

ENVIRONMENT AUDIT

STUDY PERIOD (THREE YEARS) 2019-20; 2020-21 & 2021-22

Sustainability study
AUDIT REPORT

Studied for
Cotton University
Panbazar, Guwahati – 781001, Assam, India

Studied in the capacity of
An accredited & Certified Green Building Professional



Valid till **September 2023**

Disclaimer

The Audit Team has prepared this report for the **Cotton University** located at Panbazar, Guwahati – 781001, Assam, India based on input data submitted by the University and analysed by the team to the best of their abilities.

The details have been consolidated and thoroughly studied as per the various guidelines for Green Buildings available in National and International Standards; the report has been generated based on a comparative analysis of the existing facilities and the prerequisites formulated by various standards. The inputs derived are a result of the inspection and research. These will further enhance and develop a Healthy and Sustainable Institution.

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Greenvio Solutions

Developing Healthy and Sustainable Environments

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Introduction

About Cotton University

Cotton University aspires towards a holistic education to develop foundational, employable and entrepreneurial skill among its students while contributing knowledge via cutting-edge research and by upholding the highest standards of ethics and accountability in a bid to provide transformative opportunities. We envision ourselves as a world-class university backed by excellence in teaching, research, and interdisciplinary education, production of new knowledge, leadership and outreach.

Total University Area & Building Spread Area

The **total site area is 25.5 acres** and the **total Built-up area of the University is 4,99,851 sq. ft.** for a total of approximate 4,800 – 5,200 footfalls.

Environment Audit

A flora survey was carried out to identify the plantations.

S. No.	Name	Flora Type
1	<i>Hopea odorata</i>	Tree
2	<i>Acacia auriculiformis A.Cunnex. Benth</i>	Tree
3	<i>Acalypha indica Linn</i>	Shrub
4	<i>Acyranthes aspera Linn</i>	Shrub
5	<i>Acorus calamus Linn</i>	Grass
6	<i>Adhatoda zeylinica Linn</i>	Shrub
7	<i>Aechmea nudicaulis (Linn) Griseb</i>	Grass
8	<i>Aegle marmelos (Linn) Correa</i>	Tree
9	<i>Aeries odorata Lour</i>	Tree
10	<i>Agave americana Linn</i>	Plant
11	<i>Ageratum conyzoides Linn</i>	Tree
12	<i>Albizia lucida (Roxb) Benth</i>	Tree
13	<i>Alocasia macrorrhizos (Linn) G.Don</i>	Grass
14	<i>Aloe vera (Linn.) Burm.f.</i>	Grass
15	<i>Alstonia scholaris (Linn) R.Br.</i>	Tree
16	<i>Alternanthera philoxeroides Griseb</i>	Grass

17	<i>Alternanthera sessilis</i> (Linn.) R.Br.ex DC	Grass
18	<i>Amaranthus spinosus</i> Linn.	Grass
19	<i>Amaranthus tricolor</i> Linn.	Grass
20	<i>Amaranthus viridis</i> Linn.	Grass
21	<i>Amomum aromaticum</i> Roxb.	Grass
22	<i>Amorphophallus bulbifer</i> (Roxb.) Blume	Grass
23	<i>Ananus comosus</i> (Linn.) Merr	Grass
24	<i>Andrographis paniculata</i> (Burm.f.) Wall.ex Nees	Grass
25	<i>Anemopaegma chamberlaynii</i> (Sims) Bur.	Plant
26	<i>Annona reticulata</i> Linn.	Tree
27	<i>Anthurium andraeanum</i> Linden ex Andre	Herb
28	<i>Antigonon leptopus</i> Hook. & Arn	Plant
29	<i>Aquilaria malaccensis</i> Lam.	Tree
	<i>Ardisia solanacea</i> (Poir.) Roxb	Tree
30	<i>Areca catechu</i> Linn.	Tree
31	<i>Argemone mexicana</i> Linn.	Grass
32	<i>Artabotrys uncinatus</i> (Lam.) Merrill	Shrub
33	<i>Artocarpous heterophyllus</i> Lamk.	Tree
34	<i>Asparagus racemosus</i> Willd.	Tree
35	<i>Averrhoa carambola</i> Linn.	Tree
36	<i>Azadirachta indica</i> A. Juss.	Tree
37	<i>Basella alba</i> Linn.	Grass
38	<i>Bauhinia acuminata</i> Linn.	Tree
39	<i>Bixa orellana</i> Linn.	Tree
40	<i>Boehmeria nivea</i> (Linn.) Gaudich	Shrub
41	<i>Boerhavia diffusa</i> Linn.	Herb
42	<i>Bombax ceiba</i> Linn.	Tree
43	<i>Bougainvillea spectabilis</i> Willd.	Climber
44	<i>Bownea coccinea</i> Jacaq.	Tree
45	<i>Brunfelsia pauciflora</i> (Cham. & Schltldl) Benth.	Shrub
46	<i>Bryophyllum pinnatum</i> (Lamarck) Oken	Grass
47	<i>Caesalpinia pulcherrima</i> (Linn.) Sw.	Tree
48	<i>Caladium bicolor</i> (Aiton) Vent.	Grass
49	<i>Callistemon lanceolatus</i> (Sm.) Sweet	Tree
50	<i>Calotropis gigantea</i> (Linn.) W.T. Aiton	Shrub
51	<i>Camellia japonica</i> Linn.	Tree
52	<i>Camellia sinensis</i> (Linn.) Kuntze.	Tree

