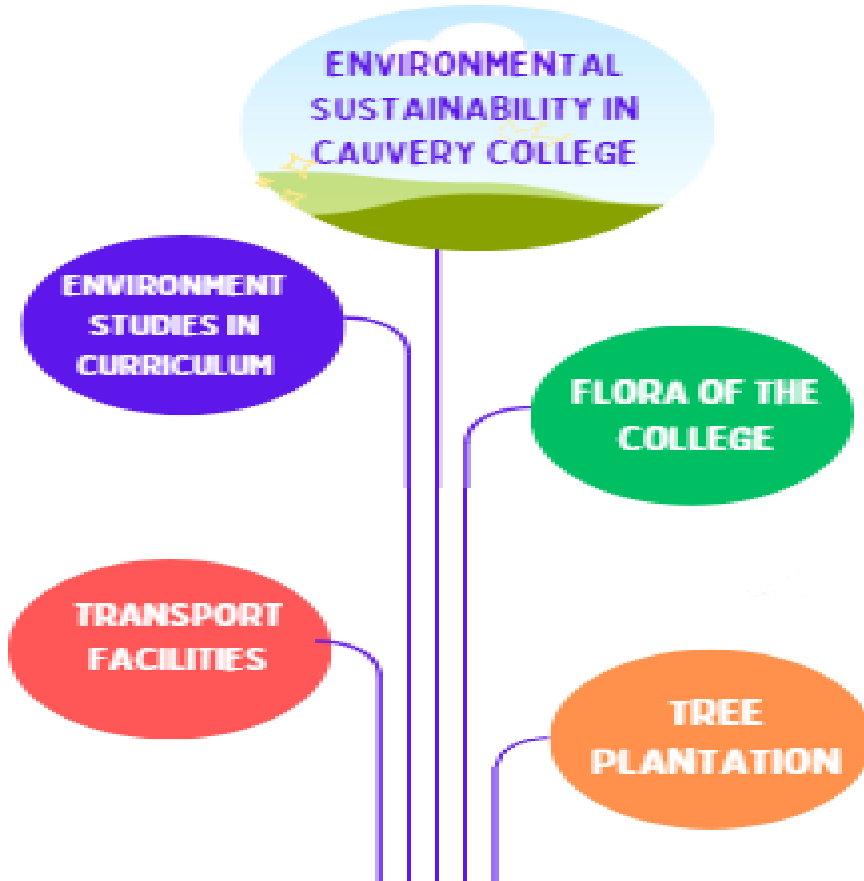




Key Indicator – 7.1 Institutional Values and Social Responsibilities

7.1.5 Green Campus Initiatives

Relevant Document - Environment Sustainability



Our Green Campus

<https://youtu.be/p09KPNK3wGw>

Environment Studies	<u>CLICK HERE</u>
Flora of the College	<u>CLICK HERE</u>
Tree Plantation	<u>CLICK HERE</u>
Transport Facilities	<u>CLICK HERE</u>



Environmental Studies in Curriculum

**Environmental Studies is part of the curriculum
for all first-year students.**



CRITERION VII

ENVIRONMENT SUSTAINABILITY

Semester : II	Internal Marks: 100			
COURSE CODE	COURSE TITLE	CATEGORY	HRS/WEEK	CREDITS
22UGEVS	ENVIRONMENTAL STUDIES	ABILITY ENHANCEMENT COMPULSORY COURSE	2	2

Course Objective

To train the students to get awareness about total environment and its related problems and to make them to participate in the improvement and protection of the environment.

Course Outcome and Cognitive Level Mapping

On the successful completion of the course, students will be able to

CO Number	CO Statement	Cognitive Level
CO1	Outline the nature and scope of environmental studies	K1, K2
CO2	Illustrate the various types of natural resources and its importance.	K2
CO3	Classify various types of ecosystem with its structure and function.	K2, K3
CO4	Develop an understanding of various types of pollution and biodiversity.	K3
CO5	List out the various types of social issues related with environment and explain protection acts	K4, K5

Mapping of CO with PO and PSO

Cos	PSO1	PSO2	PSO3	PSO4	PSO5	PO1	PO2	PO3	PO4	PO5
CO1	2	2	2	3	3	2	2	3	2	3
CO2	3	3	2	3	3	3	2	3	3	3
CO3	2	3	3	2	3	3	3	3	3	2
CO4	2	3	3	3	2	3	2	3	3	3
CO5	3	3	2	3	3	3	3	2	3	3

