GRAM PANCHAYAT SPATIAL DEVELOPMENT PLAN

PARITALA GP & TELAPROLU GP
ANDHRA PRADESH, 2041

PRESENTED BY

SCHOOL OF PLANNING AND ARCHITECTURE VIJAYAWADA

04 DEC 2020

Structure of the Presentation


Lush Green Paddy Fields of Telaprolu


Quarrying and Agriculture Activities of Paritala

Project Background

Contextual Setting

Overview of the Two Gram Panchayats

Approach of the Spatial Development Plan

TELAPROLU GP

Existing Situational Analysis

Observations

Findings – Issues and Potential

Development Proposals

PARITALA GP

Issues and Potential

Development Proposals

Summarization of Both Villages

PROJECT BACKGROUND

The Ministry of Panchayati Raj, Government of India, entrusted SPA Vijayawada to prepare ***"Gram Panchayat Spatial Development Plan"*** for two villages in Andhra Pradesh in June 2020

As per advise of the Andhra Pradesh government (Dept of Panchayati Raj), two villages were identified in Krishna District for the project, i.e., –

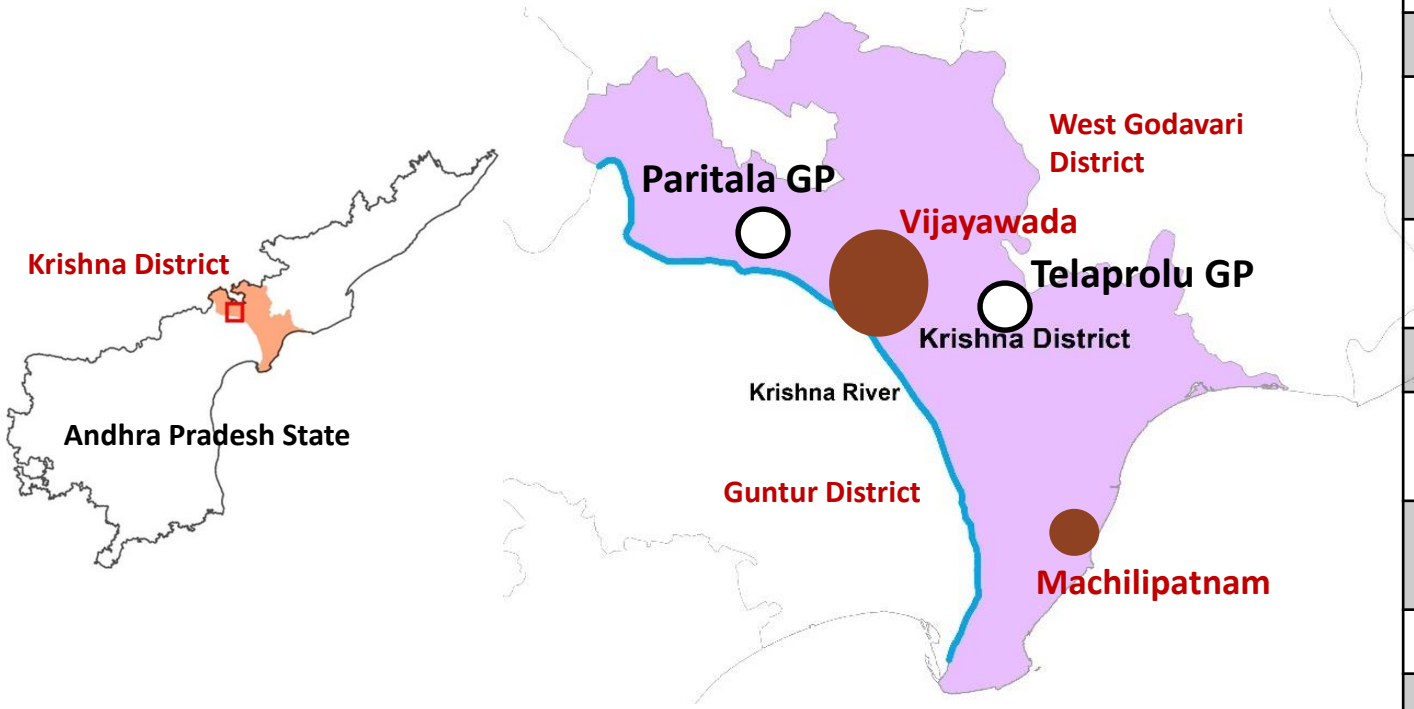
(a) ***Paritala*** *Gram Panchayat*

(b) ***Telaprolu*** *Gram Panchayat*

- SPA Vijayawada initiated the works in June 2020.
- Action Plan submitted on 22.07.2020
- Preliminary Surveys conducted in Aug & Sep 2020.
- Inception Plan submitted on 10.09.2020.
- Household Surveys and Village Stakeholders Meetings conducted in Sept and Oct 2020.
- Draft Final GPSDP for both villages submitted on 30.11.20

Village Stakeholder Discussions at Telaprolu

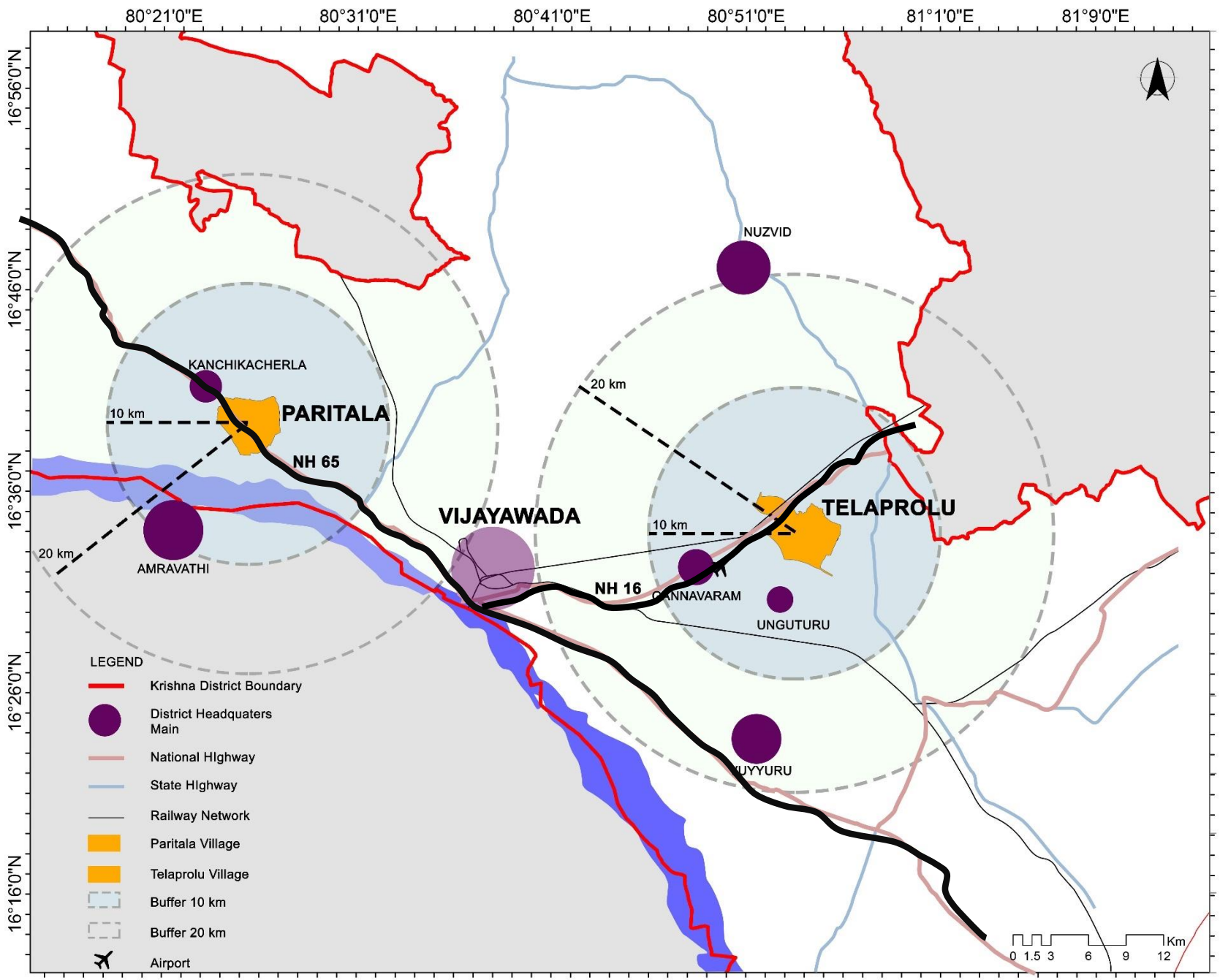
CONTEXTUAL SETTINGS



Krishna District at a Glance	
Area	8727 sqkm
Mandals	50
No of Villages	968
No of Urban Settlements	3
District HQ	Machilipatnam
Municipal Corporaition	1 (Vijayawada – 13 Lakh population)
Distirict Population	45.17 lakhs (2011) 51.49 lakhs (2020)
Sex ratio	997
Literacy	74.37

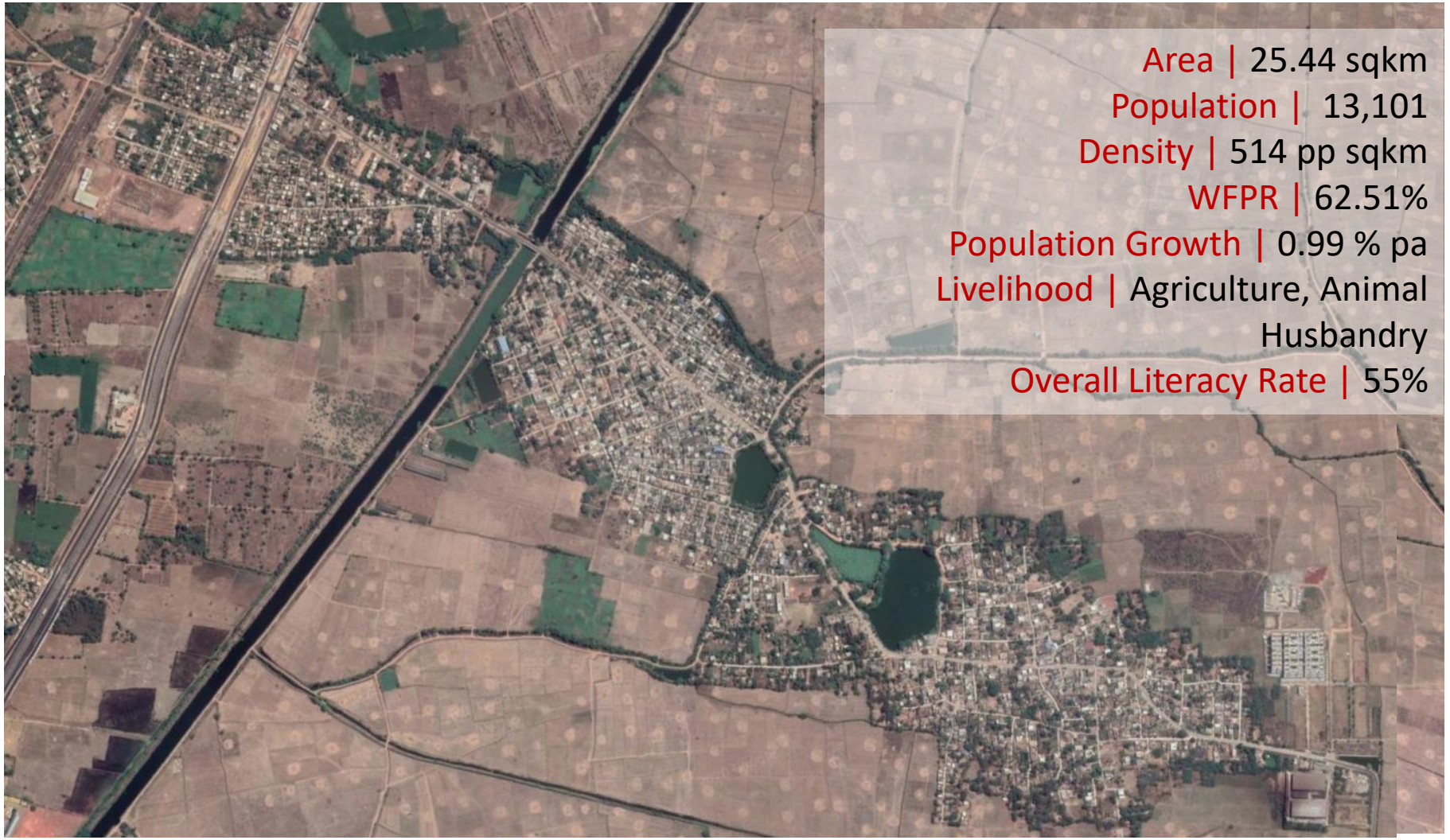
Telaprolu – 33 km from Vijayawada | 13,101 population (2020)
Paritala – 32 km from Vijayawada | 10,126 population (2020)

REGIONAL SETTING



OVERVIEW OF THE TWO VILLAGES

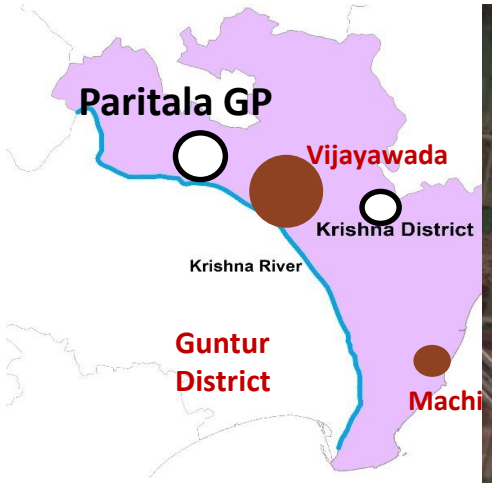
TELAPROLU



Area | 25.44 sqkm
Population | 13,101
Density | 514 pp sqkm
WFPR | 62.51%
Population Growth | 0.99 % pa
Livelihood | Agriculture, Animal Husbandry
Overall Literacy Rate | 55%

OVERVIEW OF THE TWO VILLAGES

PARITALA



Area | 19.98 sqkm
Population | 10,126
Density | 487 pp sqkm
WFPR | 68.11%
Population Growth | 2.82 % pa
Livelihood | Agriculture, Quarrying
Overall Literacy Rate | 54%

APPROACH OF THE GPSDP

Primary Surveys
Reconnaissance Survey
Land Use Survey
GPS enabled Household Survey

Satellite Image Processing
Terrain, Vegetation Index
Landuse Landcover
GPS based ground truthing

Secondary Data Assimilation
Census, Village Reports
Mission Antodaya
NRSC, AP DoPR

