

GREEN POLICY OF INDIAN INSTITUTE OF TECHNOLOGY (INDIAN SCHOOL OF MINES), DHANBAD

1) GREEN COVER

Indian Institute of Technology (Indian School of Mines) is a green campus and the extent of greenery in the campus is around **20% - 25%**. Following species of plants are present in the entire campus:

Ferns, Money Plants, Drocena, Syngonium, Monstera, Bougainvillea, Putranjiva, Kamini, Tecoma, Budha Belly, Phonix, Cassia, Gandhraj, Dwarf Gardenia, Hibiscus, Ashoka, Bakul, Fish tail palm, java, Hedges, Bottle palm, Bottle Brush, Guava, Mango, China palm, Junifer, Semal, The copper pod tree, Chatim, Jacaranda tree, Kadamba, *Azadirachta indica*, *Butea monosperma*, Indian wood tree, Amaltash, Gulmohar, Sal tree, Jungle Jalebi

The salient aspects of the campus beautification by horticulture wing are as follows:

- ❖ Gardens are being watered by treated effluents from Sewage Treatment Plants (STPs)
- ❖ Rose garden is maintained with more than 1000 varieties of various groups
- ❖ Bamboo garden is maintained inside the campus for preservation of natural eco system.
- ❖ **Following pollution control measures are being taken through plantation**
 - a) **For dust and smoke control:** Palash, Peepal, Banyan, Ashoka
 - b) **For noise control:** Neem, Palash, *Mangifera indica* l.
 - c) **For lead pollution control:** Jamun
 - d) **For sulphur di oxide pollution control:** *Albezzia lebbak*, Pride of India and Neem



Moreover cutting of trees is strictly prohibited in the campus. Environmental Advisory Committee (EAC) looks into such requests and submit their recommendations to the competent authority for emergency cases.

2) Water Supply

Water supply in the entire campus is being done through water supplied by Dhanbad Municipal Corporation which caters to 60% requirement of water and 40% requirement is met through pumping the ground water through 15 bore wells and dug wells.

During summer i.e. April to July the supply of water is limited to 3 hours and during post summer i.e. August to March around 5 hours of supply is done to all the buildings in the campus. This trend is being followed from last 5 years.

3) STP Water for Horticulture

Effluent from Sewage treatment plants (STPs) are being utilized for irrigating the fields and gardens at IIT(ISM) Campus. The details of all the areas irrigated by STP effluents is mentioned in Table 1.1

Table 1.1 Details of the areas irrigated by STP effluents at IIT(ISM) Dhanbad

S.No.	Place/ Location	Approx. Area	Irrigation by treated STP water	Work Planning Status	Remarks
1	OVAL GARDEN	1 ACRE	YES	Developed lawn (Carpet grass) and landscape with aesthetic look	
2	UPPER GROUND	SPORTS SECTION	YES USED BY SPORTS SECTION	Planation with teak and kamini inside wall	
3	LOWER GROUND	SPORTS SECTION	YES USED BY SPORTS SECTION		
4	IN FRONT OF ADMIN- TRIANGLE 1	100 SQFT		Decorative planation with buddhabelly and gardenia	
5	IN FRONT OF ADMIN- TRIANGLE 2	100 SQFT			
6	RAMDHAN I CHOWK TO DHAIYA GATE			Planted as Avenue tree – Ashoka and pride of India	Dust resistant trees

5	TEACHERS COLONY CHILDREN PARK	Proposed	PROPOSED		Before monsoon work will start
6	ROSALINE HOSTEL	0.68 ACRE	PROPOSED	Developed lawn and landscape with aesthetic look	Sound resistant plantation and Air filter planation
7	PETROLEUM DEPTT.	5000 SQFT	NIL	Developed lawn and landscape with aesthetic look	Sound resistant plantation and Air filter planation
8	RUBY HOSTEL (NEW)			POT CULTURE	
9	UGC COLONY	3000.SQFT	NIL	Developed lawn and landscaped area	Sound resistant plantation and Air filter planation
10	SEISMOLOGY	3500 SQFT	YES	Developed lawn and landscaped area	Sound resistant plantation and Air filter planation
11	Amber hostel	1ACRE APPROX.	YES	Green lawn developed with <i>Cynadon dactylon</i>	Air filter planation
12	workshop	2000 SQFT	NIL	Sound resistant and Air filter planation	
13	EDC ANNEXE		NIL	Green lawn	
14	MAIN GATE		YES	Decorative plantation	
15	Academic Complex	0.80 ACRE	NIL	Developed lawn with <i>Zoysia japonica</i> and landscaped area	
16	ROCK GARDEN		YES	Preserved the forest tree	
17	SQUARE PARK	5000 SQFT	YES	Preserved the forest tree	
18	NEW LHC	3500 SQFT	NIL	Developed green belt	
19	SWIMMING POOL		YES	Decorative planation	

20	NEW TEACHERS COLONY		NIL	Forest planation	
21	SENIOR ACADEMIC HOSTEL	5000 SQFT	YES	Developed lawn and landscaped area	
22	ADMIN BLOCK	3000 SQFT	YES	Developed garden	
23	STAFF COLONY AND STAFF CLUB		NIL	Forest planation	
24	SCOLOMIN CLUB	10000 SQFT	NIL	To be develop with Bermuda grass (Green)	
25	ECO-VATIKA		NIL	Landscaping view	
26	EMERALD, TOPAZ, JASPAR, SUPPHIRE, DIAMOND, OPAL, ISM CANTEEN	1 ACRE APPROX.	NIL 1.TOPAZ-YES 2.SUPPHIRE,-YES 3.EMERALD-YES	Forest planation with air filter plantation	
27	SQUASH COURT		NIL	Developed garden	
28	BEHIND LOWER GROUND	1 ACRE	YES	To be develop garden with preserve forest planation	Propose
29	SCOLOMIN HOUSE	2 ACRE	YES	Landscaping view with Forest planation with air filter	
30	CENTRAL LIBRARY	1 ACRE	YES	Developed lawn and landscape with aesthetic look	
31	INFRONT OF EMERALD	20000 SQFT	YES	Developed lawn and landscape with aesthetic look	
32	INFRONT OF JASPER	30000 SQFT	NIL	Developed lawn and landscape with aesthetic look	
33	WILD AREA	.5 ACRE		BEHIND ADMIN BLOCK	
34		2 ACRE		BAMBOO GARDEN	
35	OTHERS WILD	4 ACRE			

4) ETP Effluents for flushing of toilets

	TOTAL AREA APPROX.	15 ACRE GREEN BELT	
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40 KLD ETP is installed in Sapphire Hostel (Fig 1) as a pilot project which is treating the grey water for kitchen & bathroom. This treated water is being used for flushing of toilets. Similar ETP are proposed for entire campus area.



Fig 1: ETP installed at Sapphire Hostel

5) Rain Water Harvesting

Entire IIT(ISM) campus is rain water harvested zone (Roof top). There are 55 roof top rain water recharge pits which are contributing to increase in ground water levels during rainy season.

6) Ban on Single Use plastic

Use of single use plastic like bottled mineral water is restricted in campus and the campus is declared as single use plastic free zone. All the food and tea vendors inside campus are instructed to replace plastic by biodegradable materials like compressed leaf utensils etc.

7) Drum Composting

Drum composting is being used to convert raw vegetables into compost in all the hostels which is generating liquid & solid fertilizer. Till date around 6500 L of liquid fertilizer is produced which is utilized in providing nutrients to open fields. Around 4290 kg of dry compost have been produced till date which is supplied to Institute nursery and residential areas.