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Creating Self Resilience through Rural Development

A study of the peri urban areas near Vijayawada, suggesting strategies for development and connecting them with the main town.

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Abstract: **Integrated Rural block Development** is a new **approach** to rural planning, which emerges from the fact that past efforts have contributed very little to improving the well-being of people, the concept is based on the notion that such micro planning directly involves the people at the grassroot and the fruits are directly reaped by the participants. As migration of people for the sake of employment and better living are increasing in number, and when it fails, they lead to become “urban poor”. The present situation of pandemic has taught us a lot, and it is a live example which could be taken to learn how people are suffering from the problem of migration, where they are left with nothing, and the concept of returning back leads to a question of what next, in relation to survival of themselves and family. The main aim of the study is to analyse the development of rural areas and implementation of policies in those areas. People need to get aware of the thought of use of existing resources like agriculture, water and other natural sources, and create self-employment through this initiative and government help. The study area, Vijayawada Rural block covering 187 SqKms and comprising 18 villages, is located in west of Krishna district., well connected with the City, the research is done in the through various data that are collected are discussed, through primary and secondary sources, and analysis of the existing data Obtained from Rurban cluster guidelines and other sources, and the total block is divided into 4 different zones, according to connected villages nearby and strategies proposed therefore, there would be a significant change in the rural development, as tomorrow as a part of urban agglomeration, these villages would become parts of the main city, and hence development strategies suggested would work in terms of “Integrated rural block development planning”

Index Terms – Rural development, migration, self-employment, analysis, Rurban cluster.

I. INTRODUCTION

It seems almost self-evident that in this age of globalized trade and information, an integrated approach to development is the only possible course. Rural development is the process of improving the quality of life and economic well-being of people living in rural areas, often relatively isolated and sparsely populated areas. Nearly 73 percent of India’s population lives in more than 5.5 lakh villages. The ministry has been supporting programmes such as the Integrated Rural Energy Programme, and many other programmes such as “Rurban Mission” for the sake of development and self-resilience among villagers, as villages are the place where natural resources are available in abundance and can be used, where application of sustainable principles can be done at the best afteraall physical wellbeing (PWB) and Social wellbeing (SWB) are both important factors for a human to live in any condition. The Village/rural development Projects would be environment-friendly and create avenues for local employment, thus improving the quality of life and leading to overall sustainable development. Development and analysis are being taken up to demonstrate the techno-economic parameters, provide operational experience, mobilize local communities and firm up the proper

Framework, the activities envisaged under these kind of projects would be:

- (i) Identification of village.
- (ii) Preparation of a Village base plan, Survey info and analysis from socio economic survey.
- (iii) Suggesting proper strategies of development on data obtained from survey and application of sustainable principles.
- (iv) Obtaining a green rating/calculation of green rating points to obtain certification.
- (v) Application after analysis and inference.

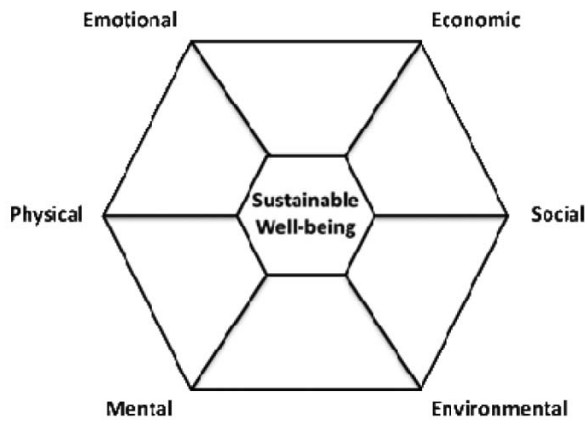


Figure 1: Connected parameters for well-being of people.

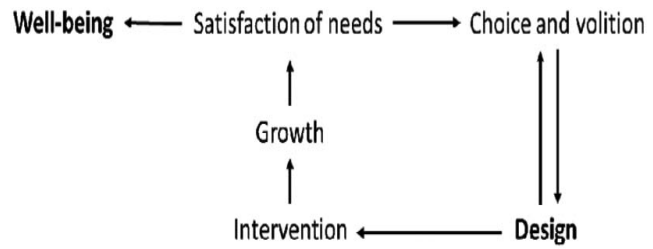


Figure 2: The design flow required.

