IN THE NATIONAL GREEN TRIBUNAL, NEW DELHI

in

Original Application No. 147/2024

Hardeep Sharma Vs. Ramesh Chand Arya & Ors.

With

Original Application No. 614/2022

Rasesh B Vissanji & Ors. Vs. State of Uttarakhand & Ors.

STATUS REPORT ON BEHALF OF UTTARAKHAND POLLUTION CONTROL BOARD

1) That the above mentioned O.A. 147/2024 was listed for hearing on 08.08.2024, wherein the Hon'ble National Green Tribunal was pleased to issue the following directions:

"……

2. Respondent 13 shall place on record material on record what action has been taken with regard to assessment of environment compensation against the violators for illegal cutting of trees as per Joint Committee report.

……."

2) That in compliance with the aforesaid direction, it is humbly stated that the Member Secretary, UKPCB vide office order bearing no.

UKPCB/HO/C&M-245/2024/844 dated 29.08.2024 constituted a committee to assess the environmental compensation for illegal felling of trees as there is no mechanism for the evaluation of environmental compensation for the same.

3) That thereafter, various meetings of the aforesaid committee were convened and the committee collectively arrived at the conclusion that substitution method is proposed for the calculation of the ecological value of a tree. The method entitled "Report of the committee on establishing an environmental compensation framework for illegal tree felling" is being marked and filed as **Annexure No. -1** to this report.

4) The joint inspection committee in its report dated 16.04.2024 has reported that the 718 trees of Mango (age 2 years to 50-year age), 334 trees of Litchi (6 to35 year age), 48 trees of Pear (6-year age) and 01 tree of Jackfruit (age 15 year) on the site. And after calculation of the tress by joint committee 94 trees of Mango, 57 trees of Litchi and 25 trees of pear (a total of 176 trees) was found short on site.

5) As per the factors proposed by the committee for determining environmental compensation for unlawful tree felling, the compensation amount was calculated for a total of 176 trees, comprising 94 mango trees, 57 litchi trees, and 29 nashpati (pear) trees. The total calculated environmental compensation amounts to Rs. 67, 26,375 (Rupees Sixty-Seven Lakh Twenty-Six Thousand and Three Hundred Seventy-Five Only). The Environment compensation is calculated considering that all the trees were in Good Conditions. Average height of trees, and average diameter of tree is taken to calculate the tree area.

RK PKL

6) The joint report submitted by the committee constituted by the Hon'ble NGT reflects various land pieces belonging to different landowners. Therefore, the Regional Officer of the area has been directed to provide details of the land containing the trees in question, along with the respective landowners. In furtherance of same RO has sent a letter to SDM, Kashipur. A copy of the letter to R.O. dated 06-11-2024 and SDM dated 08-11-2024 is attached and marked as **Annexure No. 2** of this report.

7) Once the details are received, the calculated environmental compensation amount of Rs. 67, 26,375 (Rupees Sixty-Seven Lakh Twenty-Six Thousand and Three Hundred Seventy-Five Only) will be allocated accordingly.

8) That the above mentioned O.A. 614 of 2022 was listed for hearing on 12.09.2024, wherein the Hon'ble National Green Tribunal was pleased to issue the following directions:

"1. Learned Counsel appearing for Uttarakhand Pollution Control Board stated that he may be granted a month's time to take action with regard to assessment imposition of environmental compensation for illegally cutting of trees and damage caused to the forest in violation of Section 2 of Forest (Conservation) Act, 1980. He may file action taken report by next date

....."

9) That in compliance with the afore-said direction, it is humbly stated that the UKPCB has developed a mechanism/formula to assess the environmental compensation for illegal felling of trees.

10) Since the joint committee report lacks details on illegal tree felling, a committee has been constituted by the Member Secretary of UKPCB to gather this information. The committee includes the following members: 1) Divisional Forest Officer (DFO), Almora; 2) Executive Engineer, PWD, Almora; and 3) Regional Officer, UKPCB, Haldwani. The order dated 06-11-2024 constituting this committee is being marked and filed as **Annexure No. 3** to this report.

Once the fact-finding committee submits its report, environmental compensation will be imposed based on the developed formula.

This status report is respectfully submitted in OA No. 147/2024 along with OA No. 614 of 2022 for the Hon'ble NGT's kind consideration on behalf of Uttarakhand Pollution Control Board.

