

PEOPLE'S BIODIVERSITY REGISTER

GORITA PANCHAYAT THIMMAJIPET

MANDAL, NAGARKURNOOL (DIST), TELANGANA



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DECLARATION

We hereby declare that the project work entitled "PEOPLE'S BIODIVERSITY OF GORITA VILLAGE, THIMMAJIPET MANDAL, NAGARKURNOOL DISTRICT. TELANGANA" is a genuine work done by us under the supervision of Dr. B. Sadasivaiah Department of Botany, Dr. BRR Government College, Jadcherla and that the project work has not been previously formed the basis for the award of any degree or diploma of this college or any other institute for the award of any degree

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CERTIFICATE

This is to certify that the present work titled "PEOPLE BIODIVERVCITY REGISTER OF GORITA VILLAGE" is the bonafide work of, G.BHAGYA LAXMI, M.YADAMMA , K.SWETHA, D.PRAVALIKA ,P.SANDHYA under my supervision. No part of this work has been submitted to any other University or Institution for the award of any Degree or Dimploma.

Date: 27.08.2022

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- Sri Anilkumar – Secretary
- Smt Laxmi– Member
- Sri MD.Jafar – Member
- Smt M.Krushnamma– Member
- SmtRamulamma.– Member
- Sri. Narasihma- Member
- MD.Akhil-Member
- Sri.Chandrababu-Member
- Sri.Sreenu-Member

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- Dr. L. Varalakshmi, Regional Coordinator, A.P. Biodiversity Board
- Dr. K. Prasad, RCB, A.P. Biodiversity Board
- Sri D. Nalini Mohan– IFS, Member Secretary, A.P Biodiversity Board
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- Smt Sri Laxmi– Panchayath Secretary
- Sri Ragavendhar Reddy– VRO & Staff Members of Grama Panchayath

➤ **TSG Members**

- Prof. T. Pullaiah – Plant Diversity
- Dr. M. Sridhar Reddy – Ecological studies
- Dr. A. Lakshmaiah – Traditional varieties of crops plants
- Dr. Y. Amarnath Reddy – Animal Diversity
- Dr. T. Shali Shaheb – Ethnobotanical study
- Dr. K. Prasad – Plant Diversity
- Mr. Y.D. Imran – Animal Diversity
- Dr. K. Jaya Lakshmi – Agricultural studies & Analysis of Soil
- Dr. D. Sneha Latha- Algal Diversity
- Mr. Rakesh – Wildlife Biologist
- Mr. Hanumanth (Munna) – Avian diversity
- Dr. Laxmappa - Fisheries

- **Association for Biodiversity Conservation & Development (ABCD),
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INTRODUCTION

CHAPTER-1

Cataloguing biodiversity resources, mapping their geographical distribution and quantitative estimation of their natural stands is perhaps the most important information needed for any country in the post-CBD era. There are several gaps in the surveys and datasets made regarding the plant resources of India that need to be immediately addressed. There is a critical need for such data sets for converting our bio-resources into economic wealth, apart from identifying threats to resources conservation.

The evolution of human societies over several millennia is closely related to plants and animals. Biodiversity interacting with the physical environment form the foundation of sustainable development. The worldwide destruction of the natural environment by population explosion, urbanization, industrialization and habitat fragmentation has led to a tremendous loss of biological diversity over the past few decades. Population pressures and concomitant unscientific and unsustainable extraction of resources especially of timber, medicinal herbs, fuel wood and fodder from forests has alarming consequences on conservation of these resources. Overexploitation is likely to severely reduce the population sizes below the critical level and consequently the survival of the species *per se*.

The domestication of crop plants and farm animals about 12000 years ago revolutionized the human civilization by creating more stabilized societies. The early historic and medieval period gradually reduced human interaction with the wild plants and animals. The development of modern science and technologies during the industrial and post-industrial period did not do away with our link to nature. Different groups of people continue to depend on natural resources at varying scales. Some draw resources from across continents while others within a country or a region. There are also people continue to depend on locally available biodiversity and bio-resources for their livelihoods. Such population who are directly dependent on local biological resources have, through their keen sense of observation, practices, and experimentation developed and established a body of knowledge that is passed on from generation to generation.

Some are widespread traditional knowledge like cultivation practices; others are highly specialized such as bone setting or jaundice, which are generally passed only to close members of the family.

India is land of biological and cultural diversity. It is one of the mega biodiversity countries of the world. It also the home of a large number of tribal groups, pursuing different kinds of nature based livelihoods. In addition, a large number of farming and fishing communities and nomadic groups are possess' traditional knowledge of varying degrees. The development of modern science and technologies notably biotechnology and information technologies have increased the value of biodiversity and associated knowledge including traditional knowledge (TK).The growing importance of biodiversity, bio-resources and 5 associated knowledge is fairly well understood. The first step towards conservation is sustainable utilization of biodiversity and its documentation. Biodiversity and associated knowledge is found in different ecosystems, under different legal management regimes and hence the results and manner of documentation will also differ.

The Biological Diversity Act, 2002 (18 of 2003) was notified by the Government of India on 5th February, 2003. The act covers the whole of India and reaffirms the sovereign rights of the country over the country's biological resources. Consequent to this the Government of India Published Biological Diversity Rules 2004, dated 15th April, 2004. The rules under section 22, states that "Every local body shall constitute a Biodiversity Management Committee (BMC) within the jurisdiction of each body".

The mandate and main function of the BMC is to prepare 'People's Biodiversity Register' in consultation with the local people. The Register shall contain comprehensive information on availability and knowledge of locally available biological resources and their medicinal or any other beneficial uses for the mankind.The other functions of the BMC are to extend advice on any matter referred to it by the 'State Biodiversity Board' or authority for granting approval, to maintain data about the local vaid and traditional village practitioners using the herbal preparations and local available resources of various kinds, ITKs etc.The authority is also expected to take steps to specify the form of the 'People's Biodiversity Register' with the particulars to be incorporated in it in a specific format for the electronic database establishment.

The authority, the State Biodiversity Board is to provide guidance and technical support to the BMC for the preparation of people's Biodiversity Register. The register shall be maintained and validated by the concerned BMC's. The State Biodiversity Board (SBB) would provide required training to the 'Technical Support Group' (TSG) of each district for smooth functioning and to help in networking for creation and maintenance of PBRs. The TSG consists of experts from various disciplines, line departments, universities, research institutes, colleges and other educational institutions and non-government organizations (NGOs). These TSGs will provide technical inputs and advice to the BMCs on identification of plants and animals, monitor and evaluate the PBR exercise, examine confidential information and advice on legal protection, maintain database of local and external experts on biodiversity.

To fulfill the above objectives the expert team from the Department of Botany, Dr. BRR Government College, Jadcherla initiated steps as per the requirements to prepare the 'People's Biodiversity Register' (PBR) of Gorita Grama Panchayath, Thimmajipet Mandal of Nagarkurnool District of Telangana.

An extensive and intensive survey was done in the Goritavillage by the Research team of Department of Botany, Dr. BRR Government College, Jadcherla, Telangana under the supervision of Dr. B. Sadasivaiah, Assistant Professor of Botany in the month of January to June 2022 and met the Chairperson and other members of the BMC and gram Panchayath and explained in detail about the Biological Diversity Act of 2002 and the need and beneficial effects of opening of People's Biodiversity Register. An interesting and fruitful interaction meetings were conducted with the Chairperson (sarpanch) and other members in the presence of villagers and traditional healthcare persons.

The Research team enquired about the major food crops, yields, pests attacking to the crops, details of horticulture crops, extent of aquaculture involving inland fish resources, major livestock species available in the village, levels of productivity, value addition in plant and animal produce, marketing facilities and related problems, extent of cultivable crops under various categories, traditional medicines used by the village practitioners and medicinal plants identified with their usage and about any specific local practices adopted.

The information that was given by the villagers was documented during the survey. The information, thus pooled was tabulated, validated and documented in the report. The report was prepared in three parts. Part-I covered general information about PBR, formation of management committee, details of persons having traditional knowledge, skills etc, while in Part-II information is depicted in 30 formats. All the 30 formats were divided into major 3 categories namely Agro biodiversity (Formats 1-10), Domesticated Biodiversity (Formats 11-17) and Wild Biodiversity (Formats 18-30). Brief particulars of Agro Biodiversity include crop plants, fruit plants, fodder crops, weeds, pests of crops, market for domesticated animals, peopescap, waterscap, landscap and soil types; the Domesticated Biodiversity include fruit trees, medicinal plants, ornamental plants, timber plants, domesticated animals, cultured fisheries and market for Domesticated animals and plants; the wild biodiversity include wild flora and its importance, Aquatic biodiversity and its importance, wild relatives, wild ornamentals fumigates, wild timber, coastal and marine, wild animals, urban flora and fauna. The part III is the summary and prospects, vision of PBR and responsibilities of 'Management Committee' and other related information. The report also includes salient recommendations to preserve natural bio resources and traditional knowledge for future generations and maintain eco-friendly biodiversity of Gorita Panchayath of Nagarkurnool district of Telangana

CHAPTER – II

METHODOLOGY

The present study aims systematic attempt towards floral and faunal resources of Gorita Grama Panchayath, ThimmajipetMandal, Nagarkurnool District, TelanganaState based on field exploration. The flora and fauna of Gorita Gram Panchayath were inventoried and documented. The materials used and methodology adopted for fulfilling the objectives of the present work are presented hereunder. The significant pictures regarding to methodology are depict in **Plate-1**.

Literature collections and places of consultation

Before initiating the field work, a check list of flora and fauna was prepared based on past literature. Further a thorough perusal of literature was done referring almost all recent publications published on flora and fauna with reference to taxonomy and other importance of Telangana especially Nagarkurnool(Pullaiah, 2018; Barman, 1993; Sanyal et al., 1993; Sarkar et al., 1993; Editor Director, 2008).

INVENTORY OF FLORA

In the present investigation the Gorita Gram Panchayath was explored for a period of 10 months.

Under Agrobiodiversity category, the data on Crop plants, Fruit crops, Fodder crops/species, and weeds is collected through extensive field work in Agricultural lands of the village and consultation of Agriculture Officers, farmers. The common names of the plants also collected from the farmers. Pests of crops data was collected from Mandal Agricultural officers, Farmers and based on field studies by the research team.

Data on Domesticated animals and its market details were collected from Animal Husbandry Officers, Gopalamitra of Gorita village, farmers and field survey in the village. Peoplescape, landscape, waterscape, soil type data was collected from Anganwadies (Gorita), Thasildar Office (Pamidimukkala), Village Revenue Officers (Gorita), Engineers of Irrigation Department, Agriculture Department and president of the village.

PLATE - 1 : METHODOLOGY



Field visit



Data collection



Interaction with people



Anganwadi center



Panchayath office

In Domesticated Biodiversity category, the data on fruit trees/plants, medicinal plants, ornamental plants were collected through door to door survey by research team.

For wild flora, all the plant taxa encountered in the Gram Panchayath Area were listed and representative specimens of interesting taxa were collected in quadruplicates. Specimens are then poisoned, dried and made into herbarium following standard methodology. The specimens were examined critically and have identified with the help of standard floras and further confirmed in certain cases, by comparing with the herbarium material housed at local and national herbaria. Every attempt has been made in to study the habitat, soil, elevation, vegetation type, associates etc., were recorded carefully in the field itself. With the help of local people plants with medicinal importance were identified and the relevant information is documented.

INVENTORY OF FAUNA

Field explorations, Preservation and identification

Field explorations were conducted during January2022 to June2022. All the fauna encountered in the study area were recorded and representative specimens of common fish, Amphibian and Reptile species were collected, photographed and released. Every attempt has been made into the study the habitat, elevation, vegetation type etc., were recorded carefully in the field itself. The photographs were taken with Nikon D3400, SLR Camera. The photographs regarding methodology, habitat types, significant fauna and biotic factors were present in plates. Identification of specimens was done following standard faunas, a critical study was made in conformation of identification of endemics, threatened taxa and new distributional records.

COLLECTION

Insects: Insects were collected by hand picking and using insect nets, light traps, pitfall traps, bait traps, pond nets. The collected insects were photographed and released into wild. Insects and spiders were identified up to species level following Editor-Director, ZSI (2007), Kehimkar (1997, 2008), Kunte (2000), Meenakshi Venkatraman (2010), Narendra and Sunil Kumar (2006), Sebastian and Peter (2009), Tikader (1987).

Pisces: Four different types of nets, like gill nets, cast nets, drag nets and bamboo baskets nets were employed by the villagers for the collections of fishes. Gill nets of different sieve size were set in the water bodies at 6:00 P.M and left over night, next day morning 6:00 A.M were removed by the fisher men. Cast nets were employed standing on the banks and moving on small tubes during day time. In olden days traditional bamboo basket nets were fixed in streams in late evening and removed next day early morning.

The collected fish by above all methods were carefully observed the measurements, and characters were noted down. Total length, standard length, body depth, head length, head width, eye diameter, inter orbital width, snout length, inter nostril distance, pre pelvic distance, height of dorsal fin, length of base of dorsal fin, length of base of adipose dorsal fin, length of pectoral fin on the length of pelvic fin rays, anal fine rays, caudal fine rays, member of barbells, number of tubercles, lateral line scales, pre dorsal scales, dorsal scales, number of scales between dorsal fin origin and lateral line, number of scales between lateral line and pelvic fin and scales between anal fin and lateral line. The colour of body, eyes, fins, spots and bands were noted for identification. The collected fish were identified up to species level following Day (1889), Talwar and Jhingran (1991), Barman (1993) and Jayaram (2010).

Amphibia: The amphibians were collected by hand nets, hand picking, searching along stream, beside water bodies, in agricultural lands and other places during day and night time. The following characters of the collected amphibians were noted. Snout to vent length, head length, head width, snout length, nostril to eye distance, eye diameter, width of upper eyelid, inter orbital width, inter narial distance, diameter of tympanum, length of hind limb, fore limb, toes, and length of metatarsal tubercles. The color of dorsal, ventral sides and marking on body were noted.

The amphibians were identified up to species level following Boulenger (1890), Sarkar et al., (1993), Chanda (2002), Daniel (2002), Daniels (2005), Dinesh et al., (2009) and Mathew and Sen (2010).

Reptiles: These secretive animals were searched lifting stones, looking under rocks and fallen leaves and trees during day and night times. Geckos, agamids, skinks, and lacertids were collected by hand picking and nose traps. Snakes were collected by hand picking and with the help of snake hook. The following characters reptiles were noted. Length of

snout to vent, length of tail, length, width and diameter of eye and tympanum, length of fore limbs and hind limbs. Number of upper and lower labials, number of lamelle under the fingers and toes. Number of pre anal and femoral pores. The colour of dorsal surface, ventral surface, markings on body and eye were noted down.

In case of snakes, the following counts were noted down. Shields on the head, number of upper and lower labials, number of ventral scales, sub caudals, and dorsal scales around mid body were recorded.

Reptiles were identified up to species level following Gunther (1864), Smith (1931, 1935, 1943), Murthy (1990, 2010), Sanyal et al., (1993), Sharma (1998, 2005, 2007), Daniel (2002), Whitaker and Captain (2004) and Das (2008).

Aves: Photographs of birds in different angles were taken. The following characters and plumage colours were noted down, shape, size and colour of beak, eye and legs, plumage, colour of head, mantle, belly, primaries, secondaries, tertials, primary coverts, secondary coverts, median coverts, lesser coverts, rump and upper and lower side of tail.

Birds were identified up to species level following Baker (1922-30), Ali and Whistler (1933-34), Sibley and Monroe (1993), Ali et al., (1996), Inskipp et al., (1996), Manikadan and Pittie (2001), Grimmett et al.,(2001), Kazmierczak (2000) and Ali (2002).

Mammalia: Rodent traps, mist nets were employed to collect rodents and bats respectively. Photographs of all mammals were taken in different angles. The following measurements and characters of the collected bats were noted down. Length of ear, fore arm, head and body, hind foot, tail, tibia, thumb and wing span. The structure and shape of nose leaf, ears and tail. The colour of the body and markings were also noted. Length of snout to base of tail, head, tail, front limbs, rare limbs, number of teeth and mammary glands. The colour of body and makings. Following characters of the remaining mammals were noted down. Shape of body, head, snout, ear, limbs and tail, the colour of body and markings.

Mammals were identified up to species level following Blanford (1888-1891), Jerdon (1867), Miller (1902), Pocock (1939,1941), Ellerman (1961), Walker et al., (1968), Prater (1971), Tikader (1983), Wilson and Reeder (1993), Alfred et al., (2006), Menon (2009) and Srinivasulu et al., (2010).

CHAPTER – III

PART-I

PEOPLE'S BIODIVERSITY REGISTER (PBR) GORITA- GENERAL DETAILS

1. Name of the Panchayath : Gorita
 2. Taluk/ Mandal : Thimmajipet, Pincode: 509406
 3. District : Nagarkurnool
 4. State : Telangana
 5. Geographical area of the panchayath : 520 Hectare
Revenue villages : 01- Gorita
Habitations / Hamlets : NIL
 6. Population under panchayath : 2400
 7. Total : 3200; Male:1585, Female: 1551
 8. Habitat and Topography : Plain
 9. Climate
Rain fall - Normal : 600mm to 700mm
Temperature & Other Weather Patterns : 25 to 40°C
 10. Land Use (Nine fold classification available with village records) : Mentioned in Farmat-8. Landscape
 11. Date, Month, Year of PBR preparation : 05-05-2022
Date, Month, Year of BMC Formation : 02-07-2017
 12. Management Regime : BMC Committee (listed in PBR general details)
Reserve Forests (RF) : NIL
Joint Forest Management (JFM) : NIL
Protected Areas (PA) : NIL
Community Owned and Managed Forests (COM) : NIL
- General Details of the Panchayath (Number)**
- | | |
|-----------------------------|-------|
| Households | : 660 |
| Wards | : 12 |
| Panchayath Office | : 01 |
| Elementary Schools – Govt. | : 01 |
| ZP High School - Government | : 01 |
| UP Schools | : NIL |
| PHC | : NIL |

Veterinary Hospital	: Yes
Anganwadi	: 02
Social Welfare Office	: NIL
Hand Pumps	: 05
Gravity Water Tanks	: 03
Bore well	: 432
Drinking Water Plants	: 01
Fish Tanks	: NIL
Automatic Weather Station	: NIL
Govt. Hospital	: NIL
Rice Mills	: NIL
Flour Mills	: 03
Banks	: 01
Number of Livestock	
Cattle	: 150
Buffaloes	: 250
Sheep	: 2050
Goats	: 270
Pigs	: 70
Donkeys	: NIL
Pet Rabbits	: NIL
Pet Dogs	: 50
Fowls	: 250
Normal Agriculture Area (in Acres)	
Rice	: 1150
Sugarcane	: NIL

Annexure - 1

Details of Biodiversity Committee (BMC) of the Panchayath (One elected chairperson and six persons nominated by the local body; not less than one third to be women and not less than 18% belonging to SC/ST).

1. Name of the Chairman : Srilaxmi
 - a. Age : 40 Years
 - b. Gender : Female – OC
 - c. Address : Manganoor, Bijinapaly Mandal,
Nagarkurnool District, Pin Code – 509301.
 - d. Area of Specialization: Agriculture
2. Name : K.Muralidhar Reddy S/o K.Buchi reddy
 - a. Age : 42 Years
 - b. Gender : Male – OC
 - c. Address : Secretary - BMC, Penumatcha, Pin Code – 521250.
 - d. Area of Specialization: Agriculture & Labour
3. Name : Sri N. Verabhadraiah S/o Galib
 - a. Age : 29 Years
 - b. Gender : Male – SC
 - c. Address : Secretary - BMC, Penumatcha, Pin Code – 521250.
 - d. Area of Specialization: Agriculture

Annexure - 2

List of vaidyas, hakims, and traditional health care (human and livestock) practitioners residing and or using biological resources occurring within the jurisdiction of the village:**No traditional practioners are there in this village.**

Annexure - 3

List of individuals perceived by the villagers to possess traditional knowledge (TK) related to biodiversity in agriculture, fisheries and forestry:

1. Name : B. Balakrishna
Age : 25 Years
Gender : Male
Address : Gorita
Area of specialization: Agriculture

2. Name : T.Sathaiah
Age : 35 Years
Gender : Male
Address : Gorita
Area of specialization: Agriculture & weed

3. Name : T. Hanumanth
Age : 38 Years
Gender : Male
Address : Gorita
Area of specialization: Fishieries

4. Name : T. Srinu
Age : 48 Years
Gender : Male
Address : Gorita
Area of specialization: Agriculture& Fishieries

5. Name : B.Venkataiah
Age : 48 Years
Gender : Male
Address :Gorita
Area of specialization: Agriculture and Pest of crops

6. Name : Sathyanarayana
Age : 44 Years
Gender : Male
Address : Gorita
Area of specialization: Agriculture and Animal husbandary

7. Name : M. Yadaiah
Age : 35 Years
Gender : Male
Address : Gorita
Area of specialization: Agriculture, Irrigation

8. Name : Chinna Bal Reddy
Age : 53 Years
Gender : Male
Address : Gorita
Area of specialization: Agriculture and Medicinal Knowledge Holders

Annexure– 4

Details of various Schools, Colleges, Departments, Universities, Government institutions, Non-Government Organizations and Individuals involved in the preparation of the PBR:

1. Contact Person Name and Address: Sri shi. SRILAXMI , Patvari, Gorita, Nagarkurnool District.
2. Contact Person Name and Address: Dr. B. Sadasivaiah, Assistant Professor of Botany, Dr. BRR Government College, Jadcherla, Mahabubnagar District, Telangana.
- 3. Contact Person Name and Address: Dr. BRR Government College,
- Jadcherla, Mahabubnagar District, Telanganaw

M.YADAMMA
K.SWETHA
G.BHAGYA LAXMI
D.PRAVALLIKA
P.SANDHYA
T.RAJASRI

.Contact Person
Name and Address: Sri Maradi, Panchayath Secretary, Ragavendhar
(VRO), Gorita.

