	2679.35	2064.35	Poles No.	3145	579.96	140.35
				Small-wood M3	4773.57		


 (Sanjeev Gaur)
 Chief General Manager (Planning)

d) Improvement Felling in Teak Plantation Reboisement Working Circle

Project Division	No of coupes	Physical		Expected Yield as per marking	Financial Allocation (Rs. in lac)
		Total Area as per Management Plan (In ha)	Area Fit for working (In ha)		
Yavatmal	15	322.48	322.48	Stem Timber M ³	116.70
				Poles No.	2514
				Small-wood M3	408.06
Kinwat	4	100.00	100.00	Stem Timber M ³	44.04
				Poles No.	497
				Small-wood M3	158.83
Brahmapuri	11	159.65	159.65	Stem Timber M ³	201.75
				Poles No.	0
				Small-wood M3	416.43
Markanda	9	249.65	249.65	Stem Timber M ³	382.41
				Poles No.	0
				Small-wood M3	502.69
Pranhita	6	62.89	62.89	Stem Timber M ³	30.28
				Poles No.	95
				Small-wood M3	44.40
Grand Total	45	894.67	894.67	Stem Timber M ³	775.18
				Poles No.	3106
				Small-wood M3	1530.40

(Sanjeev Gaut)
Chief General Manager (Planning)

e) Selection Cum Improvement Working Circle

Project Division	No of coupes	Physical		Expected Yield as per marking	Financial Allocation (Rs. in lac)
		Total Area as per Management Plan (In ha)	Area Fit for working (In ha)		
Thane	12	105.00	40.00	Stem Timber M ³ Poles No. Small-wood M3	150.00 0 31.79
Grand Total	12	105.00	40.00	Stem Timber M ³ Poles No. Small-wood M3	150.00 0 31.79
					1400.00

f) Plantation Management Working Circle

Project Division	No of coupes	Physical		Expected Yield as per marking	Financial Allocation (Rs. in lac)
		Total Area as per Management Plan (In ha)	Area Fit for working (In ha)		
Pune	4	266.95	207.55	Stem Timber M ³ Poles No. Small-wood M3	1500.00 0 290.00
					15000

g) Rehabilitation of Degraded Forest Working Circle

Project Division	No of coupes	Physical		Expected Yield as per marking	Financial Allocation (Rs. in lac)
		Total Area as per Management Plan (In ha)	Area Fit for working (In ha)		
Yavatmal	9	288.92	206.50	Stem Timber M ³ Poles No. Small-wood M3	76.13 2767 321.01
					4.62


 (Sanjeev Gaur)
 Chief General Manager (Planning)

Abstract of Proforma -4

a) Teak Plantation Reboisement Working Circle

No of coupes	Physical		Expected Yield as per marking	Financial Allocation (Rs. in lac)
	Total Area as per Management Plan (In ha)	Area Fit for working (In ha)		
69	3559.75	1704.47	Stem Timber M3 Poles No. Small-wood M3	44150.85 127685 95672.61

b) Improvement Working Circle

No of coupes	Physical		Expected Yield as per marking	Financial Allocation (Rs. in lac)
	Total Area as per Management Plan (In ha)	Area Fit for working (In ha)		
100	6779.50	4882.00	Stem Timber M3 Poles No. Small-wood M3	2401.25 6765 8212.52

c) Afforestation Working Circle

No of coupes	Physical		Expected Yield as per marking	Financial Allocation (Rs. in lac)
	Total Area as per Management Plan (In ha)	Area Fit for working (In ha)		
55	2679.35	2064.35	Stem Timber M3 Poles No. Small-wood M3	579.96 3145 4773.57

d) Improvement Felling in Teak Plantation Reboisement Working Circle

No of coupes	Physical		Expected Yield as per marking	Financial Allocation (Rs. in lac)
	Total Area as per Management Plan (In ha)	Area Fit for working (In ha)		
45	894.67	894.67	Stem Timber M3 Poles No. Small-wood M3	775.18 3106 1530.40

477.67

e) Selection Cum Improvement Working Circle

No of coupes	Physical		Expected Yield as per marking	Financial Allocation (Rs. in lac)
	Total Area as per Management Plan (In ha)	Area Fit for working (In ha)		
12	105.00	40.00	Stem Timber M3 Poles No. Small-wood M3	150.00 0 1400.00

f) Plantation Management Working Circle

No of coupes	Physical		Expected Yield as per marking	Financial Allocation (Rs. in lac)
	Total Area as per Management Plan (In ha)	Area Fit for working (In ha)		
4	266.95	207.55	Stem Timber M ³ Poles No. Small-wood M3	1500.00 0 15000

g) Rehabilitation of Degraded Forest Working Circle

No of coupes	Physical		Expected Yield as per marking	Financial Allocation (Rs. in lac)
	Total Area as per Management Plan (In ha)	Area Fit for working (In ha)		
9	288.92	206.50	Stem Timber M ³ Poles No. Small-wood M3	76.13 2767 321.01
Grand Total				

No of coupes	Physical		Expected Yield as per marking	Financial Allocation (Rs. in lac)
	Total Area as per Management Plan (In ha)	Area Fit for working (In ha)		
294	14574.14	9999.53	Stem Timber M ³ Poles No. Small-wood M3	49633.36 143468 126910.11


 (Sanjeev Gaur)
 Chief General Manager (Planning)

Annexure - V

ATR - 2021-22

Showing Statement of Small wood in nos.