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Uttarakhand Pollution Control Board

Dated: 11 November 2024

Report of the Committee on Establishing an Environmental Compensation Framework for Illegal Tree Felling

ABSTRACT

Substitution Method is proposed for calculation of the ecological value of a tree. This method attempts to capture the scarcity value of the resource (or the loss if the tree is not available) and the cost of substituting the same. A 'trunk formula' is used for appraising the value of trees. It considers the replacement cost of a sapling and scaling it up to the larger specimen by using a multiplying factor of the basal area of the tree. It considers the species, size, condition, and location of the tree. The royalty value is to be substracted from the ecological value of the tree to derive environment compensation of an illegally felt tree.

The formula for Environment compensation is as follows:

Environment Compensation = [Cost Factor × Trunk area of Tree × Species Factor × Condition Factor × Location Factor]- Royalty Value

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

Uttarakhand Pollution Control Board
Gaura Devi Prayavaran Bhawan
46-B, I.T. Park, Dehradun

Report of the Committee on Establishing an Environmental Compensation Framework for Illegal Tree felling.

Hon'ble NGT in the Original Application No 147/2024 Hardeep Singh Sharma Vs Ramesh Chand Arya vide order dated 08.08.2024 directed State Pollution Control Board to impose Environment Compensation on illegal tree felling. A committee of officials of 03 institutions namely 1) Wild Life Institute of India, Dehradun; 2) Indian Council for Forestry research and Education, Dehradun; 3) Forest Research Institute, Dehradun was constituted on dated 29.08.2024 which is convened by Member Secretary, SPCB.

Following Officials have participated in the meeting of the committee: -

Dr Parag Madhukar Dhakate, Member Secretary, UKPCB

Dr B.S. Adhikari, Scientist-G, Wildlife Institute of India, Dehradun

Dr. Rajiv Pandey Scientist-F, ICFRE, Dehradun

Sh VedPal Singh, Sceintist-D, Forest Research Institute, Dehradun

The committee is assisted by officials of UKPCB namely Sh Pradeep Kumar Joshi, Environment Engineer, Dr Ankur Kansal, Environment Engineer, Sh Shubhash Chand Panwar, Asst. Environment Engineer and Dr Raj Kumar Chaturvedi, Assistant Scientific Officer.

Trees have a key role to play in defining the structural, functional, and environmental complexity and heterogeneity of the forest ecosystems (Jones et al., 1997). The committee has referred various reports and it is observed that the ecosystem services for the Uttarakhand Forests is reported in between Rs 95,112 Crore to Rs 193,904 Crore (Green Accounting of Forest resources---IIFM, 2019). The committee has also referred study of S. Cullen, 2007; and G. Watson, 2001 regarding approach for valuation of a tree. Tree appraisals as reported by L. Purcell, 2018 is also referred for deriving the formula for evaluation of the value of a tree.

The committee has held its meeting on 7.10.2024, 15.10.2024, 25.10.2024, and 05.11.2024 and collectively arrived in the conclusion that the *Substitution Method*

shall be followed for calculation of the ecological value of a tree. This method attempts to capture the scarcity value of the resource (or the loss if the tree is not available) and the cost of substituting the same. A 'trunk formula' is used for appraising the value of trees. It considers the replacement cost of a sapling and scaling it up to the larger specimen by using a multiplying factor of the basal area of the tree. It considers the species, size, condition, and location of the tree. The royalty value, which the department has decided based on volume of tree to assess its value in terms of rupees is to be substracted from the ecological value of the tree to derive environment compensation of an illegally felt tree. The formula for Environment compensation is as follows: -

Environment Compensation = [Cost Factor × Trunk area of Tree × Species Factor × Condition Factor × Location Factor]- Royalty Value

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

A. <u>Description of Various Factors in the Environment Compensation Formula: -</u>

Factors	Description
Trunk area	The cross-section area of the tree trunk measured at breast height. Girth at Breast Height (GBH) (in cm) = $2\pi r$ Diameter (D) = 2r = GBH/Pie Trunk Area (in cm^2) = $\pi(D/2)^2 = \pi D^2/4$ 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.*
Cost Factor (Sapling Cost + Maintenance cost)	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 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. 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.
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: -

Area/ 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 Tree located in Nagar palika Area Tree Located in Nagar Panchayat Area	0.85 0.75 0.65
Location in rural landscapes. Higher score to be given to trees based on their proximity to commercial areas	0.50

Note: *If a tree is in the area designated under class Good and in Nagar panchayt Area and of religious importance then the score of one scale up category for calculation of Environment compensation. For example, a 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 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. Royalty value is notified per unit volume of the tree and the volume of the tree shall be calculated from the Dia class table. 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.

