GOVERNMENT DEGREE COLLEGE,
NARSAMPET
WARANGAL DISTRICT-506 132

DEPARTMENT OF BOTANY

JIGNASA STUDENT STUDY PROJECT
(2021)

TITLE

CAMPUS FLORA OF GOVERNMENT DEGREE COLLEGE, NARSAMPET, WARANGAL DISTRICT, TELANGANA

Supervisor

M NARENDAR

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CERTIFICATE

Certified that this study is a bonafide Student Jignasa Study Project done by the following B.Sc. (BZC & BZCA) students of Government Degree, Narsampet, Warangal Disrict under the supervision of M Narendar, Asst. Professor of Botany & Incharge, Department of Botany.

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INTRODUCTION

Nature has everything for everyone's needs but has nothing for anyone's greed. Nature has created a great variety of life on earth to provide for man's needs over thousands of years. We must keep biodiversity, so in the future, we don't weep. Here, the most prominent features of the earth are the subsistence of life and that of life's diversity (Tilman, 2000).

The plant life that is concerned with microhabitats and supports distinct plant assemblages reflects the diversity of the ecosystem, habitats, and prevailing environmental circumstances. Variation in the formation of varieties is not only spatial, but also temporal (Batanouny, 2001).

A Green Campus is a place on campus where environmentally friendly practises and education aim to encourage sustainable and eco-friendly practises. The green campus feature enables an institution to take the lead in creating its environmental culture and new paradigms by creating sustainable solutions to mankind's environmental, social, and economic needs (Sen & Keshari, 2019).

Plants that grew around them are used by different different cultures around the world. Plant diversity is influenced by species distribution and abundance patterns at any place (Reddy et al., 2014).

The richness of flowering plants makes India one of the mega diversity countries in the world, with four biodiversity hotspots and three mega centers of endemism. India was ranked seventh in the world among 17 mega-diversity countries, with over 17,000 species of higher plants reported (Anonymous 1993, Shiva 1996).

Biodiversity keeps the ecological processes in a balanced state, which is necessary for human survival (Kaur & Sharma 2014).

Narsampet is located in the semi-arid region of Telangana and has a predominantly hot and dry climate. Summer starts in March and peaks in May, with average high temperatures in the 42°C range. The monsoon arrives in June and lasts until September, with about 550 mm of

precipitation. A dry, mild winter starts in October and lasts until early February, when there is little humidity and average temperatures in the 22–23 °C range.

The Government Degree College, Narsampet, was established on December 3rd, 1984 in the Warangal District of Andhra Pradesh. Narsampet is a major town located 45 kilometres away from the district headquarters. The college is affiliated with Kakatiya University, After the formation of a separate Telangana State on June 2nd, 2014 and the reorganisation of the new districts in October 2016, the Government Degree College, Narsampet, was conferred as the Identified College of Warangal District, **which is** located at Lat 17.93^0, Long 79.90^0 . The total area of the campus is 16 acres. The campus harbours many plants. The campus has a rich diversity of plant species, which includes herbs, shrubs, trees, and climbers.

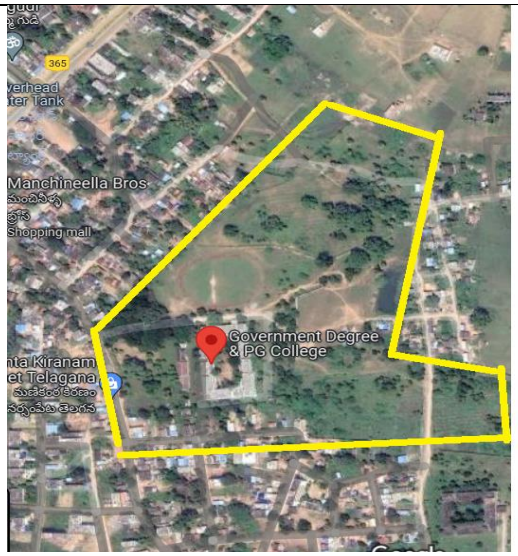


Fig: 1 (a): Front view of Government Degree College, Narsampet.

Fig: 1(b): Satellite view of Government Degree College, Narsampet.

REVIEW OF LITERATURE

Warner (1982) predicted that 80% of the geographical areas of India were under forest cover in 3000 BC, which is now left with 19.1% of the total land area. Among the 34 biodiversity hotspots (Myers et, al., 2000; CIF, 2004) recognized, two are in India.

The most imperative topographic attribute of Peninsular India is the 1400 km long Western Ghats along its western margin, traversing the states of Tamil Nadu, Kerala, Karnataka, Goa, Maharashtra, and Gujarat.

The Western Ghats are the second largest endemic centre in India, with 1550 endemics out of an estimated 4250 species of vascular plants (Nayar, 1997). Recent studies (Sasidharan, 2007) showed that more than 5000 species of vascular plants with 1700 endemics were reported from Kerala, part of the Western Ghats itself.

Since many hills in Peninsular India were formed during the Archaean and Precambrian periods, the Western Ghats are more senile than the Himalayas (Mani, 1974), and hence the genetic stock of the biodiversity of the Western Ghats is the most attractive for both evolutionists and ecologists.

Bradley (1849) and Walker (1849) were probably the first to publish accounts of agricultural, medicinal and other economically important species of Daulatabad and Warangal districts in Nizam's dominions. Patridge (1911) published a consolidated list of 450 species of arborescent forest elements in a book entitled, "Forest Flora of Hyderabad". Sayeeduddin (1935, 1936, 1941) recorded 370 vascular plant species from Hyderabad and Mulugu forests of Warangal.

Sebastine & Henry (1966) studied the flora of Pakhal and the surrounding regions of Narsampet taluk in Warangal district and reported 254 species of 198 genera belonging to 70 flowering plant families.

P.S. Reddy (1985) investigated the flora of Warangal city and surroundings, and recorded 715 plant species.

Ragan & Raju (1990) discovered Eleocharis setifolia and Scleria multilacunosa from Pakhal as new to peninsular India.

Reddy & Raju (1999) reported Gnaphalium coarcatatum as a new record for southern India.

Reddy et al. (1999b) found Youngia japonica as a new record from Warangal district for the Flora of Andhra Pradesh.

Reddy et al. (1999b) published a paper on angiosperms flora and biological spectrum of Jakaram Reserve Forest.

Reddy & Raju (2001) described a new taxon, Cleome chelidonii var. pallai from Pakhal.

Reddy (2001) described a new species, Hybanthus vatsvayae, from Telangana region. Reddy (2002) recorded 1223 species of Magnoliophyta and Pteridophyta in his Ph.D. thesis on 'Floristic Studies in Warangal District, Andhra Pradesh'. Since then, Ragan et al. (2005) reported Flemingia involucrata (Fabaceae) as new record for the State from Warangal district.

Raju et al. (2005) collected Cucurma inodora, an endemic species to Deccan extending its distribution to Tadvai and Pasra Reserve forests of Warangal district in Andhra Pradesh. While working on the biodiversity characterization study of Warangal district (2004-05)

OBJECTIVES

OBJECTIVES :

- To evaluate the diversity of plant species in Government Degree College, Narsampet

MATERIAL AND METHODS

Field Study

The Flora is prepared based on repeated seasonal collections of plant specimens from the campus, either in the flowering or fruiting stage. Regular field visits were made during the year 2021 in different seasons to explore the various plant species.

Documentation

Documentation of information during and after field work was carried out on scientific lines. Data was noted in specially designed field-diaries covering floristic entries. Voucher plant specimens tagged with field-numbers along with products or produce were invariable collected. Photographs were taken and presented in this report along with scientific names.

Laboratory Work

Laboratory work mainly consisted of processing, study of morphology, identification, matching, mounting, labeling and preservation of the Specimens. At the conclusion of each field trip, the collection was brought to Department of Botany, Government Degree College, Narsampet, Warangal District and all the above processes were completed in the laboratory. Herbarium of all the plants were Prepared as per standard practices (Jain and Rao, 1977), identified with the help of Gamble flora and preserved in the Department of Botany, Government Degree College, Narsampet, Warangal District.

Processing

The plant specimens were collected either in flower or fruit, preferable both. Herbaceous plants were collected entirely. Of woody plants, twigs of about 25 cm length were collected. At least three specimens of each plant were collected. The detail notes related to it were entered in the field note book. The plant specimens were placed on the blotters or newsprint, avoiding folding or hiding of the parts. The extra leaves/branches, etc. were removed, if necessary. The pressing sheets with specimens were placed one over the other and were then tightly bound in a plant press applying uniform pressure. The pressing sheets were changed every day till they are

perfect dried. The plant specimens were then transferred to newspaper folds for drying and later mounted.

Mounting

Before mounting, the specimens were poisoned by dipping them in ethyl alcohol saturated with mercuric chloride. Herbarium sheets are used for mounting. Animal glue or plaster was used for sticking the specimens to the sheets. To hold the specimen better, they were stitched from the back at points. Dissected parts and spare organs such as fruits and seeds were placed in plastic packets pasted to the mounting sheets.

Labelling

A label of 6.5×10.5 cm dimension is pasted on the lower right corner of the herbarium sheet. It contains general information about the specimen on the herbarium sheets. It carries the information on the locality of collection, name of the collector, family name, scientific name, habit, habitat, data collection, vernacular name, etc.

Identification

Identification of the specimens was done with the help of standard floras (Gamble 1915-1935) and monographic studies of the taxa concerned. All the studied plant species have been arranged alphabetically, along with their scientific name, family, vernacular names Habit. The families are arranged according to Bentham and Hooker's system of classification.

DATA ANALYSIS

The collected plant data were entered into Excel spreadsheet 2007 and Summarized.

Descriptive statistics

Descriptive statistical methods such as number, percentage were employed and graphs and tables showing the results generated.

RESULTS AND DISCUSSIONS

In the present investigation, a total of 97 species representing 87 genera belonging to 46 families have been recorded (Table-3). Of the 46 families, the most dominant is Fabaceae-Caesalpiniodeae with 08 species (8.24%), followed by Fabaceae-Faboideae with 07 species (7.21%), ,Euphorbiaceae with 6 species (6.18%), and the families Amaranthaceae, Apocynaceae, Arecaceae, Malvaceae, Myrtaceae, Solanaceae, Verbanaceae by each of 03 species (3.09%), Asclepiadaceae, Commelinaceae, Fabaceae, Liliaceae, Nyctanginaceae, and Tiliaceae by each of 2 species (2.06%), and the other 26 consisting of 1 species. (Table.2).

Herbs constitute the highest species representative by 43 species (44.32%), trees 34 species (35.05%), shrubs 14 species (14.43%), climbers 4 species (4.12%), Creepers 02 species (2.06%). (Table:1)

Table-1: Habit of collecting plants from the study area.

Habit	Number of Species	Percentage of Species
Climber	4	4.12%
Herbs	43	44.32%
Trees	34	35.05%
Shrubs	14	14.43%
Creepers	2	2.06%

Fig-2: Habit of the plants

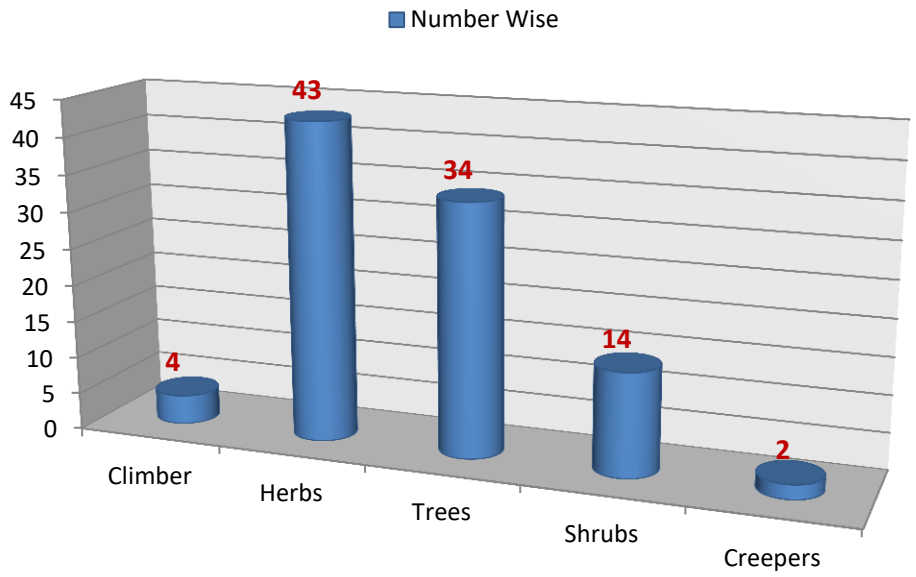


Fig-3: Habit of the plants- Percentage Wise

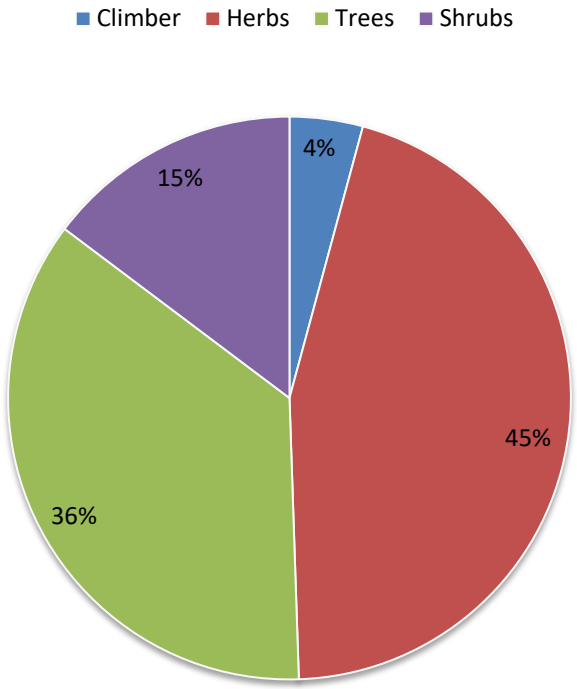


Fig-4: The number of species represented by each family.