Participatory Planning
Stakeholder Consultations
Focused Group Discussions
Village Volunteer Discussions
Village Secretariat Advise

Data Assimilation
Village Profiling
Mapping
Projections
Demand Supply Gap
Needs Identification

Existing Situational Analysis

ECONOMY
DEMOGRAPHY
PHYSICAL INFRASTRUCTURE
SOCIAL INFRASTRUCTURE
LANDUSE LANDCOVER

Observations & Findings

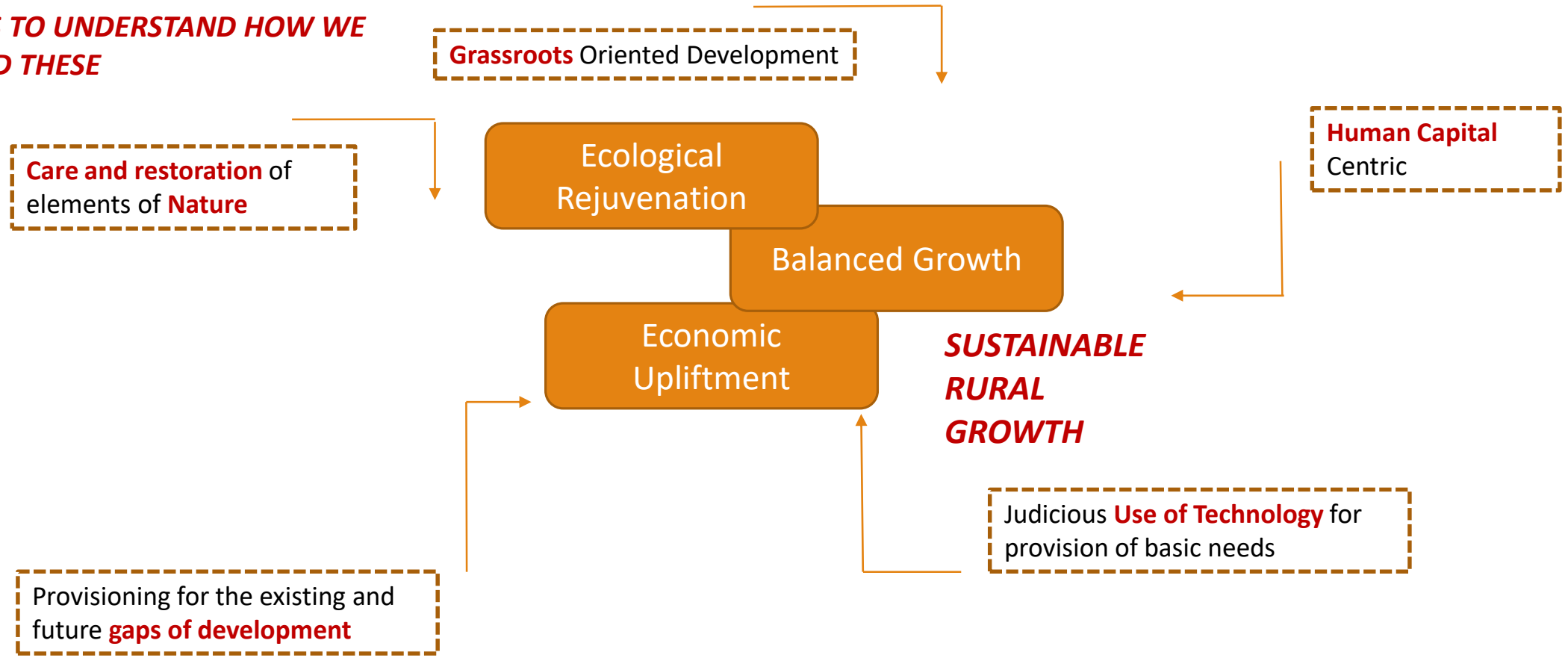
IDENTIFICATION OF KEY ISSUES AND POTENTIALS FOR EACH VILLAGE

DEVELOPMENT CONCEPTUALIZATION

DEVELOPMENT PROPOSALS
(Idea, Area Required, Design, Location)

Guiding Principle of the GPSDP

LET US NOW GO THROUGH THE TWO VILLAGES TO UNDERSTAND HOW WE ACHIEVED THESE



GPSDP in Action

Interaction of project team with villagers in Paritala

Stake holder consultation in Paritala

Training for operation of HH survey APP to village volunteers in Paritala

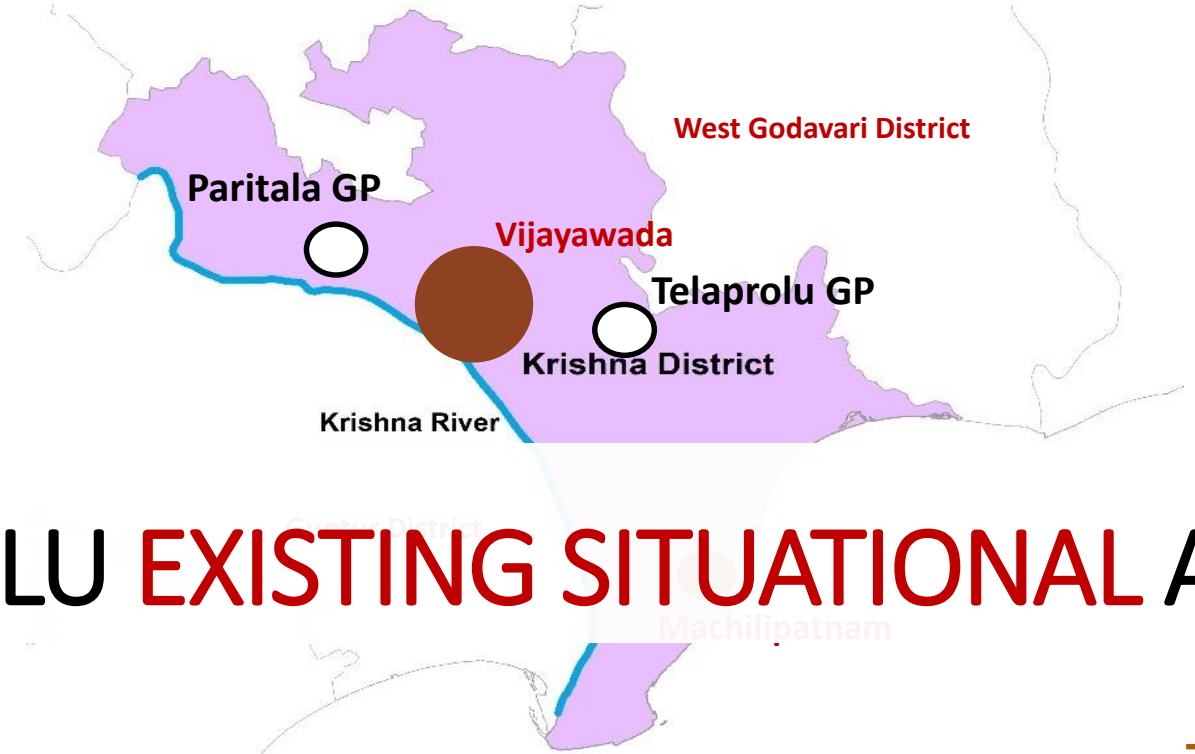
Paritala- 105 samples

Telaprolu-245 samples

Stake holder consultation in Telaprolu

Project team meeting with MRO and Panchayat secretary in Telaprolu

Training for operation of HH survey APP to village volunteers in Telaprolu



TELAPROLU EXISTING SITUATIONAL ANALYSIS

LANDUSE

DEMOGRAPHY

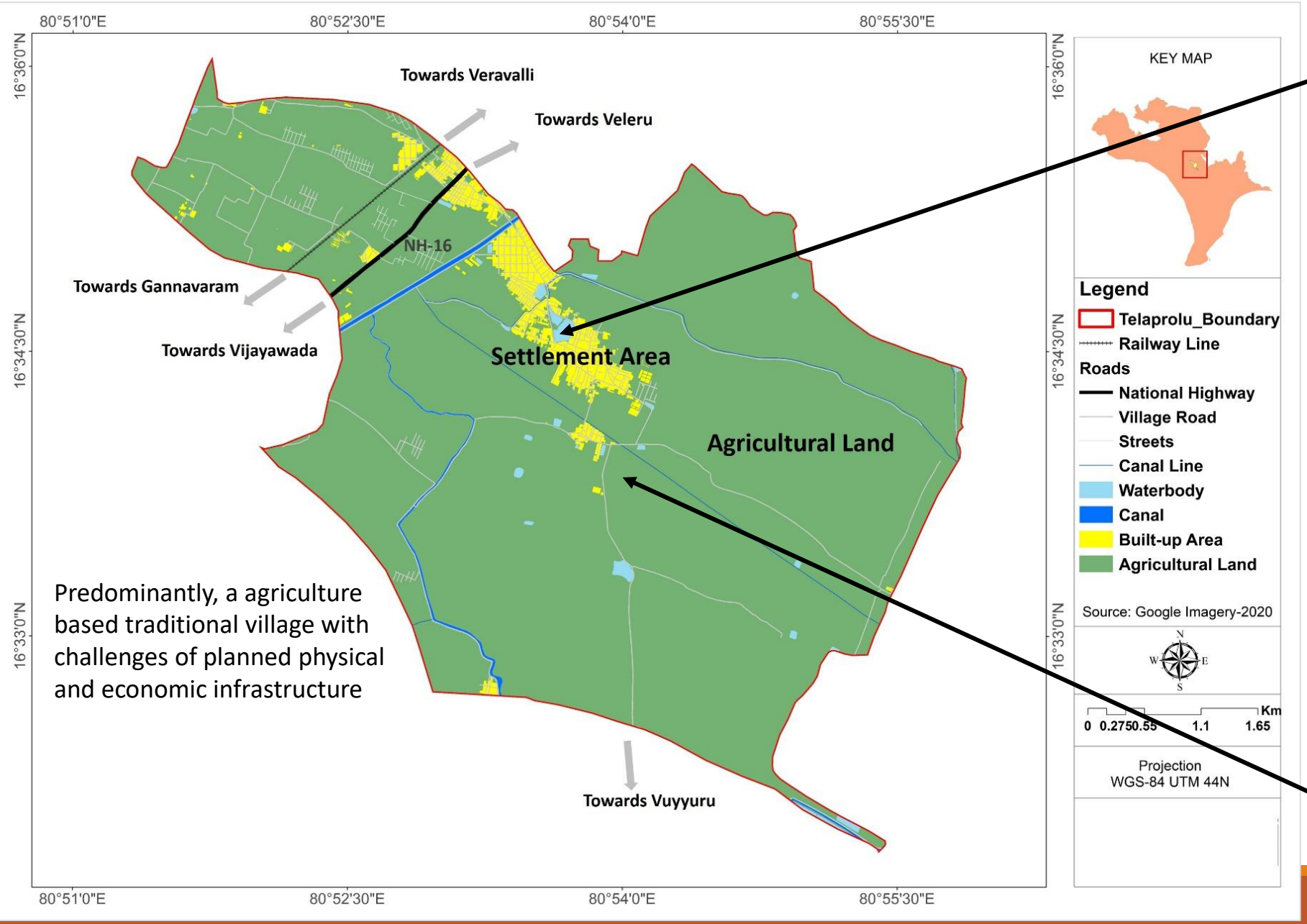
ECONOMY

SOCIO -ECONOMICS

PHYSICAL INFRASTRUCTURE

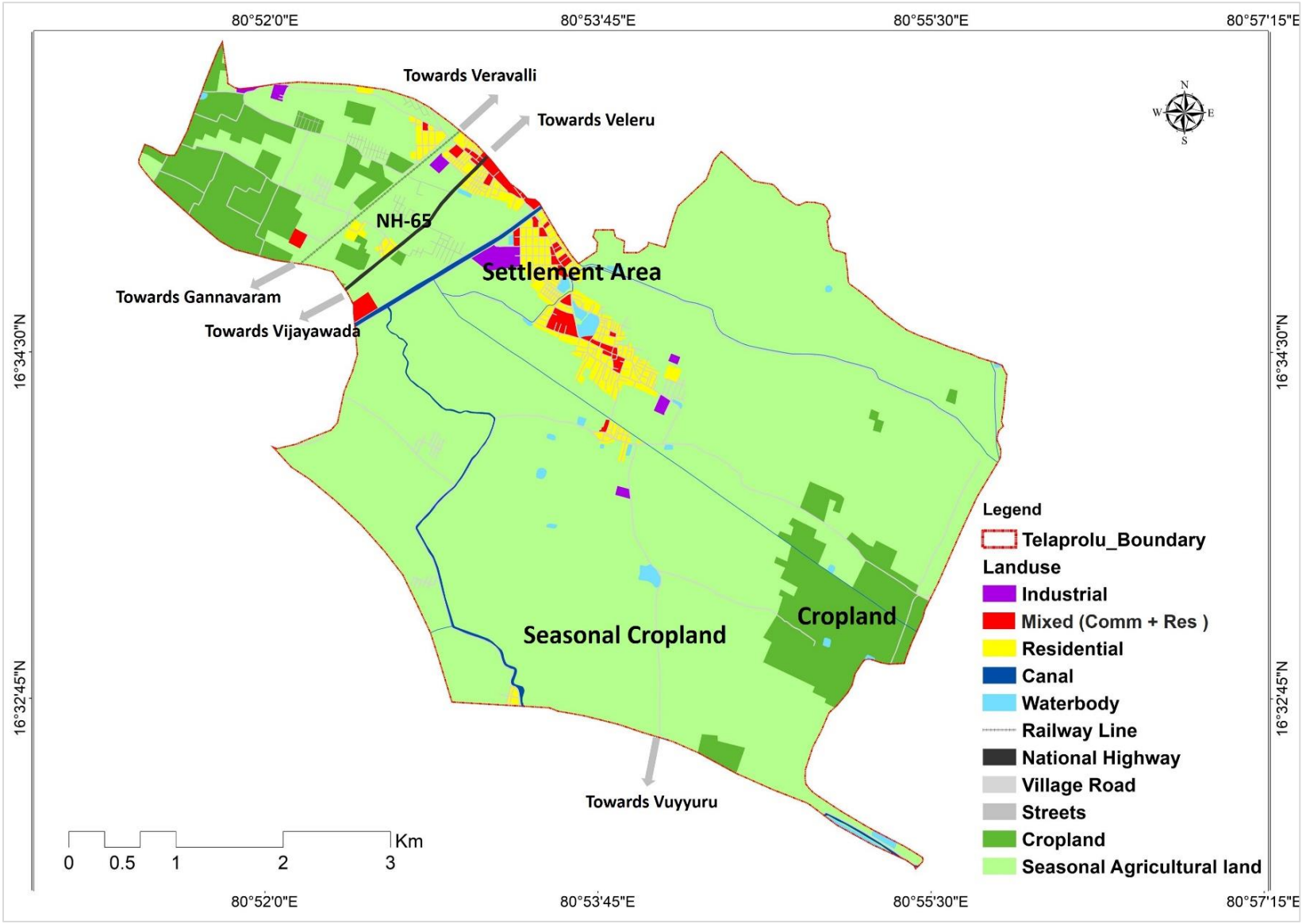
SOCIAL INFRASTRUCTURE

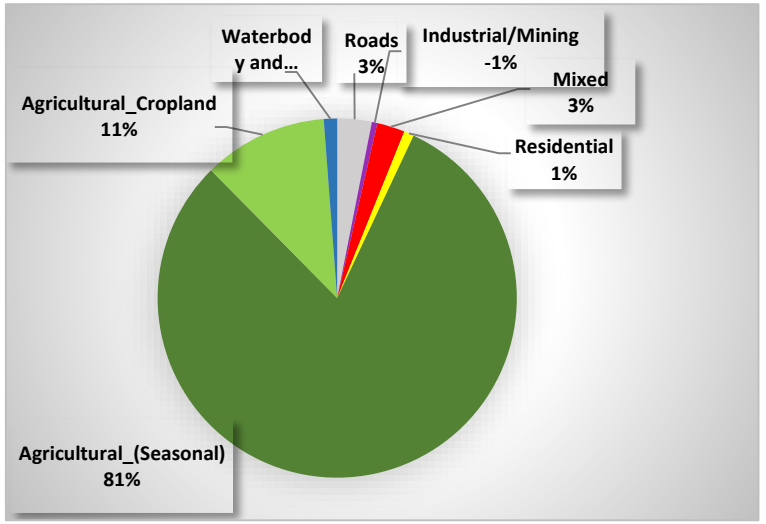
TELAPROLU | BASE MAP



Predominantly, a agriculture based traditional village with challenges of planned physical and economic infrastructure