In future these small pockets which appear to be nearby the main town, under urban agglomeration will become a unified part of the developed town, and sustainability is the future trend, which would help to cater atleast 40% of the needs of people, avoiding people from rurals to shift to the city, so suggesting a development which would help them in terms of self-resilience and self-employment would avoid creation of urban slums and avoid people from becoming “urban poor”, thereby creating a healthy environment and living condition overall.

II GROWTH FATORS OF THE STATE AND RELEVANCE TO VIJAYAWADA RURAL

Andhra Pradesh (AP) is located in the Southern peninsula of India. The state has well-developed social, physical and industrial infrastructure and virtual connectivity. It also has good power, airport, IT and port infrastructure. The state has a large coastline ofnearly 974 kms, temple destinations, lush green forests and spicy cuisine which have led to increase in domestic tourism in thelast few years. Andhra Pradesh is one of the largest producers of brackish water shrimps and freshwater prawns.

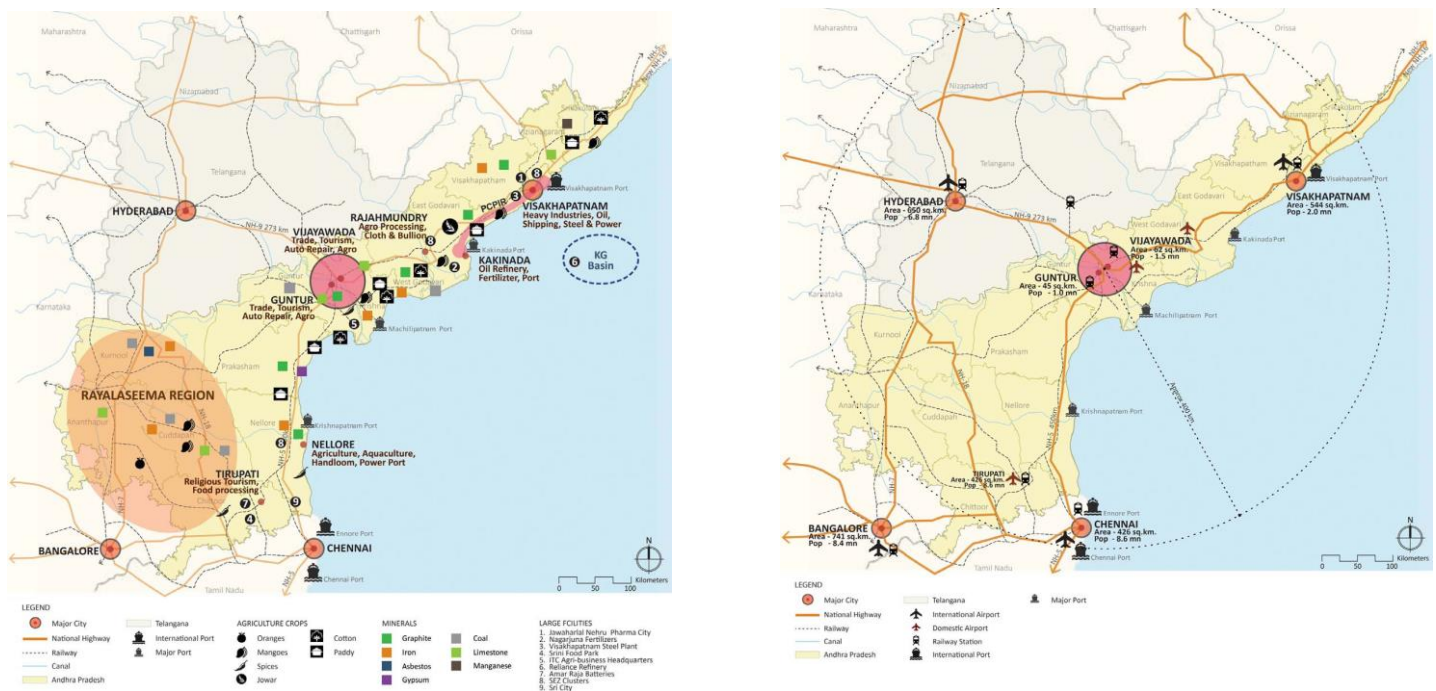


Figure 3: Connectivity of the state and existing natural resources. (Source: A.P dev. Report)

The presence of rich climatic and soil conditions makes Andhra Pradesh a major agricultural belt. Few of the leading crops produced in the state include rice, chilly, oilseeds, cotton, pulses and gram. Moreover, the state is also home to a thriving fisheries industry and ranks first in the production of fish and shrimp in India and contributes more than 70 per cent of the country’s cultures shrimp production.