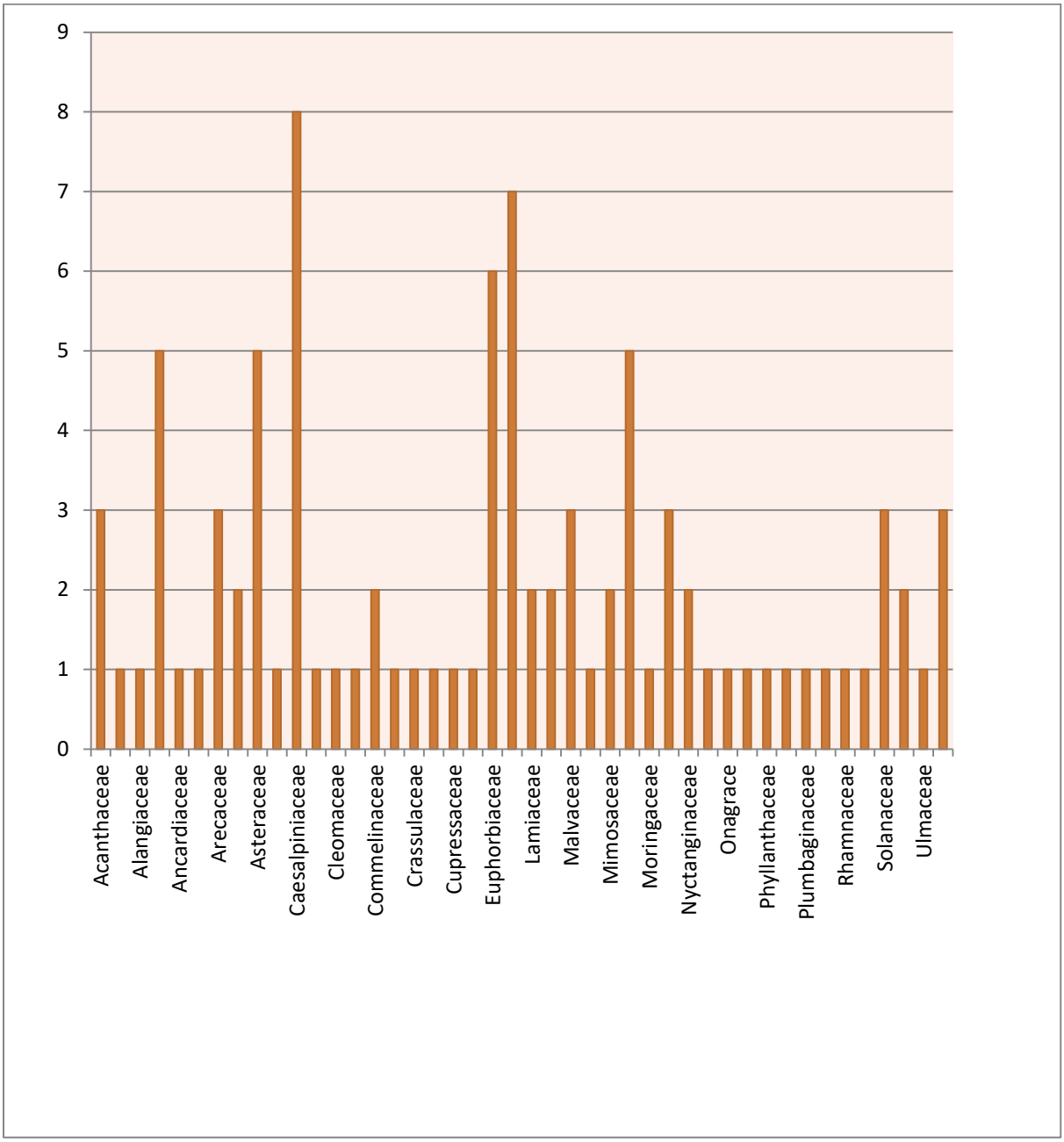


Fig-5: The percentage of species found in each family.

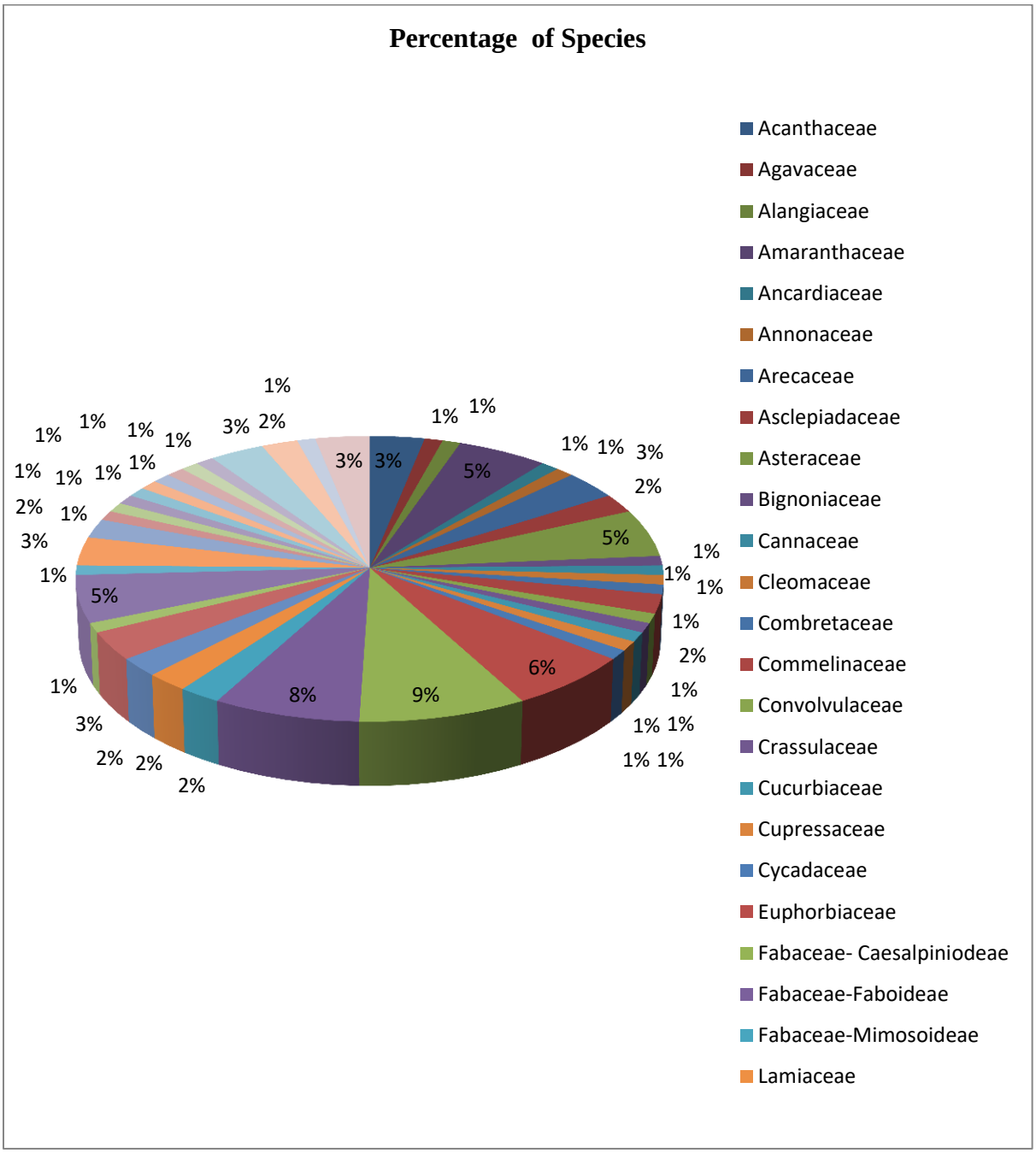


Table: 2.The number of species represented by each family and the percentage of species represented by each family

Families	Number of Spieces	Percentage
Acanthaceae	3	3.09%
Agavaceae	1	1.03%
Alangiaceae	1	1.03%
Amaranthaceae	5	5.15%
Ancardiaceae	1	1.03%
Annonaceae	1	1.03%
Apocynaceae	3	3.09%
Araucariaceae	1	1.03%
Arecaceae	3	3.09%
Asclepiadaceae	2	2.06%
Asteraceae	5	5.15%
Bignoniaceae	1	1.03%
Cannaceae	1	1.03%
Cleomaceae	1	1.03%
Combretaceae	1	1.03%
Commelinaceae	2	2.06%
Convolvulaceae	1	1.03%
Crassulaceae	1	1.03%
Cucurbiaceae	1	1.03%
Cupressaceae	1	1.03%
Cycadaceae	1	1.03%
Euphorbiaceae	6	6.18%
Fabaceae- Caesalpiniodeae	8	8.24%

Fabaceae-Faboideae	7	7.21%
Fabaceae-Mimosoideae	2	2.06%
Lamiaceae	2	2.06%
Liliaceae	2	2.06%
Malvaceae	3	3.09%
Menisoermaceae	1	1.03%
Moraceae	5	5.15%
Moringaceae	1	1.03%
Myrtaceae	3	3.09%
Nyctanginaceae	2	2.06%
Oleaceae	1	1.03%
Onagrace	1	1.03%
Passidloraceae	1	1.03%
Phyllanthaceae	1	1.03%
Plantaginaceae	1	1.03%
Plumbaginaceae	1	1.03%
Portulacaceae	1	1.03%
Rhamnaceae	1	1.03%
Salvadoraceae	1	1.03%
Solanaceae	3	3.09%
Tiliaceae	2	2.06%
Ulmaceae	1	1.03%
Verbanaceae	3	3.09%

Table.-3. List of plants collected from the Government Degree College, Narsampet, Campus

Sl.No	Scientific Name	Family	Common Name	Habit
1	*Acalypha indica*	Euphorbiaceae	Muripinda	Herb

2	*Acalypha wilkesiana*	Euphorbiaceae	Acalypha	Herb
3	*Achyranthes aspera*	Amarantheceae	Uttareni	Herb
4	*Acmella paniculata*	Asteraceae	0	Herb
5	*Aerva lanata*	Amarantheceae	Pindi kura	Shurb
6	*Agave attenuate*	Agavaceae	Kitti nara	Herb
7	*Alangium salviifolium*	Alangiaceae	Oodugu chettu	Tree
8	*Albizia lebbeck*	Fabaceae-Mimosoideae	Dirisena	Tree
9	*Alstonia scholaris*	Apocynaceae	Edakula ponna	Tree
10	*Alternanthera ficoidea*	Amarantheceae	Adavi ponnagantti	Herb
11	*Annona squamosa*	Annonaceae	Seethapalum	Tree
12	*Araucaria araucana*	Araucariaceae	Araucaria	Tree
13	*Azadiracta indica*	Meliaceae	Vepa	Tree
14	*Azima tetracantha*	Salvadoraceae	Tellauppi	Shurb
15	*Bauhinia racemosa*	Fabaceae-Caesalpiniodeae	Aare	Tree
16	*Blumea mollis*	Asteraceae	Kukka pogaku	Herb
17	*Boerhavia diffusa*	Nyctanginaceae	Atikamamidi	Herb
18	*Borassus flabellifer*	Arecaceae	Taati	Tree
19	*Bouganvilla glabra*	Nyctanginaceae	kagithpu pulu	Climber
20	*Breynia disticha*	Phyllanthaceae	Snow bush	Herb
21	*Bryophyllum pinnatum*	Crassulaceae	Ranapala	Herb
22	*Butea monosperma*	Fabaceae-Faboideae	Mooduga	Tree
23	*Calotropis gigantea*	Asclepiadaceae	Tella jilledu	Shurb
24	*Canna indica*	Cannaceae	Satyanarayan pulu	Shurb
25	*Celosia argentea*	Amarantheceae	Gunugu	Herb
26	*Cleome viscosa*	Cleomaceae	Kukka vaminta	Herb

27	*Cocculus hirsutus*	Menisoermaceae	Dusseru theega	Creeper
28	*Codium variegatum*	Euphorbiaceae	Croton	Herb
29	*Commelina benghalensis*	Commelinaceae	Neeru kasulu	Herb
30	*Corchorus aestuans*	Tiliaceae	Nela beera	Herb
31	*Cordyline fruticosa*	Liliaceae	Blood red leaves	Herb
32	*Crotan bonplandianum*	Euphorbiaceae	Galivana Mokka	Herb
33	*Cycas revolute*	Cycadaceae	Cycas	Tree
34	*Dalbergia sisso*	Fabaceae-Faboideae	sisoo	Tree
35	*Delonix regia*	Fabaceae-Caesalpiniodeae	Gulmohar	Tree
36	*Dracaena reflexa*	Lilliaceae	0	Herb
37	*Dypsis lutescens*	Arecaceae	Butterfly palm	Shurb
38	*Eclipta prostrata*	Asteraceae	Guntagalgaraku	Herb
39	*Eucalyptus obiiliqua*	Myrtaceae	Jaamaayal	Tree
40	*Euphorbia indica*	Euphorbiaceae	0	Herb
41	*Ficus benghalensis*	Moraceae	Marri	Tree
42	*Ficus benjamina*	Moraceae	Weeping fig	Tree
43	*Ficus hispida*	Moraceae	Bommedi	Tree
44	*Ficus racemosa*	Moraceae	Medi	Tree
45	*Hemidesmus indicus*	Asclepiadaceae	Sugandapala	Creeper
46	*Holoptelea intgrifolia*	Ulmaceae	Nemalinara	Tree
47	*Hygrophila auriculata*	Acanthaceae	Nerugobbi	Herb
48	*Indigofera linnaei*	Fabaceae-Faboideae	Erra palleru	Herb
49	*Ipomoea carnea*	Convolvulaceae	Rubbaru chettu	Shurb
50	*Iresine herbstii*	Amaranthaceae	Iresine	Herb
51	*Lantana camara*	Verbanaceae	Akshinthalapulu	Shurb
52	*Leucaena leucocephala*	Fabaceae-Faboideae	Subabul	Tree
53	*Ludwingia decurrens*	Onagrace	0	Herb