TELAPROLU | LAND USE

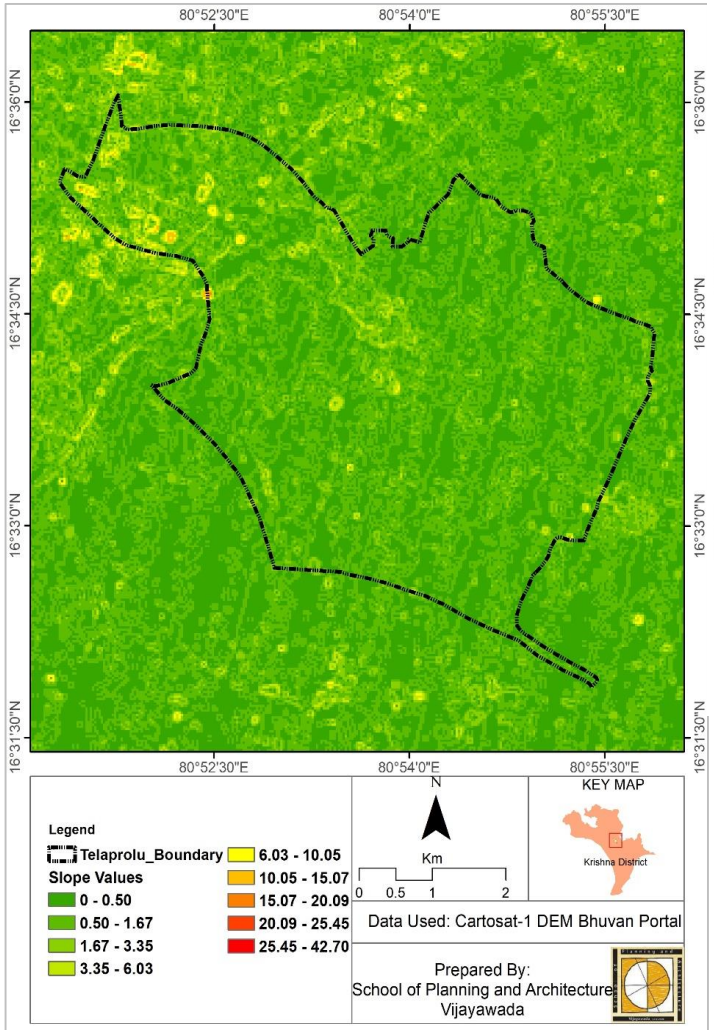




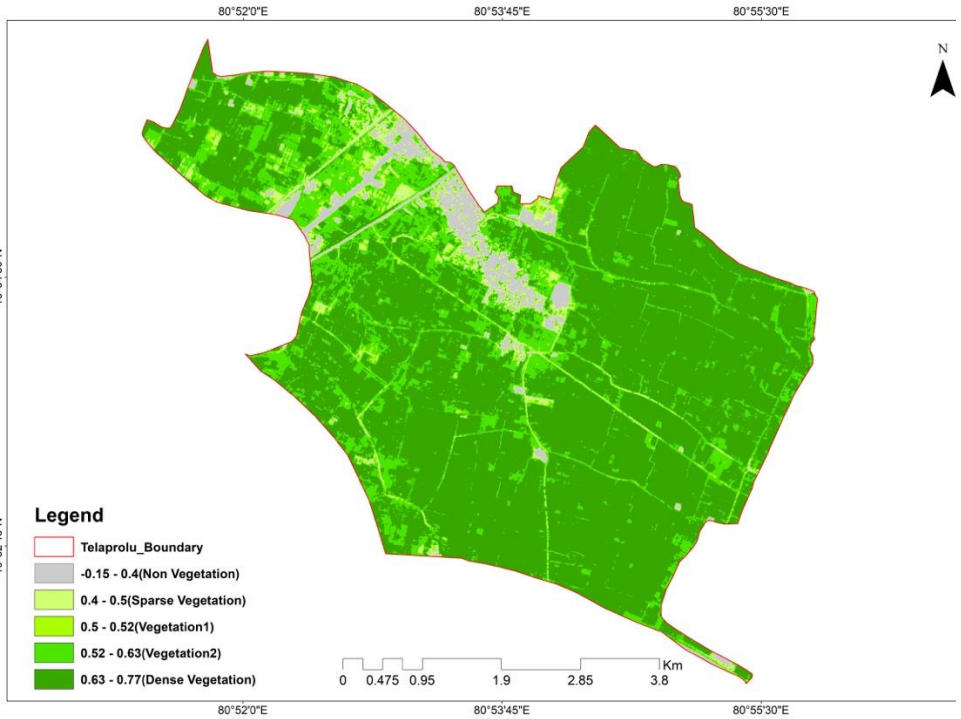
Category	Area(Ha)	%age
Roads	78.0	3.1
Industrial/Mining	13.0	0.5
Mixed	63.3	2.5
Residential	22.5	0.9
Agricultural_(Seasonal)	2050.1	80.6
Agricultural_Cropland	285.9	11.2
Waterbody and canal	31.2	1.2
Total	2544.0	100

Source: Google Earth Imageries 2020 & Field Visit

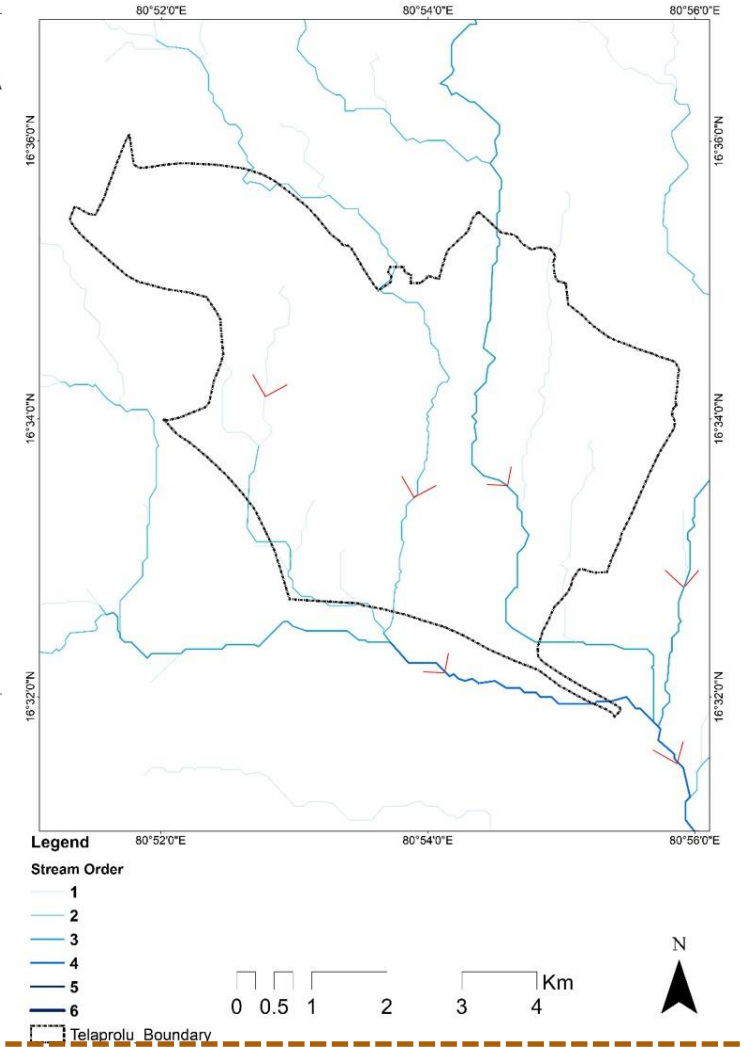
TELAPROLU | PHYSIOGRAPHY



ENTIRE VILLAGE HAS A FLAT TERRAIN WITH SLOPE BETWEEN 0 - 5 %

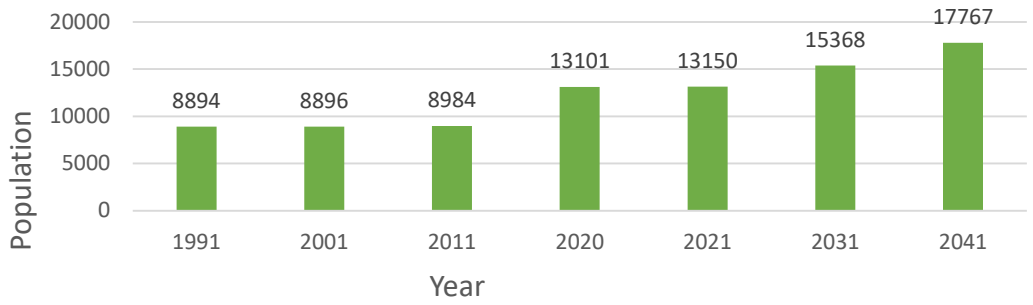


NDVI - VEGETATION INDEX INDICATES GROWTH OF VEGETATION COVER OVER LAST 4 YEARS



WATERSHED SHOWS SOUTHWARD FLOW OF NATURAL DRAINAGE WITH FIRST & 2ND ORDER STREAMS

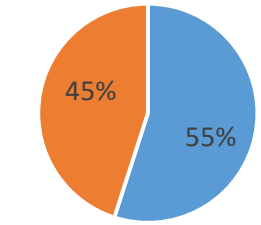
TELAPROLU | DEMOGRAPHY & ECONOMY

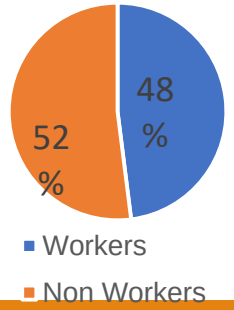


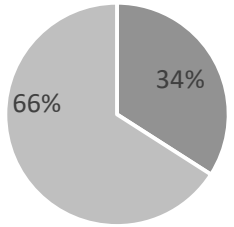
Projected Population			
Year	Arithmetic Increase	Geometric Increase	Incremental Increase
1991	8894	8894	8894
2001	8896	8896	8896
2011	8984	8984	8984
2020	13101	13101	13101
2021	13112	13150	13124
2031	14644	15368	14743
2041	16046	**17767**	17588

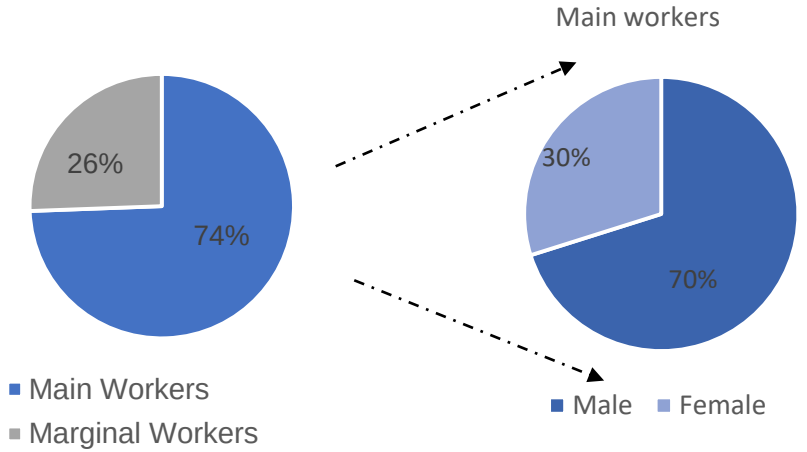
Age Cohort (Years)	0-5	6-15	16-25	26-35	36-45	46-55	56-65	66-75	≥ 76
Telaprolu GP	565	1169	1518	1437	1250	1129	742	570	247

Marginal workers









OBSERVATIONS

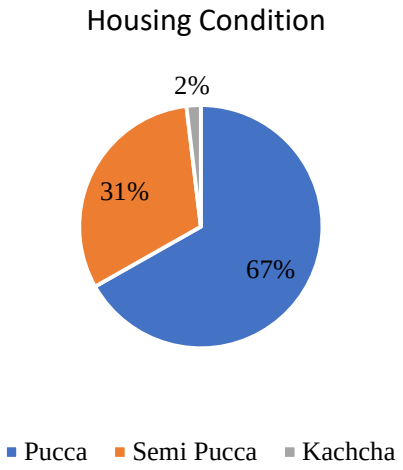
- Growth of **0.99%** from 2001 to 2011 (From 1991 to 2020, it is 15%)
- High proportion of youth and middle-aged population **(59%)**
- 55 percent of the population in Telaprolu GP is literate
- Majority (75%) of the main workers are engaged in primary sector i.e. Agriculture and Animal husbandry
- The Work Force Participation Rate (WPR) in Telaprolu GP is 62.5 %, which is more than the state's WPR i.e. 47 percent

