

**STUDY ON PLANTS BIODIVERSITY IN MRS.A.V.N. COLLEGE
CAMPUS**

BY

VADAMODULA

PYDAMMA

REGD.NO:720130805260



Estd : 1860

**PROJECT WORK SUBMITTED TO MRS. A.V.N COLLEGE,
AFFILIATED TO ANDHRA UNIVERSITY, VISAKHAPATNAM FOR
THE PARTIAL FULFILMENT OF DEGREE OF**

BACHELOR OF SCIENCE

2020 – 2023

MRS. A.V.N COLLEGE

VISAKHAPATNAM – 530001

ANDHRA PRADESH



CERTIFICATE

This is to certify that project entitled as “ **STUDY ON PLANTS BIODIVERSITY IN MRS.A.V.N. COLLEGE CAMPUS** ” is bonafide work done by **VADAMODULA PYDAMMA** (Regd.no:720130805260), B.Sc – C.B.Z student under my guidance. I certify that the project work done by him/her is original and has not been submitted to any other information.

(M. Simhadri Naidu)

PRINCIPAL

PRINCIPAL
MRS. A.V.N. COLLEGE
VISAKHAPATNAM

(L.Naveen)

MENTOR

**Program Book
for
Community Service Project**

Name of the Student: VADAMODALU PYDAMMA

Name of the College: MYS. AVN COLLEGE

Registration Number: 720130805260

Period of CSP: From: 1/10/23 To: 28/12/23

Name & Address of the Community/Habitation: MYS. AVN COLLEGE
plant Biodiversity.

Community Service Project Report

Submitted in accordance with the requirement for the degree of.....

Name of the College: MYS. AV. N COLLEGE

Department: BOTANY

Name of the Faculty Guide: L. NAVEEN

Duration of the CSP: From 1/10/2022 to 10/12/22

Name of the Student: VADAMODALU PYDAMMA

Programme of Study STUDY ON PLANT BIODIVERSITY I M.A. AV. N. COLLEGE CAMPUS

Year of Study: 2020 - 2023

Register Number: 720130805260.

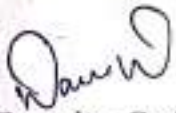
Date of Submission: 20/3/2023.

Student's Declaration

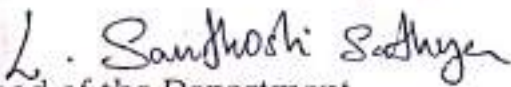
I, I.V. Pydamma a student of CBZ Program, Reg. No. 7201308052691 the Department of Botany Mrs. A.V.N. College do hereby declare that I have completed the mandatory community service from 1/10 to 28/12 in (Name of the Community/Habitation) under the Faculty Guideship of L. NAVEEN (Name of the Faculty Guide), Department of Botany in Mrs. A.V.N. College

(Signature and Date)

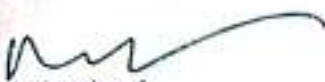
Endorsements



Faculty Guide



Head of the Department



Principal
PRINCIPAL
MRS. A.V.N. COLLEGE
VISAKHAPATNAM

Certificate from Official of the Community

This is to certify that PBN Tharamani (Name of the Community Service Volunteer) Reg. No 720/30805260 of MYS. A.V.N. Name of the College) underwent community service in Mrs. A.V.N. College (Name of the Community) from 01/10/22 to 15/11/22.....

The overall performance of the Community Service Volunteer during his/her community service is found to be good..... (Satisfactory/Good).

PBN Tharamani
(Ward Administrator (Community))
Authorized Signatory (with Date and Seal)



ACKNOWLEDGEMENTS

I would like to express my special thanks to our respected m. simhari naidu sir dean of our class teachers for their support and encouragement for completing this project.

I am highly indebted to the faculty guidance mr. L. Naveen for his guidance and constant supervision as well as for providing necessary. the year of completing csp project your useful advice and suggestions, were very helpful to me during the project completion.

I would like to express my thanks to my colleges in developing the project and people who have helped me out with their facilities.

CHAPTER 1: EXECUTIVE SUMMARY

The community service report shall have only a one page executive summary. It shall include a brief description of the Community and summary of all the activities done by the student in CSP and five or more learning objectives and outcomes.