54	*Mangifera indica*	Ancardiaceae	Mamidi	Tree
55	*Momordica charantia*	Cucurbiaceae	Kakara	Climber
56	*Moringa oleifera*	Moringaceae	Munaga	Tree
57	*Nerium odorum*	Apocynaceae	Ganneru	Shurb
58	*Nyctanthes arbor-tristis*	Oleaceae	Parijatham	Tree
59	*Ocimum basilicum*	Lamiaceae	Bhuthulasi	Herb
60	*Parthenium hysterophorus*	Asteraceae	Carrot grass	Herb
61	*Passiflora foetida*	Passidloraceae	Jookamalle	Climber
62	*Peltophorum pterocarpum*	Fabaceae-Caesalpiniodeae	Paccha sunkesula	Tree
63	*phoenix sylvestris*	Arecaceae	Eetha	Tree
64	*Phyllanthus reticulatus*	Euphorbiaceae	Pulseru	Shurb
65	*Plectranthus scutellarioides*	Lamiaceae	0	Herb
66	*Plumbago zylanica*	Plumbaginaceae	Chitramulam	Shurb
67	*Pongamia pinneta*	Fabaceae-Faboideae	kanuga	Tree
68	*Portulaca grandiflora*	Portulacaceae	Gaddi pulu	Herb
69	*Prosopis juliflora*	Fabaceae-Mimosoideae	Sarkari thumma	Tree
70	*Pseuderanthemum carruthersii*	Acanthaceae	Eranthemum	Herb
71	*Psidium guajava*	Myrtaceae	Jaamaayal	Tree
72	*Rungia repens*	Acanthaceae	0	Herb
73	*Scoparia dulcis*	Plantaginaceae	0	Herb
74	*Senna auriculata*	Fabaceae-Caesalpiniodeae	Tangedu	Shurb
75	*Senna occidentalis*	Fabaceae-Caesalpiniodeae	Kassida	Herb
76	*Senna siamea*	Fabaceae-Caesalpiniodeae	Adavi thangedu	Tree

77	*Senna tora*	Fabaceae-Caesalpiniodeae	Tarigisa	Herb
78	*Sida acuta*	Malvaceae	Polikatta	Herb
79	*Sida cordata*	Malvaceae	Thirunal Benda	Herb
80	*Solanum nodiflorum*	Solanaceae	0	Herb
81	*Solanum surattense*	Solanaceae	Nela mulaga	Herb
82	*Solanum trilobatum*	Solanaceae	0	Climber
83	*Spathodea campanulata*	Bignoniaceae	African tulip	Tree
84	*Streblus asper*	Moraceae	Barrenka	Shurb
85	*Syzygium cumini*	Myrtaceae	Neredu	Tree
86	*Tabernaemontana divaricatum*	Apocynaceae	Nadivardanam	Shurb
87	*Tamarindus indica*	Fabaceae-Caesalpiniodeae	Chinta	Tree
88	*Tecoma trans*	Verbanaceae	paccha pulachettu	Tree
89	*Tectona gandris*	Verbanaceae	Teak	Tree
90	*Tephrosia purpuria*	Fabaceae-Faboideae	Vempalli	Herb
91	*Terminalia catappa*	Combretaceae	Baadam	Tree
92	*Thuja occidentalis*	Cupressaceae	Thuja	Herb
93	*Tradescantia spathacea*	Commelinaceae		Herb
94	*Tridax procumbence*	Asteraceae	Gaddi chamanthi	Herb
95	*Triumfetta rhomboidea*	Tiliaceae	0	Herb
96	*Vigna stipulacea*	Fabaceae-Faboideae	0	Herb
97	*Ziziphus nummularia*	Rhamnaceae	Nela regu	Shurb

Plate-1: Photos of some selected plants from the study area.