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.

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Annexure-I: Indicative table containing weightage of various tree species found in Uttarakhand

Name	E/SE/C/D	CF/UC	MAP	Timber	Fodder	Fuel wood	Commercial	Ecological importance/ Priority
Tropical (400-1500m asl)								
Acacia catechu (L.f.) Willd.	D	UC	+				+	Moderate
Acacia farnesiana (L.) Willd.	D	UC	+					Low
Acacia nilotica (L.)Del. ssp. *indica* (Benth.) Bren.	D	UC	+			+		Low
Artocarpus lacucha Buch-Ham.	D	UC	+			+		Low
Azadirachta indica Juss.	D	UC	+	Gd 2			+	Moderate
Bauhinia purpurea L.	D	UC	+		+			Low
Bauhinia racemosa Lamk.	D	UC	+		+	+		Low
Bauhinia retusa Ham.	D	UC	+		+	+		Low
Bischofia javanica Bl.	D	UC	+	Gd 2		+		Low
Boehmeria rugulosa Wedd.	D	UC	+					Low
Boswella serrata Colebr.	D	UC	+	Gd 2				High
Butea monosperma (Lamk.) Taub.	D	UC	+		+	+		Moderate
Careya arborea Roxb.	D	UC	+			+		Low
Casearia tomentosa Willd	D	UC	+			+		Low
Cassia fistula L.	D	UC	+			+		Low
Crataeva religiosa Frost.f.	D	UC	+			+		Low
Dalbergia latifolia Roxb.	D	UC	+	Gd 1		+		Moderate
Dalbergia sissoo Roxb.	D	UC	+	Gd 1		+		High
Erythrina suberosa Roxb.	D	UC	+			+		Low
Gmelina arborea Roxb.	D	UC	+	Gd 2		+		Low
Grewia optiva Drumm. ex Burret	D	UC	+		+	+		Low
Haldinia cordifolia (Roxb.) Rids.	D	UC	+	Gd 1	+	+		Moderate
Kydia calycina Roxb.	D	UC	+	Gd 2	+	+		Low
Lannea coromandelica (Houtt.) Merr.	D	UC	+			+		Low
Macaranga indica Wt.	D	UC	+			+		High
Melia azedarach L.	D	UC	+	Gd 2		+		Low
Moringa oleifera Lam.	D	UC	+			+		Low
Morus alba L.	D	UC	+		+			Low
Oroxylum indicum (L.) Vent.	D	UC	+					Low
Pongamia pinnata Pierre	D	UC	+		+	+		Low

Name	E/SE/C/D	CF/UC	MAP	Timber	Fodder	Fuel wood	Commercial	Ecological importance/ Priority
Premna barbata Wall. Ex Schau.	D	UC	+			+		Low
Premna mucronata Cl.	D	UC	+			+		Low
Sapium sebiferum Roxb.	D	UC	+					Low
Spondias pinnata (L.f.) Kurz.	D	UC	+					Low
Sterculia urens Roxb.	D	UC	+			+		Moderate
Sterculia villosa Roxb.	D	UC	+			+		Moderate
Syzygium cumini (L.) Skeels	D	UC	+	Gd 2		+		Moderate
Terminalia arjuna (Roxb. Ex DC.) Wt. & Arn.	D	UC	+	Gd 2	+			Moderate
Terminalia bellirica (Gaertn.) Roxb.	D	UC	+	Gd 2	+			Moderate
Terminalia chebula Retz.	D	UC	+	Gd 2	+			Moderate
Trewia nudiflora L.	D	UC	+		+	+		Low
Wrightia arborea (Dennst.) Mabb.	D	UC	+					Low
Zizyphus mauritiana Lamk.	D	UC	+			+		Low
Cinnamomum camphora Nees	D	UC	+				+	Low
Cochlospermum religiosum (L.) Alston	D	UC	+					Low
Cordia dichotoma Forst.f.	D	UC	+		+			Low
Cordia vestita Hk.f. & Th.	D	UC	+					Low
Diospyros montana Roxb.	D	UC	+	Gd 2				Low
Ficus hispida L.f.	D	UC	+		+			Low
Ficus palmata Forsk.	D	UC	+		+			Low
Ficus racemosa L.	D	UC	+		+			Low
Hymenodictyon orixense Mabb.	D	UC	+					Low
Lagerstroemia parviflora Roxb.	D	UC	+	Gd 2				Moderate
Madhuca longifolia (Koen.) Mac.	D	UC	+		+			Moderate
Ougeinia oojeinensis (Roxb.) Hochr.	D	UC	+	Gd 2	+			Moderate
Semecarpus anacardium L.f.	D	UC	+	Gd 2				Moderate
Diospyros exsculpta Buch.-Ham.	D	UC	+	Gd 2				Moderate
Aegle marmelos (L.) Corr.	E	UC	+	Gd 2				Moderate
Alstonia scholaris (L.) R.br.	E	UC	+	Gd 2				Moderate
Barringtonia acutangula (L.) Gaertn.	E	UC	+	Gd 2				Moderate
Buchanania lanzan Spr.	E	UC	+	Gd 2			+	High
Diospyros malabarica (Descr.) Kost.	E	UC	+	Gd 2				
Michelia champaca L.	E	UC	+					Moderate