Annexure – 5

Details of access to biological resources and traditional knowledge granted details of the collection fee imposed and details of the benefits derived and mode of their sharing.

No.	Name and address of the person/ institution/ company/ others	Local and scientific name of the biological material accessed and quantity	Date and resolution of the BMC and endorsement by the Panchayath	Details of collection fee imposed	Anticipate mode of sharing benefits or quantity of benefits shared
NOT APPLICABLE					

CHAPTER – IV

PART-II

CHAPTER – IV

a)Agrobiodiversity

Format1:Crop Plants

S. No.	Crop	Scientific Name	Local Name	Variety	Landscape/Habitat	Approx. Area shown in acres	Local status		Special features	Cropping season	Uses	Associated TK	Other details	Source of seeds/Plants	Community/Knowledge Holders
							Past	Present							
1	Paddy	<i>Oryza sativa</i> L	Vari	RNR 15048	Plains	2	Common	Common	Grain Small & High yielding	Kharif & Rabi	Food	Hey used as fodder to cattle.	Pond, Canals, Bores	Market	M.anjane yulu
2	cotton	<i>Saccharum officinarum</i> L.	patti	Hybrid	Plains	3	Common	Common	High Yielding	Aug-Dec Jan-April	fabric	Stems are used to making Fodder	Not Reported	Market (Shops)	T.raju
3	Maize	<i>Zea mays</i> L.	Mokka Jonna	Hybrid	Plains	03	Common	Common	High Yielding	Kharif & Rabi	Food	Plant leaves and stems used as like fodder of Domasticate animals	Canals, Bores	Market	A.Narsim ha
4	Finger millets	<i>Eleusine coracana</i>	Ragi	Hybrid	Plains	1	Common	Common	High Yielding	Kharif	Food	Used in preparation of Traditionals food items.	Pond, Canals, Bores	Market	T.Sathaya ih
5	Redgram	<i>Cajanus cajan</i> (L.) Millsp.	Kandulu	Local	Plains	07	Common	Common	High Yielding	Karif-Rabi	Food	This plant leaves and seed coat used as food to Goats,	Lake, Canals	Market (Shops)	M.Ramulu
6	Tomato	<i>Lycopersicon esculentum</i> Mill.	Tomato	Hybrid	Plains	01	Common	Common	High Yielding	Kharif	Food	Used to prepare curries	Pond, Canals, Bores	Market	B. Bala Krishna
7	Slender amarath	<i>Amaranthus viridis</i> L.	Thotakura	Local	Plains	Home garden	Common	Common	Normal	All seasons	Food	Used as leafy vegetable	NR	Market (Shops)	M.Kannai ah

People's Biodiversity Register – Gorita (V), Thimmajipet(M), Nagarkurnool Dt., Telangana

08	Brinjal	<i>Solanum melangina</i> L.	Vankaya	Hybrid	Plains	0.25 ac	Common	Common	High Yielding	Kharif	Food	Used in preparation of food	Canals, Bores	Market (Shops)	M. Ramulu
09	Spinach	<i>Spinacia oleracea</i> L.	Palakura	Local	Plains	Home garden	Common	Common	Normal	All seasons	Food	Used as leafy vegetable	NR	Market (Shops)	B.Sathyanarayana
10	Chilli	<i>Capsicum annum</i> L.	Mirapa	Hybrid	Plains	0.5 ac	Rare	Common	NA	All seasons	Food	Used as vegetable	NA	Market (Shops)	B. Venkataiah
11	Drum sticks	<i>Moringa oleifera</i> Lam.	Munaga	Hybrid	Plains	Home garden	Common	Common	Food	Kharif	Food	Used as vegetable	NR	Market	P. Sathyanarayana Reddy
12	Castor	<i>Ricinus communis</i> L.	Amudam	Local	Plains	0.5 ac	Rare	Common	Normal	Karif-Rabi	Oil	Leaves used as fodder for Goats	NA	Market (Shops)	Chennaiah
13	Curry leaf	<i>Murraya koenigii</i> (L.) Spreng.	Karivepaku	Local	Plains	Home garden	Common	Common	NR	All seasons	Leafy vegetable	Dried leaves made into powder along with Red chilli and garlic.	NR	Market (Shops)	K. Narshima Reddy

Format 2:Fruit Plants

S. No.	Plant type	Scientific Name	Local Name	Variety	Habitat	Local status		Source of seeds/Plants	Season of fruiting	Associated TK	Uses/ other details (Market/ own use)	Community/ Knowledge Holders
						Past	Present					
1	Guava	<i>Psidium guajava</i>	Jama	Hybrid	Sandy soil	Nil	Rare	Nursery	Winter	Rarely used to eat the Raw LEAVES with Tamirind	Markets	Lakshma Reddy
2	Promaganate	<i>Punica granatum</i>	Dhanimma	Hybrid	Sandy soil	Nil	Rare	Nursery	Through out the Year	Flowers are used to decorate rarely	Markets	Lakshma Reddy
3	Mango	<i>Mangifera Indica</i>	Mamidi	Hybrid	Red Soil	Rare	Common	Nursery	Summer	Plant leaves are used to decorate the entrance of the Houses and Before the Kalyana Mandapam entrances	Market & Own Use	Surendhar Reddy

Format3:Fodder Crops/ Species

S. No.	Crop	Scientific Name	Local Name	Variety	Landscape/Habitat	Local status		Source of seeds/Plants	Associated TK	Parts used	Uses/other details (Market/own use)	Community/Knowledge Holders
						Past	Present					
1	Jawar	<i>Sorghum</i>	Jonna soppa	Local	Plain	Common	Common	Markets and Recollection of seeds	Whole plant used as fodder	WP	Own use	T.Srisalam
2	Para Grass	<i>Brachiaria mutica</i>	Pyragaddi	Wild	Field bunds	Rare	Common	Wild	Whole plant used as fodder	WP	Own use	A.Narsimma
3	Spear grass	<i>Heterotogon contortus</i>	Kona soppa	Wild	Field bunds	Rare	Common	Wild	Whole plant used as fodder	WP	Own use	M.Anjaneyulu
4	Finger Millets	<i>Eleusine coracana</i>	thaidhalu	local	Field bunds	Common	Common	markets	Whole plant used as fodder	WP	Own use	B.Bhanu Prakash

Format4:Weeds

S. No.	Scientific Name	Local Name	Affected Crop	Impact	Habitat	Local status		Uses if Any	Management Option	Associated TK	Other details	Community/ Knowledge Holders
						Past	Present					
1	<i>Parthenium hysterophorus</i>	Vayyari bhama	Cotton	Yield reduced	Post harvest	Common	Common	Nil	Removing with hands	Nil	NR	M.Aivelu
2	<i>Celosia argentea</i>	Gunugu	Open land	Stoppage of crop growth	plains	Common	Common	Uses as fodder for cattle	Removing and cutting with Hands	No	NR	M.Ramana
3	<i>Cyperus ropunbus</i>	Thunga	Paddy	Stoppage of crop growth	plains	Common	Common	Sheep feeding	Removing with hands	No	NR	Chenna Reddy
4	<i>Lantana canara</i>	Billata Allam	Over growth then the Crop	Absence of sunlight	Field bunds	Common	Common	No	NR	No	NR	Venkat Reddy
5	<i>Tepphrosia purpurea</i>	Vempali	cotton	Yield reduced	Post harvest	Common	Common	No	Removing with hands	fodder	NR	B.Sathyanaraya
6	<i>Cynodon dactylon</i>	Garka	Open land	Absorption of Manure mostly	Plains	Common	Abundant	Fodder to the herbivorous animals	Harvesting with bulls and instruments	No	NR	B.Venkatesh
7	<i>Achyranthes aspera</i>	Kukkasi rka	Grass lands	Deathh of grass	Field bunds	Common	Abundant	Fodder to the goats	Removing with hands	NR	NR	M.Aivelu
8	<i>Tribulus terrestris</i>	Palleru kaya	plains	Host for the humans	Field bunds	Common	Common	NR	NR	NR	NR	M.Ramana
9	<i>Acanthospermum hispidum</i>	palleru	Plains	Yield reduced	Field bunds	Common	Common	No	Removing with hands	No	NR	M.Aivelu
10	<i>Alternanthera sessilis</i>	Ponagan ti	All crops	Yield reduced	Field bunds	Common	Common	Fodder	Removing with hands	Fodder	NR	B.Venkstesh

Format5:PestsofCrops

S.NO	Host	Insect/Animal	Scientific Name	Local Name	Habitat	Time/Season of Attack	Management Mechanism	Associated TK	Other Details	Community/ Knowlwdge Holders
1	Paddy	Grasshopper	<i>Acrida exaltata</i> (Walker)	Midatha	Plains	Aug - Dec	Chemicals & Pesticides	NR	NR	Sathyanarayana
2	Maize	Sting bug	<i>Dolycoris indicus</i> Stal	Not reported	plains	Aug -Dec	Chemicals and Pesticides	NR	NR	Venkataiah
3	Tomato	Cotton Aphid	<i>Aphis gossypii</i> Glover	Not Reported	Plains	Aug - Dec	Chemicals & Pesticides	NR	NR	Venkataiah
4	Paddy	Mealy bug	<i>Brevennia rehi</i>	Not Reported	Plains	Aug - Dec	Chemicals & Pesticides	NR	NR	Sathyanarayana
5	Paddy	Bug	<i>Cletus punctiger</i> (Dallas)	Not Reported	Plains	Aug - Dec	Chemicals & Pesticides	NR	NR	Sathyanarayana
6	Paddy	Red pumpkin bug	<i>Coridius janus</i> (Fabricius)	Not Reported	Plains	Aug - Dec	Chemicals & Pesticides	NR	NR	Sathyanarayana
7	Maize	Metallic shield bug	<i>Cyrtacanthacris tatarica</i> (L.)	Midatha	Plains	Aug - Dec	Chemicals & Pesticides	NR	NR	Venkataiah
8	Cotton	Red pumpkin Bug	<i>Coridius janus</i> (Fabricius)	Not Reported	Plains	Aug - Dec	Chemicals & Pesticides	NR	NR	Venkataiah

Format6:MarketsforDomesticatedanimals

Name of the market & location	Weekly (D)/ Fortnightly (D) / Monthly (D) / Biannual (M) / Annual (M)	Types of animals bought and sold	Types and Average Number of animals transacted in a day	Places from which animals are brought	Places to which the animals are sold / transported	Name and location of fish market	Types of fishes sold	Source of fish
Devarakadra	Weekly (Wednesday)	Cattles,Hens, Cocks, Fishies	100-150 including all Animals	Surrounding villeges	Surrounding villeges& Mandals	Devarakadra	Cocumata Cat Fish Catla	From the Krishna river through Jurala
Bijinapally	Weekly (Thursday)	Cows, Baffalo, Goats, Ox, Sheep, Hens, Cocks, Fishes	50-100 including all Animals	Surrounding villeges	Surroundings Mandals & Villages	Bijinapally	Cocomutta Cat Fish Catla	From the Krishna river through Srisailam
Pebber	Weekly (Saturday)	Cows, Baffalo, Goats, Ox, Sheep, Hens, Cocks, Fishes	150-200 including all Animals	Through command Mahabubnagar	To Command MAHABUBNAGAR	Pebber	Cocumata Cat Fish Catla	From the Krishna river through Beechupally
Kaverammappeta	Weekly (Saturday)	Cattles,Hens, Cocks, Fishies	30-100 including all animals	Surrounding villeges	Surroundings Mandals & Villages	Kaverammappeta	Cocomutta Cat Fish Catla	From the Krishna river through Srisailam

Format7:Peoplescape

Commun ity & Populati on	Families & Major Occupations	Sub Occupation	Depending Landscape	Major resources accessed and seasons of access	Landscape management Pracitices	Resource management Pracitirces	Caste/Tribe	Social Conditions	Nature of Inhabit ants	No.of HHs
SC-854	251 & Agriculture	Agriculture , Emplyoment	Agri landscapes	Agriculture resources	Modren landscape management practices	Traditional resources management practices	Madiga	Socially privileged	Own homes	251
OC-378	145 & Agriculture	Agriculture , Emplyoment	Agri landscapes	Agriculture resources	Modren landscape management practices	Traditional resources management practices	Reddy,Brahamanis, Kommattlu	Socially privileged	Own homes	145
BC-21	70 & Agriculture	Agriculture , Emplyoment	Agri landscapes	Agriculture resources	Modren landscape management practices	Traditional resources management practices	Balija, , Chakali, Besthalu, Mudhiraj, Mangali, Vadrangi, Pallekarllu	Socially privileged	Own homes	70
ST-29	13 & Agriculture	Agriculture,	Agri landscapes	Agri , commercial	Modren landscape management practices	Traditional resources management practices	Erukali	Socially privileged	Own homes	13

Format8:Landscape

Major Land scape			Sub-Land Approx. area	Feature s and approx. area	Ownersh ip	General Flora	General Fauna	User Groups	Managemen t Pracities	Genera l Uses	Associ ated TK	Other Details	Communit y Accessed
Agricultur e Land	Pon d	Fallo w Land											
1150 Acers	10 Acer s	10 Acers	Irrigated cultivabl e land, dry land, grazing lands, cattle grazing land, waste land	Agricult ure lands are mainly plain.	Agricultu ral lands are owned by villagers and pond owned by Governm ent.	The main flora in Agricultural land is herbaceous weeds, shrubs in the field edges. In pond most of the aquatic plants are growing. In Fallow land species like <i>Sida</i> , <i>Cassia</i> , <i>Prosopis</i> , <i>Calotropis</i> , <i>Croton</i> , <i>Hyptis</i> , <i>Lantana</i> are growing.	<i>Sus scrofa</i> , <i>Passer domesticus</i> , <i>Nectarinia asiatica</i> , <i>Corvus splendens</i> , <i>Funambulus palmaram</i> , <i>Pachliopta aristolochiae</i> , <i>Xenocropis piscetor</i> , <i>Naja naja</i> , <i>Eryx johnii</i> , <i>Lycodon alicus</i> .	Farmers, fisherma ns, fallow lands used for grazing.	Traditional and modren practices are beeing applied in this village	Comme rcial purpose only	NR	NR	All community people

Format9: Waterscape

Water scape element type	Sub type	Features and approx area	Ownership	General Flora	General Fauna	Major Uses	Users Group	management Practices	General Uses	Associated TK	Other Details	Community Accessed
Ponds	5-Ponds	42-Acers	Government	Phytoplanktons	Insects, Fishes, Frogs, Snakes	Irrigation	Farmers	Modern Management practices	Irrigation and Bathing	NR	NR	All community
Borewells	Borewells	432	Private	NA	NA	Irrigation	Farmers	Automatic starting motors	Irrigation	NR	NR	All community
Canal	Krishna	The Newly constricting , Canal but NOT IN USE										

Format10:Soiltype

Soil Type	Colour and Texture	Features	Soil Management	Plants/Crops Suitable	Flora and Fauna	Associated TK	Other Information
Block soil	Black, Smooth	This is smooth soil and water holding capacity is more and is to cultivate	To developing soil fertility the crop shifting process and ADDING OF FERTILIZERS	Paddy, Cotton	Insects, Reptiles, Small Mammals	To develop soil fertility they are using Artificial Fertilizers Mostly & rarely poultry Wastage	Ploughing with Different Instruments to overlap the SOIL
Red soil	Red, Red loam soil& with rocks	They are usually poor growing soils and difficult to cultivate	To developing soil fertility they are using lanimal waste, compost & Fertilizers	Paddy ,Vegetables& Cotton	Insects, Reptiles, Small Mammals	To developing soil fertility they are using animal waste , compost& Fertilizers	Ploughing with Different Instruments to overlap the SOIL
Sandy Soils	Sandy and loose arrangement of layers ,Rarely with Rocks	Most growing but , less yielding , due to loose arrangement and Releases water mostly	To develop the soil Animal manure ,Poultry wastage & Fertilizers Crop Rotations	Cotton,Maize, jowar, Red gram	Insects, Reptiles, Small Mammals	To developing soil fertility they are using animal waste , compost& Fertilizers	Ploughing mainy times to during the RAINS to ABSORB the WATER

CHAPTER – IV

b) Domesticated Biodiversity

Format11:FruitTrees

S. No.	Plant Type	Local Name	Scientific Name	Variety	Habitat	Local Status		Source of Seeds/Plants	Season of Fruiting	Uses	Associated TK	Other details Market/own use	Community /Knowledge Holders
						Past	Present						
1	Tree	Jama	<i>Psidium guajava</i>	Hybrid	Richards	Rare	Rare	Nursery	Oct-Jan	Edible fruits	Not Reported	Market	Lakshma Reddy
2	Tree	Sethaphalam	<i>Annona squamosa</i> L.	Local	Wild and Plains	Common	Rare	Wild	Oct-Nov	Edible fruits	Not reported	Own use	Sathyanarayana
3	Tree	Mamidi	<i>Mangifera indica</i>	Natural	Home garden	Common	Common	Nursery	April	Edible fruits	Leaves used as thatching material.	Own use	Shekar Reddy
4	Tree	Sapota	<i>Sapodilla</i>	Hybrid	Home garden	Rare	Rare	Nursery	Oct-Nov Feb-Mar	Edible fruits	Not Reported	Own Use	Dharma Reddy
5	Tree	Boppayi	<i>Carica papaya</i> L.	Hybrid	Home garden	Common	Rare	Nursery	Oct-Jan	Edible fruits	Leaf decotion used for Dengue	Own use	Kalavathi

Format12: Medicinal Plants (Herbs, Shrubs, Trees etc.)

S. No.	Plant Type	Local Name	Scientific Name	Variety	Landscape/Habitat	Source of Plants / Seeds	Local Status		Uses (Usage)	Parts used	Associated TK	Other details Market/own use	Community /Knowledge Holders
							Past	Present					
1	Herb	Thulasi	<i>Ocimum gratissimum</i>	Local	Plains & Home garden	Seeds	Common	Rare	Anti Cancer COLD Cough	Leaves	Not Reported	Both	Bharathamma
2	Creeper	Thippathiga	<i>Tinospora cordifolia</i>	Local	Wild	Seeds	Rare	Rare	Diabetes Cancer	Roots and Leaves	Diabetes cure with Roots	Own use	B.Venkatesh
3	Plant	Jilledu	<i>Calotropis gigantea</i>	Local	Wild	Seeds	Common	Common	Threatening respiratory, Circulatory & Neurological disorders	Fruits/Leaves	Not Reported	Own use	Hanumanthu
4	Herb	Usiri	<i>Phyllanthus emblica</i>	Local	Home garden	Market	Common	Common	Improves Eye sight	FRUITS	NR	Own use	Bharathamma
5	Herb	Kalabandha	<i>Aloe vera</i> (L.) Burm.f.	Local	Home garden	Wild	Common	Common	Diabetic, Wounds and Cosmetics	Fleshy leaves	Diabetic patients used to take this plant fleshy leaves with sugar to cure diabetes. Own use		Bharathamma
6	Tree	Vepa	<i>Azadirachta indica</i> A.Juss.	Local	Home garden	Wild	Abundant	Common	Leaves paste is applied for chicken pox.	Whole Plant	Juvinial stems used like tooth brush to wash teeth	Own use	Rangaiah

Format13:OrnamentalPlants/Trees/Climbersetc.