Epipremnum aureum

Dracaena marginata

Syngonium podophyllum

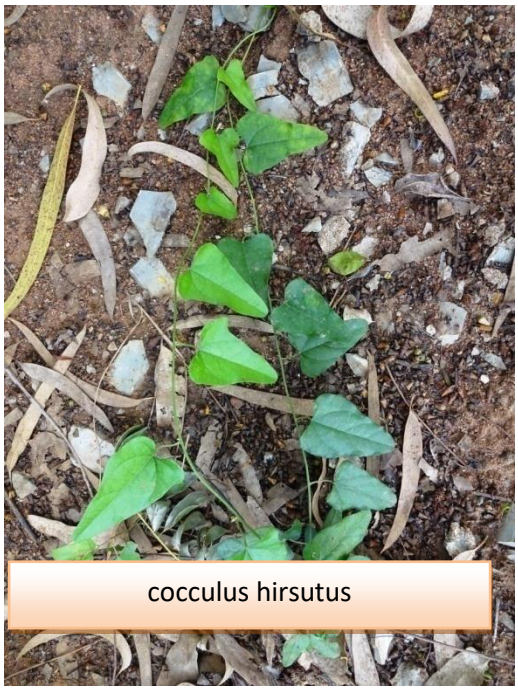
Bryophyllum pinnatum

Pandanus veitchii

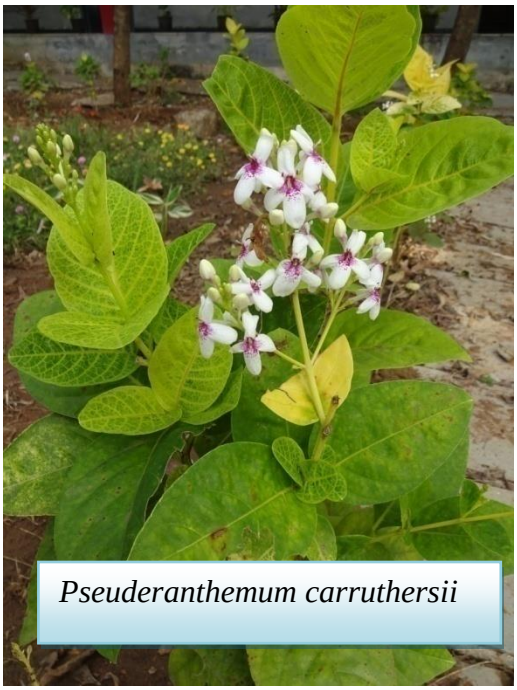
Tradescantia spathacea

Codiaeum variegatum

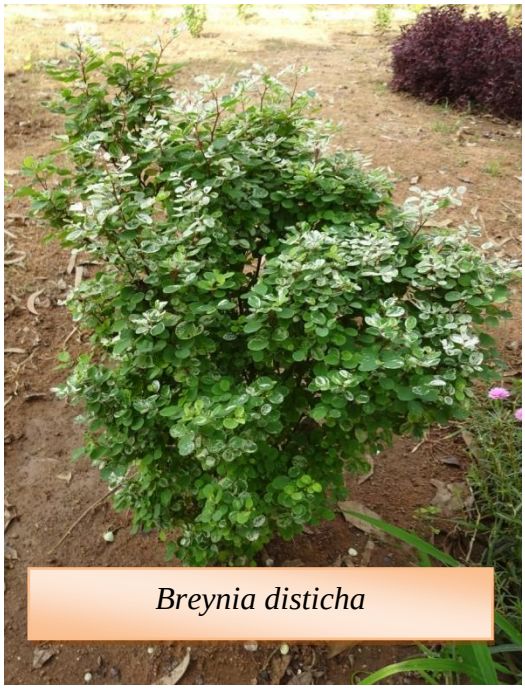
Coleus scuitellarioides



cocculus hirsutus



Pseuderanthemum carruthersii



Breynia disticha

Portulaca grandiflora

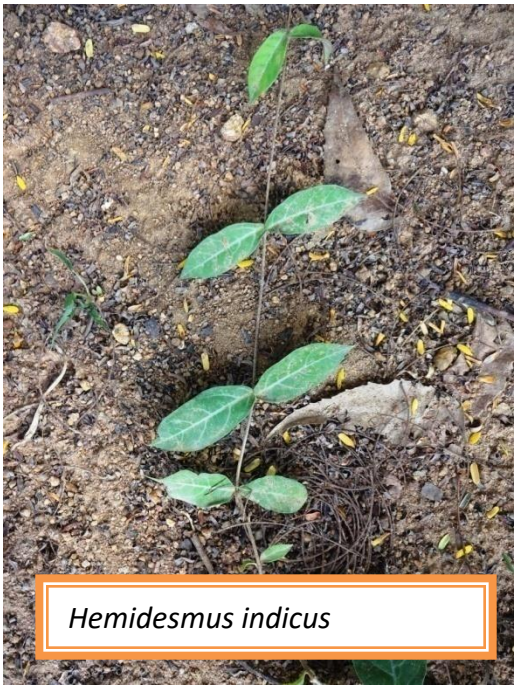
Dalbergia sisso

Alstonia scholaris

Euphorbia indica

Celosia argentea

Nerium odorum



Hemidesmus indicus

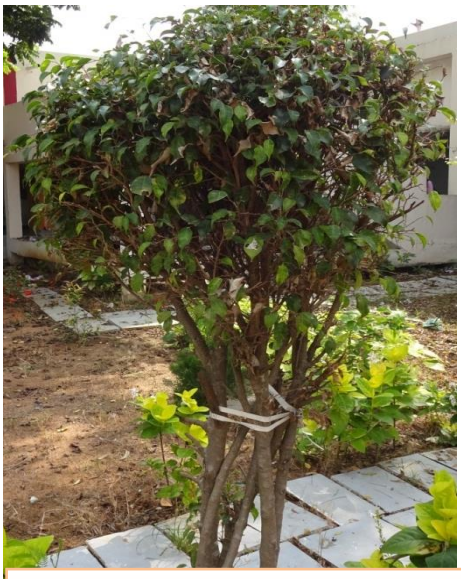
Phyllanthus reticulatus

Thuja occidentalis

Acalypha wilkesiana

Cycas revoluta

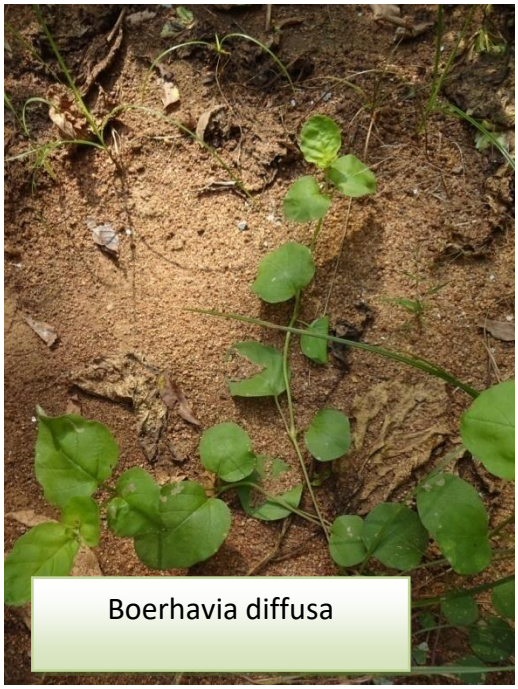
Agave attenuate



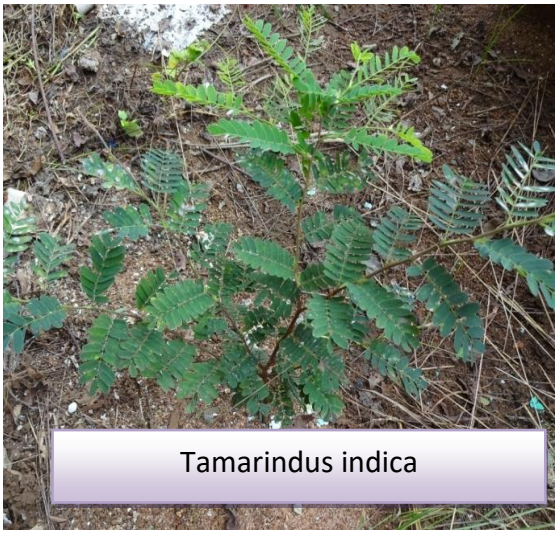
Ficus benjamina

Codium variegatum

Blumea mollis



Boerhavia diffusa

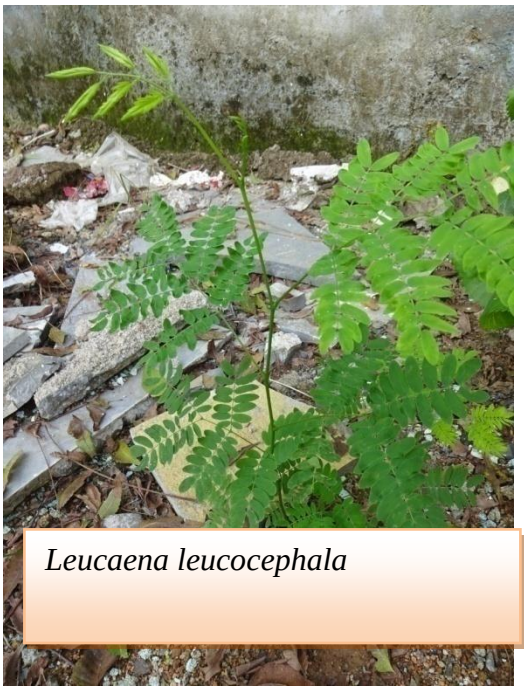


Tamarindus indica

Canna indica

Nyctanthes arbor-tristis

Syzygium cumini



Leucaena leucocephala

 *Dypsis lutescens*	 Tridax procumbence

Butea monosperma

Vigna stipulacea

Azadiracta indica

Acmella paniculata

Acalypha indica

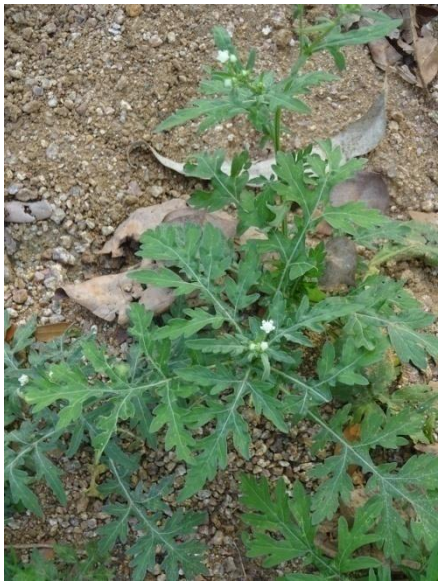
Cordyline fruticosa

Mangifera indica

Ludwingia decurrens

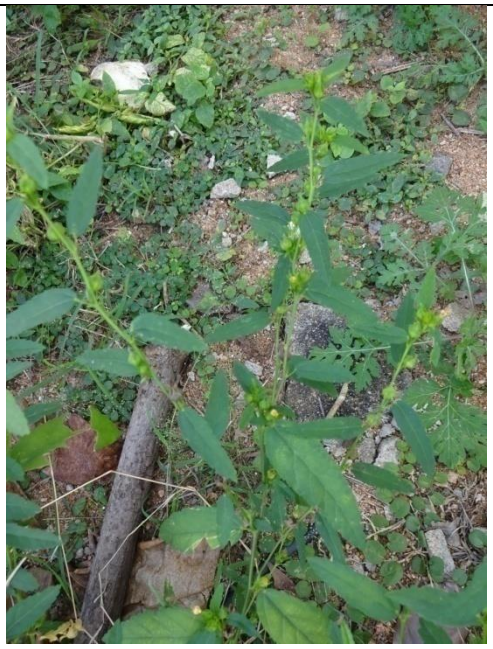
Achyranthes aspera

Aerva lanata



Parthenium hysterophorus

Ziziphus nummularia



Sida acuta

Agave attenuate

Tabernaemontana divaricatum

Crotan bonplandianum

Sida cordata

Senna siamea

Senna auriculata

Tephrosia purpuria

Prosopis juliflora

Psidium guajava

Momordica charantia

Borassus flabellif

Lantana camara

Annona squamosa

Solanum surattense

Phyllanthus reticulatus

Senna occidentalis

Ipomoea carnea

Cleome viscosa

Azima tetracantha

Ocimum basilicum

Eclipta prostrata

Alternanthera ficoidea

Rungia repens

Triumfetta rhomboidea

Plumbago zylanica

Ficus hispida

Streblus asper

Alangium salviifolium

Hygrophila auriculata

Ficus benghalensis

Solanum trilobatum

Senna tora

Pongamia pinneta

Calotropis gigantea

CONCLUSION

In terms of preserving the floral biodiversity, it is very important to set up a botanical garden in the confines of the campus, cultivate these plants, and protect the ones that grow naturally on the grounds.

The study found that the plants recorded from the campus area are economically very important. Some of them have medicinal value, some have ornamental value, and a few are edible.

Since in recent years the usage of plants for medicinal purposes is increasing, knowledge of ethnobotany should be made available to all students and faculties.

Plant documentation is the only way to preserve the fundamental knowledge of the plant resources and will be useful to the campus students and faculties for further research.

Due to over exploitation and deforestation in the natural habitat, few of the presently reported plant species are endangered. Strict conservational measures are to be taken to protect these plant species from becoming rare or endangered.

BIBLIOGRAPHY

Anonymous, 1993.Conservation on Biological diversity. Mexico

BATANOUNY, KAMAL. (2001). Adaptation to Desiccation. 10.1007/978-3-662-04480-3.11.

BRADLEY, H. 1849. Statistical report on the Circar of Dowlatabad, Hyderabad Deccan. Madras J. Lit. & Sci. 15: 411-551.

CIF, (2004). Conservation International Foundation. http://www.conservation.org

GAMBLE, J.S. & FISCHER, C.E.C.1915-1936. Flora of the Presidency of Madras.Vol. 1-3 (Vols.1 & 2 by J.S. Gamble).Adlard& Son Lts., London.

JAIN, S.K. AND R.R. RAO 1977. Field and Herberiam methods. Today and Tomorrow publishers, New Delhi.

KAUR & SHARMA 2014. Diversity and Phytosociological Analysis of Tree Species in Sacred Groves of Vijaypur Block, Samba (J&K). Int. J.Sc.& Res.6:3.859-862

MANI, M.P. (1974). The flora. In. Mani, M.S. (Editor) Ecology and Biogeography in India. Dr. W. Junk bv. Publishers, The Hague. P. 159-177.

MYERS, N., R. A. MITTERMEIR, C. G. MITTERMEIR, G. A. B. DA FONESCA & J. KENT. (2000). Biodiversity hot spots for conservation priorities. Nature 403: 853- 858.

PATRIDGE, E.A. 1911. Forest Flora of H.E.H. the Nizam's dominions, Hyderabad Deccan. A.V. Pillai & Sons, Hyderabad.

RAGAN, A. & RAJU, V.S. 1990. Eleocharis setifolia (A.Rich.) Raynal and Scleria multilacunosa T. Koyama: Two unreported sedges from peninsular India. Indian J.Bot. 13: 199-203.

RAGAN, A. SAMATA, A. & RAJU, V.S. 2005. Flemingia involucrata (Fabaceae): A new record for Andhra Pradesh. Indian J. Forestry 28(2): 164-165.

RAJU V.S., REDDY, C. S. & RAGAN, A. 2005. Curcuma L. (Zingiberaceae) in Andhra Pradesh: A preliminary study. J. Econ. Taxon. Bot. 28 (2): (in press).

RAJU, V.S. & SAMATA, A. 2004. Caralluma stalagmifera (Asclepiadaceae): A common but overlooked species in Andhra Pradesh. J. Econ. Taxon. Bot. 28: (in press).

RAO, P.N., V.S. RAJU and RAO, R.S. 1981. Floristic research works in Andhra Pradesh. Bull. Bot. Surv. India. 23: 90-95.

REDDY, C.S. 2001. Hybanthus vatsavayii (Violaceae): A new species from Andhra Pradesh, India. J. Econ. Tax. Bot. 25: 219,220.

REDDY, C.S. 2002. Floristic Studies in Warangal District, Andhra Pradesh, India. Ph.D. Thesis, Kakatiya University, Warangal.

REDDY, C.S., BHANJA, M.R. & RAJU, V.S. 1999a. Angiospermic flora and biological spectrum of Jakaram Reserve Forest, Warangal district, Andhra Pradesh. Indian Forester 125: 152-1166.

REDDY, C.S., BHANJA, M.R. & RAJU, V.S. 1999b. Nicotiana plumbaginifolia Viv. And Youngia japonica (L.) DC. – New records for the flora of Andhra Pradesh, India. J. Econ. T axon. Bot. 23: 685-686. REDDY, C.S., BHANJA, M.R. & RAJU, V.S. 2000. Cassia uniflora Miller: A new record for Andhra Pradesh, India. Indian J. Forestry 23: 324,325.

REDDY, C.S. & RAJU, V.S. 1999. Gnaphalium coarctatum Willd. (Asteraceae): A new record for southern India. J. Econ. Tax. Bot. 23: 687-688.

REDDY, C.S.& RAJU, V.S. 2001. A new variety of Cleome chelidonii (Cleomaceae). J. Econ. Tax. Bot. 25: 217,218.

REDDY, P.S. 1985. Floristic Studies of Warangal and Epidermology of Cyperaceae as an Aid to Taxonomy. Ph.D. thesis. Osmania University, Hyderabad.

REDDY, B.; RAO, VH. REDY VB AND RAO,VV 2014. Diversity and richness of herb species in peddagattu, the proposed site for uranium mining, Nalgonda district, Telangana state, India. Global Journal of Multidisciplinary Studies. 11:(3).197-204.

SAMATA, A. & RAJU, V.S. 2004. Caralluma adscendens var. fimbriata, another overlooked succulent from Andhra Pradesh. J. Econ. Taxon. Bot. 28:

SAYEEDUDDIN, M. 1935-36. Some of common flowering plants of the Hyderabad State: their distribution, economic and medicinal importance. J.Royal Asiat. Soc. Bengal (Sci.) 1: 9-22; 2: 73-94.

SAYEEDUDDIN, M. 1941. Additions to our knowledge of the flowering plants of H.E.H. the Nizams Dominions, Hyderabad, Deccan. J. Bombay Nat. Hist. Soc. 42: 930-924.

SEBASTINE, K.M. & HENRY, A.N. 1966. A contribution to the flora of Pakhal and surrounding regions of Narsapur taluk, Warangal district, Andhra Pradesh. Bull. Bot. Surv. India 8: 304-311.

SEN M & KESHARI KK 2019. Green campus report. Directorate of Technical Education, 4th Floor, Satpura Bhawan Bhopal 462004 (MP). Pp.1-4.

WALKER, A.L. 1849. Statistical report on the Circar of Warangal, Hyderabad Deccan. Madras J. Lit. & Sci. 15: 219-301.

WARNER, F. (1982). Indo-Sweedish forestry programme II – Background Documents. Govt. India, New Delhi.

GOVERNMENT DEGREE COLLEGE
NARSAMPET – 506 132
WARANGAL DISTRICT, TELANGANA STATE

DEPARTMENT OF COMMERCE

JIGNASA – STUDENT STUDY PROJECT

"A STUDY ON THE SAVING AND INVESTMENT HABIT OF SMALL INVESTORS"

SUBMITTED BY

S.No	Name of the Student	Class	Hall Ticket Number
01	Banoth Rajkumar	B.Com III Year	024-20-2002
02	Bairaboina Eshwaranad	B.Com III Year	024-20-2001
03	Miyapurapu Venkat Kiran	B.Com I Year	024-22-2015
04	Manchoju Saikrishna	B.Com I Year	024-22-2012
05	Akula Nagaraju	B.Com I Year	024-22-2001
06	Boda Kavya	B.Com I Year	024-22-2003

SUPERVISOR

DR.B.VISHNU KUMAR
ASSISTANT PROFESSOR OF COMMERCE

April – 2022

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We thank all the members who assisted us in successfully completing the project.

DECLARATION

We hereby declare that this project entitled **"A STUDY ON THE SAVING AND INVESTMENT HABIT OF SMALL INVESTORS"** is an original work done by us. This project is done as part of the Jignasa – Student Study Project as per the instructions of the Commissioner of Collegiate Education, Hyderabad. This work is not submitted anywhere else prior to this submission.

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Assistant Professor of Commerce

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Principal

CONTENTS

CHAPTER I

INTRODUCTION

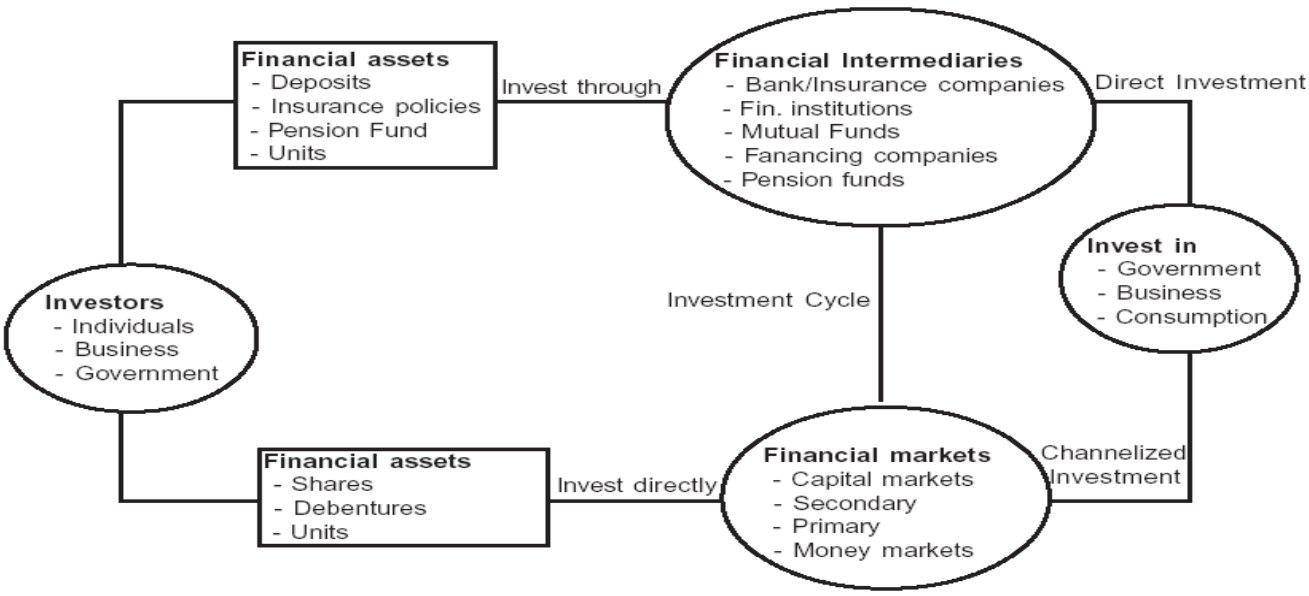
Economy of any country consists of numerous entities, which are vital for smooth functioning of the economy. Each of these entities has a specific role to play. Broadly, there are three entities in the economy viz., household, corporate (private and public sector) and Government. All the sectors, at some point of time, are either with surplus funds or have deficit. Surplus entities play an important role by supplying funds to the deficit entities. Businesses borrow funds for capital expenditure whereas Government borrows for public spending and other vital purposes. The way in which various sectors supply funds to the capital markets are like - wise linked. It is a known fact that most of the funds that are supplied to the market come from individuals or the retail sector since corporate entities usually plough back their earnings.