The present study "plant biodiversity in Mrs. A.V.N college" about to list out the flora in Mrs. A.V.N college which have several medicinal ornamental and edible properties. Though this Institute rich in such useful flora, most of them didn't recognize them till now. My project was about to list out the flora in this Institute. The whole college was divided into '8' quadrates of 100x100 meters. The trees and shrubs including several "gymnosperms" and "Angiosperms" listed out in a tabular form. Quadrates wisely using this quadrat method we have identified more than 80 species of plants that include medicinal plants like Azadirachta indica, Terminalia panicleta etc, several oil plants like Ricinus communis, Terminalia catappa etc, and also several edible plants like Cocos nucifera, Terminalia catappa etc.

CHAPTER 2: OVERVIEW OF THE COMMUNITY

- About the Community/Village/Habitation including historical profile of the community/habitation, community diversity, traditions, ethics and values.
- Brief note on Socio Economic conditions of the Community/Habitation.

Mrs. A.V.N college founded in 1860, is an arts and science college in Visakhapatnam in the state of Andhra Pradesh, India.

Mr. Ankitam Venkata Narasimha Rao, a landlord endowed the amount of Rs one lakh, an 11-acre site and a huge building, besides a building grant of Rs 15,00 in memory of his wife. The college thus came to be known by her name, i.e. Mrs. A.V.N college.

Mrs. A.V.N college not only an educational Institute it is rich in biodiversity i.e. both plant and animal biodiversity. It contains several kinds of plants, herbs, shrubs and trees, most of them are very useful in our daily life that include several properties like medicinal values, ornamental and other properties. During my project I have identified nearly 50 plant species that has several medicinal values, ornamental properties and some are also useful flora, most of them didn't recognize them till now, my project was about to let out this flora in this Institute.

WEEKLY REPORT

WEEK - 1 (From Dt. 01/10/2024 to Dt. 07/10/2024)

Objective of the Activity Done:

Detailed Report:

visited the study area and divided the area into 'eight' quadrates of 100 x 100 meters. Identify and tabulated the list and number of plant species present in quadrate one and two.

Identify and tabulated the list and number of plant species present in quadrate the "3" and "4". Identify and tabulated the list and number of plant species present in quadrate "5" and "6".
Identify

Identify and tabulated the list and number of plant species present in Quadrate.

"7" and "8" studied the abundance of plant species in whole campus of Mrs. AVN college using the quadrates.

ACTIVITY LOG FOR THE FIRST WEEK

DAY & DATE	BRIEF DESCRIPTION OF THE DAILY ACTIVITY	LEARNING OUTCOME	Person In-charge Signature
Day - 1	visited the study area and divided area into 8 quadrates of 100 x 100 mm meters.	learned about quadrates analysis method.	Dannd
Day - 2	Identify and tabulated the list and number of plants species present in quadrate one and two.	studied plant biodiversity quadrates 1 and 2.	Dannd
Day - 3	Identify and tabulated the list and number of plants species present in quadrate Three and four.	studied plant biodiversity 3 and 4	Dannd
Day - 4	Identify and tabulated the list and number of plants species present in quadrate five and six	studied plant biodiversity 5 and 6.	Dannd
Day - 5	Identify and tabulated the list and number of plant species present in quadrate seven and eight.	studied plant biodiversity 7 and 8.	Dannd
Day - 6	study abundance of plant species in hold campus of Mrs AVN college using the quadrates.	Learned Identification of plants by their characteristics.	Dannd

CHAPTER 3: COMMUNITY SERVICE PART

Description of the Activities undertaken in the Community during the Community Service Project. This part could end by reflecting on what kind of values, life skills, and technical skills the student acquired.

The whole college was divided into 8 quadrates
100x100 meters. The trees and shrubs including
several "Gymnosperms" and "Angiosperms" listed out in
Tabular form quadrate wisely using this quadrate
method we have identified more than 80 species of plant
that include medicinal plants like Azadirachta

indica, Tridax procumbens, Andropogon
paniculatus etc. several oil plants like Ricinus
communis, Terminalia catappa etc. and also several edible

plants like coccoloba, Terminalia catappa etc.
values:— The plant biodiversity is our most valuable
natural resources that gives medicine, wood, food, etc.
we have to conserve it.

life skills:— we have learnt the value of natural resources
and this skills required to conserve this biodiversity.

technical skills:— during this study we have learnt the
skill resources to plant biodiversity including quadrate
analysis plant identification etc.