S. No.	Plant Type	Local Name	Scientific Name	Variety	Source of Plants / Seeds	Commercial Non Commercial	Local Status		Uses	Associate d TK	Other details	Community /Knowledge Holders
							Past	Present				
1	Shrub	Mandharanam	<i>Highbiscus rosa</i>	Hybrid	Nursery	Non Commercial	Rare	Common	NR	NR	NR	Kashipathy
2	Shurb	Gulabi	<i>Damask rose</i>	Local	Nursery	Non commercial	Rare	Common	Medicinal	NR	NA	M.Laxmi
3	Shurb	Chamanthi	<i>Chrysantemum</i>	Local	Nursery	Non Commercial	Rare	Common	NR	NR	NR	Ramulu
4	Climber	Malle	<i>Jasmine</i>	Local	Local	Non commercial	Common	Common	NR	NR	NR	Kashipathy
5	Shurb	Kanakambaram	<i>Crossandara infundibuliformis</i>	Local	Nursery	Non commercial	Common	Common	NR	NR	NR	Kashipathy
6	Tree	Ganneru	<i>Oleander</i>	Local	Nursery	Non commercial	Common	Common	NR	NR	NR	Swetha
7	Plant	Bhanthi	<i>Marigold</i>	Hybrid	Local	Non Commercial	Common	Common	NR	NR	NA	Swetha
8	Shrub	Shivamalle	<i>Couroupita guianenses</i>	Local	Nursery	Non Commercial	Rare	Rare	NR	NR	NR	Ramulu

Format14: TimberPlants/Trees

S. No	Plant Type	Local Name	Scientific Name	Habitat	Local Status		Wild /Home Garden	Other Uses (Multi)	Associated TK	Other details	Community /Knowledge Holders
					Past	Present					
1	Tree	Thumma	<i>Acacia nilotica</i> (L.) Delile	WILD	Common	Rare	Home Garden	Seeds used as a fodder to goats	Fruits used as fodder for goats	Native	Sathyana rayana
2	Tree	Neem	<i>Azadirachta indica</i> A.Juss.	Home garden	Common	Common	Home Garden	Juvinial stems used like tooth brush to wash teeth	People growing this tree for shading in front of homes	Native	Buchi Reddy
3	Tree	Cobbari	<i>Cocos nucifera</i> L.	Home garden	Common	Common	Home garden & Field bunds	Coconut water is highly nutritious and used in Plant tissue culture lab.	Were used in marriage ceremonies.	NA	Venkat Reddy
4	Tree	Marri	<i>Ficus benghalensis</i> L.	Home garden	Abundant	Common	Home garden & Field bunds	Edible	Cheap quality wood	NA	S.Bhaskar
5	Tree	Medi	<i>Ficus racemosa</i> L.	Home garden	Common	Common	Home garden & Field bunds	Used in marriage ceremonies.	NR	NA	P.Shekar
6	Tree	Ravi	<i>Ficus religiosa</i> L.	Wild	Common	Common	Field bunds	Used in marriage ceremonies.	NR	NA	Miboose
7	Tree	Kanuga	<i>Pongamia pinnata</i> (L.) Pierre	Home garden	Common	Common	Home garden & Field bunds	Medicinal	Tree used to grown for shading in front of homes	Native	K. Raju
8	Tree	Sarkari thuma	<i>Prosopis chilensis</i> (Molina) Stuntz	Wild	Common	Common	Home garden & Field bunds	Plant used as fuel purpose	NR	NA	N.Krishin aiah
9	Tree	Chintha	<i>Tamarindus indica</i> L.	Wild	Abundant	Common	Home Garden	Fruits edible	Strong wood	NA	Venkat Reddy
10	Tree	Teek	<i>Tectona grandis</i> L.f.	Home garden	Common	Common	Home garden	Strong wood	Big plate like leaves to eat Food	NR	Kashipathy

Format15:Domesticated Animals

S. No.	Local Name	Scientific Name	Breed (Localy/Hybrid)	Features	Method of Keeping	Local Status		Uses	Associated TK	Commercial rearing	Other details	Community /Knowledge Holders
						Past	Present					
1	Yeddulu	<i>Bos taurus indicus</i> L.	Thurpu	Medium sized body with different colour	Shed	Abundant	Common	Agriculture purpose	Ox used for agriculture purpose	Yes	NR	Venkataiah
			Local (Pasevi)	Medium sized body with single color	Shed	Common	Common	Agriculture purpose	Ox used for agriculture purpose	Yes	NR	B.Balakrishna
2	Avu	<i>Bos taurus indicus</i> L.	Local	Medium body with Single color	Shed	Common	Common	Milk & Agriculture		Yes	NR	Anjalaiiah
			Thurpu	Medium body with different color	Shed	Common	Rare	Milk & Agriculture		Yes	NR	Ramulu
3	Barrelu	<i>Bos bubalis</i> L.	Local	Light body, low height	Shed	Abundant	Common	Female for milk and male for agriculture purposes and to meat		Yes	Males are offered to God	Ramana
			Murra	Heavy body	Shed	Common	Common	Female for milk and male for agriculture purposes and to meat		Yes	Males are offered to God	Venkat Reddy
4	Meka	<i>Capra aegagrus hircus</i> L.	Local	Meat and Leathe purposes	Shed	Abundant	Common	Village people drinks Raw milk for strenth		Yes	Male Goats are offered to God	Upendra
5	Kodi	<i>Galus galus</i> L.	Local	Medium sized	Free roaming	Abundant	Common	Few people specially used for eggs only		NO	NR	P.Buddana

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			Poultry	Heavy body	Free roaming	Rare	Rare	Few people specially used for eggs only		NO	NR	Venkat reddy Galaiah
6	Pilli	<i>Pilus sylvestris catus L.</i>	Local	Pet	Free roaming	Abundant	Common	Security	For security	NO	NR	Chandra kala
7	Gorrelu	<i>Ovis aries L.</i>	Local	Wool, leather, meat purposes	Shed	Abundant	Common	Meat and hair (Vunni)	Village people drinks Raw milk for strength	Yes	Males are offered to God	A.Ramulu
			Erra gorrelu	Wool, leather, meat purposes	Shed	Common	Common	Meat and hair (Vunni)	Village people drinks Raw milk for strength	Yes	Males are offered to God	M. Ramachandraiah
8	Pandhi	<i>Sus scrofa domesticus</i>	Seema Pandi	Heavy body	Shed	Common	Rare	Meat	Not reported	No	NR	Chandraiah
9	Dog	<i>Canis lupus familiaris L.</i>	Local	NR	Free roaming	Common	Common	Security	Not reported	No	NR	M.Anjaneyulu

Format16:CultureFisheries

S. No.	Local Name	Scientific Name	Variety	Features	Water scape Pond/bh eri/ talao	Local Status		Uses	Associated TK	Commercial rearing	Other details	Community / Knowledge Holders
						Past	Present					
1	Bangaru thigalu	<i>Carassius auratus</i>	local	NA	Pond	Common	Common	Food	NR	NO	NR	Hanmanthu
2	Korramata	<i>Channa striata</i>	local	NA	Pond	Rare	Rare	Food	NR	NO	NR	Hanumanthu
3	Catla	<i>Labeo catla</i>	local	NA	Pond	Common	Common	Food	NR	NO	NR	Srinu
4	Common Carp	<i>Cyprinus carpio</i> (Linnaeus, 1758)	local	NA	Pond	Common	Common	Food	NR	NO	NR	Chandramma
5	Bochelu	<i>Labeo rohita</i>	local	NA	Pond	Common	Common	Food	NR	NO	NR	Kurmaiah

Format17:Markets/ FairsforDomesticatedAnimals,MedicinalPlantsandotherproducts

Name of the market & location	Weekly (D)/ Fortnightly (D) / Monthly (D) / Biannual (M) / Annual (M)	Types of animals bought and sold	Types and Average Number of animals transacted in a day	Places from which animals are brought	Places to which the animals are sold / transported	Name and location of fish market	Types of fishes sold	Source of fish
Devarakadra	Weekly (Wednesday)	Cattles,Hens, Cocks, Fishies	100-150 including all Animals	Surrounding villeges	Surrounding villeges& Mandals	Devarakadra	Cocumata Cat Fish Catla	From the Krishna river through Jurala
Bijinapally	Weekly (Thursday)	Cows, Baffalo, Goats, Ox, Sheep, Hens, Cocks, Fishes	50-100 including all Animals	Surrounding villeges	Surroundings Mandals & Villages	Bijinapally	Cocomutta Cat Fish Catla	From the Krishna river through Srisailam
Pebber	Weekly (Saturday)	Cows, Baffalo, Goats, Ox, Sheep, Hens, Cocks, Fishes	150-200 including all Animals	Through command Mahabub nagar	To Command MAHABUBNAGAR	Pebber	Cocumata Cat Fish Catla	From the Krishna river through Beechupally
Kaveramm apeta	Weekly (Saturday)	Cattles,Hens, Cocks, Fishies	30-100 including all animals	Surrounding villeges	Surroundings Mandals & Villages	Kaverammapeta	Cocomutta Cat Fish Catla	From the Krishna river through Srisailam

CHAPTER – IV

c) Wild Biodiversity

Format 18: Trees, Shrubs, Herbs, Grasses, Climbers etc.

S. No.	Plant Type	Local Name	Scientific Name	Habit	Habitat	Local Status		Commercial / own use	Parts collected	Associated TK	Other details	Community / Knowledge Holders
						Past	Present					
1	Shrub	Thathurubenda	<i>Abutilon indicum</i> (L.) Sweet	Shrub	Plains	Common	Common	NR	Whole plant	Medicinal	Ovary edible	Hanaumanth
2	Tree	Thumma	<i>Acacia nilotica</i> (L.) Delile	Tree	Plains	Common	Common	Own	Gum	Adhesive	NR	Hanaumanth
3	Herb	Pippaku	<i>Acalypha indica</i> L.	Herb	Plains	Common	Rare	NR	Leaves	Leaves used to cure skin disease	NR	Hanaumanth
4	Herb	Kukkamundlu	<i>Acanthospermum hispidum</i> DC.	Herb	Plains	Common	Common	NR	NR	Not Reported	NR	Anjalaiah
5	Herb	Uttareni	<i>Achyranthes aspera</i> L.	Herb	Plains	Common	Common	Own	Leaves	Leaves used to insect bite	Leaves used as vegetable	Anjalaiah
6	Herb	Kondapindi	<i>Aerva lanata</i> (L.) Juss.	Herb	Plains	Abundant	Common	Own	Leaves	Leaves used as medicine to cure stones in Kidney.	Inflorescence used to fill pillow.	Anjalaiah
7	Tree	Dirisena	<i>Albizia lebbek</i> (L.) Benth.	Tree	Plains	Abundant	Common	Own	Wood	Timber	NR	Anjalaiah
8	Herb	Not Reported	<i>Alloteropsis cimicina</i> (L.) Stapf	Herb	Field bunds	Common	Rare	Own	Whole plant	Used as Fodder	NR	Yadaiah
9	Herb	Manchi Kalabanda	<i>Aloe vera</i> (L.) Burm.f.	Herb	Outskirts of village	Common	Common	Own	Leaves	Used as medicine for various ailments. Whole plant hanging to eradicate small house flies.		Yadaiah
10	Herb	Ponnaganti kura	<i>Alternanthera sessilis</i> (L.) R. Br. ex DC.	Herb	Moist localities	Common	Common	Own	Leaves	Medicinal and Used as vegetable.		Yadaiah

Format19:WildPlantSpeciesofImportance

S. No.	Local Name	Scientific Name	Variety	Importance (As economic, Social, Cultural etc)	Status
1	Thathurubenda	<i>Abutilon indicum</i> (L.) Sweet	Wild	Medicinal	Common
2	Thumma	<i>Acacia nilotica</i> (L.) Delile	Wild	Adhesive	Common
3	Pippaku	<i>Acalypha indica</i> L.	Wild	Leaves used to cure skin disease	Rare
4	Uttareni	<i>Achyranthes aspera</i> L.	Wild	Leaves used to insect bite	Common
5	Kondapindi	<i>Aerva lanata</i> (L.) Juss.	Wild	Leaves used as medicine to cure stones in Kidney and used as leafy vegetable.	Common
6	Dirisena	<i>Albizia lebeck</i> (L.) Benth.	Wild	Timber	Common
7	Not Reported	<i>Alloteropsis cimicina</i> (L.) Stapf	Wild	Used as Fodder	Rare
8	Manchi Kalabanda	<i>Aloe vera</i> (L.) Burm.f.	Wild	Used as medicine for various ailments	Common
9	Ponnaganti kura	<i>Alternanthera sessilis</i> (L.) R. Br. ex DC.	Wild	Medicinal	Common
10	Not Reported	<i>Alysicarpus bupleurifolius</i> (L.) DC.	Wild	Used as Fodder	Rare
11	Botlalam	<i>Alysicarpus hamosus</i> Edgew.	Wild	Used as Fodder	Rare
12	Not Reported	<i>Alysicarpus monilifer</i> (L.) DC.	Wild	Used as Fodder	Common
13	Mulla Thotakura	<i>Amaranthus spinosus</i> L.	Wild	Leaves used as vegetable.	Common
14	Thotakura	<i>Amaranthus viridis</i> L.	Wild	Leaves used as vegetable.	Common
15	Seetha Phalam	<i>Annona squamosa</i> L.	Wild	Fruit edible, can be supplied to local market in the season.	Common
16	Not Reported	<i>Aponogeton natans</i> (L.) Engl.	Wild	Wild ornamental	Common
17	Balurakkasi	<i>Argemone mexicana</i> L.	Wild	Used to cure ulcers on lips	Common
18	Ooba Gaddi	<i>Aristida funiculata</i> Trin. & Rupr.	Wild	Fodder	Common
19	Ooba Gaddi	<i>Aristida hystrix</i> L.f.	Wild	Fodder	Common
20	Nakkusa	<i>Aristida setacea</i> Retz.	Wild	Used to prepare broomsticks	Common
21	Not Reported	<i>Arthraxon lanceolatus</i> (Roxb.) Hochst.	Wild	Fodder	Common
22	Vepa	<i>Azadirachta indica</i> A. Juss.	Wild	Oil from seeds is used in medicines, leaves are used to cure chicken pox	Common

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23	Not Reported	<i>Azolla pinnata</i> R. Br.	Wild	Used as Fodder and also biofertilizer	Common
24	Jala Bramhi	<i>Bacopa monnieri</i> (L.) Wettst.	Wild	Medicinal	Common
25	Verri Nuvvulu	<i>Blainvillea acmella</i> (L.) Philipson	Wild	Used as fodder in early stage.	Common
26	Atukamamidi	<i>Boerhavia diffusa</i> L.	Wild	Medicinal	Common
27	Atukamamidi	<i>Boerhavia erecta</i> L.	Wild	Medicinal	Common
28	Thati	<i>Borassus flabellifer</i> L.	Wild	Fruits edible, Leaves used as thatching material and stems as wood	Common
29	Not Reported	<i>Brachiaria distachya</i> (L.) Stapf	Wild	Used as fodder	Rare
30	Not Reported	<i>Brachiaria ramosa</i> (L.) Stapf	Wild	Used as fodder	Common
31	Not Reported	<i>Brachiaria remota</i> (Retz.) Haines	Wild	Used as fodder	Common
32	Not Reported	<i>Brachiaria reptans</i> (L.) C. Gardner & C.E. Hubb.	Wild	Used as fodder	Common
33	Jilledu	<i>Calotropis gigantea</i> (L.) Dryand.	Wild	Latex used to cure scorpion bite.	Common
34	Jilledu	<i>Calotropis procera</i> (Aiton) Dryand.	Wild	Latex used to cure scorpion bite.	Common
35	Budda Budasa	<i>Cardiospermum canescens</i> Wall.	Wild	Medicinal	Rare
36	Budda Budasa	<i>Cardiospermum halicacabum</i> L.	Wild	Medicinal	Common
37	Vuppu Gaddi	<i>Chloris barbata</i> Sw. (<i>Chloris inflata</i>)	Wild	Fodder	Common
38	NR	<i>Chrysopogon fulvus</i> (Spr.) Chiov.	Wild	Fodder	Abundant
39	Kukka Vaminta	<i>Cleome gynandra</i> L.	Wild	Medicinal	Common
40	NR	<i>Cleome monophylla</i> L.	Wild	Medicinal	Common
41	Kukka Vaminta	<i>Cleome viscosa</i> L.	Wild	Medicinal	Common
42	Dusara Theega	<i>Cocculus hirsutus</i> (L.) W.Theob.	Wild	Used to prepare jelly substance with leaf juice	Rare
43	Kobbari	<i>Cocos nucifera</i> L.	Wild	Edible	Common
44	Vennadeni aaku	<i>Commelina bengalensis</i> L.	Wild	Medicinal	Common
45	Rabbaru theega	<i>Cryptostegia grandiflora</i> Roxb. ex R.Br.	Wild	Ornamental	Common
46	Garika	<i>Cynodon dactylon</i> (L.) Pers.	Wild	Fodder	Common
47	Not Reported	<i>Cyperus auriculatus</i> Nees & Meyen ex Kunth	Wild	Fodder	Common
48	Not Reported	<i>Cyperus corymbosus</i> Rottb.	Wild	Fodder	Rare
49	Bagamathi	<i>Cyperus difformis</i> L.	Wild	Fodder	Common
50	Not Reported	<i>Cyperus distans</i> L.f.	Wild	Fodder	Common

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51	Not Reported	<i>Cyperus haspan</i> L.	Wild	Fodder	Common
52	Not Reported	<i>Cyperus iria</i> L.	Wild	Fodder	Common
53	Not Reported	<i>Cyperus paniceus</i> (Rottb.) Boeckeler	Wild	Fodder	Common
54	Thunga	<i>Cyperus rotundus</i> L.	Wild	Fodder	Common
55	Not Reported	<i>Cyperus rubicundus</i> Vahl	Wild	Fodder	Rare
56	Ganupu Gaddi	<i>Dactyloctenium aegyptium</i> (L.) P. Beauv.	Wild	Fodder	Common
57	Ganupu Gaddi	<i>Dactyloctenium aristatum</i> Link Hort.	Wild	Fodder	Common
58	Datura	<i>Datura metel</i> L.	Wild	Medicinal	Common
59	NR	<i>Dichanthium annulatum</i> (Forssk.) Stapf	Wild	Fodder	Common
60	NR	<i>Dichanthium foveolatum</i> (Del.) Roberty	Wild	Fodder	Common
61	Not Reported	<i>Digitaria bicornis</i> (Lam.) Roemer & Schultes	Wild	Fodder	Common
62	Not Reported	<i>Digitaria ciliaris</i> (Retz.) Koel.	Wild	Fodder	Common
63	NR	<i>Digitaria longiflora</i> (Retz.) Pers.	Wild	Fodder	Common
64	Not Reported	<i>Digitaria tomentosa</i> (Willd.) Henr.	Wild	Fodder	Common
65	Oodarlu	<i>Echinochloa colona</i> (L.) Link	Wild	Fodder	Common
66	Guntagalagara	<i>Eclipta prostrata</i> (L.) L.	Wild	Leaf juice used to cure dandruf	Common
67	Not Reported	<i>Eragrostiella bifaria</i> (Vahl) Bor	Wild	Fodder	Common
68	Not Reported	<i>Eragrostis cilianensis</i> (All.) Janch.	Wild	Fodder	Common
69	Not Reported	<i>Eragrostis ciliaris</i> (L.) R.Br.	Wild	Fodder	Common
70	Not Reported	<i>Eragrostis pilosa</i> (L.) Beauv.	Wild	Fodder	Common
71	Not Reported	<i>Eragrostis riparia</i> (Willd.) Nees	Wild	Fodder	Common
72	Not Reported	<i>Eragrostis tenella</i> (L.) Beauv. ex Roemer & Schultes	Wild	Fodder	Common
73	Not Reported	<i>Eragrostis tremula</i> Hochst.ex Steudel	Wild	Fodder	Common
74	Not Reported	<i>Eragrostis unioloides</i> (Retz.) Nees ex Steudel	Wild	Fodder	Common
75	Not Reported	<i>Eragrostis viscosa</i> (Retz.) Trin.	Wild	Fodder	Common
76	NR	<i>Eriochloa procera</i> (Retz.) C.E. Hubb.	Wild	Fodder	Common
77	Marri	<i>Ficus benghalensis</i> L.	Wild	Edible	Common
78	Bramha Medi	<i>Ficus hispida</i> L.f.	Wild	Edible	Common
79	Medi	<i>Ficus racemosa</i> L.	Wild	Edible	Common

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80	Raavi	<i>Ficus religiosa</i> L.	Wild	Edible	Common
81	Not Reported	<i>Fimbristylis argentea</i> (Rottb.) Vahl	Wild	Fodder	Common
82	Not Reported	<i>Fimbristylis bisumbellata</i> (Forssk.) Bubani	Wild	Fodder	Common
83	Not Reported	<i>Fimbristylis dichotoma</i> (L.) Vahl	Wild	Fodder	Common
84	Not Reported	<i>Fimbristylis quinquangularis</i> (Vahl) Kunth	Wild	Fodder	Common
85	Not Reported	<i>Glossocardia bosvallea</i> (L.f.) DC.	Wild	Used to ripen the fruits of <i>Canthium parviflorum</i>	Common
86	Podapathri	<i>Gymnema sylvestre</i> (Retz.) R.Br. ex Schultes	Wild	Leaf powder is considered as anti-diabetic	Rare
87	Erra Gaddi	<i>Heteropogon contortus</i> (L.) Beauv. ex Roemer & Schultes	Wild	Brooms	Common
88	Kavalaku	<i>Ipomoea aquatica</i> Forssk.	Wild	Wild ornamental	Common
89	Rabbaru Chettu	<i>Ipomoea carnea</i> Jacq.	Wild	Wild ornamental	Common
90	Not Reported	<i>Ipomoea wightii</i> (Wall.) Choisy	Wild	Wild ornamental	Rare
91	Poolalam	<i>Lagascea mollis</i> Cav.	Wild	Fodder	Rare
92	Navarathnalu	<i>Lantana camara</i> L.	Wild	Ornamental	Common
93	Mulla Banthi	<i>Lepidagathis cristata</i> Willd.	Wild	Medicinal	Common
94	Thummi	<i>Leucas aspera</i> (Willd.) Link	Wild	Pooja	Common
95	Kasara kaya	<i>Momordica cymbalaria</i> Hook. f.	Wild	Vegetable	Common
96	Kaluva	<i>Nymphaea nouchali</i> Brum.f.	Wild	Wild ornamental	Common
97	Kaluva	<i>Nymphaea pubescens</i> Willd.	Wild	Wild ornamental	Common
98	Thulasi	<i>Ocimum tenuiflorum</i> L.	Wild	Spiritual, Medicinal	Common
99	NR	<i>Ottelia alismoideis</i> (L.) Pers.	Wild	Ovary edible	Common
100	Pulichintha	<i>Oxalis corniculata</i> L.	Wild	Medicinal	Abundant
101	Not Reported	<i>Oxystelma esculentum</i> (L. f.) Sm.	Wild	Ornamental	Common
102	NR	<i>Panicum trypheron</i> Schult	Wild	Fodder, Wild relative	Common
103	Not Reported	<i>Paspalidium flavidum</i> (Retz.) A. Camus	Wild	Fodder	Common
104	Not Reported	<i>Paspalidium geminatum</i> (Forssk.) Stapf	Wild	Fodder	Common
105	Rakiflower	<i>Passiflora foetida</i> L.	Wild	Ornamental	Common
106	NR	<i>Pennisetum pedicellatum</i> Trin.	Wild	Fodder	Common

