

email- judicial-ngt@gov.in

No. LFA(NGT Order App. No. 278/2022)2023-185962
Office of the Deputy Commissioner,
District Sirmaur at Nahan (HP)
Dated, Nahan 04-12/23

To

The District Attorney,
H.P. Legal Cell, 27th UB
Sikandra Road, Himachal Bhawan,
New-Delhi-110001

Sub:- Affidavit to the O.A. No. 278/2022 on behalf of the
Respondent No. 5 in case Gram Panchayat Bhatanwali
V/S Union of India & Ors.

Sir/Madam,

On the subject cited above, a fair affidavit on behalf of
respondent No. 5 i.e. Deputy Commissioner, District Sirmaur (HP)
Original Application No. 278/2022 in case Gram Panchayat Bhatanwali
V/S Union of India & Ors. is enclosed herewith for vetting. You are
therefore, requested that after vetting the said draft, the same may be
returned to this office making it fair please.

Yours faithfully,

Encl. As above


Deputy Commissioner,
District Sirmaur (HP)

**BEFORE THE HON'BLE PRINCIPAL BENCH NATIONAL
GREEN TRIBUNAL, NEW DELHI.**

Original Application No. 278 of 2022

IN THE MATTER OF :

Gram Panchayat Bhatanwali

.....Applicant.

Versus

Union of India & Ors

..... Respondents

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Through Counsel

Radhika Gautam
Deputy Counsel for Respondent No. 5
District Commissioner's Office, Jalandhar, H.P.

(RADHIKA GAUTAM)
Advocate for Respondent No. 5
Office-E-28, Second Floor,
Lajpat Nagar-I, New Delhi-110024

-/-

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**BEFORE THE HON'BLE PRINCIPAL BENCH NATIONAL GREEN
TRIBUNAL, NEW DELHI.**

Original Application No.278 of 2022

Gram Panchayat, Bhatanwali

.....Applicant.

Versus

Union of India & others.

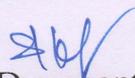
.....Respondents.

Affidavit in compliance of order, dated 27-09-2023, passed by the Hon'ble Principal Bench National Green Tribunal, New Delhi in OA No.278 of 2022, titled as Gram Panchayat Bhatanwali Vs Union of India & Others. on behalf of respondent No.5, the Deputy Commissioner, Sirmaur District at Nahan, Himachal Pradesh.

I, Sumit Khimta, IAS working as Deputy Commissioner, Sirmaur at Nahan, Himachal Pradesh, do hereby state on oath as hereunder in compliance of order, dated 27-09-2023, passed by the Hon'ble Principal Bench, National Green Tribunal, New Delhi in OA No.278 of 2022, titled as Gram Panchayat, Bhatanwali Vs Union of India & Others.:-

1. That in compliance of order, dated 27-09-2023, passed by the Hon'ble Principal Bench National Green Tribunal, New Delhi in OA No.278 of 2022, titled as Gram Panchayat, Bhatanwali Vs Union of India & Others a meeting was convened on 13-10-2023 with the authorities of other concerned departments in order to prepare action plan for the utilization of the amount of environmental compensation for restoration of environment in the area by carrying out plantation and other remedial measures, the copy of minutes of the said meeting are annexed herewith as Annexure-A.

2. That in pursuance of the decisions, taken in the aforesaid meeting the Deputy Conservator of Forest, Paonta Sahib Division, District Sirmaur, Himachal Pradesh submitted the requisite action plan vide his office letter No.Acct/APO/NGT (OA No. 278/2022)/2023-2/4960, dated 22-11-2023 (Annexure-B).
3. That the work on the aforesaid action plan shall be carried out accordingly in letter and spirit under proper monitoring and supervision of Deputy Conservator of Forest/Divisional Forest Officer, Paonta Sahib Division, District Sirmaur.
4. Further Executive Officer, Municipal Council, Paonta Sahib shall ensure firstly, to collect and transport solid waste of the town through covered vehicles. Secondly, carry out fogging/sanitation of the area around solid waste processing facility/site and adjoining village area to minimize the issues of flies/mosquitoes and foul smell and finally, to install proposed machinery at the earliest. Accordingly, the work is in progress, the present Original Application may kindly be disposed of in the interest of justice.


