

BEFORE THE NATIONAL GREEN TRIBUNAL
WESTERN ZONE BENCH, PUNE

ORIGINAL APPLICATION NO. 64 OF 2024 WZ
(EARLIER ORIGINAL APPLICATION NO. 173 OF 2024(PB))

**NEWS ITEM TITLED "TREES FELLED FOR ECO-PARK LEAVE
BEHIND BARREN LAND" APPEARING IN THE TIMES OF INDIA
DATED 12.01.2024**

1. Principal Chief Conservator of Forest.

2. District Collector Pune.

- Respondents

Affidavit in Reply on the behalf of Respondents Nos. 1.

I, Shri. Mahadev Namdev Mohite, age 47 years, working as Deputy Conservator Of Forest, Pune Forest Division, Pune hereby solemnly affirms on behalf of Respondent Nos. 1 as under :-

1.0. It is submitted that this Original Application is registered on the basis of the news item titled "TREES FELLED FOR ECO-PARK LEAVE BEHIND BARREN LAND" published in the Times of India, dated 12th January, 2024. The news item relates to alleged cutting of trees for development of an Eco-tourism on Reserved Forest land in Wanowrie, Maharashtra. As per the news item, Marashtra Eco-tourism Development Board is constructing an Eco-tourism park on the reserved forest land in Wanowrie, behind Ruby Hall

Clinic and the said park will be spread over 4 acres, but as per the allegations of residents, Board had felled about 100 *Gliricidia* trees for constructing the park. The residents also alleged that the Forest Department has rampantly cut most trees in the vicinity over 10 days. The news item raises substantial issue relating to compliance of environmental norms, hence this Hon'ble Tribunal impleaded the Principal Chief Conservator of Forests (Head of Forest Force) Maharashtra as Respondent in this case.

2.0. It is submitted that, earlier the present matter was heard at the Principal Bench of this Hon'ble Tribunal at New Delhi. Since the matter relates to the Western Zonal Bench, Pune hence this OA is transferred to Western Zonal Bench, Pune for appropriate further action. Hence this deponent is filing the Affidavit on behalf of Principal Chief Conservator of Forests (Head of Forest Force) Maharashtra State, Nagpur as under-

3.0. *Gliricidia sepiumis* vernacularly known as Undirmari and commonly known as *Gliricidia*, Glory Cedar, Mexican Lilac native to Mexico, Central America and northern South America; cultivated else where. This species is an adaptable, fast growing, precociously seeding tree. This species has been widely introduced across tropical and subtropical regions to be used for fuel wood, animal feed, green manure, shade, poles, living fences, erosion control, soil improver, and as a boundary and support plant. It has escaped from cultivation and has become a successful colonizer of disturbed sites, roadsides,





abandoned agricultural land and areas near cultivation (Elevitch and Francis, 2006). This species is listed as invasive in Australia, Hawaii, the Philippines, Cook Islands, French Polynesia, Tonga, Singapore, Comoros, and Trinidad and Tobago (Vos, 2004; PIER, 2016; Trinidad and Tobago Biodiversity, 2016; Weeds of Australia, 2016). It is also regarded as a potential weed and as a moderate or potentially invasive species in many countries across Asia, Africa, and the West Indies.

4.0. It is submitted that, considering this number of stakeholders, NGO's and Environment experts raised their concern time to time to address the menace of *Gliricidia*. Fortunately, after repeated efforts from people at large and green policy of the State Forest Department of Government of Maharashtra has also taken a green initiative to eradicate the *Gliricidia* plantation from the reserve forest areas in Urban as well as Rural areas of the State.

5.0. It is submitted that, there is a provision in Working Plan of Forest Department to phase wise and systematically removed, rather eradicate the *Gliricidia sepium* from the forest areas in the Pune Division. Various stakeholders of the society should support this important initiative of Forest Department. While addressing this green initiative Forest department abide to follow the prescribed guidelines in working plan to clear fell the *Gliricidia*

sepium population and eco-restore the degraded habitats with the help of local, native indigenous plant species.

6.0. It is submitted that the hills in and around Pune has a typical Dry Deciduous Scrub Forests with patchy grasslands and rocky outcrops. However, in the year 1990, the hills around Pune has been afforested heavily with *Gliricidia sepium* and other exotic species. Which has altered the local habitats and suppressed the local, native indigenous species. It is high time to Eco-restore the local ecosystem considering the present ill health of the hill biodiversity. Further, United Nation has declared this decade as “Ecosystem Restoration Decade.” So, the present initiative of removal of *Gliricidia* strand from hills in and around Pune by the Forest Department is in corroboration with the global initiative and prescribed government policies.

7.0. It is submitted that the Management of Forest area is done by Forest department in accordance with ‘Working Plan’. Every forest division has its own working plan for the period of 10 years. The working plan is prepared by Working plan Officer (WPO) and approved by the Government of India, Ministry of Environment, Forests and Climate Change, New Delhi. Current working plan for Pune division is approved by the Government of India, Ministry of Environment, Forests and Climate Change, New Delhi, for the period of years from 2023-24 to 2032-33 vide letter Dt.07/11/2023. **Hereto annexed as Annexure R-1 is copy of the letter of approval Dt.07/11/2023.**



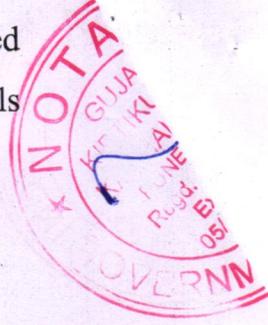


8.0. It is submitted that this Working Plan is prepared for the scientific management of the Forests and Wildlife of Pune Forest division as per the Forest Policy laid down by the Government of India. The primary management objective for the Forests of Pune Division is to treat forests as per the requirement of site so as to optimize growing stock, conserve the Bio-diversity, soil and water regime, optimize production of forest products. Working Plans of every Forest Division is a technical documents specially prepared to manage a particular area of forest land on a sustainable basis, with an objective to conserve the Bio-diversity, soil and water regime, optimize production of forest products to meet the market needs and also bona-fide needs of local people. Various standard scientific treatments, suitable for a particular area, are prescribed to conserve and improve the quality and productivity of the forest to meet the national and global needs in general and the bona-fide needs of the local people in particular. While preparing and implementing the plan it is necessary to examine the National Forest Policy and all relevant Laws, Rules, including Judicial orders and various administrative orders issued by the Government of India and State Government of Maharashtra, so that all the prescriptions are brought under the umbrella of existing policy framework.

A. Past system of Management of Pune Forest Division:

First Working plan titled as 'Working Plan for Poona Teak' was drawn up by J. Dodgaon and implemented in year 1903. This plan was followed by D.M. Thomason's Plan, Garland's Plan, S.M. Wagle's Plan, Kanwarjit Singh's Plan

and Vikas Gupta and Y.L.P. Rao Plan. The Present Working Plan was prepared as per 'National Working Plan Code-2014' which emphasis use of modern tools and techniques in preparation of working plan.



B) Prescriptions under current W.P. of Pune Forest Division :

Forest area of Pune Forest division (60133 Ha.) is divided into five working circles. Each working circle has separate set as management prescription.

Abstract of allotment of forest area to various working circles is as under:

Sr.No.	Working Circle	Area in ha.
1	Protection (PWC)	35052.50
2	Afforestation (AWC)	6942.73
3	Grassland Management (GMWC)	9181.41
4	Improvement Working circle (IWC)	5033.12
5	Urban Forest Management Working circle (UMWC)	3888.94
6	Miscellaneous.	6034.67
	Total-	66133.392

9.0. It is submitted that the, Forest area of Wanvadi which is subject matter of this Original Application is part of Urban Forest Management Working Circle. Prescriptions of Urban Forest Management Working circle was given under Chapter - 8 of current working plan, copy of Chapter -8 **Hereto annexed as Annexure R-2 is copy of Prescription of Urban Forest Management Working circle given under Chapter -8.**

10.0. It is submitted that the total forest area of Wanavadi is 29.37 ha. which was treated under Urban Forest Management Working circle in old plan (Year 2012-13 to 2021-22) and new plan too (Year 2023-24 to 2032-2033). Said area is having Old Plantation of exotic species mainly Gliricidia. In Chapter-8 point no.8.6.2 Silvicultural system recommended is selection removed for replacing Gliricidia with native (indigenous) species also in Point no. 8.6.10 it is mentioned that execution of removal should be done as explained in Old plantation management chapter. **Hereto annexed as Annexure R-3 is copy of Old plantation management Chapter -11.**

11.0. It is specifically submitted that, in this Chapter Point no.11.3.1.2 describes Environmental impacts of plantation of Gliricidia and recommended clear removal and replacement of Gliricidia / Subabhul / Prosopis. In earlier plan which was written by Shri Vikas Gupta and Dr. Y.L.P. Rao for the period i.e. 2012-13 to 2021-22, there were same recommendation on limited area to replace Gliricidia with native species. This was executed by Forest Department on Following patches –

Sr.No	Location	Area in ha.
1	Parandwadi	1.5
2	Dhamani	5.00
3	Talegaon	5.00
4	Kondawade	3.00

5	Mohammadwadi	5.00
6	Kothrud	12.00
7	Pachgaon Parvati	6.00



12.0. It is specifically submitted that the growth of this plantations is satisfactory. Also similar plantations in Dharashiv and Junnar Forest Division have proved to be successful, note of which has been taken in current Working Plan of Pune Division which is very basis of continuing the same recommendations on large area.

13.0. It is submitted that the Chapter-12 of Working Plan laid down the Guidelines regarding Eco- tourism. **Hereto annexed as Annexure R- 4 is the Copy of Eco- tourism Management Chapter -12.** In Point no.12.5 of this chapter concept of Urban Eco-tourism is elaborated and measures described for Pune division. Specific site of Wanvadi is included in potential Eco- tourism sites mentioned in Appendix no- XL of volume II of Working Plan **Hereto annexed as Annexure R-5 is copy of potential Eco- tourism sites mentioned in Appendix No. XL of volume -II of working plan.** Eco-tourism plan of Wanvadi van Udyan for replacement of *Gliricidia* and development of Eco-tourism activities is in line with the prescriptions of 'Working Plan'. Activities included in Eco- tourism Plan are from Point 12.5 of Working Plan.



14.0. It is submitted that, the Pune Forest Range has proposed to develop a Forest Park (**Van Udyan**) in **6 Ha.** out of the reserved forest, total area 25.52 Ha. bearing Survey No. 49 as per the Eco Tourism Plan **Hereto annexed as Annexure R-6 is a copy of the Eco Tourism Plan which is sanctioned by the Maharashtra Eco Tourism Development Board Nagpur.**

A copy of the Sanction Letter Dt.04/09/2023 is annexed as Annexure R-7.

15.0. It is submitted that, The Forest (Conservation) Amendment Act, 2023 (Van Savrakshan evam Savardhan Adhiniyam) Section 2 explanation (b) (vii) I state that Eco- tourism facilities included in the Forest Working Plan or Wildlife Management Plan or Tiger Conservation Plan can not be include in 'Non-forest purpose'. Also all activities are of temporary in nature and does not attract FCA Act. provides for development of any reserved forest it is not non forest activity and therefore any prior approval of the Central Government is not necessary.

16.0. It is submitted that, as provided in approved Working Plan Gliricidia has been removed and is being replaced by native trees. It is submitted that trees of only exotic species numbering 88 have been felled and trees of local species which are 95 in number have been reserved. **Hereto annexed as Annexure R-8 is a List along with Photographs of trees which have been removed and which have been reserved.** Hence, it is not true and correct to say that there is deforestation when Gliricidia has been removed and replaced by native trees.

17.0. It is submitted that the **Survey No. 45** at **Mohammadwadi** locally known as **Aanandvan** where enthusiast group called 'Anandavan' used to plant and maintain the trees also nature trails were used by the morning / evening walkers. I further state that the **Wanawadi Forest Park** is proposed with objective of Nature education specially targeting school children and proposed to be open in July-2024. This nature educational park will be managed and maintained by the Forest Department.

18.0. It is submitted that, as explained in foregoing paragraphs, it is humbly prayed that the State Forest Department may be allowed to complete the development of the **Wanvadi Van Udyan** as per the development plan and Eco-Tourism plan.



Respondent

Settled by,

Adv. Deepak Gupte.

The National Green Tribunal

Western Zone Bench, Pune

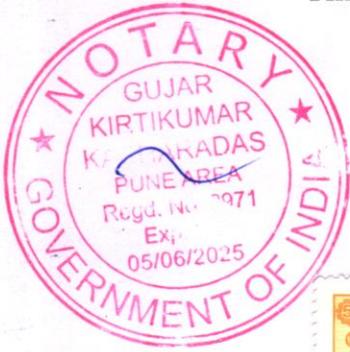


VERIFICATION

I, Shri. Mahadev Namdev Mohite age 47 years, working as Deputy Conservator of Forest, Pune Forest Division, Pune hereby solemnly affirm on behalf of the State of Maharashtra Forest Department do hereby solemnly declares that what is stated in aforesaid paragraphs is true and correct to my knowledge and I believe the same to be true and correct.

Solemnly declared at Pune

This 12th day April, 2024



BEFORE ME
K.K. Gujar 12-4-24
K. K. GUJAR
NOTARY, GOVT. OF INDIA

B. Mohite
Deponent

NOTED AND REGISTERED AT
SERIAL NUMBER 17/24





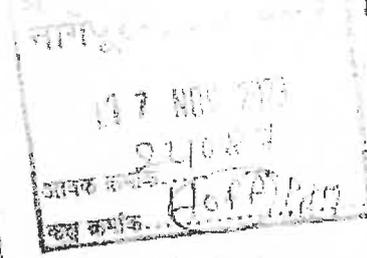
भारत सरकार
GOVERNMENT OF INDIA
पर्यावरण, वन एवं जलवायु परिवर्तन मंत्रालय
MINISTRY OF ENVIRONMENT, FOREST
& CLIMATE CHANGE

Regional Office
Ground Floor, East Wing
New Secretariat Building
Civil Lines, Nagpur - 440001
apcc@central-ngp-mef@gov.in
Date: 07.11.2023

F.No. 12-7/2004 (FOR) / 12437

To,

The Principal Secretary (Forests)
Revenue and Forest Department
Hutatma Raiguru Chowk
Madame Cama Marg
Mantralaya, Mumbai-400032.



श्री. राहुल पाली (उ. व. व.)
24/11/23
प्रमुख (उ. व. व.)

Sub: Approval of Working Plan of Pune Forest Division for the period 2023-24 to 2032-33- regarding Sir,

The undersigned is directed to refer to PCCF (P&M), Maharashtra office letter no. Desk-14/WP/ACF/19/23-24 dated 02.06.2023 on the above subject seeking prior approval of the Central Government under Forest (Conservation) Act, 1980 and to say that DWPR of Pune Forest Division has been examined in the Regional Office in light of relevant provisions of the Forest (Conservation) Act, 1980, Rules and Guidelines framed there under.

After careful examination of the DWPR of Pune Forest Division written by Shri Rahul Pali, IFS and Shri V.D. Suryawanshi, IFS, the Central Government hereby accords approval to the said Working Plan for the period of 2023-24 to 2032-33 in accordance with the powers vested under Forest (Conservation) Act, 1980 and subject to the following conditions.

1. The currency of Working Plan shall be for a period of 10 years i.e. from the year 2023-24 to 2032-33. Period of last Working Plan was up to the year 2021-22, the present Working Plan is approved from the year 2023-24. Intervening period i.e. 2022-23 will be considered as per the prescription of last working plan and whatever work has been carried out may be got regularized/will be considered as part of last working plan, after taking approval of the competent authority wherever needed. In case there has been any work carried out in 2022-23, State Government has to submit proposal for regularization of the same.
2. The orders of Hon'ble Supreme Court in the matter of T.N. Godavarman Thirumulpad Vs Union of India in W.P. (Civil) No. 202/95 and related interlocutory applications shall be strictly adhered to. Any prescription or operation at variance with the Hon'ble Supreme Court's order shall be kept in abeyance till the order is in force or otherwise modified.
3. Further, in compliance with order to Hon'ble Supreme Court's Order dated 22.09.2000, the Government of Maharashtra shall ensure that, regeneration of forests is commensurate with felling carried out under this Working Plan.
4. No felling shall be carried out without allocating necessary fund for implementation of regeneration operation so as to make regeneration commensurate with felling. In the events of failure in regeneration or any shortfall in carrying out regeneration operation, no further felling shall be undertaken until the failure/ shortfall is made up.
5. Following the directions issued by MoEF&CC vide letter dated 23.02.2018, Regional Offices of MoEF&CC under the chairmanship of Deputy Director General of Forests (Central) of the Regional Office of this Ministry will be competent authority for deciding the extent of harvesting that could be permitted under approved Working Plans for ensuring regeneration to be commensurate with felling. Instruction/ directions of the Central Government that may be issued in future in this regard shall be strictly complied with. Felling is to be done by State Government only after seeking permission from REC, RO Nagpur.

6. Fruits bearing naturally grown trees shall not be clear felled for any purpose whatsoever.
7. Standard thinning and silvicultural operations under the strict supervision of Assistant Conservator of Forests and above will be allowed as per norms to improve the health of growing stock while executing the prescriptions of the Working Plan.
8. Prescriptions of micro plans for JFM (if made) should not deviate from the broad framework/guidelines of the Working Plan and shall be in accordance with various orders of Hon'ble Supreme Court.
9. Felling carried out on forest land after seeking approval of the Central Government under Forest (Conservation) Act, 1980 will not be treated as deviation. However, proposed felling in the forest division shall be restricted proportionately in the current/future years to compensate this removal.
10. No deviations shall be made from the prescriptions of Working Plan without prior approval of the Central Government under Forest (Conservation) Act, 1980. However, deviations of positive nature i.e. voluntary plantations carried out outside the working area under any project, schemes and compensatory afforestation may be approved by the competent authority of the State Government from time to time.
11. The exploitable girth of tree species and period of felling cycle shall not be lower than what was approved in previous working plan.
12. In the vicinity of Nalas and water bodies felling shall not be undertaken. Further felling shall not be undertaken near the known resting/nesting places of wild animals and birds.
13. No commercial felling shall be carried out along the 2 km strip of all perennial Rivers of Maharashtra State as recommended by REC in its meeting dated 24.02.2020 viz: Bhima, Godavari, Kanhan, Koyna, Krishna, Manjara, Mula, Nira, Panchganga, Pench, Penganga, Pranhita, Purna, Tapi, Vaitarna and Wainganga, further, no commercial felling shall be carried out along the strip of 500 meters of all seasonal Rivers, only eco-restoration work shall be carried out.
14. Removal of dead and diseased trees will be undertaken under the supervision of an officer not below the rank of Assistant Conservator of forests.
15. Volume details of all kinds of fellings viz. dead and diseased trees, grants of right and concession and all illicit felling should be compiled along with the estimation of their standing volumes as per the same volume table used for the assessment of growing stock. This report shall be prepared annually working circle and compartment wise by the territorial Sub-DFO and shall be submitted to the CF, Working Plan for this purpose within 02 months of the end of control year. Such removal shall be accounted vis-a-vis prescribed felling yield of the relevant year.
16. To ensure sustainable management of Non Timber Forest Produce (NTFP), scientific assessment of estimated quantity has to be done before their removal as per the prescription of Working Plan. Proper mechanism has to be in place for the collection of NTFPs in sustainable manner.
17. Status of rare, endangered and near extinct species shall be monitored closely and adequate measures will be taken for their protection and conservation.
18. Execution of Working Plan shall be in conformity with the National Forest Policies, 1988.
19. No regularization of existing encroachment should be done without following due procedure. And an appendix may be added giving details of the encroachment of the forest area in the division. A definite plan has to be made to remove encroachment and vacated area shall be planted with suitable local species as per Government of India and Hon'ble Supreme Court Orders/Guidelines in the matter.

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20. Eco-tourism shall/may be undertaken on sustainable basis. No permanent structures shall be allowed at such sites. Temporary structures made up of local forest produce may be allowed for public. Such sites will be declared as Plastic Free Zones. These eco-tourisms sites will be managed by the forest department as per the prescriptions of the working plan and after taking prior approval of Central Government under Section-2 of Forest (Conservation) Act, 1980.
21. Demarcation and consolidation of Forest Boundaries will be done adequately. Identification of Land Bank in the form of degraded forest areas in the Division to be explored for CA plantations.
22. Gregarious flowering of bamboo, if any, must be reported to ICFRE and other institutes as mandated and the situation be dealt with standard protocol
23. Proper mechanism has to be put in place to control illegal felling, grazing and fire. Proper fire management plan shall be prepared and executed meticulously
24. Only 50% of normal yield, if silviculturally available, will be allowed for removal in case of Teak, Dhawada, Bhirra, Lendia, Chichawa, Mowai, Rohan, Shiwan, Shisham, Surya, Karai, Mokha, Palas, Dhaman, Bhilawa, etc. In case of Haldu, Ain, Bija, Tiwas, Kalam, Salai, Garadi, Khair it shall be 20% if silviculturally available
25. Efforts should be made to undertake artificial regeneration of local species along with 10-15% RET species in such a way that it serves the purpose of biodiversity conservation as well as meeting the demand of fuel wood, fodder and the timber. Planting of exotic species should be avoided.
26. Lac cultivation, if any, will be practiced as per the provisions of Forest (Conservation) Act, 1980
27. Documents and appendices mandated in National Working Plan, 2014 Code will be incorporated in the Working Plan
28. Attempts shall be made to grow trees outside forest areas to meet the local demand of small timber, fuel wood and fodder as well as to achieve the 33% forest cover as envisaged in National Forest Policy, 1988.
29. Socio-economic survey is to be conducted within first year of implementation of plan and the same be appended with the Working Plan
30. Cutback operation shall be undertaken as per standard norms and grassland will not be expanded at the expense of natural tree cover.
31. While managing forests, provisions of the Biological Diversity Act, 2002 and Wildlife Protection Act, 1972 shall be fully complied.
32. Prescriptions on Wildlife Management should be vetted by the CWLW and a certificate of the same be attached to the plan at the time of final printing.
33. Grazing to be properly regulated and grazing fee should be levied
34. Annual Plan of Operations under Compensatory Afforestation Fund Act, 2016 and Compensatory Afforestation Fund Rules, 2018 shall be in conformity with Working Plan prescriptions.
35. All the Unclassed Forest, acquired CA areas and acquired Private Forests should be notified as RF/PF in time-bound manner at the earliest
36. Midterm review of Working Plan shall be undertaken after five years so as to review the compliance of conditions as laid down in this approval. Modification/addition in some conditions may be made to meet the objectives, with the approval of Regional Office, Nagpur.
37. The Central Government reserves the right to review, modify, withdraw, this approval at any time if any of the conditions of approval are not implemented. Relevant modifications in the

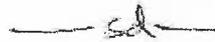
working plan are required to be carried out so as to keep it in conformity with the orders, circulars and guidelines issued by the Central Government or the Apex Court under Forest (Conservation) Act, 1980 or any other statute and National Forest Policy from time to time.