Name	E/SE/C/D	CF/UC	MAP	Timber	Fodder	Fuel wood	Commercial	Ecological importance/ Priority
Mimusops elengi L.	E	UC	+					
Phoenix humilis Royle	E	UC	+					
Saraca asoca (Roxb.) De Wilde	E	UC	+			+		Moderate
Ailanthus excelsa Roxb.	D	C	+	Gd 2			+	Low
Albizia lebbeck (L.) Willd.	D	C	+	Gd 2				Moderate
Albizia procera (Roxb.) Benth.	D	C	+	Gd 2				Moderate
Anogeissus latifolia Bedd.	D	C	+	Gd 2	+	+		High
Garuga pinnata Roxb.	D	C	+	Gd 2	+	+		Moderate
Mitragyna parvifolia (Roxb.) Korth.	D	C	+	Gd 2	+	+		Moderate
Schleichera oleosa (Lour.) Oken.	D	C	+	Gd 2		+		Moderate
Tamarindus indica L.	D	C	+	Gd 2		+		Moderate
Tectona grandis L.f.	D	C	+	Gd 1		+		High
Terminalia alata Roxb.	D	C	+	Gd 2	+			High
Toona ciliata Roem.	D	C	+	Gd 1	+	+		High
Eucalyptus globulus Labil.	D	C	+	Gd 2			+	Low
Ficus glomerata Roxb.	D	C	+		+			High
Holoptelia integrifolia (Roxb.) Planch.	D	C	+	Gd 2				Low
Kingelia africana (Lamk.) Benth.	D	C	+					
Pterocarpus marsupium Roxb.	D	C	+	Gd 2				
Pterospermum acerifolium Willd.	D	C	+					
Stereospermum chelonoides DC.	D	C	+					
Ficus benghalensis L.	E	C	+		+			High
Phoenix sylvestris Roxb.	E	C	+					
Shorea robusta Gaertn.	SE	C	+	Gd 1	+	+		High
Mangifera indica L.	SE	C	+	Gd 2			+	Moderate
Sub-Tropical to Cool temperate (1501-2500m asl)								
Pyrus pashia Buch.-Ham. Ex Don.	D	UC	+			+		Low
Lyonia ovalifolia (Wall.) Drude	D	UC	+			+		Moderate
Bauhinia variegata L.	D	UC	+		+	+		Moderate
Celtis australis L.	D	UC	+	Gd 2	+			Moderate
Emblica officinalis Gaertn.	D	UC	+			+		Moderate
Morus alba	D	UC	+		+			Low
Prunus armeniaca L.	D	UC	+		+	+		Low