Deponent.
Deputy Commissioner
District Sirmaur Nahan, H.P.

VERIFICATION

I, the above named deponent, do hereby verify that the contents of Para Nos. 1 to 4 of my above affidavit are believed to be true and correct to the best of my knowledge and belief.

Verified at Nahan on 04 December, 2023.


Deponent.
Deputy Commissioner
District Sirmaur Nahan, H.P.

MINUTES OF THE MEETING REGARDING OA NO. 278/2022 TITLED AS GRAM PANCHAYAT OF BHONTAWALI VILLAGE VS UNION OF INDIA & OTHERS HELD ON 13-10-2023 AT 03:30 PM UNDER THE CHAIRMANSHIP OF DEPUTY COMMISSIONER SIRMAUR AT NAHAN.

A meeting was held on 13-10-2023 at 03:30 PM under the chairmanship of Deputy Commissioner Sirmaur regarding OA No. 278/2022 titled as Gram Panchayat of Bhontawali Village Vs Union of India & Ors. The following were present in the meeting:-

1. Sh. Laiq Ram Verma, Additional District Magistrate, Sirmaur at Nahan.
2. Sh. Aishwarya Raj, Divisional Forest Officer, Paonta Sahib, District Sirmaur (through VC).
3. Sh. Sanjay Kumar, Executive Officer, Municipal Council, Paonta Sahib, District Sirmaur.
4. Sh. Pawan Sharma, The Regional Officer, PCB, Paonta Sahib, District Sirmaur.
5. Sh. Mohan Singh Chauhan, Range Forest officer, Paonta Sahib, District Sirmaur.

At the outset, the chairman welcomed all the participants and apprised them about the current status of the OA No. 278/2022 titled as Gram Panchayat of Bhontawali Village Vs Union of India and Ors. As per the progress in the alleged matter of the OA No. 278/2022, most of the relating work has been found to be done and the remaining has been found in progress. It has been directed in the National Green Tribunal order dated 27-09-2023, to file affidavit detailing action plan for utilization of the amount of environmental compensation for restoration of environment in the area by carrying out plantation and other remedial measures. In this regard, the point wise deliberation and decision taken in the meeting are as under:-

1. Status/ Demarcation of the land

The Regional Officer, Pollution Control Board apprised that the spot visit of the concerned site has been completed. Most of the inside part of the wall is concrete and accordingly the outside part of the wall can be used for plantation.

After discussion the chairman directed to the concerned department that the revenue status of the land should also be ascertained whether it is government land or private land and also ensure demarcation of the concerned site.

2 Identification of the trees and plants

The representative of the forest department, Paonta Sahib has apprised that the plantation of aromatic perennials plants like Gulmohar, Papri can be done at the concerned site.

The Divisional Forest Officer, Paonta Sahib has suggested that golden bamboo could also be planted in that area and this is a very ideal place for the miyawaki technique. The miyawaki method of the plantation creates a miniature forest environment.

After discussion the chairman directed to the forest department to ensure that the plants/trees should be selected according to the agro climate condition and feasibility of the area. It may also be rough and tough variety of plants/trees so that the plants can survive the harsh conditions.

3 Period of the plantation

The Divisional Forest Officer, Paonta Sahib, Sirmaur has apprised that according to the climate condition of the area the minsoon season will be best for the plantation. In this regard, the Chairman has directed that we can try some plantation in the winter season and further supplement in during the next monsoon season .

4 Distance between the trees/ plants

In this regard, the Chairman has directed that there should be a distance of 10 feet between each tree and between the distance of 10 feet aromatic bushes can be planted for the beautification of the site.

Keeping above facts into consideration, the chairman has further directed to the concerned departments to constitute a committee under the supervision of the Divisional Forest Officer, Paonta Sahib alongwith the Forest Ranger, JE-MC and others to do the needful in the matter for the procurement/variety of the plants and trees. The committee shall submit their report to the undersigned within 15 days, positively.

