

**BEFORE THE NATIONAL GREEN TRIBUNAL
PRINCIPAL BENCH
NEW DELHI**

ORIGINAL APPLICATION NO. 335/2023

IN THE MATTER OF:

PRAMOD TYAGI
S/o Raghuvansh Tyagi,
R/o H. No.664,
Landa Panda, Village-Burari,
Delhi-110084

...Applicant

Verses

- 1. STATE OF NCT OF DELHI**
Department of Transport,
Through its Secretary,
5/9 Under Hill Road,
Delhi-110054
- 2. DEPARTMENT OF ENVIRONMENT & FORESTS**
Government of NCT of Delhi
Through its Secretary,
6th Level, C-Wing,
I.P. Estate, Delhi Secretariate,
Delhi-110002
- 3. UNION OF INDIA**
MINISTRY OF ENVIRONMENT, FOREST AND CLIMATE CHANGE
Through its Secretary,
Indira Paryavaran Bhawan,
Jor Bag Road,
New Delhi-110003
- 4. CENTRAL POLLUTION CONTROL BOARD**
Through its Member Secretary,
Parivesh Bhawan,
East Arjun Nagar,
Delhi-110032

- 5. DELHI INTEGRATED MULTI-MODEL TRANSIT SYSTEM LIMITED**
(A joint venture of the Government of NCT of Delhi and IDFC Foundation)
Through its Managing director,
(CIN No. U60232DL2006PLC1484)
8th Floor, Block-1,
Delhi-110053
- 6. SOCIETY FOR DRIVER TRAINING INSTITUTE**
Through its Chairman,
Office at: Transport Authority Complex,
Burari, New Delhi-110084
- 7. GOVERNMENT OF NCT OF DELHI**
Through its Chief Secretary,
3rd Level, Delhi Secretariat, I.P. Estate,
New Delhi-110002
- 8. PRINCIPAL CHIEF CONSERVATOR OF FORESTS,**
Department of Forest and Wildlife
Government of NCT of Delhi,
A-Block, 2nd Floor, Vikas Bhawan,
I.P. Estate, New Delhi-110002
- 9. DELHI DEVELOPMENT AUTHORITY**
Through its Vice Chairman,
Vikas Sadan, INA,
New Delhi-110023
- 10. MUNICIPAL CORPORATION OF DELHI**
Through its Commissioner,
Dr. S.P.M. Civic Centre,
Minto Rd, SKD Basti,
Press Enclave, Ajmeri Gate,
New Delhi-110002

...Respondent(s)

COUNSELS FOR APPLICANT:

Mr. Avdesh Kumar Singh, Advocate

COUNSELS FOR RESPONDENT(S):

Ms. Jyoti Mendiratta and Ms. Anaya Basudha, Standing Counsel for GNCTD with Mr. Prashant Goyal, Principal Secretary (through VC) and Mr. R. Ramanathan, Deputy Commissioner, Transport Department and Ms. Anamika, DCF (Central) with Mr. Sarim Khan, Project Associate

Mr. Aditya Chopra Advocate for Respondent No. 5 (through VC)
Ms. Puja Kalra and Mr. Virendra Singh, Advocates for Respondent No. 10
Ms. Kritika Gupta, Advocate for DDA
Mr. Amit Singh Chauhan and Ms. Shaima Masood, Advocates for CPCB
(through VC)

CORAM:

HON'BLE MR. JUSTICE SUDHIR AGARWAL, JUDICIAL MEMBER
HON'BLE DR. AFROZ AHMAD, EXPERT MEMBER

RESERVED ON: OCTOBER 18, 2024
PRONOUNCED ON: MARCH 21, 2025

JUDGMENT

BY HON'BLE MR. JUSTICE SUDHIR AGARWAL, JUDICIAL MEMBER

1. Pramod Tyagi, son of Raghuvansh Tyagi, resident of H.No. 664, Landa Panda, Village-Burari, Delhi has filed present Original Application (hereinafter referred to as '**OA**') under Sections 14 and 15 (1)(a), (c) and (4) read with Section 17(1), (2) and 18 of National Green Tribunal Act, 2010 (hereinafter referred to as '**NGT Act, 2010**') complaining about adverse impact of climate change in Delhi as well as in country due to non-implementation of environmental laws particularly Forest (Conservation) Act, 1980 (hereinafter referred to as '**FC Act, 1980**'), Air (Prevention and Control of Pollution) Act, 1981 (hereinafter referred to as '**Air Act, 1981**'), Environment (Protection) Act, 1986 (hereinafter referred to as '**EP Act, 1986**') and Delhi Preservation of Trees Act, 1994 (hereinafter referred to as '**DPT Act, 1994**') in as much as trees are valuable resource for contributing to cleanliness of air but large number of trees have been cut without considering the impact of such activity upon environment and thereby causing damage to environment.

2. Facts in brief stated in OA are that there was a proposal initiated by

State of National Capital Territory of Delhi, Department of Transport (hereinafter referred to as '**NCTD (Transport)**') to start a Driving Training Institution at Mukundpur and for the said purpose, permission was granted to respondent 6 to set up/establish Driving Training Institute at Mukundpur area, Burari, New Delhi. Consequently, respondent 6 established the said Institute. Government of National Capital Territory of Delhi (hereinafter referred to as '**GNCTD**') allotted 12 acres of land to respondent 6, initially, for establishment of Driving Training Institute. 3000 big trees were standing on the said land. Later on, respondent 1 proposed to establish a Cluster Bus Depot at Burari and half of the land i.e., 4 acres was allotted to Delhi Integrated Multi-Model Transit System Limited (A joint venture of GNCTD and IDFC Foundation) (hereinafter referred to as '**DIMTSL**') for Cluster Bus Depot.

3. Respondent 2 to 4 i.e., Department of Environment & Forest, GNCTD i.e., respondent 2; Ministry of Environment, Forest and Climate Change (hereinafter referred to as '**MoEF&CC**') i.e., respondent 3 and Central Pollution Control Board (hereinafter referred to as '**CPCB**') i.e., respondent 4 are entrusted with the task of implementation of policies and programme relating to conservation of natural resource. State and its machinery is a trustee of vital natural resources on which human survival and welfare depend. There is a bond by a fiduciary duty under public trust doctrine to mitigate climate changes so as to protect such resources for the benefit of current and future generations. No effective steps were taken by respondent 4 for mitigating adverse impact on the climate change and environment in Delhi. For establishment of Driving Training Institute, Trees were cut whereagainst the applicant made representations to various authorities but no action was taken to curve

the pollution. Total number of trees fell down in setting up of Driving Training Institute, as the information has been received by applicant, are about 3000, out of which approximately 2500 are big trees which were contributing substantially as run of pollution in the area where they were standing. In Delhi for protection of trees, DPT Act, 1994 has been enacted but in an illegal manner, Forest Officers granted permission and, in their collusion, huge number of trees were cut in an illegal and arbitrary manner. No proper permission was obtained from the Competent Authority before cutting of trees.

4. **Tribunal's Order dated 03.07.2023:** Tribunal took cognizance of the OA on 03.07.2023 and after being satisfied *prima-facie* that a substantial question relating to environment has arisen out of the implementation of enactments specified in Schedule I to NGT Act, 2010, found it appropriate to obtain a factual report from Deputy Conservator of Forests-cum Tree Officer, Central Forest Division, Delhi (hereinafter referred to as '**Tree Officer, Delhi**'). He was directed to verify the factual position regarding all relevant aspects including cutting of trees unauthorizedly/without requisite permissions from Tree Officer under DPT Act, 1994, number of trees felled, action taken regarding unauthorized felling of trees, permission, if any, granted for felling of trees, and compensatory afforestation carried out in compliance with the orders of Tree Officer, etc. He was also directed to ensure that in case of any illegal felling of trees, action is taken against the responsible persons in accordance with law under DPT Act, 1994.

Report dated 11.08.2023 filed by Tree Officer, Delhi:

5. Pursuant to order dated 03.07.2023, Tree Officer, Delhi submitted

Report dated 11.08.2023. The report said that an e-forest (online) application for tree felling permission of 238 trees at Driving Training Institute for construction of Cluster Bus Depot No. 02 was applied by Executive Engineer, Flyover Project Division, F-14, PWD (GNCTD) vide Application ID: 5180. Subsequently, after approval given by Competent Higher Authority and on submission of all required documents for compensatory plantation, transplantation and payment of valid security deposit, permission for felling/transplantation of 238 **(04 felling + 234 transplantation)** trees was granted by Deputy Conservator of Forests (Central) on 07.09.2022. There was non-compliance regarding compensatory plantation as mentioned in Terms and Conditions for tree felling/transplantation permission, hence the letter was issued by Tree Officer on 04.07.2023 to Executive Engineer concerned. The letter dated 04.07.2023 required Executive Engineer to submit status report of compensatory plantation along with photographs and geo-coordinates within 30 days.

Action Taken Report filed by Deputy Conservator of Forests (Central) on 11.08.2023:

6. Pursuant to Tribunal's order dated 03.07.2023, an inspection was carried out at the site i.e., Driving Training Institute, Burari, Delhi by the officials of Central Forest Division on 27.07.2023. During inspection, it was found that transplantation carried out at the boundary wall of the project site was in bad condition and dried up state. For seeking clarity for non-compliance of terms and conditions of permission letter, a notice dated 07.08.2023 for tree offence hearing was issued to Executive Engineer, GNCTD. The notice reads as under:

“It is hereby submitted that an e-forest (Online) application for tree felling permission of 238 nos of trees at Driving Training Institute (Transport Department), Burari, Delhi: 110084 for construction of Cluster Bus Depot No. 02 was applied by the Executive Engineer, Flyover Project Division, F-14, PWD (GNCTD) vide Application ID: 5180. A copy of the application details uploaded vide Application ID: 5180 is annexed herewith as Annexure –‘A’.

Subsequently on approval given by the competent higher authority and on submission of all required documents for compensatory plantation, transplantation and payment of valid security deposit apropos to the same was made vide DD No. “440810”, permission for felling/transplantation of 238 (04 Felling + 234 Transplantation) Nos of Trees was granted by Dy. Conservator of Forests (Central) on 07.09.2022. A copy of the tree felling/transplantation permission dated 07.09.2022 along with Terms & Conditions of the same application is annexed herewith as Annexure – ‘B’.

It is submitted that on 04.07.2023 a letter was issued to the Executive Engineer, PWD, F-14, GNCTD apropos to non-compliance of Compensatory Plantation as mentioned in Terms & Conditions for Tree Felling/Transplantation permission. Thereby the letter issued directed the concerned official of PWD, F-14, GNCTD to submit a status report of the compensatory plantation along with photographs and geo-coordinates of the same within a period of 30 days. A copy of the letter issued to the Executive Engineer, PWD, F-14, GNCTD dated 04.07.2023 is annexed herewith as Annexure – ‘C’.

Thereafter in compliance of Hon’ble NGT order dated 03.07.2023 an inspection of the site i.e. Driving Training Institute (Transport Department), Burari, Delhi: 110084 was carried out by the officials of Central Forest Division on 27.07.2023. During the course of inspection it was observed that transplantation carried out at the boundary wall of the project site was in bad condition and dried up state. A copy of the Inspection Report along with Photographs of the inspection and satellite photographs of the site are annexed herewith as Annexure ‘D’ COLLY.

