GREEN AUDIT REPORT

L.R.G. Government Arts College for Women - Tirupur-641604
(Affiliated to Bharathiar University, Coimbatore)
NAAC Re-accredited with B Grade
ESTD - 1971

GREEN AUDIT REPORT

SUBMITTED BY

DEPARTMENT OF BOTANY

L.R.G. GOVERNMENT ARTS COLLEGE FOR WOMEN,

TIRUPUR-641 604

GREEN AUDIT

PREPARED BY

DEPARTMENT OF BOTANY

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SUBMITTED TO

THE PRINCIPAL

SUBMITTED BY

EXPERT COMMITTEE

ACKNOWLEDGEMENT

I AM Dr. T. BALASARAVANAN, ASSISTANT PROFESSOR AND HEAD, DEPARTMENT OF BOTANY, L.R.G. GOVERNMENT ARTS COLLEGE FOR WOMEN, TIRUPUR IS GRATEFUL TO THE PRINCIPAL, Dr. M.R.YEZHILI AND IQAC COORDINATOR Dr. M. KRISHNAVENI OF THE L.R.G. GOVERNMENT ARTS COLLEGE FOR WOMEN, TIRUPUR, TAMIL NADU, FOR PROVIDING NECESSARY FACILITIES AND CO-OPERATION EXTENDS DURING THE GREEN CAMPUS AUDIT. THIS HELPED US IN MAKING THE AUDIT A GLORIOUS SUCCESS. I ALSO THANK ALL THE DEPARTMENT HEADS, TEACHING AND NON-TEACHING STAFF MEMBERS FOR RENDERING SUPPORT IN MAINTAING OUR CAMPUS AS GREEN.

Dr. T. BALASARAVANAN

CONTENTS

ABOUT THE COLLEGE

L.R.G. Government Arts College for Women, Tirupur has a dynamic history and an outstanding reputation as one of the Government Institutions exclusively meant for the women students among the others in Tamil Nadu, from the day of its inception on 15th July, 1971. In 1972, the noble objective of establishing a better infrastructure for the women pupils became feasible by the donation of 22 acres of land made by the family of the philanthropist Shri L.R.G. Naidu, whose name is still associated with the nomenclature of the Institution. The greatest vision of educating the womenfolk began with just 221 students at the origin. Presently, the College is a colossal Banyan Tree, which is offering shelter to the students from all strata of the society. The inception and the growth of the College is a milestone in the history of Higher Education, as it stands to be the One and Only Government Women's College for three Major districts of Tamil Nadu viz., Coimbatore, Tirupur and Erode. The College is committed to providing innovative, high quality instruction that empowers students to become lifelong learners and responsible citizens who value Scholarship, Diversity and the Pursuit of Truth. Since the College is situated in a semi-rural setting where people of heterogeneous nature from across the country exist for their employment opportunities, the medium of instruction is both in the Regional Language Tamil and the Second Language English.

Initially, the Undergraduate Departments of Tamil and History were originated in 1972 and in 1974 respectively in the Arts Stream followed by the Department of Zoology in the Science Category. Later, in 1977, two additional courses viz., English and Mathematics were also added to the existing Undergraduate courses. Since there had been a great demand for Science courses, the Department of Chemistry, in 1980, and the Department of Physics in 1985 were also commenced. The Department of Economics was introduced in 1998. In the journey of the evolution of L.R.G. Government Arts College for Women, the year 2003 is a landmark, as the Postgraduate programmes such as Tamil, English and Mathematics were established. Correspondingly, at the undergraduate level, the need-based courses like Physics C.A. and B.Com. C.A. was added. To enhance the employability of the women students, the Career-Oriented courses such as B.Com. in 2004 and B.Sc. Computer Science in 2005 were introduced. As a part of the growth of the Institution, in 2009, M.Sc. Computer Science was also commenced.