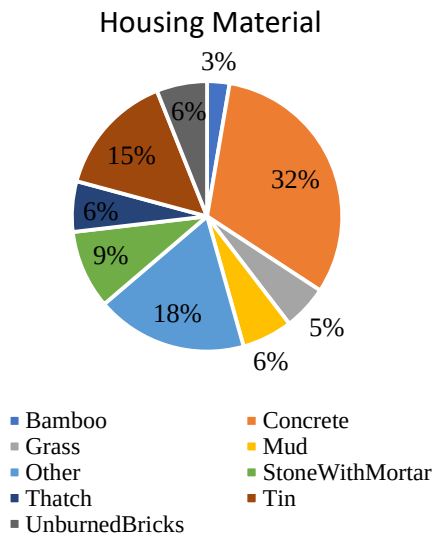
Source: Census 2011 & Village Secretariat 2020

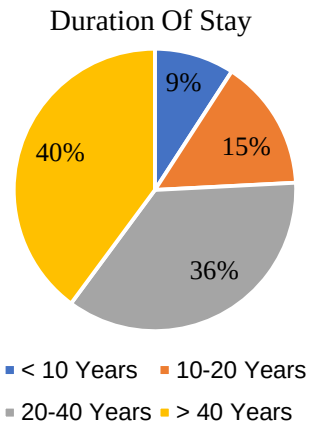
TELAPROLU | HOUSING

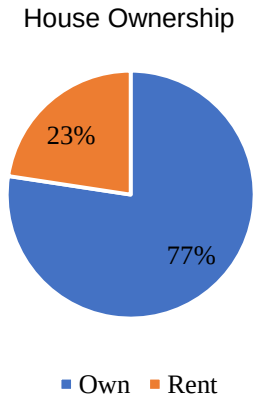
Old Thatched House

Transforming Houses







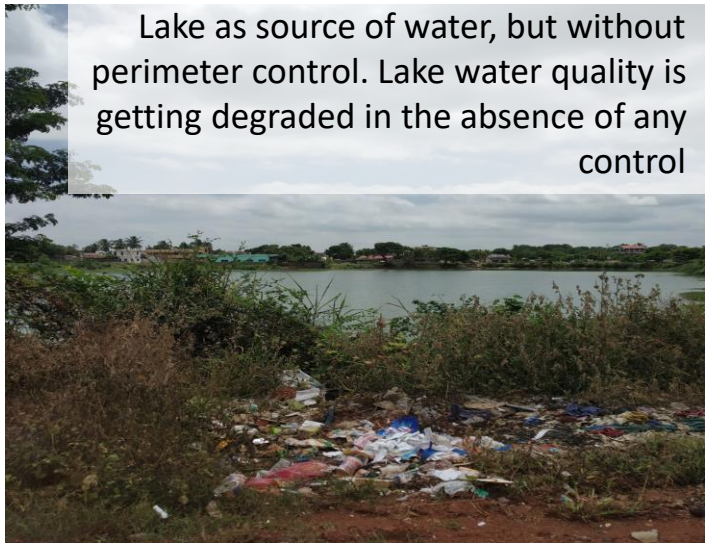


OBSERVATIONS

- Around **76%** of the houses are having age of more than 20 years. And about **32%** more than 50 years.
- There is no earmarked space for future residential areas leading to haphazard growth and transformation
- There is absence of local recreational facilities like parks and playgrounds along with housing.
- Open spaces have segregated access for diffferent sections of the community

Source: Primary Survey, 2020

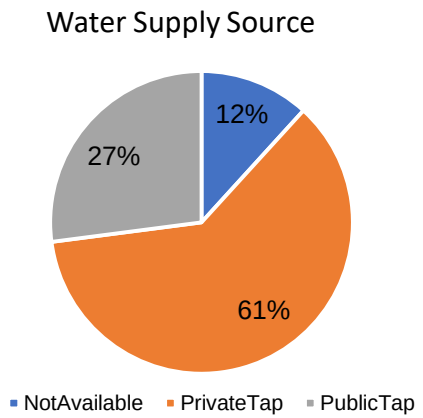
TELAPROLU | INFRASTRUCTURE

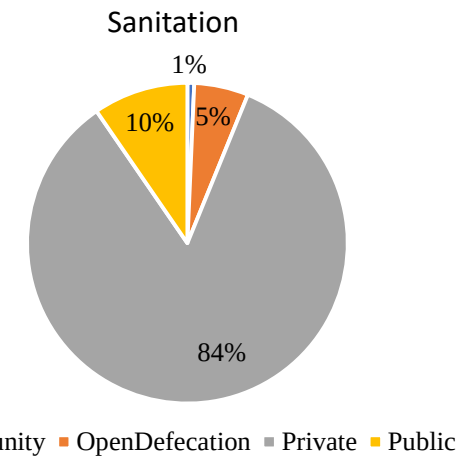


Lake as source of water, but without perimeter control. Lake water quality is getting degraded in the absence of any control

Stagnation of waste water with soild waste dumping

Open drains along some roads but with encroachment





OBSERVATIONS

- On an average water supply is **42 lpcd** through PWS in the village (against an ideal of 75 lpcd)
- Existing frequency of **water supply is once in 2 days** for 2-3 hours
- Quality of GW is within permissible limits of drinking. But village water bodies having diminishing quality of water
- There is no waste water treatment facility available leading to stagnation and unhygienic spots
- **61%** resorts to open dumping. **28%** do not have any means of solid waste disposal
- Total **95%** of HH has accessibility to toilet facility

Source: Primary Survey, 2020

TELAPROLU | ROAD, HEALTH AND EDUCATION

Pucca roads without proper edge design

Typical kuchha road with damages

Existing only health sub center in the village

OBSERVATIONS

- Right of Way of village roads is around **6-10 m** and about **70%** are Pucca
- Village roads serve as bidirectional with no pedestrian pathway along the roads leading to accidents
- At present, **pre-primary school is not available** in the village.
- There is **no primary health center** in the village
- **No dedicated public space** managed by Panchayat

Source: Primary Survey, 2020

SUMMARY OF ISSUES AND POTENTIAL IN TELAPROLU

Key Issues and Potentials - Telaprolu

Need for Management of Local Water Bodies

- Degradation of Water Quality of Lake
- Change in Area and Perimeter

Need for Augmentation of Basic Physical Infrastructure

- Water storage and treatment is a necessity
- Installation of basic drainage and waste water treatment unit is required
- Basic Solid waste management facility is required

Need for Agro and Dairy Hub as Economic Infrastructure Support

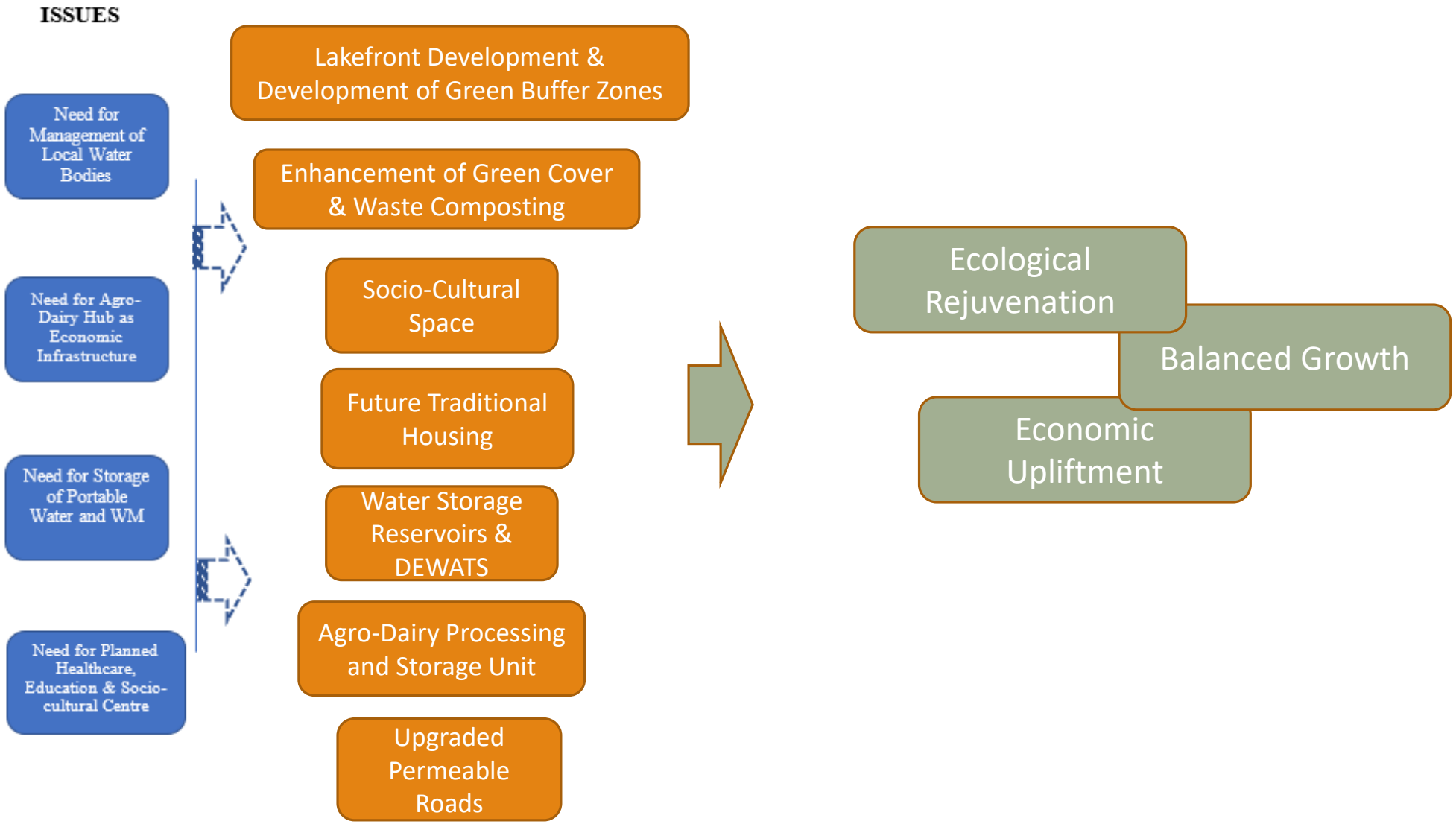
- The village lacks planned storage space for agricultural products
- Absence of Dairy processing or storage unit as large % of population is involved in animal husbandry
- Absence of proper road design leads to accidents and impediments to economic activities

Need for Healthcare, Education and Socio-Cultural Spaces

- The village lacks Primary Heatlh Centre (PHC)
- There is Absence of common spaces for cultural activities
- The village lacks pre-primary schools
- No clear roadmap for housing for future

TELAPROLU DEVELOPMENT PROPOSALS

TELAPROLU | DEVELOPMENT CONCEPT



Lakefront Development

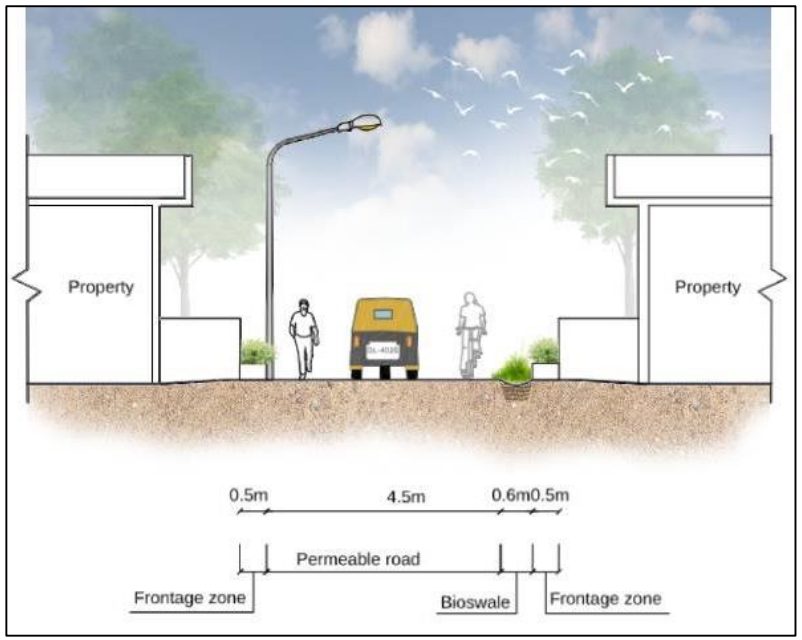
RIPARIAN EDGE

BIO-SWALE CONCEPT

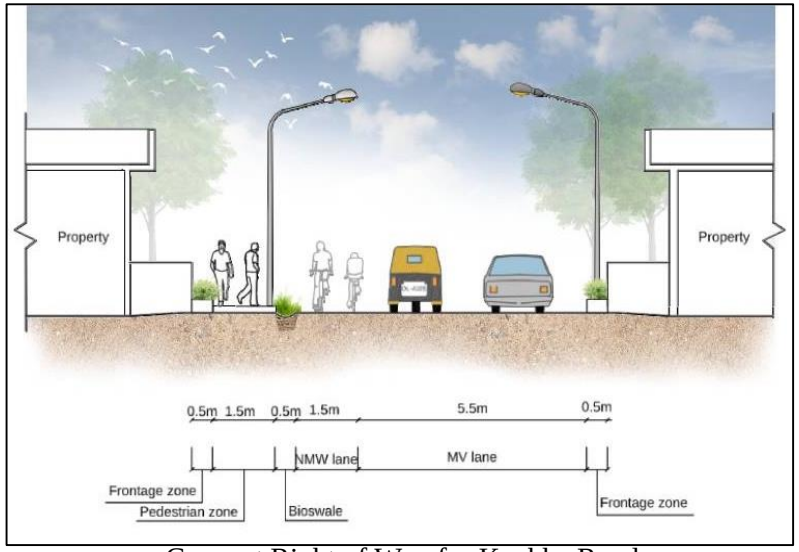
PROPOSAL SUMMARY

- It is proposed that the perimeter of the lake be made into embankment
- A walkway around the lake is proposed to be built for with intermittent seating areas and landscaped areas
- The walkway around the lake is proposed to have bio-swales