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107	Dustapu theega	<i>Pergularia daemia</i> (Forssk.) Chiov.	Wild	Medicinal	Common
108	Nakka Thoka Gaddi	<i>Perotis indica</i> (L.) Kuntze	Wild	Fodder	Common
109	Eetha	<i>Phoenix sylvestris</i> (L.) Roxb.	Wild	Leaves- Chewing; Fruits- Edible; Stem-Wood; Taddy extracted	Common
110	Nela usiri	<i>Phyllanthus amarus</i> Schumach. & Thonn.	Wild	Medicinal	Common
111	Anthara Thamara	<i>Pistia stratiotes</i> L.	Wild	Ornamental	Rare
112	Chithramulam	<i>Plumbago zeylanica</i> L.	Wild	Medicinal	Common
113	Kukkapayali	<i>Portulaca quadrifida</i> L.	Wild	Vegetable	Common
114	Sarkaru Thumma	<i>Prosopis chilensis</i> (Molina) Stuntz	Wild	Fire wood	Common
115	Jammi	<i>Prosopis cineraria</i> (L.) Druce	Wild	Spiritual, Medicinal	Rare
116	Thangedu	<i>Senna auriculata</i> (L.) Roxb.	Wild	Medicinal	Common
117	NR	<i>Setaria intermedia</i> Roemer & Schultes	Wild	Fodder	Common
118	Not Reported	<i>Setaria pumila</i> (Poir.) Roemer & Schultes	Wild	Fodder	Common
119	Not Reported	<i>Setaria verticillata</i> (L.) Beauv.	Wild	Fodder	Common
120	Parasukampa	<i>Sida acuta</i> Burm.f.	Wild	Preparation of cheap brooms	Common
121	Esthi	<i>Solanum trilobatum</i> L.	Wild	Medicinal	Common
122	Not Reported	<i>Sporobolus indicus</i> (L.) R.Br.	Wild	Fodder	Common
123	Neredu	<i>Syzygium cumini</i> (L.) Skeels	Wild	Edible	Rare
124	NR	<i>Talinum portulacifolium</i> (Forssk.) Aschers. ex Schweinf.	Wild	Fodder	Common
125	Chintha	<i>Tamarindus indica</i> L.	Wild	Edible	Common
126	Thippa Theega	<i>Tinospora cordifolia</i> (Willd.) Miers	Wild	Medicinal	Common
127	Ganjeraku	<i>Trainthema portulacastrum</i> L.	Wild	Vegetable	Common
128	Palleru	<i>Tribulus terrestris</i> L.	Wild	Medicinal and vegetable	Common
129	Gaddi Chamanthi	<i>Tridax procumbens</i> L.	Wild	Medicinal	Common
130	Jammu	<i>Typha angustifolia</i> L.	Wild	Thatching	Common
131	Vavili	<i>Vitex negundo</i> L.	Wild	Leaves burned to eradicate Mosquitos	Rare
132	Regu	<i>Ziziphus mauritiana</i> Lam.	Wild	Edible	Common

Format20: Aquatic Biodiversity

S. No	Local Name	Scientific Name	Variety	Features	Habitat	Local Status		Uses	Associated TK	Other Details	Community/ Knowledge Holders
						Past	Present				
1	Ponnaganti kura	<i>Alternanthera sessilis</i> (L.) R. Br. ex DC.	Wild	Herb	Moist localities	Common	Common	Medicinal	Used as leafy vegetable	NR	Kannaiah
2	Not Reported	<i>Ammannia baccifera</i> L.	Wild	Herb	Moist localities	Common	Common	Not Reported	NR	NR	Kannaiah
3	Not Reported	<i>Aponogeton natans</i> (L.) Engl.	Wild	Herb	Water courses	Common	Common	Wild ornamental	NR	NR	Kannaiah
4	Not Reported	<i>Azolla pinnata</i> R. Br.	Wild	Herb	Water courses	Common	Common	Used as Fodder	Used as also biofertilizer	NR	Kannaiah
5	Jala Bramhi	<i>Bacopa monnieri</i> (L.) Wettst.	Wild	Herb	Moist localities	Common	Common	Medicinal	Leaves are used for improve brain memory	NR	Kannaiah
6	Vennadeni aaku	<i>Commelina bengalensis</i> L.	Wild	Herb	Moist localities	Common	Common	Medicinal	Fodder	NR	Kannaiah
7	Rabbaru theega	<i>Cryptostegia grandiflora</i> Roxb. ex R.Br.	Wild	Climber	Water courses	Common	Common	Ornamental	NR	NR	Venkataiah
8	Garika	<i>Cynodon dactylon</i> (L.) Pers.	Wild	Herb	Moist localities	Abundant	Common	Fodder	WP used as fodder	NR	Venkataiah
9	Not Reported	<i>Cyperus corymbosus</i> Rottb.	Wild	Herb	Moist localities	Common	Rare	Fodder	WP used as fodder	NR	Venkataiah
10	Bagamathi	<i>Cyperus difformis</i> L.	Wild	Herb	Moist localities	Common	Common	Fodder	WP used as fodder	NR	Venkataiah
11	Not Reported	<i>Cyperus distans</i> L.f.	Wild	Herb	Moist localities	Common	Common	Fodder	WP used as fodder	NR	Sathaiah
12	Not Reported	<i>Cyperus haspan</i> L.	Wild	Herb	Moist localities	Common	Common	Fodder	WP used as fodder	NR	Sathaiah
13	Not Reported	<i>Cyperus iria</i> L.	Wild	Herb	Moist localities	Common	Common	Fodder	WP used as fodder	NR	Sathaiah

14	Not Reported	<i>Cyperus paniceus</i> (Rottb.) Boeckeler	Wild	Herb	Moist localities	Common	Common	Fodder	WP used as fodder	NR	Sathaiah
15	Thunga	<i>Cyperus rotundus</i> L.	Wild	Herb	Moist localities	Common	Common	Fodder	WP used as fodder	NR	Sathaiah
16	Not Reported	<i>Cyperus rubicundus</i> Vahl	Wild	Herb	Moist localities	Common	Rare	Fodder	WP used as fodder	NR	Sathaiah
17	Ganupu Gaddi	<i>Dactyloctenium aegyptium</i> (L.) P. Beauv.	Wild	Herb	Moist localities	Abundant	Common	Fodder	WP used as fodder	NR	Sathaiah
18	Guntagalagara	<i>Eclipta prostrata</i> (L.) L.	Wild	Herb	Moist localities	Common	Common	Used to cure dandruf	Leafy vegetable	NR	Sathaiah
19	Medi	<i>Ficus racemosa</i> L.	Wild	Tree	Water courses	Common	Common	Edible	Fruits are edible	NR	Sathaiah
20	Kavalaku	<i>Ipomoea aquatica</i> Forssk.	Wild	Herb	Water courses	Common	Common	Wild ornamental	NR	NR	Sathaiah

Format21: Aquatic Plant Species of Importance

S. No.	Local Name	Scientific Name	Variety	Importance	Trends
1	Ponnaganti kura	<i>Alternanthera sessilis</i> (L.) R. Br. ex DC.	Wild	Medicinal	Common
2	Not Reported	<i>Aponogeton natans</i> (L.) Engl.	Wild	Wild ornamental	Common
3	Not Reported	<i>Azolla pinnata</i> R. Br.	Wild	Used as Fodder	Common
4	Jala Bramhi	<i>Bacopa monnieri</i> (L.) Wettst.	Wild	Medicinal	Common
5	Vennadeni aaku	<i>Commelina bengalensis</i> L.	Wild	Medicinal	Common
6	Rabbaru theega	<i>Cryptostegia grandiflora</i> Roxb. ex R.Br.	Wild	Ornamental	Common
7	Garika	<i>Cynodon dactylon</i> (L.) Pers.	Wild	Fodder	Common
8	Not Reported	<i>Cyperus corymbosus</i> Rottb.	Wild	Fodder	Common
9	Bagamathi	<i>Cyperus difformis</i> L.	Wild	Fodder	Common
10	Not Reported	<i>Cyperus distans</i> L.f.	Wild	Fodder	Common
11	Not Reported	<i>Cyperus haspan</i> L.	Wild	Fodder	Common
12	Not Reported	<i>Cyperus iria</i> L.	Wild	Fodder	Common
13	Not Reported	<i>Cyperus paniceus</i> (Rottb.) Boeckeler	Wild	Fodder	Common
14	Thunga	<i>Cyperus rotundus</i> L.	Wild	Fodder	Common
15	Not Reported	<i>Cyperus rubicundus</i> Vahl	Wild	Fodder	Common
16	Ganupu Gaddi	<i>Dactyloctenium aegyptium</i> (L.) P. Beauv.	Wild	Fodder	Common
17	Guntagalagara	<i>Eclipta prostrata</i> (L.) L.	Wild	Leaf juice used to cure dandruf	Common
18	Medi	<i>Ficus racemosa</i> L.	Wild	Edible	Common
19	Kavalaku	<i>Ipomoea aquatica</i> Forssk.	Wild	Wild ornamental	Common
20	Rabbaru Chettu	<i>Ipomoea carnea</i> Jacq.	Wild	Wild ornamental	Common

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21	Kaluva	<i>Nymphaea nouchali</i> Brum.f.	Wild	Wild ornamental	Common
22	Kaluva	<i>Nymphaea pubescens</i> Willd.	Wild	Wild ornamental	Common
23	NR	<i>Ottelia alismoideis</i> (L.) Pers.	Wild	Ovary edible	Common
24	Pulichintha	<i>Oxalis corniculata</i> L.	Wild	Medicinal	Common
25	Anthara Thamara	<i>Pistia stratiotes</i> L.	Wild	Ornamental	Common
26	Kukkapayali	<i>Portulaca quadrifida</i> L.	Wild	Vegetable	Common
27	Jammu	<i>Typha angustifolia</i> L.	Wild	Thatching	Common
28	Vavili	<i>Vitex negundo</i> L.	Wild	Leaves burned to eradicate Mosquitos	Common

Format22: Wild Plants of Medicinal Importance

S. No.	Plant Type	Local Name	Scientific Name	Variety	Source of Plants / Seeds	Local Status		Uses	Parts used	Associated TK	Other details Market/ own use	Community /Knowledge Holders
						Past	Present					
1	Shrub	Thuthuru benda	<i>Abutilon indicum</i> (L.) Sweet	Wild	Wild	Common	Common	Nerve disorders	Roots	Roots made the past to apply on parts and cure nerves disorders	Own use	Nirmala
2	Herb	Pippaku	<i>Acalypha indica</i> L.	Wild	Wild	Common	Rare	Skin disease	Leaves	Leaves used to cure skin disease	Own use	Nirmala
3	Herb	Uttareni	<i>Achyranthes aspera</i> L.	Wild	Wild	Common	Common	Insect bite	Leaves	Leaf paste used for Insect bite and young leaves edible	Own use	Nirmala
4	Herb	Kondapindi	<i>Aerva lanata</i> (L.) Juss.	Wild	Wild	Abundant	Common	Kidney disorders.	Leaves	Leaves used as medicine to cure stones in Kidney and used as leafy vegetable.	Own use	Nirmala
5	Herb	Manchi Kalabanda	<i>Aloe vera</i> (L.) Burm.f.	Wild	Wild	Common	Common	Skin diseases	Whole plant	Used as medicine for various ailments	Own use	Nirmala
6	Herb	Ponnaganti kura	<i>Alternanthera sessilis</i> (L.) R. Br. ex DC.	Wild	Wild	Common	Common	Eye disorders	Leaves	Leaves used as vegetable for eye disorders	Own use	Nirmala
7	Herb	Balurakkasi	<i>Argemone mexicana</i> L.	Wild	Wild	Common	Common	Used for ulcers	Leaf sap	Used to cure ulcers on lips	Own use	Nirmala
8	Tree	Vepa	<i>Azadirachta indica</i> A. Juss.	Wild	Wild	Common	Common	Skin diseases	Whole plant	Oil from seeds is used in medicines, leaves are used to cure chicken pox	Own use	Nirmala
9	Herb	Jala Bramhi	<i>Bacopa monnieri</i> (L.) Wettst.	Wild	Wild	Common	Common	Alzheimer disease	Leaves	Leaves are eaten as raw for improve memory	Own use	Nirmala

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10	Herb	Atukamami di	<i>Boerhavia diffusa</i> L.	Local	Wild	Common	Common	Kidney stones	L	Leaves used for kidney stones and vegetables	Own use	Armutha
11	Herb	NR	<i>Boerhavia erecta</i> L.	Local	Wild	Common	Common	Kidney stones	L	Leaves used for kidney stones and vegetables	Own use	Armutha
12	Shrub	Jilledu	<i>Calotropis gigantea</i> (L.) Dryand.	Shrub	Outskirts of village	Common	Common	Scorpion bite.	Whole plant	Latex used to cure scorpion bite.	Own use	Armutha
13	Shrub	Jilledu	<i>Calotropis procera</i> (Aiton) Dryand.	Shrub	Outskirts of village	Common	Common	Scorpion bite.	Whole plant	Latex used to cure scorpion bite.	Own use	Armutha
14	Climber	Budda Budasa	<i>Cardiospermum canescens</i> Wall.	Wild	Wild	Rare	Rare	Swelling and Tumors.	Seeds	Seeds made powder, and use treatment of swelling and tumors.	Own use	Armutha
15	Climber	Budda Budasa	<i>Cardiospermum halicacabum</i> L.	Wild	Wild	Common	Common	Swelling and Tumors.	Seeds	Seeds made powder, and use treatment of swelling and tumors.	Own use	Armutha
16	Herb	Kukka Vaminta	<i>Cleome gynandra</i> L.	Wild	Wild	Common	Common	Diarrhoea	Leaves	Leaves used for diarrhoea.	Own use	Armutha
17	Herb	NR	<i>Cleome monophylla</i> L.	Wild	Wild	Common	Common	Cure swellings	WP	Whole plant used for cure swellings	Own use	Armutha
18	Herb	Kukka Vaminta	<i>Cleome viscosa</i> L.	Wild	Wild	Common	Common	Ear pain	Whole plant	Used for ear infections and roots for wounds	Own use	Armutha
19	Herb	Vennadeni aaku	<i>Commelina bengalensis</i> L.	Wild	Wild	Common	Common	Pimples	Whole plant	Used for various ailments.	Own use	Armutha
20	Herb	Datura	<i>Datura metel</i> L.	Wild	Wild	Common	Rare	Scorpion bite	L	Leaves used to treat scorpion bite	Own use	Aruna
21	Herb	Guntagalagara	<i>Eclipta prostrata</i> (L.) L.	Wild	Wild	Common	Common	Hair problems	Whole plant	Leaf juice used to cure dandruf	Own use	Aruna
22	Climber	Podapathri	<i>Gymnema sylvestre</i> (Retz.) R.Br. ex Schultes	Wild	Wild	Rare	Rare	Anti-diabetic	Leaves	Leaf powder is considered as anti-diabetic	Own use	Aruna
23	Herb	Mulla Banthi	<i>Lepidagathis cristata</i> Willd.	Local	Wild	Common	Common	Cure burns	WP	Ash of whole plant used to cure burns	Own use	Aruna

Format23: Wild Relatives of Crops

S. No.	Local Name	Cultivated Crops	Wild Relatives	Landscape /Habitat	Local Status		Uses(Usage)	Parts Used	Associated TK	Other Details	Community / Knowledge Holders
					Past	Present					
1	Vegetables	Vegetables	<i>Amaranthus spinosus</i> L.	Plains	Common	Common	Leafy vegetable	Leaves	Not Reported	NA	Narnam Krishnaiah
2			<i>Amaranthus viridis</i> L.	Plains	Common	Common	Leafy vegetable	Leaves	Not Reported	NA	Narnam Krishnaiah
3	Oodarlu	<i>Echinochloa crus-galli</i> (L.) Beauv.	<i>Echinochloa colona</i> (L.) Link	Moist places	Common	Common	Used as fodder	Whole plant	Not Reported	NA	Narnam Krishnaiah
4	Korralu	<i>Setaria italica</i>	<i>Setaria intermedia</i> Roemer & Schultes	Plains	Common	Abundant	Used as fodder	WP	Fodder	NR	Narnam Krishnaiah
5			<i>Setaria pumila</i> (Poir.) Roemer & Schultes	Plains	Common	Abundant	Used as fodder	WP	Fodder	NR	Narnam Krishnaiah
6			<i>Setaria verticillata</i> (L.) P.Beauv.	Plains	Common	Abundant	Used as fodder	WP	Fodder	NA	Narnam Krishnaiah
7	Samalu	<i>Panicum miliaceum</i> L.	<i>Panicum trypheron</i> Schultes	Ditches	Rare	Rare	Used as fodder	Whole plant	Not Reported	NA	Narnam Krishnaiah

Format24: Wild Ornamental Plants

S.No.	Local Name	Scientific Name	Variety	Habitat	Commercial / Non Commercial Use	Associated TK	Any other Details	Community / Knowledge Holders
1	Not Reported	<i>Aponogeton natans</i> (L.) Engl.	Wild	Water courses	Non commercial	NR	NR	Tamatala Chennaiah
2	Rabbaru theega	<i>Cryptostegia grandiflora</i> Roxb. ex R.Br.	Wild	Water courses	Non commercial	NR	NR	Tamatala Chennaiah
3	Kavalaku	<i>Ipomoea aquatica</i> Forssk.	Wild	Water courses	Non commercial	NR	NR	Tamatala Chennaiah
4	Rabbaru Chettu	<i>Ipomoea carnea</i> Jacq.	Wild	Water courses	Non commercial	NR	NR	Tamatala Chennaiah
5	Not Reported	<i>Ipomoea wightii</i> (Wall.) Choisy	Wild	Plains	Non commercial	NR	NR	Tamatala Chennaiah
6	Kaluva	<i>Nymphaea nouchali</i> Brum.f.	Wild	Water courses	Non commercial	NR	NR	Tamatala Chennaiah
7	Kaluva	<i>Nymphaea pubescens</i> Willd.	Wild	Water courses	Non commercial	NR	NR	Tamatala Chennaiah
8	Not Reported	<i>Oxystelma esculentum</i> (L. f.) Sm.	Wild	Outskirts of village	Non commercial	NR	NR	Tamatala Chennaiah
9	Anthara Thamara	<i>Pistia stratiotes</i> L.	Wild	Floating on water	Non commercial	NR	NR	Tamatala Chennaiah
10	Navarathnalu	<i>Lantana camara</i> L.	Wild	Plains	Non commercial	NR	NR	Tamatala Chennaiah
11	Raki flowr	<i>Passiflora foetida</i> L.	Wild	Plains	Non commercial	Attractive flowers	NA	Tamatala Chennaiah
12	Thummi	<i>Leucas aspera</i> (Willd.) Link	Wild	Plains	Non commercial	NR	NR	Tamatala Chennaiah
13	Chitramulam	<i>Plumbago zeylanica</i> L.	Wild	Plains	Non commercial	NR	NA	Tamatala Chennaiah
14	NR	<i>Pennisetum pedicellatum</i> Trin.	Wild	Field bunds	Non commercial	NR	NA	Tamatala Chennaiah

Format25:Fumigate/ChewingPlants

Plant (Herb, Shrub, Tree)	Local Name	Scientific Name	Variety	Habitat	Local Status		Uses (usage)	Part used	Associated TK	Other details (mode of use)	Community Past Present knowledge holder
					Past	Present					
Shrub	Vavili	<i>Vitex negundo</i> L.	Wild	Near stream	Common	Rare	Fumigate	Leaves	Leaves burned to eradicate Mosiquito	Also used as fencing material	M.Krishnaiah
Tree	Vepa	<i>Azadirachta indica</i> A. Juss.	Wild	Plains	Common	Common	Fumigate & Chewing	Leaves	Leaves burned to eradicate Mosiquito. And also chewed sometimes	Medicinal	M.Krishnaiah
Tree	Eetha	<i>Phoenix sylvestris</i> (L.) Roxb.	Wild	Plains	Common	Rare	Chewing	Leaflets	Chewed to cure mouth ulcers	Leaflets chewed as raw	M.Krishnaiah
Climber	Tamala paku	<i>Pipee betle</i> L.	Wild	Cultivated	Nil	Nil	Chewing	Leaves	People brought these from markets and used everyday.	Not Reported	M.Krishnaiah
Herb	Pogaku	<i>Nicotiana tobaccum</i> L.	Wild	Cultivated	Nil	Nil	Chewing	Leaves		Dired leaves	M.Krishnaiah
Tree	Vakka	<i>Areca catechu</i> L.	Wild	Cultivated	Nil	Nil	Chewing	Fruits/nuts		Nuts ply a vital role in human health	M.Krishnaiah