53	<i>Canna indica</i> Linn.	Grass
54	<i>Cannabis sativa</i> Linn.	Grass
55	<i>Cardiospermum helicacabum</i> Linn.	Climber
56	<i>Carica papaya</i> Linn.	Tree
57	<i>Caryota urens</i> Linn.	Tree
58	<i>Casia fistula</i> Linn.	Tree
59	<i>Catharanthus roseus</i> (Linn.) G.Don	Shrub
60	<i>Celosia argentea</i> Linn.	Herb
61	<i>Centella asiatica</i> (Linn.) Urban	Herb
62	<i>Chaemaecyparis lawsoniana</i> (A.Murray). Parl.	Tree
63	<i>Chenopodium album</i> Linn.	Grass
64	<i>Cinamomum camphora</i> (Linn.) J Presl.	Tree
65	<i>Cinnamomum tamala</i> (Buch.-Ham) T. Nees & C.H. Eberm	Tree
66	<i>Cissus quadrangularis</i> Linn.	Climber
67	<i>Cystrus hystrix</i> D C.	Tree
68	<i>Citrus limon</i> (Linn.) Burm.f.	Tree
69	<i>Citrus maxima</i> (Burm.) Merr	Tree
70	<i>Citrus reticulata</i> Blanco	Tree
71	<i>Clausena lansium</i> (Lour.) Skeels	Tree
72	<i>Cleome rutidosperma</i> DC	Grass
73	<i>Clerodendrum chinense</i> (Osbek) Mabb.	Shrub
74	<i>Clerodendrum colebrookianum</i> Walb.	Shrub
75	<i>Clerodendrum serratum</i> (Linn.) Moon	Shrub
76	<i>Clerodendrum speciosissimum</i> (Drapiez)	Shrub
77	<i>Clerodendrum splendens</i> G. Don.	Tree
78	<i>Clitoria ternatia</i> Linn.	Grass
79	<i>Clyostoma binatum</i> (Thumb.) Sandwith	Plant
80	<i>Cocos nucifera</i> Linn.	Tree
81	<i>Coffea arabica</i> Linn.	Tree
82	<i>Coffea benghalensis</i> Roxb	Shrub
83	<i>Cois lacryma-jabi</i> Lynn	Grass
84	<i>Colocasia esculanta</i> (Linn.) Schott	Grass
85	<i>Commelina benghalensis</i> Linn.	Grass
86	<i>Costus speciosus</i> Koen ex. Retz	Tree
87	<i>Crescentia cujete</i> Linn.	Tree
88	<i>Crinum latifolium</i> Linn.	Grass
89	<i>Cryptomeria japonica</i> (Thub. ex Linn. f.) D.Don	Tree