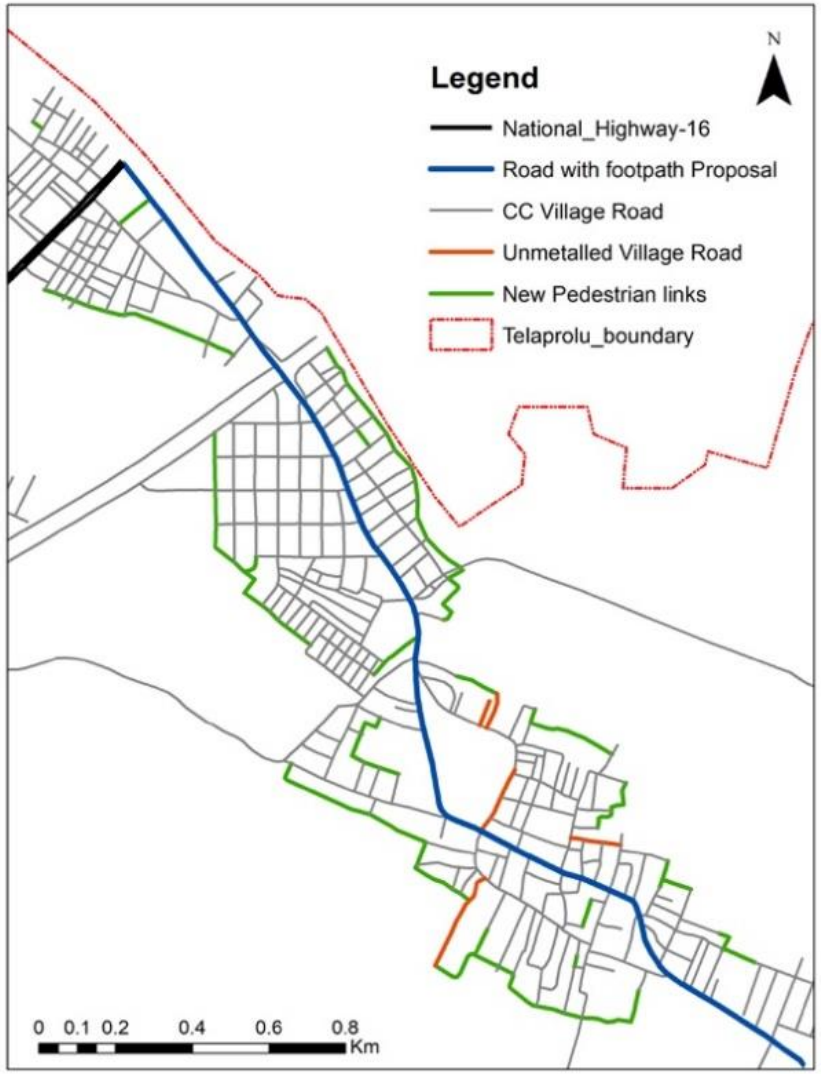
Permeable Pedestrian Friendly Roads



Concept Right of Way for Village Pucca Road, Development



Concept Right of Way for Kuchha Roads



PROPOSAL SUMMARY

- Dedicated footpath (1.5m) is proposed alongside main roads where dense settlements have grown
- Total of 3km footpath along the road leading towards Vuyuru is proposed, one side
- Certain local roads have been proposed to be with permeable surface
- Detailed cost estimate and concept design has been proposed
- Estimated Cost is Rs 54 Lakhs

Housing & Water Reservoirs

Housing Projections

Year	Population	Housing Need	Cumulative	Plinth Area of the Housing Unit and/ Land	Total Land Required for Housing
2021	13150	162	162 (100 % LIG)	288 sq.ft 60 sq. m (land) *	1.8 ha
2031	15368	554	716 (50% LIG & 50% MIG)	100 sq.m (land)	6.2 ha
2041	17767	600	1316 (50% LIG & 50 % MIG)	100 sq.m (land)	6.6 ha

* Based on the YSR Housing Scheme 2020 (AP) ** Assumed a 60 sqm of land required for each dwelling unit.

Water Reserviors

Year	Population	LPCD	Losses	Demand	Losses	Fire Demand	Others	Total
			%	MLD	MLD	MLD	15%	MLD
2021	13150	55	15	0.72	0.11	0.04	0.12	0.99
2031	15368	70	15	1.07	0.16	0.04	0.19	1.46
2041	17767	70	15	1.24	0.19	0.04	0.21	1.68

Year	Population	Demand (MLD)	Required Storage (KL)	Existing Storage (KL)	Proposed ESLRs Capacity (KL)
2021	13150	0.99	320	200	120 (1 new)
2031	15368	1.46	480		378 (2 new)
2041	17767	1.68	550		454 (1 new)

PROPOSAL SUMMARY

- Water demand can be fulfilled by elevated reservoirs (approximately 4) to meet around 4.5 lakh litres of the demand. By providing the reservoirs the duration of water supply can be improved
- Proposed housing units are 1316 till 2041, requiring an area of 6.6 ha

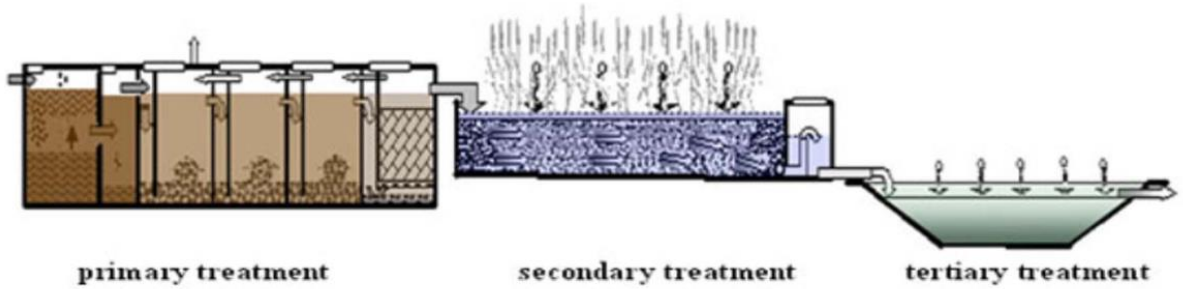
Decentralised Wastewater Treatment System (DEWATS)

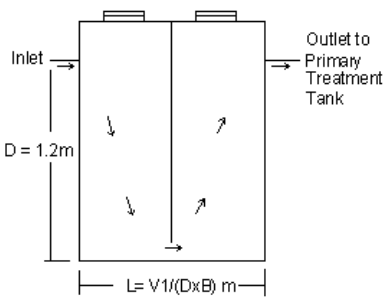
Design capacity of proposed DEWATS

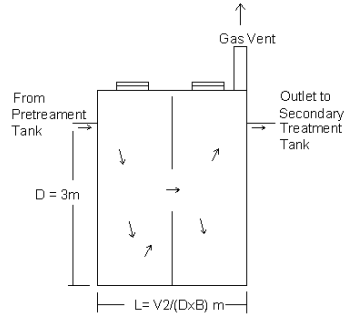
S.No	Habitation	Approx. Design Capacity or Volume KLD 2041	Proposed design capacity (anaerobic septic tank, baffled reactor, planted bed filter each)	Proposed design capacity (secondary components)
1	Telaprolu	10520	3156	1052
2	Telaprolu Scl	1312	394	131.2
3	Malapalli	1032	310	103.2
4	Artizan Complex	240	72	24
5	Mundadugu	448	135	44.8
6	Kothuru	248	74	24.8
	Grand Total	13800	4141	1380

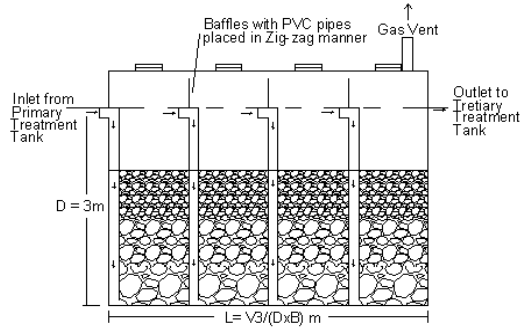
Area requirement for unit

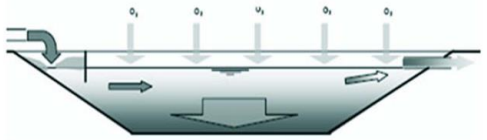
S.No.	Habitation	Estimated area required (hectares) 2041
1	Telaprolu	10.0
2	Telaprolu Scl	1.2
3	Malapalli	1.0
4	Artizan Complex	0.2
5	Mundadugupoultrycompl	0.4
6	Kothuru	0.2
	Grand Total	13.1

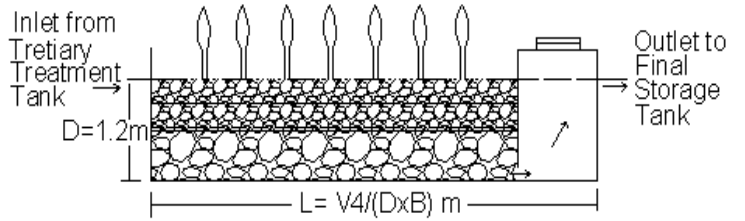












PROPOSAL SUMMARY

- DEWAT system can be provided to treat the waste water. It is decentralised, has minimum

Composting Unit & Green Buffer

Design of Compost Plant

1. Design Period : 20 Years
2. Ultimate Waster for Compost : 1.2 t/day
3. Size of each windrow (3mx2mx1.5m) trapezoidal shate 2m bottom: 12.5 cum
4. Neat Area of Windrow (5mx2m) : 10 m2
5. Assumed Waste density in compost :6.25
6. Waste handled in each Windrow : 1 no.s
7. Gross area req. for each Windrow : 30 m2
8. Total area required for each day compost: 30 sq.m
9. Initial Compost Period : 21 days
10. Total Area for Compost : 630 sq.m
11. Area required for other facilities (tipping floor, processing and etc): 945 sq.m

Total Area required : 1.5 ha

Design of Landfill site

1. Design Period : 20 Years
2. Fraction of total waste to be landfilled : 28%
3. Design Life (2021-2041) : 20
4. Total Waste to be landfilled in design life: 2,526 tons
5. Assumed Waste density in landfill : 1,00 t/cum
6. Volume of daily cover (10% of above) : 253 cum
7. Volume of liner and cover system : 316 cum
8. Total Volume : 2841 cum
9. Assume height of landfill : 10 m
10. Area of land required : 284 sq.m
11. Additional land area required – Trapizoidal shape: 355 sq.m
12. Area of land fill required : 0.04 ha
13. Total Area required for land fill : 1.2 ha.

PROPOSAL SUMMARY

- A landfill and a composting unit is proposed to take care of the projected waste generation of 2041
- Development of Green Buffer zones on areas of

Agro-Dairy Hub and Social Amenities

Agro and Dairy Trading and Storage Hub

- A designated facility which can serve as a “Agro and Dairy Products Trading and Storage hub” is proposed to come up in a maximum area of 1.5 hectare to facilitate the agro-based economy and livelihoods of the village

Education

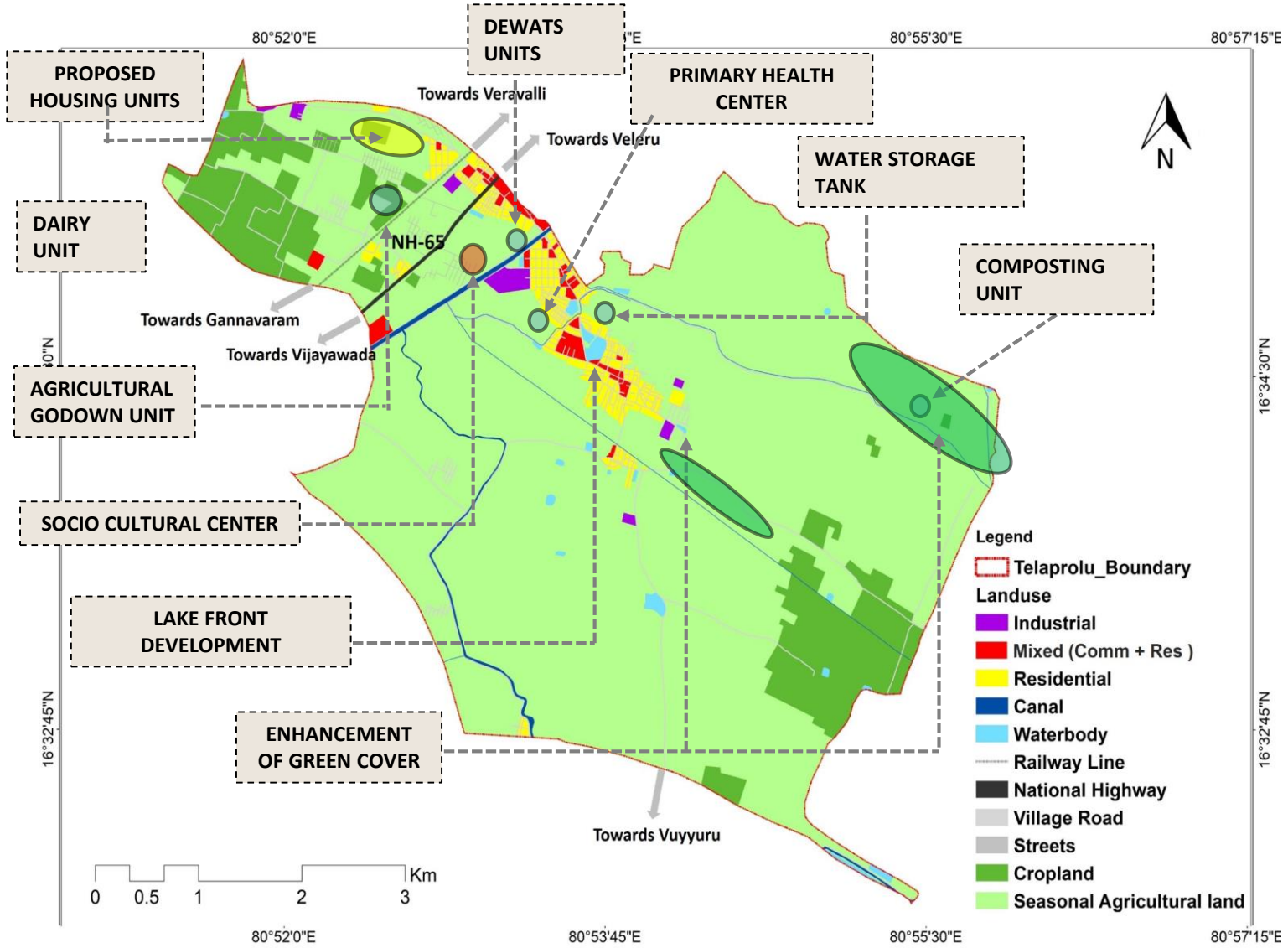
- There is a need for 4 pre-primary schools in Telaprolu, with an area of 0.4 ha as the total requirement for the design year 2041

Health care

- One PHC with a plinth area of 375 to 450 sq.m (as per IPHS for PHC guidelines 2006) is suggested to be built

Telaprolu villagers seek trading and storage space for their produce in adjacent villages due to lack of any facilities in Telaprolu

Tentative Location of all Proposals



Sl. No	Infrastructural facility proposed	Land required
1	DEWATS	13.1
2	Compost plant	1.5 Ha
3	Landfill	1.2 Ha
4	Health centre	0.05 Ha
5	Primary School	0.5 Ha
6	Integrated socio cultural facility	0.8 Ha
5	Agricultural and Dairy Trading Hub	1.5 ha
6	Lake front development	0.75 Ha
	Total	19.45 Ha

Land suitability for development was done by considering factors like proximity to NH, proximity to water bodies, Rail, canal etc.