Format26: TimberPlants

S.No.	Local Name	Scientific Name	Habitat	Local Status		Associated TK	Other Uses, if any	Community /Knowledge Holders
				Past	Present			
1	Dirisena	<i>Albizia lebbek</i> (L.) Benth.	Plains	Rare	Rare	Used in Avenue plantation	NR	Chennamallaiah
2	Vepa	<i>Azadirachta indica</i> A. Juss.	Plains	Common	Common	NA	Medicinal	Chennamallaiah
3	Thati	<i>Borassus flabellifer</i> L.	Forest area	Common	Common	Thacting Material	Fruits edible, Leaves used as thatching material and stems as wood	Chennamallaiah
4	Sarkaru Thumma	<i>Prosopis chilensis</i> (Molina) Stuntz	Plains	Common	Common	Fire wood	Branches used as Fuel	Chennamallaiah
5	Jammi	<i>Prosopis cineraria</i> (L.) Druce	Plains	Common	Common	Spiritual	Medicinal	Chennamallaiah
6	Chintha	<i>Tamarindus indica</i> L.	Plains	Common	Common	Fruits vegetable	Tender shoots used as Vegetable	Chennamallaiah
7	Neredu	<i>Syzygium cumini</i> (L.) Skeels	Near streams	Common	Common	Fruits edible	NA	Chennamallaiah
8	Thumma	<i>Acacia nilotica</i> (L.) Delile	Forest area	Common	Common	Peoples used in made for carts and doors.	NR	Chennamallaiah
9	NR	<i>Ficus benghalensis</i> L.	Forest area	Common	Common	Fire wood	Edible	Chennamallaiah
10	Raavi	<i>Ficus religiosa</i> L.	Forest area	Common	Common	NR	Edible	Chennamallaiah

Format27A:CoastalandMarineFlora*

S.No.	Plant Type	Local Name	Scientific Name	Habitat	Local Status		Parts Collected	Commercial Uses	Other Uses	Associated TK	Community /Knowledge Holders
					Past	Present					
Not Applicable											

Format27B:CoastalandMarineFauna

S. No.	Animal Type	Local Name	Scientific Name	Habitat	Local Status		Parts Collected	Commercial Uses	Other Uses	Associated TK	Community /Knowledge Holders
					Past	Present					
Not Applicable											

Format 28: Wild Animals (Mammals, Birds, Reptiles, Amphibian, Insects, others)

S.No.	Animal Type	Local Name	Scientific Name	Habitat	Description	Season when seen	Local Status		Uses(If any)	Associated TK	Mode of hunting, Collection if any	Other details	Community /Knowledge Holders
							Past	Present					
1	Molluscs	Gavva	<i>Lamellidens consobrinus</i> (Lea, 1860)	Fresh water	NR	Rainy season	Abundant	Rare	NR	NR	NR	NR	RajaShekar Reddy
2	Molluscs	Sanna Gavva	<i>Melanooides tuberculata</i> (Müller, 1774)	Fresh water	NR	Rainy season	Abundant	Rare	NR	NR	NR	NR	RajaShekar Reddy
3	Insects	Peda Purugu	<i>Oryctes rhinoceros</i> L.	Plains	NR	Rainy season	Abundant	Rare	NR	NR	NR	NR	RajaShekar Reddy
4	Insects	Gandu Cheema	<i>Camponotus compressus</i> (Fabricius, 1787)	Plains	NR	All Season	Abundant	Rare	NR	NR	NR	NR	RajaShekar Reddy
5	Insects	Aggi Cheema	<i>Tetraoponera rufonigra</i> (Jerdon, 1851)	Forest areas	NR	All Season	Abundant	Rare	NR	NR	NR	NR	RajaShekar Reddy
6	Insects	Chedalu	<i>Odontotermes obesus</i> (Rambur 1842)	Plains	NR	All Season	Abundant	Rare	NR	NR	NR	NR	RajaShekar Reddy
7	Insects	Damsal fly	<i>Ceriagrion coromandelianum</i> (Fabricius, 1798)	Near Water sources	NR	Rainy season	Abundant	Rare	NR	NR	NR	NR	RajaShekar Reddy
8	Insects	Damsal fly	<i>Ischnura senegalensis</i> (Rambur, 1842)	Plains	NR	Rainy season	Rare	Rare	NR	NR	NR	NR	RajaShekar Reddy
9	Insects	Golla Bhama	<i>Mantis religiosa</i>	Plains	NR	Rainy season	Common	Common	NR	NR	NR	NR	RajaShekar Reddy
10	Insects	Draganflies	<i>Anax guttatus</i>	Plains	NR	Rainy season	Abundant	Rare	NR	NR	NR	NR	RajaShekar Reddy
11	Insects	Draganflies	<i>Brachythemis contaminata</i>	Plains	NR	Rainy season	Rare	Rare	NR	NR	NR	NR	RajaShekar Reddy
12	Insects	Draganflies	<i>Bradinopyga geminata</i>	Plains	NR	Rainy season	Rare	Rare	NR	NR	NR	NR	RajaShekar Reddy
13	Insects	Draganflies	<i>Crocothemis servilia</i>	Plains	NR	Rainy season	Rare	Rare	NR	NR	NR	NR	RajaShekar

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													Reddy
14	Insects	Draganflies	<i>Diplacodes trivialis</i>	Plains	NR	Rainy season	Rare	Rare	NR	NR	NR	NR	RajaShekar Reddy
15	Insects	Draganflies	<i>Orthetrum sabina</i>	Plains	NR	Rainy season	Abundant	Common	NR	NR	NR	NR	RajaShekar Reddy
16	Insects	Grasshopper	<i>Acrida exaltata</i>	Plains	NR	Rainy season	Common	Common	NR	NR	NR	NR	RajaShekar Reddy
17	Insects	Jerri	<i>Scolopendra morsitans</i>	Plains	NR	Rainy season	Common	Common	NR	NR	NR	NR	RajaShekar Reddy
18	Insects	Jerri	<i>Scolopendra gigantea</i>	Plains	NR	Rainy season	Common	Common	NR	NR	NR	NR	RajaShekar Reddy
19	Insects	Grasshopper	<i>Poekilocerus pictus</i>	Plains	NR	Rainy season	Common	Common	NR	NR	NR	NR	RajaShekar Reddy
20	Insects	Walking sticks	<i>Carausius morosus</i>	Grasslands	NR	Rainy season	Common	Rare	NR	NR	NR	NR	RajaShekar Reddy
21	Insects	Butterfly	<i>Castalius rosimon</i>	Grasslands	NR	Rainy season	Common	Rare	NR	NR	NR	NR	RajaShekar Reddy
22	Insects	Butterfly	<i>Catopsilla pomona</i>	Plains	NR	Rainy season	Common	Rare	NR	NR	NR	NR	RajaShekar Reddy
23	Insects	Butterfly	<i>Catochrysops strabo</i>	Plains	NR	Rainy season	Common	Rare	NR	NR	NR	NR	RajaShekar Reddy
24	Insects	Butterfly	<i>Danus chrysippus</i>	Plains	NR	Rainy season	Common	Rare	NR	NR	NR	NR	RajaShekar Reddy
25	Insects	Butterfly	<i>Graphium agememnon</i>	Plains	NR	Rainy season	Common	Rare	NR	NR	NR	NR	RajaShekar Reddy
26	Insects	Butterfly	<i>Jisnonia lemonias</i>	Plains	NR	Rainy season	Common	Rare	NR	NR	NR	NR	RajaShekar Reddy
27	Insects	Butterfly	<i>Leptotes plinius</i>	Plains	NR	Rainy season	Common	Rare	NR	NR	NR	NR	RajaShekar Reddy
28	Insects	Butterfly	<i>Pachliopta aristolochiae</i>	Plains	NR	Rainy season	Common	Rare	NR	NR	NR	NR	RajaShekar Reddy
29	Insects	Butterfly	<i>Pachliopta hector</i>	Plains	NR	Rainy season	Common	Rare	NR	NR	NR	NR	RajaShekar Reddy
30	Insects	Butterfly	<i>Tirumala limniace</i>	Plains	NR	Rainy season	Common	Rare	NR	NR	NR	NR	RajaShekar Reddy
31	Insects	Spider	<i>Argiope aemula</i>	Plains &	NR	Rainy season	Common	Rare	NR	NR	NR	NR	RajaShekar

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				Forests									Reddy
32	Insects	Spider	<i>Argiope anasuja</i>	Plains & Forests	NR	Rainy season	Common	Rare	NR	NR	NR	NR	RajaShekar Reddy
33	Insects	Spider	<i>Hasarius adansoni</i>	Plains	NR	Rainy season	Common	Rare	NR	NR	NR	NR	RajaShekar Reddy
34	Insects	Grasshopper	<i>Cyrtacanthacris tatarica</i>	Plains	NR	Rainy season	Common	Common	NR	NR	NR	NR	RajaShekar Reddy
35	Insects	Grasshopper	<i>Acrida cinerea</i>	Plains	NR	Rainy season	Common	Common	NR	NR	NR	NR	RajaShekar Reddy
36	Insects	Mantis	<i>Gongylus gongiloides</i>	Plains	NR	Rainy season	Common	Rare	NR	NR	NR	NR	RajaShekar Reddy
37	Insects	Cockroach	<i>Periplanata americana</i>	Plains	NR	All season	Common	Common	NR	NR	NR	NR	RajaShekar Reddy
38	Insects	Cockroach	<i>Therea petiveriana</i>	Plains	NR	All season	Common	Common	NR	NR	NR	NR	RajaShekar Reddy
39	Insects	Cockroach	<i>Neostylopyga rhombifolia</i>	Plains	NR	All season	Common	Common	NR	NR	NR	NR	RajaShekar Reddy
40	Insects	Mealybug	<i>Ferrisia</i> sp.	On Prosopis	NR	Rainy season	Common	Common	NR	NR	NR	NR	RajaShekar Reddy
41	Insects	Water strider	<i>Gerris</i> sp.	On water	NR	Rainy season	Common	Common	NR	NR	NR	NR	RajaShekar Reddy
42	Insects	Seed Bug	<i>Spilostethus pandurus</i>	Plains	NR	Rainy season	Common	Rare	NR	NR	NR	NR	RajaShekar Reddy
43	Insects	Jewel Bug	<i>Chrysocoris stolii</i>	On Croton	NR	Rainy season	Common	Common	NR	NR	NR	NR	RajaShekar Reddy
44	Insects	Blister Beetle	<i>Mylabris pustulata</i>	On grasses	NR	Rainy season	Common	Rare	NR	NR	NR	NR	RajaShekar Reddy
45	Insects	Mango tree Borer	<i>Batocera rufomaculata</i>	On mango trees	NR	Rainy season	Common	Rare	NR	NR	NR	NR	RajaShekar Reddy
46	Insects	Mosquito	<i>Anaphilus</i> sp.		NR	All season	Common	Common	NR	NR	NR	NR	
47	Insects	Termites	<i>Odantotermis</i> sp.	Plains	NA	Rainy season	Common	Common	Edible	After first rain they attracted to light and dropped their wings. People collect the insects and slightly roasted and took with springrices as			RajaShekar Reddy

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										food.			
48	Butterfly	Common Jezebel	<i>Delias eucharis</i>		NR	Rainy season	Common	Rare	NR	NR	NR	NR	Bhalamni
49	Butterfly	Plain Tiger	<i>Danaus chrysippus</i>		NR	Rainy season	Common	Rare	NR	NR	NR	NR	Bhalamni
50	Butterfly	Striped Pierrot	<i>Tarucus nara</i>		NR	Rainy season	Common	Rare	NR	NR	NR	NR	Bhalamni
51	Moth	Swallowtail moth	<i>Micronea aculeata</i>		NR	Rainy season	Common	Rare	NR	NR	NR	NR	Bhalamni
52	Moth	Tiger moths	<i>Amata passalis</i>		NR	Rainy season	Common	Rare	NR	NR	NR	NR	Ramulu
53	Wasp	Vespid wasp	<i>Polistes hebraeus</i>		NR	Rainy season	Common	Rare	NR	NR	NR	NR	Ramulu
54	Ant	Weaver Ant	<i>Oecophylla smaragdina</i>	On mango trees	NR	Rainy season	Common	Common	NR	NR	NR	NR	Ramulu
55	Bee	Oriental Honey Bee	<i>Apis cerena</i>		NR	Rainy season	Abundant	Rare	NR	NR	NR	NR	Ramulu
56	Bee	Indian Rock Bee	<i>Apis dorsata</i>	On rocks	NR	Rainy season	Abundant	Rare	NR	NR	NR	NR	Ramulu
57	Mite	Red Velvet Mite	<i>Trambidium gratissimum</i>	Plains	NR	Rainy season	Abundant	Rare	NR	NR	NR	NR	Ramulu
58	Tick	Common Brown Dog Tick	<i>Rhipicephalus sanguineus</i>	On animals	NR	Rainy season	Abundant	Rare	NR	NR	NR	NR	Ramulu
59	Scorpion	Thelu	<i>Buthus tamulus</i>		NR	Rainy season	Common	Rare	NR	NR	NR	NR	Ramulu
60	Scorpion	Mondregabb a	<i>Heterometrus swammerdami</i>	Rocky areas	NR	Rainy season	Common	Rare	NR	NR	NR	NR	Ramulu
61	Amphibians	Marbled Toad	<i>Bufo stomaticus</i> Luken, 1862	Plains	NR	Rainy season	Common	Rare	NR	NR	NR	NR	Ramulu
62	Amphibians	Common Indian Toad	<i>Duttaphrynus melanostictus</i> Schneider, 1799	Plains	NR	Rainy season	Common	Rare	NR	NR	NR	NR	Ramulu
63	Amphibians	Skittering Frog	<i>Euphlyctis cyanophlyctis</i> (Schneider, 1799)	Plains	NR	Rainy season	Common	Rare	NR	NR	NR	NR	Ramulu
64	Amphibians	Indian Pond Frog	<i>Euphlyctis hexadactylus</i> (Lesson, 1834)	Water source	NR	Rainy season	Common	Rare	NR	NR	NR	NR	Ramulu

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65	Amphibians	Jerdon's Bull Frog	<i>Hoplobatrachus crassus</i> (Jerdon, 1853)	Water source	NR	Rainy season	Common	Rare	NR	NR	NR	NR	Ramulu
66	Amphibians	Indian Bull frog	<i>Hoplobatrachus tigerinus</i> (Daudin, 1803)	Plains	NR	Rainy season	Common	Rare	NR	NR	NR	NR	Ramulu
67	Amphibians	Indian Burrowing Frog	<i>Sphaerotheca breviceps</i> (Schneider, 1799)	Plains	NR	Rainy season	Common	Rare	NR	NR	NR	NR	Ramulu
68	Amphibians	Ornate Narrow mouthed Frog	<i>Microhyla ornata</i> (Dumeril & Bibron, 1841)	Plains	NR	Rainy season	Common	Rare	NR	NR	NR	NR	Ramulu
69	Amphibians	Indian Balloon Frog	<i>Uperodon globulosus</i> (Gunther, 1864)	Plains	NR	Rainy season	Common	Rare	NR	NR	NR	NR	Ramulu
70	Amphibians	Chunam Frog	<i>Polypedates maculatus</i> (Gray, 1833)	Plains	NR	Rainy season	Common	Rare	NR	NR	NR	NR	Ramulu
71	Reptiles	Southern Flap-Shell turtle	<i>Lissemys punctata granosa</i> (Schoepff, 1792)	Water source	NR	Rainy season	Common	Rare	NR	NR	NR	NR	Venkatesh
72	Reptiles	Brooke's Gecko	<i>Hemidactylus brooki</i> Gray, 1843	Plains	NR	Rainy season	Common	Rare	NR	NR	NR	NR	Venkatesh
73	Reptiles	Giant Southern Tree Gecko	<i>Hemidactylus giganteus</i> Stoliczka, 1871	Trees	NR	All season	Common	Rare	NR	NR	NR	NR	Venkatesh
74	Reptiles	Spotted Rock Gecko	<i>Hemidactylus maculatus</i> Dum & Bibr, 1836	Rocky areas	NR	All season	Common	Rare	NR	NR	NR	NR	Venkatesh
75	Reptiles	Keeled Grass Skink	<i>Mabuya carinata</i> (Schneider, 1801)	Plains	NR	All season	Common	Rare	NR	NR	NR	NR	Venkatesh
76	Reptiles	Indian Garden Lizard	<i>Calotes versicolor</i> (Daudin, 1802)	Plains	NR	All season	Common	Rare	NR	NR	NR	NR	Venkatesh
77	Reptiles	Peninsular Rock Agama	<i>Psammophilus dorsalis</i> (Gray, 1831)	Rocky areas	NR	All season	Common	Rare	NR	NR	NR	NR	Venkatesh

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78	Reptiles	Fanthroated Lizard	<i>Sitana ponticeriana</i> Cuvier, 1844	Rocky areas	NR	All season	Common	Rare	NR	NR	NR	NR	Venkatesh
79	Reptiles	Indian Chameleon	<i>Chamaeleo zeylanicus</i> Laurenti, 1768	Plains	NR	All season	Common	Rare	NR	NR	NR	NR	Venkatesh
80	Reptiles	Common Monitor Lizard	<i>Varanus bengalensis</i> (Linnaeus, 1758)	Rocky areas	NR	All season	Common	Rare	NR	NR	NR	NR	Venkatesh
81	Reptiles	Blind Snake	<i>Ramphotyphlops bramineus</i>	Plains	NR	Rainy season	Common	Rare	NR	NR	NR	NR	Venkatesh
82	Reptiles	Common Sanda Boa	<i>Eryx conicus</i> (Schneider, 1801)	Plains	NR	All season	Common	Rare	NR	NR	NR	NR	Venkatesh
83	Reptiles	Red Sand Boa	<i>Eryx johni</i> (Russell, 1801)	Rocky areas	NR	All season	Common	Rare	NR	NR	NR	NR	Venkatesh
84	Reptiles	Python	<i>Python molurus</i>	Forest areas	NR	All season	Common	Rare	NR	NR	NR	NR	Venkatesh
85	Reptiles	Banded racer	<i>Argyrogena fasciolata</i>	Forest areas	NR	Rainy season	Common	Rare	NR	NR	NR	NR	Venkatesh
86	Reptiles	Common Vine Snake	<i>Ahaetulla nasutus</i> (Lacepede, 1789)	On Trees	NR	Rainy season	Common	Rare	NR	NR	NR	NR	Venkatesh
87	Reptiles	Bronze back Tree snake	<i>Dendrelaphis tristis</i> (Daudin, 1803)	Plains	NR	All season	Common	Rare	NR	NR	NR	NR	Venkatesh
88	Reptiles	Common Trinket Snake	<i>Elaphe helena</i> (Daudin, 1803)	Plains	NR	Rainy season	Common	Rare	NR	NR	NR	NR	Venkatesh
89	Reptiles	Water Snake	<i>Enhydris enhydris</i> (Schneider, 1799)	Water source	NR	Rainy season	Common	Rare	NR	NR	NR	NR	Venkatesh
90	Reptiles	Wolf Snake	<i>Lycodon aulicus</i> (Linnaeus, 1754)	Plains	NR	All season	Common	Rare	NR	NR	NR	NR	Venkatesh
91	Reptiles	Kukri Snake	<i>Oligodon arnensis</i> (Shaw, 1802)	Plains	NR	All season	Common	Rare	NR	NR	NR	NR	Venkatesh
92	Reptiles	Streaked Kukri	<i>Oligodon taeniolatus</i> (Jerdon, 1853)	Plains	NR	All season	Common	Rare	NR	NR	NR	NR	Venkatesh
93	Reptiles	Indian Rat Snake	<i>Ptyas mucosa</i> (Linnaeus, 1758)	Plains	NR	All season	Common	Rare	NR	NR	NR	NR	Venkatesh
94	Reptiles	Striped Keel Back	<i>Amphiesma stolata</i> (Linnaeus, 1758)	Plains	NR	All season	Common	Rare	NR	NR	NR	NR	Venkatesh
95	Reptiles	Checkered	<i>Xenochropis piscator</i>	Water source	NR	Rainy season	Common	Rare	NR	NR	NR	NR	Venkatesh