*Consequently **to seek clarity for non-compliance of Terms & Conditions as per e-forest online permission No: 5180, a Notice dated 07.08.2023 for Tree offence hearing was issued to the Executive Engineer, PWD F-14, GNCTD.** A copy of notice dated 07.08.2023 is annexed herewith as Annexure – ‘E’.*”

7. **Tribunal's Order dated 10.10.2023:** Report was considered by Tribunal on 10.10.2023 and it found appropriate to issue notices to respondents 5 and 6 requiring them to submit their responses. Tree Officer was also directed to take appropriate action and submit further action taken report within two months.

Reply dated 25.01.2024 filed by DIMTSL i.e., respondent 5:

8. Reply dated 25.01.2024 has been filed by DIMTSL. It is pleaded that the application is *mala-fide* and the applicant has concealed material facts and guilty of abuse of law. The application has been filed against respondent 5 with the sole intention to harass and cause undue pressure without there being any cause of action. Respondent 5 is a Project Management Consultant engaged for implementation of the project. The land area admeasuring 4.4 acres was allotted by respondent 1 to Executing Agency to develop Cluster Bus Depot-1 at Burari in 2018. In Burari, there were 02 Depots i.e., Burari Depot-1 and Burari Depot-2. The allegations raised by applicant pertain to Burari Depot-2 while respondent no. 5 has never been connected with the project of Burari Depot-2 and, therefore, should be deleted from the array of the parties. Letter dated 27.12.2022 issued by respondent 1 and also the subsequent letter dated 10.03.2023 regarding cutting of trees for establishment of Cluster Depot does not pertain to respondent 5. Permission for felling/transplantation of trees for Burari Depot-1 was requested by respondent 1 on 13.06.2019 to the office of Deputy Conservator of Forest, North Forest Division, Department of Forest and Wildlife, Kamla Nehru Ridge, Delhi for development of bus depot facilities for Cluster Buses at Burari Depot-1, Delhi. Any activity relating to cutting of trees even regarding Burari Depot-1 does not cover the responsibilities of Project

Management Consultant i.e., respondent 5. Removal of any obstacle/bottleneck in progress of work in Burari Depot-1 was sole responsibility of respondent 1 and in respect of Burari Depot-2, respondent 5 has no concern at all.

9. Deputy Conservator of Forest, North Forest Division, Department of Forest and Wild Life, Kamla Nehru Ridge, Delhi vide letter dated 13.12.2019 granted permission for felling of 327 trees and transplantation of 168 trees on fulfilment of requisite formalities by respondent 1 for development of bus depot facilities for cluster buses at Burari Depot-1. A security of Rs.2,82,15,000/- was submitted by respondent 1 vide Demand Draft dated 31.10.2019.

10. In parawise reply, respondent 5 has reiterated that the matter pertains to the action and liabilities of respondents 1 and 6 and respondent 5 has no concern with regard to the act of cutting of trees. Respondent 5 did not violate any environmental law while executing work of Burari Depot-1. Respondent 5 planted 1000 saplings in and around Burari area within stipulated time on the request of respondent 1. For remaining compensatory plantation of 4000 trees/saplings, Respondent No.1 had already allotted a land parcel of 6.24 acres at Dera Mandi village wherein respondent 5 is assisting respondent 1 for developing compensatory plantation. Factual position of standing trees at site of Burari Depot-1 may be ascertained from the permission of Forest and Wildlife Department of GNCTD's letter dated 13.12.2019 (annexure-2 at page 78). Respondent 1 vide letter dated 24.08.2022 requested/proposed to Deputy Conservator of Forest, GNCTD to carry out compensatory plantation of 4000 numbers of saplings and their maintenance at village

Dera Mandi for a period of 07 years through Forest Department on deposit work basis and the expenditure was to be incurred by Forest Department which directly would be paid by Transport Department. The allegation of cutting of thousands of trees are incorrect, Cluster Bus Depots are property of GNCTD and respondent 5 never issued any direction to Deputy Commissioner but the letter dated 26.10.2018 was part of Project Management Consultancy work allotted to respondent 5 by respondent 1.

Report dated 30.01.2024 filed by Deputy Conservator of Forest (Central):

11. Report dated 30.01.2024 has been filed by Deputy Conservator of Forest (Central) in purported compliance of Tribunal's order dated 10.10.2024. It is said that permission was applied vide offline application dated 13.06.2019 for cutting of 495 trees at IDTR/Burari, District North Delhi for construction of Cluster Bus Depot no. 1 by Special Commissioner, Transport, GNCTD. The said permission was granted by Deputy Conservator of Forest (Central) vide letter dated 18.12.2019 subject to terms and conditions mentioned therein and this letter is annexure-B at page 91 which shows following terms and conditions which were imposed while permitting felling of 327 trees and transplantation of 168 trees:

“Terms & Conditions:

1. *Permission for **felling/transplantation of trees is granted at your** risk and without prejudice to the claim (s) of any other person/s who may be having any right (s) over the land or the trees.*
2. *Felling/transplantation of tree/s shall be completed within 30 days of issue of this letter.*
3. ***Material produced from trees shall not be disposed***

without permission of the Tree Officer.

4. *Progress report of felling & transportation shall be submitted through Inspection Officer concerned along with complete details of tree. You are requested to intimate this office at least 3 days in advance before starting the removal of felled trees.*
5. *The timber/ wood arising out of felling shall be auctioned by user agency and proceeds shall be deposited as revenue to the Government Treasury. **Lops and tops arising out of trees be transported to the nearest public crematorium managed by MCD under proper receipt and at his expense.** He shall submit copy of the receipt obtained from such crematorium to this office immediately thereafter.*
6. *The **compensatory plantation of ten times the number of trees permitted for felling/transplantation shall be planted at Transport Authority premises Burari & Dera Mandi, Delhi. Indigenous 4950 nos. of 6-7 ft. tall saplings of species such as Arjun, Jamun, Gular, Pilkhan, Neem and other suitable sps. should be completed by the applicant within 9 months** from the date of issue of this order and successfully **maintain the plantation for 07 (seven) years.** The completion of plantation shall be intimated to this office alongwith photographs.*
7. *In the event of failure on the part of the permit holder to carry out compensatory plantation as indicated at serial number 6 above, the Tree Officer shall himself arrange to plant tree saplings and recover the cost thereof from the permit holder by way of adjustment against the security deposit made by the permission holder, or failing that, by recovery as arrears of land revenue and take suitable action as per DPTA, 1994.”*

12. Letter dated 02.05.2022 was issued to Special Commissioner, Transport, GNCTD enquiring about compliance/status report with photographs of compensatory plantation and transplantation. Thereafter, reminders were issued on 04.07.2023, 21.07.2023, 06.10.2023, 08.12.2023 and 03.01.2024. Further, for felling of 238 trees at Driving Training Institute (Transport Department) Burari, (online) application was submitted by Executive Engineer, Flyover Project Division, F-14,

PWD (GNCTD) vide application ID 5180 and the permission was granted for felling of 04 trees and transplantation of 234 trees vide order dated 07.09.2022 issued by Deputy Conservator of Forest. The said letter contains certain terms and condition. Those terms and conditions are at page 103 and may be reproduced as under:

“Terms & Conditions

1. **100% Compensatory Plantation of 2380 saplings of native species shall be raised and maintained by User Agency for Seven years and monitored till its successful.**
2. **2380 tree saplings of indigenous species 6-8 feet height shall be planted as compensatory plantation in ratio of 1:10 on non-forest land in lieu of felling/ transplantation 238 no. of trees. The plantation shall be done by following site specific plantation techniques with additional measures on identified land within three months of issue of tree removal permission and maintenance for next Seven (7) years shall be carried out there after by User Agency with their own funds.**
3. **Transplantation of trees** shall be initiated immediately after permission is issued and should be **completed not later than three (03) months**, after which a completion report has to be submitted to the Tree Officer. The spacing of the transplantation of trees shall not be less than 4 meter (point to point) at transplantation site.
4. All the conditions mentioned in Tree Transplantation Policy 2020 shall be followed scrupulously by User Agency.
5. If the User Agency fails to successfully raise compensatory plantation. The User Agency shall also deposit extra site improvement expenses which may be required to make the site suitable for plantation as calculated by Tree Officer concerned (as deposits).
6. **The land over which compensatory plantation/Tree transplantation raised shall not be utilized for other purpose without the approval of the Tree Officer concerned.**
7. Detailed plantation schedule shall have to be submitted by User Agency to concerned Tree Officer in compliance with Section 12 of Delhi Preservation of Trees Act, 1994 before initiating

transplantation.

8. *User Agency shall maintain plantation journals as Department of Forests and Wildlife, Govt. of NCT of Delhi and submit a copy of at the end of every financial year.*
9. *User Agency shall submit a detailed plan for Transplantation/felling.*
10. *Land owning agency shall ensure that there is no encroachment in area proposed for compensatory plantation/transplantation.*
11. *The User agency shall implement the improved soil moisture conservation activities on compensatory plantation/transplantation site.*
12. ***Permission*** *for transplantation/ felling of 238 trees is being granted at their own risk and without prejudice to the claim (s) of any other person/s who may be having any rights(s) over the land or the trees.*
13. *The user agency shall ensure that there is no pending litigation or stay order passed by any court of law/ other authority before undertaking felling/transplantation of trees.*
14. ***The transplantation shall be carried out prior to felling of 04 nos. of trees permitted herein. The 04 trees shall be felled after successful transplantation of 234 trees and submission of compliance certificate to DCF (Central).***
15. *Before removal of trees from the site is commenced all requisite statutory clearances shall necessarily be obtained by the User Agency.*
16. *The User Agency shall ensure that the plan of this proposal shall not be changed.*
17. *The progress report of transplantation/ felling shall be submitted through inspection officer to concerned Tree Officer along with complete details of trees.*
18. *If any tree is found to have nest of birds it should not be felled/transplant till the same is abandoned by the birds.*
19. ***Transplantation/ felling of any tree apart from 238 trees by User Agency shall constitute an offence under Delhi Preservation of Trees Act, 1994.***
20. *The timber obtained from removal of trees shall be auctioned and proceeds shall be deposited as revenue to the Government account by the User Agency.*
21. *The lops and tops of the trees shall be sent/supplied to the nearest crematorium free of cost and the same should be*

reported to DCF (Central) by User Agency.

22. *Before shifting of timber, if any, from site of removal of trees, permission for transportation of the said wood shall be obtained from the DCF (Central) by User Agency.*
23. *Transplantation/felling of trees and transportation of forest produce arising there from to the public crematorium shall be completed within 90 days.*
24. *It should be ensured by the user agency that all the conditions mentioned in environmental clearance and other clearances, if any obtained, shall be followed scrupulously.”*

13. On inspection made on 28.11.2023, it was found that 238 trees were present at the site of permission.

Status Report dated 13.03.2024 filed by Transport Department, GNCTD:

14. Transport Department, GNCTD has filed its Status Report dated 13.03.2024 stating that there are two Cluster Bus Depots at Burari namely, Burari Depot-1 and Burari Depot-2. Transport Department has already constructed Burari Depot-1 for which permission for felling of 495 trees was obtained and the details thereof are given as under:

- A. *In a meeting held on 06.02.2018 & 07.02.2018, the Expenditure Finance Committee of Government of NCT of Delhi, under the chairmanship of Hon'ble Deputy Chief Minister/Finance Minister, GNCTD had accorded approval of the project of Transport Department for “construction of cluster bus depot at Burari” at an estimated cost of Rs.24.20 crores through DIMTS as PMC.*
- B. *Thereafter, tenders were called by the Transport Department and with the approval of the then Secretary-cum-Commissioner (Transport) on 09.04.2019, the project was awarded to M/s Shree Construction Company on 17.09.2018.*
- C. *Accordingly, the land parcel was handed over to the aforesaid contractor by DIMTS/PMC on 05.11.2018 for construction of cluster bus depot at Burari as per the tender conditions.*
- D. **An application was made to the Tree Officer by the Transport Department on 13.06.2019 for the felling of 495**

trees from the site. It was submitted to the Tree Officer that transplantation of 4950 trees shall be carried out in the Burari complex itself and at another land parcel of Transport Department located at Village Dera Mandi which was allotted by Director (Panchayat).