90	<i>Curcilio orchiodes Gaertn.</i>	Grass
91	<i>Cycas pectinata Buch-Ham</i>	Tree
92	<i>Cycas revoluta Thunb</i>	Tree
93	<i>Cymbidium aloifolium (Linn.) Sw</i>	Tree
94	<i>Cymbopogon citratus (DC.) Stap f.</i>	Grass
95	<i>Cynodon dactylon (Linn.) Pers</i>	Grass
96	<i>Cyperus pilosus Vahl</i>	Grass
97	<i>Cyperus rotundus Linn.</i>	Grass
98	<i>Datura metel Linn.</i>	Grass
99	<i>Delonix regia (Boj. ex Hook) Raf.</i>	Tree
100	<i>Dendrobium aphyllum (Roxb.) C. E. C. Fisch</i>	Grass
101	<i>Dendrobium phalaenopsis Fitzg.</i>	Grass
102	<i>Dieffenbackia amoena Gentil</i>	Plant
103	<i>Dillenia indica Linn.</i>	Tree
104	<i>Dioscorea alata Linn.</i>	Plant
105	<i>Dracaena marginata Lam</i>	Tree
106	<i>Duranta erecta Linn.</i>	Shrub
107	<i>Eclipta prostrata (Linn.) Linn.</i>	Grass
108	<i>Eicchornia crassipes (Mart.) Solms</i>	Grass
109	<i>Elaeocarpus floribundas Blume</i>	Tree
110	<i>Eryngium foetidum Linn.</i>	Grass
111	<i>Erythrina variegata Linn.</i>	Tree
112	<i>Eucalyptus globulus Labill.</i>	Tree
113	<i>Euphorbia hirta Linn.</i>	Grass
114	<i>Euphorbia nerifolia Linn.</i>	Shrub
115	<i>Euphorbia pulcherrima Willd. ex Klotzsch</i>	Shrub
116	<i>Ficus benghalensis Linn</i>	Tree
117	<i>Ficus benamina Linn.</i>	Tree
118	<i>Ficus elastica Roxb. ex Hornem.</i>	Tree
119	<i>Ficus hispida Linn. f.</i>	Tree
120	<i>Ficus pumila Linn.</i>	Tree
121	<i>Ficus religiosa Linn.</i>	Tree
122	<i>Flacourtia jangomas (Lour.) Raeusch</i>	Tree
123	<i>Flemengia strobilifera (Linn.) W.T. Aiton</i>	Shrub
124	<i>Fragaria vresca Linn.</i>	Grass
125	<i>Garcinia lanceifolia Roxb.</i>	Tree
126	<i>Gardenia jasminoides J. Ellis</i>	Shrub

127	<i>Gloriosa superba</i> Linn.	Grass
128	<i>Gnaphalium indicum</i> Linn.	Grass
129	<i>Gnetum gnemon</i> Linn.	Shrub
130	<i>Grevillea robuste</i> A. Cunn. ex R. Br.	Tree
131	<i>Grewia multiflora</i> Juss.	Tree
132	<i>Hedychium coronarium</i> J. Koenig	Grass
133	<i>Hedychium spicatum</i> Sm. in A. Rees	Grass
134	<i>Hedyotis corymbosa</i> (Linn.) Lam	Grass
135	<i>Heliconia rostrata</i> Ruiz & Pavon	Grass
136	<i>Heliconia subulata</i> Ruiz & Pav.	Grass
137	<i>Hibiscus rosa-sinensis</i> Linn.	Shrub
138	<i>Holmskioldia sanguinea</i> Retz.	Shrub
139	<i>Homalomena aromatica</i> (Spreng.) Schott.	Herb
140	<i>Houttuynia cordata</i> Thunb.	Herb
141	<i>Hydrocotyle sibthorpioides</i> Lam.	Grass
142	<i>Impatiens balsamina</i> Linn.	Grass
143	<i>Ipomoea aquatica</i> Forssk.	Plant
144	<i>Ixora coccinia</i> Linn.	Shrub
145	<i>Ixora polyantha</i> Wight.	Shrub
146	<i>Jacquinia arborea</i> Vahl.	Tree
147	<i>Jasminum multiflorum</i> (Burm.f.) Andruos	Shrub
148	<i>Jatropha curcas</i> Linn.	Shrub
149	<i>Juniperus horizontalis</i> Moench	Shrub
150	<i>Justicia gendarussa</i> Burm. f.	Shrub
151	<i>Kyllinga brevifolia</i> Roddt	Grass
152	<i>Lablab purpureus</i> (Linn.) Sweet	Grass
153	<i>Lagerstroemia indica</i> (Linn.) Pers.	Tree
154	<i>Lagerstroemia speciosa</i> (Linn.) Pers.	Tree
155	<i>Lawsonia inermis</i> (Linn.)	Tree
156	<i>Leonurus sibiricus</i> (Linn.)	Grass
157	<i>Leucas plukenetii</i> (Roth.) Spreng	Grass
158	<i>Litsea monopetala</i> (Roxb.) Pers	Tree
159	<i>Livistonia jenkinsia</i> Griff	Tree
160	<i>Ludwigia adscendens</i> (Linn.) H Hara.	Grass
161	<i>Machilus bombycina</i> King ex. Hoof f.	Tree
162	<i>Magnolia acuminata</i> Linn.	Tree
163	<i>Magnolia champaca</i> (Linn) Bail. ex Pierre	Tree