"1" - Slight (Low) Correlation
"3" - Substantial (High) Correlation

"2" - Moderate (Medium) Correlation
"-" indicates there is no correlation



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**CRITERION VII****ENVIRONMENT SUSTAINABILITY**

Syllabus

UNIT	CONTENT	HOURS	COS	COGNITIVE LEVEL
I	Introduction to environmental studies Definition, scope and importance. Need for public awareness	06	CO1, CO2, CO3, CO4	K1, K2, K3,
II	Natural Resources: Renewable and non-renewable resources: Forest resources: use and over-exploitation, deforestation, case studies. Timber extraction, mining, dams and their effects on forests and tribal people. Water resources: Use and over-utilization of surface and ground water, floods, drought, conflicts over water, dams benefits and problems. Mineral resources: Use and exploitation, environmental effects of extracting and using mineral resources. Food resources: World food problems, changes caused by agriculture and overgrazing, effects of modern agriculture, fertilizer-pesticide problems, water logging, salinity. Energy resources: Growing energy needs, renewable and non-renewable energy sources, use of alternate energy sources. Case studies. Land resources: Land as resources, land degradation, man induced Landslides, soil erosion and desertification. Role of an individual in conservation of natural resources.	06	CO1, CO2, CO3, CO4	K1, K2, K3
III	Ecosystems Concept, Structure and function of an ecosystem. Producers, consumers and decomposers Energy flow in the ecosystem and Ecological succession. Food chains, food webs and ecological pyramids Introduction, types, characteristic features, structure and function of the following ecosystem:-Forest ecosystem, Grassland ecosystem and Desert ecosystem, Aquatic ecosystems, (ponds, streams, lakes, rivers, oceans, estuaries)	06	CO1, CO2, CO3, CO4	K1, K2, K3



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IV	<p>Biodiversity and Environmental Pollution Introduction, types and value of biodiversity. India as a mega diversity nation. Hot-spots of biodiversity. Threats to biodiversity: habitat loss, poaching of wildlife, man-wildlife conflicts. Endangered and endemic species of India. Conservation of biodiversity: In-situ and Ex-situ conservation of biodiversity. Definition, Causes, effects and control measures of:</p> <p>a. Air Pollution b. Water Pollution c. Soil Pollution d. Noise pollution e. Nuclear hazards</p> <p>Solid waste Management: Causes, effects and control measures of urban and industrial wastes. E-Waste Management: Sources and Types of E-waste. Effect of E-waste on environment and human body. Disposal of E-waste, Advantages of Recycling E-waste. Role of an individual in prevention of pollution. Disaster management: floods, earthquake, cyclone and landslides.</p>	06	CO1, CO2, CO3, CO4, CO5	K1, K2, K3, K4, K5
V	<p>Social Issues and the Environment Water conservation, rain water harvesting, watershed management. Climate change, global warming, acid rain, ozone layer depletion, Wasteland reclamation. Environment Protection Act Wildlife Protection Act. Forest Conservation Act. Population explosion - Family Welfare Programmes Human Rights - Value Education. HIV/ AIDS - Women and Child Welfare. Role of Information Technology in Environment and human health.</p>	06	CO1, CO2, CO3, CO4, CO5	K1, K2, K3, K4, K5



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VI	Self-Study for Enrichment	-	CO1,	K1,
	(Not to be included for End Semester Examination)		CO2,	K2,
	Global warming – climate change – importance of ozone – Effects of ozone depletion. Biogeography – history, ecology and conservation. International laws and policy		CO3,	K3,
			CO4,	K4,
			CO5,	K5

References

1. Beard, J.M. 2013. Environmental Chemistry in Society (2nd edition). CRC Press.
2. Girard, J. 2013. Principles of Environmental Chemistry (3rd edition). Jones & Bartlett.
3. Brebbia, C.A. 2013. Water Resources Management VII. WIT Press.
4. Pandit, M.K. & Kumar, V. 2013. Land use and conservation challenges in Himalaya: Past, present and future. In: Sodhi, N.S., Gibson, L. & Raven, P.JI. Conservation Biology: Voices from the Tropics. pp. 123-133. Wiley-Blackwell, Oxford, UK (file:///Users/mkpandit/Downloads/Raven%20et%20al.%202013.%20CB%20Voices%20from%20Tropics%20(2).pdf).
5. Hites, R.A. 2012. Elements of Environmental Chemistry (2nd edition). Wiley & Sons.
6. Harnung, S.E. & Johnson, M.S. 2012. Chemistry and the Environment. Cambridge University Press.
7. Boeker, E. & Grondelle, R. 2011. Environmental Physics: Sustainable Energy and Climate Change. Wiley.
8. Forinash, K. 2010. Foundation of Environmental Physics. Island Press.
9. Evans, G.G. & Furlong, J. 2010. Environmental Biotechnology: Theory and Application (2nd edition). Wiley-Blackwell Publications.
10. Williams, D. M., Ebach, M.C. 2008. Foundations of Systematics and Biogeography. Springer
11. Pani, B. 2007. Textbook of Environmental Chemistry. IK international Publishing House.
12. Agarwal, K.C. 2001 Environmental Biology, Nidhi Public Ltd Bikaner.