Exact location of the facilities can be earmarked with the availability of land ownership data, so that proposals can be assigned on Panchayat / Government land

PARITALA EXISTING SITUATIONAL ANALYSIS

LANDUSE

DEMOGRAPHY

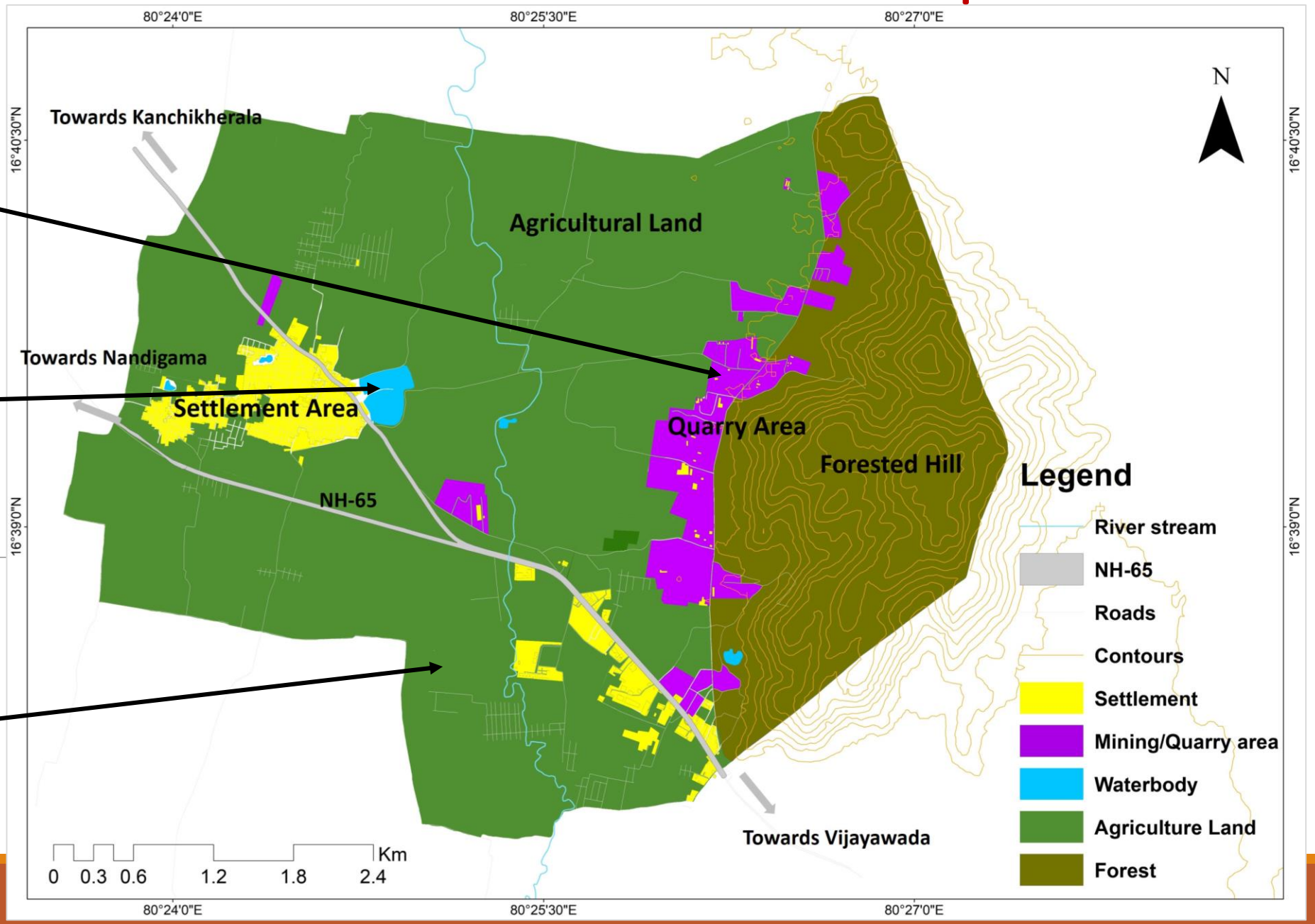
ECONOMY

SOCIO -ECONOMICS

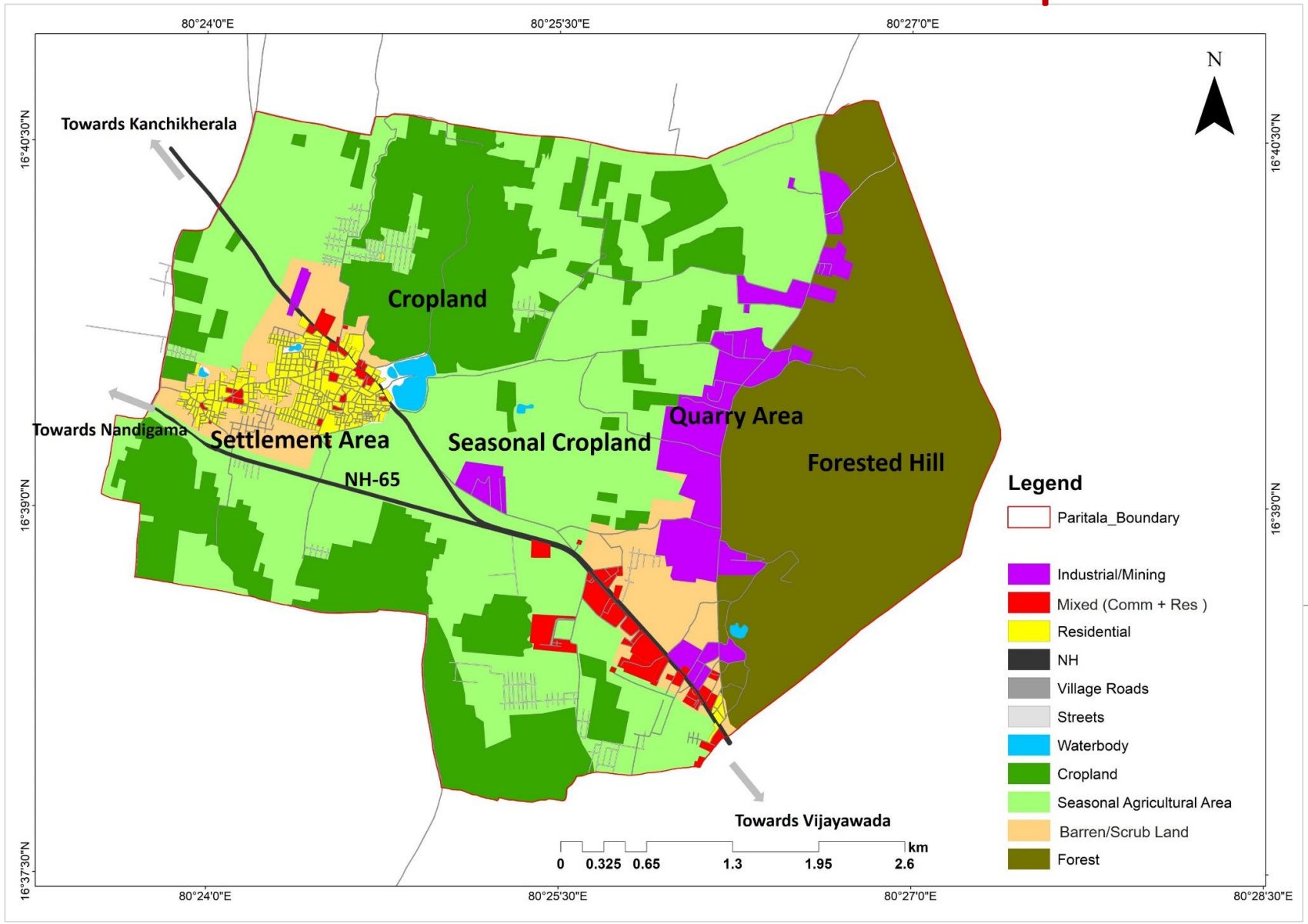
PHYSICAL INFRASTRUCTURE

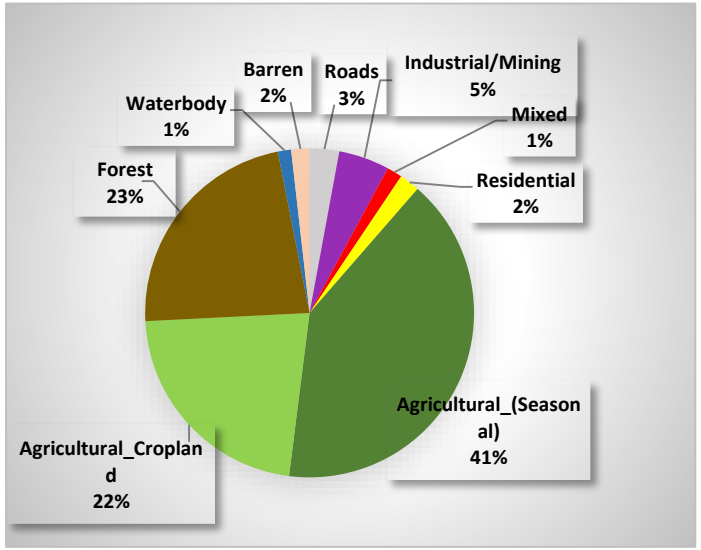
SOCIAL INFRASTRUCTURE

PARITALA | BASE MAP



PARITALA | LANDUSE LANDCOVER MAP

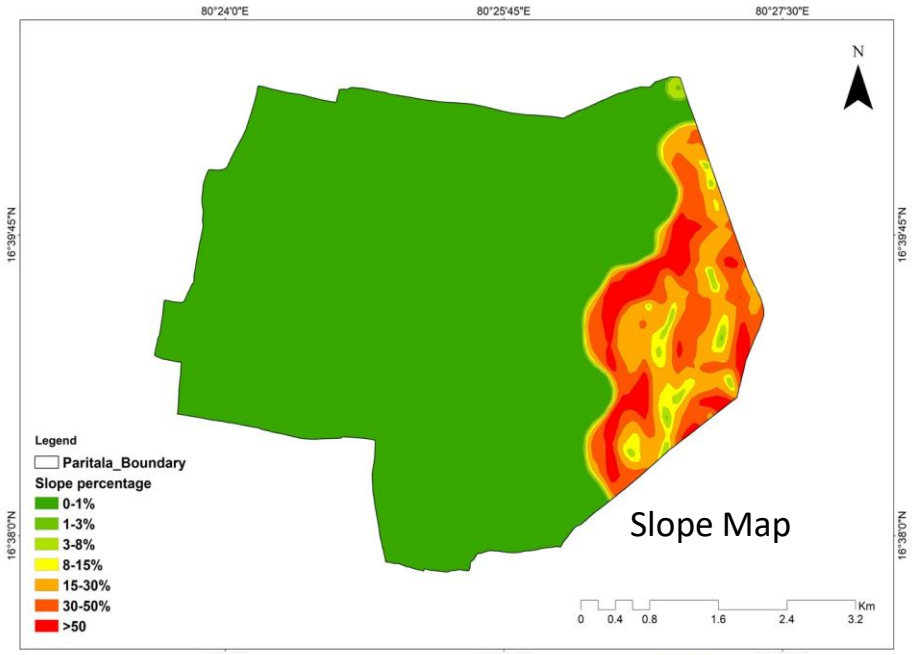




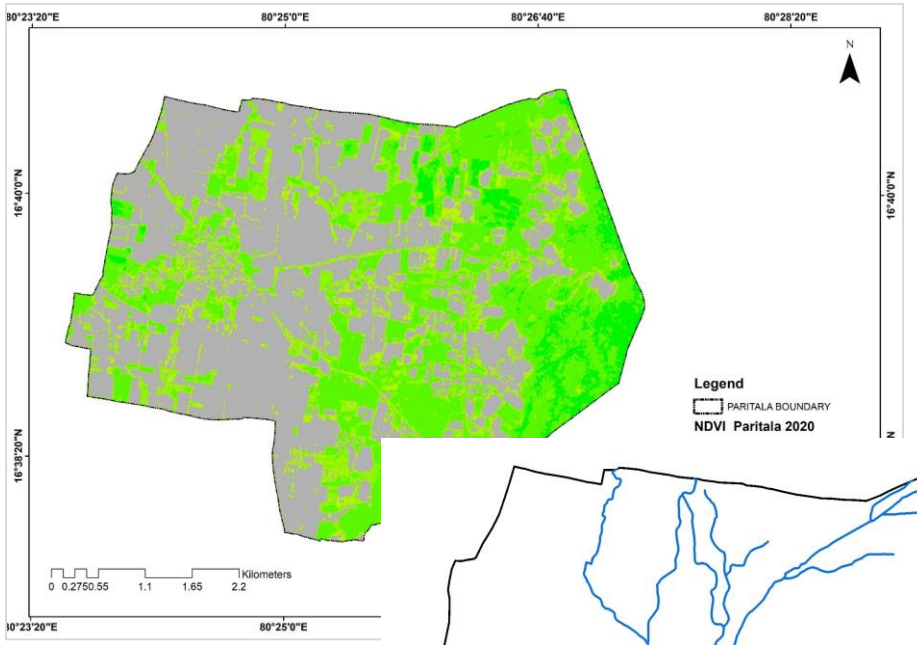
Category	Area	%age
Roads	583386.9	2.9
Industrial/Mining	989275.3	5.0
Mixed	299528.2	1.5
Residential	402881.5	2.0
Agricultural_(Seasonal)	8109146.5	40.6
Agricultural_Cropland	4441697.8	22.2
Forest	4541347.6	22.7
Waterbody	253096.1	1.3
Barren	359640	1.8
Total	19980000.0	100