NOTE: The above mentioned approval is subject to attending shortcomings as below and submitting complete Working Plan within 6 months:

1. Information on Chapter- I(i) i.e. Works prescribed during the Plan period in a tabular form along with annual target is not incorporated in Working Plan. The same has to be incorporated.
2. Latest data i.e. 2021-22 regarding density classification for forests as per ISFR (Indian State Forest Report) 2021-22 report of FSI has not mentioned in Section- 2.4.3 (Change in Land Use, Land Use Change on basis of density classification). The same has to be incorporated.
3. Information on Section- 11.3 (Special works of improvement undertaken), and Section- 11.4 (Past yield, revenue and expenditure) is not included in the Working Plan. The same has to be incorporated.
4. Section 4.6.12 should have been Regeneration and Section 4.6.13 should have been Associated regulations and measures in Chapter- 4 i.e. Grassland Management Working Circle. The same has to be incorporated.
5. General information w.r.t. General financial forecast and financial plan of operation chapter, Miscellaneous regulations chapter containing below mentioned section is not incorporated in the Working Plan.
 - a. Petty felling and extraction.
 - b. Rights and Concessions
6. KML file of compartment and boundary of the division is not submitted. The soft copy of KML file needs to be submitted.
7. Maps viz. Management map, Working Plan map and Reference map and other necessary maps shall be submitted.

This issues with the approval of DDGF (Central), Regional Office, MoEF&CC, Nagpur.

Yours faithfully,



(C.K. Sonwane)
DIGF (Central)

Copy to:

1. The IGF (RoHQ), Ministry of Environment, Forest and Climate Change, Indira Paryavaran Bhawan, Jorbagh Road, Aliganj, New Delhi- 110003.
2. The Principal Chief Conservator of Forests (HoFF) Govt. of Maharashtra, Van Bhawan, Ramgiri Road, Civil Lines, Nagpur-440001.
3. The Principal Chief Conservator of Forests (P&M), Govt. of Maharashtra, Van Bhawan, Ramgiri Road, Civil Lines, Nagpur-440001.
4. Guard File.


(C.K. Sonwane)
DIGF (Central)

**GOVERNMENT OF INDIA
MINISTRY OF ENVIRONMENT,
FOREST
& CLIMATE CHANGE**

Regional Office Ground Floor, East
Wing New Secretariat Building
Civil Lines. Nagpur-440001
apccfcentral-ngp-mef@gov.in

F.No. 12-712004 (FOR) 124.37

Date: 07.11.2023

To,

The Principal Secretary (Forests)
Revenue and Forest Department
Hutatma Raiguru Chowk
Madame Cama Marg
Mantralaya, Mumbai 400032

Sub- Approval of working Plan of Pune forest division for the period 2023-24 to 2032-33 regarding.

Sir,

The undersigned is directed to refer to PCCF (P&M), Maharashtra office letter no Desk-14/WP/ACF/19/23-24 dated 02-06-2023 on the subject seeking prior approval of the Central Government under Forest (Conservation) Act 1980 and to say that DWPR of Pune forest division has been examined in the regional office in light of relevant provisions of the Forest (Conservation) Act, 1980, Rules and Guidelines framed there under.

After careful examination of the DWPR of Pune forest division written by Shri. Rahul Patil, IFS and Shri. V. D. Suryawanshi. IFS the Central Government hereby accords approval to the said Working Plan for the period of 2023-24 to 2032-33 in accordance with the powers vested under Forest (Conservation) Act, 1980 and subject to the following conditions.

1. The Currency of working Plan shall be for a period of 10 years from the years 2023-24 to 2032-33, Period of last Working Plan was up to the year 2021-22, The present Working Plan is approved from the year 2023-24 Intervening period i.e. 2022-23 will be considered as per the prescription of last working plan and whatever work has been carried out may be got regularized/will be considered as part of last working plan. After taking approval of the competent authority wherever needed in case there has been any work carried out in 2022-23, State Government has to submit proposal for regularization of the work.
2. The orders of Hon'ble Supreme Court in the matter of T. N Godavarman Thirumulpad Vs Union of India in W. P (Civil) NO. 202/95 related interlocutory applications shall be strictly adhered to any prescription of operation at variance with the Hon'ble Supreme Court's order shall be kept in abeyance till the order is in force or otherwise modified.
3. Further, in compliance with order to Hon'ble Supreme Court's order dated 22. 09. 2000, the Government of Maharashtra shall ensure that regeneration of forests is commensurate with felling carried out under this Working Plan.
4. No felling shall be carried out without allocating necessary fund for implementation of regeneration operation so as to make regeneration commensurate with felling in the

- events of failure in regeneration of any shortfall in carrying out regeneration operation no further felling shall be undertaken until the failure shortfall is made up.
5. Following the direction issued by MoEF & CC vide letter dated 23.02.2018. Regional Offices of MoEF & CC under the chairmanship of Deputy director general of Forests (Central) of the regional office of this Ministry will be competent authority for deciding the extent of harvesting that could be permitted under approved Working Plans for ensuing regeneration that to be commensurate with felling . Instruction/directions of the Central government that may be issued in future in this regard shall be strictly compared with Felling is to be done by State Government only after seeking permission from REC RO Nagpur.
 6. Fruits bearing naturally grown tree shall not be clear felled any purpose whatsoever.
 7. Standard thinning and silvicultural operations under strict supervision of assistant Conservator of Forests and above will be allowed as per norms to improve the health of growing stock while executing the presumptions of the working Plan.
 8. Prescriptions of micro plans for JFM of mass should be devote from the broad framework/ guidelines of the Working Plan and shall be in accordance with various orders of Hon'ble Supreme Court.
 9. Felling carried out on forest land after seeking approval of the Central Government under forest (Conservation) Act, 1980 will not be treated as deviation however, Proposed felling in the forest division shall be restricted proportionately the current future years to compensate this removal.
 10. No. deviations shall be made from the prescription of working Plan without prior approval of the Central Government Forest (Conservation) Act 1980. However, deviations of positive nature i.e. voluntary plantations carried out outside the working area under any project schemes and compensatory afforestation may be approved by the competent authority of the state Government from Time to time.
 11. The exploitable girth of tree species and period of felling cycle shall not be lower than what was approved in previous working plan.
 12. In the vicinity of Nalas and water bodies felling shall not be undertaken. Further felling shall not be undertaken near the Known resting/nesting place with animals and birds.
 13. No commercial felling shall be carried out along the 2 km. strip of all perennial Rivers of Maharashtra State as recommended by REC in its meeting dated 24.02.2020 viz; Bhima, Godavari, Kanhan, Koyna, Krishna, Manjara, Mutha, Panchganga, Pench, Penganga, Pranhita, Purna, Tapi, Vaitarna and Wainganga, further no commercial felling shall be carried out along the stop of 500 meters of all seasonal Rivers only eco-restoration work shall be carried out.
 14. Removal of dead and diseased trees will be undertaken under the supervision of an officer not below the rank of Assistant Conservator of forests.
 15. Volume details of all kinds of fellings viz dead and diseased trees, grants of right and concession and all illicit felling should be compiled along with the estimation of their standing volumes as per the same volume table used for the assessment of growing stock. This report shall be prepared annually CF, Working Plan for this purpose within 02 months of the end of control year. Such removal shall be accounted and presented felling yield of the relevant year.
 16. To ensure sustainable management of Non Timber Forest Produce (NTFP) scientific assessment of estimated quantity has to be done before their removal as per the perceptions of Working Plan. Proper mechanism has to be place for the collection of NTFPs in sustainable manner.
 17. Status of rare, endangered and near extend species shall be monitored closely and adequate measures will be taken for their protection and conservation.
 18. Execution of working Plan shall be in Conformity with the National Forest Policies 1988.

19. No regularization of existing encroachment should be one without following due procedure. And an appendix may be added giving details of the encroachment of the forest area in the division. A definite plan has to be made to remove encroachment and vacated area shall be planted with suitable local species as per Government of India and Hon'ble Supreme Court orders/Guidelines in the Matter.
20. Eco-tourism shall/may be undertaken on sustainable basis No permanent structures shall be allowed at such sites Temporary structures Made up of local forest produce may be allowed for public. Such sites will be declared as plastic free Zones these eco-tourisms sits will be managed by the forest department as per the prescriptions of the working plan and after taking prior approval of Central Government under Section 2 of forest (conservation) Act 1980.
21. Demarcation and consolidation of forest Boundaries will be done adequately Identification of land Bank in the form of degraded forest areas in the Division to be explored for CA plantations.
22. Gregarious flowing of bamboo if any must be reported to ICFRE and other institutes as mandated and the situation be deal with standard protocol
23. Proper mechanism has to be put in place to control legal felling, grazing and the. Proper fire management plan shall be prepared and executed meticulously
24. Only 50% of normal Yield if silvicultural available will be allowed for removal in case of Teak Dhawada. Bhirra. Lendia, Chichanws, Mowai, Rohan, Shiwan, Shishem. Surya, Karai, Mokha, Palas, Dhaman, Bhilawa, ect. In case of Haldu,Ain, Bija, Tiwas, Kalam, Salai, Garadi, Khair it shall be 20 % if silviculturally available
25. Efforts should be made to undertake artificial regeneration of local species along with 10-15 % RET species in such a way that it serves the purpose of biodiversity conservation as meeting the demand of fuel wood, fodder and the – planning of exotic species should be avoided.
26. Lac cultivation, if any, will be practiced as per the provisions of Forest (Conservation) Act, 1980
27. Documents and appendices mandated in National Working Plan, 2014 Code will be incorporated in the working Plan
28. Attempts shall be made to grow trees outside forest areas to meet to local demand of small timber fuel wood and fodder as well as to achieve the 33% forest cover as envisaged in National Forest Policy, 1988
29. Socio-economic survey is to be conducted within first year of implement of plan and the same be appended with the working plan
30. Cutback operation shall be undertaken as per standard norms and grassland will not be expanded at the expense of natural tree cover
31. While managing forests, provisions of the biological diversity Act, 2002 and wildlife Protection Act 1972 shall be fully complied
32. Perceptions on wildlife Management should be vetted by the CWLW and a certificate of the same be attached to the plan at the time of final printing.
33. Grazing to be properly regulated and grazing fee should be levied
34. Annual plan of Operations under Compensatory afforestation Found Act 2016 and Compensatory Afforestation fund Rules 2018 shall be in conformity with Working plan prescriptions
35. All the un classed Forest acquired CA areas and acquired Private Forests should be notified as RF/PF in time-bound manner at the earliest
36. Midterm review of working Plan shall be undertaken after five years so as to review the compliance of conditions as laid down in this approval of Regional Office, Nagpur.
37. The Central Government reserves the right to review, modify, and withdraw this approval at any time if any of the conditions of approval are not implemented. Relevant modifications in the Working plan are required to be carried out so as to keep it in

conformity with orders, circulars and guidelines issued by the Central Government or the Apex Court

Working plan area required to be carried out so as to keep in conformity with the orders, circulars and guidelines issued by the Central Government of the Apex Court under Forest (Conservation) Act, 1980 or any other statute and National Forest Policy from time to time

Note – The above mentioned approval is subject to attending shortcomings as below and submitting complete Working Plan Within 6 Months;

1. Information on Chapter – (I) i.e. Works prescribed during the Plan-period in a labour form along with annual target is not incorporated in Working Plan. The same has to be incorporated.
2. Latest date i.e. 2021-22 regarding density classification for forest as per ISFR (Indian State Forest Report) 2021-22 report of FSI has not mentioned in Section 2.4.3 (Change in Land Use. Land Use Change on basis of density classification) The same has to be incorporated
3. Information on Section 11.3 (Special works of improvement undertaken) and Section 114 (Past yield, revenue and expenditure) is not included in the Working Plan. The same has to be incorporated.
4. Section 4.6.12 should have been Regeneration and Section 46.13 should have been Associated regulations and measures in Chapter 4 e Grassland Management Working Circle The same has to be incorporated
5. General information w.r.t. General financial forecast and financial plan of operation chapter Miscellaneous regulations chapter containing below mentioned section is not incorporated in the Working Plan
 - a. Petty felling and extraction.
 - b. Rights and Concessions
6. KML file of compartment and boundary of the division is not submitted The soft copy of KML file needs to be submitted
7. Maps viz, Management map, Working Plan Map and Reference map and other necessary maps shall be submitted.

This issues with the approval of DDGF (Central) Regional Circle EF & CC, Nagpur

Yours faithfully,

S/d
(C.K.Sonwane)
DIGF (Central)

Copy to:

1. The IGF (Ro, HQ), Ministry of Environment Forest and Calamite Change Indira Paryavaran Bhavan, Jorbagh Road, Aligani, New Delhi-110003
2. The Principal Chief Conservator of Forest (HoFF) Govt. of Maharashtra Van Bhawan, Ramgiri Road, Civil Lines, Nagpur – 4400001
3. The Principal Chief Conservator of Forest (P & M) Govt. of Maharashtra Van Bhawan, Ramgiri Road, Civil Lines, Nagpur – 4400001
4. Guard File.

S/d
(C.K.Sonwane)
DIGF (Central)

CHAPTER – 8**URBAN FOREST MANAGEMENT WORKING CIRCLE****8.1: URBAN FOREST MANAGEMENT WORKING CIRCLE:**

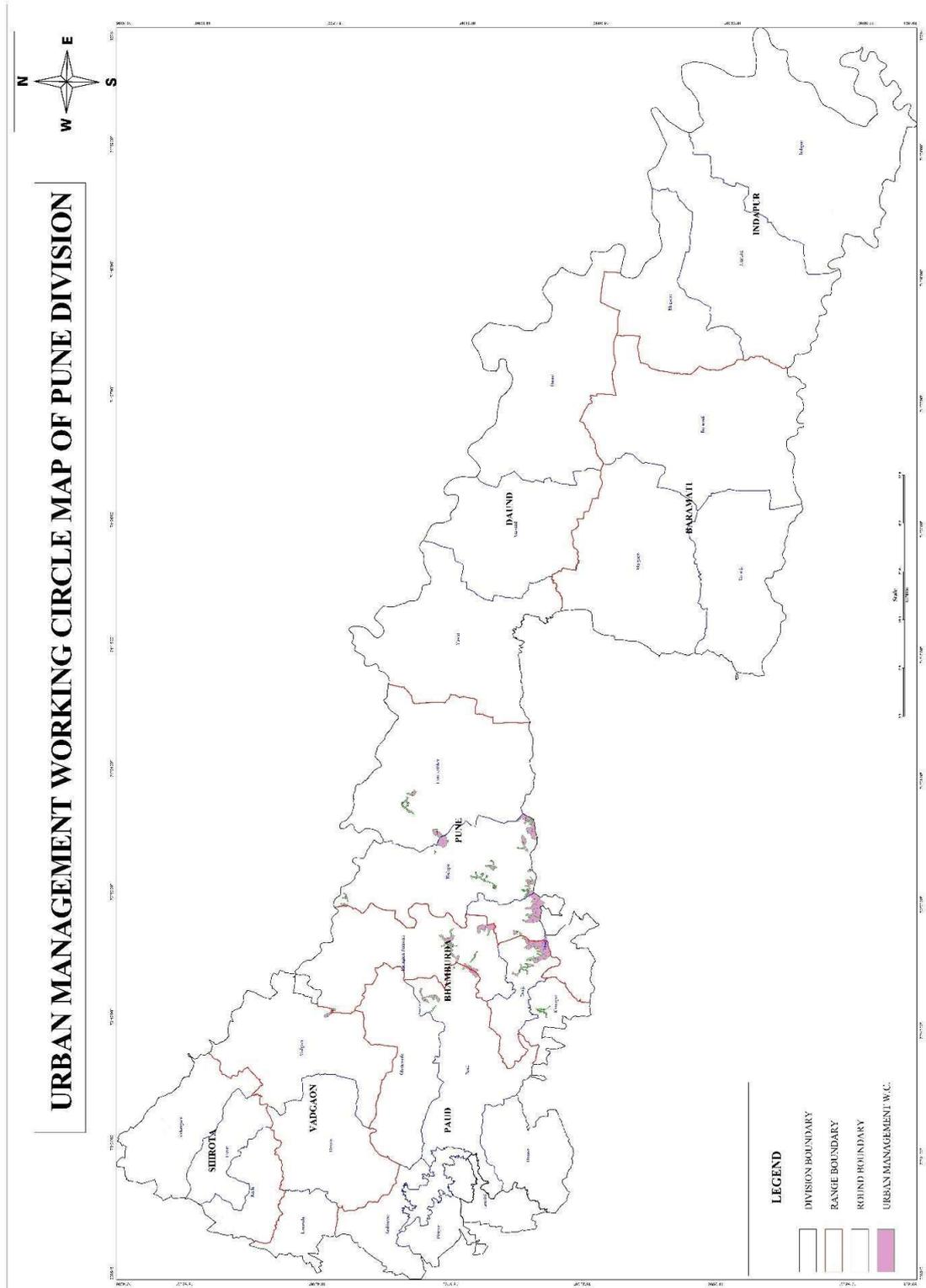
The area of this Working Circle has been clearly marked on the GIS based map, which is appended as Management Map in the Plan and a copy of the same is given on a smaller scale on A4 size here.

8.2: GENERAL CONSTITUTION OF THE WORKING CIRCLE

This Working Circle includes forest areas situated mostly in city limits and areas of urban sprawls expanding up-to outer ring roads, forest areas bordering major MIDC's and talukas. The forests in this Working Circle are all part of Urban Forest Management which is a specialized branch of forestry and has its objective of cultivation and management of trees for their present and potential contribution to the Physiological, Sociological, Environmental and Economic well-being of urban society. The health of this urban forest is a mosaic of the planted landscape and the remnant native forest. It is a reflection of the city's health, well-being and livability. These trees and other plants are a vital part of the city character, giving it a special sense of place. Urban forests provide many environmental and social services that contribute to the better quality of life in cities. Apart from their aesthetic appeal, these forest patches have a great multiple use value for the city dwellers, planners and civic authorities. People use these forest areas for morning and evening walks, for jogging and trekking, for bird watching, for outings and picnics and as resting places.

These islands of greenery and serenity which are surrounded by cement concrete jungle from all around, act as green lungs to the Pune city. Though all green islands don't vest with Forest department but are also vested with Defense, and Municipal Corporation of Pune and Pimpri –Chinchwad. The forest areas of varying shapes and sizes (varying between 1.00 ha. and 717.19 ha.) are scattered at different places within the municipal limits of the PMC & PCMC and areas adjoining to major MIDC's & talukas like Baramati, Indapur, Wadgaon etc. Some important forest areas are located at Pachgaon-Parvati, Bhamburda, Vadki, Bavdhan Khurd, Warje, Kothrud, Katraj, etc. The areas allotted to this Working Circle were previously included mainly in the 'Urban Forest WC' & 'Protection WC' and also from another Working Circle. A statement showing village and compartment no. wise details of area included in this WC is given in **Appendix No. XXXVI of Vol. II.**

Coordinated management of the urban forest occurs because city agencies, businesses, civic organizations and residents have formed unified approach and partnered to make a place for forests in the city. Numerous residents recognize trees as a vital, functioning part of the city's infrastructure and ecosystem and provide adequate, whole hearted support to maintain and enhance the urban forest. The department has achieved a healthy, sustained urban forest, carefully managed and cared for, which



contributes to the economic and environmental well-being of the city. Although these forests are being protected and nurtured yet they face relentless pressure of biotic and abiotic form.

Table 8.1 Allotment of area to the WC

Sr. No	Range	Area of the Range (In ha.)	No. of compartments		Area allotted to the WC	% To area of the range	% To area of the W.C.
			Full	Part			
1.	Wadgaon Maval	10124.18		1	51.59	0.510	1.327
2.	Shirota	12766.60			0.00	0	0
3.	Paud	11770.701		1	266.93	2.268	6.864
4.	Bhamburda	6514.60	6	8	1614.97	24.79	41.527
5.	Pune	7062.128	3	4	1955.45	27.690	50.282
6.	Daund	6107.97			0	0	0
7.	Indapur	6753.67			0	0	0
8.	Baramati	5031.11			0	0	0
	Total	66130.9615	9	14	3888.94	5.881%	100%

The following table shows the extent of all such urban forest areas falling within the Corporation limits of Pune (PMC) & Pimpri-Chinchwad Municipal Corporation (PCMC).