Pedagogy

Chalk and talk, PPT, Discussion, Assignment, Quiz, Seminar

Course Designer

Dr.B.Thamilmaraiselvi

Assessment Rubrics for 100 Marks

1. Documentary (or) Poster Presentation (or) Elocution-25 Marks
2. Quiz (or) MCQ Test-25 Marks
3. Album Making (or) Case study on a topic (or) Field Visit -25 Marks
4. Essay Writing (or) Assignment (Minimum 10 pages) -25 Marks

There will be no End Semester Examination for this course. However, the subject teacher will evaluate the above mentioned components based on the performance of the students and submit the marks out of 100 (in the format to be supplied by the COE) with the approval of the concerned Head of the Department to the COE along with CIA marks of other courses.



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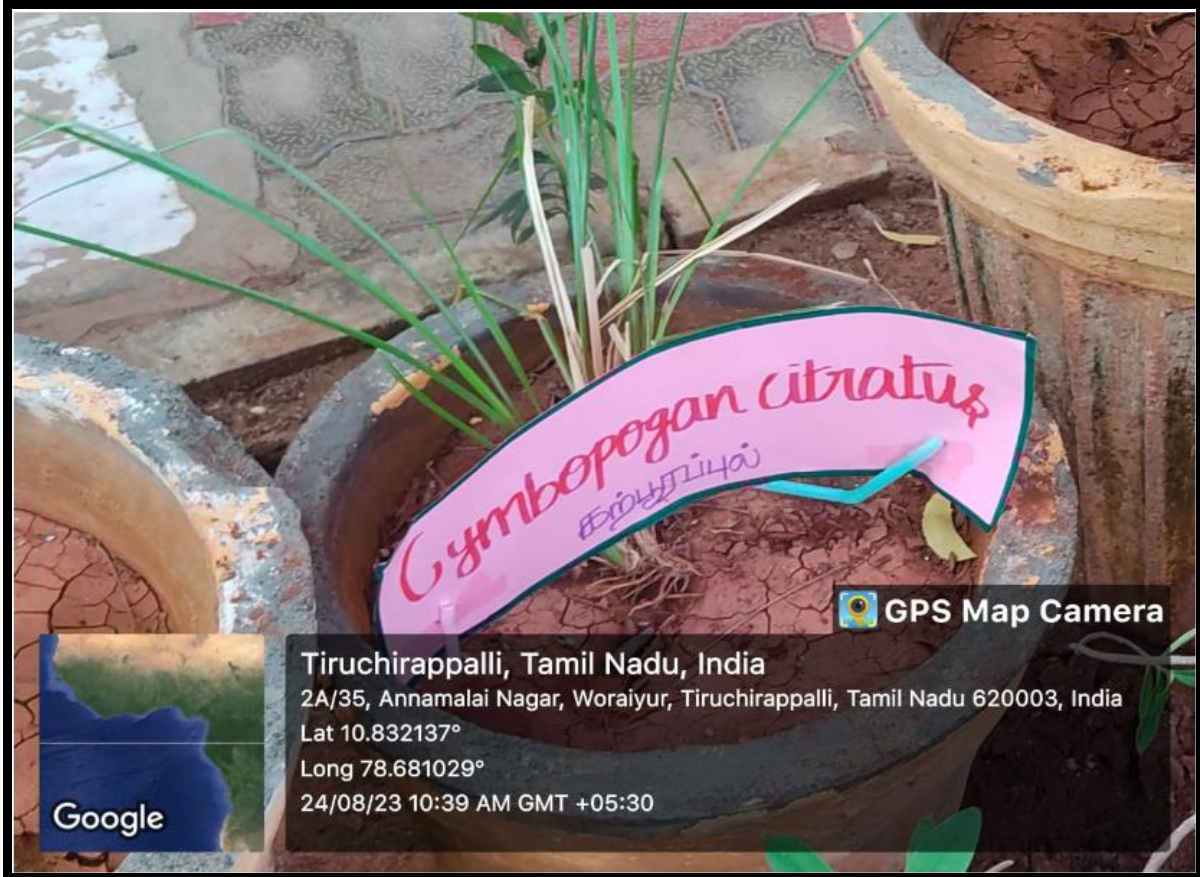


FLORA OF COLLEGE



CRITERION VII

ENVIRONMENT SUSTAINABILITY





CRITERION VII

ENVIRONMENT SUSTAINABILITY





CRITERION VII

ENVIRONMENT SUSTAINABILITY





CRITERION VII

ENVIRONMENT SUSTAINABILITY



GPS Map Camera



Tiruchirappalli, Tamil Nadu, India
2A/35, Annamalai Nagar, Woraiyur, Tiruchirappalli, Tamil Nadu 620003, India
Lat 10.832137°
Long 78.681029°
24/08/23 10:45 AM GMT +05:30



