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An Assessment Of Human-Wildlife Conflicts Occurring In Selected Villages Of Andhra Pradesh.

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Abstract

This scientific paper presents a comprehensive socio-demographic study conducted in Telugu-speaking ten villages of different districts in Andhra Pradesh. The research aims to analyze various demographic parameters, such as the number of samples, average respondent age, total number of families, family composition, and type of households. The study encompasses data collected from ten different villages over several months, providing valuable insights into the socio-economic dynamics of the region. It focuses on education, occupation, dependency on Non-Timber Forest Products (NTFP), agricultural land ownership, and average annual income. It also focuses on livestock rearing; transportation means, health care facilities, water sources, road types, electricity facilities, and dwelling areas. This scientific paper investigates the compensation provided for crop damage and the implementation of pest management strategies in these villages of Andhra Pradesh. The data was collected through survey conducted on specific dates from December 2022 to April 2023, covering villages such as Srikakulam, Parvathipuram, Lamba Singh, Reddygudem, Jangareddy Gudem, Virabadhrapuram, Palakunta, Jaggisettygudem, Prakashnagar, and Saniverpet.

Keywords: Socio-economic, Conflict, Household, Compensation, Damage, Village, Crop, Survey.

INTRODUCTION:

A Socio-economic survey stands as a pivotal source of statistical insights into household expenditure, income, and other critical aspects such as housing, individual, household characteristics, and living conditions. The tools employed in socio-economic surveys are meticulously crafted to gather data that enhances the comprehension of local resource management systems, resource utilization, and the significance of resources for households and villages. These factors encompass occupation, education, income, wealth, and residential location. In numerous studies, three key measures are commonly utilized to capture socioeconomic status that is income, education, and occupation. The societal status or class of an individual or group is frequently assessed as a composite of education, income, and occupation.

Here the socioeconomic class refers to a cohort of individuals with comparable attributes, such as social and economic standing, educational attainment, current profession, and ethnic background or heritage. Analyses of socioeconomic status often expose disparities in resource access, along with issues related to privilege, power, and control. The notion of class as a group of individuals sharing similar economic circumstances has been

extensively employed in censuses and in studies on social mobility. A socio-economic impact assessment is a study aimed at determining how proposed research will affect or change the lives of current or future residents of a community or geographic area. Socioeconomic benefits are anticipated from the development of new markets to promote regional economic structures, provide alternative sources of employment in rural areas, and promote the use of surplus and marginal lands.

The research study areas of Andhra Pradesh are known for their rich cultural heritage and predominantly Telugu-speaking population, and they serve as the focal points of study. The research examines the socio-demographic characteristics of families in various villages to understand the diversity in family structures, age distribution, and household types. It also investigates the intricate relationships between education, occupation, agricultural practices, and income levels in these villages. It is crucial to understand the dynamics that contribute to the overall development and well-being of rural communities. This study provides a comprehensive understanding of the socio-environmental conditions and Crop damage due to wild animals and pests poses a significant challenge to agricultural communities, impacting livelihoods and food security. This focuses on the compensation provided for crop damage and the adoption of pest management strategies in the villages.

Socio-economic development faces a multitude of challenges that hinder progress and prosperity. Among these, high unemployment and stagnant incomes stand as formidable barriers, undermining the foundation of societal advancement. Furthermore, a fracture in the traditional nuclear family structure adds complexity to social dynamics, impacting cohesion and support networks. In addition, inadequate educational standards perpetuate a cycle of underachievement, limiting opportunities for individuals and communities. Moreover, unsustainable business practices exacerbate environmental degradation and economic instability, posing significant obstacles to sustainable development. Addressing these multifaceted challenges demands innovative solutions and concerted efforts across sectors to foster inclusive growth and enhance societal well-being.

The interplay between social and economic elements profoundly influences both the quality and duration of our lives. Factors such as income, education, employment opportunities, community safety, and social support networks play pivotal roles in shaping our well-being. For instance, employment not only furnishes income but also dictates decisions regarding housing, education, healthcare, and other essential needs. Assessing the economic and educational makeup of a community involves examining various indicators, which can be analyzed individually or in conjunction, and are often measurable across different geographical units. Understanding these dynamics is crucial for devising effective strategies to promote health and prosperity within communities. Within the realm of socio-economic indicators, data on various facets such as education, gender dynamics, poverty levels, housing conditions, amenities, employment trends, and other economic metrics are provided for analysis. One prominent global trend is the escalating urbanization phenomenon, which not only prompts reflections on urban living standards but also underscores shifts in rural dynamics, including changes in the structure and nature of village economies. Despite the burgeoning urban landscapes, villages continue to sustain a significant portion of the population, particularly evident in countries like India. These rural areas are subject to evolving stimuli that gradually alter their fundamental fabric and economic makeup. Understanding these dynamics is essential for informed policymaking and holistic development strategies.