Apart from the direction as mentioned above, the chairman also gave the following directions to the concerned departments :-

- The Chairman directed the Executive Officer, Municipal Council, Paonta Sahib to ensure that all the vehicles of the area which are going to the garbage plant should be covered with tarpaulin to prevent bad odour from spreading.
- It has been further directed to the Executive Officer, Municipal Council, Paonta Sahib to carry out fogging/ sanitation of the area around solid waste processing site and adjoining village area to reduce the problem of flies, mosquitoes and smell on a regular basis.
- There is an urgent need to separate solid waste processing facility site for the waste generated from rural areas. In the previous meeting dated 05-09-2023 direction was already issued to the Block Development Officer, Paonta Sahib and a committee of the following members was already constituted vide this office letter No. LFA-9 (OA No. 360/2018) Environmental plan/ 2023-182130 dated 19-07-2023 to identify the suitable site for installation of solid waste processing site . The name of the committee members mentioned as under :-

Sr No.	Officers	Designation
1	The Tehsildar Paonta Sahib, District Sirmaur.	Chairman
2	The Project Officer, DRDA, District Sirmaur	Member
3	The Executive Officer, Municipal Council, Paonta Sahib	Member Secy.

The Block Development Officer, Paonta Sahib, District Sirmaur was intimated vide letter No. 11693 dated 19-09-2023 that the place for installation of solid waste processing site has been identified in Gram Panchayat Jamani & Gojjar Adyen.

The chairman directed the Block Development Officer, Paonta Sahib to coordinate with all committee members and submit final report within 15 days, positively.
The meeting ended with the vote of thanks from and to the chair.

SKH
(Sumit Khimta) IAS,
Deputy Commissioner,
Sirmaur at Nahan.

Endst No. LFA (OA No. 278/2022)- 184977 Dated:- 27-10-23

Copy is forwarded for information and necessary to :-

- 1 The Additional District Magistrate, District Sirmaur at Nahan.
- 2 The Divisioanl Forest Officer, Paonta Sahib, District Sirmaur at Nahan.
- 3 The Project Officer, DRDA, District Sirmaur at Nahan.
- 4 The Executive Officer, Municipal Council, Paonta Sahib, District Sirmaur.
- 5 The Regional Officer, Pollution Control Board, District Sirmaur.
- 6 The Tehsildar, Paonta Sahib, District Sirmaur.
- 7 The Block Development Officer, Paonta Sahib, District Sirmaur.

SKH
(Sumit Khimta) IAS,
Deputy Commissioner,
Sirmaur at Nahan.



Himachal Pradesh Forest Department
Paonta Sahib Forest Division
Email:- dfopaonta@gmail.com



Acct/APO/NGT(OA No.278/2022)/2023-2/4960

Dated: 22.11.2023.

To: -
The Deputy Commissioner
District Sirmour (at Nahan).

Subject: - Proposal for a customized Miyawaki Plantation around the waste treatment facility at Bhatanwali under Paonta Sahib Forest Division - in reference to OA No. 278/2022 (Gram Panchayat Bhatanwali V/s Union of India).

Sir,

With respect to the subject cited above, the DPR regarding a Miyawaki (customized) Plantation adjoining the waste treatment facility at Bhatanwali, under Paonta Sahib Forest Division - in reference to OA No. 278/2022 (Gram Panchayat Bhatanwali V/s Union of India), has been attached herewith and is being presented for your kind perusal.

Encl :- As above.

Yours faithfully,

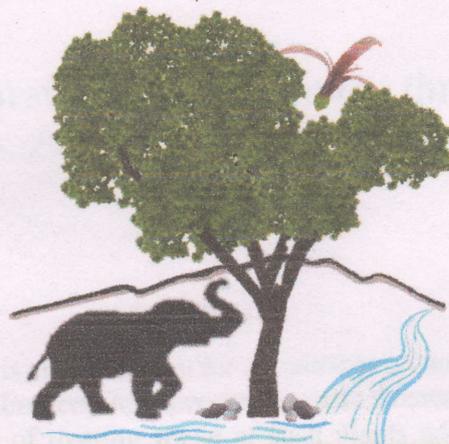
Aishwarya Raj (IFS).
Deputy Conservator of Forest
Paonta Forest Division,
Paonta Sahib, HP.