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ENVIRONMENT SUSTAINABILITY



**Tradescantia
Spathacea
Oyster Plant**



**Punica Granatum
Pomegranate plant**



**Azadirachta indica
Neem Tree**



CRITERION VII

ENVIRONMENT SUSTAINABILITY



Millettia pinnata
Pungai Tree



Mangifera indica
Mango Tree






Musa paradisiaca
Banana Tree



CRITERION VII

ENVIRONMENT SUSTAINABILITY

	<p>Cocos nucifera Coconut tree</p>
	<p>Psidium guajava Guava Tree</p>
	<p>Manilkara zapota Sapodilla</p>



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ENVIRONMENT SUSTAINABILITY



Carica papaya
Papaya Tree



Punica granatum
Pomegranate






Citrus limon
Lemon



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ENVIRONMENT SUSTAINABILITY

	<p>Citrus medica Narthangai</p>
	<p>Phyllanthus acidus Indian gooseberry</p>
	<p>Phyllanthus emblica Parriyanelli</p>



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ENVIRONMENT SUSTAINABILITY

	<p>Saracaasoca Ashoka Tree</p>
	<p>Aegle marmelos Billva tree</p>
	<p>Bambusa vulgaris Bamboo Tree</p>



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ENVIRONMENT SUSTAINABILITY

		<p>Terminalia catappa VathamMaram</p>
		<p>Mimusopselengi Magilam Tree</p>
		<p>Ficus religiosa Arasham Tree</p>



CRITERION VII




ENVIRONMENT SUSTAINABILITY

		<p>Ficus benghalensis Aalamaram</p>
		<p>Diospyros candolleana Nilaviruksha</p>
		<p>Hyophorbelagenicaulis bottle palm</p>



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ENVIRONMENT SUSTAINABILITY

		<p>Canna iridiflora Canna Lilies</p>
		<p>Phyllanthus acidus Cermai</p>
		<p>Lantana montevidensis weeping lantana</p>



CRITERION VII

ENVIRONMENT SUSTAINABILITY



Plumbago auriculata
cape leadwort



Canna indica
Indian Shot



Euphorbia milii
crown of thorns



CRITERION VII

ENVIRONMENT SUSTAINABILITY



Ruellia tuberosa
snapdragon root



Ixora coccinea
scarlet jungle flame






Dypsis lutescens
Areca Palm · Bamboo Palm



CRITERION VII




ENVIRONMENT SUSTAINABILITY

	<p>Aloe vere Kattralai</p>
	<p>Lawsonia inermis Henna</p>
	<p>Hibiscus rosa-sinensis Hibiscus</p>



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ENVIRONMENT SUSTAINABILITY

		<p>Ocimumtenuiflorum Karuntuls</p> <p>i</p>
		<p>Zephyranthesps Thunder lily</p>
		<p>Ocimumbasilicum Thiruneetrapachilai</p>



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	<p>Ocimum sanctum Vishnu tulsi</p>
	<p>mentha piperita Mint tulsi</p>
	<p>Gloriosa superba flame lily</p>
	<p>Cymbopogon citratus Lemongrass</p>