- E. The **permission** of felling/ transplantation of 495 trees (327 felling + 168 Transplantation) **were accorded by the Forest Department on 18.12.2019.** Copy of the said Permission dated 18.12.2019 by the Forest Department is annexed as Annexure-I.
- F. That the Respondent Department carried out transplantation as also plantation of **1000 numbers of saplings** in the Burari Complex during **February, 2020** and between **June & August, 2022** in 2 instalments through the Contractors to whom the work of Construction of Bus Depot was allotted. Out of these 1000 saplings, **830 numbers survived** and payments were made to the contractor through running accounts bills of M/s Shree Construction Company and M/s Bansal Associates. The requisite number of trees were also transplanted in the periphery of Burari Cluster Bus Depot-I.
- G. That however, due to delay in obtaining permission for felling/transplantation of trees, **the site where trees exists, was handed over to M/s Shree Construction on 13.01.2020.** Considering the facts that Transport Department handed over the entire area to the contractor very late due to delay in getting permission of felling of trees, COVID-19 pandemic and delay in payment to the contractor against their running accounts bills due to restriction imposed by Finance Department, GNCTD, the contractor requested to compensate him for the delay. **Subsequently,** on the request of the contractor M/s Shree Construction Company, the **contract was foreclosed by the Transport Department on 31.07.2021.**
- H. The Respondent Department then invited bids for carrying out the balance work. **On 08.10.2021, a contract was executed with the new contractor, M/s Bansal Associates.**
- I. That in the scope of both the contractors, there was a provision of planting saplings in the Burari Complex and to fence the Dera Mandi land parcel where remaining saplings were to be planted.
- J. The **work of fencing was completed by the contractor and handed over to Transport Department on 06.05.2022.** The work of fencing was delayed inordinately by the contractor due to objections by the nearby land owners, which was later resolved

by the intervention of the Revenue Department, GNCTD.

- K. **On 25.05.2022, the Transport Department wrote to the Dy. Director (Horticulture), PWD to carry out the compensatory plantation of 4000 numbers of saplings and their maintenance at Dera Mandi for a period of 7 years** from the funds of Transport Department. Copy of the said letter dated 25.05.2022 to Dy. Director, Horticulture, PWD is annexed as Annexure-II in reply, PWD (Hort.) vide communication dated 17.06.2022, annexed hereto Annexure III, required boundary wall/ fencing to be done and arrangement of water for irrigation for the purpose of plantation. Another letter was sent on 23.06.2022, annexed as Annexure IV, informing that fencing had already been done and that watering/ irrigation of the saplings was part of the maintenance contract.
- L. *However, no proposal was received from Horticulture wing of PWD for carrying out the said work. On 14.07.2022, the Respondent against wrote to them to submit their proposal. Copy of the said letter dated 14.07.2022 is annexed as Annexure V. Subsequently, the PWD (Horticulture) vide its letter dated 21.07.2022 informed that the plantation work could be started only after water facilities were provided. It was stated that lying of water pipeline was related to Civil Work and as such, required the Transport Department to contact the Civil wing of PWD. Copy of the said letter dated 21.07.2022 is annexed as Annexure-VI.*
- M. *The Engineers of DIMTS were constantly, in touch with the Horticulture wing of PWD but could not find any solution.*
- N. *In the meantime, DIMTS and Transport Department also consulted with the Forest Department, GNCTD and wrote to Dy. Conservator of Forest on 24.08.2022 to carry out the plantation work of 4000 saplings for the Transport Department from the funds of the Respondent Department. Still no response was received from Forest Department either, despite regular follows up by the Engineers of DIMTS. Copy of the letter to DCF dated 24.08.2022 is annexed as Annexure-VII.*
- O. *On 22.11.2022, the Horticulture wing of PWD inter-alia informed that the plantation was not possible without water and again requested to make the arrangement of water for plantation of trees. Copy of the said letter dated 22.11.2022 is annexed as Annexure- VIII. Thereafter, Transport Department decided to implement the project at its own through DIMTS as PMC and necessary approvals were obtained.*

- P. *The concerned Executive Engineer, PWD informed that as it was difficult to get the plantation through the Horticulture wing of PWD, the flyover wing of PWD, which is constructing 9 bus depots, would execute the plantation work on its own through open tender instead of Horticulture wing of PWD. As such, on 19.11.2023 the then Pr. Secretary cum Commissioner (Transport), accorded administrative approval and expenditure sanction to execute the work of compensatory plantation of 4000 saplings/ plants & Maintenance for period of 7 years in Dera Mandi Village, New Delhi through DIMTS as PMC.*
- Q. *Subsequently, the then Pr. Secretary cum Commissioner (Transport) also approved the schedule of bidding and accordingly bids were invited on 01.02.2024.*
- R. *That six bids were received on due date. The Tender Committee in its evaluation submitted that only one bid was responsive and the other five bids were deficient on various grounds and therefore, recommended cancellation of the tender and inviting fresh bids.*
- S. *The matter is now sent to Finance Department, GNCTD for opinion.*
- T. *That it has been further decided that in case, the area in Dera Mandi is inadequate, additional plantation of 150 trees in the periphery of Kirari Cluster Bus Depot will be considered.”*

15. It is further said that after construction of Burari Depot-1, Transport Department decided to construct another Burari Cluster Bus Depot-2, for housing of 12-meter electric buses. At the planned site, Motor Driving Training School was already in operation hence 238 trees were required to be felled/transplanted in the area to enable PWD to construct Burari Depot-2. Director (Panchayat) allotted Gram Sabha land of Village Ghumanhera and Dhansa. Forest Department vide letter dated 05.09.2022 accorded approval for felling of 238 trees subject to deposit of Rs.1,35,66,000/- wherefore, sanction order to release the said fund was issued on 16.10.2022. PWD had to seek extension of permission of felling of trees/transplantation from Forest Department upto 28.06.2023 as transplantation and felling of trees could not be completed due to delay

of closure of Motor Driving Training School. The extension was applied by PWD on 15.09.2023 and it is pending before Forest Department, GNCTD. Competent Authority in Transport Department accorded approval to close the activities of Motor Driving Training School w.e.f. 16.10.2023 to enable felling/transplantation of trees by PWD in accordance with approval of Forest Department and to construct bus depot. Forest Department vide letter dated 13.10.2023 has informed PWD that permission is withheld due to pendency of the present proceedings and also due to Delhi High Court's order dated 31.08.2023 in ***Bhavreen Kandhari vs. Shri C.D. Singh & Ors., Cont. Case (C) No. 1149 of 2022***, wherein High Court has said *"no permission for felling of trees for any individuals will be granted and any permission required for important projects will be intimated to the Court"*.

Report dated 08.04.2024 filed by Deputy Conservator of Forest (Central):

16. Deputy Conservator of Forest (Central) has also submitted a Report dated 08.04.2024 in compliance of Tribunal's order dated 14.03.2024. It is reiterated that vide permission letter dated 18.12.2019 for construction of Cluster Bus Depot-1, permission was granted for felling of 327 trees and transplantation of 168 trees. A letter dated 22.03.2024 was issued by Deputy Conservator of Forest (Central) requesting Deputy Commissioner, Transport, GNCTD to depute an official to carry out a joint inspection of compensatory plantation site at Burari complex but no response has been received therefrom. Again, a reminder letter was issued on 03.04.2024 to Special Commissioner, Transport and thereafter, a joint inspection was carried out on 04.04.2024. The observations made during joint inspection as stated in the Joint Inspection Report, read as

under:

*“2). 168 (One hundred and sixty eight) nos. of trees were transplanted (as per permission letter dated 18.12.2019) **out of which 89 (Eighty Nine) nos. of trees were identified at the transplantation site.***

3). Out of 89 (Eighty Nine) nos. of transplanted trees which were found/identified during joint inspection:-

(a). 27 (Twenty Seven) Nos. of transplanted trees were observed to be in good condition.

*(b). **62 (Sixty Two) Nos. of trees were observed to be in dried condition.***

(c). No Tree Numbering has been observed on the transplanted trees.

(4). Official on behalf of Transport Department is unable to provide identification of remaining 79 (Seventy Nine) Nos. of Trees at the site of Tree Transplantation.”

17. In view of the above inspection Report, Deputy Conservator of Forest (Central) has issued an order dated 08.04.2024 directing Transport Department to carry out compensatory plantation of 705 trees in lieu of failure of carry out transplantation of 141 trees as proposed vide tree felling/transplantation permission dated 18.12.2019 for construction Cluster Bus Depot-1.

18. **Tribunal's Order dated 09.04.2024:** These reports and replies were considered by Tribunal on 09.04.2024. It examined the provisions of DPT Act, 1994. Observing that the condition of compensatory plantation has not been carried out by Transport Department, Tribunal observed that Tree Officer is under an obligation to take steps for implementation of its order in view of the specific provisions contained in Section 12 of DPT Act, 1994. Tribunal accordingly directed Deputy Conservator of Forest (Central) to forfeit security amount, carry out

compensatory afforestation and recover balance cost of plantation, if any, after adjustment of security amount from respondent 1 in the prescribed manner and submit an action taken report. With regard to Cluster Bus Depot-2, Tribunal found that trees have not been cut and application for extension of time is pending, hence directed Tree Officer concerned to deal with the application and dispose of in accordance with law as also the direction of Delhi High Court.

19. An issue was also raised regarding land for compensatory plantation and on this aspect, Tribunal in para 19 and 23 observed as under:

*“19. In view of the facts and circumstances of the case and the environmental questions involved we consider it necessary to seek information from the conserved Authorities about cases in which the matter of **compliance regarding compensatory afforestation in accordance with terms and conditions stipulated in permissions granted for cutting of trees in NCT of Delhi during the last 05 years is pending and also about the cases in which the matter of such compensatory afforestation is pending due to the reason of land for such compensatory afforestation not having been made available.***

xxx.....xxx.....xxx

23. The aspect of availability of land for compensatory afforestation in the affected locality to be done in the present case which is to be carried out by the Deputy Conservator of Forests-cum Tree Officer, Central Forest Division, Delhi in accordance with this order passed by this Tribunal may be looked into by the Chief Secretary, Government of NCT of Delhi and PCCF (HoFF), Government of NCT of Delhi for making the requisite land available so that such compensatory afforestation may be carried out during forth coming monsoon period suitable for plantation.”

20. Tribunal also impleaded GNCTD through Chief Secretary; Principal Chief Conservator of Forests (hereinafter referred to as ‘**PCCF**’) (HoFF), GNCTD; Delhi Development Authority (hereinafter referred to as ‘**DDA**’); and Municipal Corporation of Delhi (hereinafter referred to as ‘**MCD**’) as

respondents 7 to 10 and issued notices to them.