Table 8.2 List of villages bearing urban forest areas

Pune Municipal Corporation			Pimpri-Chinchwad Municipal Corporation		
Sr. No.	Village Forest Area (Ha.)	Area in ha.	Sr. No.	Village Forest Area (Ha.)	Area in ha.
1.	Pachgaon-Parvati	239.68	1.	Dighi	134.71
2.	Parvati	8	2.	Nirgudi	227.02
3.	Pashan	43.51	3.	Dudulgaon	63.2
4.	Dhanori	71.66	4.	Kiwale	7.90
5.	Warje	118.58	5.	Mamurdi	44.67
6.	Bhamburda	99.84	6.	Mahlunge	36.62
7.	Kothrud	127.99	7.	BavdhanKh.	102.46
8.	Nandoshi	619.34			
9.	Katraj	774.82			
10.	Dhayari	186.87			
11.	Wadki	543.24			
12.	Kondhava bk	144.6			
13.	Narhe	52.53			
14.	Pisoli	26.51			
15.	Wadgaon Sheri	3.23			
16.	Ghorpadi	10.83			
17.	Mohmadwadi	99.77			
18.	Undri	80.94			
19.	Wanawadi	29.37			
20.	KondwaKh.	13.02			
21.	Hadapsar	80.93			
22.	ManjriKh.	40			
23.	Manjri Bk.	7.60			
24.	Kharadi	3.27			
25.	Lohagaon	16.11			
26.	Wagholi	39.12			
27.	Khadawasla	120.22			
28.	Hingane Bk.	8.10			

29.	Bopodi	8.37			
30.	Bavdhan Khurd	102.46			
31.	Khanapur	44.82			
	Total	3765.33		Total	616.58

8.3: GENERAL CHARACTERS OF VEGETATION

A few forest patches within the municipal limits bear good vegetation which are green lungs of Pune city. Pachgaon- Parvati, Bhamburda, Katraj, and many others were afforested under 'Green Pune' campaign implemented by the State Government in the early nineties. Areas were fenced for effective protection against biotic interference. Irrigated plantations were undertaken within the fenced areas for early establishment of seedlings and their faster growth. Most of such urban forests are now covered with successful mature *Glyricidia*, *Subabul* plantations. The Katraj forest block is very rich in biodiversity. University students and research scholars study these areas for acquiring scientific knowledge.

It has been observed that the top and the gentle slopes of the plateau of many such spots especially Pachgaon-parvati and Bhamburda bear good soil depth and the soils varying between red lateritic soil to black cotton soil. Miscellaneous species plantations were raised in the years 2009 and 2010 in blank areas / small patches after removal of *Glyricidia* ('a' areas) and as under-planting in the old *Glyricidia* plantations only ('b' areas) at Pachgaon-parvati and Bhamburda. Tall plants were used as the planting stock and were being artificially irrigated. The miscellaneous plants in 'a' area had shown good growth in comparison to the ones in 'b' Mixed sp. Plantations on Pachgaon-Parvati hillock one year old Irrigated mixed spp. Plantation with tall plants at Bhamburda after partial removal of *Glyricidia* have also shown promising results during the last plan period.

Table 8.3 No. of sound trees per ha in Urban Forest Management Working Circle

Name of Working Circle	Total	General utility species	Special utility species	Minor forest produce species	Other species
Urban Forest Management W.C.	268.58	54.90	18.98	78.57	116.12
% Of stock to total stock	100	20.44	7.07	29.26	43.24

Table 8.4 Species and Girth- class wise Distribution (Per Ha.) in Protection Working Circle

Group & Species	Girth Class Wise Classification in cm										
	15 U 30	31 U 45	46 U 60	61 U 75	76 U 90	91 U 105	106 U 120	121 U 135	136 U 150	Above 150	Total
Group - A : Species of General Utility											
Ain	5.71	6.12	2.86	1.02	0.20	0.00	0.00	0.00	0.00	0.00	15.92
Shisam	0.41	1.63	0.41	0.00	0.00	0.00	0.00	0.00	0.00	0.00	2.45
Teak	4.90	13.06	8.16	6.12	2.24	1.02	0.61	0.41	0.00	0.00	36.53
Total - A	11.02	20.82	11.43	7.14	2.45	1.02	0.61	0.41	0.00	0.00	54.90

Group - B : Species of Special Utility											
Khair	10.00	2.65	1.02	0.00	0.00	0.00	0.00	0.00	0.00	0.00	13.67
Salai	2.24	1.22	0.41	0.00	0.00	0.00	0.00	0.00	0.00	0.00	3.88
Sawar	0.00	0.00	0.00	0.41	0.00	0.00	0.00	0.00	0.00	0.00	0.41
Shivan	0.41	0.20	0.00	0.41	0.00	0.00	0.00	0.00	0.00	0.00	1.02
Total - B	12.65	4.08	1.43	0.82	0.00	0.00	0.00	0.00	0.00	0.00	18.98
Group - C : Species of Minor Forest Produce											
Aawala	0.20	0.20	0.00	0.20	0.20	0.00	0.00	0.00	0.00	0.00	0.82
Amba	0.00	0.00	0.00	0.00	0.20	0.00	0.00	0.00	0.00	0.00	0.20
Anjan	0.00	0.00	0.41	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.41
Apta	0.20	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.20
Asana	0.20	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.20
Babhul	0.20	1.02	1.22	0.61	0.00	0.00	0.00	0.00	0.00	0.00	3.06
Bel	3.67	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	3.67
Bhutiya	0.41	0.82	0.82	0.20	0.00	0.00	0.00	0.00	0.00	0.00	2.25
Bibwa	1.43	1.22	0.00	0.20	0.20	0.00	0.00	0.00	0.00	0.00	3.06
Bor	0.61	0.00	0.41	0.00	0.00	0.00	0.00	0.00	0.00	0.00	1.02
Charoli	0.20	0.41	0.41	0.00	0.00	0.00	0.00	0.00	0.00	0.00	1.02
Chinch	0.20	0.00	0.00	0.61	0.41	0.82	0.20	0.00	0.00	0.00	2.25
Dhaman	1.43	1.02	0.20	0.00	0.00	0.00	0.00	0.00	0.00	0.00	2.65
Dhawada	3.27	3.88	0.82	0.00	0.20	0.20	0.00	0.00	0.00	0.00	8.37
Dhup	0.00	0.20	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.20
Ghatbor	4.49	2.24	0.20	0.00	0.00	0.00	0.00	0.00	0.00	0.00	6.94
Hirda	0.41	0.41	0.20	0.00	0.00	0.00	0.00	0.00	0.00	0.00	1.02
Hiwar	0.00	0.61	0.20	1.02	0.00	0.00	0.00	0.00	0.00	0.00	1.84
Jambhul	0.00	0.00	0.00	0.41	0.61	0.20	0.20	0.00	0.00	0.00	1.43
Kadamb	5.10	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	5.10
Kalamb	0.00	0.20	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.20
Kanchan	0.61	1.22	0.41	0.00	0.00	0.00	0.00	0.00	0.00	0.00	2.24
Karvand	0.82	0.00	0.20	0.00	0.00	0.00	0.00	0.00	0.00	0.00	1.02
Kuda	0.61	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.61
Medhsing	0.41	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.41
Mogir	0.20	0.61	0.20	0.00	0.00	0.00	0.00	0.00	0.00	0.00	1.02
Moha	0.41	0.61	0.20	0.00	0.20	0.00	0.00	0.00	0.00	0.00	1.43
Neem	3.47	1.63	1.43	0.82	1.02	0.00	0.00	0.00	0.00	0.00	8.37
Nilgiri	0.00	0.41	0.61	0.41	0.00	0.00	0.00	0.00	0.00	0.00	1.43
Palas	0.00	0.20	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.20
Pangara	0.82	0.61	0.00	0.61	0.00	0.00	0.00	0.00	0.00	0.00	2.04
Subabhul	0.82	1.22	0.41	0.41	0.00	0.00	0.00	0.00	0.00	0.00	2.86
Tembhurni	0.82	1.02	1.43	0.00	0.00	0.00	0.00	0.00	0.00	0.00	3.27
Tiwas	0.00	0.82	0.00	0.00	0.00	0.20	0.00	0.00	0.00	0.00	1.02
Umber	0.00	0.00	0.00	0.20	0.20	0.00	0.00	0.00	0.00	0.00	0.41
Wad	6.33	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	6.33
Total - C	37.35	20.61	9.80	5.71	3.27	1.43	0.41	0.00	0.00	0.00	78.57
Group - D : Other Species											

Accacia	0.00	0.00	0.00	0.20	0.20	0.00	0.00	0.00	0.00	0.00	0.41
Borkati	0.41	1.02	0.41	0.20	0.00	0.00	0.00	0.00	0.00	0.00	2.04
Chandan	0.20	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.20
Char	0.00	0.20	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.20
Chilar	0.00	0.20	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.20
Fashi	0.61	0.00	0.20	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.82
Gela	0.00	0.61	0.00	0.20	0.00	0.00	0.00	0.00	0.00	0.00	0.82
Gliricidia	20.41	22.45	12.24	6.53	4.69	1.84	0.00	0.00	0.00	0.00	68.16
Goti	0.61	0.41	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	1.02
Kashid	0.00	0.82	1.02	1.22	1.22	0.00	0.00	0.00	0.00	0.00	4.29
Kinai	0.41	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.41
Kini	0.20	0.20	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.41
Kinjal	0.61	0.61	0.20	0.00	0.00	0.00	0.00	0.00	0.00	0.00	1.43
Kombal	0.61	1.63	0.61	0.41	0.20	0.00	0.00	0.00	0.00	0.00	3.47
Kumbal	0.20	0.20	0.20	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.61
Mohgani	6.73	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	6.73
Nana	0.00	0.41	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.41
Pachar	0.00	0.00	0.00	0.00	0.00	0.20	0.00	0.00	0.00	0.00	0.20
Patang	0.61	0.20	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.82
Pimpal	6.94	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	6.94
Salphal	0.00	0.20	0.20	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.41
Sisoo	0.00	1.43	1.02	1.43	0.20	0.20	0.00	0.00	0.00	0.00	4.29
Surangi	0.00	0.82	0.20	0.00	0.00	0.00	0.00	0.00	0.00	0.00	1.02
Tambat	2.04	1.63	0.20	0.82	0.00	0.00	0.00	0.00	0.00	0.00	4.69
Tamhan	2.24	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	2.24
Tortolis	0.00	0.00	0.41	0.82	0.41	0.00	0.00	0.00	0.00	0.00	1.63
Vela	0.82	0.61	0.20	0.00	0.00	0.00	0.00	0.00	0.00	0.00	1.63
Waras	0.20	0.00	0.00	0.20	0.00	0.00	0.00	0.00	0.00	0.00	0.41
Wavala	0.20	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.20
Total - D	44.08	33.67	17.14	12.04	6.94	2.25	0.00	0.00	0.00	0.00	116.12
Grand Total	105.10	79.18	39.80	25.71	12.65	4.69	1.02	0.41	0.00	0.00	268.58

8.4 FELLING SERIES, CUTTING SECTIONS AND JFM AREAS

Working series and annual coupes: The area of this Working Circle is divided into 10 working series with average area of 388.89 ha. Each working series is further divided into 10 coupes with average coupe size of 32.40 ha. Details of felling series and coupes in given in **Appendix No.XXXVII**

8.5: BLOCKS, COMPARTMENTS AND JFM AREA (MARKED ON GIS BASED MAPS)

The details of compartments in this Working Circle have been provided in the **Appendix No. XXXVI**.

8.6: - SPECIAL OBJECTS OF MANAGEMENT

- i. To protect the forest areas from encroachments, illegal felling and fires etc.

- ii. To rejuvenate the forests falling within the corporation limits and replace old plantations of exotic species with native species of plants.
- iii. To create awareness and to educate urban dwellers regarding forests, wild life and environmental issues.
- iv. To help mitigate the effects of severe air pollution in the Pune city area.
- v. To provide recreational facilities to the people by adopting eco-tourism.
- vi. To protect and conserve endemic biodiversity of Pune city and improve carbon sequestration.

8.6.1: - ANALYSIS OF THE CROP

8.6.1.1 Stock Mapping-

Conventional stock mapping has been done by the staff of the working plan division with the help of territorial division. Working Plan division has used satellite imageries and done ground truthing for verification. Stock analysis results shows that this Working Circle constitutes of 6 % which are either within city limits, adjoining to urban sprawls or near to areas which are prone to encroachment. Therefore, this area has been allotted to Urban Forest Management Working Circle. Nearly 56% area is well stocked and about 23% area is under plantations mainly of Glyricidia and Subabul.

Urban Forest Management Working Circle

Sr. No.	Stock Type	Area (Hectare)	Area (Percentage)
1	Bamboo	0.00	0.00%
2	Forest Blank	45.17	1.16%
3	Exotic Species	876.17	22.53%
4	Grass	1.88	0.05%
5	Mixed	1818.96	46.77%
6	Plantation	29.05	0.75%
7	Scrub	161.81	4.16%
8	Teak	138.55	3.56%
9	Uncultivable Blank	815.25	20.96%
10	Understocked	0.00	0.00%
11	Water	2.12	0.05%
Grand Total		3888.94	100.00%

8.6.1.2 Age and density- The crop in this WC is having preponderance of Glyricidia which are not clearly divided into classes but, other allied species are divided into classes. These plantations are mainly more than 25 years old and forms mature crop. These forest which have vegetative cover are generally very dense in monsoon and winter whereas during summer only main stems are present.

8.6.1.3 Enumeration: Enumeration has been carried in 49 plots by the staff of the territorial division as per the procedure laid down in National Working Plan Code, 2014.

8.6.2 SILVICULTURAL SYSTEM

Here selection felling silvicultural system is being prescribed. It is mainly prescribed for replacing Glyricidia with indigenous plantations.

8.6.3 ROTATION PERIOD: Rotation period is fixed for this Working Circle though working plan period is spread over span of 10 years; as there is no production prescribed.

8.6.4 HARVESTABLE DIAMETER: Not Applicable

8.6.5 REDUCING FACTORS AND REDUCED AREAS: Not Applicable

8.6.6 FELLING CYCLE: Treatment cycle is fixed at 10 years.

8.6.7 DIVISION INTO PERIODS AND ALLOTMENT TO PERIODIC BLOCK (PB): Not Applicable.

8.6.8 CALCULATION OF THE YIELD: Not Applicable.

8.6.9 TABLE OF FELLING: Not applicable.

8.6.10 METHOD OF EXECUTING THE FELLING: As per prescriptions of felling of Glyricidia mentioned in Old Plantation Management Chapter.

8.6.11: SUBSIDIARY SILVICULTURAL OPERATIONS CLEANING AND THINNING:

8.6.11.1: Demarcation, Treatment Map and Prescription

The annual coupes shall be demarcated one year in advance. The Range Forest Officer shall prepare a treatment map with the help of stock map as prepared by WPO, major focus should be on Soil and Moisture Conservation works keeping in view the principles of watershed management.

8.6.11.2: Treatment Map:

After demarcation of the coupe, a treatment map shall be prepared by the field staff and shall be verified by a gazetted officer emphasizing the suitability of sites for SMC as well as other improvement works.

A treatment map should show the following areas:

- I. **Area 'A' - Protection areas:** include following areas
 - i. Areas with steep slopes i.e., more than 25°.
 - ii. Eroded areas or areas liable to erosion.
 - iii. Twenty meters wide strip on either side of the water courses.

Area 'B' - Under stocked areas: include areas with crop density less than 0.4.

II. Area 'C' - Old plantation areas: include areas under old plantations. It mainly includes mixed species forest areas around on slopes of hillocks and plantations of exotic species like Glyricidia, Subabhul, etc. in other areas. Roughly 900 ha area comes under this category.

III. Area 'D' - Well stocked areas: include areas with crop density more than 0.4. These areas are also having mainly Glyricidia and also mixed plantations. Roughly 1800 ha area comes under this category.

All prominent nallahs, perennial sources of water, water bodies etc. shall also be shown in the treatment map and numbered.

In B areas where plantations are prescribed, grids of 0.5 (100x 50 m) hectare size while in C and D areas, grids of 1 ha. size (100 x 100 m) shall be laid. The RFO shall maintain grid wise record of enumeration and marking in the marking register. In remarks column of the register, reasons for marking such as mature, dead, malformed, live high stump, singling of coppice shoots etc. will be recorded. Grid wise record of operations mentioned under NR e.g., tending, root stock management, singling of coppice, weeding etc. shall also be maintained by the RFO.

8.6.11.3 TREATMENT: The various treatments proposed for the above-mentioned areas are as follows:

I. Area 'A':

- I. The SMC works including brushwood dam, LBS, gabion and gully plugging will be carried out wherever essential. Sites with perennial sources of water should be tackled appropriately as explained under 'general prescriptions'. While undertaking SMC works, **raking of soil or SMC works requiring excavation should not be done** as this may accelerate soil erosion. Area treatment like Continuous Contour Trench, etc. must be strictly avoided in high rainfall areas. Sites with perennial sources of water should be tackled appropriately.
- II. Soil binders like Sisal (*Agave sp.*), Sabar (*Euphorbia*), local grasses like Dongri, Marvel, Pavnya, Sheda, gholi, etc. shall be planted in areas prone to sheet erosion.
- III. In the accessible under stocked areas having good soil depth, seed-dibbling of local species like Hirda, Gela, Ain, Behada, Jambhul, Amba, Karap, Arjun, Karwand etc. shall be done to suitably clothe the area.
- IV. Bamboo and other suitable species shall be planted in accessible under stocked areas, within 20 meters wide strip on either side of water courses. 'Mes' bamboo may be preferred in high rainfall areas.
- V. Artificial regeneration by plantation should be strictly avoided on steep slopes and **high-altitude plateaus**.
- VI. Felling is not prescribed.
- VII. For plantations in plains adjoining to major perennial rivers endemic species must be planted which are of hydrophilic nature like *Terminalia arjuna*, *Pongamia pinnata*, *Ficus racemosa*, *Ficus hispida*, etc. and shrubs like *Commelinaspecies* *Polygonum species*, *Cyperusspecies*, etc. may be planted which can tolerate submergence due flood water for shorter period of time. Plantation can be done only in riparian zone and in upland area.

II. Area 'B':

- i. The SMC works shall be carried out as per the site suitability.

- ii. Accessible under-stocked areas having good soil depth and more than 0.5 hectares in extent in a compact block shall be planted with suitable local miscellaneous species while in areas less than 0.5 ha. in extent, seed-dibbling shall be done. Irrigated plantations with tall plants should be raised at suitable sites.
- iii. All existing natural regeneration of Hirda, Amba, Ain, Kadai, Awala, Jambhul, etc. will be tended, interfering undergrowth will be cleared and seedlings will be freed of suppression if any, by judicious removal of some over wood under strict guidance of RFO.
- iv. Wherever soil depth is less than 15 centimeter and slope is gentle, instead of planting tree species, grass seedlings raised in polythene bags may be tried. Marvel, Dongri, Pavnya, Sheda grass species are recommended. In such areas medicinal plants Waghati, Bilimbi, Kandvel, etc. occurring on shallow soils, wild edible plants like Kartole, Chichurdietc, which normally don't require more soil depth may be tried.
- v. No tree shall be marked for felling.

III. Area 'C':

- i. SMC works shall be carried out as per the site suitability.
- ii. Old successful plantations shall be treated as per the prescriptions given in the 'Old Plantations Management' chapter.

IV. Area 'D':

- i. SMC works shall be carried out as per the site suitability.
- ii. No planting shall be done in these areas but removal of dead trees after retaining two snag trees is prescribed.
- iii. No tree shall be marked for felling.

8.6.12. GENERAL PRESCRIPTIONS

Forests have dampening effect on city temperature due to both shading and evapotranspiration. Urban forests ameliorate climate through shading, which reduces the amount of radiant energy absorbed, stored and radiated by built surfaces. Forests mitigate the air pollution generated in the city by absorbing gaseous compounds and intercepting air borne particulate matter. They also mitigate noise pollution. The trees facilitate the soil water infiltration and lower surface run off and act as an important mediator in urban hydrological cycle. To gain these benefits following general prescriptions are needed to be followed.

- I. *Demarcation and protection of urban forest from the nearby habitations by RCC/ masonry wall.***
This will include areas which though survived under the shade of Glyricidia plantations but did not show appreciable growth. Such forest patches are not well demarcated in the field and therefore are highly susceptible to encroachments and unauthorized usage from the surrounding population. It has been observed in the past that the Barbed wire or Chain-link fencing could not

prove to be effective for demarcation purpose since miscreants could easily cut and sell it in the market. On the other hand, forest areas at Pachgaon-parvati, Bhamburda and Warje falling within Bhamburda range have been partly fenced with RCC walls through funding from PMC and those have been found to be very effective for protection against encroachments, illicit felling, illegal grazing/ trampling of seedlings, fires from adjoining areas.

Before creating RCC walls / masonry walls area must be thoroughly surveyed properly by using modern tools and construction must be initiated only after boundary is fixed by surveyor of the division. DCF Pune territorial should chalk a proper plan as per felling series and coupes mentioned in this plan for survey and demarcation of these areas. Active involvement of DILR and revenue department must be ensured by DCF Pune territorial. The DCF Pune should try to complete the entire activity as per prescriptions of this plan else deviation must be submitted for the same.

This RCC/ masonry wall should be built only in places which shall be prone to encroachment and on other sides traditional demarcation by pillar and TCM must be done. Under no circumstances the boundary can be altered. The existing height of boundary is efficient only to prevent encroachment but, it is not sufficient to prevent fire by miscreants if height is increased then probably the effect of fire may be reduced.

- II. *Protection against littering/ dumping* – It is being observed that forest areas near the city or urban sprawls are nowadays becoming dumping ground for garbage and debris of construction. Strict action has to be taken against miscreants and dumped garbage has to be cleared with the help of local administration. Necessary sign boards may be erected at areas highly prone for such activities.
- III. *Reclamation of mines* – Old mined areas in forest which are exposed rocks or hard refractory soil or water bodies are needed to be treated with the help of local administration and reclaim such mines e.g., near Warje, Hingne, etc. A proper committee of representatives from local administration department, forest department and mines department may be formed and necessary treatments must be taken unanimously by the committee for the welfare of the forest. All such treatments must be in sync with policies of the government as taken from time to time. For treatment of mine the treatment plan must be approved by the CCF (T) Pune and CCF – Research jointly to study the impact of reclamation over period of next working plan period. Under no circumstances for reclamation purpose materials hazardous to forest health should not be used.
- IV. *Ecotourism* - The lush green urban forest patches afford city dwellers an opportunity to understand nature. The FD can help them interpret nature by showcasing its various activities at such centers. Therefore, the DCF Pune should prepare proposals as eco-tourism projects as per the prescriptions given in the chapter on Eco-tourism to develop such urban forest areas into ‘Bio-diversity Parks cum Nature Interpretation Centres’. Such BDP cum NIC shall promote native indigenous tree/ plant species over exotics and shall develop eco-friendly structures and public utilities for recreation of the city dwellers and for holding awareness camps, for providing forum for

discussing various environmental issues, for arranging training workshops for enhancing skills of the members of self-help groups, forest staff and others at regular intervals with the active participation from the NGOs and various stake holders. More emphasis should be given of school children to BPD/ NIC. The programme could be called “Nisarg Anubhav”.