WEEKLY REPORT

WEEK - 2 (From Dt. 21/10/20 to Dt. 24/10/20)

Objective of the Activity Done:

Detailed Report:

The data obtained in 1st week is tabulated and studied using the data and awareness camp has been conducted in the community area

by the campaign creative awareness about the plant available in the community area. The campaign has been continued and created awareness on value of plants available in the area. The campaign has been continued and created awareness on value about decreasing number of plants available in the community area. The campaign has been continued and created awareness about decreasing number of plants available in the community area. The campaign has been continued and created awareness about protective measures of plants in the area.

ACTIVITY LOG FOR THE SECOND WEEK

DAY & DATE	BRIEF DESCRIPTION OF THE DAILY ACTIVITY	LEARNING OUTCOME	Person In-charge Signature
Day - 1	The data obtained In 1st week is tabulated and studied.	Learned about Biodiversity in the community area.	Daud
Day - 2	using the data And awareness camp has been conducted in the community Area.	Learned about How to make a campaign.	Daud
Day - 3	By the campaign create Awareness about the plant available in community Area.	Learned about uses of plants in the community Area.	Daud
Day - 4	the campaign has been continued and created Awareness on value of plants available in the community Area.	Learned about various threats facing by plants in the community Area.	Daud
Day - 5	The campaign has been continued and created Awareness about decreasing number of plant species in the Area.	Learned about various threats facing by plants in the community Area.	Daud
Day - 6	the campaign has been continued and created Awareness about protective measures of plants in the Area.	Learned about protective measures to be taken to conserve plants	Daud

WEEKLY REPORT

WEEK - 2 (From Dt. 21/10/20 to Dt. 27/10/20)

Objective of the Activity Done:

Detailed Report:

The data obtained 1st and 2nd weeks is analysed. The analysed data is written on the paper in organized manner. The pictures has been collected which were taken during campaign. Pie-charts and tabular forms were prepared for data updation.

Information obtained is updated in the data report. The reported data self-verified once again. It is also described in didn't recognize them till now. My project was about to list out the flora in this institute.

The picture in this institute which were taken during campaign. Pie-charts and tabular forms were prepared for data updation.

ACTIVITY LOG FOR THE SECOND WEEK

DAY & DATE	BRIEF DESCRIPTION OF THE DAILY ACTIVITY	LEARNING OUTCOME	Person In-charge Signature
Day - 1	The data obtained 1st and 2nd weeks is analysed.	learnt about HOW to prepare A data analysis	Dawud
Day - 2	The Analysed data is written on the paper in organized manner.	learnt about methods of data presentation	Dawud
Day - 3	The pictures has been collected which were taken during campaign	learnt about methods of data presentation.	Dawud
Day - 4	pie-chart and Tabular forms were prepared for data updation.	learnt about preparation of pie-chart and Tabular forms	Dawud
Day - 5	Information obtained is updated in the data Report.	learnt about Information updated in the Data Report.	Dawud
Day - 6	The reported data re-verified once again.	learnt about HOW to prepare and report data analysis.	Dawud

WEEKLY REPORT

WEEK - 3 (From Dt. 22/10/20... to Dt. 28/10/20...)

Objective of the Activity Done:

Detailed Report:

The data obtained 1st and 2nd week is analysed. The analysed data is written on the paper in required manner. The pictures has been collected which were taken during Campaign pie-charts and Tabular forms were prepared for data updation. Information obtained is updated in the data report. The reported data self-verified once again. It is also described in such useful flora, most of them didn't recognize them till now my project was about to list out the flora in this Institute.

The pictures has been collected which were taken during Campaign pie-charts and tabular forms were prepared for data updation.

ACTIVITY LOG FOR THE THIRD WEEK

DAY & DATE	BRIEF DESCRIPTION OF THE DAILY ACTIVITY	LEARNING OUTCOME	Person In-charge Signature
Day - 1	The community project report programme book were download and print out has been taken.	Learned about how to prepare data analysis.	Dawud
Day - 2	The data obtained and prepared literature were ethered in the programme - mme BOOK.	Learned about methods of data presentation.	Dawud
Day - 3	The pictures taken during project were printed and fixed in the programme book.	Learned about methods of data presentation.	Dawud
Day - 4	The picture taken during project were printed and fixed in the programme book.	Learned about preparation of pie-charts and tabular forms.	Dawud
Day - 5	The programme book paper are arranged in order and verified once again.	Learned about information updated in the data report.	Dawud
Day - 6	The programme book has given for binding role work.	Learned about how to prepare and report data analysis.	Dawud