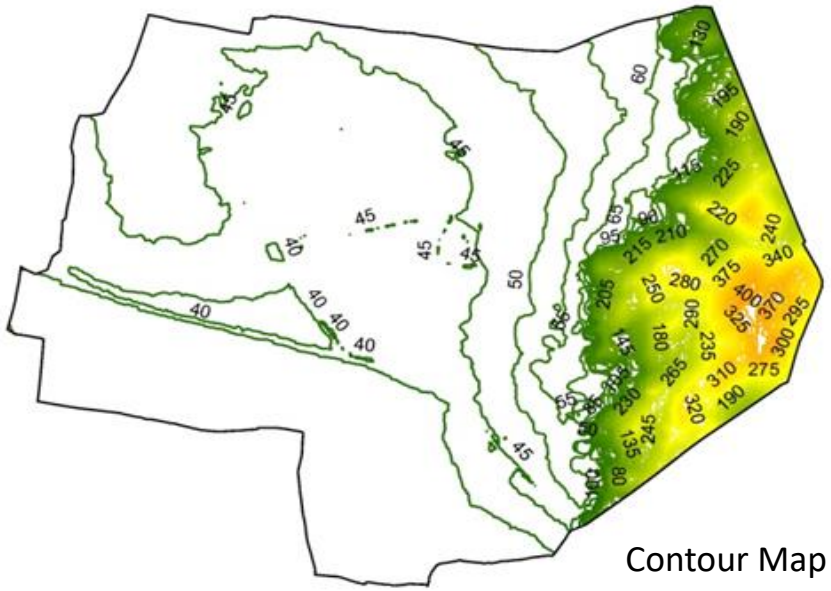
Source: Google Earth Imageries 2020 & Field Visit

PARITALA | PHYSIOGRAPHY

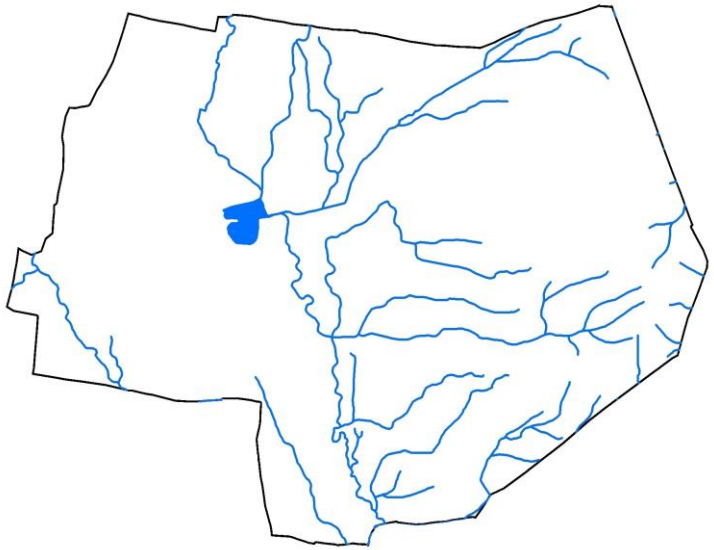


Slope Map





Contour Map



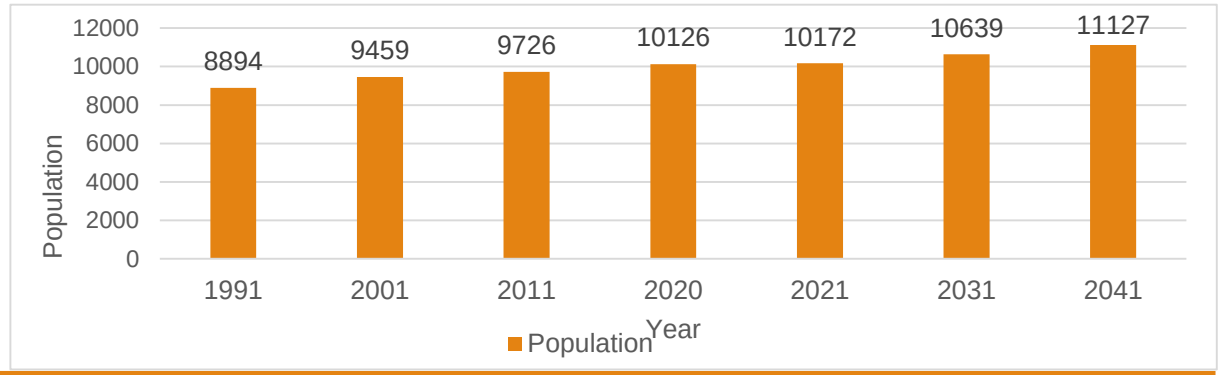
Drainage Map

Legend

Drainage-line

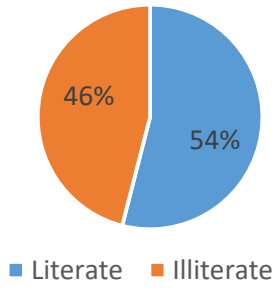
Lake/Pond/Reservoir

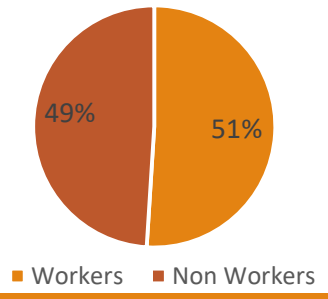
PARITALA | DEMOGRAPHY & ECONOMY

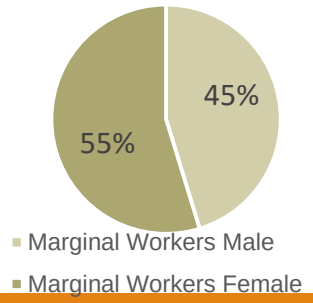


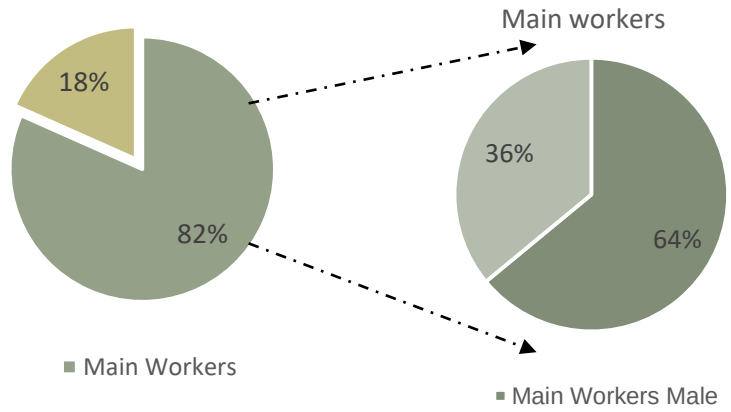
Projected Population			
Year	Arithmetic Increase	Geometric Increase	Incremental Increase
1991	8894	8894	8894
2001	9459	9459	9459
2011	9726	9726	9726
2020	10100	10126	9845
2021	10142	10172	9844
2031	10558	10639	9664
2041	10974	**11127**	9186

Age Cohort (Years)	0-5	6-15	16-25	26-35	36-45	46-55	56-65	66-75	≥ 76
Paritala GP	759	1773	1955	1720	1375	1020	575	383	166







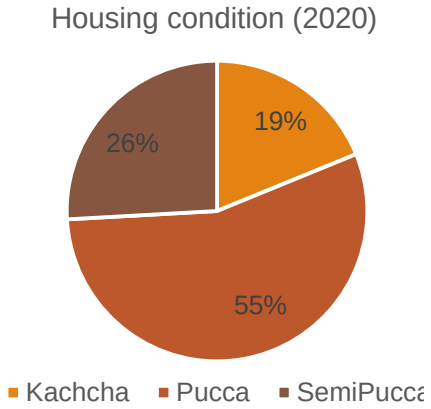


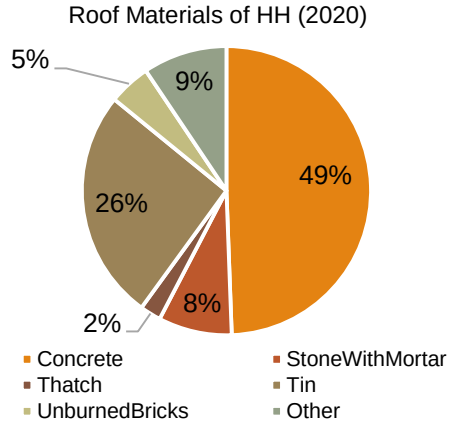
OBSERVATIONS:

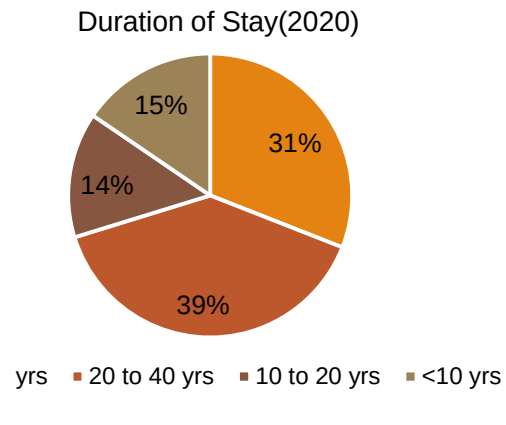
- Majority (**73%**) of the main workers are engaged in primary sector i.e. agriculture, cultivation and quarrying.
- The WFPR in Paritala GP is 68.1%, which is more than the state's WFPR i.e. 47 percent
- Percentage of working population in **62%**, and the literate population is only **54%**, indicating the need to engage them productively
- Over 65% of the population belong to reserved category

Source: Census 2011, Village Secretariat Office, 2020

PARITALA | HOUSING







OBSERVATION:

- The percentage of households living in owned category has increased from **79%** in 2011 to **87%** in 2020.
- Around **70%** of the houses are having age of more than 20 years
- There is no designated planned space for parks and recreational facilities compared to the dense housing areas.

Source: Primary Survey 2020

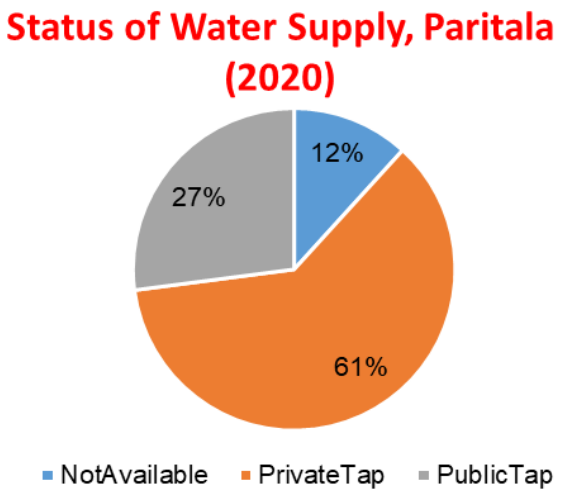
PARITALA | INFRASTRUCTURE

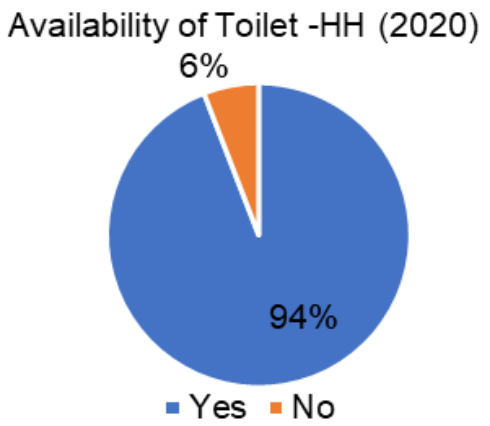
Water Taps and Waste water stagnation

Complete paving with solid waste littering

Open dumping as common practice

Source: Primary Survey, 2020





OBSERVATIONS:

- Quality of Ground Water is **not within permissible limits**. Also the supply is below the requirement
- At present, there is **no drainage and waste water treatment** facility available.
- It is reported that **92%** of the households have door to door collection of solid waste through
- Total **94%** of HH has toilet facility which has increased from 2011. Of the available toilets, **86%** were reported to be constructed under government schemes while the remaining 14% were constructed on their own.
- There is a solid waste treatment unit, which is non-functional

PARITALA | ROAD, HEALTH AND EDUCATION

Pucca Internal village roads

Pucca Main village roads

Existing Sub center in the village

OBSERVATIONS:

- Right of Way of the village roads is around 6-9 m. Village roads serve bidirectional motor vehicle traffic without lane markings, leading to accidents
- There is **no Primary Health Center** in the village
- No socio-cultural space for the communities. Open spaces have segregated access
- There is a need to provide pre-primary schools, which are absent

Source: Primary Survey 2020

SUMMARY OF ISSUES AND POTENTIAL IN PARITALA

Key Issues and Potentials - Paritala

Need for Enhancement of Human capital

- Unskilled and unemployed youth is more
- Lack of training and educational facilities

Need for Augmentation of Basic Physical Infrastructure

- Ground water quality in the village is not within permissible limits
- Frequency of the water supply is also once in 2 days for 2 to 3 hrs
- No drainage and waste water treatment unit present in the village
- Solid waste treatment needs to be augmented

Need for Economic Infrastructure and Livelihood Options

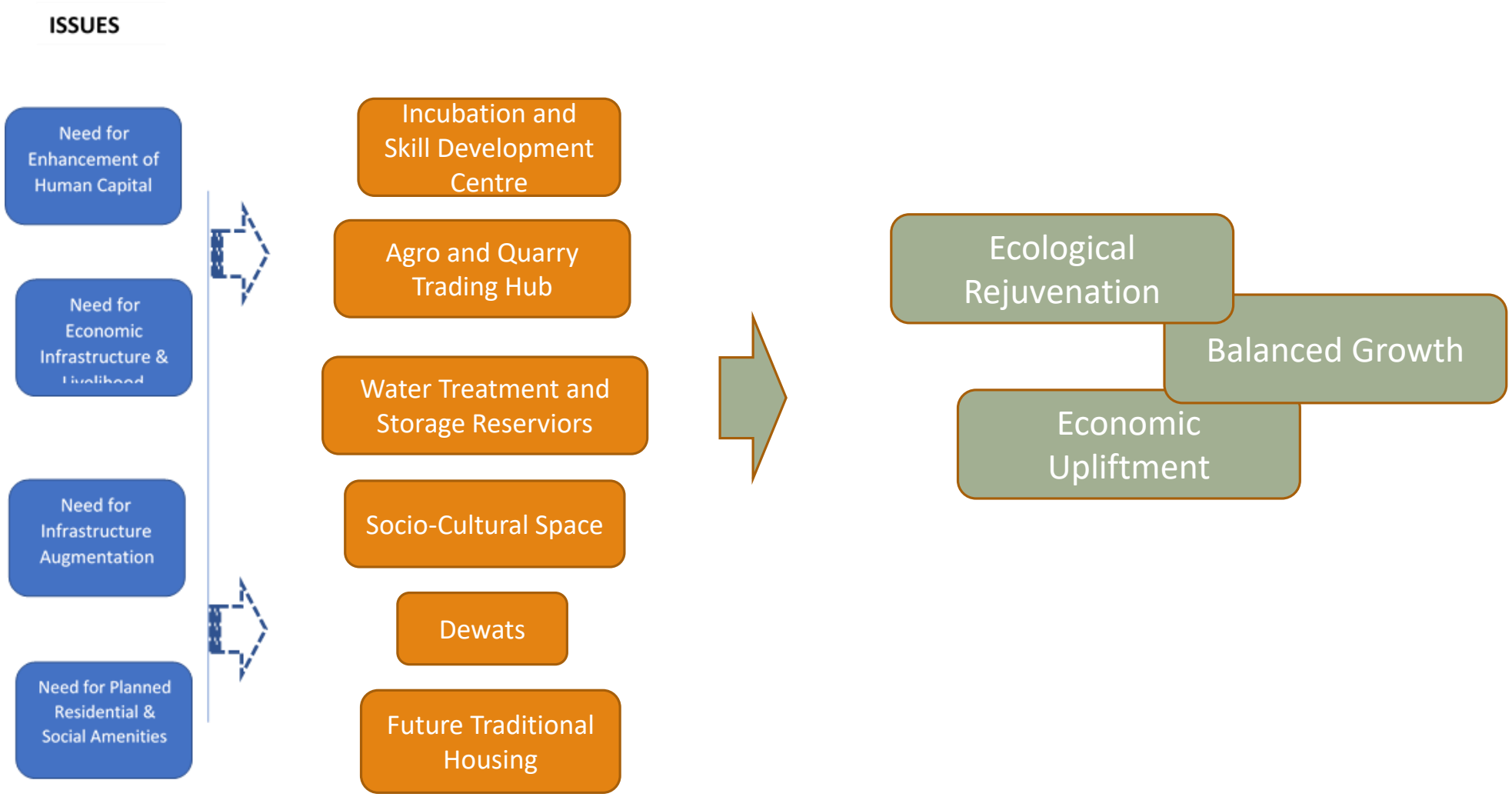
- Lack of trading and processing hub or commercial zones for agriculture or quarrying products