8.6.13: OTHER REGULATIONS

- i. **Fire Protection:** These forest areas shall be fire-traced and rigidly fire-protected every year. The area shall be cleared-off of all the dry and cut remains of bushes, leaves etc. by end of February to avoid fire hazards to standing crop as well as to NR. Effective protection against fire for a period between Feb.15 to June 15 is a must to ensure survival and establishment of regeneration of all species for developing it into the future growing stock. 'Joint Forest Management committees' shall be formed and a comprehensive firefighting scheme shall be chalked out, the details of which are given in the 'Miscellaneous Regulations'.
- ii. **Closure to grazing:** These forest areas shall remain closed to grazing.
- iii. **Protection Measures:** The area will be strictly protected from illicit felling and encroachments with the help of JFMCs/ BMCs.
- iv. **Resolving conflict with Micro Plans made under JFM/ FDA:** If any conflict is noticed between the prescriptions given in this WC and the Micro Plan written under JFM, FDA etc. for the same area, then the said area shall be treated in accordance with the special objects of management pertaining to this W.C. and suitable amendments shall be made in the Micro Plan, if necessary.
- v. **Training Workshops:** The DCF Pune with the help from the CCF, Education, Pune should organize Workshops in the division to sensitize and train the field staff in implementing the prescriptions of this WP. The induction training of the field staff should be organized on priority by the CCF, Education Circle which will help in effective implementation of various WP prescriptions.
- vi. **Forest area reconciliation:** It has been observed during the course of forest area reconciliation work that the boundaries of few newly constituted forest gut numbers from the old forest survey numbers after ‘consolidation’ show large variations at places and do not coincide in many villages thereby reducing or changing the RF area. The notifications of disforestation of such RF areas could also not be traced and therefore such discrepancies in the forest areas remain unresolved. The DCF Pune should undertake the forest area reconciliation work on top most priority to be followed by survey and demarcation in the field to resolve all such issues. Old village maps bearing survey nos. should only be used for the survey and demarcation purpose in the field till the time all such issues pertaining to forest area get resolved.

CHAPTER – 11

OLD PLANTATION MANAGEMENT

This chapter deals with the management of patches of old successful plantations of miscellaneous species, Glyricidia, Subabul, Prosopis, *Acacia auriculiformis*, Bamboo and Teak plantations taken since 1976 onwards. Stock maps are prepared for all compartments of division; old successful plantations are shown with separate colour code in these stock maps. However exact extent of these old plantations has not been assessed as they are interspersed with blank areas and other plantations. These patches of old plantations are found in all five Working Circles viz. Protection Working Circle, Afforestation Working Circle, Improvement Working Circle, Urban Forest Management Working Circle and Fodder Management Working Circle. While preparing treatment map of each working coupe, concerned Range Forest Officer should indicate the area under old plantation as area 'C' and prescriptions under this chapter should be followed.

11.1: SPECIAL OBJECTIVES OF MANAGEMENT

1. To improve the silvicultural conditions and productivity of old successful plantations.
2. To restore biodiversity, enrich the area by taking AR of suitable species.
3. To supply small timber and firewood to the local communities.
4. To create employment opportunities for the local people.
5. To involve JFMCs in protection and management of old plantations.

11.2: METHOD OF TREATMENT

For its continuous healthy development, a tree crop requires food, light and adequate space to grow. The individual members of the forest crop have to compete amongst themselves for getting these essentials. The requirement of the individual members increase with age and their growth is seriously hampered if the forest crop is not tended properly.

'Tending' is defined as operations carried out for the benefit of a forest crop at any stage of its life between the seedling and mature stages; it essentially covers operations on the crop itself and on the competing vegetation and includes weeding, cleaning, thinning and pruning and does not include regeneration fellings and ground operations like soil working, drainage and controlled burning. The tending operations required for the management of the old plantations are explained below.

I. Cleaning: It is done in the sapling crop involving the removal or topping of inferior growth including individuals of favoured species, climbers etc., when they are interfering with the better grown individuals of the favoured species. It merges with thinning's as saplings grow into poles. It is done to improve light conditions and to reduce root competition and transpiration water loss. The following operations will be carried out:

- i. Interfering climbers shall be cut in the plantation area.

- ii. Coppice shoots interfering or likely to interfere with the growth of planted saplings shall be cut back.
- iii. Malformed, diseased and damaged individuals of the planted saplings shall also be cut back.
- iv. Singling of coppice shoots keeping two most promising & healthy shoots arising from the stumps.

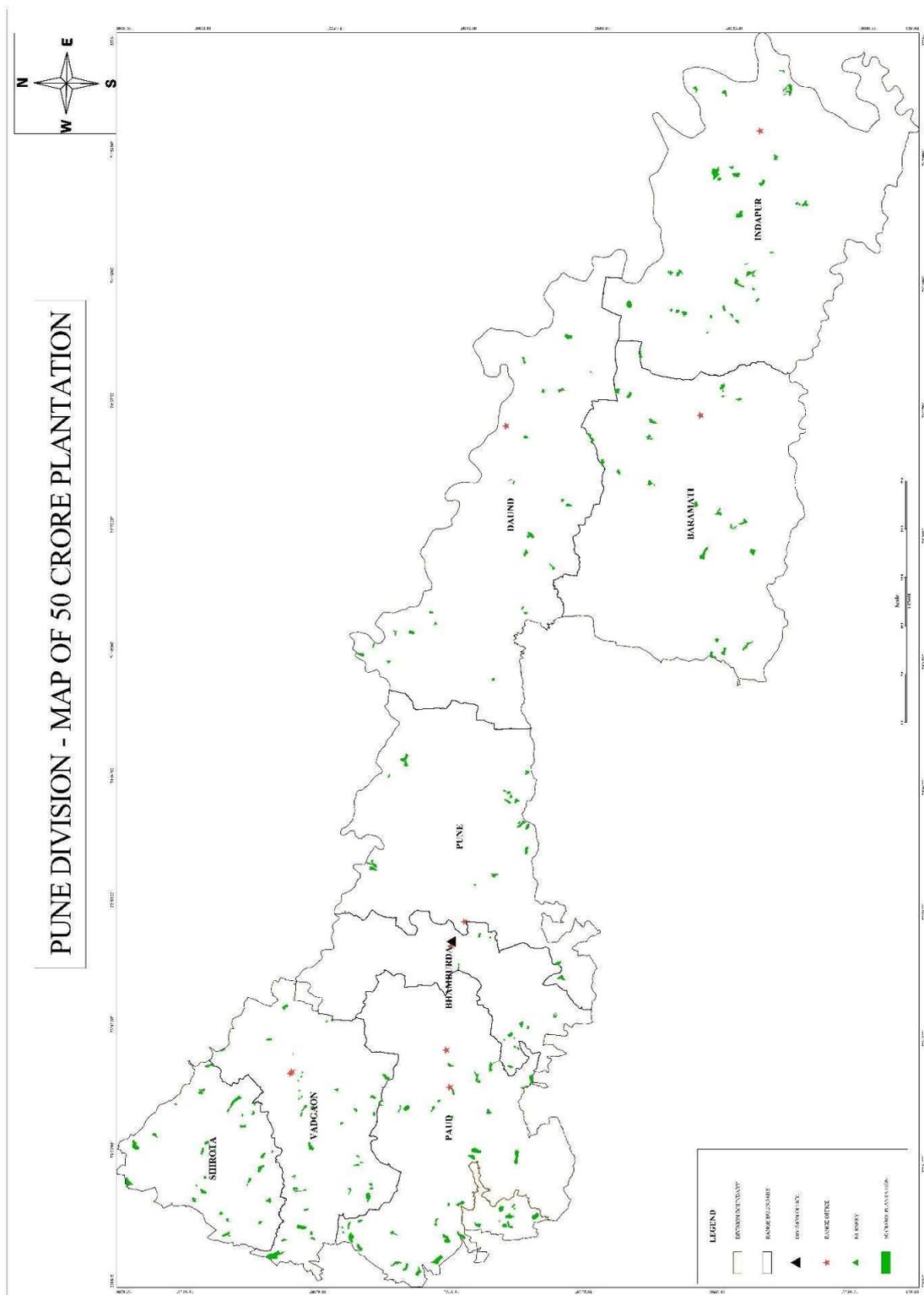
II. Thinning: It is defined as a felling made in an immature stand for the purpose of improving the growth and form of the trees that remain, without permanently breaking the canopy. Few years after the plantations are raised; there starts an intense competition amongst the saplings for limited light, minerals and water. Therefore, to avoid the adverse effects on the growth of the future crop, thinnings are required, to gradually reduce the number of saplings, poles and trees per unit area, as the crop advances in age. It consists of series of successive felling operations before the crop matures and is carried out in a crop after it reaches the sapling stage and continued up to the beginning of the regeneration period. The interval between two successive fellings may be fixed but it depends upon the time required for canopy closure.

11.3 DIFFERENT TYPES OF OLD PLANTATIONS IN THE DIVISION

Evaluation of Plantations:

Evaluation Division has evaluated 113 plantations over 2752 ha. area, raised during this plan (from 2012-13 to 2018-19) period. This evaluation is mainly done in third/ tenth year of plantation. In 12 plantations - Pre plantation operations (PPO) were also evaluated for 265 ha area. On the basis of systematic enumeration and ocular estimations it was observed that out of total 113 plantations, 17 plantations covering an area of 367 ha. were successful plantations (survival more than 50%), 40 plantations covering an area of 898 ha. were successful plantations (survival more than 25%), rest 54 plantations covering an area of 1487 ha. were failure plantations (survival less than 25%). The successful plantation made 13%, partially successful made 32 % and the failure plantations made 54 % of the total plantation area.

The results of survival showed that in all 54 plantations that had failed, the survivals in these were mostly in the form of badly grazed and hacked seedlings, many times carrying multiple coppice shoots. It was also noted that pathway was going from the plantation, encroachment was present in a plantation site and also site selected for plantation was an old plantation site which had not succeeded. In the 17 plantations classified as partially successful also, the survivals were mostly in the form of badly grazed and hacked seedlings only. Whereas the successful plantation sites are resultant of good site selection, good planting material as well as proper protection.



In the 12 PPO site for 265 ha area, only 4 plantations site selection is medium category other all sites are of poor quality as per evaluation code 1969. Moreover pits/ trenches were dug in Zone I & Zone II area.

The plantations were raised by carrying out by planting of polybag seedlings of Karanj, Jambhul, Shiwan, Ain, Bakan, Hivar, Shivan Aonla, Hirda, Wavla, Sissoo, Kanchan, Kashid, Tamrind, Sitaphal, Khair, Neem, Babhul and Shiras. It was supplemented by direct sowing of hardy species like Tamrind, Neem, Sissoo, Hivar, Babhul, Karanj, Shivan etc. Amongst the plants that had come up as a result of direct sowing Ain, Bakan, Hivar, Shivan, Babhul, Neem, Karanj had been found to survive. The maximum growth of the plants in terms of height and girth vary very widely from the minimum growth and this was on account of wide variations in local edaphic factors. All the afforestation areas had been found to be grazed. Protection of these plantations from grazing and fires appeared to be extremely difficult and they were the crucial factors along with hacking for firewood needs that determined the fate of plantation.

In Western part of Pune division, mainly in ghatmatha portion survival as well as growth is hampered due to heavy rains and fog in rainy season. All the plantation areas were subjected to heavy biotic interference showing thereby a great lack of public cooperation.

Abstract of Evaluation Reports-2007- 2014

Total units evaluated/ Area	Successful Pl. Survival > 50%	Partially successful Pl. Survival >25-50%	Failure Pl. Survival < 25%
113	17	40	54

11.3.1 Old Plantations – Areas containing successful plantations of the miscellaneous species, patches having congested Bamboo clumps, Teak and Prosopis areas along river banks are included in this part.

Extensive forest areas were brought under miscellaneous plantations since last 2-3 decades. These plantations have largely been taken on the refractory sites of the division. The objective was to bind, conserve and improve the soil cover in such refractory areas. For management purpose these plantations are further divided into two categories viz. Miscellaneous plantations and Glyricidia/ Subabhul Plantations/ Prosopis plantations.

11.3.1.1 Miscellaneous Plantations

Due to poorer site-quality, most of the plantations show stunted growth and are usually sparse. Therefore, only improvement works have been prescribed for such plantations as follows:

- i. All common climbers found interfering with the growth of the planted crop shall be cut in the plantation area.
- ii. Rooted stock of the planted species shall be tended wherever required.
- iii. The undesirable under-growth which is preventing or likely to prevent the development of seed-based NR of the desired species, shall be removed.
- iv. The SMC works like bandharas, nalla-bunding, gully-plugging etc. will be carried out as per the requirement and suitability of the site.
- v. Under-stocked areas within the plantation area having good soil depth and more than 2 hectares in extent in a compact block shall be planted with suitable miscellaneous species.

11.3.1.2 Glyricidia Plantations

As per stock map area under exotic species plantation is 2684.79 ha (4.9%), out of this majority area is under Glyricidia and Subabhul.

Environmental Impact

Due to its nitrogen-fixing ability, Glyricidia has the capacity to change soil nitrogen levels with negative impacts on nutrient balances and cycling in invaded areas. This species also grows forming mono-specific thickets that displace native vegetation (Anon., 1998) and alter successional processes. Replacement of native species in invaded areas is leading to lower quality habitat for native biodiversity.

Therefore, it is felt that monocultures of mature Glyricidia/ Subabhul/ Prosopis at fertile sites with deep soil should be gradually replaced with diverse local miscellaneous species plantations. But it requires intensive working and supervision to make it a success and therefore site-specific estimates should be prepared with due care and application of mind.

Silvicultural system used will be 'Clear Felling in blocks' followed by AR. The prescriptions are as follows:

- i.** Patches with deep soil preferably having more than 30 cm. depth shall be selected.
- ii.** In the division, every year area shall be demarcated for treatment shall depend upon the financial provisions i.e. availability of funds for area of Glyricidia plantation, preparation of plantation site and planting activities along with provision for management of plantation for next five years.
- iii.** The felling shall be restricted in due coupes only and from the mature Glyricidia plantations area shall be clear-felled and stumps of Glyricidia shall be uprooted, as it being a good coppicer.
- iv.** Native RET and miscellaneous species preferably tall plants (minimum 1 meter tall) shall be planted in pits of minimum 45 x 45 cms.
- v.** Felling is strictly prohibited on 20m both side of streams/ nallas/ water courses, soil depth less than 30 cms and slopes more than 25°.
- vi.** Since Glyricidia being good coppicer and fast-growing species provision should be made in estimate to eradicate Glyricidia growth in areas which are replaced with native species during next five years of management. If growth of Glyricidia persists then periodic uprooting is inevitable.

These types of works were prescribed in Working Plan (from 2012-13 to 2021-22) of Sh. Vikas Gupta for Pune Forest Division. However, these works were not carried out till year 2018-19. Since year 2018-19 around 15-20 hectare area under Glyricidia plantation in Bhamburda range, has been clear felled and plantation of tall plants of local miscellaneous species has been undertaken. The growth of these plantations is satisfactory but maintenance & protection has to done beyond 5 years. These plantations have proved to be successful in Osmanabad and Junnar divisions too.

11.3.1.3: Teak Plantations

Teak plantations have been raised mainly in Paud, Shiota, Bhamburda, and some parts of Wadgaon ranges; however, these have not been tended and thinned as per the prescriptions of the earlier plans, thus affecting their growth. As per stock map area under

Teak plantations comes to 1165.27 ha. (1.76 %)

The method of treatment shall be as follows:

- i. 'C' grade 'Ordinary thinning', a kind of silvicultural thinning shall be done which consists of removal of inferior individuals of the crop, starting from the suppressed class to the dominated class to some of the dominants but not creating any permanent gap in the canopy. The trees selected for retention are the trees with good boles and crown, evenly distributed over the area, with space on all sides for proper development. In this grade, few suppressed or dominated trees whose removal is of no economic or hygienic value may be left as soil cover.
- ii. Thinning shall be done as per the Yield Tables which give the number of trees per unit area left after thinnings at different ages by site qualities. Site quality of the area where the plantation is raised and the age of the crop shall be ascertained. Site quality is measured in terms of average height of dominant trees in the plantation area. Yield tables prepared for teak plantations by the FDCM may be consulted if local yield tables are not available.
- iii. Girth class wise distribution of poles or trees in the plantation area shall be obtained by random sampling. Sample plots of size 0.5 ha i.e., of 100 x 50 meters dimensions shall be laid with sampling intensity of 10% only. Corresponding to age and site quality the number of stems per ha and their distribution among different girth classes shall be obtained from the Yield Table, which shall then be compared with the number of stems actually available per ha in the stand to obtain the number of stems to be retained girth class-wise after the thinning. The deficiency in stems in any girth class shall be compensated with the surplus and healthy stems in nearest girth classes on the basis of basal area.
- iv. After sample marking, basal area per ha of the stand excluding trees already marked for felling, shall be obtained by using wedge prism. This shall be compared with that of Yield Table value, to ascertain the correctness of thinning marking. Deficiencies if any shall be removed and thinning marking shall be completed by the RFO. The detailed marking list shall be prepared which shall be checked and verified by the concerned ACF and the DCF in the field. Thinning shall be completed after removal of deficiencies, if any. The following rules shall be observed while thinning.
 - a. The dead, dying, diseased and malformed poles shall be marked first for thinning.
 - b. The multiple pole crops shall also be thinned to one pole per stool retaining the most promising one.
 - c. Care shall be taken to remove the poles of coppice origin first while retaining the poles of seedling origin.

- d. All live high stumps shall be cut flush to the ground and shall be dressed thereafter with a sharp axe to get vigorous coppice shoots.
- e. The established multiple coppice shoots shall be reduced to one per stool retaining the vigorous one while the newly risen coppice shoots shall be removed.
- f. The undesirable under growth which is preventing or likely to prevent the development of seed-based NR of the desired species, shall be removed.

11.3.1.4: Prosopis Plantations

This part includes narrow strips of forests along the banks of Mula, Mutha, Indrayani, Pawna & Bhima River located in eastern part of Pune division i.e., Pune, Daund, Baramati & Indapur Range and some patches in Bhamburda Range. These are isolated forest patches located on the rich alluvial deposits along the river banks, occasionally extending inland.

The areas along the river banks which used to get inundated during floods in rainy season supported good Babhul (*Acacia arabica*) forests in the past. Here the soil is deep and fertile and Babhul used to consist nearly 90% of the crop composition previously.

But many such areas were clear felled in the past and were tried to be artificially regenerated by Babhul (*Acacia arabica*) along with dibbling of seeds of Vilayati babhul (*Prosopis juliflora*) and other species. The AR of *Acacia arabica* somehow could not establish and as a result *Prosopis juliflora*, a much lesser valuable species invaded into the valuable babhul forests, suppressing the growth and spread of babhul. Now, nearly all such areas are thickly infested with impenetrable growth of *Prosopis juliflora* which has now become the major constituent of the tree composition of these riverine forests. Vilayatibabhul did not remain confined to the areas where they were introduced but also got spread in the adjoining private lands and public waste lands. It is difficult to move through such forest due to thorny multiple coppice shoots arising from the stumps of Vilayati babhul (*Prosopis juliflora*) because of their repeated hacking for fuel wood by the head loaders.

Other species met with are Karanj (*Pongamia pinnata*), Chinch (*Tamarindus indica*) etc. NR of babhul is completely missing while that of *Prosopis* is found.

All these forest patches on the river banks are surrounded by private cultivations from the other sides and are not well demarcated in the field. Therefore, they are highly susceptible to encroachments due to their fertile soil and closeness to the water source and roads. The river banks bearing these forests are also subjected to heavy soil erosion due to scouring action of fast and turbulent flow of water along the banks. *Prosopis* crop cover has helped over the years in retarding the scouring action of water along the river banks as well as to save such forest patches from large scale encroachments.

Objects of Management

- i. To revive erstwhile Babul Forests
- ii. To meet the local demand for fuel wood, fodder, small timber to a certain extent.
- iii. To get gum from Babhul trees.
- iv. To protect the river banks from soil erosion.

These areas, in the earlier plan were prescribed to be managed under clear-felling system followed by AR of Babhul and Neem. In the present scenario, clear felling entire area bearing prosopis crop and possibility of regenerating such areas with babhul is difficult, since prosopis is a very good coppicer and babhul being slow growing takes much longer to establish. It may only invite encroachments from the nearby cultivators as well as may lead to soil erosion due to floods and heavy rains. Therefore, to revive these erstwhile Babhul areas, clear felling prosopis in small patches and replanting it with Babhul, planting Bamboo, Karanj (along river bank), and other soil binder species is prescribed.

Demarcation: Forest boundaries especially those touching cultivations and private areas be first surveyed and demarcated on priority since these areas are highly vulnerable to encroachment. The annual coupes shall be demarcated one year in advance.

Treatment:

- i. Soil binders like Sisal (*Agave* sp.), Nirgudi (*Vitex negundo*) and other suitable species like Bamboo (atleast 2 year old rhizomes), Karanj, Khas (*Vetiveria zizanioides*) shall be planted over a width of 10 meters from the river banks as per the site requirement.
- ii. Miscellaneous tree species except Prosopis shall not be felled.
- iii. Young NR of miscellaneous species if any shall be tended.
- iv. Strip of Prosopis over a width of 20 meters from river bank will be kept as buffer.
- v. The rest of the area will be divided into 100 x 50 mt grids. Every alternate grid will be treated in plan period. So that entire area will not be opened up in one stroke, this will reduce possibility of encroachment or erosion. The Prosopis crop in these patches shall be uprooted.
- vi. Healthy seedlings of Babhul {*Acacia nilotica* subsp. Indica (Godi Babhul), *cupressiformis* (Ram Kathi), *vediana* (Vedi Babhul)}, will be planted at spacing of 3 x 3 mts. The felled coupe shall be strictly protected against any kind of encroachment.
- vii. Seed dibbling of wild leguminous plants like *Vigna indica* (Ran moong), *Indigofera cordifolia* (*Gokharu*), *Crotalaria hebecarpa* (*Godhadi*), *Tephrosia strigosa* (*Sharpunkha*), *Alysicarpus tetragonolobus* (*Lal Shevra*), *Stylosanthes Species* (*Hamata*) may be done.
- viii. These plantations shall be strictly protected against grazing especially from goat & sheep grazing.