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		Keel Back	(Schneider, 1799)										
96	Reptiles	Common Krait	<i>Bungarus caeruleus</i> (Schneider, 1801)	Plains	NR	All season	Common	Rare	NR	NR	NR	NR	Venkatesh
97	Reptiles	Cobra	<i>Naja naja naja</i> (Linnaeus, 1758)	Plains	NR	All season	Common	Rare	NR	NR	NR	NR	Venkatesh
98	Reptiles	Russell's Viper	<i>Vipera russelli</i> (Shaw, 1797)	Rocky areas	NR	All season	Common	Rare	NR	NR	NR	NR	Venkatesh
99	Reptiles	Saw-scaled Viper	<i>Echis carinatus</i> (Schneider, 1801)	Rocky areas	NR	All season	Common	Rare	NR	NR	NR	NR	Venkatesh
100	Birds	Cheruvukodi	<i>Tachybaptus ruficollis</i>	Water source	NA	Rainy season	Common	Rare	NA	NR	NR	NA	Akhil
101	Birds	Little Cormorant	<i>Phalacrocorax niger</i>	Water source	NA	Rainy season	Common	Rare	NA	NR	NR	NA	Akhil
102	Birds	Little Egret	<i>Egretta garzetta</i>	Water source	NA	Rainy season	Common	Rare	NA	NR	NR	NA	Akhil
103	Birds	Grey Heron	<i>Ardea cinerea</i>	Water source	NA	Rainy season	Common	Rare	NA	NR	NR	NA	Akhil
104	Birds	Large Egret	<i>Casmerodius albus</i>	Water source	NA	Rainy season	Common	Rare	NA	NR	NR	NA	Akhil
105	Birds	Cattle Egret	<i>Bubulcus ibis</i>	Water source	NA	Rainy season	Common	Rare	NA	NR	NR	NA	Akhil
106	Birds	Pond Heron	<i>Ardeola grayii</i>	Water source	NA	Rainy season	Common	Rare	NA	NR	NR	NA	Akhil
107	Birds	Oriental White Ibis	<i>Threskiornis melanocephalus</i>	Water source	NA	Rainy season	Common	Rare	NA	NR	NR	NA	Akhil
108	Birds	Black Ibis	<i>Pseudibis papillosa</i>	Water source	NA	Rainy season	Common	Rare	NA	NR	NR	NA	Akhil
109	Birds	Gadda	<i>Elanus caeruleus</i>	Water source	NA	Rainy season	Common	Rare	NA	NR	NR	NA	Akhil
110	Birds	Black Kite	<i>Milvus migrans</i>	plains	NA	Rainy season	Common	Rare	NA	NR	NR	NA	Akhil
111	Birds	Shikra	<i>Accipiter badius</i>	Plains	NA	All season	Common	Rare	NA	NR	NR	NA	Akhil
112	Birds	Kamju	<i>Francolinus pondicerianus</i>	plains	NA	All season	Common	Rare	NA	NR	NR	NA	Akhil
113	Birds	Nemali	<i>Pavo cristatus</i>	Plains	NA	All season	Common	Rare	NA	NR	NR	NA	Akhil
114	Birds	White-breasted Waterhen	<i>Amaurornis phoenicurus</i>	Water source	NA	All season	Common	Rare	NA	NR	NR	NA	Akhil
115	Birds	Common Coot	<i>Fulica atra</i>	Water source	NA	All season	Common	Rare	NA	NR	NR	NA	Akhil
116	Birds	Theethuva	<i>Vanellus indicus</i>	Water source	NA	All season	Common	Rare	NA	NR	NR	NA	Akhil
117	Birds	Vallanki Pitta	<i>Himantopus himantopus</i>	Water source	NA	All season	Common	Rare	NA	NR	NR	NA	Akhil

People's Biodiversity Register – Gorita (V), Thimmajipet(M), Nagarkurnool Dt., Telangana

118	Birds	Pavuramu	<i>Columba livia</i>	Plains	NA	All season	Common	Rare	NA	NR	NR	NA	Akhil
119	Birds	Bella gadu	<i>Streptopelia chinensis</i>	plains	NA	All season	Common	Rare	NA	NR	NR	NA	Akhil
120	Birds	Bellagadu	<i>Streptopelia decaocto</i>	plains	NA	All season	Common	Rare	NA	NR	NR	NA	Akhil
121	Birds	Chiluka	<i>Psittacula krameri</i>	Plains	NA	All season	Common	Rare	NA	NR	NR	NA	Akhil
122	Birds	Koel	<i>Eudynamys scolopacea</i>	Plains	NA	All season	Common	Rare	NA	NR	NR	NA	Akhil
123	Birds	Sambar Kaki	<i>Centropus sinensis</i>	Plains	NA	All season	Common	Rare	NA	NR	NR	NA	Akhil
124	Birds	Spotted Owllet	<i>Athene brama</i>	plains	NA	All season	Common	Rare	NA	NR	NR	NA	Akhil
125	Birds	Common Indian Nightjar	<i>Caprimulgus asiaticus</i>	Plains	NA	All season	Common	Rare	NA	NR	NR	NA	Akhil
126	Birds	White-breasted Kingfisher	<i>Halcyon smyrnensis</i>	Water source	NA	All season	Common	Rare	NA	NR	NR	NA	Akhil
127	Birds	Small Bee-eater	<i>Merops orientalis</i>	Plains	NA	All season	Common	Rare	NA	NR	NR	NA	Akhil
128	Birds	Palapitta	<i>Coracias benghalensis</i>	Plains	NA	All season	Common	Rare	NA	NR	NR	NA	Akhil
129	Birds	Common Hoopoe	<i>Upupa epops</i>	Plains	NA	All season	Common	Rare	NA	NR	NR	NA	Akhil
130	Birds	Indian Grey Hornbill	<i>Ocyrceros birostris</i>	plains	NA	All season	Common	Rare	NA	NR	NR	NA	Akhil
131	Birds	Red-rumped Swallow	<i>Hirundo daurica</i>	plains	NA	All season	Common	Rare	NA	NR	NR	NA	Akhil
132	Birds	Large Pied Wagtail	<i>Motacilla maderaspatensis</i>	Water source	NA	All season	Common	Rare	NA	NR	NR	NA	Akhil
133	Birds	Paddy field Pipit	<i>Anthus rufulus</i>	Plains	NA	All season	Common	Rare	NA	NR	NR	NA	Akhil
134	Birds	Red-vented Bulbul	<i>Pycnonotus cafer</i>	Plains	NA	All season	Common	Rare	NA	NR	NR	NA	Akhil
135	Birds	Oriental Magpie-Robin	<i>Copsychus saularis</i>	Plains	NA	All season	Common	Rare	NA	NR	NR	NA	Akhil
136	Birds	Indian Robin	<i>Saxicoloides fulicata</i>	Plains	NA	All season	Common	Rare	NA	NR	NR	NA	Akhil

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137	Birds	Yellow-eyed Babbler	<i>Chrysomma sinense</i>	Plains	NA	All season	Common	Rare	NA	NR	NR	NA	Akhil
138	Birds	Common Babbler	<i>Turdoides caudatus</i>	Plains	NA	All season	Common	Rare	NA	NR	NR	NA	Akhil
139	Birds	Large Grey Babbler	<i>Turdoides malcolmi</i>	Plains	NA	All season	Common	Rare	NA	NR	NR	NA	Akhil
140	Birds	Pale-capped Babbler	<i>Turdoides affinis</i>	Plains	NA	All season	Common	Rare	NA	NR	NR	NA	Akhil
141	Birds	Ashy Prinia	<i>Prinia socialis</i>	Plains	NA	All season	Common	Rare	NA	NR	NR	NA	Akhil
142	Birds	Purple-rumped Sunbird	<i>Nectarinia zeylonica</i>	Plains	NA	All season	Common	Rare	NA	NR	NR	NA	Akhil
143	Birds	Spotted Munia	<i>Lonchura punctulata</i>	Plains	NA	All season	Common	Rare	NA	NR	NR	NA	Akhil
144	Birds	Pichuka	<i>Passer domesticus</i>	Plains	NA	All season	Common	Rare	NA	NR	NR	NA	Akhil
145	Birds	Gijigadu	<i>Ploceus philippinus</i>	Water source	NA	All season	Common	Rare	NA	NR	NR	NA	Akhil
146	Birds	Myna	<i>Acridotheres tristis</i>	Plains	NA	All season	Common	Rare	NA	NR	NR	NA	Akhil
147	Birds	Black Drongo	<i>Dicrurus macrocercus</i>	Plains	NA	All season	Common	Rare	NA	NR	NR	NA	Akhil
148	Birds	Kaki	<i>Corvus splendens</i>	Plains	NA	All season	Common	Rare	NA	NR	NR	NA	Akhil
149	Birds	Malakaki	<i>Corvus macrorhynchos</i>	Plains	NA	All season	Common	Rare	NA	NR	NR	NA	Akhil
150	Mammal	Squirrel	<i>Funambulus palmarum</i>	On Trees	NR	All season	Common	Rare	NR	NR	NR	NR	Mamatha
151	Mammal	Mongoose	<i>Herpestes edwardsii</i>	Plains	NR	All season	Common	Rare	NR	NR	NR	NR	Mamatha
152	Mammal	Alugu	<i>Manis crassicaudata</i>	Plains	NR	All season	Common	Rare	NR	NR	NR	NR	Mamatha
153	Mammal	Rat	<i>Tatera indica</i>	Plains	NR	All season	Common	Rare	NR	NR	NR	NR	Mamatha
154	Mammal	House mouse	<i>Mus musculus</i>	Houses	NR	All season	Common	Rare	NR	NR	NR	NR	Mamatha
155	Mammal	House Rat	<i>Rattus rattus</i>	Houses	NR	All season	Common	Rare	NR	NR	NR	NR	Mamatha
156	Mammal	Monkey	<i>Macaca radiata</i>	Plains	NR	All season	Common	Rare	NR	NR	NR	NR	Mamathas
157	Fish	Kodada	<i>Channa punctatus</i>	Water source	NA	Rainy season	Common	Rare	Edible	NR	Through	NA	Ramulamma

People's Biodiversity Register – Gorita (V), Thimmajipet(M), Nagarkurnool Dt., Telangana

			(Bloch, 1793)								Net		
158	Fish	Kodada	<i>Channa striatus</i> (Bloch, 1793)	Water source	NA	Rainy season	Common	Rare	Edible	NR	Through Net	NA	Ramulamma
159	Fish	Catla	<i>Catla catla</i> (Hamilton-Buchanan, 1822)	Water source	NA	Rainy season	Common	Rare	Edible	NR	Through Net	NA	Ramulamma
160	Fish	Common Carp	<i>Cyprinus carpio</i> (Linnaeus, 1758)	Water source	NA	Rainy season	Common	Rare	Edible	NR	Through Net	NA	Ramulamma
161	Fish	NR	<i>Garra lamta</i> (Hamilton-Buchanan, 1822)	Water source	NA	Rainy season	Common	Rare	Edible	NR	Through Net	NA	Ramulamma
162	Fish	NR	<i>Labeo boggut</i> (Sykes, 1841)	Water source	NA	Rainy season	Common	Rare	Edible	NR	Through Net	NA	Ramulamma
163	Fish	Rohu	<i>Labeo rohita</i> (Hamilton-Buchanan, 1822)	Water source	NA	Rainy season	Common	Rare	Edible	NR	Through Net	NA	Ramulamma
164	Fish	NR	<i>Puntius chola</i> (Hamilton-Buchanan, 1822)	Water source	NA	Rainy season	Common	Rare	Edible	NR	Through Net	NA	Ramulamma
165	Fish	NR	<i>Puntius sarana sarana</i> (Hamilton-Buchanan, 1822)	Water source	NA	Rainy season	Common	Rare	Edible	NR	Through Net	NA	Ramulamma
166	Fish	NR	<i>Salmophasia horai</i> (Silas, 1951)	Water source	NA	Rainy season	Common	Rare	Edible	NR	Through Net	NA	Ramulamma
167	Fish	Nucta	<i>Schismatorhynchus</i> (Nukat) nukta (Sykes, 1841)	Water source	NA	Rainy season	Common	Rare	Edible	NR	Through Net	NA	Ramulamma
168	Fish	Pearl spot	<i>Etroplus maculatus</i> (Bloch, 1785)	Water source	NA	Rainy season	Common	Rare	Edible	NR	Through Net	NA	Ramulamma
169	Fish	Kakiparaka	<i>Oreochromis mossambicus</i> (Peters, 1852)	Water source	NA	Rainy season	Common	Rare	Edible	NR	Through Net	NA	Ramulamma
170	Fish	Isuka donda	<i>Glossogobius giuris</i> (Hamilton-Buchanan, 1822)	Water source	NA	Rainy season	Common	Rare	Edible	NR	Through Net	NA	Ramulamma
171	Fish	NR	<i>Mystus bleekeri</i> (Day, 1877)	Water source	NA	Rainy season	Common	Rare	Edible	NR	Through Net	NA	Ramulamma

People's Biodiversity Register – Gorita (V), Thimmajipet(M), Nagarkurnool Dt., Telangana

172	Fish	Walking catfish	<i>Clarias batrachus</i> (Linnaeus, 1758)	Water source	NA	Rainy season	Common	Rare	Edible	Not Reported	Through Net	NA	Ramulamma
173	Fish	Stinging catfish	<i>Heteropneustes fossilis</i> (Blotch, 1794)	Water source	NA	Rainy season	Common	Rare	Edible	NR	Through Net	NA	Ramulamma
174	Fish	Kuntimukku	<i>Macrogathus arali</i> (Bloch & Schneider, 1795)	Water source	NA	Rainy season	Common	Rare	Edible	NR	Through Net	NA	Ramulamma

URBANBIODIVERSITY

Format29:Flora

S.No.	Local Name	Scientific Name	Type of Plants	Habitat	Flowering Season	Remarks (Rare / Common etc)
NOT APPLICABLE						

Format30:Fauna

S.No.	Local Name	Scientific Name	Type of Animals (Mammals / Birds/ Fish / Insect etc.)	Habitat	Remarks (Rare / Common etc)
NOT APPLICABLE					

Note: Separate format should be used for roadside plantation-habitat/ Parks and Gardens/Housing estate/ Commercial buildings/other institutional areas, Private club premises and also for Aquatic(water) habitat and Terrestrial(land) habitat.

Format31:Fauna: Any Other Information of Local Importance:-

There is no specific and significant aspect / information noticed in Penumatcha Panchayath.

End of Part II

CHAPTER – V

PART-III

CHAPTER – V

A. GENERAL PROFILE OF GORITA

Gorita Grama Panchayath is in Thimmajipet Mandal, Nagarkurnool of Telangana State. The total population of Gorita is 3200 and number of houses are 660. Female Population is 42%. Village literacy rate is 82% and the Female Literacy rate is 58%.

LOCATION

Gorita is 6km distance from mandal Head Quarters Thimmajipet and it is 31 km distance from District Head Quarters Nagarkurnool Telangana. Gorita total area is 560 hectares, Non-Agricultural area is 10 acres and agricultural land is 1150 acres. The satellite imagery of Gorita Village and the vicinity depicted in **Plate-2**.

EDUCATION

To improve the literacy of the village 02 Anganwadi centres, 01 Government Primary Schools are available in this Village. Nearest Government Junior in Thimmajipet.

HEALTH

No Primary Health Centre is present in Gorita and it is located at Thimmajipet; only one ANM is visiting regularly to this village.

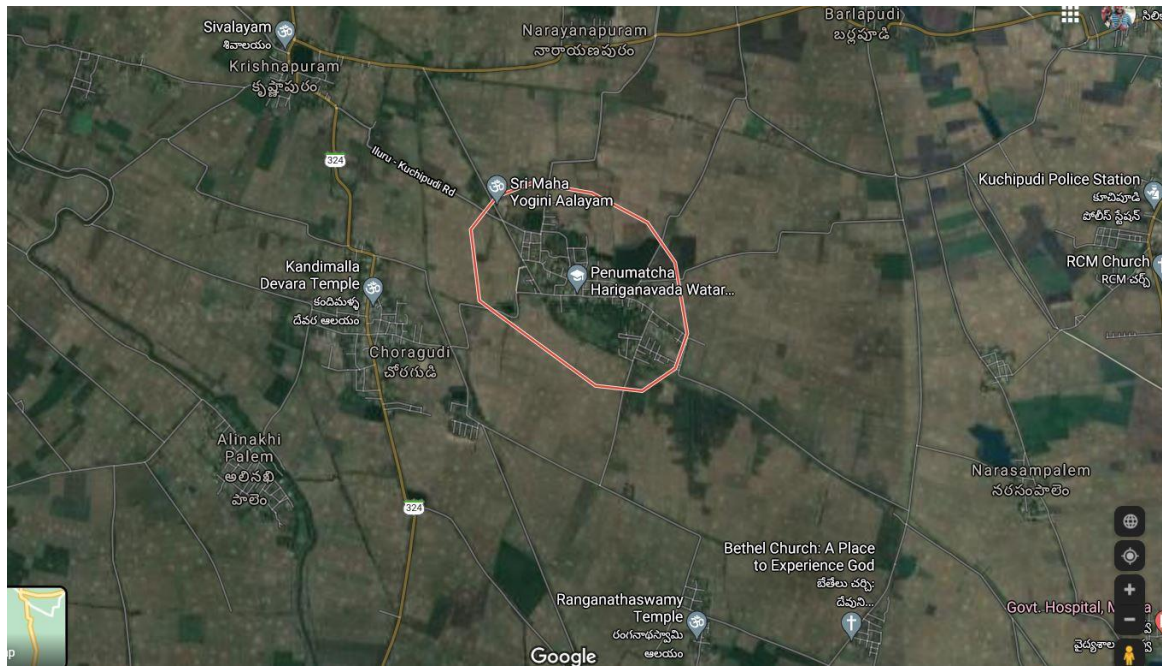
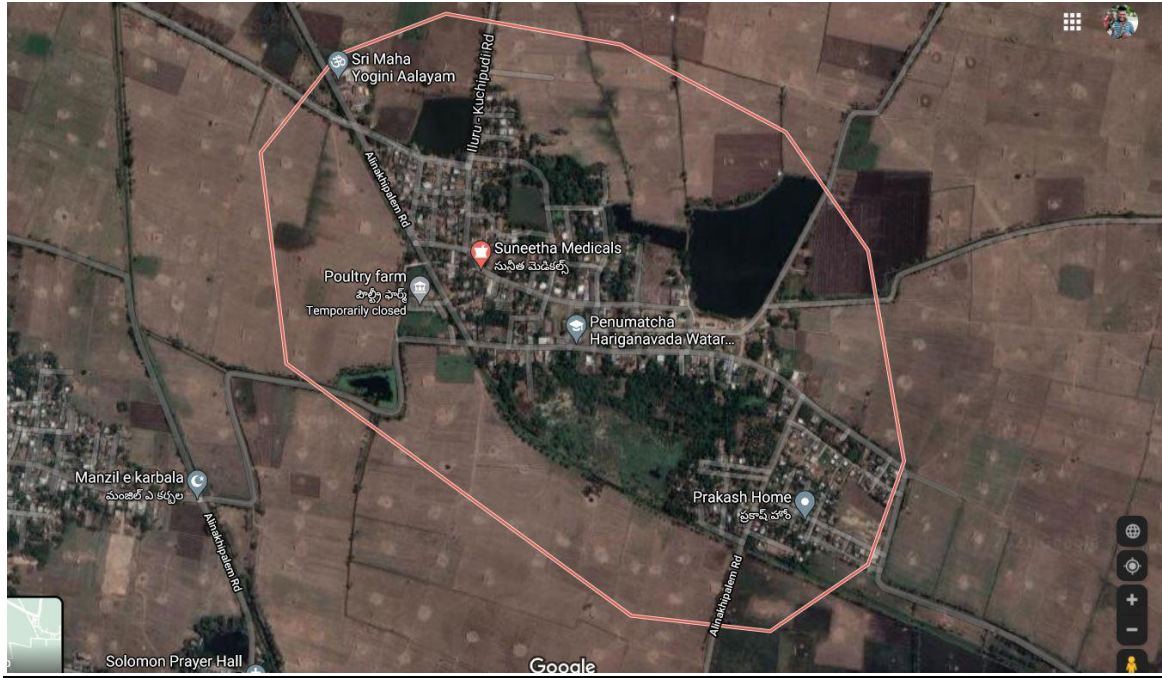
AGRICULTURE

Paddy and Cotton are the main agriculture commodities cultivating in this village. Very few farmers are cultivating Red Gram, Ground Nut and other dry crops. Nearly 7 hours agricultural power supply in summer and 7 hours agricultural power supply in winter is available in this village. Total agricultural area in this village is 1150 acres and which is under irrigation.

COMMUNICATION

Post Office is available in this Village; Mobile coverage is available. There is no Internet Centre in less than 10 km. No Private Courier Facility in less than 10 km.

Plate -2. Sattelite view of GORITA village



DRINKING-WATER AND SANITATION

Untreated tap water supply is continuing all round the year to the villagers through one Over Head Water Tanks. Every 15 days the Water tanks are cleaning and treating with bleaching powder. Only 15 handpumps are present of which only 2 are working.

TRANSPORTATION

Public Bus service is available to this village. There is no Railway Station in 21 km. Autos available in this Village.

CHAPTER – V

B. ANALYSIS OF TAXA

PLANT TAXA

A total of 381 plant taxa were recorded through 30 formats from Gorita Grama Panchayath. Habit analysis shows that herbs are dominating with 265 taxa followed by trees (55 taxa), shrubs (32 taxa) and climbers (29 taxa). The list of taxa is presented in **Table 1** along with their use value. The graphical representation of habit wise analysis is presented here under in **Fig.1**.