Abstract of Proforma-1 (Statement showing Small wood in nos.)

a) Teak Plantation Reboisement Working Circle

No of coupes	Total Area as per Management Plan (In ha)	Area Fit for working (In ha)	Area worked (in ha.)	Physical		Expenditure Rs. In lacs
				Anticipated Yield	Actual Yield	
115	5548.98	2133.11	1959.52	Stem Timber M ³ Poles Nos. Small-wood Nos	49589.17 131747 38360	44700.36 159809.00 36973

b) Improvement Working Circle

No of coupes	Total Area as per Management Plan (In ha)	Area Fit for working (In ha)	Area worked (in ha.)	Physical		Expenditure Rs. In lacs
				Anticipated Yield	Actual Yield	
178	8779.60	7526.82	6832.28	Stem Timber M ³ Poles Nos. Small-wood Nos	3903.97 26908 7906	3823.269 14973 3513

c) Afforestation Working Circle

No of coupes	Total Area as per Management Plan (In ha)	Area Fit for working (In ha)	Area worked (in ha.)	Physical		Expenditure Rs. In lacs
				Anticipated Yield	Actual Yield	
98	4039.11	3152.09	3152.09	Stem Timber M ³ Poles Nos. Small-wood Nos	667.33 4758 1871	604.74 3956.00 1487

d) Improvement Felling in Teak Plantation Reboisement Working Circle

No of coupes	Total Area as per Management Plan (In ha)	Area Fit for working (In ha)	Area worked (in ha.)	Physical		Expenditure Rs. In lacs
				Anticipated Yield	Actual Yield	
84	2194.37	2194.37	2194.37	Stem Timber M ³ Poles Nos. Small-wood Nos	1276.77 7854 1079	1099.881 6385.00 873

e) Selection Cum Improvement Working Circle

No of coupes	Total Area as per Management Plan (In ha)	Area Fit for working (In ha)	Area worked (in ha.)	Physical		Expenditure Rs. In lacs
				Anticipated Yield	Actual Yield	
2	225.00	90.00	25.00	Stem Timber M ³ Poles Nos. Small-wood Nos	92.275 0 235	68.55 0 438
						15.78 2.52

f) Plantation Management Working Circle

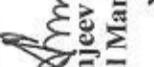
No of coupes	Total Area as per Management Plan (In ha)	Area Fit for working (In ha)	Area worked (in ha.)	Physical		Expenditure Rs. In lacs
				Anticipated Yield	Actual Yield	
4	236.50	236.50	217.70	Stem Timber M ³ Poles Nos. Small-wood Nos	675.00 0 4500	1330.56 0 6455
						91.80 225.45

g) Rehabilitation of Degraded Forest Working Circle

No of coupes	Total Area as per Management Plan (In ha)	Area Fit for working (In ha)	Area worked (in ha.)	Physical		Expenditure Rs. In lacs
				Anticipated Yield	Actual Yield	
18	600.00	600.00	600.00	Stem Timber M ³ Poles Nos. Small-wood Nos	302.22 5859 406	229.62 4784 248
						10.27 24.11

Grand Total

No of coupes	Total Area as per Management Plan (In ha)	Area Fit for working (In ha)	Area worked (in ha.)	Physical		Expenditure Rs. In lacs
				Anticipated Yield	Actual Yield	
499	21623.56	15932.90	14980.96	Stem Timber M ³ Poles Nos. Small-wood Nos	56506.73 177126 54357	51856.98 189907 49986
						2702.83 4411.65


 (Sanjeev Gaur)
 Chief General Manager (Planning)



FOREST DEVELOPMENT CORPORATION OF MAHARASHTRA LIMITED

(Govt. of Maharashtra Enterprise)

CIN : U45200MH1974SGC017206

FDCL Bhavan, 359/B, Hingna Road, Ambazari, Nagpur - 440 036

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“MANAGEMENT BY PEOPLE”

No:-Desk-PLN/F&R Proposal/CR-14/21-22/1407 Dated 5th August, 2021

CIRCULAR

Subject--Estimation of yield out of the standing crop.

The Annual Plan of operations for the prospecting year requires the estimation of anticipated yield based on objective criteria. However, during recent interactions with General Manager/Regional Managers and Divisional Managers, it has been observed that different criteria and methodologies are being used in this regard in different Regions and Divisions. This not only results in subjectivity in estimation but also leads to practical difficulties in execution.

2.0 In order to eliminate the element of individual bias and to ensure objectivity and uniformity in that regard, attention of all concerned is invited to the Site-Quality wise Local Volume Table in respect of Teak, which specifies Site-Quality wise and girth-class wise apportionment of expected yield between the stem-timber (u.b.) and small-wood(o.b.), based on quarter-girth measurements. A copy of the said Local Volume Table is enclosed herewith for ready reference. It is therefore directed that the aforesaid Local Volume Table shall be used for the purpose of estimation of the yield.