The results of growth and survival of these plantations may be analysed by Evaluation wing. Depending on these results remaining portion of coupe may be treated consequently in next plan period, once earlier plantation of Babhul is well established.

11.3.1.5 Bamboo Areas

This part deals with bamboo planted in the old afforestation programme as well as to some extent found naturally in some patches of protection Working Circle area. As per stock map 100.00 ha area (0.15%) is under Bamboo plantation. Such bamboo seedlings will be tended by soil working and application of manure wherever necessary.

Dendrocalamus strictus has been planted largely while *Bambusa* bamboo (Kalak bamboo) has also been planted to limited extent. *Bambusa* bamboo is generally found growing naturally in the wild in the forest areas. *Oxytenanthera stocksii* (Managa/ Chivari/ Mes) on the other hand is found growing on the bunds of private cultivations at places mainly in the western region of the district but is rarely seen in the forest. *Oxytenanthera monostigma* (Chiva-kathi) is found growing in small quantities mainly on top of the ridges and hills. Majority of the old bamboo clumps found growing naturally or in plantations in the forest areas have never been worked before and show lot of congestion bearing dead, deformed and over mature bamboos. These bamboo areas mainly fall in 'Protection Working Circle'. The culms of *Bambusa bambos* are found to be badly entangled within the clumps due to over congestion. The growing stock is also damaged due to forest fires and illicit cutting. Rather dried/damaged bamboos culms become easily available raw material for spread of forest fires. These clumps therefore require immediate management interventions.

Objects of Management

- i. To improve bamboo productivity by using various management interventions.
- ii. To harvest bamboos scientifically as per the local demand.
- iii. To generate employment to the local people.

Agency for harvesting

Bamboo areas will be worked departmentally or as per the prevailing government policy. The DCF in consultation with the CCF (T) will decide the extent and location of bamboo area and its quantity to be harvested annually as per the local demand while considering silvicultural, financial and administrative requirements.

Method of Treatment

Majority of the bamboo crop falls in Protection Working Circle with highly congested clumps. Considering heavy congestion of clumps and badly entangled culms especially in case of *Bambusa bambos*, practicing following prescriptions for the clumps being worked for the first time may not be easy. Harvesting of highly entangled bamboos may not be possible without breaking them. Such clumps of *Bambusa bambos* or other species which are difficult to work as per standard bamboo working due to heavy congestion should be worked so as to retain culms in 'U' shape or to retain bamboo culms on the periphery of the clumps. This should be done only once after which following standard bamboo working prescriptions should be strictly followed. Considering the difficulties in working of the congested bamboo clumps for the first time, special wage rates may be sanctioned by the CCF Pune based on the work study report submitted by the DCF Pune, in consultation with CF Research.

Bamboo harvesting will not be permitted during June 15 to September 30, the period of culm formation.

- i. Bamboo cutting will be done with a sharp axe. A bamboo culm must be cut in a single stroke with a slant cut so that cutting is above the first inter-node and the height of the cut is between 15 cm to 45 cm above the ground, to avoid drying of the rhizome due to capillary action.

- ii. All clumps will be cleaned during working. Cleaning operations in bamboo clumps will include the following:
 - a. Climbers infesting bamboo clumps will be removed.
 - b. All dead, decayed and dry culms will be removed.
 - c. All culms will be cut above the first internode.
 - d. Twisted culms will be removed.
 - e. Top broken culms with more than half of the top damaged and malformed culms will be removed.
- iii. No clump shall be considered fit for harvesting unless it contains more than 12 culms of one year or older in age.
- iv. While extracting bamboo, it should be ensured that the reserved culms are evenly spaced and some mature culms are present on the periphery of the clumps.
- v. All current year and previous year culms will be retained. Current year culms have the culm sheath on the lower half and abundant bloom i.e., white powdery dust which comes off easily when touched. Previous years culms do not have the culm sheath and the patchy bloom does not come off easily. Older or mature culms have blackish grey bloom.
- vi. The mature culms equal in numbers to the current year culms subject to minimum of 8 culms must be retained to provide support to the younger culms.
- vii. The remaining mature culms after reserving as described in the preceding paragraph may be harvested. No culm shall be extracted without cleaning the clump which should be an integral part of the bamboo harvesting.
- viii. Debris after cutting the bamboos should be stacked at least 3 metres away from clumps.
- ix. Digging of rhizomes, removing tender parts of older culms or cutting of current or previous year culms will be strictly prohibited.
- x. The culms at the periphery of the clump will not be removed except where it is absolutely necessary for facilitating working in the interior portion of the clump.
- xi. The leading exterior culms may not be cut under any circumstances even if they are malformed. Their retention is in the interest of the outward growth of rhizome and clump as they support new culms.
- xii. In order to make whole of the clump accessible, removal of all the culms in the form of a wedge may be permitted but the width of the wedge shall not be more than one meter.
- xiii. The working of the clump will be such that the culms after working are well spaced.
- xiv. The bamboo extraction should end by March when the culms are almost devoid of starch and attract less insect borers.
- xv. Areas suitable for bamboo plantations should be identified and planted preferably with Managa bamboo (*Oxytenanthera stocksii*) or Kanak bamboo (*Bambusa bambos*).

General Prescriptions

- i. Felling on slope more than 25° should be strictly avoided.
- ii. Permission/ felling proposal approval should be sought well in advance.
- iii. Before felling the trees should be enumerated and felling must strictly as per prescriptions.
- iv. Felling should not be initiated without making financial provision for regeneration is done.
- v. Felling estimate should be approved as per government orders.
- vi. Felling in Protected Areas & Eco-Sensitive Zones, etc. should be as per orders of Government from time to time.

OTHER REGULATIONS

- i. **Fire Protection:** Old plantations shall be fire-traced and rigidly fire-protected. The area shall be cleared-off of all the dry and cut remains of bushes, leaves etc. by end of February to avoid fire hazards to standing crop as well as to NR. Effective protection against fire for a period between Feb.15 to June 15 is a must to ensure survival and establishment of NR of all species for developing it into the future growing stock. 'Joint Forest Management committees' shall be formed and a comprehensive fire fighting scheme shall be chalked out, the details of which are given in the 'Miscellaneous Regulations'.
- ii. **Closure to grazing:** Plantations taken after removal of Glyricidia/ Subabul shall remain closed to grazing for a period of 10 years from 1st year of its working.
- iii. **Protection Measures:** The plantations will be strictly protected from illicit felling and encroachments including seasonal encroachment for the purpose of agriculture with the help of JFMCs.
- iv. **Resolving conflict with Micro Plans made under JFM/ FDA:** If any conflict is noticed between the prescriptions given in this chapter and the micro plan written under JFM, FDA etc. for the same area, then the said area shall be treated in accordance with the special objects of management pertaining to this chapter and suitable amendments shall be made in the Micro Plan, if necessary.
- v. **Training Workshops:** The DCF Pune with the help from the CCF, Education, Pune should organize Workshops in the division to sensitize and train the field staff in implementing the prescriptions of this WP. The induction training of the field staff should be on priority by the CCF, Education Circle which will help in effective implementation of various WP prescriptions.

CHAPTER - 12

ECO-TOURISM.

12.1 INTRODUCTION

Ecotourism is defined as “Responsible travel to natural areas that conserves the environment and improves the well-being of local people. Ecotourism must make a positive impact on both the Ecology and Economy of a given destination.

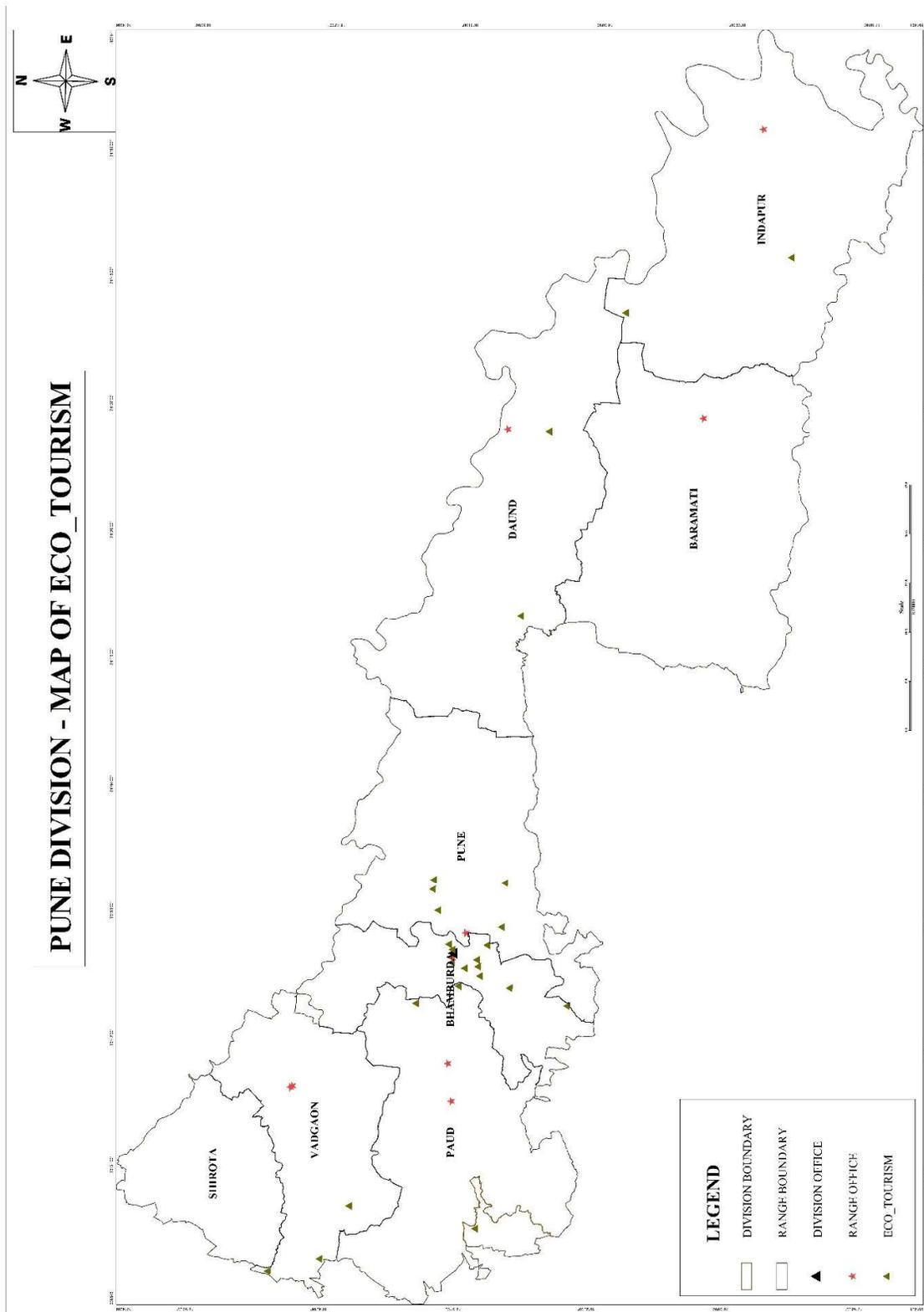
In simple words, ecotourism means a sustainable form of tourism that allows the tourist to see the most pristine form of Mother Nature. Ecotourism encourages travelers to spend time in the lap of nature. In ecotourism, tourists are indulged more in activities that are less intrusive or destructive toward ecosystem and more sustainable and supportive towards promoting the native culture of the locals.

Ecotourism has received much attention in recent years especially within the developing world. Ecotourism in simple terms means management of tourism and conservation of nature in a way so as to maintain a fine balance between the requirements of tourism and ecology on the one hand and needs of the local communities for jobs, new skills, income generating employment and a better status for women on the other. Ecotourism developed in India in 1980s. Ecotourism was globally identified as a means of achieving twin goals of biodiversity conservation and sustainable development. Sustainable tourism and nature tourism are umbrella concepts that include ecotourism. India, the land of varied geography offers several tourist destinations that not just destress but also rejuvenate people.

The traditional treatment of a visitor in India is based on the historical concept of Atithi Devo Bhavah (Guest is God). This was the mantra of the Indian tourism sector. The Tourism Ministry has launched the “Atithi Devo Bhavah” campaign under an ambitious programme to attract more tourists. The concept is aimed at capacity building for service providers and stakeholders in the tourism sector to make the tourists aware of the benefits in India and the need to treat them with traditional care and utmost courtesy. This has been further boosted by the New National Tourism Policy, which revolves round a framework ‘*Government led, private sector driven and community welfare oriented*’. A countrywide awareness campaign for sensitizing the public against Garbage and Graffiti at monuments has been launched under the title “Atithi Devo Bhavah” for preservation and protection of heritage monuments and tourist sites in the country.

12.2 IMPORTANCE OF ECOTOURISM

India is one of the 12-mega bio-diverse countries of the world and has a rich cultural heritage too. It has a vast potential for ecotourism that needs to be tapped for healthy conservation and preservation of nature and bringing about economic benefits to the local communities. Ecotourism in India has developed recently, for the concept itself is a relatively new one. India has spectacularly



attractive natural and cultural tourist attractions. India offers enormous diversity in topography, natural resources and climate. The most significant feature of the ecotourism industry in India is its capacity to generate large-scale employment opportunities, particularly in remote and underdeveloped area. Ecotourism industry is one of the leading employment generating sectors of India and it generates

directly or indirectly approximately 3.8% employment out of the total employment generation every year in India.

The State of Maharashtra is rich in biodiversity. It has main four bio-geographic regions which have specific geographical, climatic and landscape settings. They include the Northern belt of teak forests and the Satpudas; the semiarid Deccan Plateau grasslands and Thorn Forests; the biologically rich and fragile evergreen and semi-evergreen forests of the Western Ghats; and the distinctive ecology of the coastal belt with its terrestrial and marine eco systems. Its fresh water aquatic ecosystems are equally diverse. Great rivers and their impoundments are distributed across the length and breadth of this diverse land. Though green travel in Maharashtra is at its nascent stages, Maharashtra Ecotourism Development Board has slowly started developing ecotourism site in the state by involving all stakeholders.

12.3 ECOTOURISM POLICY

- ❖ Ministry of Tourism, in Government of India has declared “Eco-tourism in India Policy and guidelines, 1998”. This policy has underlined the activities of tourism ought to be environment-friendly having no adverse impact on ecosystem.
- ❖ The United Nations World Tourism Organisation (UNWTO) came into force in 1970 on 27th September. To bring awareness among the people about the role and impact of tourism on society, the UNWTO started celebrating World Tourism Day on 27th September every year since 1980. Every year a theme is launched on the eve of World tourism Day by UNWTO. Ecotourism, Environment Protection, Climate change, Biodiversity, Community development became theme of World Tourism Day in the year 2002, 1997, 2008, 2010, and 2014 respectively.
- ❖ Government of Maharashtra, in Tourism and cultural affairs vide Resolution No. MTC-2005/2/CR-172/ Tourism, Mumbai dated -2006, declared Tourism Policy-2006 having tourism vision 2025. This policy has identified “Ecotourism” sector. Infrastructure development, public-private partnership, capacity building, creating awareness etc. are high lights of this policy.
- ❖ Govt. of Maharashtra in Revenue and forest Department vide Resolution No. WLP 1002/C.R.53/F-1, Mumbai dated 20.2.2008 has declared “Eco-tourism Policy 2008”. This policy illustrates the role of stake holders, capacity building of stake holders, Information, Education and communication, selection of eco-tourism centres and operationalization of it, formation of “Maharashtra Eco Tourism Development Board” to promote ecotourism.

This policy laid down principles of Eco tourism as below:

- The Ecotourism activity should be concise and small for operationalization.
- It should be proper in view of environmental, social and cultural aspects.
- It should be proven and worthy of adoption.
- Participation of local community.

- It should neither be degrading nor destructive.
- As per tourist demand but definitely with some restrictions. This policy entrusts Forest Department to prepare management plan of ecotourism centres' in pursuance of Forest Conservation Act.1980, Wildlife Protection Act 1972, and guidelines by National Tiger Conservation Authority. The Maharashtra Ecotourism Board has key role in co-ordination of line departments, granting of permission for infrastructure development, signing of MOU with Forest Department regarding development of infrastructure and revenue sharing.
- The Govt. of Maharashtra, in Revenue and Forest Department vide Resolution No.-M-2011/ C.R. 174/F-5, Mumbai, dated 24.11.2011 has issued guidelines for implementing eco-tourism activities in forest areas. Identification of ecotourism places, preparation of management plan, involvement of stake holders, stay and food facilities, home-stay facilities, capacity building of local people and staff, identification of various types of tourism etc. are important provisions in eco-tourism policy 2008.

12.4 POTENTIAL OF ECOTOURISM IN PUNE DIVISION

Area of Pune Division is one of the leading regions in case of agriculture and industrial development. This development is not uniform in all the parts. Its westernmost part, mainly Paud and Parts of Shirola is yet in developing phase of agriculture and industrial progress but, the area is bestowed with scenic landscape. These all ranges have factors like natural beauty (Ghats, waterfalls, variety of flora), temples, forts, caves, festivals which provide vast opportunity for taking up ecotourism development in near future. Efforts should be made for sensitizing host community as well as administrators and planners. Pune has a long history of religious tourism, Pune division is having three out of eight Ashtavinayak temples - Theur, Ranjangaon & Siddhtek (adjoining to Pune division), one Jyotirlinga in adjoining Bhimashankar Wildlife Sanctuary & Ekvira devi temple.

Forts

Along with the religious places it has many forts of great historical importance like Sinhagad, Tunga, Tikona, Visapur, Lohagad, Rajmachi, Morgiri, Koragad, Tailbaila, etc. Most of the forts are located within the heart of forest area as these forts were built on high plateaus in deep forest by the then rulers. These forts are frequently visited mostly in monsoon and winter season as trekking spots and face huge biotic pressure due excess influx of tourists in these forts.

Dams

Dams and water reservoirs are also have a great potential for tourism development. Pune division is having many large and medium size dams, having the potential of becoming a tourist spot and some have already evolved as tourist spots providing employment to locals. These dams are located in lower ridges of forest areas where most of forests are catchment areas of these dams. The list of dams is Pawna, Bhushi, Andhra, Walwan, Shirola, Uksan, Mulshi, Khadakwasla, Malwandi, Panshet, Varasgaon, Temghar, Ujani, etc. Tourism like aqua sports, camping along the dam-site, trekking in forests are few tourism activities present in the region. But these tourism activities are not regulated so

there is heavy tourist pressure on these spots on weekends causing traffic on narrow roads to these areas and also polluting the area by litter, etc.

Ghats and tourist spots

Some beautiful ghats are located in Western Ghat region of the division which are famous tourists' spots located within forests or adjacent to the forests. The popular ghats are Khandala, Javan-Tungi, Bhaje, Bhopdev, Dive, Katraj, etc. Mainly in Monsoon season they look beautiful with greenish surrounding, streams and springs, waterfalls, fogs and a typical ghat atmosphere. Many local and outside visitors travelled on weekends and enjoy the rainy climate. Some tourists spots along ghats and other forest areas are Lion point, Tiger point, Monkey point, Shivling point, Dukes Nose, Dudhivre khind, Saltar khind, etc.

Caves

Apart from above locations famous ancient caves on the slopes of hills are located in forests or adjoining to forest areas which are also famous for eco-tourism. Few prominent caves are Bhaje, Karla, Dhak Bahiri, Bedse, Yelghol, Kondhane, etc.

Urban Eco-tourism

Within the city limits and places bordering city limits are few ecotourism spots developed by forest department. They are Pachgaon Parvati, Taljai, Vetaltekti, MAFCO garden, Warje Shanti van, Vandevi (Warje), Dhayari, etc. In these places eco-parks with plantations of medicinal and aromatic plants, open gym, children park, eco-trail, interpretation centre, etc. type of development are present which are relished by urban citizens.

12.5 MEASURES TO BE TAKEN FOR DEVELOPMENT OF ECOTOURISM IN PUNE DIVISION

There is ample opportunity to develop Ecotourism activities in and around above places depending on availability of area. The principles of Eco-tourism stated above should be the guide for all such developments. Some of the following activities can be taken up depending upon site requirements;

- Biodiversity garden, Medicinal Plants gardens, Nakshatra van etc.
- Nature interpretation centres, Nature Trail, Observation towers, Bird watching, etc.
- Protection hut, Camping site, Adventure Sports, Home stay development, Boating, etc.

Apart from keeping in mind the principles of ecotourism, the Division should take all care that the following area adhered to:

- a) While developing above eco-tourism sites, it should be verified that the proposed activities must not attract nor violate provisions under Forest Conservation Act 1980.

- b) The Deputy Conservator of Forests shall prepare an Eco-tourism Development Plan for the Division incorporating the above sites and any other potential sites.
- c) Local people especially the JFM Committees and EDCs wherever are in existence should be fully involved right from the planning stage.
- d) Adequate training and capacity-building of the staff and locals should form part of the development plan.
- e) The specialty and uniqueness of each site should be properly documented and should be brought up in attractive brochures keeping in mind the information that tourists would require and the Dos and Don'ts for such tourists.
- f) Any local traditional product, crafts, food items/local cuisine, cultural display etc. should be encouraged as part of the eco-tourism package
- g) The development of the ecotourism sites should go hand in hand with the conservation of the biodiversity, the nurture of environment and the appreciation of nature by the tourists.

While designing the plan the interests of the forests and wildlife should be of prime importance. The different actors/stakeholders like the community, visitors, businesses, NGOs should no doubt be taken into consideration. A common phenomenon is that ecotourism can generate both symbiosis and conflict between the actors. The potential for ecotourism to result in symbiosis between conservation (e.g., natural areas) and development (e.g., businesses) has been widely touted, but the potential for conflict should not be ignored.

In the recent years due to good transportation facilities, the number of tourists has increased considerably. This has raised an alarm for conservation measures to be taken.