Fig. 1: Habit wise analysis of Plant taxa recorded in Gorita Gram Panchayat

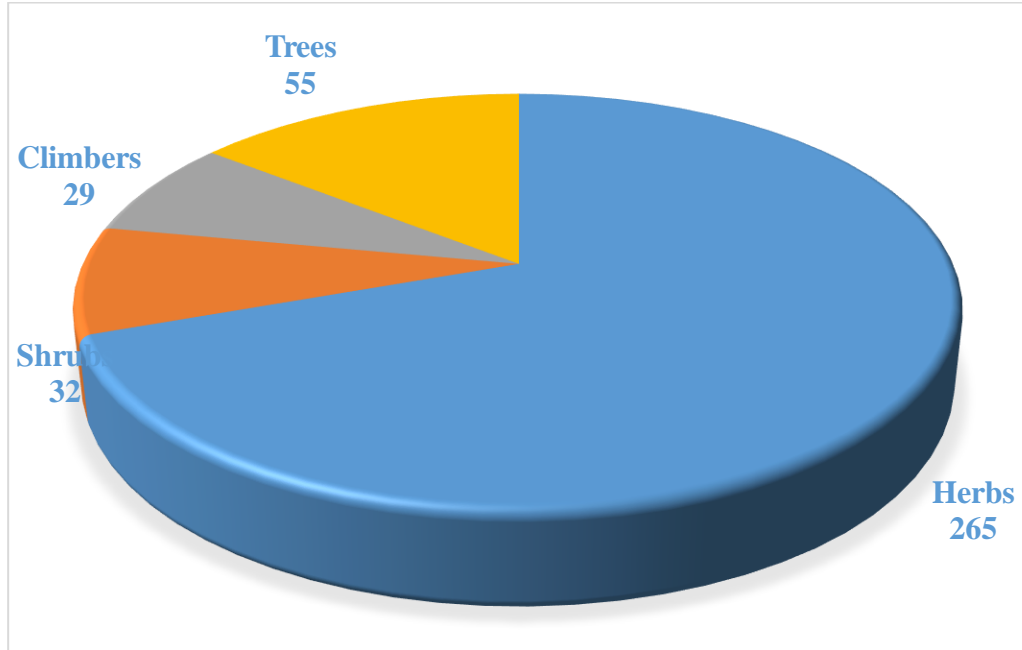


Table. 1: List of plant taxa recorded in all formats of GORITA Gram Panchayat

S. No.	Name of the taxon	Habit	A	F R	F C	M	O R	T	W R	W O R	F U	W E	F W	O th es	Tot al valu e
1	<i>Abutilon indicum</i> (L.) Sweet	S				1						1			2
2	<i>Acacia nilotica</i> (L.) Delile	T						1					1	1	3
3	<i>Acalypha indica</i> L.	H				1						1			2
4	<i>Acanthospermum hispidum</i> DC.	H													0
5	<i>Achyranthes aspera</i> L.	H				1						1			2
6	<i>Adenium obesum</i> (Forssk.) Roem. & Schult.	S						1							1
7	<i>Aegle marmelos</i> (L.) Corr.	T				1	1							1	3
8	<i>Aerva lanata</i> (L.) Juss.	H				1								1	2
9	<i>Aeschynomene indica</i> L.	H			1										1
10	<i>Aganosma dichotoma</i> K.Schum.	C					1								1
11	<i>Ageratum conyzoides</i> L.	H													0
12	<i>Albizia lebeck</i> (L.) Benth.	T						1					1		2
13	<i>Allamanda blanchetii</i> A.DC.	C					1								1
14	<i>Allamanda carthatica</i> L.	C					1								1
15	<i>Alloteropsis cimicina</i> (L.) Stapf	H			1										1
16	<i>Aloe vera</i> (L.) Burm.f.	H				1								1	2

112	<i>Croton bonplandianum</i> Baillon	H																	0
113	<i>Cryptostegia grandiflora</i> Roxb. ex R.Br.	C																1	1
114	<i>Cucumis pubescens</i> Willd.	C																	0
115	<i>Cupressus sempervirens</i> L.	T							1										1
116	<i>Cuscuta reflexa</i> Roxb.	C																	0
117	<i>Cycas sphaerica</i> Roxb.	T							1										1
118	<i>Cynodon dactylon</i> (L.) Pers.	H							1										1
119	<i>Cyperus auriculatus</i> Nees & Meyen ex Kunth	H																	0
120	<i>Cyperus corymbosus</i> Rottb.	H							1										1
121	<i>Cyperus difformis</i> L.	H							1										1
122	<i>Cyperus distans</i> L.f.	H							1										1
123	<i>Cyperus haspan</i> L.	H							1										1
124	<i>Cyperus iria</i> L.	H							1										1
125	<i>Cyperus paniceus</i> (Rottb.) Boeckeler	H							1										1
126	<i>Cyperus rotundus</i> L.	H							1										1
127	<i>Cyperus rubicundus</i> Vahl	H							1										1
128	<i>Dactyloctenium aegyptium</i> (L.) P. Beauv.	H							1										1
129	<i>Dactyloctenium aristatum</i> Link Hort.	H							1										1
130	<i>Datura metel</i> L.	H							1										1
131	<i>Dichanthium annulatum</i> (Forssk.) Stapf	H							1										1
132	<i>Dichanthium caricosum</i> (L.) Camus	H							1										1
133	<i>Dichanthium foveolatum</i> (Del.) Roberty	H							1										1
134	<i>Digera muricata</i> (L.) Mart.	H																	0
135	<i>Digitaria bicornis</i> (Lam.) Roemer & Schultes	H							1										1
136	<i>Digitaria ciliaris</i> (Retz.) Koel.	H							1										1
137	<i>Digitaria longiflora</i> (Retz.) Pers.	H							1										1
138	<i>Digitaria tomentosa</i> (Willd.) Henr.	H							1										1
139	<i>Diplocyclos palmatus</i> (L.) Jeffrey	C																	0
140	<i>Dracaena reflexa</i> Lam.	H																	1
141	<i>Dregea volubilis</i> (L. f.) Benth.ex Hook. f	C																	2
142	<i>Dypsis lutescens</i> (H.Wendl.) Beentje & J.Dransf.	T																	1
143	<i>Echinochloa colona</i> (L.) Link	H							1										2
144	<i>Echinochloa crus-galli</i> (L.) Beauv.	H							1										1
145	<i>Echinochloa stagnina</i> (Retz.) Beauv.	H							1										1
146	<i>Echinops echinatus</i> Roxb.	H																	0
147	<i>Eclipta prostrata</i> (L.) L.	H							1										1
148	<i>Eleusine indica</i> (L.) Gaerth.	H							1										1
149	<i>Emilia sonchifolia</i> (L.) DC.	H																	0
150	<i>Enicostemma axillare</i> (Lam.) Roynal	H																	0
151	<i>Epaltes divaricata</i> (L.) Cass.	H																	0
152	<i>Eragrostiella bifaria</i> (Vahl) Bor	H							1										1
153	<i>Eragrostiella walkeri</i> (Stapf) Bor	H																	0
154	<i>Eragrostis cilianensis</i> (All.) Janch.	H							1										1
155	<i>Eragrostis ciliaris</i> (L.) R.Br.	H							1										1
156	<i>Eragrostis diarrhena</i> (Schultes)	H							1										1

253	<i>Nicotiana tobaccum</i> L.	H								1				1
254	<i>Nyctanthes arbor-tristis</i> L.	S			1	1								2
255	<i>Nymphaea nouchali</i> Brum.f.	H							1				1	2
256	<i>Nymphaea pubescens</i> Willd.	H							1				1	2
257	<i>Ocimum americanum</i> L.	H												0
258	<i>Ocimum tenuiflorum</i> L.	H			1								1	2
259	<i>Oldenlandia umbellata</i> G. Don	H												0
260	<i>Oligochaeta ramosa</i> (Roxb.) Wagenitz	H												0
261	<i>Origanum majorana</i> L.	H				1								1
262	<i>Oropetium thomaeum</i> (L.f.) Trin.	H												0
263	<i>Oryza rufipogon</i> Griff.	H												0
264	<i>Oryza sativa</i> L.	H	1											1
265	<i>Ottelia alismoideis</i> (L.) Pers.	H									1			1
266	<i>Oxalis corniculata</i> L.	H			1						1			2
267	<i>Oxystelma esculentum</i> (L. f.) Sm.	C							1					1
268	<i>Panicum psilopodium</i> Trin.	H												0
269	<i>Panicum repens</i> L.	H			1									1
270	<i>Panicum trypheron</i> Schult	H			1				1					2
271	<i>Parthenium hysterophorus</i> L.	H												0
272	<i>Paspalidium flavidum</i> (Retz.) A. Camus	H			1									1
273	<i>Paspalidium geminatum</i> (Forssk.) Stapf	H			1									1
274	<i>Paspalum notatum</i> Fluegg	H			1									1
275	<i>Paspalum scrobiculatum</i> L.	H												0
276	<i>Paspalum vaginatum</i> Sw.	H												0
277	<i>Passiflora foetida</i> L.	C				1			1					2
278	<i>Pavonia zeylanica</i> (L.) Cav.	H												0
279	<i>Pedilanthus tithymaloides</i> (L.) Poit.	S				1								1
280	<i>Pennisetum pedicellatum</i> Trin.	H			1				1					2
281	<i>Pergularia daemia</i> (Forssk.) Chiov.	C				1								1
282	<i>Perotis indica</i> (L.) Kuntze	H			1									1
283	<i>Phaseolus mungo</i> (L.) Hepper	H	1		1									2
284	<i>Phoenix dactylifera</i> L.	T		1										1
285	<i>Phoenix sylvestris</i> (L.) Roxb.	T			1				1	1			1	4
286	<i>Phyla nodiflora</i> (L.) Green	H												0
287	<i>Phyllanthus acidus</i> (L.) Skeels	T		1										1
288	<i>Phyllanthus amarus</i> Schumach. & Thonn.	H				1								1
289	<i>Phyllanthus emblica</i> L.	T		1		1							1	3
290	<i>Phyllanthus maderaspatensis</i> L.	H												0
291	<i>Phyllanthus reticulatus</i> Poir.	H												0
292	<i>Physalis minima</i> L.	H												0
293	<i>Pipee betle</i> L.	C								1			1	2
294	<i>Piper nigrum</i> L.	C				1							1	2
295	<i>Pistia stratiotes</i> L.	H							1					1
296	<i>Pithecellobium dulce</i> (Roxb.) Benth.	T		1										1
297	<i>Plumaria alba</i> L.	T					1							1
298	<i>Plumbago zeylanica</i> L.	H				1			1					2
299	<i>Plumeria pudica</i> Jacq.	S					1							1
300	<i>Plumeria rubra</i> L.	T					1							1
301	<i>Polianthes tuberosa</i> L.	H					1							1
302	<i>Polyalthia longifolia</i> (Sonn.) Thwaites	T					1							1

352	<i>Tamarindus indica</i> L.	T		1				1				1	1		4
353	<i>Tecoma stans</i> (L.) Kunth	S					1								1
354	<i>Tectona grandis</i> L.f.	T						1							1
355	<i>Tephrosia purpurea</i> (L.) Pers.	H													0
356	<i>Terminalia arjuna</i> (Roxb. Ex DC) Wight&Arn	T				1			1						2
357	<i>Thespesia populnea</i> (L.) Sol.	T						1							1
358	<i>Tinospora cordifolia</i> (Willd.) Miers	C				1									1
359	<i>Tonningia axillaris</i> (L.) Kuntze	H			1										1
360	<i>Tragia involucrata</i> L.	H													0
361	<i>Tragus monogolorum</i> Ohii	H			1										1
362	<i>Tragus roxburghii</i> Panigr.	H			1										1
363	<i>Trainthema portulacastrum</i> L.	H										1			1
364	<i>Tribulus terrestris</i> L.	H				1						1			2
365	<i>Tridax procumbens</i> L.	H				1									1
366	<i>Turnera ulmifolia</i> L.	H						1							1
367	<i>Typha angustifolia</i> L.	H													0
368	<i>Vernonia albicans</i> DC.	H													0
369	<i>Vernonia cinerea</i> (L.) Less.	H													0
370	<i>Vigna aconitifolia</i> (Jacq.) Marechal	C			1										1
371	<i>Vigna trilobata</i> (L.) Verdc.	C			1										1
372	<i>Vitex negundo</i> L.	S				1						1			2
373	<i>Waltheria indica</i> L.	H													0
374	<i>Xanthium indicum</i> Koenig	S													0
375	<i>Yucca gloriosa</i> L.	T						1							1
376	<i>Zaleya decandra</i> (L.) Burm. f.	H													0
377	<i>Zea mays</i> L.	H	1												1
378	<i>Zephyranthes citrine</i> Baker	H						1							1
379	<i>Ziziphus mauritiana</i> Lam.	T		1								1			2
380	<i>Zornia diphylla</i> (L.) Pers.	H													0
381	<i>Zornia gibbosa</i> Span.	H													0

Habit: H-Herb; C- Climber; S-Shrub; T-Tree

A- Agricultural Crop; **FO**- Fodder; **FR**- Fruit; **OR**- Ornamental; **T**- Timber; **M**- Medicinal; **WR**- Wild Relative; **WOR**- Wild Ornamental; **FU**- Fumigates; **FW**- Fire Wood; **WE**- Wild Edible.

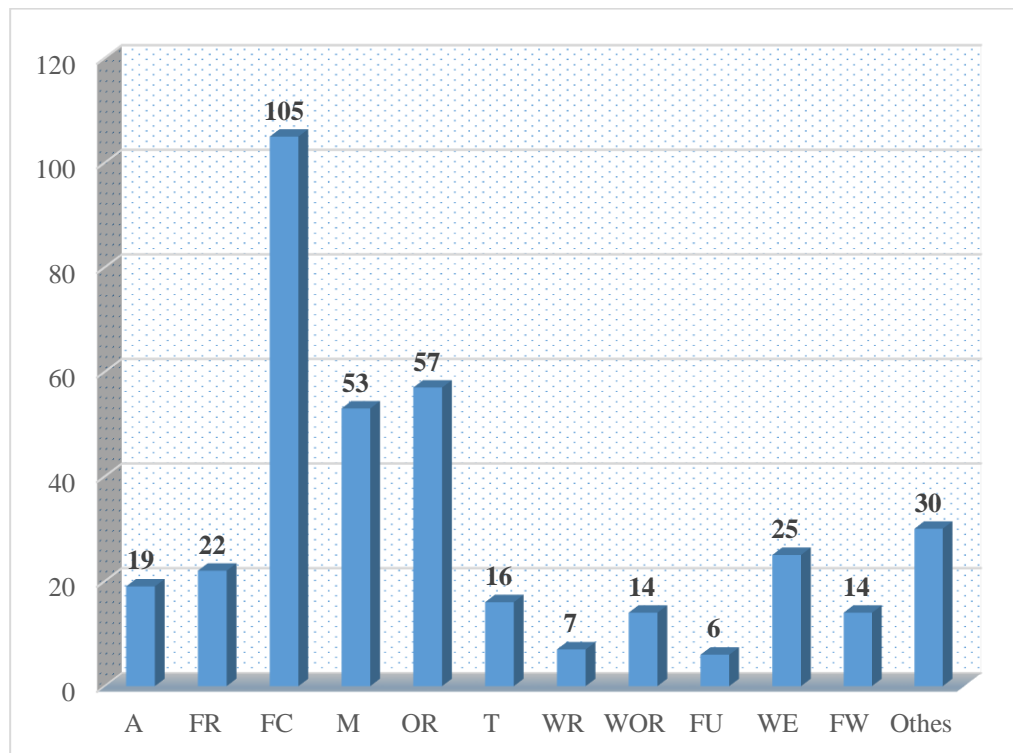
USE VALUE

The Indian sub-continent is a centre of domestication and diversification of several economically useful wild plant species comprising about 3,000 plants of edible value, 4,000 species having known reputed medicinal value, 700 plants of traditional and social significance, 500 fibre yielding species, 400 fodder plants, 40 plants having insectivorous uses, 300 gum and dye yielding plants and 100 aromatic and essential oil yielding species (Arora, 1991).

Out of 381 plant taxa recorded in the study area, 272 are having one or more use value. Agricultural plants (A), Fodder (FO), Fruits (FR), Ornamental (OR), Timber (T), Medicinal (M), Wild Relatives (WR), Wild Ornamentals (Wor), Fumigates and chewing plants (FU), Fire wood (FW), Wild Edible (WE), and other values like scientific

values, ecological values, thatching, bio fencing, brooms preparation are considered as use values. Each value was given one mark. The use value was given based on present study and secondary literature (Sadasivaiah and Pullaiah, 2016). A total of 19 taxa recognised as Agricultural crop plants, which are cultivating and growing in home gardens of Penumatcha village; 53 plant taxa were identified as medicinal, 57 taxa are under ornamental value, 105 are as fodders, 7 are wild relatives, 14 wild plants having potential ornamental value, 25 wild edible plants, 10 wild timber plants, 6 plant taxa are fumigates and chewing plants, 13 are Firewood, 30 plants are used as other valued plants. *Azadirachta indica*, *Ficus racemosa* are having high use value i.e. 5, followed by *Ficus benghalensis*, *Borassus flabellifer*, *Cocos nucifera*, *Phoenix sylvestris*, *Ficus religiosa*, *Prosopis cineraria*, *Tamarindus indica* are with 4 use value, 7 species with use value 3 (Eg. *Mangifera indica*, *Ficus hispida*), 53 taxa with use value 2 (Eg. *Aerva lanata*, *Achyranthes aspera*, *Calotropis gigantean*, *Vitex negundo*) and 203 taxa with single use value (*Amaranthus spinosus*, *Bacopa monnieri*, *Gymnema sylvestre*, *Datura metel*) were recorded. The use values are depicted in **Table-1**. The categories of use values are graphically represented in **Fig. 2**.

Fig. 2. The categories of use values and plant taxa



CROP PLANTS

A total of 11 crop plants were recorded from Gorita Grama Panchayath which are cultivated and growing in home gardens. Due to the plenty of water most of the farmers cultivated crops like Paddy and Sugar cane. Rarely they are also cultivating Maize and Plues like Red gram, Black gram etc. Some of the farmers are cultivating and growing vegetables like Bottle gourd, Ridge Gourd, Tomato, Brinjal, and Chilli etc. in their home gardens. The common crop plants of the village presented in **Plate 3**.

FRUIT TREES

Under Agrobiodiversity and Domesticated Biodiversity category a total of 22 fruit trees were recorded from Gorita Grama Panchayath. *Manilkara zapota*, *Carica papaya*, *Psidium guajava*, *Phyllanthus emblica*, *Mangifera indica* are common plants growing in home gardens. Only *Musa paradisiacal* is cultivated in the village. All the fruit plants are maintaining just for their own usage. The common fruit plants presented in **Plate 4**.

FODDER CROPS/SPECIES

Most of the agricultural crop remnants are used as fodder. Due to the availability of water in the vicinity of Gorita Grama panchayat good number (105 taxa) of fodder species were recorded. Most of the fodder species are weeds of agricultural lands, wastelands and few of them are from field bunds. Among the 105 fodder species, 49 are growing in field bunds, 28 are from plains and 28 are from Cropping fields. Among 105, a total of 99 are common both in the past and present and remaining 6 are common in the past and rare in the present.

According to people of Gorita the usage of *Chloris barbata*, *Dactyloctenium aegyptium*, *Dichanthium annulatum*, *Rhynchosia minima*, *Vigna trilobata* as fodder then cattle give more milk, hence there is a need to create awareness on these species.

WEEDS

Agricultural weeds are common competitors with crop plants for nutrients, minerals, water, space and sunlight. A total of 174 plant taxa recorded as weeds in agricultural land. Weeds are classified as Pre ploughing stage, cropping stage and post harvesting stage based on their presence in the field. Some of weeds growing on the field edges and plains are also recorded, which are common host for many pathogenic agents. A total of 25 weeds occurred during post harvesting season; 28 are pre ploughing stage; 21 are cropping stage; 31 are growing on field bunds; 69 are growing on plains.

PLATE- 3 : Crop Plants



Amaranthus viridis



Coccinia grandis



Luffa acutangula



Lycopersicon esculentum



Musa paradisiaca



Oryza sativa



Saccharum officinarum



Solanum melangina

PLATE - 4 : FRUIT PLANTS



Annona squamosa



Carica papaya



Citrus limetta



Citrus medica



Cocos nucifera



Ficus hispida



Musa × paradisiaca



Phyllanthus acidus

Most of the weeds are herbaceous plants only, very few are shrubs, which are commonly growing on field edges. Even though they have worst effect on yield of crop,

but they have tremendous ecological, medicinal and economical, values. A good number of weeds used as fodder (65 taxa), 36 taxa used as medicinal plants, 24 taxa used as edible, 10 taxa are wild relatives to crop plants and 7 taxa are have the potential of ornamental. The common wees are presented in **Plate-5**.

PESTS OF CROPS

Water is one of the major resources that effect the growth of Biodiversity. When water is more automatically weeds are high, some of the weeds are host for many pathogens which causes many diseases to the crop plants. A total of 30 pests of crops were recorded in the present study, of which 14 species of pests attack Paddy, 6 species are common pests attack Sugar cane, 3 other pest attacked Maize and other 8 pests are common in vegetable crops. The farmers of the village are adopted chemical pesticides to eradicate the pests to the crops. The chemical pesticides show adverse effect on biodiversity and human health. Hence there is need to create awareness among the farmers about the effects of chemical pesticides and need training about organic forming and traditional forming systems.

DOMESTICATED ANIMALS AND THEIR MARKET

A total of 9 species of domesticated animals were recorded from Gorita village. Of which, *Galus galus domesticus* is bird, remaining are mammals. Cows, Buffalos are meant for milk. Sheep, Goats are meant for meat, but wool, milk also by products. Oxes are meant for agriculture. Cats and Dogs adopted for security from poisonous insects and thieves. Birds are for eggs, meat and happiness.

Cattle, sheep, goats are the major other works adopted by the people of Gorita. Village people are generally going to Kaverammappeta, Bijinapally for purchasing and selling the domestic animals, which is weekly market. There is no specific fish market to this village.