Report dated 31.08.2024 filed by Deputy Conservator of Forest (Central):

21. Report dated 31.08.2024, pursuant to above order, has been filed by Deputy Conservator of Forest (Central) stating that vide letter dated 25.06.2024, amount of security deposited by user agency has been forfeited and it has also been directed to deposit a further sum of Rs.40,18,500/- for taking up compensatory plantation of additional 705 trees. The agency was also required to allot land measuring 50895 m² for taking up compensatory plantation of 5655 trees i.e., 4950 initially directed and 705 additional number of trees to be planted. However, no response was received, hence a reminder was sent on 29.07.2024 and 23.08.2024 still no reply has been received.

22. **Tribunal's Order dated 19.09.2024:** On 19.09.2024, Tribunal observed that in the orders of permission granted by Tree Officer for felling/transplantation of trees, what relevant aspects were considered, are not discernable and in a mechanical manner permission was granted which shows non-application of mind on the part of concerned statutory authority.

23. Tribunal was also informed by Deputy Conservator of Forest (Central) that though Transport Department has allotted land for compensatory afforestation but identity of land is not known and, therefore, the possession has not been taken and this state of affairs was seriously castigated by Tribunal.

Reply dated 02.09.2024 filed by CPCB:

24. CPCB vide e-mail dated 02.09.2024 has submitted its reply stating

that in another matter i.e., **OA No. 911/2022 (I.A. No. 14/2023 and I.A. No. 16/2023), Prof. Dr. Sanjeev Bagai & Ors. vs. Department of Environment, GNCTD & Ors.**, directions have been issued by CPCB seeking information from all State Pollution Control Boards and Pollution Control Committees regarding Acts/Rules/Guidelines/Circulars, etc. for protection and management of trees. With regard to Delhi, the information received from Delhi Pollution Control Committee (hereinafter referred to as '**DPCC**') refers to the provisions of DPT Act, 1994 and Delhi Preservation of Trees Rules, 1996 (hereinafter referred to as '**DPT Rules, 1996**').

Status Report dated 17.10.2024 filed by PCCF, GNCTD:

25. Status Report dated 17.10.2024 has also been filed by PCCF, GNCTD stating that a meeting under the Chairmanship of Chief Secretary, GNCTD was held on 08.10.2024 and the minutes of the said meeting, as put in para 3, read as under:

“At the outset the APCCF briefed the Chief Secretary about O.A. No. 335/2023 titled Pramod Tyagi vs. GNCTD and O.A. No. 334/2023 titled Naresh Chaudhary vs. UOI pending before Hon’ble NGT.

1. The discussions and decisions on the issues pertaining to the O.A. No. 335/2023 titled Pramod Tyagi Vs. GNCTD are detailed as below:

*a) **Compensatory Plantation of 4950 trees against tree felling/transplantation permission granted on 13.12.2019 for the construction of Cluster Bus Depot at Burari has not been done by the Transport Department**, and Hon’ble NGT has directed Forest Department to forfeit the Security Deposit of Transport Department and carry out the plantation itself. Further, in compliance of Tree Transplantation Policy 2020 of Government of NCT of Delhi, additional compensatory plantation of 705 trees (141 x 5) has to be carried out against the failed transplantation of 141 trees.*

b) The Principal Secretary, Transport informed that the land is available for taking up compensatory plantation at two locations i.e. Dera Mandi and Dhansa. According to inspection of both the sites by

Forest Department, the land proposed at Dera Mandi is notified Ridge Reserve Forest Land with only 2.1 hectare area available for plantation where approximately 2000 trees can be planted, and the land proposed at Dhansa Village has soft encroachment in the nature of rice cultivation.

*c) After discussions, **it was decided that compensatory plantation on the Forest Land at Dera Mandi shall be started by the Forest Department before the end of October 2024. Additional encumbrance free land including proposed land at Dhansa (after removal of encroachment) is required for remaining compensatory plantation.** Further, additional compensatory plantation in lieu of failed transplantation, and requisite additional funds for the same, shall be made available by the Transport Department on priority so that plantation can be carried out by the Forest Department.”*

26. It is further said in para 4 that compensatory plantation on forest land at Dera Mandi shall be started by Forest Department before the end of October 2024. Further Transport Department has assured to make the land at Dhansa available after removal of encroachment by end of December 2024 whereupon remaining compensatory plantation will be carried out.

ARGUMENTS:

27. On behalf of applicant, it is stressed that in construction of Cluster Bus Depot at Burari, permission for felling of 495 trees at the site was sought by Transport Department vide application dated 13.06.2019 submitted online. Stand was taken before Tree Officer, Delhi that plantation of 4950 trees shall be carried out in Burari Complex itself and at another land parcel of Transport Department located at Village Dera Mandi which was allotted by Director (Panchayat). Believing on the stand taken by Transport Department, GNCTD, Tree Officer Delhi, vide order dated 18.12.2019, granted permission for felling of 327 trees and

transplantation of 168 trees. All the trees have been removed but plantation as per the conditions imposed by Tree Officer, Delhi has not been carried out. It is pointed out that as per condition no. 6 of the letter dated 18.12.2019 issued by Deputy Conservator of Forest (Central), compensatory plantation of ten times the number of trees permitted for felling/transplantation was to be carried out by Transport Authority at the site within 9 months from the date of issue of the letter i.e., 18.12.2019 and trees planted were to be maintained successfully for next seven years. This condition has been violated with impunity and therefore, Transport Department, GNCTD is liable to pay environmental compensation by application of principle of 'Polluter Pays' in as much as environment has been damaged due to felling/removal of trees in non-compliance of the conditions of permission letter dated 18.12.2019.

28. On behalf of Transport Department, GNCTD, Learned Standing Counsel submitted that in February 2020 and between June and August 2022, 1000 numbers of saplings in the Burari Complex were planted through Contractors to whom work of construction of Bus Depot was allotted. Out of 1000 saplings, 830 survived and payments were made to Contractor through running accounts bills. With regard to further plantation, it is said that steps have been taken to request Horticulture wing of PWD and other agencies and the matter is still in process. Learned standing Counsel submitted that earnest efforts are being made by Transport Department to carry out plantation as per the conditions of Deputy Conservator of Forest (Central)'s permission letter dated 18.12.2019 hence Transport Department should not be saddled with any liability of environmental compensation. With regard to Burari Cluster Bus Depot-2, it is said that work has not commenced and no tree has

been cut/transplanted, therefore, it cannot be said that Transport Department in respect of this project has committed any violation of the conditions of Forest Department's permission letter dated 05.09.2022.

29. The other Learned Counsels appearing for other respondents have not submitted any individual arguments and their stand is that on the basis of record available, Tribunal may pass appropriate order and the same shall be abided by the respective departments.

ISSUES:

30. In the light of the pleadings discussed above and the rival submissions, in our view, following issues have arisen which require adjudication by this Tribunal:

- (I) Whether there is violation of the conditions of permission granted by Competent Authority with regard to felling/transplantation of trees and there is illegal felling/transplantation of trees on the part of Transport Department, GNCTD?
- (II) Whether felling of trees by respondent 1 is illegal and has caused damage to environment?
- (III) Whether for illegal felling of trees and causing damage to environment, if issues I and II are answered against respondent 1, renders respondent 1 liable to pay environmental compensation by application of principle of 'Polluter Pays' and Tribunal would be justified in exercising its power of computing and imposing environmental compensation under Section 15 read with Section 20 of NGT

Act, 2010?

- (IV) Whether any other order, remedial or otherwise, is necessary to be passed in this matter and if so, what orders should be passed by this Tribunal?

31. We propose to consider Issues I and II together.

32. The facts discussed above shows that GNCTD through Expenditure Finance Committee chaired by Deputy Chief Minister/Finance Minister, GNCTD in its meeting held on 06.02.2018 and 07.02.2018 accorded approval to the project of “construction of cluster bus depot at Burari” initiated by Transport Department i.e., respondent 1, at an estimated cost of Rs.24.20 Crores. For carrying out the said project DIMITSL was approved as Project Management Consultant.

33. Initially, execution of the project was awarded to M/s. Shree Construction Company on 17.09.2018 and land was handed over to the said Contractor on 05.11.2018 for construction of Cluster Bus Depot at Burari as per the tender conditions. In furtherance of execution of the project, an application was submitted before Tree Officer, Delhi by Transport Department on 13.06.2019 seeking permission for felling of 495 trees from the site. Permission was accorded vide order dated 18.12.2019 passed by Deputy Conservator of Forest (Central) subject to certain terms and conditions. Terms and conditions show that the permission was granted at the risk of the applicant department i.e., Transport Department of GNCTD. Transport Department, GNCTD was directed to inform Tree Officer by submitting a progress report of felling and transportation with complete details of trees. Felling and

transplantation of trees was to be completed within 30 days of the issue of the permission letter dated 18.12.2019. Transport Department, GNCTD was also required to undertake compensatory plantation of 10 times in number of trees permitted for felling/transplantation and hence it was supposed to carry out plantation of indigenous 4950 nos. of 6-7 ft. tall saplings of species such as Arjun, Jamun, Gular, Pilkhan, Neem and other suitable species. The work of compensatory plantation was to be completed by Transport Department within 09 months from the date of issue of permission order dated 18.12.2019. Planted trees (saplings) of the requisite specifications were required to be maintained successfully for seven years. Transport Department was also required to intimate Tree Officer about completion of compensatory plantation. Further, permission was granted by Tree Officer for removal of trees in two ways i.e., felling of 327 trees and translation of 168 trees, permission whereof was granted for felling/transplantation by order dated 18.12.2019. The trees have been removed from the site by Transport Department through its Work Executing Agency. Deputy Conservator of Forest (Central)'s report dated 08.04.2024 shows that against 168 trees which were to be transplanted, on the ground, it could identify only 89 trees at the transplanted site and even out of these 89 transplanted trees, only 27 were found in good condition while 62 were found in dried condition. Meaning thereby transplantation miserably failed and out of 168, Transport Department could show only 89 transplanted trees whereof 62 were found in dried condition and only 27 survived. The remaining 79 trees which were to be transplanted by Transport Department, no traces of transplantation were found by Forest Department which shows that 79 trees which were to be transplanted by Transport Department were

actually not transplanted but cut illegally and removed from the site in utter violation of the conditions of the permission order dated 18.12.2019.

34. With regard to compensatory plantation which was to be carried out by Transport Department within 09 months from permission letter dated 18.12.2019 i.e., by September 2020, we find from record that during February 2020, some saplings in Burari complex were planted and thereafter, some plantation was carried out in June and August 2022. The total number of plantation of saplings as per status report dated 13.03.2024 filed by Transport Department was 1000 out of which as per their own admission, only 830 survived and this survival is also based on the facts that payments were made to Contractor through running accounts bills.

35. With regard to maintenance of the said saplings for next seven years and their survival, we do not find any information rendered by Transport Department and what it has said that it has taken steps for compensatory plantation of 4000 saplings by requesting various authorities/agencies to carry out the work but on the ground level, nothing has proceeded till date. It also shows that with regard to compensatory plantation which is one of the conditions of the permission letter dated 18.12.2019, there is massive violation on the part of Transport Department in compliance, hence, the inference is obvious that the trees have been cut/transplanted in an illegal manner in violation of the conditions of the permission letter dated 18.12.2019 and the work was carried out not in the manner as directions were given by Tree Officer/Competent Authority of Forest Department.

36. Whether the provisions of DPT Act, 1994 are complied or not, is another issue and the said enactment is not one of the Statutes mentioned in NGT Act, 2010 which is enforceable by this Tribunal, hence, we are not looking into this aspect of the matter, but, what we have to see is whether illegal felling/cutting of trees has caused any damage to environment as the same would be within the ambit of this Tribunal which would require appropriate orders/directions under the provisions of EP Act, 1986 and Air Act, 1981.