BOTANICAL GARDEN

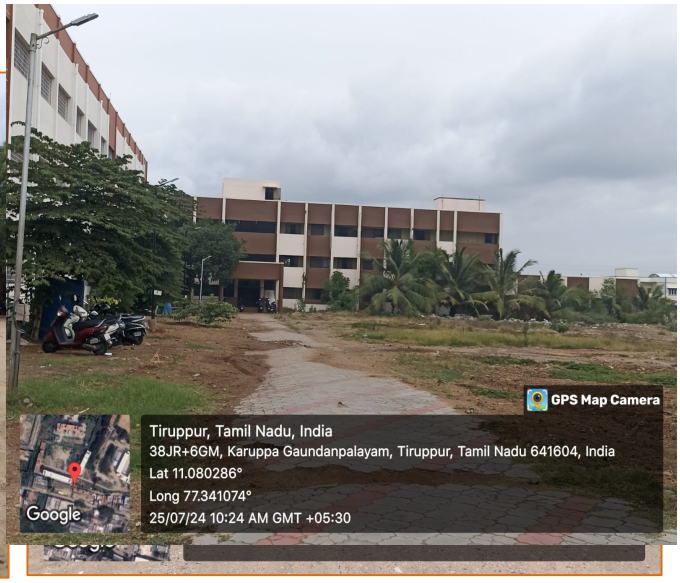
A botanical garden is established in college campus by the Department of Botany and maintained by the undergraduate students of Botany. There are more than 50 medicinal plants in the form of herbs, shrubs and trees in the garden. This garden also comprises of certain ornamental plants, fruit bearing plants and butterfly host plants. The plants present in the college make the campus green and beautiful.

ENVIRONMENT FRIENDLY CAMPUS

Our institution is known for its Green Campus where environmental friendly practices and education combine to promote sustainable and eco-friendly practices in the campus and around the campus. The green campus concept offers the institution an opportunity to take the lead in redefining its environmental culture through inspiring environmental ethics among students and staff's. The College also promotes "Clean and Green" campus through adopting, practicing and promoting environmental friendly practices among students and staff to generate Eco-consciousness among them and in the World around them. Creating green spaces and maintaining natural landscapes on campus enhance biodiversity and improve native plantings. Green panorama and medicinal plant gardens can contribute to a healthier and more sustainable to environment. In recent years, the growing concern about climate change and environmental sustainability has prompted institutions worldwide to take action toward creating a greener and more eco-friendly environment. One significant initiative that educational institutions have embraced is the concept of the "Green Campus". The first step of the Go Green Programme involves establishing a viable Green-Campus Committee like Rotaract, Eco Club and NSS within the organizational structure of the Institute. The Institute has to work out the time bound strategies to implement green campus initiative and planning to achieve the aim of developing a clean and green campus. Our initiative will include working with students, faculty and support staff to nurture a culture of self-sustainability and make the entire campus environmental friendly. The Green Campus Initiatives (GCI) will enable us to develop the campus clean as a living laboratory and green vegetation.

LANDSCAPING WITH TREES AND PLANTS

Landscaping with trees, plants, campus flora, medicinal plant garden and ornamental plants were maintaining our campus for initiatives of green campus policy. Every year during rainy season, Botany department collaboration with NSS, Eco Club, Rotaract of our College committee members take the initiative of plantation inside the College campus. The Vanam Foundation of India, Tirupur and promote different NGO and institute for plantation. The our college campus has developed Coconut tree 6 plants, Jamun tree (Naval) - 5, *Terminalia cadaba* (Batham) - 3, and State tree of Asian Palmyra palm (*Borassus flabellifer*) - 4 and medicinal plant garden, avenue trees for ornamental plants were maintained. Also campus having many tree plants such as neem, banyan, jarul, arjun tree, java plum, Portia tree, Albizia, Gulmohar, Ficus and Mahilam have been planted.



AIMS AND OBJECTIVES OF GREEN CAMPUS AUDIT

- To distinguish the inventiveness taken towards establishing and developing the green campus college
- To grow a large number of oxygen releasing and carbon dioxide assimilating plants in the campus and give a pure air
- To identify and provide baseline information to assess threat and risk to the ecosystem
- To resolve different environmental threats to the ecosystem.
- To assess nurture the nature of an Institution campus in terms of trees, herbs, shrubs, climbers, lianas, lawns and reflected in reducing the environmental pollution, biodiversity conservation, landscape management and green vegetation.

IMPORTANCE OF GREEN AUDITING

Green campus audit may be beneficial to the campus for improving the greenery activities like planting and management around the college campus. Green campus audit is a kind of teaching and learning of planting a huge number of trees in the college campus, which is helpful to each and every students and faculties to know the environmental factors. It is necessary to conduct green audit frequently because students and staff members should aware of the green audit and its beneficial effects in order to save planet by means of 'Go green concept' which in turn support to the environmental system and where they are retaining the campus eco-friendly manner.

BENEFITS OF THE GREEN AUDITING

There are several benefits on conduct of green audit by the Institution which may be definitely useful to improve the College campus significantly based on the audit report. The green campus audit contained methodology followed and both qualitative and quantitative measurements including physical observation of greeneries in terms of growing of terrestrial and aquatic plants and birds in the campus. The following emphasize most valuable of benefits of green audit:

- Documentation of the number of oxygen releasing and carbon dioxide assimilating plants planted in the College campus to give pure atmosphere air

- Recommendation in use of biofertilizers, organic and green manures, cow dung manures and farmyard manures for the cultivation of plants to protect the environmental health

- Conduct of outreach programmes for dissemination of Green Campus motto and Green pledge initiatives through Eco club, Rotaract club, Fine Arts club, Youth Red Cross unit, NCC/Student Force and NSS bodies.