Endorsement No. Acct/DPR/NGT(OA No.278/2022)4961

Dated: 22.11.2023

✓ Copy is forwarded to Regional Officer, HPPCB, Paonta Sahib for information and further necessary action at your end please.

Aishwarya Raj
Aishwarya Raj (IFS).
Deputy Conservator of Forest
Paonta Forest Division,
Paonta Sahib, HP.



Paonta Sahib Forest Division
In the Land of Shorea & Jamuna

**Action Plan for Restoration of
Environment through a Customized
Miyawaki Plantation with reference to
OA No. 278/2022 (Gram Panchayat
Bhatanwali v/s UoI)**



Action Plan for Restoration of Environment through Plantation with reference to OA No. 278/2022 (Gram Panchayat Bhatanwali v/s UoI)

1. Context

Scientific waste management is an imperative for sustainable urbanization. Waste treatment plants are essential tools to manage burgeoning amounts of waste emanating from our towns and cities. Nonetheless, the very nature of treating waste at such plants adds to various pressures on the adjoining areas viz. foul smell, deleterious impact on the health of people, pollution of the micro-habitat to but name a few. Hence, concerted efforts are a must to minimize their impacts on the surrounding areas. Vegetative measures via scientifically designed plantations are a promising way of ameliorating the aforementioned deleterious impacts: they can uplift the ambience, treat pollutants, address issues of foul air and make an eye-sore into an aesthetically pleasing delight.

2. Current Scenario

The under-operation waste treatment plant at Gram Panchayat Bhatanwali treats hundreds of tonnes of waste from the various wards of Paonta Sahib Municipal Area and suffers from the same externalities as detailed above viz. the polluting impact on the micro-climate as well as the foul smell emanating from the treatment facility.



Figure 1: The Northern Wall of the Treatment Facility



Figure 2: The intersection of the Northern and Western Walls of the Treatment Facility



Figure 3: Southern Wall of the Treatment Facility (facing the river)

To ameliorate the prevailing conditions, a Miyawaki Plantation in the adjoining forest land has been planned and is detailed below:

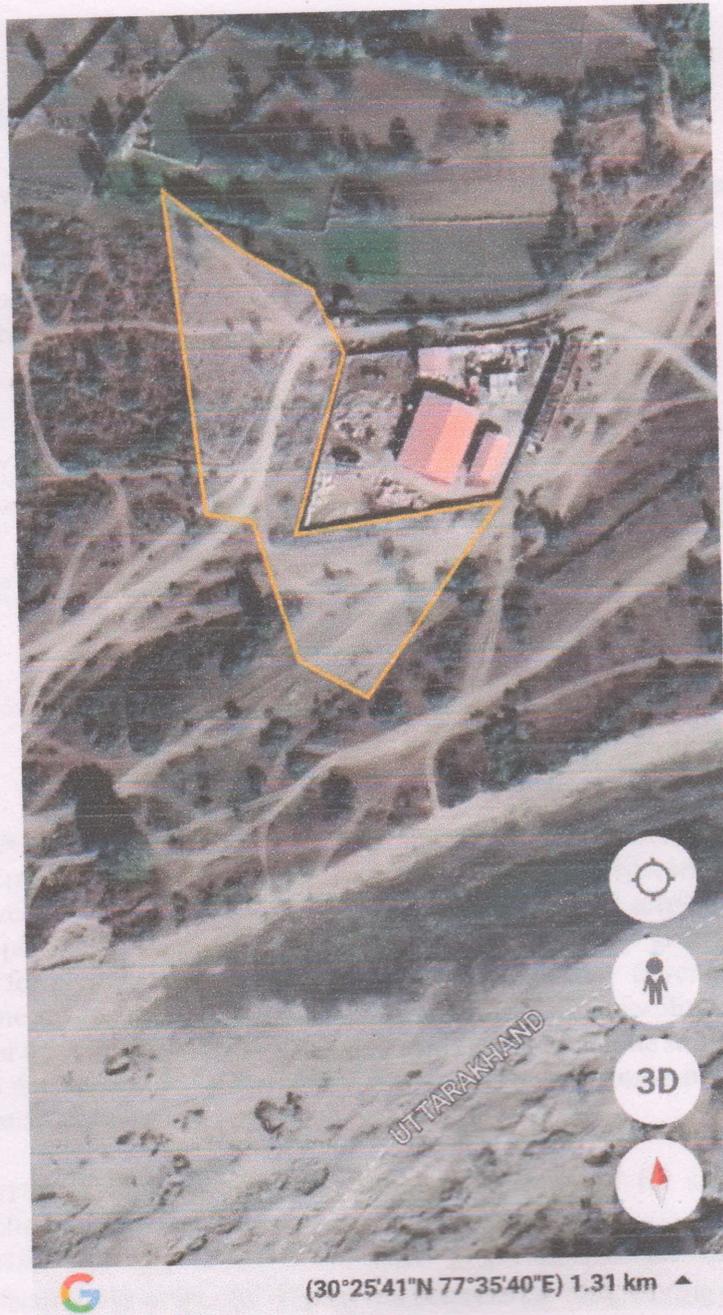


Figure 4: Google Earth Image of the Waste Treatment Facility and the adjoining polygon of proposed Miyawaki plantation



3. Miyawaki Plantation:

Rationale: Miyawakis grow around 10 times faster, are around 30 times denser than a normal forest, and harbour 100 times more biodiversity and are finding rapid acceptance as means of urban afforestation in India. Also, for countries like ours, which are vulnerable to climate breakdown, they provide 30 times more green surface area as well as have 30 times better capacity to absorb carbon dioxide as compared to monoculture plantations.

Miyawaki Forest Layers



Figure 5: A representative Miyawaki Plantation

A typical Miyawaki Plantation has four primary layers to create a more natural forest. The 1) canopy Layer 2) Tree layer 3) Sub tree layer 4) Shrub layer. Native species seedlings are planted on prepared soil, very densely. This creates competition for light and seedlings grow vertically at a rapid space. As per inputs from sugiproject.com, "The denseness of growth provides a greater amount of forage for pollinators and refuge for birds. More canopy cover shades out weed and creates a cool home for insects, plus the increased leaf litter builds fertility and life in the soil." The wide variety of trees make the entire plantation disease resilient. The soil is covered with straw to retain moisture decreasing the watering requirements. The plantation becomes self-sufficient within 2-3 years and nature completely takes over.

The proposed Miyawaki Plantation has been suitably customized for site-specific prevailing conditions. The salient features are as follows:

- The plantation has been chosen to be *dense to create a visual wall* around the waste treatment facility. However, the spacing has been customized to bring down the cost factor. Inspiration has been taken from some cost-effective variants of Miyawaki technique as detailed in the reference list.
- *Evergreen species* have been predominantly chosen for year-round foliage.
- Trees with *higher values of Air Pollution Tolerance Index* have been chosen as they withstand and treat polluting environments better (the scientific literature perused has been appended to the proposal).



- Species as mentioned in the *guidelines of the Central Pollution Control Board* for developing green belts have been incorporated.
- Strict emphasis has been given on choosing *only native species* in line with the best practices of modern-day forestry (listed in section 3.1)

The total cost for the proposed Miyawaki plantation (customized) for the entire area (as demarcated) works out as Rs. 24.595 lakhs (APO attached in section 4).



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3.1 List of Species Proposed* for the Miyawaki (customized) Plantation