- Large scale construction works should be avoided in Eco tourism areas. Emphasis should be made on development of existing infrastructure with maximum use of local and eco-friendly material.
- Design the structures in such a way that they should merge with surrounding nature.
- Main objective should be creating ecological awareness among the visitors.
- Possibility of exploring the fact as if whether some work related to Eco- tourism can be taken up in private forest.
- Scientific studies of the plateaus and sacred groves vegetation through local people and JFM.
- Awareness creation among the concerned parties and new generation about total diversity and its significance to the area in particular and nation in broad sense. With respect to instant and long term benefits, such as water resources is definitely maintained due to the forest on and around the plateau.
- Training to selected locals to be guide to tourist and pilgrims, for this some charges could be taken from the visitors and benefit could be shared with JFM.
- Training to selected locals for providing hospitality to the visitors in the form of refreshment, food and shelter in turn of the charge.
- Complete ban on plastic wares.

- Implementation of normal entry fee for vehicle, tourists and pilgrims, the revenue generated could be used for creation and maintenance of the facilities at tourist place.
- Set up instruction boards, signage, information banners and awareness posters at different places.

Restriction on number of visitors and their vehicles as per carrying capacity. A detail study of all the eco-tourism sites should be done where number of tourists with respect to the carrying capacity of the area season-wise should be calculated and online booking must be made available for visitors to plan accordingly. Example – on Sinhagad fort during weekends in monsoon around 15000 – 18000 visitors visit the fort and entire ghat, parking is over flooded with vehicles causing long queue. Moreover, the fort has limited capacity for tourists to visit when number of tourists increase numerous mishaps have happened in the past. So, to overcome this issue the division has initiated Electric bus service which was temporarily withheld due to technical issues and would be revived soon. This will control the flow of tourists and also reduce the vehicular movement thus providing some respite to ecology. Such planning may be done in other places like Ekvira devei temple, Bhaje & Karla caves, small ghat roads in Paud, Maval & Shirola ranges, etc. Detail list of potential eco-tourism sites is mentioned in [Appendix No XL](#) of Volume II

12.6 SOME MAJOR ISSUES OF ECO TOURISM

“Tourism has a tendency to become something like a steamroller wherever it goes. It can completely destroy natural places. Ecotourism is about trying to stop that”. The quotation tries to define loudly the scope of ecotourism in comparison to mass tourism. Making a concept is much easier than its implementation and it is quite practical if we say that achieving hundred percent successes in any implementation program is inevitable. It is true with the concept of ecotourism all over the world. Indian ecotourism industry is successful but facing with number of problems, which are adversely affecting. There are number of issues relating to ecotourism in India, which contradict the very principle of the concept.

Environmental Issues: One of the most disturbing facts about ecotourism is that it is mainly promoting the expropriation of wilderness area, national parks, isolated tribal areas and even the areas having no trace of any permanent settlement. Tourists opting for such tourism often belong to the prosperous strata of society and are capable and ready to pay for everything they wish, so consumerism becomes focal theme here. Tour operators succumb to ever increasing demands made by visitors and to facilitate and entertain them, they build completely artificial landscape in the area, which have mega-resorts, luxury hotels, and shopping centres. Such changes cost almost the entire eco system dearly, many of flora and fauna species lose their natural habitat and in the long run this may even lead to species extinction. Tourism competes with other forms of development and human activity for natural resources, especially land and water. The use of natural resources subsequently leads to the transformation of ecological habitats and loss of flora and fauna. Land transformation for tourism development can directly destroy ecological habitats. The use of resources for tourism involves an ‘opportunity cost’ as they are denied to other sectors of economic development.

Socio-Economic Issues: Just because something is marketed as ecotourism, it does not necessarily mean that the long-term motto of providing socio-economic benefit with protection of environment to the host areas will be achieved. The fact that ecotourism business is often owned and controlled by outside interests in just the same way as mass tourism means the economic benefits often are not used for the protection of the areas or to support the local community. Besides, the carrying capacity of host areas is not calculated. As a result, there is a breakdown of civil amenities during peak season when the influx of tourists is tremendous.

Impact over Locals: One of the basic objectives of ecotourism is to engage local communities so that they benefit from conservation, economic development and environmental education. While nearby inhabitants are most directly affected by the establishment of parks and protected areas, they also stand to profit by their conservation. Ecotourism deceives the locals in two ways. First, their traditional economic and social structure undergoes a transformation towards tourism monoculture. Secondly, the promise made to them to provide perennial source of income and rational distribution of profit made is highly insincere. Those locals get jobs but only of low quality, low valued and seasonal in nature. They serve mostly as tourist guide, food providers, or souvenir vendors in the locality. The lion's share of revenue generated goes only in hands of organizers. So, it can be said that the cost of ecotourism is borne by locals and big players like organizers make profit.

APPENDIX No. - XL**PROPOSED ECO-TOURISM CENTRES IN PUNE
FOREST DIVISION**

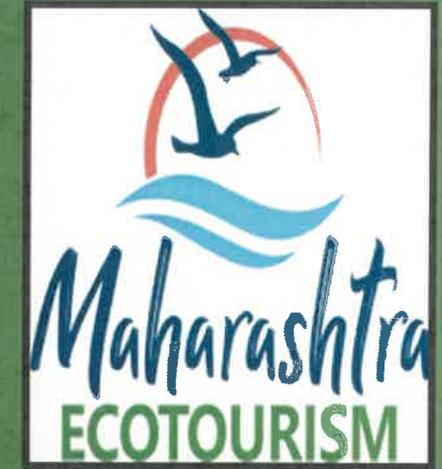
Sr. No.	Range	Project Name
1	Bhamburda	Khadakwasala Van Udyan
2	Bhamburda	Hanuman Tekadi Van Udyan
3	Bhamburda	Sinhgad paryatan Vikas
4	Bhamburda	Mafco Van Udyan
5	Pune	Mastani Talav Van Udyan, Vadaki
6	Pune	Vadegaon Van Udyan
7	Pune	Pisoli Van Udyan
8	Pune	Bhilarevadi Van Udyan
9	Pune	Wanavadi Van Udyan
10	Shirota	Tungarli Van Udyan
11	Daund	Varavand Van Udyan



Annexure R-6

54

Division Pune
Range Pune



Wanwadi Van Udyan - Urban Forestry

Village - Wanwadi

Reserved Forest Survey No. 49

Reserved Forest Area 25.52 Ha.

Proposed Area- 6 Ha.

Proposal Cost Rs. 481.00 Lacs.

Site Context:

- The forest site under consideration is a part of rapidly growing satellite city of Pune. Which attracts foot fall of 2000-3000 tourists daily.
- Due to rapid growth in urbanism, site may fall under encroachment threat.
- Local public representatives Shri. Sunil Kambale and residents are asking for well-planned and maintained forest park within the region given secured access and edutainment.

Wanwadi Van Udyan Proposal

Year (2023-24)

**Mauje Wanwadi Van Udyan
Reserved Forest Survey No. 49
Reserved Forest Area 25.52 Ha.
Proposal Cost Rs.481.00 Lakh**

URBAN FORESTRY



COOLS THE AIR



REGULATES WATER FLOW AND IMPROVES WATER QUALITY



FILTERS FOR URBAN POLLUTANTS



MITIGATE CLIMATE CHANGE



IMPROVES PHYSICAL AND MENTAL HEALTH



REDUCES AIR CONDITIONING NEEDS



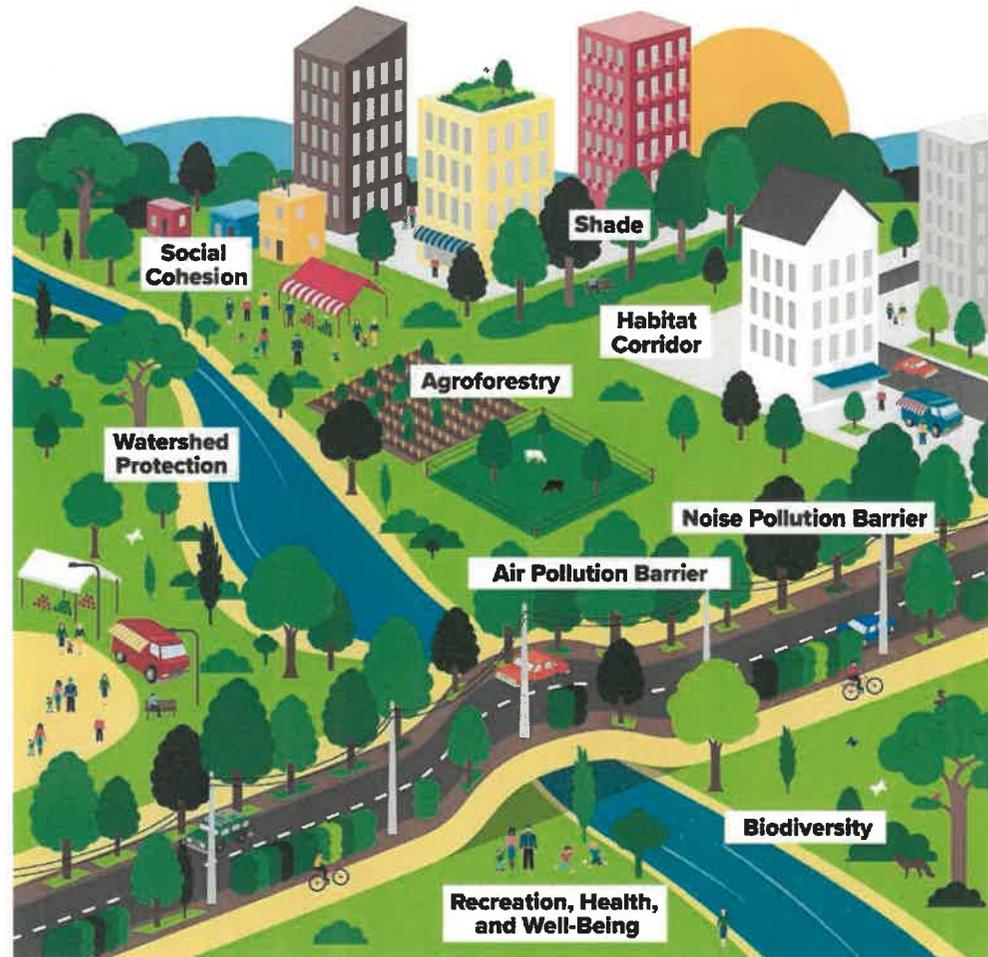
SAVES ENERGY USED FOR HEATING

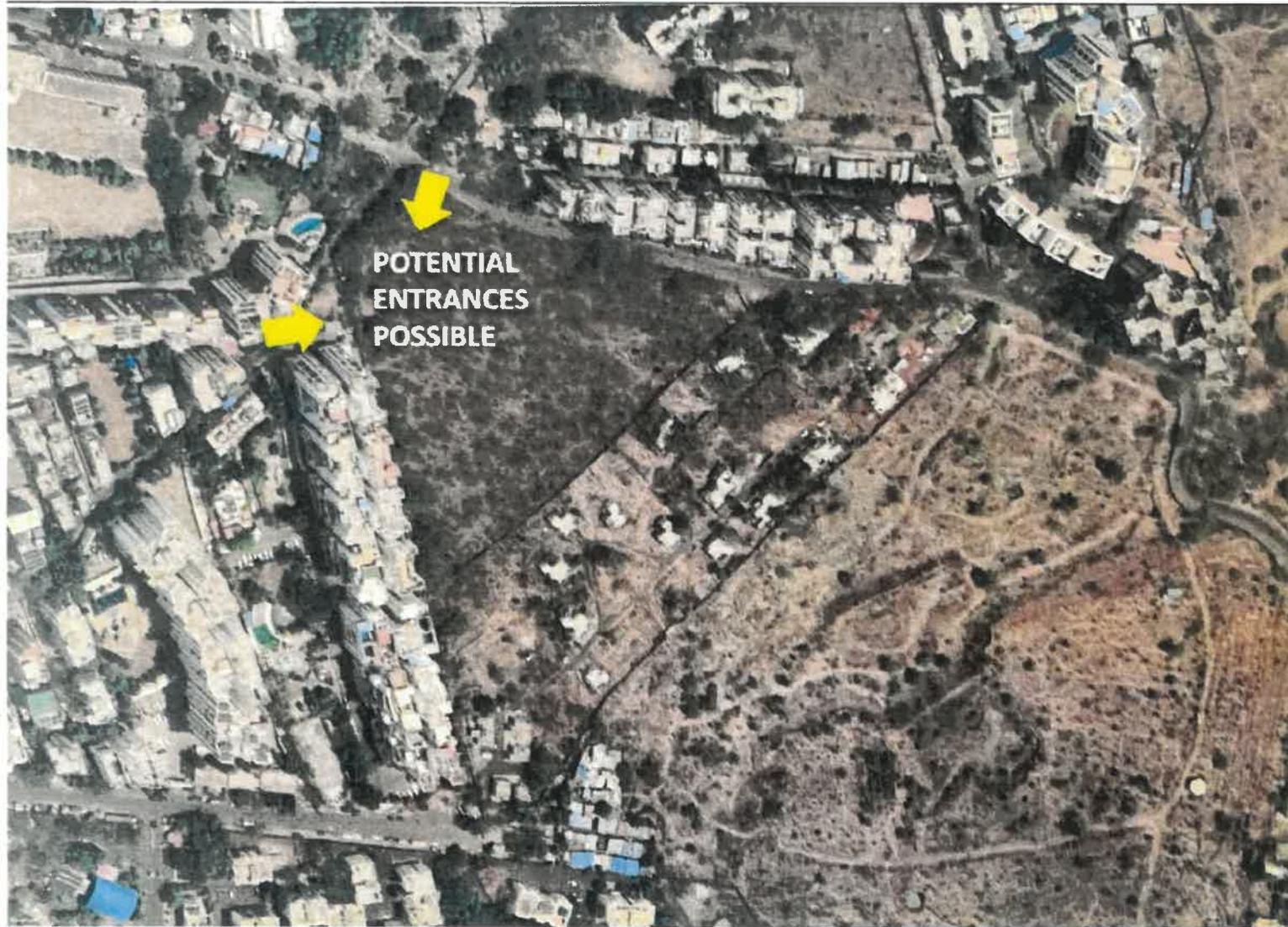


INCREASES URBAN BIODIVERSITY



INCREASES PROPERTY VALUE





**WANWADI VAN UDYAN
COMPONENTS:**

1. TREE PLANTATION.
2. WATER MANGMENT.
3. MEDITATION CENTER.
4. ROCK GARDEN.
5. LOTUS GARDEN.
6. VINE TRELLIS.
7. REFLEXOLOGY PATH.
8. VALLY OF FLOWER.
9. CHILDREN PLAY AREA
10. ADVENTURE PARK.
11. WATER POND.
12. FOREST STATION.
13. ENTRY GATE.



Wanvadi Van Udyan

Urban Forestry
Sr.No. 49
Total Area 6.00 Ha

Legend

- Naren Hills
- Ruby Hall Clinic, Wanowrie





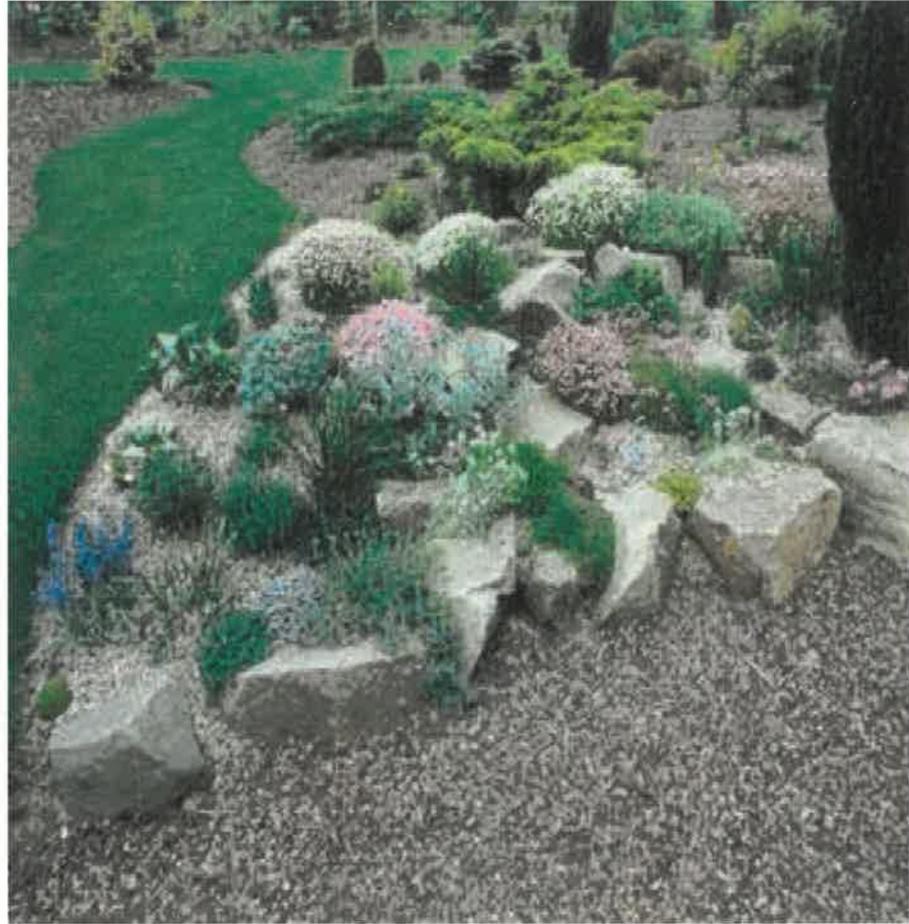
Entrance



Tall Tree Plantation



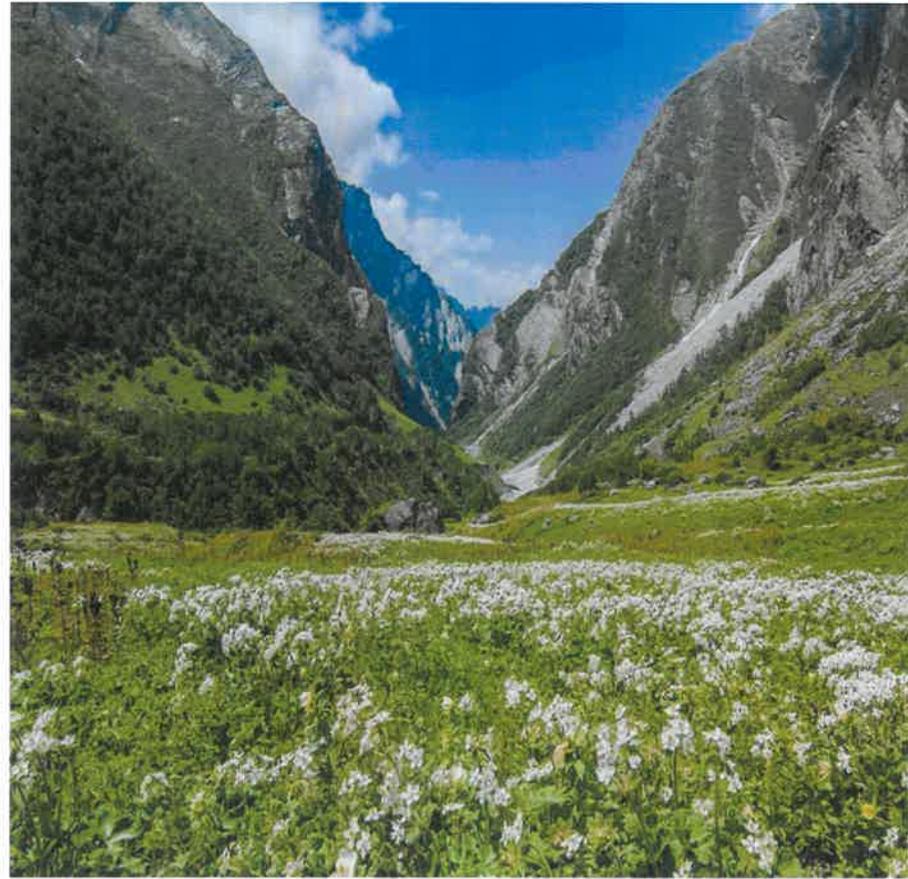
M.S.Railing



Rock Garden



Solar street Lights



Valley of Flowers



Pathway



Reflexology Pathway



Laterite Stone Pathway

Stone Masanory benches

Specification Sheet

Estimated amount of Proposed Work Year (2023-24) West Zone

Sr. No.	Name	No.	Unit	Est. Amt.(in Lakh)
1	Removing Gliricidia.andTall Plantation.	3	Ha	22.00
2	Entrance camman with gate	1	No	9.00
3	Ticketing Unit.	1	No	3.00
4	Bio-toilets	4	No	10.00
5	M.S.Railing.	250	Rmt	15.00
6	Meditation Center.	1	No	9.00
7	Rock Garden.	1	No	9.00
8	Childrens Play Area.	1	No	10.00
9	Water Pond.	1	No	10.00
10	Solar Lights.	15	No	10.00
11	Water supply. (Water tank with water supply from tanker)	1	No	9.50
12	Valley of Flower with drip system.	1	No	10.00
13	Pathway.	500	Rmt	10.00
14	Reflexology Pathway.	1	No	10.00
15	Laterite Pathway. For West Zone	1	No	10.00
16	Benches.	40	No	9.00
17	Udyan Protection and Management.	1	No	8.00
18	Water storage tank	1	No	8.00
19	Pipeline.	1	No	6.00
20	Vine Trellis.	4	No	10.00
21	Forest Station.	1	No	7.00
22	Adventure park.	1	No	40.00
23	Lotus Garden with Pond.	1	No	10.00
			Total In Lakh.	254.50

Specification Sheet

Estimated amount of Proposed Work Year (2023-24) North Zone

Sr. No.	Name	No.	Unit	Est. Amt.(in Lakh)
1	Nature Trail	500	Rmt	15.00
2	Vantale	2	No	10.00
3	Ferocrate Bridge on Nalla	1	No	9.50
4	Resting Point	1	No	9.00
5	Open Air Amphitheatre	1	No	15.00
6	M S Structure Watch Tower	1	No	9.00
7	Open Air GYM	1	No	9.75
8	Miyawaki Plantation with Drip System	1	No	42.50
9	Tree Otta	10	No	10.00
10	Information Board	15	No	7.00
11	Bird Nests	25	No	1.00
12	Dustbins	20	No	0.50
13	Ferocrate Railing	1	No	9.25
14	Chain Link Fencing	500	Rmt	15.00
15	Painting Nature them on Old Wall	1	No	10.00
16	Laterite Pathway. For North Zone	1	No	10.00
17	Pitching to Nala	1	No	9.00
18	M.S.Railing.	200	Rmt	10.00
19	Compound Wall	500	rmt	25.00
Total In Lakh.				226.50
Total Proposal Amount				481.00



महाराष्ट्र निसर्ग पर्यटन विकास मंडळ,

10/2, स्टार्की टाऊन, मंगळवारी बाजार, सदर, नागपूर 440 001
दुरध्वनी क्रमांक 0712-2978844

E-mail ID : mahaecotourism@mahaforest.gov.in



ई-मेलद्वारे

विषय:-महाराष्ट्र निसर्ग पर्यटन विकास मंडळाच्या कार्यकारी समितीच्या दिनांक ३०/०८/२०२३ रोजी आयोजित १९ व्या सभेच्या कार्यवृत्तांता बाबत.