37. So far as the cutting of trees is concerned, if a tree is illegally cut in a forest area, the provisions of FC Act, 1980 take care so far as the Forest Department is concerned but with regard to the damage to environment due to loss caused by removal of tree, environmental compensation has to be assessed by Statutory Regulator under the environmental laws. Similarly, in the case of non-forest area, different Provincial Legislations make laws to govern and regulate falling/removal of trees in given circumstances. There also, if felling of trees is illegal, for the damage caused to environment, environmental compensation has to be assessed and imposed by Statutory Regulators under the environmental laws.

38. In other words, it can be said that illegal cutting of a tree in a forest area or in non-forest area has equal damaging and adverse impact upon environment irrespective of the fact whether tree which has been removed was in forest area or in non-forest area. Therefore, for the purpose of application of environmental laws, considerations relevant for environmental protection have to be taken into consideration and applied accordingly in both the cases i.e., where a damage is caused to tree(s) illegally, whether in forest area or non-forest area.

39. Felling/cutting of trees is commonly known as deforestation. It represents a critical environmental challenge with far-reaching consequences. The causes of cutting of trees may be many. For example, timber production, land clearing for agriculture, urban development and forest management. The reasons may be genuine but damage to environment is normally same or similar and, therefore, while permitting cutting of trees, the principle of 'Sustainable Development' has to be kept into consideration and while there is illegal felling of trees, appropriate action includes application of 'Polluter Pays' principle, i.e., the polluter must pay for the damage caused to the environment for its restoration. There may be instances where felling of trees may be necessary for economic development or safety reasons. It is crucial to comprehend its implications for environment and essential role that trees play in maintaining ecological balance. A renowned environmentalist, Wangari Maathai once said *"it is the little things citizens do. That is what will make the difference. My little thing is planting trees"*.

40. The above quote encapsulates the importance of trees not only in combating climate change, but also in fostering biodiversity and supporting human well-being. Trees play a vital role in the ecosystem by offering numerous benefits that extend beyond their physical presence. They provide habitats and sustenance for a wide array of species, thereby support biodiversity. Trees absorb carbon dioxide from atmosphere and thereby help mitigation of climate change by reducing greenhouse gas levels.

41. According to a study published in 'Nature', forests are responsible for sequestering approximately 30% of global carbon emissions and this

highlights their critical role in climate regulation. Trees influence water cycle by maintaining soil moisture, reduce runoff and prevent erosion. They act as natural sponges that absorb rainfall and release it slowly into environment thereby regulating stream flow and reduce flood risk. Trees improve air quality by filtering pollutants such as Sulfur Dioxide, Ammonia and Nitrogen Oxide. The extensive root system of trees stabilizes soil, prevents erosion and promotes nutrient cycle within ecosystems. Trees are crucial in regulating both local and global climates by influencing temperature and precipitation pattern. They serve as natural buffers against extreme weather events such as floods and droughts.

42. In brief, understanding importance of trees and recognizing impact of tree felling is essential for developing sustainable practices that balance human needs and environmental conservation. The importance and effect of trees on the environment of the ecology may be placed under the following heads:

(I) Habitat Loss and Biodiversity Decline

(a) Impact on Species Diversity: With more than 80% of terrestrial species found there, forests are hotspots for biodiversity. Habitat fragmentation brought on by tree loss can separate species populations and interfere with their mating habits. For example, in order to move and obtain food, huge creatures like tigers and elephants need to occupy large areas. These animals frequently have to relocate to smaller places where they are unable to flourish when forests are cut down.

(b) Ecosystem Services Interrupted: Forests provide essential ecosystem services such as pollination, seed dispersal, and nutrient cycling. The loss of tree cover can disrupt these processes, leading to reduced agricultural productivity and compromised food security for animal kingdom that rely on these services.

(c) Extinction Risks: The loss of habitat puts an estimated 1 million species in danger of going extinct, according to the International Union for Conservation of Nature (IUCN). Individual species are not the only ones impacted by this loss; entire ecosystems may become unstable. For instance, the loss of one pollinator species may have a domino effect on the capacity of other species to reproduce and obtain food.

(II) Soil Erosion and Degradation

(a) Soil Erosion Mechanisms: By binding soil together, tree roots stop wind and water erosion. The soil becomes loose and more susceptible to erosion when trees are cut down. Significant land degradation can result from topsoil being washed away by heavy rains. In tropical areas with frequent heavy rainfall, this process is very severe.

(b) Increased Flooding Risks: Deforested areas are more prone to flooding because there are fewer trees to absorb rainfall and slow down runoff. This increased runoff can lead to flash floods that devastate communities downstream and erode riverbanks.

- (c) **Extended Loss of Soil Fertility:** Additionally, the normal nutrition cycle is upset when trees are cut down. Organic matter and decomposing leaves add to soil fertility; in the absence of trees, this organic input is greatly reduced. This can eventually result in bare terrain that is unfit for natural regeneration or cultivation.

(III) Climate Change and Carbon Emissions

- (a) **Role of Trees in Carbon Sequestration:** Trees play a critical role in sequestering carbon dioxide (CO₂) from the atmosphere through photosynthesis. When trees are cut down, not only are this carbon storage capacity lost, but the act of cutting down trees releases stored carbon back into the atmosphere.
- (b) **Global Warming Contribution:** Deforestation contributes significantly to global warming. The Food and Agriculture Organization (FAO) reports that deforestation accounts for approximately 10-15% of global greenhouse gas emissions. The release of carbon from felled trees exacerbates climate change, leading to more extreme weather events such as droughts, hurricanes, and heatwaves.
- (c) **Feedback Loops:** As climate change progresses due to increased greenhouse gas emissions from deforestation, it creates feedback loops that further threaten forests. For example, rising temperatures can lead to increased forest fires or pest infestations that further reduce tree cover.

(IV) Disruption of Water Cycles

- (a) Transpiration Process:** Trees contribute significantly to local water cycles through transpiration—the process by which water is absorbed by roots from the soil and released as vapor through leaves. This process helps to regulate local humidity levels and precipitation patterns.
- (b) Altered Rainfall Patterns:** Deforestation can lead to reduced rainfall in previously forested areas due to decreased moisture release into the atmosphere. Studies have shown that regions experiencing deforestation often see a decline in annual precipitation levels.
- (c) Impact on Aquifers:** Forests play a crucial role in recharging aquifers by allowing rainwater to infiltrate the ground slowly. Without trees, rainwater runs off quickly rather than being absorbed into the soil, leading to lower groundwater levels and increased risks of drought during dry seasons.

(V) Air Quality Deterioration

- (a) Pollutant Absorption:** Trees improve air quality by absorbing pollutants such as sulfur dioxide (SO₂), ammonia (NH₃), nitrogen oxides (NO_x), and particulate matter (PM). They filter these pollutants from the air and release oxygen through photosynthesis.
- (b) Health Implications:** The removal of trees leads to poorer air quality in urban areas where pollution levels are already high due to industrial activities and vehicle emissions. Increased air

pollution can exacerbate respiratory diseases such as asthma and bronchitis among urban populations.

- (c) **Urban Heat Island Effect:** In urban areas, tree cover helps mitigate the urban heat island effect where cities become significantly warmer than surrounding rural areas due to human activities. The loss of trees contributes to higher temperatures in cities, increasing energy consumption for cooling purposes and exacerbating heat-related health issues.

(VI) Socioeconomic Impacts

- (a) **Food Security Risks:** Deforestation can disrupt local food systems by reducing agricultural productivity due to soil degradation and altered water cycles. As forests are cleared for agriculture without sustainable practices in place, communities may face food insecurity as crop yields decline.
- (b) **The displacement of Native American communities:** Forests are essential to the livelihoods, culture, and identity of many indigenous groups. They are frequently displaced as a result of deforestation, which occurs when land is destroyed for urbanization or cultivation. Their way of life is in danger, and traditional knowledge about sustainable land management is being undermined by this displacement.
- (c) **The Impact on the Economy:** Although logging or land conversion for agriculture (such as palm oil plantations) may result in short-term financial rewards, deforestation frequently

causes long-term financial losses because it reduces ecosystem services like flood protection and clean water supply.

43. The above discussion shows that trees are an essential part of our ecosystem. They provide Oxygen, regulate climate and support biodiversity. While tree felling may be necessary for various reasons, like harvesting wood for construction, furniture, paper products and fuel, creating space for agricultural expansion, facilitating urban development and infrastructure projects, removing diseased or hazardous trees to prevent accidents, thinning forests to promote healthy growth, providing shelter and food sources for wildlife, preventing spread of pests and diseases, but simultaneously it also cannot be ignored that the trees have significant environmental impact. Therefore, felling of trees wherever is regulated by statute must strictly follow the procedure prescribed in such Statutes and felling should be strictly controlled by such provisions.

44. Here, at this stage, we may also refer to the definition of **‘environment’** which is provided in Section 2(a) of EP Act, 1986 as under:

“2.DEFINITIONS.-

In this Act, unless the context otherwise requires,--

*(a) **“environment”** includes water, air and land and the inter-relationship which exists among and between water, air and land, and human beings, other living creatures, plants, micro-organism and property;”*

45. The above definition clearly shows that all the aspects which we have already discussed are adversely affected due to cutting of a tree and affect the environment/damages the environment, which comes within the ambit of the definition of ‘environment’ in Section 2(a) of EP Act, 1986.

46. The above discussion shows that removal of a healthy and green tress causes devastating impact on environment in various ways. It affects bio-diversity, reduces the ability of atmosphere with regard to quantity of Oxygen which is deprived of to be released in atmosphere due to illegal cutting of tree. *Flora and fauna* is adversely affected as we have discussed in detail above.

47. Here, large number of trees i.e., 495 have been cut by Transport Department, GNCTD in utter violation of the conditions of permission letter rendering the felling/transportation of trees illegal. As we have already said, mere removal of trees affects the environment adversely and causes damage thereto.

48. Deputy Conservator of Forest (Central)'s report shows that out of 89 trees transplanted which could be identified by him, only 27 survived, meaning thereby, 468 trees (495-27) stood removed from the site, causing permanent damage to environment in all respects which we have discussed above.

49. Besides, by not carrying out compensatory plantation, respondent 1 has further caused damage to environment in as much as the benefit, the environment could have derived due to compensatory plantation, has been denied and, in this way, also, the environment has been damaged by the act, directly attributable to respondent 1.

50. Learned Standing Counsel for respondent 1 contended that 830 saplings planted in February 2020 and between June and August 2022 had survived and payments were made and, therefore, it cannot be said that compensatory plantation was not carried out in entirety. Even if the

said argument is given some credit though the current status of the so called 830 saplings survived has not been made available to us, still it is evident that as per the permission order dated 18.12.2019, 4950 saplings of given specifications were to be planted and due to illegal transplantation of 141 trees, 705 more trees were to be planted. Thus, in all 5655 trees were to be planted as compensatory plantation out of which only 830 were planted, and had survived. Hence, it is evident that in any case, compensatory plantation has not been carried out in respect of 4825 trees. The above illegal act, evidently, has caused huge damage to environment and **we according answer Issues I and II against respondent 1** and in affirmative i.e., there is illegal felling/transplantation of trees in violation of the conditions of permission order dated 18.12.2019 and it has caused serious damage to environment.

51. **ISSUE III:** An illegality committed in felling of a tree in violation of the laws which requires permission from the Competent Authority before felling of trees, and penalty imposed for such violation, is not something akin to the loss caused to the environment due to illegal felling of trees for which environmental compensation is to be determined and leviable by application of Principle of 'Polluter Pays'. Further, deterioration of environmental compensation is not within the Province of the Forest Officers or any district authority but within the power and ambit of concerned Pollution Control Board/Committee.