One of the basic preconditions for the growth of an economy is the growth in capital formation. Capital formation implies diversion of productive capacity of the economy to the making of capital goods that increases future productive capacity. The process of capital formation thus involves three distinct yet interdependent activities, viz., savings, finance and investment. As the size of national income increases with increase in productive capacity, the volume of savings also generally increase. It is a well-known fact that private and government savings are limited in scope. In such a case the individual savings becomes important. These individual savings are influenced by a multitude of social, psychological and political factors. The economic factors, specifically the level and distribution of income, fiscal, specifically the level and distribution of income, fiscal, monetary and economic policies are also important, as they drive the main factors.

The investment in any of the financial claim is governed by certain considerations. It ranges from return, safety, and liquidity to maturity. Different class of investors has different profile, which makes the intermediaries to design specific instruments for these classes. Good economic growth, liberalization of the financial markets, entry of foreign players into investment related sectors has resulted in the increase of investment avenues.

Financial institutions are the tools to mobilize savings and encourage investments by directing them to the productive channels and occupy a key position in the modern global economy. Financial institutions are of two types in general, namely Depository Institutions (e.g., Banks) and Non-Depository Institutions (e.g., Insurance Companies, Mutual funds) and both serve financial markets.

An Overview of Financial System in India



Source: Mutual funds in India Emerging issues, Nalini Prava Tripathy, Excel Books, 2007, p.3

Objectives of the Study:

The basic objective of the study is to examine the savings and investment related alternatives and decisions of small investors in the Narsampet Mandal of Warangal District, Telangana State. However, the sub objectives of the present study are as follows:

1. To understand the various savings and investment alternatives available in India for small investors.
2. To study the various factors that influence the savings and investment related decisions of the small investors.
3. To understand the most preferred savings and investment alternatives by the small investors.

Research Methodology and Database:

The study is predominantly based on both primary data. However, the related secondary data is also used wherever required. Primary data is collected by administering a structured questionnaire to randomly selected small investors in Narsampet Mandal based on convenience sampling consisting of 240 respondents.

The secondary sources of data include the Government publications, Magazines/Journals pertaining to the related topic of the research, the search engines and the related websites.

Tools of Analysis:

The data collected is analysed through tables. For better understanding of the same ratios & percentages, simple averages are used.

Scope of the Study:

The present study is confined to Narsampet Mandal for collecting the responses to understand the savings and investment habits of the small investors.

Limitations of the Study:

The study is restricted to the following limitations:

1. The present study is confined to the small investors investment habits only.
2. The study is confined to the geographical limits Narsampet Mandal of Warangal District in Telangana State.
3. The size of the sample respondents is 240 only, hence the conclusions arrived cannot to be generalised to all the retail investors,
4. The primary data collected from the respondents may be biased and hence the conclusions arrived at may not be applied to all.

Scheme of the study:

In order to have a better understanding of the present study and to achieve the stated objectives of the study, the study is divided in to four chapters as follows:

Chapter I	:	Introduction
Chapter II	:	An overview of various saving and investment alternatives
Chapter III	:	Small Investors perceptions towards savings and Investment
Chapter IV	:	Conclusions

CHAPTER II

AN OVERVIEW OF SAVING AND INVESTMENT ALTERNATIVES

Savings form an important part of the economy of any nation. With the savings invested in various options available to the people, the money acts as the driver for growth of the country. Indian financial scene too presents a plethora of avenues to the investors. Though certainly not the best or deepest of markets in the world, it has reasonable options for an ordinary man to invest his savings. Saving is the act of setting aside money for a future need or expense, i.e. for unforeseen situations. Financial institutions offer several savings' options, the most common being savings account in a bank, or fixed deposits, etc.

Investment benefits both economy and the society. It is an outgrowth of economic development and the maturation of modern capitalism. For the economy as a whole, aggregate investment sanctioned in the current period is a major factor in determining aggregate demand and, hence, the level of employment. In the long term, current investment determines the economy's future productive capacity and, ultimately, a growth in the standard of living. By increasing personal wealth, investing can contribute to higher overall economic growth and prosperity. The process of investing helps to create financial markets where companies can raise capital. This too, contributes to greater economic growth and prosperity. Specific types of investments provide other benefits to society as well. Investing is the process of putting your money in financial products and investment avenues that offer the potential to generate income or aid in wealth creation. The most popular investment options in India include stocks, mutual funds, real estate, bonds, ETFs (exchange-traded funds), etc. It's important to remember that risk and return go hand in hand when it comes to investing.

Need for Saving:

There are several reasons why one should save their hard-earned money. Here are some of the top benefits of savings:

1. **Emergency cushion:** Savings are a must regardless of the purpose for which they are ultimately used. Emergencies can come unannounced. one might lose their job, or have a medical emergency in the family, or plan to start own business. In these circumstances, one needs liquidity. Thus, it is always advised to set aside at least 3 to 6 months of income for an emergency.

2. **Stepping stone to investing:** Saving is the difference between your income and expenses. Out of the money saved, one can allocate a small portion to liquid assets such as bank fixed deposits or liquid funds and the rest to long-term wealth creation.

Importance of Investing

Investments hold the key to one's future as they aid in realising the dreams. Following are some of the top benefits of investing:

1. **Beat inflation:** Investing helps you to beat inflation over time. If one doesn't invest, chances are that the purchasing power will decline as inflation tends to eat away the value of money over time. To insure against this situation, it makes sense to invest money in investment avenues that have the potential to yield inflation-beating returns.

2. **Realise financial goals:** Whether it's buying a house, a car, or saving up for marriage of children, or paying for child's higher education, or planning for retirement, investing can help you to meet all such financial goals. Investing is one of the best ways to achieve long-term goals.

3. **Earn higher returns:** Investment avenues such as mutual funds or stocks have the potential to beat inflation and fetch higher returns than fixed deposits or savings account.

Major differences between savings and investments:

Many people feel that both the savings and investment are same. However, both the concepts differ in many aspects. The following are the major differences in savings and investment:

Point of Difference	Savings	Investment
Time Frame	Savings shall be considered for short to medium term time frame. 1-3 years time frame savings is best alternative	Investment shall be considered for long term time horizon any time frame over and above 3 years it shall be considered as investment alternative
Objective	Capital protection shall be the primary objective	Capital appreciation shall be the primary objective
Returns	Returns are steady and low over long term also.	Returns are fluctuating and high over long term.
Risk	Risk of loss is low	Risk of loss is high
Products	Money market and Government securities are main savings alternatives.	Capital market products, gold and real estate are the main investment alternatives.

INVESTMENT OBJECTIVES

The main investment objectives are increasing the rate of return and reducing the risk. Other objectives like safety, liquidity and hedge against inflation can be considered as subsidiary objectives.

RETURN: Investors always expect a good rate of return from their investments. Rate of return could be defined as the total income the investor receives during the holding period stated as a percentage of the purchasing price at the beginning of the holding period.

RISK: Risk of holding securities is related with the probability of actual return becoming less than the expected return. The word risk is synonymous with the phrase variability of return.

LIQUIDITY: Marketability of the investment provides liquidity to the investment. The liquidity depends upon the marketing and trading facility.

HEDGE AGAINST INFLATION: Since there is inflation in almost all the economy, the rate of return should ensure a cover against the inflation. The return rate should be higher than the rate of inflation; otherwise the investor will have loss in real terms. Growth stocks would appreciate in their values overtime and provide a protection against inflation. The return thus earned should assure the safety of the principal amount, regular flow of income and be a hedge against inflation.

SAFETY: The selected investment avenue should be under the legal and regulatory framework. If it is not under the legal framework, it is difficult to represent the grievances, if any. Approval of the law itself adds a flavour of safety.

Popular Saving and Investment options in India:

1. **Fixed Deposits:**

Fixed Deposits are popularly known as FDs in India and are offered by Banks and other financial institutions. FDs offer guaranteed returns and hence are the most popular investment type in India. They have a tenure ranging between 7 days and ten years. Fixed deposit interest rates range between 3%-7%. Moreover, senior citizens are offered additional interest on their FD investments. The FD interest rates are higher than the savings account interest rate. The interest payments are made monthly, quarterly, half-yearly, annually or at the time of maturity as per investor's choice. Investment in tax-saving FDs qualifies for tax benefits under Section 80C of the Income Tax Act, 1961. Moreover, the interest income is taxable as per the individual investor's income tax slab rates.

2. **Bonds**

Bonds are fixed-income instruments that offer a fixed rate of interest to the investors against the money invested. The investors lend money to the Government and Corporations and get regular income in the form of interest. Bond issuers are the borrowers who raise money publicly or privately for funding various projects. A bond is an instrument that includes information on the interest, due date, maturity date, and bond terms. Investors of bonds are paid the entire amount after the bond expires (upon maturity). Investors can also sell the bond before maturity in the secondary market at higher prices and get profits.

Bonds are considered low-risk investments. However, there are certain risks attached to them. The most common risk is the default risk. Bond issuers can default on interest and principal repayment. However, investors can assess the risk in the bond before investing. They can do so by checking the

credit rating of the bond. Bonds with higher credit rating are less likely to default on the payments than bonds with low credit rating. Bonds with AAA rating are considered the safest. Having bonds in one's portfolio helps investors diversify their investment risk.

3. Public Provident Fund (PPF)

The Public Provident Fund is one of the post office savings schemes launched by the National Savings Institute. However, some private and nationalised banks are authorised to accept PPF investments. Returns from the scheme are guaranteed as the Government of India backs it. Hence are considered as low-risk investments. Furthermore, the PPF investments come with a 15 years lock-in period. Also, in case the investor wishes to extend the scheme, they can do so in blocks of 5 years. Furthermore, for the purpose of tax savings, one can invest in PPF. The PPF interest rates are announced every quarter. Investment up to INR 1,50,000 per annum, qualifies for tax exemption under Section 80C of the Income Tax Act 1961.

4. Stocks (Popularly called as Shares)

Investment in stocks is known as an equity investment. Buying stocks or shares would give investors a part of the ownership of that company. Investors invest in stocks with a motive to earn regular income in the form of dividends and also gain from capital appreciation. When the stock prices rise, investors can benefit from selling the shares. Returns from stocks are market-linked and hence is considered the riskiest investment type. Share prices fluctuate based on market demand and supply and market sentiments. A bullish sentiment will lead to an unexpected rally of the market, while a bearish sentiment will lead to a drop in share prices.

Investing in the share market should be done with a long term investment horizon. In the short term, the market will fluctuate, which might

lead to unexpected losses. Investors need to be patient while investing in equities. To invest in shares, investors need to have a demat and trading account. A demat account will hold the shares while a trading account will facilitate the purchase and sale of shares. Short term capital gains from stock investing (below one year) are taxable at 15%. At the same time, long term capital gains are taxable at 10%, if the gains are above INR 1,00,000 per annum.

5. Mutual funds

Mutual funds are investment vehicles that pool money from investors to invest in assets like equity and debt. A mutual fund invests in shares, government bonds, corporate bonds, and other assets strategically. The fund house appoints a portfolio manager or fund manager manages the mutual fund. Every mutual fund has an investment objective, and the fund's investments revolve around this. Mutual funds can be of several types based on the assets. For example, equity funds, debt funds and hybrid funds are three types of mutual funds based on the asset class. Similarly, funds can also be categorised based on their strategy, structure and investment option. There are also mutual funds that offer tax benefits. These are called Equity Linked Savings Scheme. or ELSS funds. Investment in these funds qualifies for tax deduction under Section 80C of the Income Tax Act, 1961.

Returns from mutual funds are taxable as per the investment holding period. Short term capital gains are subject to short term capital gains tax (STCG tax). At the same time, the long term capital gains are subject to long term capital gains tax (LTCG tax). Furthermore, tax rates vary for equity and debt mutual funds.

6. Exchange-Traded Funds (ETF)

The exchange-traded fund is a passive investment option that usually replicates the underlying index. In other words, ETFs portfolio matches the

composition of an Index in the same proportion. An exchange-traded fund mimics and tracks the performance of the index. Hence ETFs are not actively managed by a portfolio manager. Furthermore, exchange-traded funds do not attempt to outperform their respective index. There are different types of ETFs, for example, equity ETFs, bond ETFs, currency ETF, commodity ETFs, etc. Also, one can easily buy or sell them on the stock market.

7. National Pension Scheme (NPS)

National Pension Scheme (NPS) is a scheme suitable for retirement. Investors who wish for regular income post their retirement and also save tax can invest in NPS. The Central Government backs them and hence are considered as low-risk investments. An investor can invest during the period of their employment at regular intervals. The scheme allows the investor to withdraw a percentage of the accumulated amount post-retirement. Also, the investor receives the remaining amount monthly as a pension post-retirement.