164	<i>Magnolia grandiflora</i> Linn	Tree
165	<i>Magnolia hodgsonii</i> (Hook f. Thompson) H .Keng	Tree
166	<i>Mangifera indica</i> Linn	Tree
167	<i>Manihot esculenta</i> Crantz	Shrub
168	<i>Maranta arundinacea</i> Linn.	Grass
169	<i>Melaleuca leucadendron</i> (Linn.) Linn.	Tree
170	<i>Melia azedarach</i> Linn.	Tree
171	<i>Mentha viridis</i> Linn.	Grass
172	<i>Mesua ferrea</i> Linn	Tree
173	<i>Mikania micrantha</i> Kunth	Plant
174	<i>Mimosa pudica</i> Linn.	Grass
175	<i>Mimusops elengi</i> Linn.	Tree
176	<i>Mirabilis jalapa</i> Linn	Grass
177	<i>Momordica dioica</i> Roxb ex. Wiild	Grass
178	<i>Monochoria hastata</i> (Linn.) Solms	Grass
179	<i>Monstera deliciosa</i> (Liebm)	Plant
180	<i>Moringa oleifera</i> Linn.	Tree
181	<i>Morus alba</i> Linn.	Tree
182	<i>Muehlenbeckia platyclada</i> (F. J Full) Meisn	Shrub
183	<i>Murraya koenigii</i> (Linn.) Spreng	Tree
184	<i>Murraya paniculata</i> (Linn.) Jack	Tree
185	<i>Musa balbisiana</i> Colla	Grass
186	<i>Musa paradisiaca</i> Linn.	grass
187	<i>Mussaenda frondosa</i> Linn.	Shrub
188	<i>Neolamarckiana cadamba</i> (Roxb.) Bosser	Tree
189	<i>Nerium oleander</i> Linn.	Tree
190	<i>Nyctanthes arbor-tristis</i> Linn.	Tree
191	<i>Nymphaea pubescens</i> . Wiild	Grass
192	<i>Ocimum bacilicum</i> Linn.	Grass
193	<i>Ocimum sanctum</i> Linn.	Shrub
194	<i>Opuntia dillenii</i> (Ker gawl.) Haw	Shrub
195	<i>Opuntia vulgaris</i> Mill.	Tree
196	<i>Oroxylum indicum</i> (Linn.) Benth ex Kunj	Tree
197	<i>Oxalis corniculata</i> Linn	Grass
198	<i>Oxalis corymbosa</i> DC	Grass
199	<i>Paederia foetida</i> Linn.	Tree
200	<i>Pandanus facicularis</i> Lamk	Tree