III ABOUT VIJAYAWADA RURAL

Vijayawada (Rural) Mandal, with population of about 1.5 lakh is Krishna district's the 5th most populous sub district, located in Krishna district of the state Andhra Pradesh in India. The majority of the population, nearly 88% (about 1.3 lakh) live in Vijayawada (Rural) Sub District urban part and 12% (about 19 thousand) population live in the Vijayawada (Rural) Sub District rural part, overall literacy rate in the rural block has decreased by 1%, male literacy has gone down by 1% and female literacy rate has gone down by 2%.

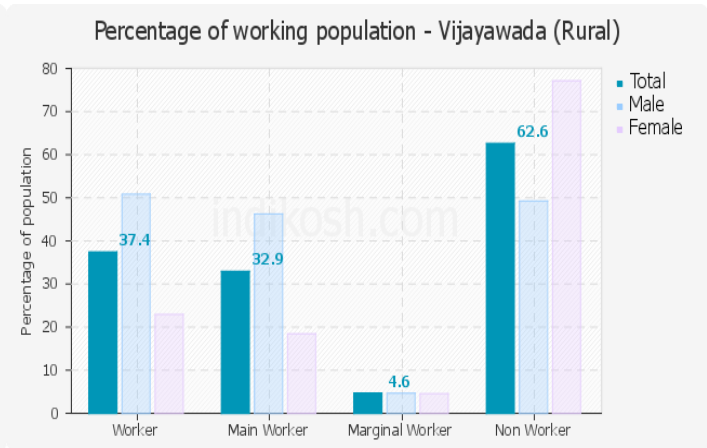
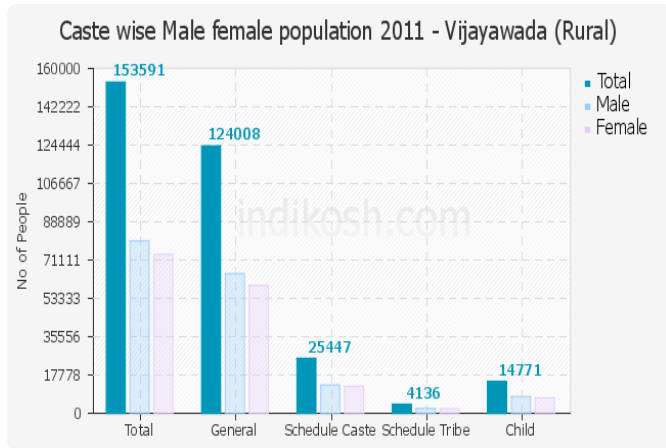


Figure4: Population Chart, Source (Indikosh.com)

Figure5: Population Chart, Source (Indikosh.com)

There are 17 villages in the block, among them Gudavalli is the most populous village with population of 6653 and Vemavaram is the least populous village with population of 508. Rayanapadu is the biggest village in the sub district with an area of 8 km² and Shabada is the smallest with 1 km².