NPS has two types of accounts, namely NPS Tier I Account and NPS Tier II Account. Tier I account is a default account, while the Tier II account is a voluntary account. NPS investments up to INR 1,50,000 qualify for tax benefits under Section 80C of the Income Tax Act, 1961. Furthermore, an additional INR 50,000 is eligible for tax deduction under Section 80CCD of the Income Tax Act, 1961.

8. Gold

Gold has always been a go-to asset or investment for Indians. It is also an asset with great emotional and social value. Buying gold coins, bars, biscuits, and jewellery on auspicious days has been a tradition in India for ages now. An asset with such sentimental value has also become popular in different forms. For example, gold bonds and gold ETFs are gaining popularity recently. Gold is used as a hedge to protect one’s portfolio against

potential market risk. Investing in gold doesn't provide any regular income in the form of dividends and interest. However, it is a relatively liquid asset and can offer inflation-beating returns.

9. Real Estate

Investing in real estate involves purchase, ownership and management of the physical property. In other words, any investment in land, building, plant, property, etc. is considered as real estate investment. Investor's main aim of investing in real estate is to sell the asset at a higher price in the future or generate regular income by way of rent. Real estate investing best suits investors with a long term investment horizon. The prices of land and property do not fluctuate a lot in the short term. Hence investors with long term goals should look at investing in real estate. Before investing in real estate, investors have to be prudent and do their research about the market prices and get the papers provided by the seller authenticated by legal experts.

Real estate investing in India has shifted from owning physical property to owning a part of the property with low investment. This is possible through REITs or Real Estate Investment Trusts. Real Estate Investment Trusts (REIT) is an instrument with real estate properties as its underlying assets and investors can buy a share of REIT to earn steady income in the form of dividends. These dividends are paid from the rental income from the underlying properties.

CHAPTER III

SMALL INVESTORS PERCEPTION TOWARDS SAVING AND INVESTMENT

The relationship between saving, investment and economic growth has surprised economists in India over a period of time. Generally, in case of retail investors a portion of income is saved and put into investment. India Investment accounted for 34.3 % of its Nominal GDP in March 2021. India accounts for one of the leading countries in terms of savings and investment in terms of its GDP. However, proper channel of those savings into productive investment alternatives is also very important for the growth and development of economy. This section of the present study had attempted to understand the preferences of small investors towards their saving and investment decisions.

Age plays a vital role in making decisions and quality thereof. Investment habits of the people across the age groups will not be the same. Table 1 shows the age profile of the respondents. From the table it is observed that the maximum number of respondents belong to the age group of 25-40 (53 per cent), followed by 40-50 (28 per cent) age category. The tendency to invest more is generally high in the age group of 25-40 as it is regarded as the risk taking and risk bearing age group in the human life cycle.

Table 1
Age-Wise Classification

Age Group (in Years)	**Number of Respondents**	**Percentage**
25 to 40	128	53
40 to 50	66	28
50 to 60	38	16
Above 60	08	03
Total	**240**	**100**

Source: Primary Data

Ability to take informed decisions would largely depend on the education level. Investment decisions would undoubtedly be affected by the investor's ability to scan around and find the right opportunity. Table 2 presents the details relating to the educational qualifications of the investors. Of the total respondents 40 percent possess Graduate degree followed by Post - graduates (27 per cent) and 16 percent of the respondents are having professional qualification such as Teachers, Doctors, and Job holders. A majority of the respondents are capable of understanding the return, risk and safety aspects of the various savings and investment alternatives.

Table 2
Education Qualifications

Qualification	Number of Respondents	Percentage
Intermediate	42	18
Graduation	96	40
Post Graduation	64	27
Professional	38	16
Total	**240**	**100**

Source: Primary Data

Not all individuals would possess same acumen to determine the portfolio of investment. People in different professions / occupations are endowed with different sets of skills for making decisions. The particulars relating to the profession of the respondents are presented in Table 3. An analysis of the table clearly indicates that out of 240 respondents as many as 110 (46 percent) belong to the business community followed by Government service (19 percent), professional (17 percent) and private service and self-employed (9 percent each). As business community respondents are very calculated in taking risk with the given amount of assured return the high proportion justifies the need for the present study.

Table 3
Occupation of the Respondents

Occupation	Number of Respondents	Percentage
Govt. Service	46	19
Private Service	22	09
Self Employed	22	09
Professional	40	17
Business	110	46
Total	**240**	**100**

Source: Primary Data

Investment made in any avenue is a function of savings. Savings itself is influenced by income levels. Hence, an understanding of the income levels of the respondents become necessary. The particulars relating to the same are presented in Table 4. The table gives the break-up of the income of the respondents. The highest proportion of respondents are having an annual income of Rs 2 to 4 Lakhs (33 percent) followed by Rs. 4 – 6 Lakhs (26 percent) , Rs. 6 – 8 Lakhs (21 percent), less than Rs.2 Lakhs (17 percent) and More than Rs.8 Lakhs (3 percent).

Table 4
Annual Income of the Respondents

Annual Income	Number of Respondents	Percentage
Less than 2 Lakhs	40	17
2-4 Lakhs	80	33
4-6 Lakhs	62	26
6-8 Lakhs	50	21
More than 8 Lakhs	08	03
Total	**240**	**100**

Source: Primary Data

Savings are an integral part of any household system. Table 5 reveals the savings rate of the respondents as percent of their annual income. It is observed that the majority of the respondents have savings of 20 to 30 percent (48 percent) of their income followed by above 30 percent (39 percent) the least percent of savings are found in the range of 5 to 9 percent indicating only 3 percent of the respondents under study.

Table 5
Savings Rate (% 0f Income) of the respondents

Savings	Number of Respondents	Percentage
1 to 4 Percent	12	05
5 to 9 Percent	06	03
10 to 20 Percent	14	06
20 to 30 Percent	114	48
Above 30 Percent	94	39
Total	**240**	**100**

Source: Primary Data

Table 6 reveals the savings habits of the respondents based on their annual income. It is interesting that all the respondents in the range of 1 to 4 percent of savings habits are from less than Rs.2 lakhs income group and the savings habits of all the respondents with more than Rs.8 lakhs income is either 20 percent or more. In the income groups of Rs.2-4 lakhs and Rs.4-6 lakhs majority of savings are in the range of 20-30 percent whereas in the income group of Rs.6-8 lakhs majority of savings preferred are above 30 percent.

Table 6
Annual Income and Savings of the Respondents

Savings/ Income	1% to 4%`	5% to 9%	10% to 20%	20% to 30%	Above 30%	Total
< 2 Lakhs	12 (05)	02 (01)	04 (02)	10 (04)	08 (03)	36 (15)
2-4 Lakhs	00 (00)	04 (02)	08 (03)	52 (22)	20 (08)	84 (35)
4-6 Lakhs	00 (00)	00 (00)	02 (01)	36 (15)	24 (10)	62 (26)
6-8 Lakhs	00 (00)	00 (00)	00 (00)	12 (05)	38 (16)	50 (21)
>8 Lakhs	00 (00)	00 (00)	00 (00)	04 (02)	04 (02)	08 (03)
Total	**12 (05)**	**06 (03)**	**14 (06)**	**114 (48)**	**94 (39)**	**240 (100)**

Source: Primary Data
Figures in brackets indicate Percentage.

An attempt was made to find the first preference among the various investments options the respondents prefer to invest their money. Table 7 gives an indication about the various options in which the respondents prefer to invest. The details are shown in Table 7. It can be understood from the table that the majority of the respondents (36%) prefer to save or invest in Insurance. 16% of the respondents preferred bank deposits and only 6% of the respondents preferred shares as their first investment alternative. This clearly indicates that majority of investors are preferring safety over returns and are willing to take minimum risk. Tax saving option is another prominent reason to invest in insurance plans.

Table 7
Preferred Investment as first priority

Type of Investment	Number of Respondents	Percentage
Bank Deposits	38	16
Bonds	18	08
Shares	14	06
Real Estate	22	09
Mutual Funds	28	12
Precious Metal	32	13
Insurance	88	36
Total	**240**	**100**

Source: Primary Data

As indicated in the Table 8, 35 percent of respondents make self analysis while making investment decisions whereas 27 percent depend on the suggestions of friends & relatives; 20 percent rely on expert opinion and 18 percent prefer the TV/Newspaper advertisements.

Table 8
Recommendations followed by respondents while saving or investing

Recommendation	Number of Respondents	Percentage
Expert Opinion	48	20
Self Analysis	85	35
Friends & Relatives	65	27
TV / News Paper	42	18
Total	**240**	**100**

Source: Primary Data

An attempt was made to understand the saving and investment objective of the respondents under study. The details of the various objectives as stated by the respondents are shown in Table 9. It can be seen that majority (28%) of the respondents prefer the saving and investment objective as tax saving option. Around 24% of the respondents prefer capital appreciation with risk taking ability, 22% of the respondents opined that they prefer to save for meeting the future obligations related to their children. Only 8% of the respondents opined that they are planned for their retirement corpus.

Table 9
Investment Objective of the Respondents

Investment Objective	Number of Respondents	Percentage
Capital Protection	38	16
Capital Appreciation	57	24
Tax Saving	68	28
Children Future needs	52	22
Retirement	20	08
Others	05	02
Total	**240**	**100**

Source: Primary Data

It is generally considered that any form investment should be for a longer duration to get the desired/maximum return. Table 10 indicates the time horizon of the respondents' investments. It can be seen that 166 respondents (69 percent) out of the total of 240 respondents have a time horizon of 3 year to 5 years followed by 23 percent of the respondents having a time horizon of 1 year to 3 years. Only 5 percent of the respondents have a time horizon of more than 5 years and 3 percent of the respondents have it as less than 1 year.

Table 10
Time Horizon of Investment of respondents

Time Horizon (in Years)	Number of Respondents	Percentage
Less than 01 Year	08	03
1-3 Years	54	23
3-5 Years	166	69
More than 05 Years	12	05
Total	**240**	**100**

Source: Primary Data

Table 11
Classification of Income wise Expected Returns of the Respondents

Expected Return/ Income	<10%	10-15%	15-20%	>20%	Total
< 2 Lakhs	06 (03)	16 (07)	18 (08)	00 (00)	40 (18)
2-4 Lakhs	02 (01)	28 (12)	50 (21)	00 (00)	80 (33)
4-6 Lakhs	00 (00)	20 (08)	38 (16)	04 (02)	62 (26)
6-8 Lakhs	00 (00)	02 (01)	36 (15)	12 (05)	50 (20)
8-10 Lakhs	00 (00)	00 (00)	05 (03)	03 (01)	08 (03)
Total	**08 (03)**	**66 (28)**	**147 (61)**	**19 (08)**	**240 (100)**

Source: Primary Data
Figures in brackets indicate Percentage.

The expected return on investment by and large is determined by the risk associated with the investment avenue. The universal dictum of science of finance has been: “higher the risk, higher will be the return”. The expected return of the respondents is illustrated in Table 11. An analysis of the table reveals that the majority of the respondents (61 percent) prefer a return in between 15-20 percent. 28 percent of the respondents prefer a return between 10-15 percent whereas only 08 percent said their expected return is more than 20%. Interestingly there are only 03% of respondents with expected return of less than 10 percent; this may be due to the reason that the government bonds/deposits which have zero risk also guarantee more than or equal to such return.

CHAPTER IV

CONCLUSIONS & SUGGESTIONS

In this chapter of the present study, an attempt is made to summarise the important findings of the study and conclude the entire study in a summarised form. A few suggestions are also offered as per the important observations made from the study.

Conclusions:

- One of the basic preconditions for the growth of an economy is the growth in capital formation. Capital formation implies diversion of productive capacity of the economy to the making of capital goods that increases future productive capacity. The process of capital formation thus involves three distinct yet interdependent activities, viz., savings, finance and investment.
- These individual savings are influenced by a multitude of social, psychological and political factors. The economic factors, specifically the level and distribution of income, fiscal, specifically the level and distribution of income, fiscal, monetary and economic policies are also important, as they drive the main factors.
- Financial institutions are the tools to mobilize savings and encourage investments by directing them to the productive channels and occupy a key position in the modern global economy. Financial institutions are of two types in general, namely Depository Institutions (e.g., Banks) and Non-Depository Institutions (e.g., Insurance Companies, Mutual funds) and both serve financial markets.

- Saving is the act of setting aside money for a future need or expense, i.e. for unforeseen situations. Financial institutions offer several savings' options, the most common being savings account in a bank, or fixed deposits, etc.
- The main investment objectives are increasing the rate of return and reducing the risk. Other objectives like safety, liquidity and hedge against inflation can be considered as subsidiary objectives.
- The most important savings and investment related alternatives for small investors in India are Bank Deposits, Public Provident Fund, Shares, Mutual Funds, Gold, Real Estate and Insurance.
- Maximum number of respondents under the present study belong to the age group of 25-40 (53 per cent), followed by 40-50 (28 per cent) age category. The tendency to invest more is generally high in the age group of 25-40 as it is regarded as the risk taking and risk bearing age group in the human life cycle.
- Out of 240 respondents under consideration as many as 110 (46 percent) belong to the business community followed by Government service (19 percent), professional (17 percent) and private service and self-employed (9 percent each). As business community respondents are very calculated in taking risk with the given amount of assured return the high proportion justifies the need for the present study.
- The highest proportion of respondents are having an annual income of Rs 2 to 4 Lakhs (33 percent) followed by Rs. 4 – 6 Lakhs (26 percent) , Rs. 6 – 8 Lakhs (21 percent), less than Rs.2 Lakhs (17 percent) and More than Rs.8 Lakhs (3 percent).
- From the savings habits of the respondents it is observed that the majority of the respondents have savings of 20 to 30 percent (48 percent) of their income followed by above 30 percent (39 percent) the

least percent of savings are found in the range of 5 to 9 percent indicating only 3 percent of the respondents under study.