Name	E/SE/C/D	CF/UC	MAP	Timber	Fodder	Fuel wood	Commercial	Ecological importance/ Priority
Prunus cerasoides Don	D	UC	+		+	+		Low
Sapindus mukorossi Gaertn.	D	UC	+					Low
Sapium insigne Benth ex Trimen	D	UC	+					Low
Symplocos chinensis (Lour.) Drace	D	UC	+		+	+		Moderate
Toona serrata Roem.	D	UC	+	Gd 2				Moderate
Debregeasia longifolia Wedd.	D	UC	+		+	+		Low
Debregeasia salicifolia Rendl.	D	UC	+		+			Low
Ehretia laevis Roxb.	D	UC	+		+			Low
Ficus semicordata Buch.-Ham. ex Sm.	D	UC	+		+			Low
Fraxinus micrantha Lingelschein	D	UC	+	Gd 1				Moderate
Litsea glutinosa (Lour.) Robins.	D	UC	+	Gd 2				Moderate
Mallotus philippensis Muell.-Arg.	D	UC	+		+	+		High
Cinnamomum tamala Nees	E	UC	+					Moderate
Myrica esculenta Ham. ex Don.	E	UC	+	Gd 2			+	High
Neolitsea cuipala (D.Don)Kost.	E	UC	+					Moderate
Neolitsea pallens (D.Don.) Mom. & Hara	E	UC	+					Moderate
Persea gamblei (King)Kost	E	UC	+			+		Moderate
Aesculus indica Colebr. Ex Camb.	D	C	+	Gd 2	+			Moderate
Alnus nepalensis Don	D	C	+	Gd 2				High
Betula alnoides Buch.-Ham. Ex D.Don	D	C	+	Gd 2				High
Bombax ceiba L.	D	C	+	Gd 2			+	Moderate
Engelhartia spicata	D	C	+	Gd 2				Moderate
Ficus religiosa L.	D	C	+		+			High
Pinus roxburghii Sarg.	SE	C	+	Gd 1		+		Moderate
Quercus leucotrichophora Camus	SE	C	+		+	+		High
Quercus glauca	SE	UC			+	+		High
Quercus lanuginosa	SE	C			+	+		High
Warm temperate to Subalpine (2501-3000m asl)								
Taxus baccata L. subsp. *wallichiana* (Zucc.) Pilger	C	UC	+	Gd 1				High
Acer acuminatum Wall. ex D.Don	D	UC	+	Gd 2	+			Moderate
Corylus jacquemontii Decne.	D	UC	+					Moderate
Juglans regia L.	D	UC	+	Gd 2				Moderate

Name	E/SE/C/D	CF/UC	MAP	Timber	Fodder	Fuel wood	Commercial	Ecological importance/ Priority
Prunus cornuta (Royle) Steud.	D	UC	+		+	+		Low
Ulmus wallichiana Planch.	D	UC	+	Gd 2	+			Low
Abies spectabilis (D.Don) Mirb.	C	C	+	Gd 1				High
Cedrus deodara (Roxb.) Loud.	C	C	+	Gd 1				High
Picea smithiana Boiss.	C	C	+	Gd 1				Moderate
Cupressus torulosa D. Don	C	C		Gd 1				Moderate
Quercus floribunda	SE	C			+	+		High
Rhododendron arboreum Sm.	SE	UC	+			+		Moderate
Populus ciliata Wall.	D	C	+	Gd 2	+			Moderate
Abies pindrow Spach.	C	C	+	Gd 1				High
Pinus wallichiana Jacks.	C	C	+	Gd 1				Moderate
Cool temperate-Subalpine (2501-3300m asl)								
Betula utilis Don	D	C	+					High
Juniperus macropoda Bioss	C	C	+	Gd 1				High
Abies spectabilis (D.Don) Mirb.	C	C		Gd 1				High
Quercus semecarpifolia Smith.	C	C	+		+	+		High

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List of Abbreviations

E: Evergreen
SE: Semi-evergreen
D: Deciduous
GD-1: Timber Grade-1

C: Conifer
CF: Canopy Forming tree
UC: Under Canopy Species
GD-2: Timber Grade-2

MAP: Medicinal and Aromatic Plant
M: Meter
asl: Above Sea level

Annexure-II: Illustrative example for calculation of Environment Compensation of different type of trees in different conditions