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Piper betle
Betel



Phyllanthus amarus
Keelaneeli



Aristolochia indica
Perumarunthukodi



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ENVIRONMENT SUSTAINABILITY



Thymus vulgaris

Garden thyme



Salvia officinalis

Sage Plant






Catharanthus roseus

Pink periwinkle



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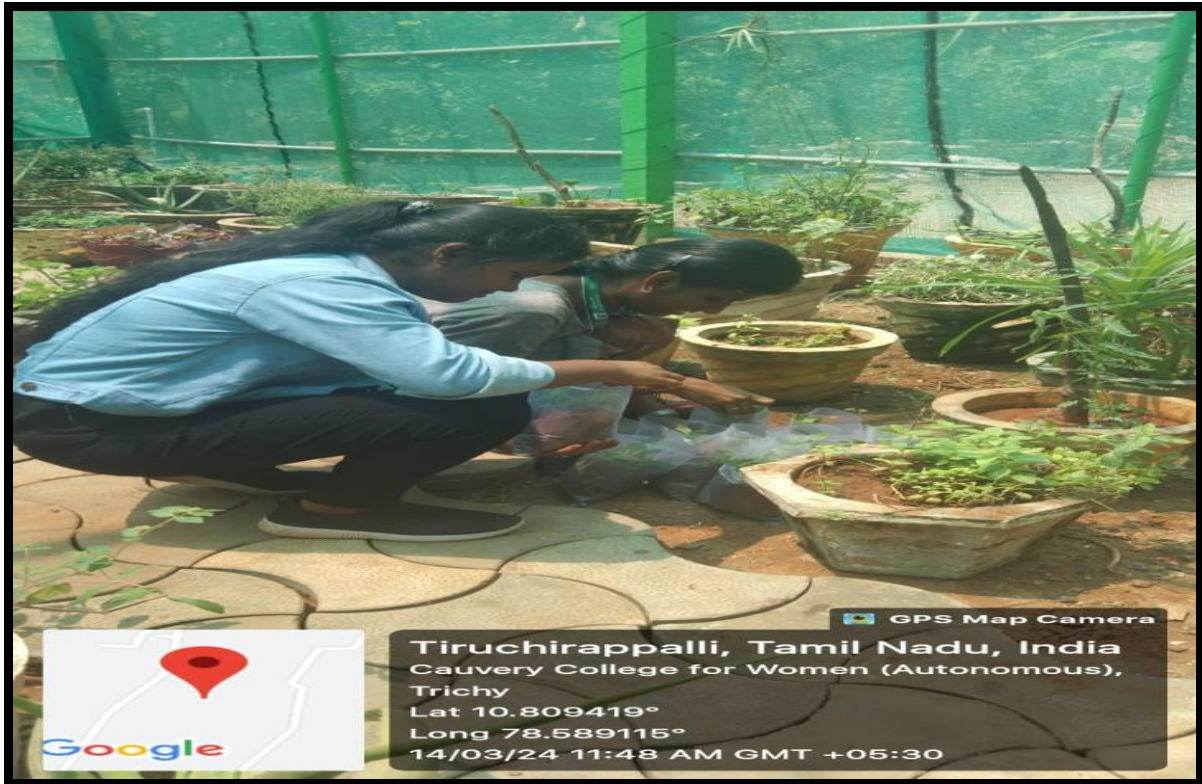
	<p>Solanum trilobatum Thoothuvalai</p>
	<p>Portulaca quadrifida PasalaiKeerai</p>
	<p>Tecoma stans yellow trumpetbush</p>



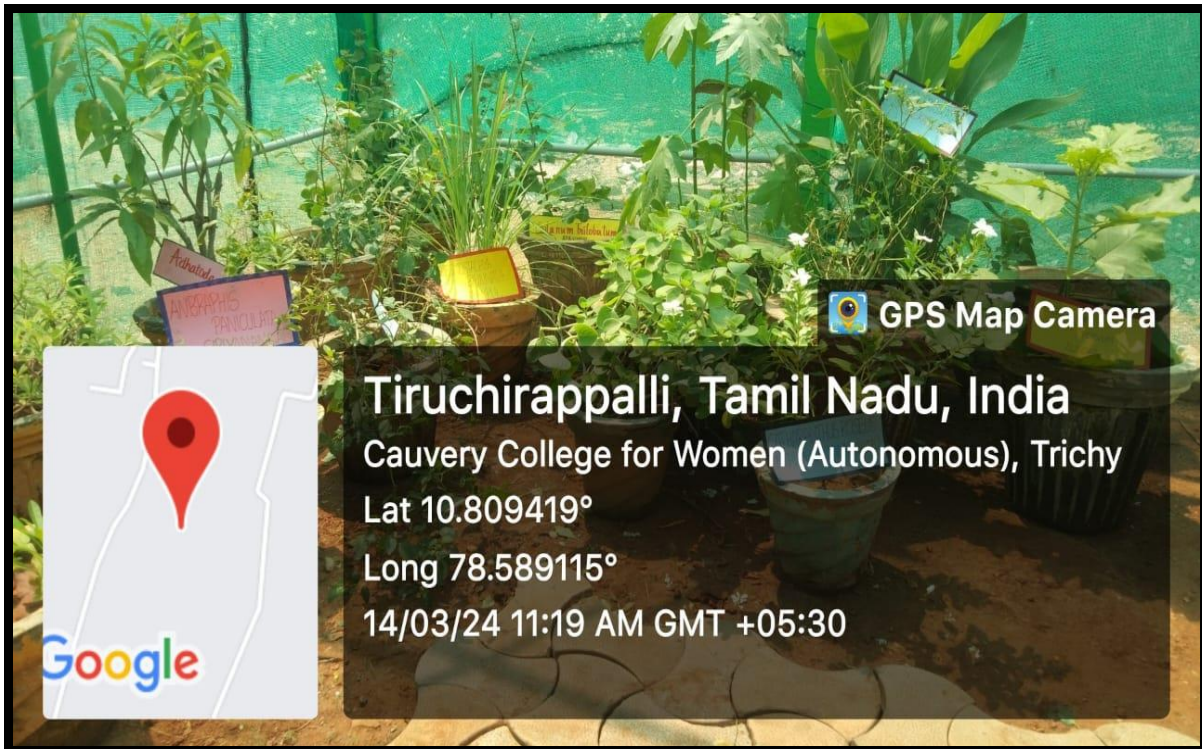
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Herbal Garden photos