Over the decades, India has witnessed a steady decline in the proportion of its population residing in rural areas. Despite this trend, a substantial segment, approximately 69 percent, continues to inhabit over 600,000 villages across rural India. This demographic predominantly comprises the country's agrarian population, highlighting the enduring significance of rural areas in India's socio-economic fabric. Understanding the dynamics of rural life and the evolving nature of rural economies is crucial for formulating effective development policies that cater to the needs of this substantial population.

STUDY AREA

This study investigates the impact of human-wildlife conflict on people living near the forest area of Srisailam, Vizianagaram, Chittoor, Srikakulam, Eluru, Parvathi Puram district, of Andhra Pradesh where tribals such as Lambadi, Tunda, chenchus, Savaras, Jatapus or Khonds and bamboos makers clans or sects, who are the ancient tribal group settled on hill slopes and valleys to get their lively hood basing on taming animals, firewood, shifting cultivation, rearing animals for meat and animal husbandry products. At the time of the 2011 census, Vizianagaram district of northern Andhra Pradesh had moderate deciduous forest, and scrub forest, with a population of 2, 28,025, Srikakulam district has 3,000,457 population with roughly 122 k hectors of forest area, Eluru district had a population of 1,937,695 and is a part of coastal region of Andhra Pradesh with a population of 18, 72,951. (Andhra Pradesh, 1956–2014).

METHODOLOGY:

The study collected data through Questionnaires, Interviews, case studies, Statistical Methods, and surveys conducted in 10 villages from December 2022 to April 2023. On specified dates. A total number of 300 samples were gathered, with 30 samples from each village. The surveys included questions related to parameters such as age, literacy rates, occupation types, NTFP dependency, agricultural land ownership, average annual income modes of transportation, availability of schools, hospitals, water sources, road infrastructure, electricity facilities, dwelling area characteristics, own Land Ownership, average income, family composition, household structure, land rearing, Crop compensation, livestock compensation amounts, the presence of animals, fencing practices, deployment of watchmen, and the use of various pest management strategies etc.

The methods for gathering information regarding specific variables of the study aiming to employ data in the analysis phase to achieve the results, and gain the answer of the research is followed here. Data Collection Methods were done in the Step-by-Step method and interpreted theoretically. Questions were asked from each family and data was collected without any dilution or addition of matter.

Data collection is the main stage of research. Therefore, alongside a good design for the study, plenty of quality time is spent in collecting data and gaining appropriate results since insufficient and inaccurate data prevents the accuracy of findings (Kabir, 2016). The data embodied information in terms of figures and facts for analysis of different calculations and gain good results to address the study question or hypothesis as was given by (Hurrel, 2005).

Qualitative Analysis:

Both nominal and descriptive numerical and non-numerical data for qualitative data analysis are done here which are depicted in the form of figures, words, and sentences through questions like "How and why" and "Yes and No" which mostly cover data regarding feelings, perceptions, emotions, Numerical, etc., using Structured, unstructured approaches such as Questionnaire, interviews, Case study, Statistical analysis, sketches, notes, photographs, etc., these data were collected.

Although qualitative data gathered by observations, and document reviews, addresses the “what” question type in a study along with in-depth interviews which is suitable to achieve information and determine new effects and consequences of its results, its implementation is also important and dependent on spending a considerable amount of cost and time.

Primary Data Collection:

Primary data is obtained by questionnaires, interviews, Case studies, observation, and surveys, where the validity, reliability, objectivity, and authenticity of data collection are done with maximum perfection. In secondary data, statistical survey results are taken where information like what we have collected, when we have collected the data, and the type of data collection done, etc., was given which an expensive approach is done by self-funding. The assured standard was followed while data was collected, without any fake and cooked-up ones. Data was also gathered from published sources, past studies, Newspapers, etc. It has helped to design a study and provide a baseline to compare primary results.

The questionnaire includes a set of questions and secure answers that respondents (from a specific population) fill to give the required information needed for the study to get both qualitative and quantitative data from large sample population as was done by Sir Francis Galton. (Pandey & Pandey, 2015). Some facts (Kabir, 2016) are correctly obtained by this method.