201	<i>Pailionanthe teres (Roxb.) Schltz</i>	Grass
202	<i>Parthenium hysterophorus Linn.</i>	Grass
203	<i>Passiflora edulis Sims</i>	Plant
204	<i>Paulownia fortunei (Seem) Hemsl</i>	Tree
205	<i>Pereskia grandifolia Haw</i>	Shrub
206	<i>Persicaria lapathifolia (Linn. delabre)</i>	Grass
207	<i>Petrea volubilis Linn.</i>	Plant
208	<i>Phaius tanocarvilleae (L'Her) Blume</i>	Grass
209	<i>Philodendron lacerum (Jacq) Schott</i>	Climber
210	<i>Phlogacanthus curviflorus (Wall) Nees.</i>	Shrub
211	<i>Phoenix dactylifera Linn</i>	Plant
212	<i>Phoenix roebelenii O Brien</i>	Tree
213	<i>Phragmites karka</i>	Grass
214	<i>Phyllanthus emblica</i>	Tree
215	<i>Phyllanthus niruri</i>	Grass
216	<i>Pinanga dicksonii</i>	Tree
217	<i>Pinus kesiya</i>	Tree
218	<i>Piper betle</i>	Herb
219	<i>Pistia stratiotes</i>	Grass
220	<i>Plumbago zeylanica</i>	Grass
221	<i>Plumeria rubra</i>	Tree
222	<i>Pogostemon benghalensis</i>	Shrub
223	<i>Pogostemon cablin</i>	Shrub
224	<i>Polyalthia longifolia</i>	Tree
225	<i>Polygonum microcephalum</i>	Grass
226	<i>Pongamia pinnata</i>	Tree
227	<i>Pouzolzia zeylanica</i>	Grass
228	<i>Protulaca oleracea</i>	Grass
229	<i>Prunus jenkinsii</i>	Tree
230	<i>Prunus persica</i>	Tree
231	<i>Psidium guajava</i>	Tree
232	<i>Punica granatum</i>	Tree
233	<i>Rouvolfia serpentina</i>	Shrub
234	<i>Rouvolfia tetraphylla</i>	Shrub
235	<i>Ravanela madagascariensis</i>	Tree
236	<i>Rebutia menuscula</i>	Tree
237	<i>Rhapidophora decursiva</i>	Climber

238	<i>Rhizophora apiculata</i>	Tree
239	<i>Rhyncostyllis retusa</i>	Grass
240	<i>Ricinus communis</i>	Shrub
241	<i>Rorripa indica</i>	Grass
242	<i>Rosa centifolia</i>	Shrub
243	<i>Roystonea regia</i>	Tree
244	<i>Rumex maritimus</i>	Grass
245	<i>Rungia pulviflora</i>	Grass
246	<i>Saccharum officinarum</i>	Grass
247	<i>Sagittaria sagittifolia</i>	Grass
248	<i>Sagittaria trifolia</i>	Grass
249	<i>Samanea saman</i>	Tree
250	<i>Sambucus canadensis</i>	Tree
251	<i>Sapindus mukorossi</i>	Tree
252	<i>Saraca asoca</i>	Tree
253	<i>Scadoxus multiflorus</i>	Grass
254	<i>Scindapsus officinalis</i>	Plant
255	<i>Senna alata</i>	Shrub
256	<i>Senna siamea</i>	Tree
257	<i>Sensevieria roxburghiana</i>	Grass
258	<i>Sesamum indicum</i>	Grass
259	<i>Sida rhombifolia</i>	Shrub
260	<i>Smilax zeylanica</i>	Shrub
261	<i>Solanum nigrum</i>	Grass
262	<i>Solanum torvum</i>	Shrub
263	<i>Spathoglottis plicata</i>	Grass
264	<i>Spilanthes paniculata</i>	Grass
265	<i>Spondias pinnata</i>	Tree
266	<i>Sterculia villosa</i>	Tree
267	<i>Streblus asper</i>	Tree
268	<i>Syzygium cumini</i>	Tree
269	<i>Tabernamontana divaricata</i>	Shrub
270	<i>Tacca integrifolia</i>	Grass
271	<i>Tamarindus indica</i>	Tree
272	<i>Tecoma stans</i>	Tree
273	<i>Tectona grandis</i>	Tree
274	<i>Terminalia arjuna</i>	Tree

275	<i>Terminalia chebula</i>	Tree
276	<i>Thevetia peruviana</i>	Tree
277	<i>Thuja occidentalis</i>	Tree
278	<i>Thysanolaena maxima</i>	Grass
279	<i>Tinospora cordifolia</i>	Plant
280	<i>Tradescantia pallida</i>	Grass
281	<i>Tridax procumbens</i>	Grass
282	<i>Tymphonium trylobatum</i>	Herb
283	<i>Vernonia cinerea</i>	Grass
284	<i>Vitex negundo</i>	Tree
285	<i>Wedelia chinensis</i>	Grass
286	<i>Xanthosoma sagittifolium</i>	Grass
287	<i>Zamia pygmaea</i>	Shrub
288	<i>Ziziphus jujuba</i>	Tree

Table 1: Details of plantations in the premises

There are thousands of plantations in the premises.