Need for Planned residential areas and social amenities

- The village lacks Primary Heatlh Centre (PHC)
- There is Absence of common spaces for cultural activities
- The village lacks pre-primary schools
- No clear roadmap for housing for future

PARITALA DEVELOPMENT PROPOSALS

PARITALA | DEVELOPMENT CONCEPT



Incubation Centre & Trading Hub

Integrated Socio-Cultural Community Centre

- The Integrated Socio - Cultural Centre (ISCC) has been conceptualized aligned with the cultural/habitual character of villages in general.
- The ISCC can be a multi-activity dynamic space that can accommodate a variety of activities

Education

- A total of 4 preprimary school is required covering a total area of 0.4 ha for the design year 2041

Health care

- One PHC with a plinth area of 375 to 450 sq.m (as per IPHS for PHC guidelines 2006) is suggested to be built which can also serve the nearby villages.

Development of Incubation / Skill Development Centre

- An incubation facility can be proposed in an area of 1.5 ha. The MSME, AP Skill Development Mission can develop an action plan. On a pilot basis, the GP can select few graduates and identify the goods and services required locally

Trading Hub for Quarrying and Agro-Products

- A designated facility which can serve as a specialized mandi or a trading hub is suggested. This facility is proposed to come up in a maximum area of 1 hectare
- The facility will have to be designed with simple and basic built structures in a compound that can serve as – offices, wholesale closed shops, wholesale open air shops and storage facilities

Housing & Water Reservoirs

Housing Projections

Year	Population	Housing Need	Cumulative	Plinth Area of the Housing Unit and/ Land	Total Land Required for Housing
2021	10172	257	257 (100 % LIG)	288 sq.ft 60 sq. m (land) *	2.1 ha
2031	10639	140	397 (50% LIG & 50% MIG)	100 sq.m (land)	1.56 ha
2041	11127	140	537 (50% LIG & 50 % MIG)	100 sq.m (land)	1.56 ha

* Based on the YSR Housing Scheme 2020 (AP) ** Assumed a 60 sqm of land required for each dwelling unit.

Water Reservoirs

Year	Population	LPCD	Losses	Demand	Losses	Fire Demand	Others	Total
			%	MLD	MLD	MLD	15%	MLD
2021	10172	55	15	0.56	0.08	0.03	0.10	0.77
2031	10639	70	15	0.74	0.11	0.03	1.36	1.01
2041	11127	70	15	0.78	0.12	0.03	1.41	1.07

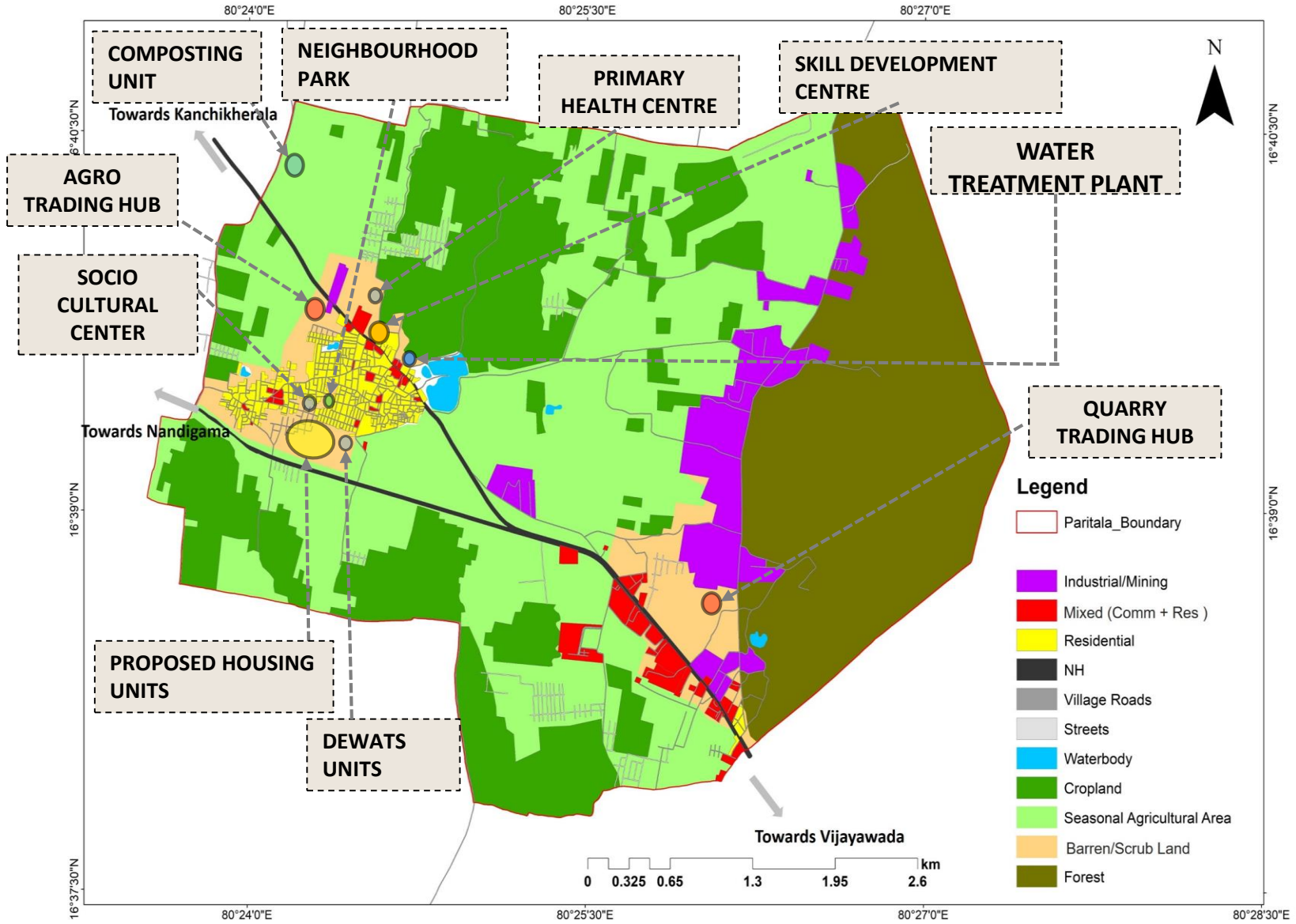
Year	Population	Demand (MLD)	Required Storage (KL)	Existing Storage (KL)	Proposed ESLRs Capacity (KL)
2021	10172	0.77	254.1	410	60 (1)
2031	10639	1.01	333.3	470	60 (2)
2041	11127	1.07	353.1	530	--

PROPOSAL SUMMARY

- Water demand can be fulfilled by elevated reservoirs (approximately 3) to meet around 4.5 lakh litres of the demand
- A water treatment plant of capacity 5000 l/hr is proposed to address the issue of water quality
- Proposed housing units are 537 till 2041, requiring an area of 1.56 ha

Population 2041	Average Demand(l/day)	Total Demand Per day(litres)	Unit Capacity (l/hr)	Duration of Unit operation (hr)	No of units	Quantity of Treated water(l/day)
12000 (Aprrox)	5	60000	5000	6	2	60000

Tentative Location of all Proposals



Sl. No	Facility proposed	Land required
1	DEWATS	10.75 Ha
2	Compost plant	1.5 Ha
3	Landfill	1.2 Ha
4	Health centre	0.05 Ha
5	Incubation / Skill Development Centre	1.5 Ha
6	Socio-cultural facility	0.8 Ha
7	Schools	0.4 Ha
8	Trading Hub	1.0 Ha
	Total	17.2 Ha

Land suitability for development was done by considering factors like proximity to NH, proximity to water bodies, slope etc.

Exact location of the facilities can be earmarked with the availability of land ownership data so that proposals can be assigned on Panchayat / Government land

SUMMARISATION AND LEARNINGS

Design with Nature and People

Villages are on an accelerated path of transformation, in every sense

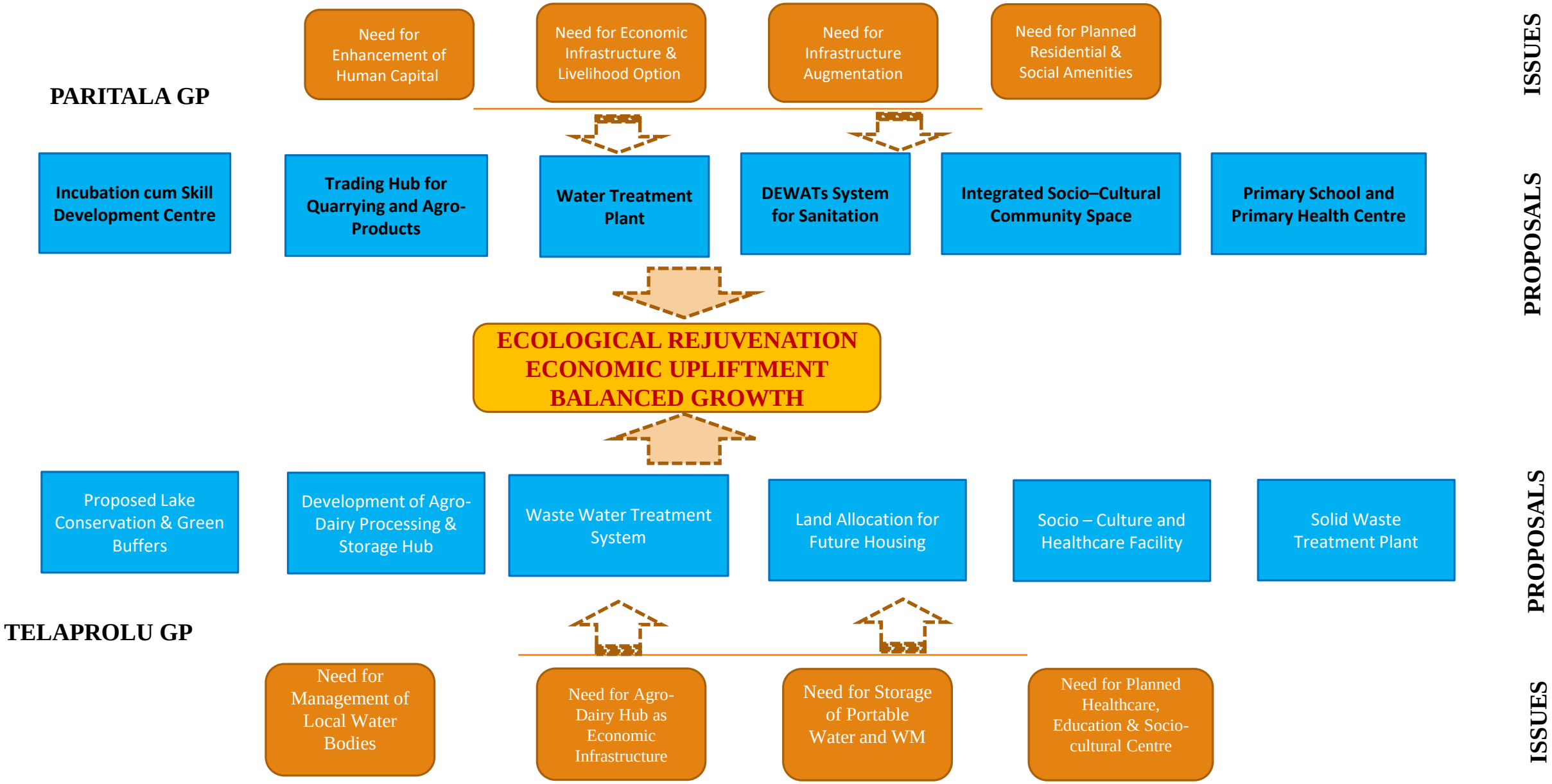
*While transformation towards development and growth is essential, it needs to be in harmony with the **character of the village** and **its resources and needs***

*There has to be a focus on **bringing back elements of Nature***

*There needs to be a focus on **providing accessible basic amenities** of living environment*

*There should be a focus on **enabling human capacities***

*There must be efforts to **endow economic opportunities** with necessary infrastructure*


PARITALA GP
Need for Enhancement of Human Capital
Need for Economic Infrastructure & Livelihood Option
Need for Infrastructure Augmentation
Need for Planned Residential & Social Amenities
ISSUES
Incubation cum Skill Development Centre
Trading Hub for Quarrying and Agro-Products
Water Treatment Plant
DEWATs System for Sanitation
Integrated Socio–Cultural Community Space
Primary School and Primary Health Centre
PROPOSALS
ECOLOGICAL REJUVENATION
ECONOMIC UPLIFTMENT
BALANCED GROWTH
Proposed Lake Conservation & Green Buffers
Development of Agro-Dairy Processing & Storage Hub
Waste Water Treatment System
Land Allocation for Future Housing
Socio – Culture and Healthcare Facility
Solid Waste Treatment Plant
PROPOSALS
TELAPROLU GP
Need for Management of Local Water Bodies
Need for Agro-Dairy Hub as Economic Infrastructure
Need for Storage of Portable Water and WM
Need for Planned Healthcare, Education & Socio-cultural Centre
ISSUES

THANK YOU

TEAM SPA VIJAYAWADA