S. No.	Factors /Name of Species	Mango Tree usually grown in Tropical region (400-1500 m asl) species weightage moderate.		Deodar Tree usually grown in warm temperate to sub alpine area (2500 -3000 m asl) species weightage high		Cedar Tree usually grown in cool temperate to sub alpine area (2500 -3300 m asl) species weightage high	
		Tree is in Excellent Condition and is in Nagar Nigam Area	*Tree is in Poor Condition and in Nagar Nigam Area*	*Tree is in Excellent Condition and is in Nagar Palika Area*	*Tree is in Poor Condition and in Nagar Palika Area*	*Tree is in Excellent condition and in RF/PF*	*Tree is in Poor Condition and in RF/PF*
A	Tree Dia in cm (average for a health tree)	50	50	120	120	200	200
B	Tree area in square cm	1962.5	1962.5	11304	11304	31400	31400
C	Cost factor for sapling (assumed)	80	80	100	100	100	100
D	Cost factor for planting sapling	100	100	100	100	100	100
E	Total Cost Factor (C+D)	180	108	200	200	200000	200
F	Score for species factor	0.6	0.6	0.9	0.9	1	1
G	Score for condition factor	1	0.5	1	0.5	1	0.5
H	Score for Location factor	0.85	0.85	0.75	0.75	1	1
I	Ecological Services Value (in INR)	180158	90079	1526040	763020	6280000	3140000
J	Less Royalty Factor (Assumed)	50000	50000	500000	500000	750000	750000
	Total Environment Compensation (I-J)	130158	40079	1026040	263020	5530000	2390000

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मुख्यालय
उत्तराखण्ड प्रदूषण नियंत्रण बोर्ड
"गौरा देवी पर्यावरण भवन"
46बी, आई.टी. पार्क, सहस्त्रधारा रोड़, देहरादून
E-mail : msukpcb@yahoo.com, दूरभाष: 0135-2607092

पत्रांक–यूकेपीसीबी/एच.ओ./ (2M-245-1078, दिनांक06 11.2024

सेवा में,

क्षेत्रीय अधिकारी,
क्षेत्रीय कार्यालय,
उत्तराखण्ड प्रदूषण नियंत्रण बोर्ड,
चामुण्डा काम्पलैक्स, रामनगर रोड़,
काशीपुर, जिला– ऊधमसिंह नगर।

विषयः– मा0 एन0जी0टी0 में योजित मूल आवेदन सं0 147/2024 में पारित आदेशों के अनुपालन के सम्बन्ध में।

महोदय,

विषयगत प्रकरण में अवैध रूप से काटे गये वृक्षों के सम्बन्ध में दोषियों के विरूद्ध पर्यावरणीय क्षतिपूर्ति आरोपित किये जाने हेतु मा0 एन0जी0टी0 द्वारा दिनांक 27.08.2024 में आदेश पारित किये गये। उक्त आदेश दिनांक 16.04.2024 में की गयी संयुक्त निरीक्षण की जांच आख्या के क्रम में पारित किये गये हैं, जिसमें सूचित किया गया है कि मौके पर फलदार वृक्षों के गणना के अनुसार 94 वृक्ष आम के, 57 वृक्ष लींची के व 25 वृक्ष नाशपति समेत कुल वृक्ष 176 वृक्ष कम पाये गये, जिसके क्रम में सम्बन्धित विभागों द्वारा कार्रवाही किये जाने हेतु संस्तुत किया गया है। मा0 एन0जी0टी0 के अनुक्रम में प्रकरा पर दोषियों के विरूद्ध पर्यावरणीय क्षतिपूर्ति आरोपित किये जाने की कार्यवाही गतिमान है।

इस सम्बन्ध में आपको निर्देशित किया जाता है कि जिन भू–खण्डों में फलदार वृक्षों की संख्या कम पायी गयी है, उन भू–खण्डों के स्वामियों का विवरण तथा सम्बन्धित भू–स्वामियों के भू–खण्डों में विभिन्न प्रजातियों के कितने–कितने वृक्ष आच्छादित है (उक्त 176 वृक्षों में से) का विवरण तत्काल इस कार्यालय को उपलब्ध कराना सुनिश्चित करें।

भवदीय

(डा0 पराग मधुकर धकाते)
सदस्य सचिव

क्षेत्रीय कार्यालय
उत्तराखण्ड प्रदूषण नियंत्रण बोर्ड,
चामुण्डा काम्पलैक्स, रामनगर रोड
काशीपुर, ऊधमसिंहनगर।