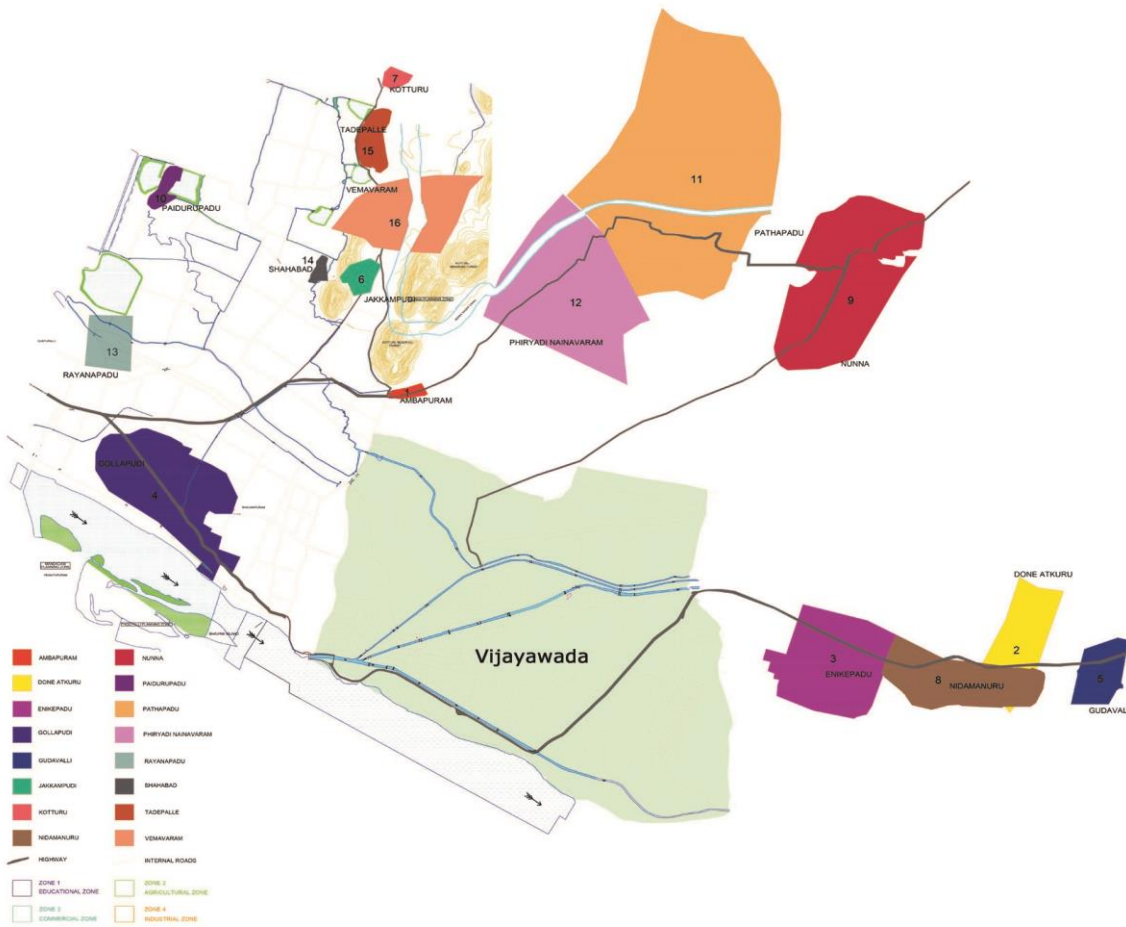


Figure6: Map showing Details of Vijayawada Rural Block.

Table 1: Details of Individual Villages of the Rural Block.

village	population	Literacy percent	Work percentage
Ambapuram:	2058	64	60% marginal workers 20% agriculture.
Done At kuru:(OG)	3200	70	70% marginal workers 10% agriculture.
Enikepadu:(OG)	10,000	64	60% marginal workers 20% agriculture.
Gollapudi (OG)	30000	70	56% marginal workers 10% agriculture.
Gudavalli (ST)	6600	80	80% marginal workers 10% agriculture.
Jakkampudi (OG)	1309	65	40% marginal workers 50% agriculture.
Kotturu (R)	6000	80	50% marginal worker ,20% agriculture.
Nidamanuru (OG)	10000	73	50% marginal workers,12% agriculture.
Nunna (CT)	14000	70	50% marginal workers 15% agriculture.
Paidurupadu(R)	2410	67	40% marginal workers,15% agriculture.
Pathapadu (OG)	3370	60	60% marginal workers,20% agriculture.
Phiryadi Nainavaram (OG)	2800	58	50% marginal workers 15% agriculture.
Prasadampadu (CT)	13000	70	60% marginal workers 10% agriculture.
Ramavarapadu (CT)	20000	75	75% marginal workers 15% agriculture.
Rayanpadu(R)	3000	70	:60% marginal workers 10% agriculture.
Shabada(R)	6000	70	60% marginal workers 30% agriculture.
Tadepalli (CT)	4000	70	60% marginal workers 20% agriculture.
Vemavaram(R)	200	70	60% marginal workers 30% agriculture.

III ISSUES IDENTIFIED

3.1 **Basic Amenities**, such as- Water supply network, Drainage network, Road network, etc. to be provided in villages, there should be proper design for waste management, whether it can be solid waste management or it can be liquid waste management.

Recreational activities are to be there, so that people of village could get knowledge about that activities.

Villages should have in hygiene conditions, because these conditions prevent disease and it is most important to have clean villages.

Proper sanitation facilities should be involved in village area, so that people can remain healthy, especially through cleanliness.