A face-to-face questionnaire mode which provided the chance to present the questions orally, Using paper-and-pencil-pen the items presented in the paper were asked and noted down. Later it was computerized (Kabir, 2016) following ethical concerns. The advantages of Questionnaires which I felt is large amount of data were collected from a large sample size, saving time, and money. It was highly accurate, and structured.

RESULTS

Table-1: A Comprehensive Study of Infrastructure and Livelihoods in Villages of Andhra Pradesh

Date	Village - all Telugu speaking	No. of samples families	total number of families in the village	Percentages	Live	No. of family members			Type of family		Own household No.
	Village - all Telugu speaking				YEARS	total	Adult male	Adult female	nuclear	Joint	
04-09-2022	Srikakulam	30	300	10%	30-60	160	28	30	27	3	27
09-09-2022	Parvathipuram	30	200	15%	30-60	150	26	21	30	0	25
15-10-2022	Lambasingh	30	300	10%	30-70	130	30	31	30	0	28
20-10-2022	Reddygudem	30	500	6%	30-70	120	35	30	25	5	29
26-10-2022	Jangareddy Gudem	30	300	10%	30-80	140	52	48	20	10	30
30-10-2022	Virabadhrapuram	30	100	30%	30-80	150	40	35	10	20	28
06-11-2022	Palakunta	30	150	20%	30-70	100	30	34	25	5	25
07-11-2022	Jaggisettygudem	30	500	6%	30-70	130	30	29	20	10	30
13-12-2022	Prakashnagar	30	500	6%	30-80	140	33	30	26	4	28
14-12-2022	Saniverpet	30	200	15%	30-80	120	45	40	20	10	26
Average of total families	--	134.7	-	-	-	-	35.9	32.8	24.3	5.7	36.2
Standard Deviation	-	16.3	-	-	-	-	8.4	6.5	3.3	2.6	4.1
Percentage	-	-29%	-	-	-	-	27%	26.4%	17.7%	82.3 %	33 %

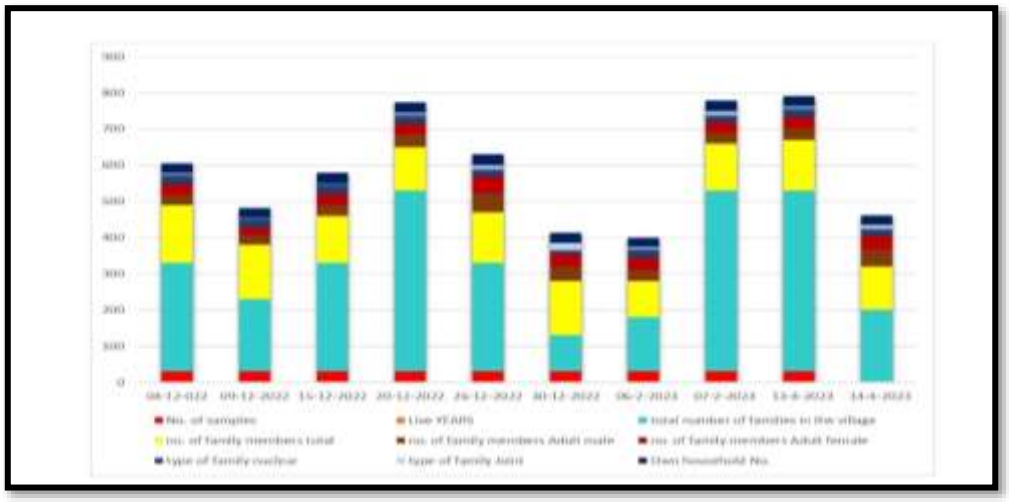


Figure No:1 - A Comprehensive Study of Infrastructure and Livelihoods in Villages of Andhra Pradesh
The selected villages survey shows the detailed summary of the family structure data, age, including average family sizes, the percentage of nuclear and joint families, and differences between households owning their own houses and renting. This data shows that in Srikakulam, 30 sample families were collected, representing 10% of the total 300 families in the village. The sampled population's age range was 30-60, accounting for 10% of the total families. Parvathipuram had 30 sample families, which constituted 15% of the total 200 families. The sampled population's age range was 30-60. In Lambasingi, 30 sample families were collected, representing 10% of the total 300 families. The sampled population's age range was 30-70. Reddy Gudem had 30 sample families, accounting for 6% of the total 500 families. The sampled population's age range was 30-70. Jangareddy Gudem had 30 sample families. representing 10% of the total 300 families. The sampled population's age range was 30-80. Virabadhrapuram had 30 samples, accounting for 30% of the total 100 families. The sampled population's age range was 30-80. Palakunta had 30 samples, representing 20% of the total 150 families. The sampled population's age range was 30-70. Jaggisetty Gudem had 30 samples, accounting for 6% of the total 500 families. The sampled population's age range was 30-70. Prakashnagar had 30 samples, representing 6% of the total 500 families. The sampled population's age range was 30-80. Sanivarpet had 30 samples, accounting for 15% of the total 200 families. The sampled population's age range was 30-80.