52. The purpose of imposition of fine by the forest authorities is for non-compliance of the provisions of Statutes which require their permission if any operating or enforced in the area concerned and/or to charge

penalty upon the violator for the property in the trees which is/are cut illegally provided trees are on public land. This later aspect does not cover the trees which are cut on private land.

53. However, the purpose of environmental compensation is totally different. Environmental compensation is imposed when an act or omission on the part of a person has caused any loss/damage to the environment which requires its remediation. This would include loss to the environment caused due to illegal cutting of trees, whether on forest land or on non-forest land.

54. Tribunal has repeatedly held that assessment/computation of environmental compensation for restoration of the damaged environment should take care of damage caused to the environment, to the community, if any, and should also be preventive, deterrent and to some extent, must have an element of being punitive. The idea is not only for restoration/remediation or to mitigate damage/loss to environment, but also to discourage people/proponents from indulging in the activities or carrying out their affairs in such a manner so as to cause damage/loss to environment. The imposition of environmental compensation is in furtherance of the application of principle of 'Polluter Pays'. In the context of this Tribunal, NGT Act, 2010 vide Section 20 itself recognizes application of the said principle but for the Statutory Authorities who have power to issue statutory directions for enforcement of environmental laws, principle of 'Polluter Pays' is available being integral part of environmental jurisprudence. The power of Statutory Authorities to levy environmental compensation by application of 'Polluter Pays' principle is available in the provisions of environmental laws containing provisions to

issue direction like Section 33A of Water Act, 1974, Section 5 of EP Act, 1986, etc.

55. When environment is damaged on account of act of someone's illegal activity in violation of environmental laws and norms, such violator is liable to share the cost which may be incurred for remediation and rejuvenation of damaged environment. This has been recognized as principle of 'Polluter Pays'.

56. This Principle was recognized as part of environmental law in India in ***Indian Council for Enviro-Legal Action vs. Union of India, (1996) 3 SCC 212***. Certain industries producing assets were dumping their waste. Even untreated waste water was allowed to flow freely polluting atmosphere and sub-terrain supply of water which ultimately caused darkening and dirtiness of wells and the streams water rendering it unfit for human consumption. Certain environmentalists' organizations broadly alleging severe damage to villager's health, filed a Writ petition as PIL in 1989 before Supreme Court. By that time, some of the units were already closed. Referring to Article 48-A in Directive Principles of State Policy and 51-A in the Fundamental duties of citizens, Supreme Court observed that said provisions say that State shall endeavour to protect and improve environment and to safeguard the forest and wildlife of the country. One of the fundamental duties of citizens is to protect and improve the natural environment including forests, lakes, rivers and wildlife and to have compassion for living creature. Where a **Proponent has established its commercial unit and operate contrary to law flouting norms provided by law, Statutory Regulator is bound to act and if it fails, a judicial forum can direct it to act in accordance with law.**

57. Referring to Oleum Gas leak case, i.e., ***M.C. Mehta vs. Union of India, (1987) 1 SCC 395***, Court observed in para 58 that the constitution bench held that **enterprise must be held strictly liable for causing such harm as a part of social cost of carrying on the hazardous or inherently dangerous activity**. Hazardous or inherently harmful activities for private profits can be tolerated only on the condition that the enterprise engaged in such hazardous or inherently dangerous activity indemnifies all those who suffer on account of carrying on of such hazardous or inherently dangerous activity, regardless of whether it is carried on carefully or not.

58. Court also referred to its earlier decision in ***Indian Council for Enviro Legal action vs. Union of India, (1995) 3 SCC 77***, wherein concerned Pollution Control Board identified about 22 industries responsible for causing pollution by discharge of their effluent and a direction was issued by Court observing that they were responsible to compensate the farmers. It was the duty of State Government to ensure that this amount was recovered from the industries and paid to the farmers. In para 67 of the judgment, Court said that the **question of liability of respondent units to defray the costs of remedial measures can also be looked into from another angle which has now come to be accepted universally as a sound principle**, for example, 'Polluter Pays' principle. On this aspect, Court further observed as under:

“67. ...The Polluter Pays principle demands that the financial costs of preventing or remedying damage caused by pollution should lie with the undertakings which cause the pollution, or produce the goods which cause the pollution. Under the principle it is not the role of government to meet the costs involved in either prevention of such damage, or in carrying out remedial action, because the effect of this would be to shift the financial burden of the pollution incident to the taxpayer. The ‘Polluter

Pays' principle was promoted by the Organization for Economic Co-operation and Development (OECD) during the 1970s when there was great public interest in environmental issues. During this time there were demands on government and other institutions to introduce policies and mechanisms for the protection of the environment and the public from the threats posed by pollution in a modern industrialized society. Since then, there has been considerable discussion of the nature of the polluter pays principle, but the precise scope of the principle and its implications for those involved in past, or potentially polluting activities have never been satisfactory agreed.

*Despite the difficulties inherent in defining the principle, the European Community accepted it as a fundamental part of its strategy on environmental matters, and it has been one of the underlying principles of the four Community Action Programmes on the Environment. The current Fourth Action Programme ([1987] OJC 328/ 1) makes it clear that **the cost of preventing and eliminating nuisances must in principle be borne by the polluter**', and the polluter pays principle has now been incorporated into the European Community Treaty as part of the new Articles on the environment which were introduced by the Single European Act of 1986. Article 130-R(2) of the Treaty states that environmental considerations are to play a part in all the policies of the Community, and that action is to be based on three principles: the need for preventative action; the need for environmental damage to be rectified at source; and that the polluter should pay."*

59. Court further said that **according to the above principle of 'Polluter Pays', responsibility for repairing the damage is that of the offending industry**. Sections 3 and 5 of EP Act, 1986 empower Central Government to give directions and take measures for giving effect to this principle. Court further said:

*"...In all the circumstances of the case, **we think it appropriate that the task of determining the amount required for carrying out the remedial measures, its recovery/realisation and the task of undertaking the remedial measures is placed upon the Central Government in the light of the provisions of the Environment [Protection] Act, 1986**. It is, of course, open to the Central Government to take the help and assistance of State Government, R.P.C.B. or such other agency or authority, as they think fit."*

60. The above principle has been followed in **Vellore Citizen Welfare Forum vs. Union of India, 1996 (5) SCC 647**. In para 25, direction no. 2 reads as under:

*2. The authority so constituted by the Central Government shall implement the “precautionary principle” and the “polluter pays” principle. The **authority shall, with the help of expert opinion and after giving opportunity to the concerned polluters assess the loss to the ecology/environment in the affected areas and shall also identify the individuals/families who have suffered because of the pollution and shall assess the compensation to be paid to the said individuals/families. The authority shall further determine the compensation to be recovered from the polluters as cost of reversing the damaged environment. The authority shall lay down just and fair procedure for completing the exercise.***

61. In **Bittu Sehgal and Another vs Union of India & Others, (2001) 9 SCC 181**, referring the earlier judgments, Supreme Court has said that ‘Precautionary Principle’ and ‘Polluter Pays Principle’ have been accepted as part of the law of the land.

62. In **Research Foundation for Science vs. Union of India & Ors., (2005) 13 SCC 186**, in para 26 and 29, Court, on ‘Polluter Pays’ Principle, has said as under:

“26. The liability of the importers to pay the amounts to be spent for destroying the goods in question cannot be doubted on applicability of precautionary principle and polluter-pays principle. These principles are part of the environmental law of India. There is constitutional mandate to protect and improve the environment. In order to fulfill the constitutional mandate various legislations have been enacted with attempt to solve the problem of environmental degradation.

29. The polluter-pays principle basically means that the producer of goods or other items should be responsible for the cost of preventing or dealing with any pollution that the process causes. This includes environmental cost as well as direct cost to the people or property, it also covers cost incurred in avoiding pollution and not just those related to remedying any damage. It will include full environmental cost

and not just those which are immediately tangible. The principle also does not mean that the polluter can pollute and pay for it. The nature and extent of cost and the circumstances in which the principle will apply may differ from case to case.”

63. In ***Karnataka Industrial Areas Development Board vs. C. Kenchappa & Others, (2006) 6 SCC 371***, principle of ‘Polluter Pays’ has been explained in detail referring to the earlier judgments in ***Indian Council for Enviro-Legal Action vs. Union of India (supra)*** and ***Vellore Citizen Welfare Forum (supra)***.

64. The environmental compensation due to felling of trees illegally is not a component on account of illegal felling of trees without permission of the Competent Authority or in violation of the statutes regulating felling of trees but for damage caused to the environment and the cost needed for its restoration which is required to be compensated by the violator by application of principle of ‘Polluter Pays’ which is well recognized in the jurisprudence of environment by the highest Court of the land.

65. Wherever any permission for felling of trees is granted, the condition for reforestation should also be imposed so as to mitigate the damage as much as possible. But wherever felling of trees is not required, or felling does not follow the procedure prescribed in this Statute or is not in accordance with the Regulatory Statute or there is otherwise illegal felling of trees, punitive, prohibitive and compensatory regime must be implemented and applied so as to act as deterrent against felling of trees. The Regulatory measures may also contain provisions for imposition of fine for violation of the statutes with regard to felling of trees and also for realization of cost of timber/wood realizable by Forest Department or any

other Regulatory Authority under such provisions but with regard to damage caused to the environment due to illegal felling of trees, it is the responsibility of Authority who are under an obligation to take care of the environment to issue necessary directions which includes, application of 'Polluter Pays' principle by requiring the violator to pay environmental compensation.

66. In view of the above discussion, we answer Issue III by holding that respondent 1 is liable to pay environmental compensation for causing damage to environment (i) due to illegal felling/non-transplantation of trees as per the directions given by Tree Officer's permission letter dated 18.12.2019 and also by not carrying out compensatory plantation which was one of the conditions of the permission granted by Tree Officer.

67. Issue III is answered in affirmative and against respondent 1.

68. **ISSUE IV:** for causing damage to environment by illegal felling/transplantation of trees as discussed above, respondent 1 has seriously violated environmental laws. As we have held that it is liable to pay environmental compensation by application of principle of 'Polluter Pays'. The question would be as to what environmental compensation should be ascertained which is payable/recoverable from respondent 1. In other words, what should be the methodology for computation for environmental compensation where environment has been damaged due to illegal felling of a tree. CPCB has not laid down any Guidelines for computation of environmental compensation if a tree is illegally cut by any person. For finding out methodology of computation of environmental compensation, we also do not get any assistance from the Statutes. Section 15 of NGT Act, 2010 talks of relief, compensation and restitution.

It confers wide powers on this Tribunal to grant relief by awarding compensation for the loss suffered by individual(s) and/or for damage caused to environment. Section 15 reads as under:

“15. Relief, compensation and restitution-(1) *The Tribunal may, by an order, provide-*

*a) **relief and compensation** to the victims of pollution and **other environmental damage arising under the enactments specified in the Schedule I (including accident occurring while handling any hazardous substance);***

*b) **for restitution of property damaged;***

*c) **for restitution of the environment** for such area or areas, as the Tribunal may think fit.*

(2) The relief and Compensation and restitution of property and environment referred to in clauses (a), (b) and (c) of sub-section of (1) shall be in addition to the relief paid or payable under the Public Liability Insurance Act, 1991 (6 of 1991).