3.2 Reviews obtained from people justifying the above said.

Offices of different working departments in government sectors were established in rented buildings in nearby panchayats, considering the availability of office spaces at affordable prices, due to more no. of people shifting from Hyderabad to work in the head offices, after state bifurcation, people started staying in rented houses in nearby areas, this caused an increase in population drastically which was creating problems, residents faced problems with the poor sanitation and garbage management implemented by the panchayats, garbage had become a big problem in those areas, due to sudden new settlements, and strategy of management, dumper bins were not available in the

areas and citizens were throwing waste on streets, despite of people trying the workers were not able to clear the garbage for weeks, this led to stinking smell and home for stray animals, as said Javvadi Padmavati, a homemaker from Vuppara-bavi Street in Gollapudi, they were not able to come out of houses due to the bad odour, and vacant lands in the locality leading to become dumping yards, so an appeal to the Government to consider their problems and maintain sanitation was given by the residents of Ramavara-ppadu, Prasadampadu and Enikepadu who were also facing the same problems with garbage and untidy roads, parallelly pure water availability had also become a big issue to be sorted.

3.3SWOT:

Strengths:

Nature and landscape potentials Recreation value and tourism potential.

Competencies in agriculture and forestry.

Land availability, Cultural heritage, protected buildings.

Naturally available resources such as water ponds, natural trees and 50% of the people owning cattle, can lead to development of poultry and milk production industry, agriculture also can take lead.

Weakness:

Availability of funds for development.

Bad communication networks, availability of resources other than natural.

Lack of communication among villagers, and awareness of using resources.

Most of the required infrastructure facilities lagging back, inspite of availability of resource and land.

Village boundaries not defined and marked, hence it lacks in safety measures.

Opportunities:

Potential for added value in agriculture. Forestry, biomass, tourism, biotechnology.

Availability of natural resources like agriculture, fresh air, surroundings, low height buildings, so an opportunity to give a thought on F.S.I can be given.

Potential for development in future as areas nearby are coming up in terms of real estate and other developments.

Proper division of zones according to potential can lead to development of particular sectors and easy for people to communicate.

Threats:

Migration hinders regional economic development.

Proposed development schemes from government or other agencies always do not work beneficial to the people.

Acceptance of people and maintaining after development is a big threat.

Availability of facilities to the earliest.

IV SUGGESTED STRATEGIES FOR DEVELOPMENT

4.1 Division of connected villages into Zones as per potential of development and connectivity to each other would work as it would help in individual sectors coming up as IT corridors and commercial stretches lie in cities.

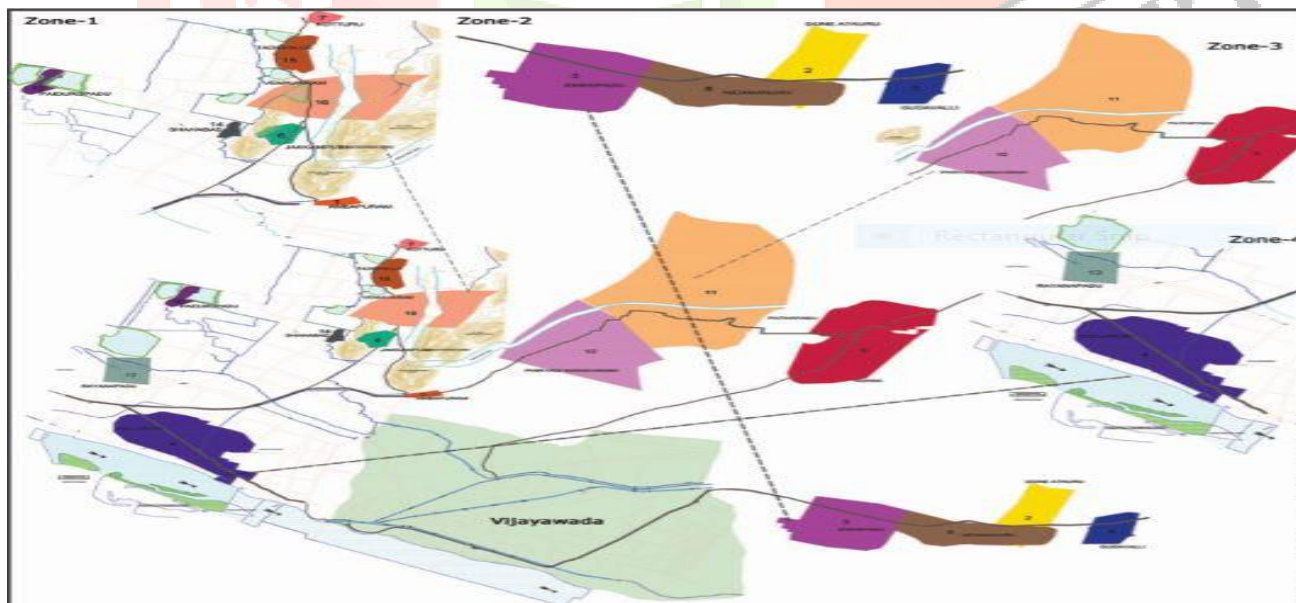


Figure7: Map showing Details Zone Division in Block.