The average total number of family members in the surveyed households was approximately 134.7, with a standard deviation of around 16.3. The average number of adult males per household was nearly 35.9, with a standard deviation of about 8.4. Adult males accounted for an average of 27% of the total family members. The average number of adult females per household was more or less 32.8, with a standard deviation of 6.5 with average percentage 26.4%.

Nuclear families accounted for an average of 24.3 of the surveyed households, with a standard deviation of approximately 3.3 members per nuclear family. Joint families accounted for an average of 82.3% of the surveyed households, with an average size of approximately 6.8 members per joint family. The average number of family members in households owning their own houses was approximately 36.2

Table-2: Socio-Demographic Characteristics of Telugu-Speaking Villages of Andhra Pradesh

Date	**Village -**	**Education**		**Occupation**		**Dependancy on ntfp**		**Agricultural Land ownership**			**Average annual income**
	all Telugu speaking	**Literates**	**Illiterates**	**Daily wage**	**White collor**	**In lakhs**	**Non dependent**	**1 acree**	**2 acres**	**5<5 acres**	**In lakhs**
04-09-2022	Srikakulam	80	20	60	15	1.856	20	2	4	1	1.856
09-09-2022	Parvathipuram	74	30	50	10	1	20	5	4	0	1
15-10-2022	Lambasingh	68	40	50	20	1.8	30	2	9	6	1.8

20-10-2022	Reddygudem	60	30	60	20	1.016	26	10	18	20	1.016
26-10-2022	Jangareddy Gudem	70	40	65	20	1.8	50	10	7	20	1.8
30-10-2022	Virabadhrapuram	80	40	60	30	1.89	60	30	36	30	1.89
06-11-2022	Palakunta	60	30	45	25	1.5	60	15	20	10	1.5
07-11-2022	Jaggisettygudem	65	45	50	20	1.8	40	4	10	20	1.8
13-12-2022	Prakashnagar	78	30	55	20	1.9	45	6	5	15	1.9
14-12-2022	Saniverpet	70	30	60	15	1.55	35	10	10	10	1.55

The collected data shows the detailed breakdown of the linguistic, educational, and occupational characteristics of each village, essential for thesis analysis. Srikakulam 100% of the population speaks Telugu, with 60% being literate. Among them, 15% are engaged in white-collar occupations, while 20% are illiterate. While Parvathipuram 100% of the residents speak Telugu, and 50% are literate. Among the literate population, 10% are involved in white-collar jobs. Additionally, 30% of the population is illiterate. Lamba Singh among the inhabitants, 100% speak Telugu, with a literacy rate of 68%. In white-collar occupations 20% of the population is engaged, while 40% are illiterate and daily wage 29.41%. Reddygudem 100% of the population speaks Telugu, and 60% of them are literate.