Herbal Garden photos





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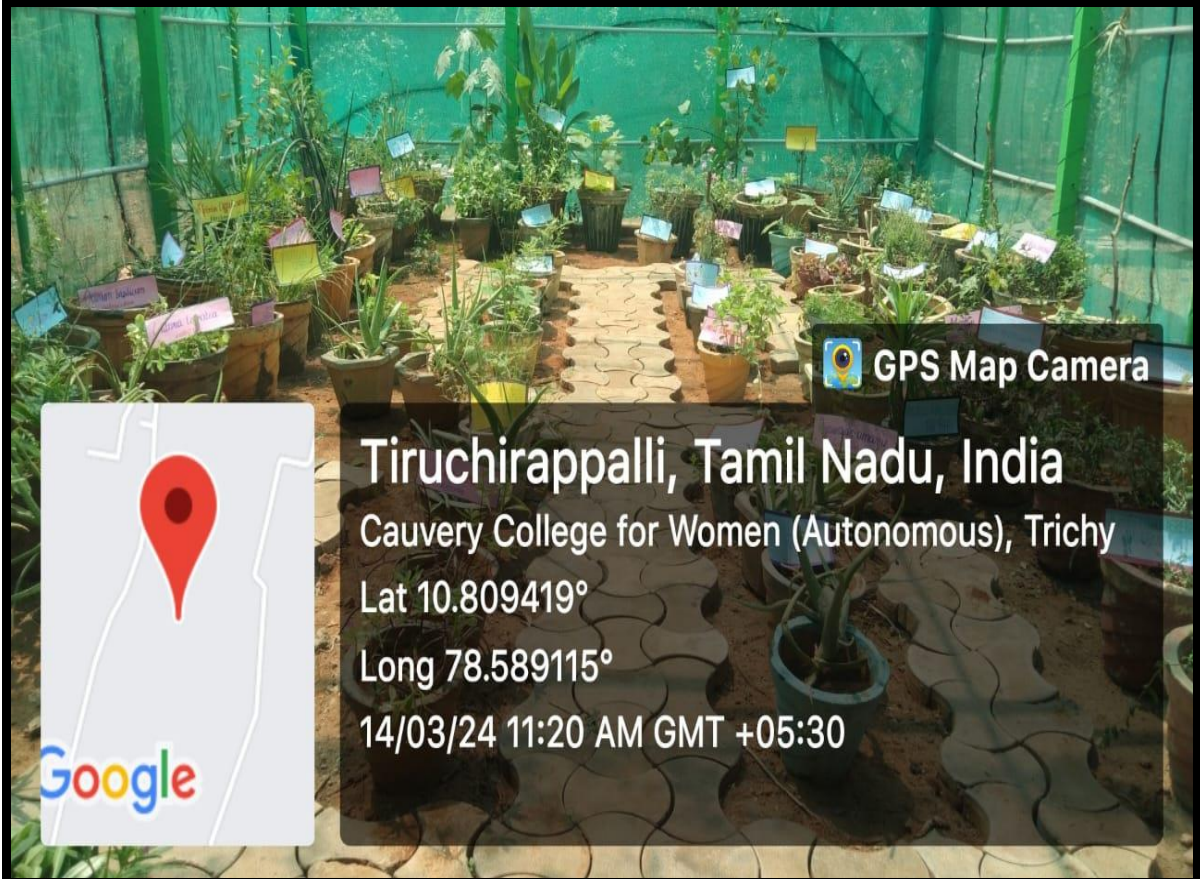
Herbal Garden photos