- The savings preferences of the respondents under study were determined and it is found that majority of the respondents (36%) prefer to save or invest in Insurance. 16% of the respondents preferred bank deposits and only 6% of the respondents preferred shares as their first investment alternative. This clearly indicates that majority of investors are preferring safety over returns and are willing to take minimum risk. Tax saving option is another prominent reason to invest in insurance plans.
- It is noticed that 35 percent of respondents make self analysis while making investment decisions whereas 27 percent depend on the suggestions of friends & relatives; 20 percent rely on expert opinion and 18 percent prefer the TV/Newspaper advertisements.
- The details of the various objectives as stated by the respondents indicated that majority (28%) of the respondents prefer the saving and investment objective as tax saving option. Around 24% of the respondents prefer capital appreciation with risk taking ability, 22% of the respondents opined that they prefer to save for meeting the future obligations related to their children. Only 8% of the respondents opined that they are planned for their retirement corpus.
- It is generally considered that any form investment should be for a longer duration to get the desired/maximum return. It is observed that166 respondents (69 percent) out of the total of 240 respondents have a time horizon of 3 year to 5 years followed by 23 percent of the respondents having a time horizon of 1 year to 3 years. Only 5 percent of the respondents have a time horizon of more than 5 years and 3 percent of the respondents have it as less than 1 year.

- The expected return on investment by and large is determined by the risk associated with the investment avenue. The universal dictum of science of finance has been: “higher the risk, higher will be the return”. Majority of the respondents (61 percent) prefer a return in between 15-20 percent. 28 percent of the respondents prefer a return between 10-15 percent whereas only 08 percent said their expected return is more than 20%. Interestingly there are only 03% of respondents with expected return of less than 10 percent; this may be due to the reason that the government bonds/deposits which have very minimum risk also guarantee more than or equal to such return.

SUGGESTIONS:

In light of the important observations made during the present study a few suggestions are offered to improve the saving and investment habit of the small investors. The most important aspect is to convert the savings of the small investors into investment in order to reap the real benefit of the growing economy of our country. The important suggestions made are as follows:

- Majority of the small investors feel that both saving and investment are one and the same. In light of this, appropriate awareness programs may be conducted by the authorities and institutions concerned to enlighten them regarding the benefits of savings and converting them into investment.
- It is observed that majority of small investors are preferring life insurance as an investment product for their future needs. They should be made aware that insurance is not a investment related but it is only a protection related product. They should be encouraged to take term insurance for their protection related needs and the remaining surplus shall be converted to investment related needs.

- It is noted that many small investors have an aspiration to avail tax benefits under section 80C for their investment. In view of this they are preferring life insurance as a best alternative. They shall be educated that many other investment related products such as ELSS, NPS are available to avail tax benefits.
- It is also noted that majority of small investors don't prefer shares as an investment alternative. This may be because of the high risk involved in such investment. The small investors shall be educated regarding the returns that can be generated through investment in shares. Any return that can beat the inflation rate in the long term is considered as the real return.
- The small investors shall understand the importance of long term investment. They shall be made aware about the Systematic Investment Plan (SIP) in mutual funds. SIP helps to average the cost of investment and helps to accumulate more units in volatile markets and in turn helps to generate good returns in long term.

ANNEXURE

QUESTIONNAIRE

"A STUDY ON THE SAVING AND INVESTMENT HABIT OF SMALL INVESTORS"

Dear Respondent,

This questionnaire is designed for the data collection as part of the Jignasa – Student Study Project to be submitted to the Commissioner of Collegiate Education, Hyderabad. We the students of B.Com of Government Degree College, Narsampet are doing a project. All the information collected through the questionnaire will be used purely for the said project and will be kept highly confidential. We request you to please provide the true information and co-operate with us.

01.Name (Optional) :

02.Place of stay :

03.Age

a) 25 – 40 years ( )
b) 40-50 years ( )
c) 50-60- years ( )
d) More than 60 Years ( )

04.Educational Qualifications:

a. Intermediate ( )
b. Graduation ( )
c. Post Graduation ( )
d. Professional ( )

05. Occupation / Profession

a. Government Service ( )
b. Private Service ( )
c. Self Employed ( )
d. Professional ( )
e. Business ( )

06. Annual Income (in Rupees)

a. Less Than 02 Lakhs ( )
b. 2 – 4 Lakhs ( )
c. 4 – 6 Lakhs ( )
d. 6 – 8 Lakhs ( )
e. More than 08 Lakhs ( )

07. Savings Rate (% of Income)

a. 1% to 4% ( )
b. 4% to 9% ( )
c. 10% to 20% ( )
d. 20% to 30% ( )
e. More than 30% ( )

08. Preferred investment as first priority. (Please give the number as per order of Preference such as 1,2,3,4,5,6,7)

a. Bank Deposit ( )
b. Bonds ( )
c. Shares ( )
d. Real Estate ( )
e. Mutual Funds ( )
f. Gold (Precious Metal) ( )
g. Insurance ( )

09. Recommendation / Advice followed while taking investment decision.

a. Expert Opinion ( )
b. Self Analysis ( )
c. Friends & Relatives ( )
d. TV / News Paper ( )

10. Investment Objective (Please give order of preference as 1,2,3,4,5,6)

a. Capital Protection ( )
b. Capital Appreciation ( )
c. Tax Saving ( )
d. Children future needs ( )
e. Retirement ( )
f. Others (Please Specify) ( )

11. Time Horizon of Investment (in Years)

a. Less than 01 Year ( )
b. 1 – 3 Years ( )
c. 3 – 5 Years ( )
d. More than 05 Years ( )

References:

- RBI Annual Reports.
- SEBI Annual Reports.
- Government Reports on Indian Statistics.
- Mutual funds in India Emerging Issues, Nalini Prava Tripathy, Excel Books, 2007

LEARNING OF ENGLISH THROUGH DIGITAL MEDIA: A BRIEF REPORT

I. Statement of the Problem or Hypothesis

Most of the learners in Government Colleges of rural areas hail from exclusive sections of the society. Several methods of learning English are available for the slow learners in Government Colleges of rural areas of Telangana State. Technology plays vital role in learning of English in the 21st Century.

II. Aims and Objectives

The aim of this project is to explore the use technology in learning of English language. Use of technology in higher education system is a major successful transformation in learning Communication Skills.

- To find the useful methods of learning of English.
- To analyze, formulate a better platform of learning of English.
- To use tools of Information and Communicative Technology (ICT) for effective learning of Communication Skills in English.
- To find the possible solutions to the issues and challenges faced in Government Degree Colleges of Telangana State.

III. Review of Literature

The aim of this study is to examine the issues in learning of English and to find possible solutions for the students in rural colleges. Although different learning strategies are prevalent, technology paves the way to the innovative and informative language learning modules. The Information and Communicative Technology (ICT) plays key role in learning of English through various tools.

IV. Research Methodology

- The study proposes to analyze the communication problems of the Undergraduate students of Government Degree Colleges of Warangal District Rural.

- Try to find some specific methods of learning modules which can motivate the learners to communicate in English.
- The approach intends to collect data through tests, surveys, observations in actual classroom learning in experimental situations**.**

V. Introduction

English is global communicative language used by everyone in the world. It now holds a dominant position in every sphere of human activity. The rural undergraduate students are lagging behind in acquiring communication skills. The socio-economic conditions, familial and environmental factors make the rural students hard to learn English language skills as well as Soft Skills. In this context, the Kakatiya University, Warangal has introduced the new text book entitled **English for Advancement** for First year Undergraduate students from the academic year 2019-2020, in which the textual and grammar topics are useful for learners of English. Further, the Commissioner of Collegiate Education, Hyderabad offers **TSKC** (Telangana Skills and Knowledge Centre) for the students of Government Colleges. The aim of TSKC is to train the students in communication skills, soft skills, analytical skills, computer skills, and employability skills to make them competent in global market. ICT imparts the knowledge readily available for learners any time anywhere.

VI. Data Analysis

The students collected the data of various digital tools used by the Principal, Staff and students in the college.

VII. Conclusion

Learning English through Digital media has become essential for students as well as teachers. The teacher can upload syllabus, model papers, teaching modules, audio and video clippings, etc and circulate to the students for download.

GOVERNMENT DEGREE COLLEGE
NARSAMPET

WARANGAL DISTRICT (RURAL) 506 132

DEPARTMENT OF HISTORY

STUDENT STUDY PROJECT

(2019-2020)

TITLE:

A STUDY ON THE SIGNIFICANCE OF MEDARAM SAMMAKKA SARALLAMA JATHARA

SUPERVISOR

B. RAMESH

Assistant Professor of History

Government Degree College

Narsampet, Warangal Rural

CERTIFICATE

This is to certify that this study entitled "***A STUDY ON THE SIGNIFICANCE OF MEDARAM SAMMAKKA SARALLAMA JATHARA"*** is a bonafide Student Study Project done by the following B.A. students of Government Degree College, Narsampet, Warangal Disrict (Rural) under the supervision of B.Ramesh, Asst. Professor of History, Department of History.

S.No.	NAME OF THE STUDENT	CLASS & GROUP	SIGNATURE
1	G. RAJU	B.A. – III YEAR	
2	K . REVANTH	B.A. – III YEAR	
3	A.AISHWARYA	B.A. – III YEAR	
4	K . SUSHMITHA	B.A. – III YEAR	
5	J . MANI CHANDAR	B.A. – II YEAR	
6	CH.MAMATHA	B.A. – II YEAR	

Head
Dept. of History

Supervisor

PRINCIPAL

A STUDY ON THE SIGNIFICANCE OF

MEDARAM SAMMAKKA SARALLAMA JATHARA

INTRODUCTION

Medaram is a village in the "Dandakaaranya" (Dandaka forest) area of the Mulugu District which is situated at about 150-km away from Warangal city. Here Sammakka Jatara, non-Vedic and non-Brahminical festival is celebrated once in two years on a very large scale for four days in the months of January/February. It is a rare confluence of different tribes and castes and their traditions at this biennial Indian fair. Medaram Festival is considered to be the largest festival in the South India and is one of the largest festivals in the world.

OBJECTIVES OF THE STUDY:

- To know the significance of Medaram Samakka Saralamma Jathara.
- To bring awareness among the students about the culture and tradition of tribal communities.
- To understand the efforts of the various government organizations in conduct of Medaram jathara.

DATA COLLECTION

We have visited medaram along with our teaching faculty as a part of field trip to collect information from the priests of the temple about medaram jathara and its historical

and devotional significance for secondary sources we have visited the medaram museum and other libraries to collect articles and essay published in daily news papers.

The relevant pictures and data have been collected from Google through internet for carrying out the total project.

Day -1

1st day of "Medaram Jathara" is celebrated as the arrival of Saralamma on to the 'Medaram Gaddhe' (Platform). Saralamma was the daughter of Sammakka. Saralamma is installed in a temple at Kannepalli, a small village near Medaram, in the morning pujaris perform pujas secretly. More than 3 million devotees visit Saralamma and offer special pujas as a part of Medaram Jathara.

Day – 2

2nd day of Medaram Jatara is celebrated as the arrival of Sammakka on to the 'Medaram Gaddhe' (Platform). Sammakka is welcomed amidst the official homage from police and government. 'Edurukolla Ghattam' is one of the popular events during the arrival of Sarakka., pujaris bring bamboo sticks and place them on the 'Gaddhe'.

Day – 3

On 3rd day of Medaram Jathara, Sammakka Saralamma darshanam is available devotees. After performing Punya Snanams in 'Jampanna Vaagu', devotees visit the Goddesses.

Day – 4

Last the 4th day of Medaram Jathara is celebrated as Vana Pravesham of Sammakka and Sarakka. After getting worshipped by millions of devotees, devatas return back to forest. It marks the conclusion of 4-day Sammakka Saralamma Jathara.The same security and the official homage they have got while arriving on to the platform are paid to the Goddesses while returning into the forest (Vana Pravesham).

Conclusion:

This Study Project examines The Significance of Medaram Jatara. The Information regarding its Historical, Traditional & Cultural Aspects of The Tribes of Medaram was collected from The Priests of The Temple.

Sammakka & Saralakka the Adobe of Medaram bravely fought against the Persecution of Kakatiya Kings. They sacrificed their lives & became Martyrs. The Students got inspired by The Story of the Great Sacrifice of Sammakka & Saralamma.

The Festival of Medaram Jatara takes place once in 2 Years. The Government of Telangana has provided Accommodation & Necessary Arrangements for more than 01 Crore People. It is the Biggest Tribal Festival in India Where People from Other States like Orissa, Chhattisgarh, Madhya Pradesh, Karnataka, Maha Rashtra visit Medaram Deity Jatara Time & Offer Their Prayers to Sammakka & Saralamma.

STUDIES ON SEASONAL DIVERSITY OF ZOOPLANKTON POPULATION IN PAKHALA LAKE NARSAMPET, WARANGAL RURAL

***Dr.J.lakan Singh**, Asst.Professor of Zoology*

Sk. Asma B.Sc(B.Z.Cs) III Year, S.Reecha B.Sc(B.Z.C) II Year, M.Naveen Prashanth, K. Mounika, , K.Sandeep, B.RajKumar, B.Sc(B.Z.Cs) I Year

Introduction:

Zooplanktons are the second steps in the food chain of lake ecosystems. These are food for invertebrates, fish and some birds. They play very significant role in the functioning of fresh water ecosystems. protozoans, copepods, cladocerans and rotifers are the main groups of zooplanktons of fresh water(Goldman and Horne 1986).The seasonal changes in zooplankton species are clearly related to the physico-chemical and biological regime of the aquatic environments. In Indian studies on Zooplanktonic fauna are still merge. Many limnologists (Nayar 1964) have conducted some studies on the zooplanktonic fauna of the subcontinent.