PLATE - 5 : WEEDS



Achyranthes aspera



Celosia argentea



Cleome viscosa



Dactyloctenium aegyptium



Euphorbia hirta



Hyptis suaveolens



Physalis minima



Tridax procumbens

PEOPLESCAPE

According to 2022 census the total population of Gorita village is 2070. Scheduled Caste (SC) is the dominating population with 22.89 followed by Other Castes (OC) with 2.82 Backward Class (BC) with 49.68, Scheduled Tribe (ST) 5.86. All most all the families depending on Agriculture and some of them are Animal husbandry. Some of the OCs is employees of Government and private sectors. Some of the SCs are depending on piggery. Still Barbers, Rajakas, Carpenters depending on their own works for their lively hood. The different professions and works of people presented in **Plate-6**.

LANDSCAPE & WATERSCAPE

According to Village Revenue Officer (VRO), Panchayath Secretary (PS) 3022Acers of Agriculture land, 3100 Acers of land occupied by pond, 15 Acers are Fallow land present in the village.

A total of 5 Pond, 432 bore wells, and 1Canal flowing and enriches the biodiversity of the village. Except bore wells all others are owned by Government. The pond is full with water in rainy season. The common flora and fauna present in this area are useful to Human beings.

ORNAMENTAL PLANTS

A total of 60 plant species recorded as ornamentals from Gorita Gram Panchayath. Good number of shrubs (19 taxa) and herbs(13 taxa) growing as ornamentals followed by trees (18 taxa) and climbers (7 taxa). Among 60 taxa 35are local varieties, 25are hybrids. Most of the ornamental plants growing in the village are brought from nurseries or from neighbours. Some of the common ornamentals are in **Plate -7 & 8**.

CULTURED FISEHES

No cultured fisheries are growing in the water sources of Gorita and a total of 4 species of fishes were identified in the water sources of Gorita. The common fishes are *Channa punctatus*, *Catla catla*, *Cyprinus carpio*, *Oreochromis mossambicus* and the rare fishes are *Mystus bleekeri*, *Macrognathus aral*.

S



METROPOLIS

27/06/2022

PLATE - 7 : ORNAMENTAL PLANTS



Allamanda blanchetii



Crinum asiaticum



Crossandra infundibuliformis



Hibiscus rosa-sinensis



Justicia adhatoda



Kigelia africana



Pseuderanthemum crenulatum



Ruellia patula

PLATE - 8 : ORNAMENTAL PLANTS



Adenium obesum



Codiaeum variegatum



Dypsis lutescens



Gomphrena globosa



Plumeria rubra



Turnera ulmifolia



Zephyranthes citrina

WILD FLORA

A total of 120 wild and naturalized plant taxa were recorded in the vicinity of Gorita gram panchayath. Habit wise analysis resulted that herbaceous plants are dominating with 134 species followed by 15 trees, 14 climbers and 9 shrubs. Habitat analysis yield a variety of habitats namely Dried ditches/ponds, moist localities, Near Streams, Outskirts of village, Plains, Scrubs, Waste land and Water courses. A total of 83 plants growing in Plains, 22 plants in moist localities, 29 plants growing in outskirts of villages, 11 from water courses, 26 from forest Field bunds respectively. Out of 172 plant taxa, 132 are useful plants to the villagers for their lively hood. Good number of medicinal plants, wild edible plants, ornamental plants, wild relatives, thatching material and other uses like broomsticks, spiritual values, adhesives etc. Some of them are culturally important like *Mangifera indica* and *Cocos nucifera* leaves used in preparation of marriage ceremonies and festivals. Significant plants are in **Plate-9**.

AQUATIC BIODIVERSITY

A total of 32 plants growing in aquatic and marshy habitats were recorded in the study area. Of which 19 plants are growing in moist localities *i.e* periphery of water sources, 1 plant is floating on water, 1 plant growing near streams and 11 plants are water courses. The fruits of *Ficus racemosae* eaten as raw and the leaves of *Alternanthera sessilis*, *Oxalis corniculata*, *Ipomoea aquatica* are used as leafy vegetables; 11 species are used as fodder; 6 plants are used as medicinal like *Eclipta prostrata*, *Bacopa monnieri*, *Alternanthera sessilis*; 7 plants are used as ornamental like *Nymphaea nouchali*, *Nymphaea pubescens*, *Pistia stratiotes*.

MEDICINAL PLANTS

According to format-12 and format 22, a total of 53 medicinal plants were recorded from the vicinity of GORITA Gram Panchayath based on floristic survey and secondary literature. From format 12, only 26 species were recorded and from 22 format 36 medicinally important plants were recorded. *Azadirachta indica*, *Aloe vera*, *Catharanthus roseus* and *Ocimum tenuiflorum* are common throughout village.

PLATE - 9 : WILD FLORA



Cuscuta reflexa



Indigofera linnaei



Ipomoea carnea



Lantana camara



Nymphaea pubescens



Phyllanthus amarus



Typha angustifolia



Ziziphus mauritiana

All the 53 plants identified as medicinally important are presented in **Table 2** along with habit, vernacular name, parts used and the disease cured by that plant. The plant parts like Flower (Fl), Fruits (Fr), Leaves (L), Latex (La), Root (R), Root Bark (RB), Stem (S), Seeds (Se), Tuber (T) and Whole Plant (WP) used for the treatment of many ailments by the people of Penumatcha and based on secondary literature (Shali Saheb, 2008; Khadar Basha, 2009; Sadasivaiah, 2009). The part wise analysis showed that leaves are the major part (27 taxa) used to treat many diseases followed by whole plant (WP) with 12 taxa, fruits with 6 taxa, roots with 2 taxa, bark of 3 taxa, latex of 2 plants, seeds of 2 plants respectively used to cure diseases. A total of 39 ailments are cured by 53 medicinal plants present in Penumatcha, but local people are aware of very few plants and few diseases. Hence there is a need to create awareness among the people about medicinal plants and their importance. Many plants cure more than one disease.

Table 2. List of medicinal plants recorded in all formats in GORITA Gram Panchayat

S. NO	Name of the taxon	Habit	Vernacular Name	Parts used	Disease
1	<i>Abutilon indicum</i> (L.) Sweet	H	Thuthuru benda	R	Nerves disorders
2	<i>Acalypha indica</i> L.	H	Pippaku	L	Jaundice
3	<i>Achyranthes aspera</i> L.	H	Uttareni	WP	Insect bites; Piles, toothache
4	<i>Aegle marmelos</i> (L.) Corr.	T	Bilvathram	FR	Diarrhoea
5	<i>Aerva lanata</i> (L.) Juss.	H	Kondapindi	L	Kidney stones
6	<i>Aloe vera</i> (L.) Burm.f.	H	Manchi Kalabanda	L	Used as medicine for various ailments.
7	<i>Alternanthera sessilis</i> (L.) R. Br. ex DC.	H	Ponnaganti kura	L	Eye disorders
8	<i>Annona reticulata</i> L.	T	Ramapal	L	Diabetic
9	<i>Argemone mexicana</i> L.	H	Balurakkasi	L	Used for ulcers
10	<i>Azadirachta indica</i> A.Juss.	T	Vepa	WP	Skin disease, Fever, Toothache
11	<i>Bacopa monnieri</i> (L.) Wettst.	H	Jala Bramhi	WP	Improve Brain memory
12	<i>Boerhavia diffusa</i> L.	H	Atukamamidi	L	Kidney stones
13	<i>Boerhavia erecta</i> L.	H	NR	L	Kidney stones
14	<i>Calotropis gigantea</i> (L.) Dryand.	S	Jilledu	La	Scorpion bite
15	<i>Calotropis procera</i> (Aiton) Dryand	S	Jilledu	La	Scorpion bite
16	<i>Cardiospermum canescens</i> Wall.	C	Budda Budasa	Se	Heart pain, epilepsy
17	<i>Cardiospermum halicacabum</i> L.	C	Budda Budasa	Se	Heart pain, epilepsy
18	<i>Catharanthus roseus</i> (L.) G. Don	H	Billa ganneru	WP	Wounds
19	<i>Cleome gynandra</i> L.	H	Kukka Vaminta	L	Diarrhoea

20	<i>Cleome monophylla</i> L.	H	Not Reported	WP	Cure swellings
21	<i>Cleome viscosa</i> L.	H	Kukka Vaminta	WP	Ear infections and Wounds
22	<i>Commelina bengalensis</i> L.	H	Vennadeni aaku	WP	Pimples
23	<i>Cordia dichotoma</i> G.Forst.	T	Bankira pallu	L	Mouth ulcers
24	<i>Datura metel</i> L.	S	Ummetha	L	Scorpion bite
25	<i>Dregea volubilis</i> (L. f.) Benth.ex Hook. f	C	Dhudhipala	B	Bone Fractures
26	<i>Eclipta prostrata</i> (L.) L.	H	Guntaglagara	L	Dandruf
27	<i>Ficus racemosa</i> L.	T	Meddi	FR	Diabeties.
28	<i>Gymnema sylvestre</i> (Retz.) R.Br. ex Schultes	C	Podapathri	L	Anti-diabetic
29	<i>Justicia adhatoda</i> L.	S	Adasaram	L	Cold, Cough
30	<i>Lawsonia inermis</i> L.	T	Gorintaku	L	Hair falling and body heat control.
31	<i>Lepidagathis cristata</i> Willd.	H	Mulla Banthi	WP	Burns
32	<i>Morinda pubescens</i> Sm.	T	Thogari	L	Cure wounds
33	<i>Moringa oleifera</i> Lam.	T	Munaga	FR	Increase seman
34	<i>Murraya Koenigii</i> (L.)	T	Karivepaku	L	Hair problems, Eye problems
35	<i>Nerium oleander</i> L.	S	Ganneru	WP	Peralysis
36	<i>Nyctanthes arbor-tristis</i> L.	S	Parijathum	L	Back pain
37	<i>Ocimum tenuiflorum</i> L.	H	Tulasi	L	Cold, Cough, Asthma
38	<i>Oxalis corniculata</i> L.	H	Pulichintha	WP	Diarrhoea
39	<i>Pergularia daemia</i> (Forssk.) Chiov.	C	Dustapu theega	L	Piles
40	<i>Phoenix sylvestris</i> (L.) Roxb.	T	Eetha	L	Mouth ulcers
41	<i>Phyllanthus amarus</i> Schumach. & Thonn.	H	Nela usiri	WP	Jaundice
42	<i>Phyllanthus emblica</i> L.	T	Usiri	Fr	Vitamin C deficiency.
43	<i>Piper nigrum</i> L.	C	Miriyalu	FR	Cold, Cough
44	<i>Plumbago zeylanica</i> L.	H	Chithramulam	L	Skin problems
45	<i>Prosopis cineraria</i> (L.) Druce	T	Jammi	Rb	Leprosy, asthma and earache.
46	<i>Sapindus emarginatus</i> Vahl	T	Kunkudu	Fr	Hair problems
47	<i>Senna auriculata</i> (L.) Roxb.	S	Thangedu	Wp	Bone fractures, burns.
48	<i>Solanum trilobatum</i> L.	C	Esthi	L	Dyspepsia
49	<i>Terminalia arjuna</i> (Roxb. Ex DC) Wight&Arn	T	Tellamaddi	B	Bone Fractures
50	<i>Tinospora cordifolia</i> (Willd.) Miers	C	Thippa teega	L	Fever & Diabetes
51	<i>Tribulus terrestris</i> L.	H	Palleru	L&R	Urinary disorders
52	<i>Tridax procumbens</i> L.	H	Gaddi Chamanthi	L	Wounds, skin diseases
53	<i>Vitex negundo</i> L.	S	Vavili	L	Asthma, epilepsy

B- Bark, **Fl-** Flower, **Fr-** Fruit, **L-** Leaves, **La-** Latex, **R-** Root, **RB-** Root Bark, **S-** Stem, **Se-** Seeds, **T-** Tuber, **WP-** Whole Plant

WILD RELATIVES

“Crop wild relatives are to our food plants as wolves are to dogs. They’re distant but related cousins, often from far away, and hold an incredible amount of genetic diversity that has been lost to agriculture. They represent an invaluable resource for crop improvement that is yet to be fully explored, let alone exploited”-Hannes Dempewolf, Crop Trust Senior Scientist, Head of Global Initiatives.

Early agriculturists selected crop plants from wild species on the basis of reproductive potential, adaptation to climatic vagaries and the traits associated with production. During domestication, a small number of gene combinations accumulated in crop species resulting in narrow genetic diversity. Wild related species constitute a part of the crop gene pool. The WRCs possess a big reservoir of untapped genes that have potential to be utilized in improvement of crops. The evaluation and direct utilization of wild relatives and related taxa is based on their classification. These can be classified into primary, secondary and tertiary gene pools (Harlan, 1976).

Crop Wild Relatives (CWR) are wild taxa closely related to crop plants, including wild progenitors and/ or wild forms of crops. Maxted et al.(2006) defined a CWR as —a wild plant taxon that has an indirect use derived from its close genetic relationship to a crop. The closer the species related, the more the possibility/practicality to get their traits incorporated. They form an important source of useful traits such as agronomic, quality and biotic and abiotic stresses, which are identified as critical component for food security and environmental sustainability in the 21st century (Scholten et al. 2005).

From the crop improvement angle, cytogenetic relationship needs to be given priority. Though in the light of contemporary biotechnological advances, most, if not all, species are potential gene donors to crops (Maxted *et al.* 2008), in practical sense of conservation and use, it is important to prioritize the most closely related taxa through some estimate of the degree of interrelationship (Hopkins & Maxted 2010) and other means. In terms of variability and habitats many crop wild relatives are intermediate between crop diversity and natural /wild diversity in an area. The PGR management approach also requires a refinement of methods used for crop diversity conservation. Wild taxa are adapted to survival/ perpetuation in a habitat contrary to the favourable environment and selection pressure of cultivated plants.

Arora and Nayar (1984) reported the occurrence of over 320 wild relatives of crops (51- cereals and millets; 31-grain legumes; 12-oilseeds; 24-fibre plants; 27-spices and condiments; 109 of fruits, 54 of vegetables and 27 of others) in India. The NHCP of NBPGR serves as a nodal point for confirming the botanical identity of crop wild relative taxa.

A total of 7 taxa are recorded as wild relatives to crop plants, of which 5 species are wild relatives of Cereals and Millets (*Panicum trypheron*, *Setaria pumila*, *Echinochloa colona*); 2 species are wild relatives of vegetables such as *Amaranthus spinosus*, *Amaranthus viridis*.

WILD ORNAMENTALS

A total of 14 wild plants recorded with ornamental potential, of which some of the already using as ornamentals and some of them are eligible to use as ornamentals. Many of the above plants are also has multi use values like, medicinal, fodder, edible and others. For some species like *Nymphaea nouchali*, *Nymphaea pubescens*, *Passiflora foetida* flowers has ornamental value. In cities each flower of *Nymphaea* is cost about rupees ten.

FUMIGATES & CHEWING PLANTS

A total of 6 plant taxa used as fumigates and chewing plants in GORITA Gram Panchayath area. The leaves of *Vitex negundo* and *Azadirachta indica* are used as fumigates to eradicate mosquitoes and other harmful insects. The leaves of *Nicotiana tobaccum*, *Piper betle*, nuts of *Areca catechu* are generally chewed by the aged people in the village. The rate of chewing is more on female rather than male. Generally people brought these from markets and used every day. The tender leaves of *Azadirachta indica* are chewed to remove worms in the stomach. The tender leaves of *Phoenix sylvestris* chewed to cure mouth ulcers.

TIMBER

A total of 16 timber yielding plants were recorded in the vicinity of the Penumatcha under domesticated and wild biodiversity. Now-a-days people are not going to forest for collection of timber and collected from saw mills. Most of the people adapted to compressed doors, fibre doors and furniture. *Acacia nilotica*, *Azadirachta indica*, *Tectona grandis*, are the common timber yielding plants in the vicinity of GORITA.

FIRE WOOD

A total of 14 plants used for fire wood purpose by the people of GORITA. Most common plants like *Acacia nilotica*, *Azadirachta indica*, *Prosopis chilensis* etc, were used by the people as fire wood.

MISCELLANEOUS USES

A total of 30 plant taxa are having miscellaneous use, which are commonly available in GORITA. Some of the examples are the inflorescence of *Aerva* species are used to fill the pillows; the species of *Heteropogon* and *Aristidasetacea* used to prepare brooms; taddy is extracted from *Borassus flabellifer* and *Phoenix sylvestris*; are used as thatching material. Some of the plants used in spiritual ceremonies like worshipping the God, birth and death ceremonies, marriages, special ceremonies like vrathas and poojas. Generally 21 plants used in worshipping the lord Ganesh at the time of Ganesh Chaturthi, which are collectively known as Eka vishanthi patri; commonly available in the vicinity of GORITA Gram Panchayath. *Ocimum tenuiflorum*, *Ficus religiosa*, *Ficus benghalensis*, *Azadirachta indica*, *Calotropis gigantea*, *Phyllanthus emblica* are worshiped as Gods or Goddess by the GORITA people. The leaves of *Mangifera indica* used to tie to the doors at the time of festivals. Generally the flowers of *Nymphaea* are used to worship Goddess Lakshmi. The leaves of *Prosopis cineraria* were exchanged at the time of Dasara festival to establish faith and confidence among the people. The leaves of *Piper betle* and the nuts of *Areca catechu* are generally offered to God and each and every tradition of many religions. The fruits of *Cocos nucifera* are offered to God at the time of pooja and festivals.

WILD ANIMALS

A total of 175 animal taxa were recorded from the surroundings of GORITA, of which, 60 are insects, 18 fishes, 10 amphibians, 30 Reptiles, 50 birds, 7 mammals. Some of the birds are major pests for paddy at early stage and some of them are beneficial to paddy. Some of the insects are directly or indirectly useful to human beings. Most of them are involved in pollination. The species of *Apis* are prepared honey. In olden days *Odantotermis* sp. are coming after first rain and they attracted to light and dropped their wings. People collect these insects and slightly roasted and eaten along with spring rice as high protein supplement.

Some of the insects are harmful to human beings directly or indirectly. Most of the pests of crops are insects only. Some of the insects poisoning the food, some of them are parasites, some of them are poisonous. Weaver ants are beneficial insects that make nest with leaves of Mango, Jamoon etc.

In Amphibians *Bufo stomaticus*, *Duttaphrynus melanostictus* are generally found during night time in plains, where as *Euphlyctis cyanophlyctis*, *Euphlyctis hexadactylus*, *Hoplobatrachus crassus*, *Hoplobatrachus tigerinus* are found in water sources; *Sphaerotheca breviceps*, *Microhyla ornata* found in moist localities. *Uperodon globulosus* commonly found in forest areas and they are nocturnal. Out of 19 snakes recorded in the GORITA Gram Panchayath area only 4 are venomous; 13 are non venomous and 2 are semi venomous.

Out of 50 birds found in GORITA area, 33 are commonly occurred in plains; 17 are from water sources. *Phalacrocorax niger*, *Egretta garzetta*, *Bubulcus ibis* are commonly present near water sources.

Out of 8 mammals recorded in the vicinity of village, *Funambulus palmaram*, *Tatera indica* and *Macaca radiata* are commonly found in the village *Herpestes edwardsii*, *Manis crassicaudata* are normally found in forest areas of the village.

CHAPTER – VI

CONCLUSIONS & RECOMMENDATIONS

The geographical area of GORITA Gram Panchayat is 520 hectare. A small geographic area like GORITA is having a rich plant diversity with 381 plant taxa and 174 wild animal taxa from all the 30 prescribed formats. Out of 381 plant taxa, about 80% plants having one or more use value. A total of 19 taxa are Agricultural crop plants, 22 are fruits, 53 are medicinal, 57 are ornamental, 105 are fodders, 7 are wild relatives, 14 are wild ornamental value, 25 are wild edible, 16 are timbers, 06 are fumigates and chewing plants, 14 are firewood, 30 plants with miscellaneous uses.

In Agrobiodiversity category 19 crop plants, 1 fruit crop, 105 fodder species, 174 weeds, 30 pests of crops were recorded; in Domesticated Biodiversity 24 fruits plants, 26 medicinal plants, 57 ornamental plants, 13 timber yielding plants, 09 species of domesticated animals, 18 fishes were recorded; in wild biodiversity category 172 plant taxa (of which 132 are have importance), 32 plants in aquatic biodiversity (of which 28 are having importance), 07 wild relative plants, 14 wild ornamental plants, 06 fumigate and chewing plants, 10 wild timber plants and 174 wild animals were recorded. It shows the high diversity of the area.

RECOMMENDATIONS

- Paddy and Cotton are the only major crops in this village. Almost all the farmers using chemical fertilizers and pesticides, it leads to environmental pollution.
- Good number fodder species was recorded in the vicinity of village, it is recommending that people should make use of it and improve the number of cattle.
- Most of the weeds are an important source of fodder, medicine and some of them are rich source of proteins, people should aware of this and utilize the weeds in sustainable manner.
- Based on the primary data and second literature good number of medicinal plants was recorded. There is a need to take a special care for some tradable medicinal plants. Some of the species like *Cardiospermum halicacabum* is around rupees 300 per each sapling in Amazon online shopping.
- A highly coordinated action-oriented multi-disciplinary approach on potential bio resources conservation integrating the forest department, Non-Governmental Organizations, scientific bodies with the co-operation of local communities should be launched at the earliest.

CHAPTER – VII

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