ACTIVITY LOG FOR THE FOURTH WEEK

DAY & DATE	BRIEF DESCRIPTION OF THE DAILY ACTIVITY	LEARNING OUTCOME	Person In-charge Signature
Day - 1	The community project report programme book were downloaded and print out has been taken	learnt about how to prepare A support programme.	David
Day - 2	The data obtained and prepared literature were ethered in the program - ml. BOOK.	learnt about how to prepare literature were ethered in the Book.	David
Day - 3	The pictures taken during project were printed and fixed in the programme book.	learnt about pictures were printed and fixed in program e book.	David
Day - 4	The pictures taken during project were printed and fixed in the progra - ml book.	learnt about complete of proje ct in the prog ramme book.	David
Day - 5	The programme book papers are arranged in order and verified once again	learnt about Arranged papers in order and verified once again	David
Day - 6	The programme book has give for binding Role work.	learnt about how to prepare and report data Analysed.	David

WEEKLY REPORT

WEEK - 4 (From Dt. 22/10/20... to Dt. 28/10/20...)

Objective of the Activity Done:

Detailed Report:

The community project report programme book were downloaded and print out has been taken. The data obtained and prepared literature were entered in the programme book.

The pictures taken during project were printed and fixed in the programme book. The pictures taken during project were printed and fixed in the programme book. The programme book has given for Binding Role work. In the entire the community project report programme book were downloaded and print out has been taken.

CHAPTER 5: OUTCOMES DESCRIPTION

Details of the Socio-Economic Survey of the Village/Habitation. Attach the questionnaire prepared for the survey.

The present study "plant biodiversity in Mrs. AVN college" about to list out the flora in Mrs AVN college which have several medicinal, ornamental and edible properties. The whole college was divided into 8 quadrates of 100x100 meters. The trees and shrubs including several "Gymnosperms" and "Angiosperms" listed out in a tabular form quadrante wisely using this quadrante method we have identified more than 50 species of plants that include medicinal plants like *Azodi recta* Indica, *Tridax procumbens* like *Ricinus communis*, *Terminalia catapa* etc. and also several edible plants like *cocos*, *nicotia*, *Terminalia catapa* etc. The remaining plant names like *Azodher ecta* Indica *Terminalia catapa*, *Anthocephalus kedhantka*, *phylanthus Acidul*, *Ricinus communis*, *muvinda*, *tinctoria*, *paly murisu*, *plum citrus lemon*, *pseudum buyava*, *tatropa ussea*, *ferulla*, *figus Religiosa*.

Describe the problems you have identified in the community

Though AVN college is rich in plant biodiversity which have several beneficial values most of the people in the campus don't know their values. due to this they are refusing to protect them. due to improper conservation the plant bio-diversity reducing gradually with period of time. The people in this study area loosing several valuable plants due to this improper conservation. The present study "plant biodiversity in Mrs. AVN college about to list out the flora in Mrs. AVN college which have several medicinal, ornamental and edible properties. due to insufficient knowledge the people in the area are refusing to conserve the plants and losted several useful plants species like *Azadirachta indica*, *Albizia leucacarpa*, etc. which have very useful values like resilience of kidney stones, in-treat several skin diseases etc. due to insufficient knowledge of value of plants and their conservation methods they are loosing such valuable plants.

Short-term and long term action plan for possible solutions for the problems identified and that could be recommended to the concerned authorities for implementation.