पत्रांक- यू.के.पी.सी.बी./आर.ओ.के./ रिट - १०/२५/५५१ दिनांक.8/.11/२५

सेवा में,

उपजिलाधिकारी महोदय
काशीपुर, उधमसिंहनगर।

विषय- मा0 एन0जी0टी0 में योजित मूल आवेदन संख्या-147/2024 में पारित आदेशों के अनुपालन के संबंध में।

महोदय,

कृपया उपरोक्त विषयक बोर्ड मुख्यालय के पत्रांक-यूकेपीसीबी/एचओ/सी.एण्ड.एम-245-1078 दिनांक 06.11.2024 का संदर्भ ग्रहण करना चाहें(छायाप्रति संलग्न)।

उक्त पत्र में प्राप्त निर्देशों के क्रम में आपसे अनुरोध है, कि उक्त 176 वृक्षों के अवैध कटान के संबंध में यह सूचना उपलब्ध कराना चाहें, कि उक्त अवैध कटान किन-किन भूखण्डों पर, किस-किस प्रकार के वृक्षों का अवैध कटान हुआ है तथा उक्त भूखण्डों के स्वामियों का विवरण इस कार्यालय को शीघ्र उपलब्ध कराना चाहें, ताकि प्रकरण पर मा0 एन0जी0टी0 के आदेशों के अनुपालन में संबंधितों के विरुद्ध पर्यावरणीय क्षतिपूर्ति आरोपित की जा सके।

संलग्नक-यथोपरि।

भवदीय,

8/11/२५

(नरेश गोस्वामी)
क्षेत्रीय अधिकारी(प्र0)

प्रतिलिपि-1. सदस्य सचिव महोदय, उत्तराखण्ड प्रदूषण नियंत्रण बोर्ड, देहरादून को सूचनार्थ सादर प्रेषित।
2. जिलाधिकारी महोदय, उधमसिंहनगर को सूचनार्थ सादर प्रेषित।

क्षेत्रीय अधिकारी(प्र0)

मुख्यालय
उत्तराखण्ड प्रदूषण नियंत्रण बोर्ड
"गौरा देवी पर्यावरण भवन"
46बी, आई.टी. पार्क, सहस्त्रधारा रोड़, देहरादून
E-mail : msukpcb@yahoo.com, दूरभाष: 0135-2607092

Annexure-3

पत्रांक–यूकेपीसीबी/एच.ओ./मा0-183-626-2024-1083 दिनांक 6.11.2024

कार्यालय ज्ञाप

मा0 एन0जी0टी0 में योजित मूल आवेदन सं0 614/2022, रासेश बी0 विश्नजी व अन्य बनाम उत्तराखण्ड राज्य में दिनांक 12.08.2024 में आदेशों के क्रम में राज्य प्रदूषण नियंत्रण बोर्ड द्वारा अवैध रूप काटे गये वृक्षों के सम्बन्ध में कृत कार्यवाही पर अपना जवाब प्रस्तुत किया जायेगा। विषयगत प्रकरण में अवैध रूप से वृक्षों के पातन की जानकारी हेतु निम्नानुसार Fact Finding समिति का गठन किया जाता है:–

1. प्रभागीय वनाधिकारी, वन प्रभाग, अल्मोड़ा
2. अधिसाशी अभियन्ता (निर्माण खण्ड), लोक निर्माण विभाग, अल्मोड़ा
3. क्षेत्रीय अधिकारी, उत्तराखण्ड प्रदूषण नियंत्रण बोर्ड, हल्द्वानी, जिला– नैनीताल–सदस्य संयोजक

उक्त समिति द्वारा स्थल निरीक्षण कर अवैध रूप से काटे गये वृक्षों के सम्बन्ध में विस्तृत रिपोर्ट इस कार्यालय को प्रस्तुत करेगी।

(डा0 पराग मधुकर धकाते)
सदस्य सचिव

प्रतिलिपि:– निम्नलिखित को सूचनार्थ एवं आवश्यक कार्यवाही हेतु प्रेषित्:–

1. प्रभागीय वनाधिकारी, वन प्रभाग, अल्मोड़ा।
2. अधिसाशी अभियन्ता (निर्माण खण्ड), लोक निर्माण विभाग, अ ल्मोड़ा।
3. क्षेत्रीय अधिकारी, उत्तराखण्ड प्रदूषण नियंत्रण बोर्ड, हल्द्वानी, जिला– नैनीताल।
4. गार्ड फाईल।

सदस्य सचिव