3.0 Since the aforesaid Local Volume Table is presently available in respect of teak only and are yet to be devised for the other species, depending on the composition of crop, i.e. the extent of non-teak species present in different proportion in different localities, other multiple local factors and the form of individual trees themselves (malformed, crooked, dead, deceased, dying etc.), the estimation so arrived at is naturally bound to differ from the actual yield, but it shall definitely eliminate the element of subjectivity altogether.

4.0 The yield-estimation therefore should be based on volume contents shown in the aforesaid Local Volume Table based on following factors---

4.1 Except for the species mentioned in para 4.2 below, the yield-estimation for all girth-classes shall be based on the aforesaid Local Volume Table and shall be classified as stem-wood and small-wood.

4.2 Certain species viz. *garari*, *lendia*, *dhaman*, *ghogar*, *hivar*, *dhoban*, *wuranga*, *apta*, *pahas*, etc. inherently belong to small-wood category (firewood), irrespective of the girth-class they belong to. Therefore, for the purpose of yield-estimation of such species, the entire volume shall be considered as small-wood, irrespective of the girth-class.

Provided that in case of *garari* and *lendia*, in addition to the small-wood as mentioned above, poles as prescribed in para 4.3 below shall also be considered.

4.3 For the purpose of estimation of number of poles, 1 to 2 poles per tree may be considered across all girth-classes for teak and its associates (*saja*, *bija*, *haldu*, *kalam* and *tiwas*) as well as other commercially superior species.

Encl: As above


Sanjeev Gaur
Managing Director

To

General Manager, Nagpur Region.

Regional Managers, Nashik / Chandrapur Region

Divisional Managers [All]

Assistant Managers [All]

Range Forest Officers [All]

TEAK SITE QUALITY-WISE LOCAL VOLUME TABLE : QUARTER GIRTH MEASUREMENTS

(Tectona grandis)

Girth Classes	Mid point	Stem Timber (u.b.) - Teak Site Quality			Small wood (o.b.) - Teak Site Quality			Total Volume - Teak Site Quality			Girth Classes		
		IV & III / IV	III	II & II / III	I & I / II	IV & III / IV	III	II & II / III	I & I / II	IV & III / IV	III	II & II / III	I & I / II
0/10	5	0	0	0	0	0	0	0	0	0	0	0	0/10
0/15	7.5	0	0	0	0	0	0	0	0	0	0	0	0/15
11/15	12.5	0	0	0	0	0	0	0	0	0	0	0	11/15
16/25	20	0	0	0	0	0.003	0.006	0.008	0.01	0.003	0.006	0.008	16/25
16/30	22.5	0.004	0.004	0.004	0.007	0.01	0.012	0.014	0.011	0.014	0.016	0.018	16/30
26/35	30	0.015	0.015	0.015	0.018	0.02	0.025	0.025	0.033	0.035	0.04	0.04	26/35
31/45	37.5	0.026	0.026	0.026	0.027	0.031	0.036	0.04	0.053	0.057	0.062	0.066	31/45
36/45	40	0.03	0.03	0.03	0.03	0.035	0.04	0.045	0.06	0.065	0.07	0.075	36/45
46/60	52.5	0.045	0.045	0.057	0.071	0.095	0.093	0.084	0.14	0.15	0.155	0.155	46/60
61/75	67.5	0.07	0.1	0.13	0.157	0.16	0.14	0.12	0.103	0.23	0.24	0.25	61/75
76/90	82.5	0.12	0.17	0.23	0.268	0.235	0.195	0.14	0.122	0.355	0.365	0.37	76/90
91/105	97.5	0.19	0.295	0.35	0.425	0.365	0.27	0.22	0.155	0.555	0.565	0.57	91/105
106/120	112.5	0.26	0.42	0.5	0.6	0.56	0.41	0.335	0.24	0.82	0.83	0.835	106/120
121/135	127.5	0.36	0.55	0.68	0.8	0.67	0.5	0.38	0.3	1.03	1.05	1.06	121/135
136/151	142.5	0.485	0.75	0.89	1.05	0.775	0.55	0.46	0.36	1.26	1.3	1.35	136/151
151/165	157.5	0.635	0.95	1.15	1.365	0.825	0.6	0.5	0.405	1.46	1.55	1.65	151/165
166/180	172.5	0.77	1.17	1.42	1.7	0.87	0.68	0.6	0.45	1.64	1.85	2.02	166/180
181/195	187.5			1.73	2.055				0.75	0.595		2.48	2.65
196/210	202.5				2.01	2.39						3	3.22
211/225	217.5				2.32	2.75						3.5	3.8
226/240	232.5					3.08						4.5	4.5
241/255	247.5											5.3	241/255
255/270	262.5											6.2	255/270

Note: For the purpose of this table, timber includes poles having mid girth upto 45 cms. over bark, volume being taken exclusive of bark.