Result

Fresh water zooplankton populations in the plagiczone are usually characterised by only a few dominant species. Typically in single reservoir there are a few species of cladocerans 1 to 3 copepod species and 3 to 7 species of rotifers at any on time.crustacean zooplankton are small,often transparant organisms which along with the pelagic protozoans and rotifers, comprise most of the fresh water animal plankton. Daphnia the common water flea has an over wintering resting egg stage the ephippium; which is produced in summer of fall as the adult population dies off (Gold and Horne,1989) rotifer are often as small as the larger ciliated protozoans and also inhabit a wide range of aquatic habitats.

Discussion

With an increase in primary productivity we could reasonably expect an increase in the zooplankton. However different of algae are utilized to different extents by zooplankton. compared with green algae and diatoms. Blue green are assimilated with low efficiency (schindler 1971). The bottom dwelling cladoceran chydorus. Sphacricus can eat blue greens and its population often increases markedly during phytoplankton blooms (Brokes 1969).

The copepods diaptommus and especially epischura, migrate upward at night into the warmer surface waters. Some planktonic forms exhibit littoral avoidance in which they make horizontal migrations away from the lake edge. They tend to cluster as they actively swim away from thee littoral avoidance in which they make horizontal migrations away from the lake edge. They tend to cluster as they actively swim away from the littoral shelf.

Many forms of zooplankton exhibit diurnal vertical migration patterns controlled by variations in light intensity. There are over 1800 species of rotifers; many are cosmopolitan and most occur in fresh water the

majority are sessile, but rotifers also form an Important part of the zooplankton community in reservoirs although may pass through coarse plankton nets. They usually dominate the zooplankton in rivers. Most rotifers have acrown of celian, which Is used both for movement and for drawing in suspended particles. Foot is captured and macerated by hard structures called trophy. A few predatory species can extend this structure outside the body to penetrate aprey and such out its contents some rotifers such as a asplanchna are permanently planktonic but most are attached to solid substrates with their food and creep in leechlike fashion. The rotifer body is protected by a cuticle which may be thickened to produce a distinctly ornameuted lorica. The distinctive shape of their trophi and lorica usually classifies rotifers.

ANALYSIS OF VEGETABLES AND FRUIT JUICES

K. Ganesh, J. Pranaya, B. Shiva , MD. Neha Rizwana & E. Bindu

GOVERNMENT DEGREE COLLEGE, NARSAMPET, WARANGAL RURAL

I.AIM OF THE PROJECT

Aim is to analyze some fruits & vegetables juice for the contents present in them. Fruits and vegetable are always a part of balanced diet. That means fruits and vegetables provide our body the essential nutrients, i.e. Carbohydrates, proteins, vitamins and minerals.

II.INTRODUCTION

Vegetable juice (also referred as: Green Drink) is a juice drink made primarily of blended vegetables and also available in the form of powders. Vegetable juice is often mixed with fruits such as apples or grapes to improve flavor. It is often touted as a low-sugar alternative to fruit juice, although some commercial brands of vegetable juices use fruit juices as sweeteners, and may contain large amounts of sodium.

Our body needs important nutrients to support its healthy condition. That is why it is imperative that our food consumption should include healthy foods that contain good amount of nutrients sufficient enough to supply our body with its required daily nutrition. Nutrients like carbohydrates, proteins, fats, vitamins, minerals, etc. are play vital and specific role to develop and sustain body.

This project deals with finding out various constituents and compositions of vegetables and fruits. Analyzing the type of nutrient present in a food item helps plan a balanced diet. A balanced diet can be prepared according to the energy requirement which varies depending on age, sex, size, metabolic rate and activity level.

III.Material Required:

• Test Tubes, Burner,Litmus paper, Laboratory reagents, various fruits, Vegetable juices

IV.Chemical Requirements:

• PH indicator, Iodine solution, Fehling solution A and Fehling solution B

• Ammonium chloride solution,Ammonium hydroxide, Ammonium oxalate

• Potassium sulphocyanide solution.

V.Procedure:

The vegetable juices are diluted using distilled water. The distilled water is added to it in order to remove color and to make it colorless so that color change can be easily watched and noted down. Now test for food substance is taken down with the solution.The following Tests were conducted to analyse the vegetables and fruit juices.

1. Test for Acidity

2. Test for Starch

3. Test for Proteins

4. Test for Carbohydrates

5. Test for Potassium

6. Test for Calcium

7. Test for Magnesium

VI. Results:

After performing the tests for carbohydrates, proteins, fats and minerals, following can be concluded about their presence in different vegetables and fruits.

Tomato contains carbohydrates, proteins, calcium, and magnesium.

Cucumber contains carbohydrates, proteins, fats, calcium, magnesium, iron.

Carbohydrates and starch are rich in tomato and cucumber.

VII.Conclusion:

After analyzing the vegetables and fruits it can be well concluded that all of them contain one or the other compounds vital for body functioning. The results throw a light on significance of vegetables and fruits as their constituents are vital compounds and nutrients. The deficiency of these nutrients can lead to various metabolic disorders. So, besides cereals, milk and its products and non-vegetarian food items, vegetable and fruits must be included in a daily balanced diet of all. More effort is required to make everyone realizes their significance for a healthy, disease-free, long lifestyle

VILLAGE PROGRESS

Presents

1) B.Kalpana BA III Year

2) A.sandhya BA III Year

3) K.Shivashankar BA I Year

4) M.sujatha BA I Year

5) MD. Rehana BA I Year

6) D.sandeep BA I Year

TELANGANA RURAL INCLUSIVE GROWTH PROJECT

తెలంగాణ పల్లె ప్రగతి పథకం

గ్రామీణాభివృద్ధి శాఖ - తెలంగాణ ప్రభుత్వం

Observer

M. SAMMAIAH

Assistant Professor of Economics
Government Degree College
Narsampet, Warangal Rural

DECLARATION

In the observation of Sri M. Sammaiah lecturer of Economics in Govt Degree College Narsampet, Students of Economics did a project on Village Progress in Ayodhyapuram village, Narsampet Mandal. They only studied, and presented the project by themselves without any suggestions.

Student Name **Sign**

1. B.Kalpana BA III Year

2. A.sandhya BA III Year

3. K.Shivashankar BA I Year

4. M.sujatha BA I Year

5. MD. Rehana BA I Year

6. D.sandeep BA I Year

Observer sign

Introduction:

Our Telangana Government started a program from 06/09/2019 to 06/10/2019 is called 30 days program.

By the Co-Operation of the Villagers, village heads they took the suggestions of every one and did every work day by day to develop the village.

This program is called “Village Progress” and it changed the fate of every village in our Telangana.

This Programme includes development of inter roads, cleanliness, Drinking water supply and implementation of Harithaharam Programme. For this our Government released 2 crores budget for every district in emergency. For the development of all villages in Telangana Totally 339 crores. In this process if anybody makes their house and surroundings clean and green. Then they will be awarded the “Best House Award” By this Villages will develop in all the aspects.

- This programme includes interrelationship between villages and Grampanchayat.
- Clean and Green, Current supply, side drainages on both sides of the roads, Removal of weeds in public places, Removal of stagnant water on roads supplying of Dustbins in all the wards.

Aims and Objectives:

- To eradicate the problems from so many years in step wise manner.
- Roads, Cleanlines, Electirc Supply, Abolion of Plastic usage, Setting of street lights, construction of bath rooms and latrines and maintaining of Harithaharam.
- Village Development is the main Aim of the Government.

Methodology Analysis:

This project did in Narsampet Area “Ayodhyapuram” Village and its progress.

This is done by students and you may analyze in Ayodhyappuram Village.

1) Village Name : Ayodhyapuram Village
2) Extent : 3KM
3) Population : 3500
4) Females : 1800
5) Males : 1700
6) No. of Votes : 1300
7) No. of Jobbers : 80
8) Bank : Andhrabank
9) No. of Anganwadies : 02
10) No. of Roads : 13
11) Self Help Groups : 20
12) No. of Members in Groups : 12
13) No. of Wards : 10
14) Planted Tress : 200
15) Distance from Nspt To Ayodhyapuram 25KM
16) No. of House Village : 600
17) No. of CC Roads : 13

Not only in planting the tress but they took care of every plant to develop clean and Greenery. Every Facility is provided in this 30 days programme, like Grave Yard, arrangement of Dust Bins, leveling of old wells, two water Tanks to provide water for the whole village and arrangement of new electric poles. Everybody in the village thought that the village development work is their own work.

Explanation:

After Independence Mahathma Gandhi said that, if a country which has development in villages it is the development of the country. First we have ti develop through education and Health.

Every Village has lot of problems. Since Independence every Government implemented so many programmes but few are rectified because there is no involvement of villagers. Our Telangana Government recognized this concept and introduced a new programme from 6th September 2019 to 06th October 2019 is called “Palle Pragathi” Village progress.

By this pogramme every person in the village got minimum knowledge to make their village house surrounding clean and green.

Every Villager did self help and some member’s did donation to the village to the development.

For this programme, Collector visited every day 4 villages and their progress if any village is not progresses according to the concept them action will be taken by the Collector.

Progress:

- Changing of structure and Design of the Village by clean and green programme by implementing a village nursery.
- Changing of Rusted Eclectic Poles and making perfect electric Lines and Street Lights
- Removal of unwanted plants beside the roads, construction of side damages setting of pitches on the roads and supplying of and a Tricycle to collect waste and Dumping Yard.
- Setting of Grave Yard in Every Village.

Suggestions:

- Every Jobber should participate in this programme
- This Programme should be implemented for every three months
- Every budget sanctioned from Government should directly handover to Gramapanchayath
- Keen observation should be done by the Government
- It should follow a rule and every answer should be given for every question
- For Every 15 days officers' should conduct a meeting with the villagers
- Every minister should campaign in the village
- For the Development of the Villages they should design a programme by state academy for Rural Development.

Conclusion:

This programme is marvelous because after and before Independence villages are at the same level without any development but by this it changed the structure and design of every village in Telangana. But it is depending on the Budget if it is continued for every 3 months than the villages will become equal to cities with all the facilities.

GOVERNMENT DEGREE COLLEGE
NARSAMPET

WARANGAL DISTRICT (RURAL) 506 132

DEPARTMENT OF COMMERCE

STUDENT STUDY PROJECT

(2019-2020)

TITLE:

"A STUDY ON THE CRM PRACTICES IN LIC OF INDIA"

SUPERVISOR

Dr.Vishnu Kumar Balouva
Assistant Professor of Commerce
Government Degree College
Narsampet, Warangal Rural

CERTIFICATE

This is to certify that this study entitled "***A STUDY ON THE CRM PRACTICES IN LIC OF INDIA"*** is a bonafide Student Study Project done by the following B.Com. students of Government Degree College, Narsampet, Warangal Disrict (Rural) under the supervision of Dr.B.Vishnu Kumar, Asst. Professor of Commerce, Department of Commerce.

S.No.	NAME OF THE STUDENT	CLASS & GROUP	SIGNATURE
1	Sk. Osman Pasha	B.Com II Year	
2	D.Rama	B.Com I Year	
3	B.Eshwarananad	B.Com I Year	
4	B.Rajkumar	B.Com I Year	
5	Shaik Saidulu	B.Com I Year	
6	B.Swapna	B.Com III Year	

Head **Supervisor** **PRINCIPAL**
Dept. of Commerce

ABSTRACT

Life Insurance Corporation of India was the only company prior to liberalization of insurance sector in India. In the year 2000 the monopoly of LIC was broken with the entry of private companies in life insurance business. The Indian insurance industry was opened for private insurers in the year 2000, with the enforcement and establishment of Insurance Regulatory and Development Authority (IRDA) Act.

Objectives of the Study:

The basic objective of the study is to examine the Customer Relationship Management practices of LIC of India Further, the sub objectives of the proposed study are as follows:

1. To understand the concept of Customer Relationship Management (CRM)

2. To understand the working of LIC of India,

3. To understand the CRM practices in LIC of India.

Research Methodology and Database:

The present study is based mainly on secondary data.

The secondary sources of data includes the Annual Reports of LIC of India, Annual Reports of IRDAI, IRDAI Reports on Indian Insurance statistics, Government publications, Magazines/Journals pertaining to the related topic of the research, the related websites and the search engines.

Customer Relationship Management (CRM)

CRM is a combination of policies, processes, and strategies implemented by an organization to unify its customer interactions and provide a means to track customer information. The central idea behind CRM is to help the

businesses use technology and human resource to gain insight into the behavior of customers and the values of those customers.

CRM is a process by which a company maximises customer information in an effort to increase customer loyalty and retain customers over their lifetime. CRM is about understanding the nature of the exchange between customer and the organisation and managing it appropriately. The major challenge to all the organisations is to optimize communication between parties to ensure profitable long-term relationships. CRM is a key focus for many organisations as there is a shift from customer acquisition to customer retention.

CRM as a Mission in LIC of India

The Mission of CRM at LIC of India is to transform product, process and human resources into a transnational competitive strength by creating customer satisfaction of utmost delight, diligence and trustworthy in the life insurance industry. CRM ensures better quality of products, improved services to meet the aspirations of the customers at large with good work culture and values dedicated for customer service.

For LIC, the CRM philosophy advocates the following road map for building long lasting relationship with customers.

- Collection of customer information as a strategic asset,
- Measuring the ongoing customer values,
- Identifying customer expectations,
- Aligning organizational strategies with customer values and expectations,
- Managing customer’s experiences.

In realizing the above tasks, LIC of India has taken up strategic initiatives for reengineering the business processes and implementation of the concept of CRM at all the levels of the organisation.