S. No	Layer	Species	Scientific Name	Relevance
1	Canopy Layer (30m and above)	1) Semul	<i>Bombax ceiba</i> (D, 30m)	Large canopy tree for enhancing faunal biodiversity.
		2) Tun	<i>Toona ciliata</i> (D, 45m)	High APTI as per Kashyap et. al.
		3) Kadamb	<i>Neolamarckia cecadamba</i> (E, 45m)	Native, umbrella shaped crown and beautiful orange flowers
		4) Baheda	<i>Terminalia bellirica</i> (D, 50m)	An important native, large tree species
2,3	Tree and Sub-Tree Layers (10-30m)	1) Shisham	<i>Dalbergia sissoo</i> (D, 25m)	Recommended by CPCB Guidelines on Green Belts
		2) Karanj	<i>Pongamia pinnata</i> (D, 20m)	Recommended by CPCB Guidelines on Green Belts
		3) Neem	<i>Azadirachta indica</i> (E, 20m)	NO _x , SO _x absorbent and filters dust particles with inherent medicinal properties. High APTI as per various studies
		4) Haadu	<i>Adina cordifolia</i> (D, 20m)	One of the important native tree species
		1) Amula	<i>Emblica officinalis</i> (D, 18m)	One of the most important native trees with medicinal properties
		2) Bamboo	<i>Dendrocalamus strictus</i> (D, 16m, grass)	Fast growing, native, good for raising a quick visual barrier
		3) Ashoka	<i>Saraca indica</i> (E, 10m)	Captures air-borne particles and reduces pollution. High APTI as per various studies.
4	Papri	1) Indian bael	<i>Holoptelea integrifolia</i> (D, 18m)	Large canopy tree having very high APTI as per Paulsamy et. al. 2009
		2) Kachnar	<i>Aegle marmelos</i> (D, 15m)	High APTI as per Paulsamy et. al. 2009
		3) Chakera/garial	<i>Bauhinia variegata</i> (D, 12m)	Attractive visual appeal. In bloom for several months
		4) Chakera/garial	<i>Bauhinia semla</i> (E, 10m)	Important native tree species
		5) Chakera/garial	<i>Bauhinia semla</i> (E, 10m)	Important native tree species



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4	Shrub layer (<10m)	8) Khair	<i>Acacia catechu</i> (D, 15m)	Important native tree species
		9) Indian Laurel	<i>Litsea chinensis</i> (E, 15m)	High APTI as per Dubey et al. 2023
		10) Dheeru	<i>Artocarpus lacucha</i> (D, 15m)	Important middle canopy native tree
		11) Dhak	<i>Butea monosperma</i> (D, 10m)	Attractive visual appeal
		1) Ber	<i>Ziziphus mauritiana</i> (D, 8m)	Species native to the plantation site
		2) Malabar nut	<i>Justicia adhatoda</i> (E, 4m)	Important native species
		3) Vitex	<i>Vitex neerunda</i> (P, 5m)	Important native species
		4) Karonda	<i>Carissa carandas</i> (P, 5m)	Important native species
		5) Karer	<i>Neelum indicum</i> (E, 3m)	Important native species
		6) Senjan	<i>Moringa oleifera</i> (D, 9m)	Important native species
		7) Babool	<i>Acacia nilotica</i> (E, 7m)	Economically important (CF CB) (Guidelines on Green Felts)
5	Others (Herbs/Climbers/Grasses)	8) Aak	<i>Caotrochis procera</i> (P, 1m)	Important native shrub
		9) Dhei	<i>Woodfordia fruticosa</i> (P, 3m)	Important native shrub
		10) Gandhela	<i>Murraya koenigii</i> (E, 6m)	Important native shrub
		11) Ban Mirchi	<i>Murraya paniculata</i> (E, 7m)	Important native shrub
		12) Chattran	<i>Berberis lycium</i> (L, 4m)	Important native shrub
		1) Var. Haldi	<i>Cucumis decipiens</i> (P)	Important native species
		2) Nal	<i>Arundo donax</i>	Important native species
		3) Muij	<i>Saccharim munja</i>	Important native species
		4) Dub	<i>Cynodon dactylon</i>	Important native species

*Subject to availability of plants in nurseries and forests (more native species shall be added according to availability).
 Please Note: E= Evergreen, D=Deciduous, P=Perennial. Trees with higher values of air pollution tolerance (in column 3) refer to the highest value attained as per literature.