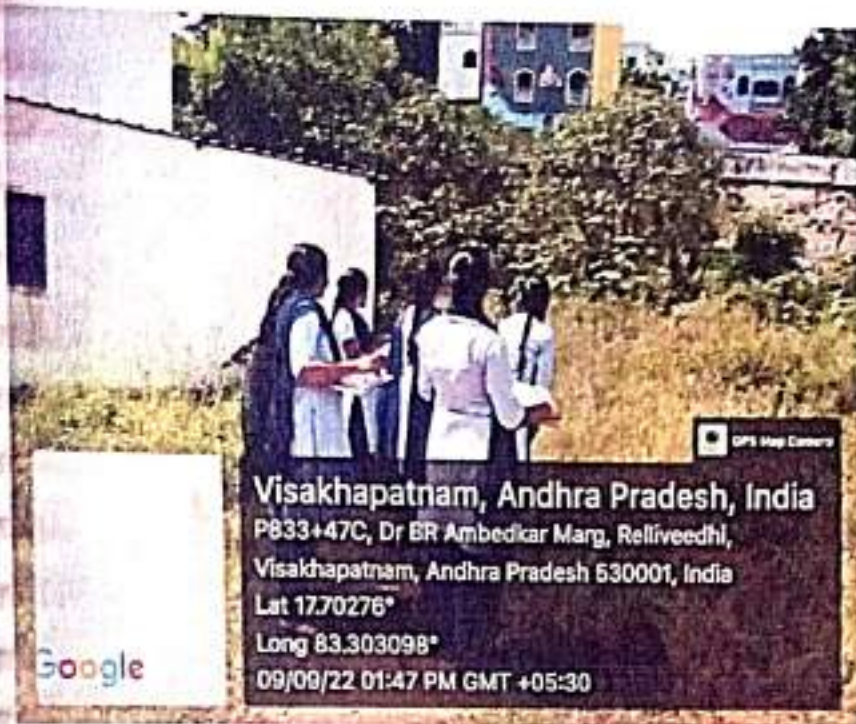
Since the plants in the studied Area are very valuable and their number is being reduced there is a necessity to conserve these plants by In situ conservation method like caring them, providing facilities for their growth and planting new plant species etc. The number and abundance of plant species present in the studied Area are to be identified and if possible if the decreased plant species should be replanted. The plant species present in the studied Area are to be provided with suitable conditions for their growth and should be protected from threats. If possible the plant species should be provided with name plates that contain their botanical and common names, their family etc. for student about plant species and their identification and also their uses. This is necessary for future generation to protect the plant species with a such a wide range of useful values.

Description of the Community awareness programme/s conducted w.r.t the problems and their outcomes.

The whole college was divided into "8" quadrats of 100x100 meters. The trees and shrubs including several "gymnosperm" and "angiosperms" listed out in a tabular form quadrat wise. Using this quadrat method we have identified more than 50 species of plants that include medicinal plants like *Azadirachta indica*, *Tournefortia procumbens*, *Andropogon paniculata* etc. several oil plants like *Pongamia pinnata*, *Trichinanthus* etc. and also several edible plants like *Cassia siamea*, *Trichinanthus* etc. Though the studied rich in plant biodiversity which have several beneficial values most of the people in the campus don't know their values due to this they are refusing to protect them due to loss of plant biodiversity. By the campaign created awareness in the people of the study area on value of plants available in that area. The campaign has been continued and created awareness about protective measures of plants in the area.

PLANT BIODIVERSITY IN MRS.A.V.N. COLLEGE CAMPUS

PLANT BOTANICAL NAME	Q ₁	Q ₂	Q ₃	Q ₄	Q ₅	Q ₆	Q ₇	Q ₈
<i>Albizia lebbek</i>	--	--	--	1	1	--	--	--
<i>Alstonia scholaris</i>	--	--	--	--	1	--	1	--
<i>Anthocephalus cadamba</i>	6	2	--	--	--	--	--	--
<i>Annona squamosa</i>	--	2	--	--	--	--	--	--
<i>Azadiracta indica</i>	2	5	6	2	--	--	2	--
<i>Bauhinia purpurea</i>	--	7	--	--	--	--	--	--
<i>Calotropis procera</i>	--	--	--	90	--	--	--	--
<i>Caryota urens</i>	--	--	--	--	--	--	3	--
<i>Cassia fistula</i>	--	--	3	--	--	2	--	2
<i>Citrus limon</i>	--	2	--	--	--	--	--	--
<i>Coccinia cordifolia</i>	--	--	--	54	--	--	--	41
<i>Coccinia graminis</i>	--	--	--	4	--	--	--	--
<i>Cocos nucifera</i>	--	2	--	--	--	--	1	--
<i>Delonix regia</i>	--	--	--	--	5	--	--	--
<i>Euphorbia hirta</i>	30	20	15	8	20	20	17	10
<i>Euphorbia milli</i>	--	--	--	--	2	--	--	--
<i>Euphorbia tirucalli</i>	1	2	--	--	--	--	--	--
<i>Ficus benghalensis</i>	--	--	--	1	--	--	--	2
<i>Ficus religiosa</i>	--	--	--	--	4	--	--	--
<i>Hibiscus rosa-sinensis</i>	--	--	--	--	--	--	1	--
<i>Hymenocalyt litoralis</i>	--	--	--	--	1	--	--	--
<i>Ixora chinensis</i>	--	--	--	--	--	--	10	--
<i>Jatropha curcas</i>	--	1	--	--	--	--	--	--
<i>Leucaena leucocephala</i>	--	--	--	--	8	--	--	--
<i>Mangifera indica</i>	--	--	--	--	1	--	--	--
<i>Mirabilis jalapa</i>	--	--	--	--	--	--	7	--
<i>Morinda tinctoria</i>	1	--	--	--	--	--	--	--
<i>Muntingia calabura</i>	--	--	1	--	2	--	--	--
<i>Phyllanthus acidus</i>	2	1	--	--	--	--	--	--
<i>Phyllanthus amarus</i>	10	12	10	20	10	--	20	--
<i>Phyllanthus emblicu</i>	--	2	--	--	2	--	--	--