क्रमांक:व्यसं/मनिपविमं-सभा/प्र.क्र.१२१(भाग-५)/२३-२४/592

नागपूर: ४४० ००१, दिनांक : ०४/०९/२०२३

प्रति,

१. प्रधान मुख्य वनसंरक्षक (वनबल प्रमुख) तथा अध्यक्ष कार्यकारी समिती, महाराष्ट्र निसर्ग पर्यटन विकास मंडळ, महाराष्ट्र राज्य, नागपूर.
२. प्रधान मुख्य वनसंरक्षक व मुख्य कार्यकारी अधिकारी (महाकॅम्पा), महाराष्ट्र राज्य, नागपूर तथा सदस्य, कार्यकारी समिती.
३. प्रधान मुख्य वनसंरक्षक (अर्थसंकल्प, नियोजन व विकास), महाराष्ट्र राज्य, नागपूर तथा सदस्य, कार्यकारी समिती.
४. व्यवस्थापकीय संचालक, एफडीसीएम लि.नागपूर तथा सदस्य कार्यकारी समिती किंवा त्यांचे प्रतिनिधी.
५. प्रधान मुख्य वनसंरक्षक (वन्यजीव), महाराष्ट्र राज्य, नागपूर तथा सदस्य, कार्यकारी समिती.
६. अपर प्रधान मुख्य वनसंरक्षक (वन्यजीव), पश्चिम मुंबई तथा सदस्य, कार्यकारी समिती.
७. अपर प्रधान मुख्य वनसंरक्षक (वन्यजीव), पुर्व नागपूर तथा सदस्य, कार्यकारी समिती.
८. व्यवस्थापकीय संचालक, महाराष्ट्र पर्यटन विकास महामंडळ, मुंबई तथा सदस्य, कार्यकारी समिती किंवा त्यांचे प्रतिनिधी.

संदर्भ : या कार्यालयाचे पत्र क्रमांक:कक्ष-६/लले/व्यसं/काससभा/भाग-५/२३-२४/५५३
दिनांक २८/०८/२०२३

महाराष्ट्र निसर्ग पर्यटन विकास मंडळाच्या कार्यकारी समितीची १९ वी सभा, मा. प्रधान मुख्य वनसंरक्षक (वनबल प्रमुख), महाराष्ट्र राज्य, नागपूर तथा अध्यक्ष कार्यकारी समिती, महाराष्ट्र निसर्ग पर्यटन विकास मंडळ, नागपूर यांच्या अध्यक्षतेखाली दिनांक ३०/०८/२०२३ रोजी दुपारी १२.३० वाजता कमांड

कंट्रोल रुम, वनभवन, नागपूर येथे संपन्न झाली. सदर सभेचा कार्यवृत्तांत सोबत माहिती व आवश्यक कार्यवाहीस्तव सादर करण्यात येत आहे.

सहपत्र:- वरील प्रमाणे.

leapt
सदस्य-सचिव, कार्यकारी समिती तथा
व्यवस्थापकीय संचालक,
महाराष्ट्र निसर्ग पर्यटन विकास मंडळ,
नागपूर

प्रतिलिपी:-

- १) अपर प्रधान मुख्य वनसंरक्षक (वन्यजीव), पश्चिम मुंबई यांना माहिती व आवश्यक कार्यवाही करीता सादर.
- २) मुख्य वनसंरक्षक (प्रादेशिक), पुणे यांना माहिती व आवश्यक कार्यवाहीकरीता अग्रेषित.
- ३) वनसंरक्षक व संचालक, संजय गांधी राष्ट्रीय उद्यान, बोरीवली यांना आवश्यक कार्यवाहीकरीता अग्रेषित.
- ४) उपवनसंरक्षक, पुणे वनविभाग, पुणे यांना आवश्यक कार्यवाहीकरीता अग्रेषित.

leapt
सदस्य-सचिव, कार्यकारी समिती तथा
व्यवस्थापकीय संचालक,
महाराष्ट्र निसर्ग पर्यटन विकास मंडळ,
नागपूर

प्रत — कक्ष-२, योजना, मनिपविमं यांना सहपत्रांसह माहिती व आवश्यक त्या पुढील कार्यवाहीसाठी.

महाराष्ट्र निसर्ग पर्यटन विकास मंडळाच्या दिनांक ३०/०८/२०२३ रोजी संपन्न झालेल्या कार्यकारी समितीच्या १९ व्या सभेचा कार्यवृत्तांत

महाराष्ट्र निसर्ग पर्यटन विकास मंडळाच्या कार्यकारी समितीची १९ वी सभा दिनांक ३० ऑगस्ट, २०२३ रोजी दुपारी १२.३० वाजता प्रधान मुख्य वनसंरक्षक (वनबल प्रमुख), महाराष्ट्र राज्य, नागपूर तथा अध्यक्ष, कार्यकारी समिती, महाराष्ट्र निसर्ग पर्यटन विकास मंडळ यांचे अध्यक्षतेखाली कमांड कंट्रोल रूम, वनभवन, रामगिरी रोड, सिव्हील लाईन्स, नागपूर येथे संपन्न झाली. सभेत उपस्थित कार्यकारी समिती सदस्य व आमंत्रित अधिका-यांची यादी (परिशिष्ट-१) नुसार सोबत जोडली आहे.

व्यवस्थापकीय संचालक, महाराष्ट्र निसर्ग पर्यटन विकास मंडळ तथा सदस्य सचिव यांनी एकोणीसव्या सभेच्या सुरुवातीला अध्यक्षीय व उपस्थित सर्व सदस्यांचे व इतर अधिकाऱ्यांचे स्वागत केले व त्यानंतर अध्यक्षीय परवानगीने विषयसूचीनुसार सभेच्या कामकाजास सुरुवात केली.

सभेमध्ये सर्व विषयांवर सविस्तर चर्चा होऊन कार्यकारी समितीद्वारे खालील प्रमाणे निर्णय घेण्यात आले.

सादरीकरण संबंधित उपवनसंरक्षक/ विभागीय वनाधिकारी यांनी केले.

सर्व मंजूर प्रस्तावांना पुढील सर्वसाधारण अटी व शर्तीच्या अधीन राहून मंजूरी प्रदान केलेली आहे.

- (१) वन संवर्धन कायदा, १९८०, भारतीय वन अधिनियम, १९२७ व वन्यजीव संरक्षण अधिनियम, १९७२ चे कोठल्याही प्रकारे उल्लंघन होणार नाही.
- (२) महाराष्ट्र राज्य वन पर्यटन धोरण व वन पर्यटनासंबंधी वेळोवेळी शासनाने निर्गमित केलेले शासन निर्णय/ सूचनांच्या विपरीत कामे करता येणार नाही.
- (३) प्रत्यक्ष कामे ही मंजूर आराखड्यानुसारच होतील. कामाचे प्रकार किंवा स्वरूप किंवा नवीन कामे घ्यावयाची असल्यास सुधारीत आराखडा महाराष्ट्र निसर्ग पर्यटन विकास मंडळ, नागपूर यांचेकडून मंजूर झालेनंतरच पुढील कार्यवाही करावी.
- (४) प्राचीन ऐतिहासिक स्मारके उदा. गड/किल्ले आदी यांचेशी संबंधित निसर्ग पर्यटनाची कामे करण्यापूर्वी संबंधित पुरातत्व विभागाची परवानगी प्राप्त करावी. अशी कामे ऐतिहासिक स्मारकाशी समरस होणारी असावीत याकरीता आवश्यक तांत्रिक मार्गदर्शन त्यांचे कार्यालयातील तज्ज्ञांकडून घ्यावे.

विषय क्रमांक	विषय	समितीचे निर्णय
१	दिनांक २७/०६/२०२३ रोजी झालेल्या १८ व्या बैठकीचा कार्यवृत्तांत कायम करणे.	यासंबंधी सविस्तर चर्चा होवून सर्वानुमते कार्यवृत्तांत कायम करण्यात आला.
२	निसर्ग पर्यटन विकास आराखड्यांना मान्यता देणे.	
२.१	संजय गांधी राष्ट्रीय उद्यान निसर्ग पर्यटन विकास आराखडा, बोरीवली वनविभाग आराखडा किंमत रु.४३३२.८५ लक्ष आराखडा कालावधी २०२३-२४	उपरोक्त अ.क्र. (१) ते (३) च्या अधीन राहून आराखड्यास तत्त्वतः मान्यता प्रदान करण्यात आली.
२.२	मौजे भरणेवाडी ता. इंदोपूर फॉ. स. नं. १५३ निसर्ग पर्यटन आराखडा, पुणे वनविभाग आराखडा किंमत रु.२३९.५० लक्ष आराखडा कालावधी २०२३-२४	उपरोक्त अ.क्र. (१) ते (३) च्या अधीन राहून व निधी डी.पी.डी.सी. कडून उपलब्ध करून घेणे या अटीवर आराखड्यास मान्यता प्रदान करण्यात आली.
२.३	मौजे पिसोळी फॉ.स.नं.२६ निसर्ग पर्यटन विकास आराखडा, पुणे वनविभाग आराखडा किंमत रु.२४३.०० लक्ष आराखडा कालावधी २०२३-२४	उपरोक्त अ.क्र. (१) ते (३) च्या अधीन राहून व निधी डी.पी.डी.सी. कडून उपलब्ध करून घेणे या अटीवर आराखड्यास मान्यता प्रदान करण्यात आली.
२.४	मौजे वडकी राखीव वन गट नं.२७९, ३०९ निसर्ग पर्यटन विकास आराखडा, पुणे वनविभाग आराखडा किंमत रु.३२८.०० लक्ष आराखडा कालावधी २०२३-२४ ते २०२४-२५	उपरोक्त अ.क्र. (१) ते (३) च्या अधीन राहून व निधी डी.पी.डी.सी. कडून उपलब्ध करून घेणे या अटीवर आराखड्यास मान्यता प्रदान करण्यात आली.
२.५	मौजे वानवडी फॉ.स.नं.४९ वन उद्यान निसर्ग पर्यटन विकास आराखडा, पुणे वनविभाग आराखडा किंमत रु.४८१.०० लक्ष आराखडा कालावधी २०२३-२४	उपरोक्त अ.क्र. (१) ते (३) च्या अधीन राहून व निधी डी.पी.डी.सी. कडून उपलब्ध करून घेणे या अटीवर आराखड्यास मान्यता प्रदान करण्यात आली.

३) महाराष्ट्र निसर्ग पर्यटन विकास मंडळ, नागपूर यांचे कार्यालय परिसरातील लेबर शेड चे दुरुस्ती कामाबाबत.

व्यवस्थापकीय संचालक, महाराष्ट्र निसर्ग पर्यटन विकास मंडळ, नागपूर यांचे कार्यालय परिसरातील लेबर शेड चे दुरुस्तीची कामे करण्याकरिता २१,४७७००/- रकमेच्या अंदाजपत्राकास वन अभियंता, महाराष्ट्र राज्य, नागपूर यांनी मान्यता प्रदान केली असून सदर कामे रु.१६४९०१९/- (without GST) मध्ये करण्याकरिता मंडळातर्फे करण्यात येत असलेल्या कार्यवाहीबाबत सभेत माहिती देण्यात आली. समितीने सदर कामे करण्यास मान्यता प्रदान केली.

४) ऑनलाईन सफारी बुकींग प्रणाली करिता पुलिंग अकाउंट कार्यान्वित करणे.

राज्यातील सर्व वन्यजीव अभयारण्य/ व्याघ्र प्रकल्प/ Ecotourism sites करिता सर्वसामान्य पर्यटकांसाठी आवश्यक देय शुल्क जमा करणे करिता एकच पर्मेट गेटवे प्लॅटफॉर्म असणे आवश्यक असून त्याकरिता वनविभागाचे अधिकृत पुलिंग खाते असणे गरजेचे आहे.

त्या अनुषंगाने व्यवस्थापकीय संचालक, महाराष्ट्र निसर्ग पर्यटन विकास मंडळ, नागपूर यांचे भारतीय स्टेट बँक, सिव्हील लाईन, नागपूर येथे नवीन पुलिंग खाते उघडण्यास परवानगी देणेबाबत शासनास विनंती केली आहे.

व्यवस्थापकीय संचालक, महाराष्ट्र निसर्ग पर्यटन विकास मंडळ, नागपूर या नांवाने भारतीय स्टेट बँक, सिव्हील लाईन, नागपूर येथे नवीन पुलिंग खाते Current Account राहिल. सदर खाते व्यवस्थापकीय संचालक, महाराष्ट्र निसर्ग पर्यटन विकास मंडळ संचालित करतील.

महाराष्ट्र निसर्ग पर्यटन विकास मंडळ व स्टेट बँक ऑफ इंडिया मध्ये MoU होणार आहे. त्याद्वारे SBI ePay Life द्वारे विविध निसर्ग पर्यटन स्थळांचा सफारी/ निवास व्यवस्थेपोटी पर्यटकांद्वारे आरक्षणामुळे पुलिंग अकाउंट मध्ये जमा होणारी रक्कम संबंधीत निसर्ग पर्यटन स्थळाच्या खात्यात जमा करण्यात येणार आहे. याबाबतची माहिती सभेत सादर करण्यात आली. त्यावर समितीने सदर कार्यवाहीस मान्यता प्रदान केली.

५) निसर्ग पर्यटन विकास मंडळाचे आर्किटेक्ट कन्सल्टन्सी फर्म यांचे पॅनेलवर नियुक्तीबाबत.

महाराष्ट्र निसर्ग पर्यटन विकास मंडळ, नागपूर अंतर्गत करावयाचे पर्यटन विकास कामाकरीता आर्किटेक्ट कन्सल्टन्सी फर्म यांचे पॅनेल शासन निर्णय दिनांक २२/०८/२०२३ अन्वये २३ वास्तुशास्त्र सल्लागारांची नियुक्ती करण्यास शासन मान्यता प्रदान करण्यात आली आहे. याबाबत सभेत माहिती देण्यात आली. त्यावर समितीने समाधान व्यक्त केले.

सभेच्या शेवटी व्यवस्थापकीय संचालक, निसर्ग पर्यटन विकास मंडळ, नागपूर यांनी उपस्थितांचे आभार मानून अध्यक्षीय परवानगीने सभा संपल्याचे जाहीर केले.


सदस्य-सचिव, कार्यकारी समिती तथा
व्यवस्थापकीय संचालक,
महाराष्ट्र निसर्ग पर्यटन विकास मंडळ,
नागपूर

परिशिष्ट -१

दिनांक ३० ऑगस्ट, २०२३ रोजी संपन्न झालेल्या महाराष्ट्र निसर्ग पर्यटन विकास मंडळाच्या कार्यकारी समितीच्या १९ व्या सभेमध्ये उपस्थितांची यादी

अ.क्र.	अधिकाऱ्यांचे नांव	समिती मधील पद	पदनाम
१	डॉ. वाय.एल.पी. राव	अध्यक्ष	प्रधान मुख्य वनसंरक्षक(वनबल प्रमुख), महाराष्ट्र राज्य, नागपूर तथा अध्यक्ष, कार्यकारी समिती महाराष्ट्र निसर्ग पर्यटन विकास मंडळ, नागपूर
२	श्री. महीप गुप्ता	सदस्य सचिव	व्यवस्थापकीय संचालक, तथा सदस्य सचिव, कार्यकारी समिती, महाराष्ट्र निसर्ग पर्यटन विकास मंडळ, नागपूर
३	श्री. प्रविण चव्हाण	सदस्य	अपर प्रधान मुख्य वनसंरक्षक (वन्यजीव) पूर्व, नागपूर
४	श्री. राजन तलमले	सदस्य	प्रधान मुख्य वनसंरक्षक व मुख्य कार्यकारी अधिकारी (महाकॅम्पा), महाराष्ट्र राज्य, नागपूर यांचे प्रतिनिधी
५	श्री. राजेश तिवारी	सदस्य	व्यवस्थापकीय संचालक, एफ.डी.सि.एम., नागपूर यांचे प्रतिनिधी
६	श्रीमती प्रतिभा बोदले		महाराष्ट्र पर्यटन विकास मंडळ, नागपूर यांचे प्रतिनिधी
आभासी V.C. द्वारे सभेस उपस्थितांची यादी			
१	डॉ. व्ही. क्लेमेंट बेन		अपर प्रधान मुख्य वनसंरक्षक (वन्यजीव) पश्चिम, मुंबई
२	श्री. एन. आर. प्रविण		मुख्य वनसंरक्षक (प्रादेशिक), पुणे
३	श्री. जी. मल्लीकार्जुन		वनसंरक्षक तथा संचालक, संजय गांधी राष्ट्रीय उद्यान बोरीवली
४	श्री. महादेव मोहिते		उपवनसंरक्षक, पुणे वनविभाग
५	श्रीमती प्रत्यूषा		SDGM
६	श्री. के. व्यंकटेश		Additional GM
७	श्री. नरेन्द्र चांदेवार		उप महाप्रबंधक, मनिपविमं. नागपूर

Maharashtra Eco-Tourism Development Board,
10/2, Staki Town, Mangalwari Bajar, Sadar, Nagpur 440 001
Telephone No 0712-2978844
E-mail ID: mahaecotourism@mahaforest.gov.in

Via E-mail

Subject: About Activity Report of the 19th meeting of the executive committee of Maharashtra Eco-Tourism Development Board, dated 30/08/2023

Number: VS/MNPVM-Meeting/C.No.121(Section – 5)/23-24/592

Nagpur: 440 001, **Date:** 04/09/2023

To,

1. Principal Chief Conservator of Forest (Head of Forest Forces) and Chairman, Executive Committee, Maharashtra Eco-Tourism Development Board, Maharashtra State, Nagpur
2. Principal Chief Conservator of Forest and Chief Executive Officer (MAHACAMPA), Maharashtra State, Nagpur and Member, Executive Committee
3. Principal Chief Conservator of Forest (Budget, Planning and Development), Maharashtra State, Nagpur and Member, Executive Committee
4. Managing Director, FDCM Ltd. Nagpur and Member, Executive Committee or their representative
5. Principal Chief Conservator of Forest (Wildlife), Maharashtra State, Nagpur and Member, Executive Committee
6. Upper Chief Conservator of Forest (Wildlife), Western Mumbai and Member, Executive Committee
7. Upper Chief Conservator of Forest (Wildlife), Eastern Nagpur and Member, Executive Committee
8. Managing Director, Maharashtra Eco-Tourism Development Board, Mumbai and Member, Executive Committee or their representative

Reference: Letter number:Cell-6/LL/VS/KSMeeting/Section-5/23-24/553 of this office, dated 28/08/2023

19th meeting of the Maharashtra Eco-Tourism Development Board took place under the chairmanship of the Principal Chief Conservator of Forest (Head of Forest Forces), Maharashtra State and Chairman, Executive Committee, Maharashtra Eco-Tourism Development Board, Nagpur, on 30/08/2023 at 12.30 PM at Command Control Room, Vanbhavan, Nagpur. Activity Report of the meeting has been attached hereby for your information and required action.

Enclosure:- As mentioned above

Sd/-
Member – Secretary,
Executive Committee and
Managing Director,
Maharashtra Eco-Tourism
Development Board,
Nagpur

Copy:-

- 1) Upper Chief Conservator of Forest (Wildlife), Western Mumbai for information and required action
- 2) Chief Conservator of Forest (Regional), Pune for information and required action
- 3) Conservator of Forest and Director, Sanjay Gandhi National Park, Borivali for required action
- 4) Deputy Conservator of Forest, Pune Division, Pune for required action

Copy – to Cell-2, Scheme, MNPVM with enclosure for information and required action

Activity Report of the 19th meeting of the executive committee of Maharashtra Eco-Tourism Development Board, organised on 30/08/2023

19th meeting of the Maharashtra Eco-Tourism Development Board took place under the chairmanship of the Principal Chief Conservator of Forest (Head of Forest Forces), Maharashtra State and Chairman, Executive Committee, Maharashtra Eco-Tourism Development Board, Nagpur, on 30/08/2023 at 12.30 PM at **Command Control Room**, Vanbhavan, Ramgiri Road, Civil Lines, Nagpur. List of the members of the Executive Committee and invitee officers, who attended this meeting, has been attached hereby as Annexure 1.

In the beginning of the **19th meeting**, the Managing Director, Maharashtra Eco-Tourism Development Board and Member Secretary welcomed the chairman and all members and other officers, who were present during the meeting, and then, proceeding of the meeting started with the permission of the chairman.

A detailed discussion took place on all subjects during the meeting and the executive committee took the following decisions. Concerned Deputy Conservator of Forest/Divisional Forest Officer presented the same.

All approved proposals were sanctioned with the following terms and conditions.