(3) No application for grant of any compensation or relief or restitution of property or environment under this section shall be entertained by the Tribunal unless it is made within a period of five years from the date on which the cause for such compensation or relief first arose:

Provided that the Tribunal may, if it is satisfied that the' applicant was prevented by sufficient cause from filing the application within the said period, allow it to be filed within a further period not exceeding sixty days.

*(4) The Tribunal may, **having regard to the damage** to public **health, property and environment**, divide the compensation or relief payable under separate heads specified in Schedule II so as to provide compensation or relief to the claimants and for restitution of the damaged property or environment, as it may think fit.*

(5) Every claimant of the compensation or relief under this Act shall intimate to the Tribunal about the application filed to, or, as the case may, be, compensation or relief received from, any other Court or authority.

69. Sub-section 1 of Section 15 enables Tribunal to make an order providing relief and compensation to (i) the victims of pollution, (ii) other environmental damage arising under the enactments specified in the Schedule I.

70. Tribunal is also conferred power to pass an order providing relief for restitution of property damaged. Section 15(1)(c) enables Tribunal to pass an order providing relief for restitution of the environment for such area or areas, as Tribunal may think fit. Section 15 sub-section 4 says that Tribunal may divide compensation or relief payable under separate heads specified in Schedules II, having regard to the damage to public health, property and environment so as to provide compensation or relief, (i) to the claimants and (ii) for restitution of the damaged property or environment, as it may think fit.

71. Schedule II of NGT Act, 2010 gives a list of heads under which compensation or relief for damage may be granted. It has 14 heads in total out of which items (a) to (f), (l), (m) and (n) relate to loss, damage etc. sustained to the person or individual or their property. Items (i) to (k) relate to harm, damage, destruction etc. of environment or environmental system including soil, air, water, land, and eco-system. Items (i) to (k) of Schedule II of NGT Act, 2010 are as under:

“(i) Claims on account of any harm, damage or destruction to the fauna including milch and draught animals and aquatic fauna;

(j) Claims on account of any harm, damage or destruction to flora including aquatic flora, crops, vegetables, trees and orchards;

(k) Claims including cost of restoration on account of any harm or damage to environment including pollution of soil, air, water, land and eco-systems;”

72. Items (g) and (h) relate to expense and cost incurred by State in providing relief to affected person; and loss caused in connection with activity causing damage.

73. The damage to environment covers a very wide variety of nature as is evident from definition of 'Environment' under Section 2(c) which is inclusive and says; **'environment includes water, air, and land and the interrelationship, which exists among and between water, air and land and human beings, other living creatures, plants, micro-organism and property'**.

74. Even Rules framed under NGT Act, 2010 are silent on this aspect. Issue of determination of environmental compensation is significant in the sense that it should be proportionate to or bears a reasonable nexus with the environmental damage and its remediation/restoration. Similarly in case of compensation to be determined for a victim, it needs to co-relate to injury caused or damage suffered by such person as also cost incurred for treatment/remediation. Computation of environmental compensation may involve some degree of subjectivity but broadly it must be based on objective considerations as it saddles financial liability upon the violator.

75. Taking into consideration multifarious situations relating to violation of environmental laws *vis-a-vis* different proponents, nature of cases involving violation of environmental laws can be categorized as under:

- (i) Where Project/Activities are carried out without obtaining requisite statutory permissions/consents/clearances/NOC etc., affecting environment and ecology. For example,

Environmental Clearance under Environment Impact Assessment Notification dated 14.09.2006; Consent under Water Act, 1974 and Air Act, 1981; Authorisation under Solid Waste Management Rules, 2016 and other Rules; NOC for extraction and use of ground water, wherever applicable, and similar requirements under other statutes.

- (ii) Where proponents have violated conditions imposed under statutory Permissions, Consents, Clearances, NOC etc. affecting environment and ecology.
- (iii) Where Proponents have carried out their activities causing damage to environment and ecology by not following standards/norms regarding cleanliness/pollution of air, water etc.

76. The above categories are further sub-divided, i.e., where the polluters/violators are corporate bodies/organizations/associations and group of the people, in contradistinction, to individuals; and another category, the individuals themselves responsible for such pollution.

77. Further category among above classification is, where, besides pollution of environment, proponents/violators action also affect the community at large regarding its source of livelihood, health etc.

78. The next relevant aspect is, whether damage to environment is irreversible, permanent or is capable of wholly or partial restoration/remediation/rejuvenation.

79. Determination/computation/assessment of environmental restoration/remediation/rejuvenation should also take care of damage caused to the environment, to the community, if any, and should also be

preventive, deterrent and to some extent, must have an element of “being punitive”. The idea is not only for restoration/remediation or to mitigate damage/loss to environment, but also to discourage people/proponents from indulging in the activities or carrying out their affairs in such a manner so as to cause damage/loss to environment.

80. To impose appropriate ‘environmental compensation’ for causing harm to environment, besides other relevant factors as pointed out, one has to understand the kind and nature of ‘Harmness cost’. This includes risk assessment. The concept of risk assessment will include human-health risk assessment and ecological risk assessment. U.S. Environmental Protection Agency has provided a guideline to understand harm caused to environment as well as people. For the purpose of human-health risk assessment, it comprised of three broad steps, namely, planning and problem formulation; effects and exposure assessment and risk categorization. The first part involves participation of stakeholders and others to get input; in the second aspect health effect of hazardous substances as well as likelihood and level of exposure to the pollutant are examined and the third step involves integration of effects and exposure assessment to determine risk.

81. Similarly, ecological risk assessment is an approach to determine risk of environmental harm by human activities. Here also we can find answer following three major steps, i.e., problem codification; analysis of exposure and risk characterization. First part encompasses identification of risk and what needs to be protected. Second step insists upon crystallization of factors that are exposed, degree to exposure and further comprised of two components, i.e., risk assessment and risk description.

82. In totality, problem is multi-fold and multi-angular. Solution is not straight but involves various shades and nuances and vary from case to case. Even Internationally, there is no thumb-rule to make assessment of damage and loss caused to environment due to activities carried out individually or collectively by the people, and for remediation/restoration. Different considerations are applicable and have been applied. As the term suggest, compensation means a return for loss or damage sustained. Therefore, it must always be just and not based on a whim or capricious.

83. In India, where commercial activities were carried out without obtaining statutory permissions/consents/clearance/NOC, Courts have determined, in some matters, compensation by fixing certain percentage of cost of project. In some cases, volume of business transactions, turnover, magnitude of establishment of proponent have also been considered as guiding factors to determine environmental compensation. In some cases, a lump sum amount has been imposed.

84. In an article, '*the cost of pollution-Environmental Economics*' by Linas Cekanavicius, 2011, it has been suggested, where commercial activities have been carried out without consent etc., and pollution standards have been violated, Total Pollution Cost (hereinafter referred to as '**TPC**') can be applied. It combines the cost of abatement of environmental pollution and cost of pollution induced environmental damage. The formula comes to **TPC(z)=AC(z)+ED(z)**, where **z** denotes the pollution level. Further, clean-up cost/remediation cost of pollution estimated to be incurred by authorities can also be used to determine environmental compensation.

85. When there is collective violation, sometimes the issue arose about

apportionment of cost. Where more than one violator is indulged, apportionment may not be equal since user's respective capacity to produce waste, contribution of different categories to overall costs etc. would be relevant. The element of economic benefit to company resulting from violation is also an important aspect to be considered, otherwise observations of Supreme Court that the amount of environmental compensation must be deterrent, will become obliterated. Article 14 of the Constitution says that unequal cannot be treated equally, and this principle must also be given due consideration and be taken care.

86. Determination/ assessment/ computation of environmental compensation cannot be arbitrary. It must be founded on some objective and intelligible considerations and criteria. Simultaneously, Supreme Court also said that its calculations must be based on a principle which is simple and can be applied easily. In other words, it can be said that wherever Court finds it appropriate, expert's assessment can be sought but sometimes experts also go by their own convictions and belief and fail to take into account judicial precedents which have advanced cause of environment by applying the principles of 'Sustainable Development', 'Precautionary Approach' and 'Polluter Pays', etc. In such circumstances, it is the ultimate responsibility of Court's to assess and compute environmental compensation, rationally.

87. Clean-up cost or TPC, may be a relevant factor to evaluate damage, but in the diverse conditions as available in this Country, no single factor or formula may serve the purpose. Determination should be a quantitative estimation; the amount must be deterrent to polluter/violator and though there is some element of subjectivity but

broadly assessment/computation must be founded on objective considerations. Appropriate compensation must be determined to cover not only the aspect of violation of law on the part of polluter/violator but also damage to the environment, its remediation/restoration, loss to the community at large and other relevant factors like deterrence, element of penalty etc.

88. Nature is precious. The elements of nature like air, water, light and soil in materialistic manner may not be priced appropriately and adequately. Most of the time, whenever price is determined, it may be extremely low or highly exorbitant meaning thereby disproportionate. Still, since some of the assets of nature are marketable, on that basis price may be determined but when such elements are damaged or degraded, restoration thereof, in effect is priceless. Many a times, it may be almost impracticable and improbable to recover and remediate damaged environment to its position as it was. Moreover, its cost might be very high. It also cannot be doubted that once there is a pollution or damage to environment, it would affect adversely not only the environment but also inhabitants and all biological organisms. Damage is there, only degree may differ whether to the environment or to the inhabitants and other organisms. To find out simultaneously degree of damage and to ascertain the same in many cases may not be possible or practicable. For example, a polluted air causes respiratory diseases but the people do not get infected and starts reflection of the disease immediately but it takes some time. The time taken in reflection of injury on the person or body also differs from person to person depending upon his immunity and other health conditions. In some cases, damage to environment i.e., air pollution may be fatal to a person who already has

respiratory problem. For some a minor inconvenience, minor injury to others, and some may not suffer to the extent of showing symptoms of any diseases at all. When we talk of environmental compensation for causing degradation to environment and for its restoration or remediation, it is not a formal or casual or symbolic amount which is required to be levied upon the violator. It is substantive and adequate amount which must be levied for restoration of environment.

89. In respect of State of Uttarakhand, in the matter of **OA No.147/2024, Hardeep Sharma vs. Ramesh Chand Aarya**, decided vide judgment dated 04.12.2024, this Tribunal has approved a formula/guidelines prepared by Uttarakhand Pollution Control Board for assessment and computation of environmental compensation for illegal felling of trees causing damage to environment and the said formula reads as under:

Environment Compensation = (Cost Factor x Trunk area of Tree x Species Factor x Condition Factor x Location Factor) x Royalty Value

The species, condition, and location ratings are considered to range from 0.5 to 1.0.