- The plants available in the campus must be tagged with their common name and Botanical name for the stakeholders to impart the knowledge on medicinal and ornamental and horticultural values of plant varieties

- Best practices followed on green campus initiatives in the Institution listed and disseminated among the stakeholders

- Recommendations for improving the green initiatives, planning and efforts in the campus after audit report to improve further.

PROCEDURES FOLLOWED IN GREEN CAMPUS AUDIT

Green campus audit is a structured process of documenting the credentials in terms of number of trees, herbs, shrubs and climbers reflected in reducing the environmental pollution and useful for biodiversity conservation, landscape management and maintain natural vegetation. It is a kind of a practiced tool for assessing the green campus.

PLANT SPECIES IN THE LRG CAMPUS

The plant species were collected across the LRG College campus and subjected to botanical identification (botanical name, family and habit) and anthropogenic disturbances to the natural vegetation in campus. Plants were freshly collected and their digital photographs were also taken. The collected plant specimens have been identified using taxonomic literatures (Gamble and Fischer, 1972; Matthew, 1983; Nair and Henry, 1983; Henry *et al*., 1989; Chandrabose and Nair, 1988). Further, their identification was confirmed by matching with authentic specimens in the Madras Herbarium (MH), Botanical Survey of India (BSI), Southern Circle, Coimbatore, Tamil Nadu, India. Following plant species are identified, documented and labelled as a part of managing green campus initiative in our college.

S. NO	HABIT	BOTANICAL NAME	VERNACULAR NAME
1	Tree	*Terminalia catappa* L.	Badam tree
2	Tree	*Annona squamosa* L.	Setamaram
3	Tree	*Azadirachta indica*	Neem tree
4	Tree	*Syzygium cumini*	Naval maram
5	Tree	*Terminalia arjuna*	NeerMaruthu
6	Tree	*Pongamia pinnata*	Pungan
7	Tree	*Delonix regia*	Gulmohar
8	Tree	*Ficus bengalensis*	Alamaram
9	Tree	*Albizia lebbeck*	Vagai
10	Tree	*Thespesia populinifolia*	Poovarasu
11	Tree	*Ficus racemosa*	Aathi
12	Tree	*Mimusops elengi*	Mahilam
13	Tree	*Cocos nucifera*	Coconut
14	Tree	*Borassus flabellifera*	Panaimaram
15	Tree	*Leucaena leucocephala*	Subapul
16	Tree	*Muntingia calabura*	Sakaraipalam
17	Tree	*Polyalthia longifolia*	Asokamaram
18	Tree	*Millingtonia hortensis*	Maramalli
19	Tree	*Cassia fistula*	Sarakondrai
20	Tree	*Tamarindus indicus*	Puliamaram
21	Tree	*Alstonia scholaris*	Eluelaipalai
22	Tree	*Spathodea campanulata*	Flame of forest
23	Tree	*Samania saman*	Sleeping tree
24	Tree	*Lagerstroemia* speciosa	Jarul
25	Tree	*Acacia Sp*	Velvalmaram
26	Tree	*Canophyllum inophyllum*	Punnai

27	Tree	*Tectona grandis*	Thekku
28	Tree	*Ficus religiosa*	Arasamaram
29	Tree	*Zyzyphus zizypha*	Elanthai
30	Tree	*Holarrhena antidysenterica*	Aathimaram
31	Tree	*Moringa olerifera*	Thuthuvalai
32	Tree	*Tecoma stanes*	Tecoma
33	Tree	*Wrightia tinctoria*	Palai
34	Tree	*Madhuca longifolia*	Eluppai
35	Tree	*Manjifera indica*	Mango
36	Tree	*Ficus microcarpa*	Echi
37	Tree	*Pithocelobium dulce*	Kodukapuli
38	Tree	*Manjifera indica*	Mango
MEDICINAL PLANTS			
39	Climber	*Solanum trilobatum*	Vetiver
40	Herb	*Vetveria zizanioides*	Thiruneetrupachai
	Herb	*Ocimum basilicum*	Kalmulaiyaan
41	Herb	*Carallu maatteunata*	Ponnanganni
42	Herb	*Alternanthera sessilis*	Adathoda
43	Herb	*Adathoda vasica*	Pencil cactus
44	Herb	*Euphorbia tirucalli*	Butterfly pea
45	Climber	*Clitoria ternate*	Veld grape
46	Climber	*Cissus quadrangularis*	Gymnema
47	Climber	*Gymnema sylvestre*	Kuppaimeni
48	Herb	*Acallyphaindica*	Marul
49	Herb	*Sansevieria roxburghiana*	Marvel-of-peru
50	Herb	*Mirabilis jalapa*	Aloe vera
51	Herb	*Aloe vera*	Black nightshade
52	Herb	*Solanum nigrum*	Wild onion