Zone 1: Ambapuram, Jakkampudi, Kothuru, Paidurupadu, Shabad, Tadepalli, Vemavaram—Combination of CT+OG, to be developed as agricultural zone as more % of people depending on agriculture and around also agricultural fields are available.

Zone 2: Gudavalli, Atkuru, Enikepadu, Nidamanuru- Combination of CT+OG to be developed as Industrial zone as more of industrial works go on, -- oil. Automobile parts, rice mills, storages, godowns.

Zone 3: P. nainavaram, Pathapadu, Nunna -Combination OG+CT, development as institutional zone as more of educational institute coming up.

Zone 4: Gollapudi, Rayanpadu-Commercialzone. As directly connected to the main town and also real estate coming up hence commercial sector may grow up.

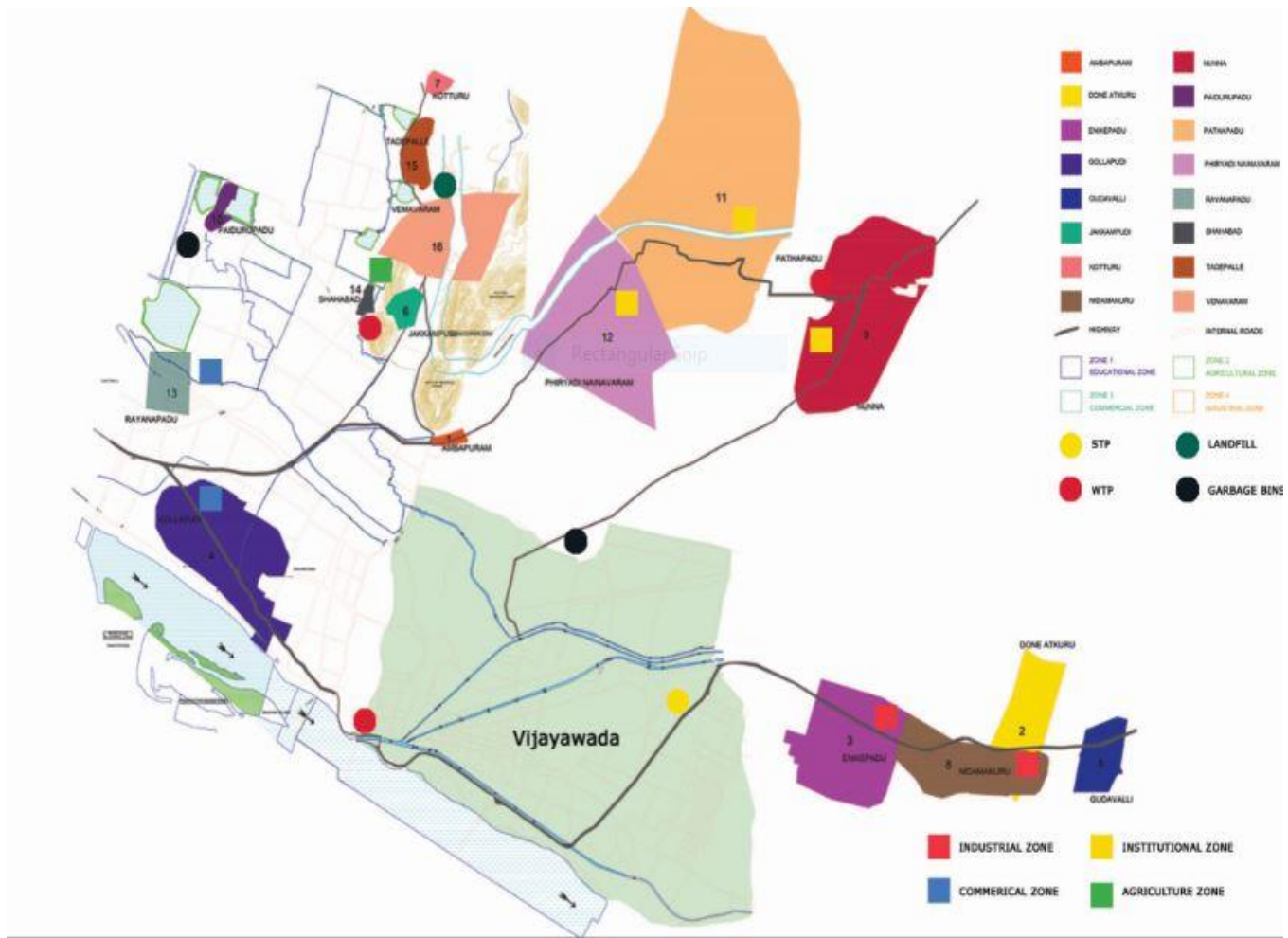


Figure7: Map Showing points of STP, WTP and garbage disposal points.

Sewerage System:

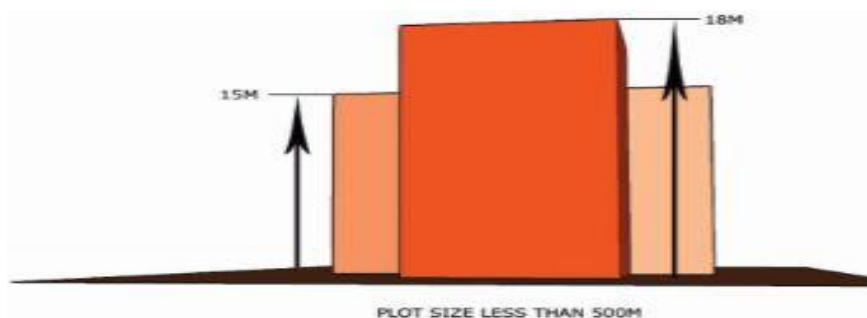
Current sewerage generation is 130MLD & future sewerage generation will be 200MLD, the total STP capacity is 148MLD and a demand gap of 100MLD is required, therefore, additional STP'S are required as at present only 20% of it is treated and reused.

Solid Waste:

The existing Jakkampudi site is at present sufficient to cater waste for 2025, but with growing population and coming up industries more than one plant will be required.

Water Supply:

Presence of SS tanks in Gollapudi and near Polavaram canal, total 190MLD water supply is done, at present it is not enough and requirement of divided units of water supply and also drinking water sources to be provided through water atm provision or R.O units.



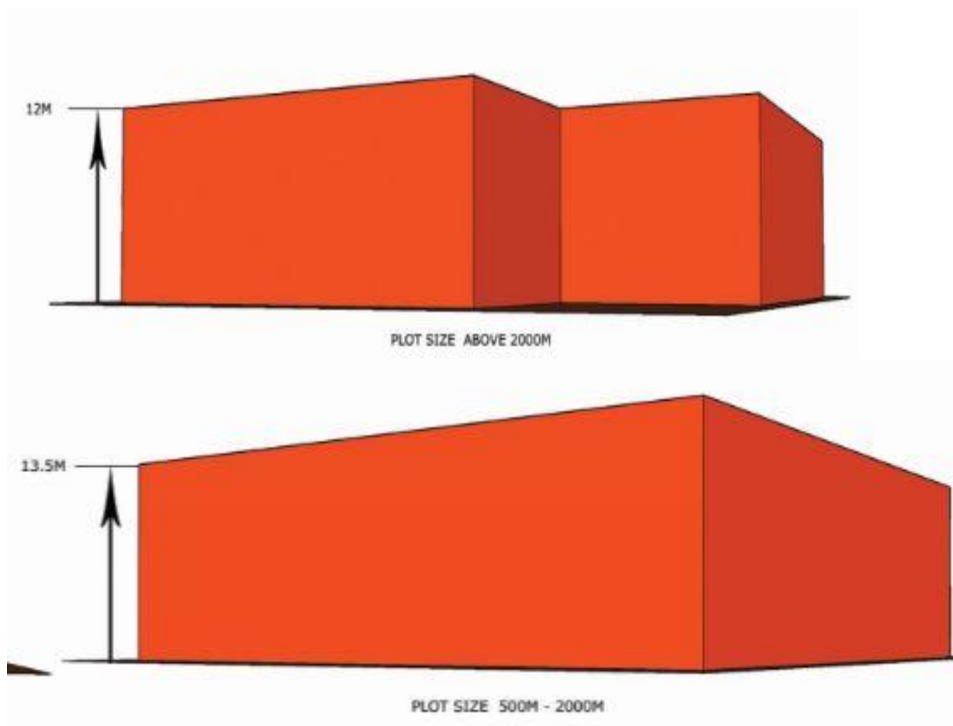


Figure8: Sketches Showing Respective plot sizes and heights.