A. Description of Various Factors in the Environment Compensation Formula: -

Factors	Description
Trunk area	The cross-section area of the tree trunk measured at breast height. Girth at Breast Height (GBH) (in cm) = 27rr Diameter (D) = 2r = GBH/Pie Trunk Area (in cm') = 7r(D/2)² = 7rD²/4 Where, r is the radius of the tree at GBH in cm. Note: If the GBH of the tree is not reported, then the average GBH of a mature tree of the respective species shall be taken in to consideration for calculation of Trunk Area of the tree. In case the GBH/diameter is not available then the average GBH/diameter of the respective species shall be taken in to account. The full cost (estimated per unit of the cross-sectional area of the trunk, i.e., per square centimeter) of a newly planted sapling that is at least 1.80 meters tall. Its derivation has two components: the
Cost Factor (Sapling	

Cost + Maintenance Cost)	nursery gate price and the planting cost (transportation, planting, materials, manure, fertilizers, immediate care, and management costs, but not aftercare). Thus, Cost factor is sum of sapling cost and Cost of Transportation/planting etc. Note: Department of Forest as well as Department of Horticulture is used to notify the sapling price from time to time. Such value of a sampling shall be taken in to consideration. If, in any case, there is no notified price, then the market price of such sapling in that area where the tree is felt shall be taken in to consideration. In General cost of transportation/planting the sapling shall be taken as Rs100/- For example, a sapling of mango tree costs Rs 80/- so Cost Factor shall be sum of Cost of sapling Rs 80/- and planting cost Rs. 100/- i.e. Rs 180/-
Species Factor	Mountains are among the most vulnerable environments; they are also a rich repository of biodiversity (Kumar and Sharma, 2016). The Indian Himalayan Region (IHR), one of the most important mountain ecosystems of the world, supports unique natural and cultural diversity, manifested in the 18,440 plant species, including 1,748 and 675 species of medicinal importance and wild edibles, respectively (Negi and Gaur, 1994). In a recent study of Western Himalayas (Bhatt, 2020) it reveals that the more diverse plant communities support more diverse fauna communities, both of which exist at mid-altitudinal zones of Himalaya. Species factor is thus based on the spatial distribution of species (altitude wise) in Uttarakhand clubbed with the priorities of the species. The priority of the species is divided in three classes as Low, Moderate and High. The details of priority of species are provided as Annexure-I. Score card for the factor is reported between 0.5 to 1.0 and detail is provided in next section of the report. Weightage of the species is higher if the tree is in higher altitude. Weightage of different species is assigned based on the different types and values of the tree.
Condition Factor	It is an assigned value between 0.5 to 1.0 based on the condition of the tree which considers factors such as wounds, decay, storm damage, insect or disease damage, and form. <u>It is based on the observation. In case, the felt tree is not available, an average of 0.75 would be considered. Score card for the factor is reported in detail in next section of the report.</u>
Location Factor	It is based on the functional and aesthetic contribution that a tree makes to a site and the importance of the location in the context of the broader community. The location value lies between 0.5 and 1.0. Score card for the factor is reported in detail in next section of the report.
Royalty Value	For every tree which is felt, the Government has levied an amount as a royalty. The amount of such Royalty is proposed to be deducted and the final value so obtained will be termed as Environment Compensation. This is to clarify that the respective departments also obtained penalty for illegal felling of trees, which is higher than the Royalty value, but in the environment compensation regime only the Royalty value will be considered.

B. Indexing of Various Factors

B.1 Score Chart for Species Factor

Considering the higher ecological importance of trees located at higher altitudes the Species classification is proposed based on the spatial distribution of species (altitude wise) in Uttarakhand clubbed with the priorities the species in Low, Moderate and High. Weightage of the species is higher if the tree is in higher altitude. An indicative table containing weightage of various tree species found in Uttarakhand is given under Annexure-I. Score chart for species factor is as under: -

Areal Weightage	High	Moderate	Low
Cool temperate-Subalpine (2501-3300m asl)	1.0	0.85	0.75
Warm temperate to Subalpine (2501-3000m asl)	0.90	0.80	0.70
Sub-Tropical to Cool temperate (1501-2500m asl)	0.80	0.70	0.60
Tropical (400-1500m asl)	0.75	0.60	0.50

B.2 Score Chart for Condition Factor

It is an assigned value between 0.5 and 1 based on the condition of the tree which considers factors such as wounds, decay, storm damage, insect or disease damage, and form. For simplicity's sake, a tree is usually placed in one of five classes whose value is expressed as a decimal in the formula. Following values are assigned based on condition of tree: -

Class	Tree Health Characteristics	Score
Excellent	Root plate is undisturbed, trunk is sound and solid. Excellent vigour with well-formed canopy	1.0
Good	Moderate damage and defects in root plate, trunk and canopy	0.75
Poor	Major (more than 50%) damage and defects in root plate, trunk and canopy which would be very difficult to restore	0.5

Note: If a felt tree is not found at site, then the condition, factor shall be taken as Good. If tree is found felt and it is difficult to find the condition, the decision will be taken based on surrounding habitat and the time series of satellite image like google images etc.

B.3 Score Chart for Location Factor

It is based on the functional and aesthetic contribution that a tree makes to a site and the importance of the location in the context of the broader community.

Site location	Score
Tree located in wild life sanctuaries, national Parks, Conservation Reserve, RF/PF, Eco sensitive Zone, Van Panchayat	1.0
Tree located in Nagar Nigam Area	0.85
Tree located in Nagar palika Area	0.75
Tree Located in Nagar Panchayat Area	0.65
Location in rural landscapes. Higher score to be given to trees 0.50 based on their proximity to commercial areas	

Note: *If a tree is in the area designated under class Good and in Nagar panchayat Area and of religious importance then the score of one scale up category for calculation of Environment compensation. For banyan tree is in good class (in Nagar Panchayat area) and designated as religious importance of local community then the location factor shall be considered as assigned for Nagar Palika Area i.e. 0.75 instead of 0.65.*

B.4 Royally Value

For every tree which is felt, the Government has levied an amount as a royalty. The amount of such Royalty is proposed to be deducted and the final value so obtained will be termed as Environment Compensation. Royalty value is notified per unit volume of the tree and the volume of the tree shall be respective departments also obtained penalty for illegal felling of trees, which is higher than the Royalty value, but in the environment compensation regime only the Royalty value will be considered.

Illustrative example for calculation of Environment Compensation of different type of trees in different conditions is placed at Annexure-II.

C. Disclaimer

- *This formula is not applicable on felling of such trees which are felt by obtaining requisite permission from the competent authorities.*
- *This formula is also not applicable to the species which are under exemption category as notified by Government from time to time.”*

90. In our view, DPCC must compute environmental compensation for loss/damage to environment due to illegal cutting of trees by Transport Department, GNCTD and also for not carrying out compensatory plantation and thereby, depriving the ecological benefit, which the environment would have, by taking into the above discussed methodology and recover the same in accordance with law.

91. In the meantime, we are of the view that till final computation is made, Transport Department of GNCTD must pay environmental compensation which we propose to impose as an interim measure subject to adjustment as per the final computation/determination by DPCC. As we have already discussed, 468 trees (after adjusting 27 trees which have been transplanted and survived) have been cut which have caused damage to environment in an illegal manner and, therefore, we compute interim compensation at the rate of Rs.10,000/- per tree in the absence of details of the age of the trees, nature of the trees and other relevant considerations and direct respondent 1 to pay the same as interim environmental compensation. The amount of interim environmental compensation due to illegal cutting of 468 trees comes to **Rs.46,80,000/-** (468 trees × Rs.10,000/-).

92. Besides, for causing damage to environment by not carrying out compensatory plantation of 5655 trees (after adjusting 800 saplings transplanted by respondent 1 which according to them are surviving), at

the rate of Rs.1,000/- per such tree, the interim compensation must be computed which comes to **Rs.48,25,000/-** (4825 trees × Rs.1000/-).

93. The total environmental compensation as an interim measure comes to **Rs.95,05,000/- (Rs.46,80,000/- + Rs.48,25,000/-)** which is payable by respondent 1.

94. Before parting, we may also observe that it has come to our experience that almost all State Pollution Control Boards or Pollution Control Committees have refrained from computing and assessing any environmental compensation due to illegal cutting of trees despite having caused serious damage to environment only on the pretext that no methodology or guideline has been provided for computation of environmental compensation for illegal cutting of trees. This stand of State Pollution Control Boards and Pollution Control Committees is neither justified nor consistent with the environmental jurisprudence particularly, with the 'Polluter Pays' principle, in as much as, wherever there is a damage to environment due to any activity which includes illegal cutting of trees, the principle of 'Polluter Pays' is attracted and being Regulatory body, it is incumbent upon State Pollution Control Boards and Pollution Control Committees to come forward by computing, imposing and assessing environmental compensation for illegal cutting of trees and realise the same from the violator(s) by applying principle of 'Polluter Pays'. The inaction on the part of Statutory Regulators in this regard has to be deprecated. Whenever law requires something to be done, the same must be done in accordance with the provisions if made and if not made, by working out reasonable guidelines in this regard since such power of issuing directions is conferred upon the Statutory

Regulators under Section 33A of Water Act, 1974 and Section 31A of Air Act, 1981 and Section 5 of EP Act, 1986. Whenever occasion arise, the law requires that Statutory Regulator(s) must act to enforce law and in case of illegal cutting of trees causing damage to environment, one of the functions required to be performed by Statutory Regulator is application of principle of 'Polluter Pays'.

95. To cut short, since, in the present case, we have approved the guidelines prepared by UKPCB for assessment and computation of environmental compensation for illegal felling of trees causing damage to environment, in respect of the area within the jurisdiction of DPCC, we find it appropriate that the same guidelines be extended to be observed and followed by all State Pollution Control Boards and Pollution Control Committees including CPCB whenever/wherever any occasion arises for determination of environmental compensation due to illegal felling of trees, until different methodology or guidelines is laid down, prepared or evolved by concerned Statutory Regulator at the State or Union Territory level or by CPCB at PAN India level, and, environmental compensation shall be determined for illegal felling of trees accordingly.

96. In the light of the above discussion, we dispose of this OA by issuing following directions:

- (I) For illegal cutting of trees/non-carrying out compensatory plantation, respondent 1 shall pay environmental compensation as an interim measure to the extent of Rs.95,05,000/- and deposit the same with DPCC within two months.

- (II) DPCC shall compute final environmental compensation in respect of illegal cutting of trees and failure to carry out compensatory plantation in the light of discussions made in this judgment and on the principles/methodology referred hereinabove, within three months, after giving opportunity of hearing to respondent 1.
- (III) The final amount of environmental compensation, after adjusting the interim compensation, shall be recovered from respondent 1 in accordance with law or refunded as the case may be.
- (IV) The amount of interim environmental compensation realised from respondent 1 under this order shall be utilised for remediation of the damaged environment in accordance with Environment Remediation Plan which shall be prepared by a Joint Committee comprising CPCB, DPCC, Principal Chief Conservator of Forest, GNCTD, New Delhi, wherein CPCB shall be the nodal authority. This Plan shall be prepared within 3 months and executed in the next 3 months.
- (V) Respondents shall not cut any tree illegally and/or in contravention of the terms and conditions imposed under the tree cutting permission order of Competent Authority i.e., Tree Officer and if any violation takes place, strict penal action shall be taken in accordance with law besides computation and levy of environmental compensation in the light of the observations made above by the concerned Competent Authorities against the violator(s).

97. Copy of this judgment be forwarded to CPCB; DPCC; Transport Department, GNCTD; Department of Environment and Forests, Government of NCT of Delhi; MoEF&CC; Principal Chief Conservator of Forest, Department of Forest and Wildlife, Delhi Development Authority; Municipal Corporation of Delhi and GNCTD New Delhi by e-mail for information and compliance.

98. In order to give effect to the direction given in paras 94 and 95, copy of the judgment shall be forwarded by Registry to all the Chief Secretaries of States and Union Territories; Member Secretaries of State Pollution Control Boards and Pollution Control Committees; Additional Chief Secretaries/Principal Secretaries, Environment and Forest of all the States and Union Territories; Director General (Forest), MoEF&CC, New Delhi; Member Secretary, CPCB and Secretary, MoEF&CC, Government of India for information and compliance.

SUDHIR AGARWAL,
JUDICIAL MEMBER

DR. AFROZ AHMAD,
EXPERT MEMBER

March 21, 2025
Original Application No.335/2023
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