- (1) Forest Conservation Act, 1980, Indian Forest Act, 1927 and Wildlife Protection Act, 1972 will not be violated at any cost.
- (2) Activities, which are against the decisions/instructions issued by the Government of Maharashtra from time to time with regards to the eco-tourism policy and eco-tourism, cannot be undertaken.
- (3) Activities will be carried out as per the sanctioned plan. In case there are changes in the type or nature of the activities or new activities need to be taken up, revised plan needs to be approved by the Maharashtra Eco-Tourism Development Board, Nagpur before taking any action in this regard.
- (4) Before carrying out activities related to the ancient historical monuments, such as forts, permission for the Archaeology Department should be obtained. Technical guidance from the experts from the Archaeology Department should be obtained in order to sync such activities with the historical monuments.

Subject No.	Subject	Decision of the Committee
1	To retain activity report of the 18 th meeting, which took place on 27/06/2023.	A details discussion took place on this and activity report was unanimously confirmed.
2	To approve eco-tourism development plans	
2.1	Sanjay Gandhi National Park Eco Tourism Development Plan, Borivali Forest Division Amount of the plan – Rs. 4332.85 lakh Duration of the plan – 2023-24	Plan was approved in principle subject to the above sr.no (1) and (3).
2.2	Mauje Bharanewadi, Taluka Indapur, Forest Survey No. 153 Eco Tourism Development Plan, Pune Forest Division Amount of the plan – Rs. 239.50 lakh Duration of the plan – 2023-24	Plan was approved subject to the above sr.no (1) and (3) and term that the funds will be made available from DPDC.
2.3	Mauje Pisoli Forest Survey No. 26 Eco Tourism Development Plan, Pune Forest Division Amount of the plan – Rs. 243.00 lakh Duration of the plan – 2023-24	Plan was approved subject to the above sr.no (1) and (3) and term that the funds will be made available from DPDC.
2.4	Mauje Wadaki Reserved Forest Gat No. 279, 309 Eco Tourism Development Plan, Pune Forest Division Amount of the plan – Rs. 328.00 lakh Duration of the plan – 2023-24	Plan was approved subject to the above sr.no (1) and (3) and term that the funds will be made available from DPDC.
2.5	Mauje Wanawadi, Forest Survey No. 49 Eco Tourism Development Plan, Pune Forest Division Amount of the plan – Rs. 481.00 lakh Duration of the plan – 2023-24	Plan was approved subject to the above sr.no (1) and (3) and term that the funds will be made available from DPDC.

3) About carrying out repair works of the labour shade from campus of the Maharashtra Eco-Tourism Development Board, Nagpur

Forest Engineer, Maharashtra State, Nagpur has sanctioned budget of Rs. 2147700 in order to carry out repair works of the labour shade from campus of the office of the Managing Director, Maharashtra Eco-Tourism Development Board. The Board is taking action to complete the said works in the amount of Rs. 1649019 (without GST) and information about the same was disseminated during the meeting. Committee has given its approval to carry out these works.

4) To activate Pooling Account for online safari bookings

One common payment gateway platform is required in order to collect charges paid by tourists at all wildlife sanctuaries/tiger projects/eco-tourism sites. Hence, the Forest Department requires authorise pooling account.

In this regard, a request has been sent to the government in order to open a new pooling account of the Managing Director, Maharashtra Eco-Tourism Development Board, Nagpur in the State Bank of India, Civil Line, Nagpur.

The State Bank of India, Civil Line, Nagpur, will have a new pooling account as a Current Account in the name of the Managing Director, Maharashtra Eco-Tourism Development Board, Nagpur. The said account will be operated by the Managing Director, Maharashtra Eco-Tourism Development Board.

MoU will be signed between the Maharashtra Eco-Tourism Development Board and the State Bank of India. As a part of this MoU, charges paid by tourists towards reservation of safari/accommodation at various Eco-Tourism Development Boards to the pooling account will be credited to the account of related Eco-Tourism Development Board through SBI ePay Life. Meeting was informed about this and committee approved the same.

5) About appointing on the panel of an Architect Consultancy Firm of the Eco-Tourism Development Board

The government has approved to appoint 23 Architecture Consultants on the panel of the Architect Consultancy Firm in order to carry out tourism development activities under the Maharashtra Eco-Tourism Development Board, Nagpur, as per the government decision, dated 22/08/2023. Meeting was informed about this and the committee expressed satisfaction on the same.

At the end of the meeting, the Managing Director, Maharashtra Eco-Tourism Development Board, Nagpur gave vote of thanks and concluded the meeting with the permission of the chairman.

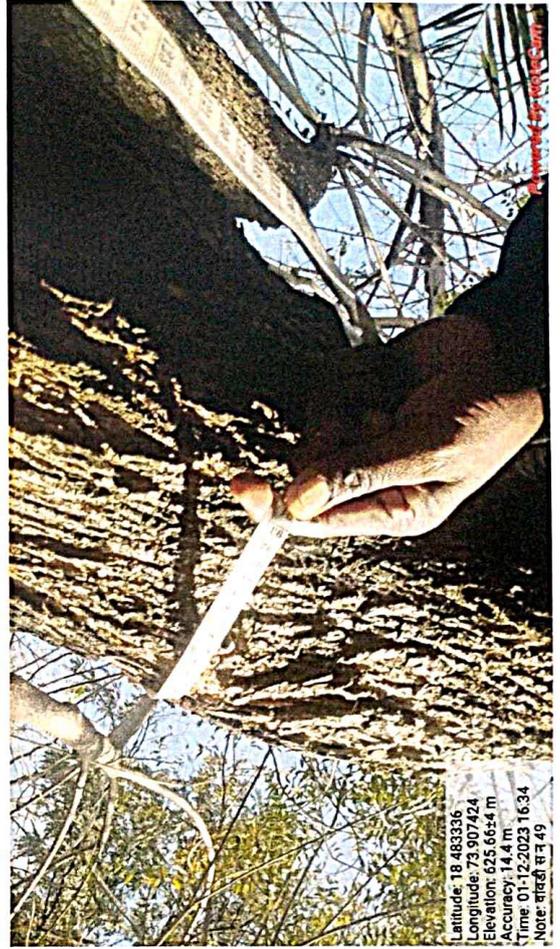
Sd/-
Member – Secretary,
Executive Committee and
Managing Director,
Maharashtra Eco-Tourism
Development Board,
Nagpur

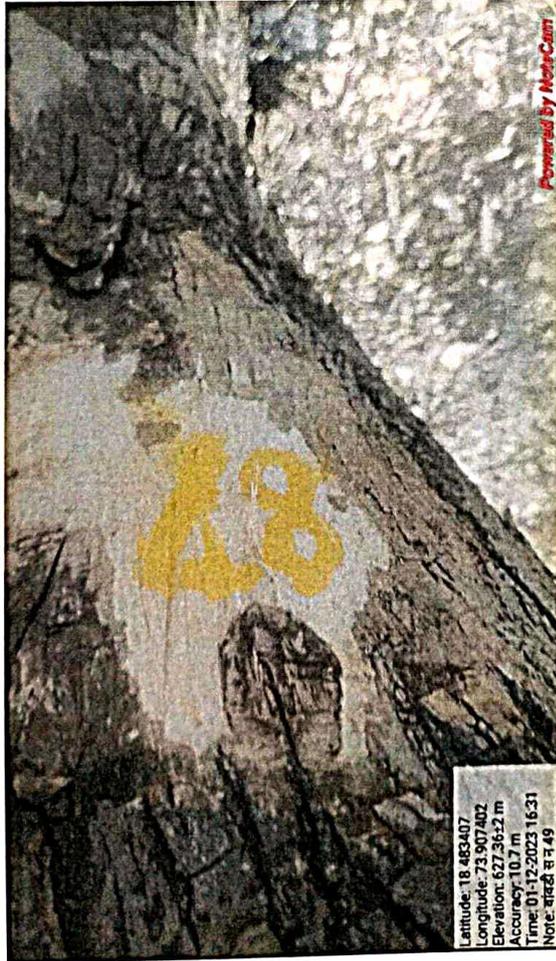
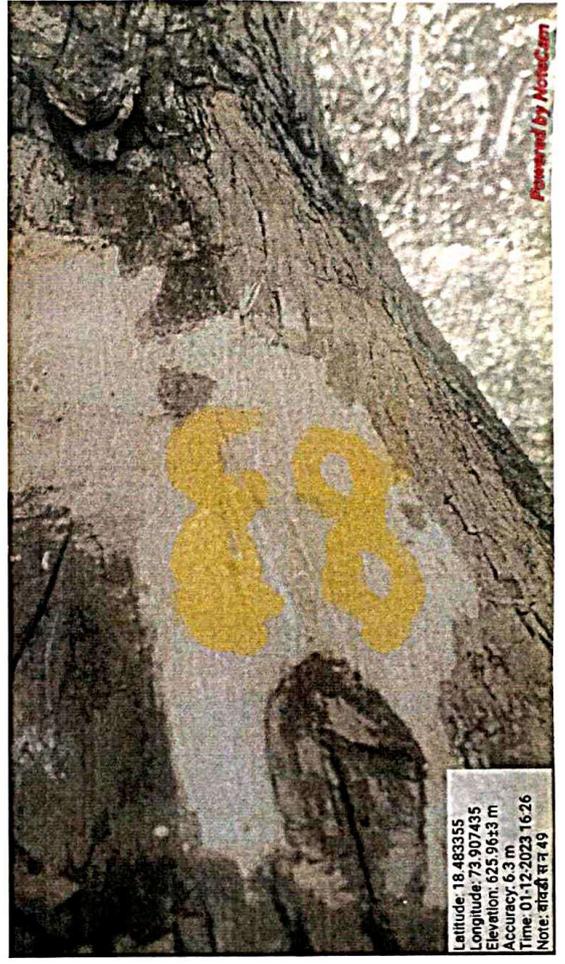
List of the attendees of the 19th meeting of the Executive Committee of the Maharashtra Eco-Tourism Development Board, which took place on 30 August, 2023

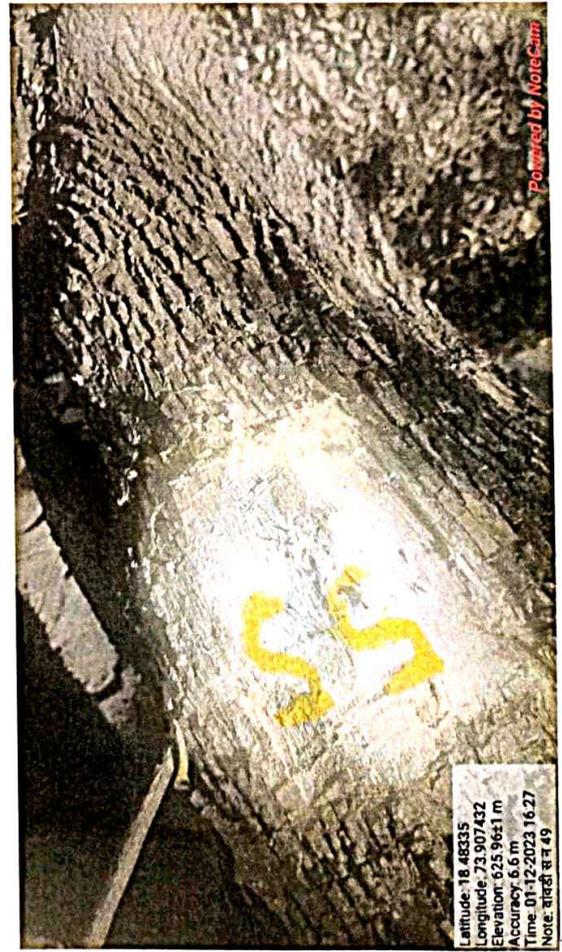
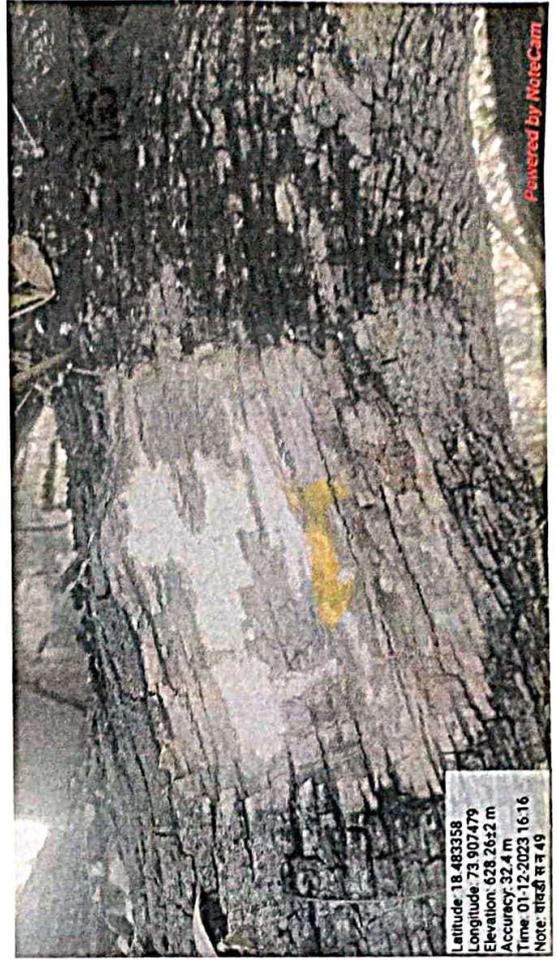
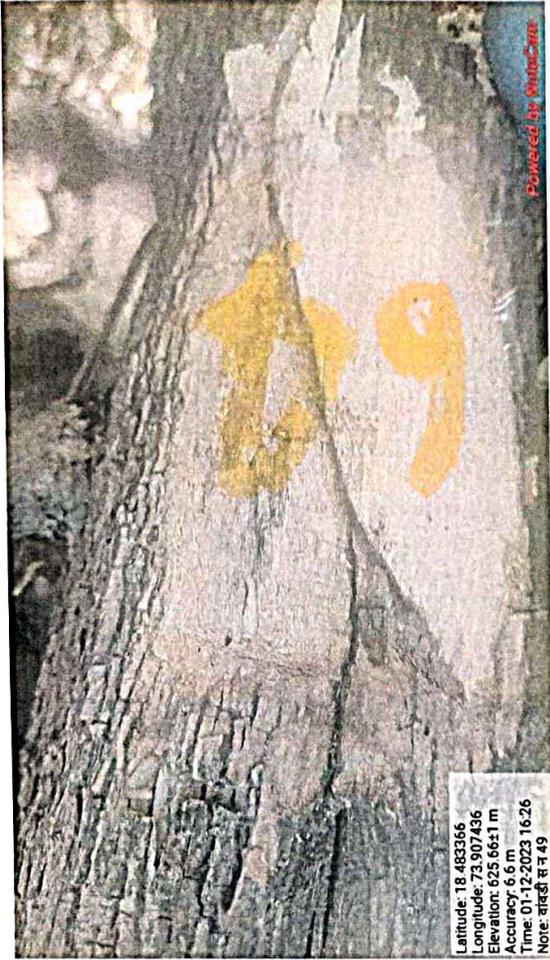
Sr.No.	Officer's Name	Designation in the Committee	Deputation of Post
1	Dr. Y L P Rao	Chairman	Principal Chief Conservator of Forest (Head of Forest Forces) and Chairman, Executive Committee, Maharashtra Eco-Tourism Development Board, Maharashtra State, Nagpur
2	Mr. Mahip Gupta	Member Secretary	Managing Director, and Member Secretary, Executive Committee, Maharashtra Eco-Tourism Development Board
3	Mr. Pravin Chavan	Member	Upper Principal Chief Conservator of Forest (Wildlife), East, Nagpur
4	Mr. Rajan Talmale	Member	Representative of the Principal Chief Conservator of Forest and Chief Executive Officer (MAHACAMPA), Maharashtra State, Nagpur
5	Mr. Rajesh Tiwari	Member	Representative of the Managing Director, FDCM, Nagpur
6	Smt. Pratibha Bodele		Representative of the Maharashtra Eco-Tourism Development Board, Nagpur
List of the attendees, who attended via virtual V C			
1	Dr. V Clement Ben		Upper Principal Chief Conservator of Forest (Wildlife) West, Mumbai
2	Mr. N R Pravin		Chief Conservator of Forest (Regional) Pune
3	Mr. G Mallikarjun		Conservator of Forest and Director, Sanjay Gandhi National Park, Borivali
4	Mr. Mahadeo Mohite		Deputy Conservator of Forest, Pune Forest Division
5	Smt. Pratyusha		SDGM
6	Mr. K Vyankatesh		Additional GM
7	Mr. Narendra Chandewar		Deputy General Manager, MNPVM, Nagpur

List of removed Glirisdia trees at Mouje Wanawadi F. S.no.49 Forest Park

Sr.no.	Species	Girth (cm.)	Height (mtr.)	Sr.no.	Species	Girth (cm.)	Height (mtr.)
1	Glirisdia	36	2.85	47	Glirisdia	51	4.95
2		31	2.71	48		31	2.91
3		38	2.91	49		32	2.95
4		30	2.71	50		30	2.70
5		31	2.75	51		35	2.75
6		33	2.91	52		39	2.95
7		47	3.85	53		38	2.91
8		31	2.55	54		30	2.50
9		50	5.5	55		48	2.95
10	Glirisdia	32	2.01	56	Glirisdia	41	3.50
11		35	2.95	57		43	2.95
12		48	4.3	58		45	3.01
13		31	2.63	59		39	3.05
14		33	2.73	60		30	2.70
15		39	2.91	61		49	3.50
16		41	2.95	62		31	2.85
17		48	4.02	63		33	2.95
18		31	2.85	64		30	2.65
19		53	4.03	65		49	3.55
20		32	2.9	66		49	3.55
21		47	3.09	67		30	2.75
22		31	3.01	68		31	2.85
23	Glirisdia	30	2.01	69	Glirisdia	33	2.95
24		41	2.90	70		48	3.95
25		98	3.95	71		30	2.70
26		39	3.55	72		49	3.85
27		52	4.08	73		55	4.85
28		30	2.71	74		51	5.01
29		31	2.85	75		30	2.75
30		30	2.65	76		32	2.95
31	Glirisdia	49	3.1	77	Glirisdia	33	3.05
32		51	4.85	78		31	3.05
33		31	2.85	79		36	3.30
34		47	3.55	80		48	3.91
35		30	2.75	81		54	6.01
36		30	2.71	82		55	6.15
37		50	3.95	83		41	4.95
38		31	2.70	84		39	3.01
39		33	2.85	85		43	3.05
40		47	3.55	86		41	4.00
41		30	2.70	87		39	4.00
42	Glirisdia	31	2.85	88	Glirisdia	33	2.95
43		30	2.65				
44		35	2.90				
45		30	2.69				
46		50	4.8				







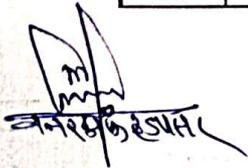
list of Reserve Netive Tree at Mouje Wangwaji S.no.49 Forest Park

Sr.No.	Species Name	Girth (cm.)	Sr.No.	Species Name	Girth (cm.)
१	kanchan	२२	४९		९१
२		२३	५०		७४
३		२८	५१		७६
४		२२	५२		६०
५		३६	५३		४५
६	Khair	३४	५४	Bor	४४
७		३१	५५		४५
८		८७	५६		४२
९		८१	५७		८३
१०		२८	५८		३१
११		२८	५९		४८
१२		२२	६०	Ain	४१
१३		३७	६१		३८
१४		५१	६२		३६
१५		४९	६३		२६
१६		४८	६४		३१
१७		५९	६५		५१
१८	Bhabhul	८२	६६		८९
१९		६९	६७		४१
२०		३१	६८		५८
२१		४८	६९		७२
२२		४१	७०		३१
२३		४७	७१		५७
२४		९१	७२		६३
२५		९४	७३		८१
२६		६०	७४	Subhabul	३१
२७		४५	७५		४१
२८	Aapta	२६	७६		३५
२९		२१	७७		७१
३०		२०	७८		३५
३१	Shiras	६५	७९		३१
३२		६८	८०		३५
३३		५६	८१	Chinch	२०
३४		८७	८२		२६
३५		५०	८३	Kadulimb	५१
३६		१०६	८४		२०
३७		७०	८५		२३
३८		४१	८६		१९
३९		३६	८७	Maharukha	६४
४०		३८	८८		१२९
४१		४१	८९		६०
४२		४४	९०		३६
४३		४६	९१		१०
४४		५५	९२	Arjun	९९
४५		५८	९३		९०
४६		५६	९४	Chandan	३९
४७		४१	९५	Bhokar	२५
४८		३१			

list of Reserve Netive Tree at Mouje Walewadi S.no.49 Forest Park

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Sr.No.	Species Name	Girth (cm.)	Sr.No.	Species Name	Girth (cm.)
१	kanchan	२२	४९		९९
२		२३	५०		७४
३		२८	५१		७६
४		२२	५२		६०
५		३६	५३		४५
६	Khair	३४	५४	Bor	४४
७		३१	५५		४५
८		८७	५६		४२
९		८१	५७		८३
१०		२८	५८		३१
११		२८	५९		४८
१२		२२	६०	Ain	४१
१३		३७	६१		३८
१४		५१	६२		३६
१५		४९	६३		२६
१६		४८	६४		३१
१७		५९	६५		५१
१८	Bhabhul	८२	६६		८९
१९		६९	६७		४१
२०		३१	६८		५८
२१		४८	६९		७२
२२		४१	७०		३१
२३		४७	७१		५७
२४		९१	७२		६३
२५		९४	७३		८१
२६		६०	७४	Subhabul	३१
२७		४५	७५		४१
२८	Aapta	२६	७६		३५
२९		२१	७७		७१
३०		२०	७८		३५
३१	Shiras	६५	७९		३१
३२		६८	८०		३५
३३		५६	८१	Chinch	२०
३४		८७	८२		२६
३५		५०	८३	Kadulimb	५१
३६		१०६	८४		२०
३७		७०	८५		२३
३८		४१	८६		१९
३९		३६	८७	Maharukha	६४
४०		३८	८८		१२९
४१		४१	८९		६०
४२		४४	९०		३६
४३		४६	९१		१०
४४		५५	९२	Arjun	९९
४५		५८	९३		९०
४६		५६	९४	Chandan	३९
४७		४१	९५	Bhokar	२५
४८		३१			


 वनरक्षक, एस.ए.ए.


 R.O. Lonikalbhia