53	*Herb*	*Scilla indica*	Lippia alba
54	*Herb*	*Lippia nodiflora*	Shame plant
55	*Herb*	*Mimosa pudica*	Mugwort
56	*Herb*	*Artemisia vulgaris*	Mustard greens
57	*Herb*	*Brassica juncea*	Fennel
58	*Herb*	*Foeniculum vulgare*	Asthma-plant
59	*Herb*	*Euphorbia hirta*	Pasalaikeerai
60	*Herb*	*Basella alba*	Marvel of peru
61	*Herb*	*Mirabilis jalapa*	Betel
62	*Creeper*	*Piper betle*	Sweet leaf bush
63	*Herb*	*Sauropus androgynus*	Grey leaf heliotrop
64	*Shrub*	*Heliotropium ovalifolium*	Grey leaf heliotrop
65	*Herb*	*Eclipta alba*	Karisalankanni
66	*Herb*	*Amorphophallus campanulatus*	Elephant foot yam
67	*Climber*	*Cardiospermum halicacabum*	Ballon vine
68	*Herb*	*Zingiber officinale*	Zinger
69	*Creeper*	*Quisqualis amalabaric*	Rangoon creeper
70	*Herb*	*Waltheriaindica*	Sleepy morning
71	*Shrub*	*Justicia gendarussa*	Chaste tree
72	*Herb*	*Cymbopogan citratus*	Lemon grass
73	*Shrub*	*Evolvulus alsinoides*	Slender dwarf morning-glory
74	*Herb*	*Andrographis alata*	Periyanangai
75	*Herb*	*Costus specious*	Koshtam
76	*Herb*	*Ocimum Sanctum*	Holy basil (thulasi)
77	*Herb*	*Achyrathus aspera*	Nauruvi
78	*Climber*	*Euphorbia pedilanthus*	Zigzag plant
79	*Herb*	*trigonella foenum-graecum*	Fenugreek (methi)

80	*Herb*	*Cuppressus sempervirens*	Suram
81	*Herb*	*Vinca rosea*	Madagascar perivinkle
82	*Herb*	*Curcuma longa*	Turmeric
83	*Shrub*	*Asparagus racemosus*	Asparagus root
84	*Herb*	*Dolichus biflorus*	Horse gram
85	Herb	*Jatropha glandulifera*	Bellyache bush
86	Climber	*Coccinia indica*	Ivy gourd
87	Herb	*Vitex negundo*	Nochi
88	Shrub	*Lawsonia inermis*	Henna
89	*Tree*	*Scoparia dulcis*	Sweet broomweed
90	*Tree*	*Andrographis paniculate*	Green chiretta
91	*Shrub*	*Phyllanthus emblica*	European Gooseberry
92	*Herb*	*Hibiscus rosasinensis*	Shoe black plant
93	*Tree*	*Moringa oleifera*	Drumstick tree
94	*Tree*	*Melia azedarach*	Meliadubia
95	*Tree*	*Murrakoenigii*	Curry leaves
96	*Tree*	*Crinum asiaticum*	Poison bulb
97	*Herb*	*Nyctanthus arbor-tristis*	Night – flowering jasmine
98	Herb	*Datura metal*	Datura
99	*Tree*	*Feronia elephantarum*	Vilaa
100	*Tree*	*Vitex negundo*	Nochi
101	*Herb*	*Trianthema portulacastrum*	Mukrattai
102	*Herb*	*Boerhavia diffusa*	Satnai
103	*Climber*	*Coccinia indica*	Kovaikai
104	*Climber*	*Ipomea obscura*	Ipome
105	*Herb*	*Alternenthera sessilis*	Ponnaganni
106	*Herb*	*Cleome viscosa*	Cleome