Residential units, advantages in development:

Here the plots having size less than 500m are unable to achieve the full F.S.I of 2.7 because of height restrictions applied parallelly to this registration and similar scenario being observed in the plot size greater than 500m where they have larger plot sizes and unable to acquire the height provided, so a strategy suggesting that F.S.I and height regulation restriction not to go hand in hand, rather one single approach to be followed.

V CONCLUSION

Although disadvantaged, rural communities have the potential for self-development and dignity. Given the right opportunity, we believe that they possess the power to solve their problems. The project can prove to be useful in promoting investment in rural areas, as per the available resources and data obtained, the design would help the people to become independent, the improvement in connectivity through road connections and different zones coming up according to the potential would help in systematic planning avoiding confusion and cluster of all different types of business or any type of activities clubbed in one place, instead segregation would help in division of the same type of people living or working at one place, in turn helping in investments come up, for example IT corridors in cities, or commercial stretches, prove to be multipurpose destination for people and trade. The concept of Rural Development was, and remains, useful in its recognition of the multi-faceted nature of a process of change. IRBD hence would make a big difference to lives of people of the rural block. It would contribute to poverty alleviation, self-employment and migration to other places, mainly through improved food security, incomes, health status, housing, water, sanitation, education, environment.

REFERENCES

1. Alexander, C., Silverstein, M., Angel, S., Ishikawa, S., & Abrams, D. (1975). *The Oregon experiment*. New York: Oxford University Press.
2. Barton, H. (Ed.). (2000). *Sustainable communities: The potential for eco-neighbourhoods*. London: Earthscan Publication.
3. Bład M.: Kulturowe funkcje wsi i rolnictwa [in:] *Wielofunkcyjność rolnictwa* (ed. J. Wilkin). IRWiR PAN, Warszawa 2010, 165-180.
4. Bradshaw, T. (2008). The post-place community: Current perspectives and future directions. *Community Development*, 39(1), 5–16.
5. Chaipattana Foundation. (1999). Self-sufficient economy. *The Chaipattana Foundation Journal*, August 1999. Retrieved May 23, 2003, from: <http://www.chaipat.or.th/journal/aug99/thai/self.html>
6. Chansomsak S. & Vale, B. (2007). Guidelines for architect actions in sustainable community development (Manuscript presented in the 7th International Conference on Urban Planning and Environment). Retrieved February 6, 2008, from: <http://www.arch.ku.ac.th/upebangkok/fullpaper.html>
7. Crane, D. A., & Ramage, W. T. (2000). Scaling up green strategies for the next millennium. In A. Shanableh & W. P. Change (Eds), *Towards sustainability in the built environment* (pp. 19-30).
8. Brisbane, Australia: Faculty of Built Environment and Engineering, Queensland University of Technology.
9. Day, C. (2003). *Consensus design: Socially inclusive process*. Oxford: Architectural Press.
10. Environs Australia. (1999). *Our community our future: A guide to local agenda 21*. Melbourne, Australia: Environs Australia.
11. Hengrasmee, S. (2005). [The study of sustainable architectural design in Thailand]. Phitsanulok, Thailand: Faculty of Architecture, Naresuan University.
12. Hungerford, H., & Volk, T. (1990). Changing learner behavior through environmental education. *Journal of Environmental Education*, 21(3), 8-21.
13. Articles from Newspaper and other sources.
14. A.P Development Report.

References

- [1] Ali, A. 2001. Macroeconomic variables as common pervasive risk factors and the empirical content of the Arbitrage Pricing Theory. *Journal of Empirical finance*, 5(3): 221–240.
- [2] Basu, S. 1997. The Investment Performance of Common Stocks in Relation to their Price to Earnings Ratio: A Test of the Efficient Markets Hypothesis. *Journal of Finance*, 33(3): 663-682.
- [3] Bhatti, U. and Hanif. M. 2010. Validity of Capital Assets Pricing Model. Evidence from KSE-Pakistan. *European Journal of Economics, Finance and Administrative Science*, 3 (20).