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4. The APO for the Miyawaki Plantation (customized) is detailed below:

APPO for customized Miyawaki Plantation at *Shahar nwa* in *Uttara Pradesh Sahil* Forest Division - in reference to OA No. 278/2022 - OA No. 78/2022. *Grar. Par. :hayat Bhitaran Valli (Union Council Ind)*

Sr. No.	Scheme Name	Particulars/Work	Units (in L/s)	Quantity	Approximate cost (Rs.)	Remarks
1	JGT JAND, 278, 2022	Interlink-hair fencing work	L/s	390	7,000	
2		and leveling, carriage of soil, mixing of vermicompost including cost of vermicompost and other materials required etc.	L/s		2,000	
3		Watering of plants in dry season through water tanker (etc).	L/s		1,000	
4		Procurement/urchasing of Manoy, Tree layer plants and shrubs	Lant	700	5,400	The exact numbers may vary as per site specific
5		Planting of plants /Cultivating and felling of plants.	Lant	300	9,000	
6		Procurement and tying of bamboo sticks	Lant	700	2,000	
		Year plantation maintenance including procurement/	L/S	300	7,000	
				5 Year	1,000	

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Sl. No.	Description of plants (or group)	Date of planting	No. of plants	Rate per plant	Total amount
7	Vatc 1 anu Wa d fo five year s st ye ar nd ye ar rd ye ar th ye ar th ye ar	s. 3 5/d y s. 4 0/d y s. 4 5/d y s. 4 0/d y s. 4 5/d y	36€ 36€ 36€ 36€ 36€	1 687 ; 1 640) 1 512 ; 1 425) 1 337 ; 1 000)	2 594 5
8	Total amount	/s	L/s		

Channarayana Miyawadi Plantation

FOR DEVELOPMENT OF RURAL
AND URBAN AREAS
(Approved 22 Nov 2004)



Reference list for (Customized) Miyawaki Plantation

- CPCB (1999). *Programme Objective Series: GUIDELINES FOR DEVELOPING GREENBELTS*. [online] Available at: <https://cpcbenvs.nic.in/scanned%20reports/PROBES-75%20Guidelines%20For%20Developing%20Greenbelts.pdf> [Accessed 22 Nov. 2023].
- Dubey, R., Choudhary, A., Singh, S., Ajay, A., Kumar, S., Kumar, R., Mondal, S. and Singh, V. (2023). *Assessing the impact of air pollution on trees and crops in the Eastern Gangetic Plains of India*. [online] Available at: <https://www.currentscience.ac.in/Volumes/124/08/0956.pdf> [Accessed 20 Nov. 2023].
- gopi (2018). *Beat Air Pollution: Greening with pollution-gobbling trees doubles benefits*. [online] Mongabay-India. Available at: <https://india.mongabay.com/2018/11/world-environment-day-greening-with-pollution-gobbling-trees-doubles-benefits/>.
- Growing an urban forest in Bengaluru, at a fraction of the cost. (2021). *The Times of India*. [online] 25 Sep. Available at: https://timesofindia.indiatimes.com/city/bengaluru/growing-an-urban-forest-in-bengaluru-at-a-fraction-of-the-cost/articleshow/86481036.cms?utm_source=contentofinterest&utm_medium=text&utm_campaign=cppst [Accessed 22 Nov. 2023].
- Kashyap, R., Sharma, R. and Uniyal, S.Kr. (2018). Bioindicator responses and performance of plant species along a vehicular pollution gradient in western Himalaya. *Environmental Monitoring and Assessment*, 190(5). doi:<https://doi.org/10.1007/s10661-018-6682-7>.
- Paulsamy, S. and Senthilkumar, P. (2009). *Identification of Air Pollution Tolerant Tree Species for the Industrial City, Tirupur, Tamil Nadu*. [online] Available at: [http://www.neptjournal.com/upload-images/NL-5-31-\(31\)B-1370com.pdf](http://www.neptjournal.com/upload-images/NL-5-31-(31)B-1370com.pdf).
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- Thakur, J. (2017). *World Environment Day: Five trees that can be Delhi's best bet against pollution*. [online] Hindustan Times. Available at: <https://www.hindustantimes.com/delhi-news/world-environment-day-five-trees-that-can-be-delhi-s-best-bet-against-pollution/story-nlke40kDP0r34e40vZrWCI.html> [Accessed 20 Nov. 2023].