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 **GPS Map Camera**

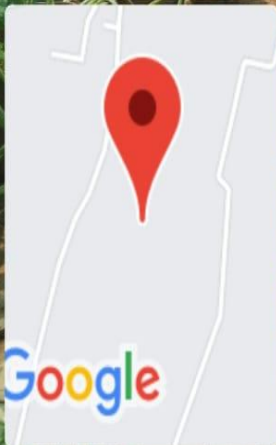
Tiruchirappalli, Tamil Nadu, India

Cauvery College for Women (Autonomous), Trichy

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Long 78.589115°

14/03/24 11:20 AM GMT +05:30





CRITERION VII

ENVIRONMENT SUSTAINABILITY

A Symbol of Longevity and Good Health

Mushrooms are a sustainable and environmentally friendly food source





TREE PLANTATION ACTIVITIES



CRITERION VII

ENVIRONMENT SUSTAINABILITY

SEED BALLS ISSUING TO STUDENTS

- **To enhance awareness among students to plant trees and protect environment**





CRITERION VII

ENVIRONMENT SUSTAINABILITY

SEED BALLS ISSUING TO STUDENTS

- **To enhance awareness among students to plant trees and protect environment**

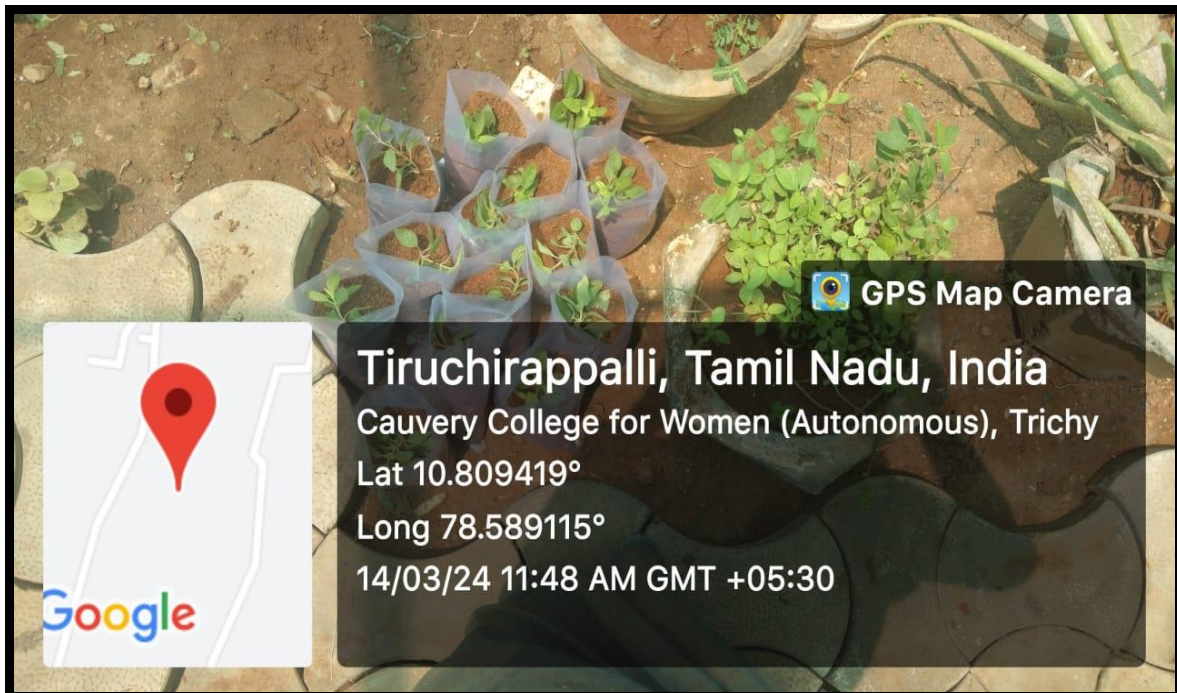




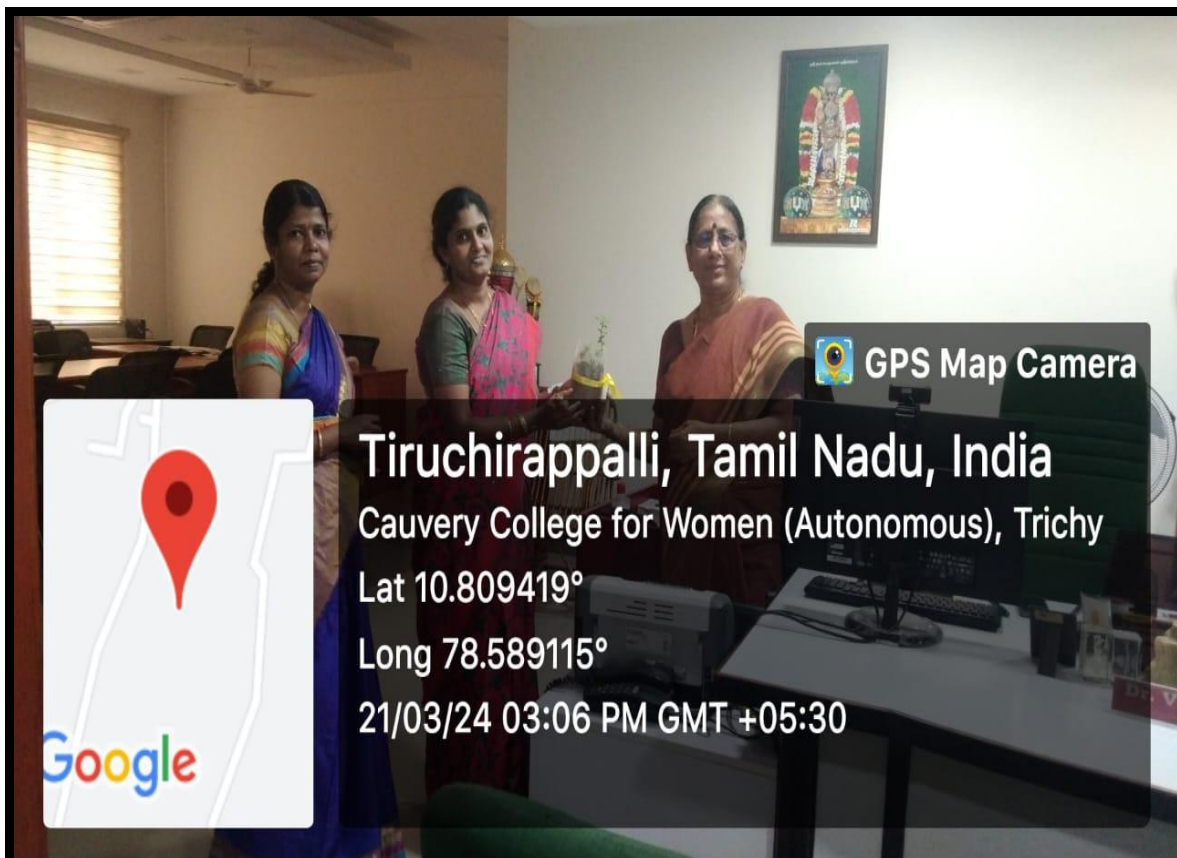
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SAPLING PRODUCTION - An opportunity to enhance the garden with wonderful plants.



The Department of Biotechnology offered Mint Tulasi saplings for sale.

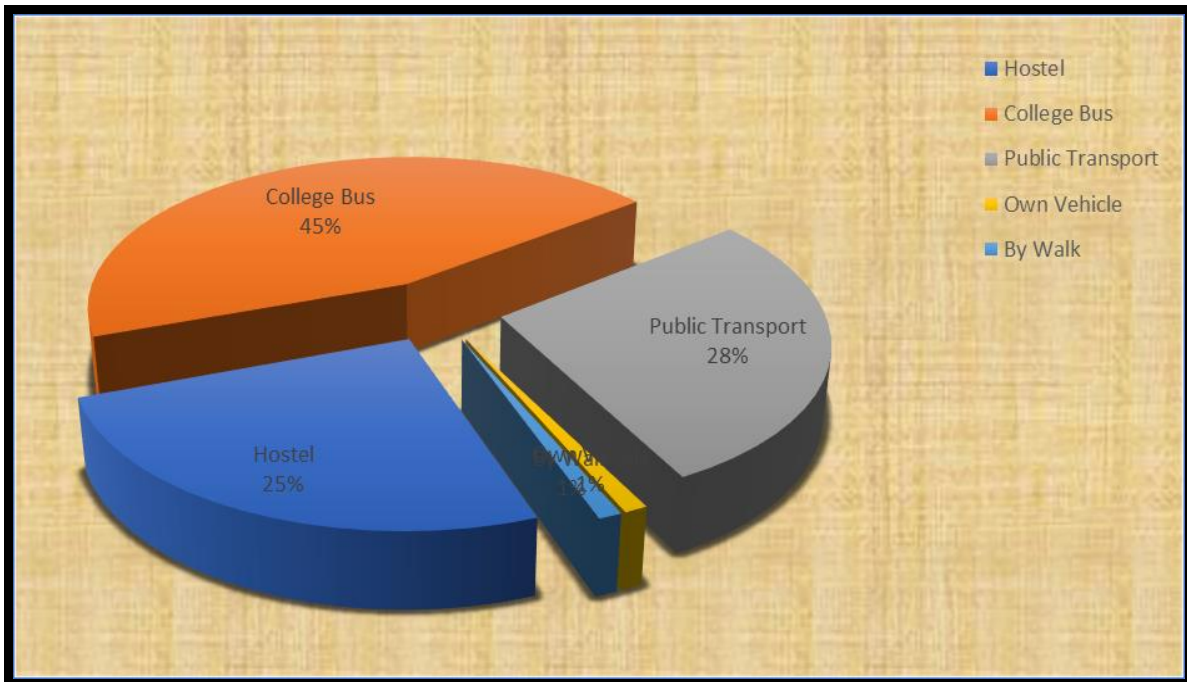




Mode of transport

**Most of the staff and students use bus facility
which avoids air pollution.**

By Students



By Staff