QUADRATE I



QUADRATE II



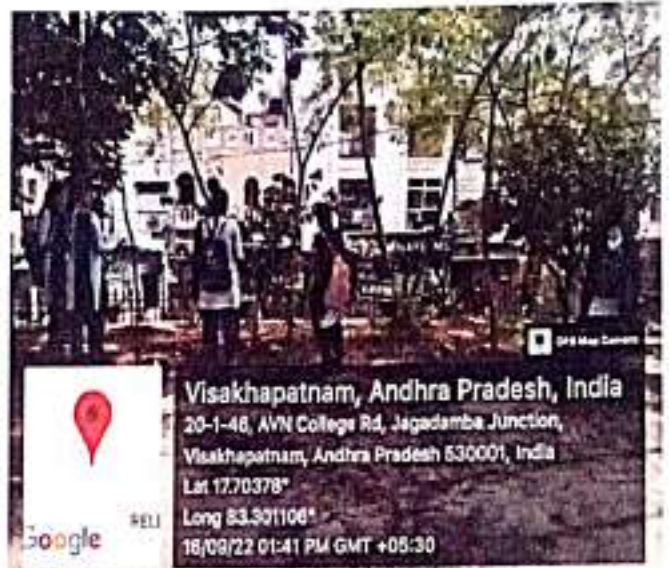
QUADRATE III



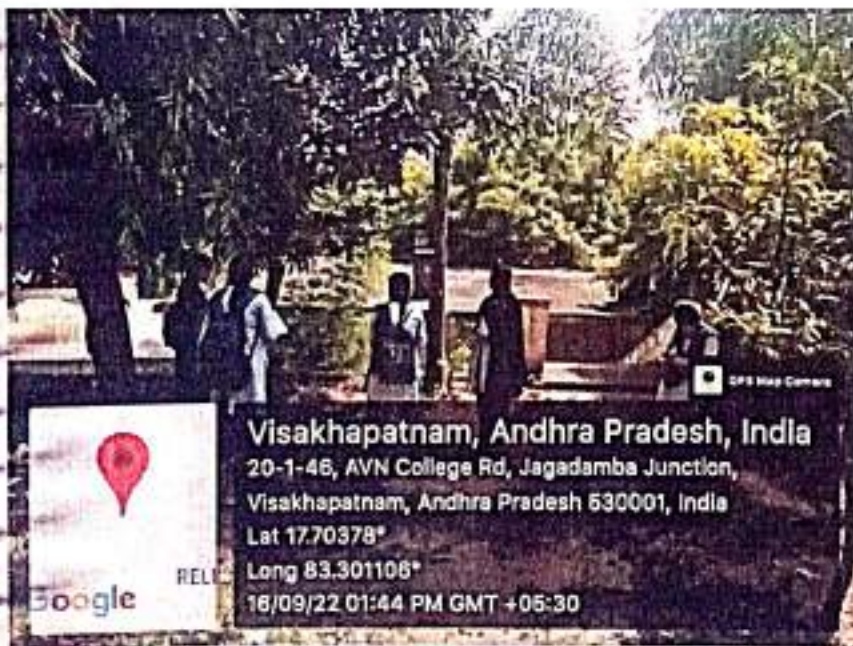
QUADRATE IV



QUADRATE V



QUADRATE VI



QUADRATE VII



QUADRATE VIII