107	*Herb*	*Gomphrena serrata*	Gomphren
108	*Herb*	*Gynandropsis gynandra*	Gynandra
109	*Herb*	*Datura metal*	Oomathai
110	*Herb*	*Acalypha indica*	Kuppaimeni
ORNAMENTAL PLANTS			
111	*Herb*	*Cynodon dactylon*	Arugampul
112	Shrub	*Clerodendrun inerme*	Sangam kuppi
113	Shrub	*Ixora coccinia*	Idlipoo
114	Herb	*Crinum latifolium*	Crinum
115	Herb	*Oldenlandia umbellatum*	Oldenlandia
BUTTERFLY HOST PLANTS			
116	Shrub	*Asclepias currasivica*	Milkweed
117	Shrub	*Lantana camera*	Lantana
118	Herb	*Weddlia chinensis*	Yellow Karisalakanni
119	Herb	*Heliotropium arborensis*	Heliotropium
120	Shrub	*Hibiscus rosa-chinensis*	Semparuthi
121	Herb	*Veronia cinera*	Aster
122	Herb	*Ocimum americanum*	Naithulasi
123	Herb	*Crotalaria retusa*	Salasalapai
124	Shrub	*Ixora coccinea*	Idlipoo
125	Herb	*Barleria cristata*	Philippine violet
MONOCOTYLEDON PLANTS			
126	Grass	*Cynodon dactylon*	Arugampul
127	Grass	*Setaria viridis*	Kattusamai
128	Grass	*Eleusine indica*	Indian goose grass
129	Grass	*Chloris barbataa*	Finger grass
130	Grass	*Dactyloctenium aegyptium*	Button grass

GREEN CAMPUS AUDIT OBSERVATIONS

It covers both qualitative and quantitative measurements including physical observation of greeneries in terms of growing of terrestrial, aquatic plants and animals in the natural and planted vegetation and their maintenance. Botanical garden, landscape management design and plantation are playing important role in environment sustainable development in the College campus. An account of a large number of Oxygen releasing and Carbon dioxide assimilating plants were planted in the Campus are taken into consideration to give pure atmosphere air. Establishment of different types of gardens in the campus, rainwater harvesting system, operation of water irrigation and water management methods may be adopted to improve the green campus.

BEST PRACTICES FOLLOWED ON GREEN CAMPUS INITIATIVES

- **Botanical Garden**: The Department of Botany, LRG College has developed 'Botanical garden' for establishing germplasm assemblage of medicinal and valuable plants planting in which a large number of trees, shrubs and herbal species were planted together with a minimum distance covering fruits yielding, nuts, horticultural and timber yielding plants are also planted.

- **Tree Planting at Our College Campus**: Planting trees in our College campus was practiced by Staff's and students in various programmes. They are enveloped in a culture that reveres nature and prioritizes its preservation. In addition to traditional tree planting, College has also expanded its green footprint with native plants

encircling the campus. This innovative approach facilitates efficient management and monitoring of plants, ensuring their continued health and growth. Additionally, it serves as an educational resource, providing valuable insights into the campus's botanical diversity. With robust support from the college management, staff, and student bodies, this initiative has flourished, embodying the institution's commitment to a greener future.

- **Medicinal Plants Exhibition:** The Medicinal Plant Exhibition was organised by Department of Botany and Exhibition was chaired & inaugurate by the Dr. M.R. Yezhili, Principal and Dr. R. Gurusamy, Former Head, Department of Botany. In his presidential address she focused on the importance of Medicinal plants and the Conservation and sustainable use of medicinal plant. In the exhibition student Prepare informative posters and present the potted plant and parts of plant. The students collected more than 50 varieties of plants which are of medicinal importance. They showcased the importance of growing medicinal plants. The main idea behind the exhibition was the vision of Department of Botany to conserve nature and develop a complete knowledge about nature.

CONCLUSION

The LRG College has taken enormous efforts to maintain green campus to the students, research scholars, staff members and parents in a sustainable manner which reflects the importance of the environment. It is conducting a large number of activities for the benefit students and peoples without disturbing the natural environment, landscape management and natural vegetation. The College Campus is maintaining more than 70-80 % of the green cover area after building construction along with 60% of natural vegetation and & 70 % planted vegetation. A maximum number of more oxygen releasing and carbon dioxide assimilating plants are being maintained to provide pure atmosphere to the students and teachers. The Institution has created medicinal, herbal and ornamental gardens at small scale level for establishing a massive reforestation/afforestation planting programme in which a large number of trees were planted together for providing an eco-friendly atmosphere to form Nurture the Nature.

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RECOMMENDATIONS OF GREEN CAMPUS AUDITOR

The College is well maintained and the environment is clean & green
well balanced ecosystem with diversity of species
Rich flora and fauna makes the College green and pleasent
I strongly recommend the College to go ahead for accreditation process.

17/08/19

EXPERT COMMITTEE

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