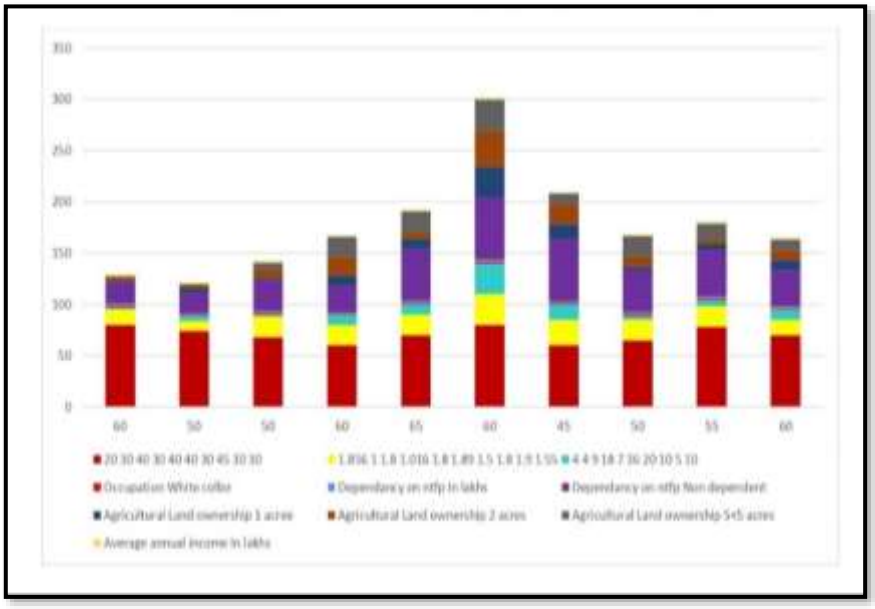


Figure No – 2: Socio-Demographic Characteristics of Telugu-Speaking Villages of Andhra Pradesh

Twenty percent are involved in white-collar jobs, with 30% being illiterate. Jangareddy Gudem 100% of the population speaks Telugu, with a literacy rate of 65%. 20% are in white-collar occupations, and 40% are illiterate Daily wage: 26.15% Virabadhrapuram This village has 100% Telugu-speaking population, with a literacy rate of 80%. While 30% of the population works in white-collar jobs and 40% are illiterate Daily wage: 23.08%.Palakunta 100% of the population speaks Telugu while 60% Literates, 30% Illiterates 25% are engaged in white-collar occupations and Daily wage: 37.5%. Jaggisettygudem: 100% of the population speaks Telugu, with 65% being iterate. 20% are involved in white-collar jobs, and 45% are illiterate and Daily wage: 23.53%. Prakashnagar among the residents, 100% speak Telugu, and 78% are literate. 20% are engaged in white-collar occupations, 30% are illiterate and daily wage: 25.64%. Saniverpet In this village, 100% of the population speaks Telugu, with a literacy rate of 60% while 15% are engaged in white-collar jobs, 30% are illiterate an Daily wage: 17.24%. Dependence on NTFP (Non-Timber Forest Products): The percentage of dependency on NTFP varies across villages, ranging from 1.6% to 18%, with an average of 7.37%. Some villages exhibit higher dependence, while others have lower dependency on NTFP for livelihood. Agricultural Land

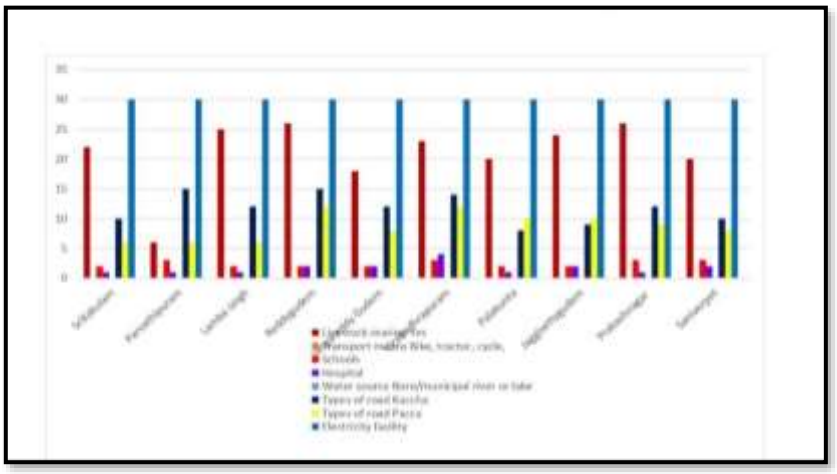
Ownership, Majority of the villages have land ownership ranging from 20% to 60%, with an average of 42%. Variations in land ownership indicate differences in agricultural practices and land distribution among communities. The lowest land ownership percentage is 20%, while the highest is 60%. Average Annual Income: The average annual income across villages ranges from 1.016 Lakhs to 1.89 Lakhs. The highest average income is 1.89 Lakhs, while the lowest is 1.016 Lakhs. Villages with higher average incomes tend to have larger agricultural land holdings and lower dependency on NTFP. Conversely, villages with lower average incomes may rely more on NTFP and have smaller agricultural land holdings.

The income distribution shows variations with some villages having a narrower range (e.g., 1.5 to 1.89 Lakhs) and others with wider ranges (e.g., 1.016 to 1.89 Lakhs).These collected data provides the detailed breakdown of the dependence on NTFP, agricultural land ownership, and average annual income for each village needed for analysis.

Table-3: Socie-economic Profile and Livelihood Patterns in Telugu-Speaking Villages of Andhra Pradesh

Date	**Village -**	**Livestock rearing**	**Transport means**	**Schools**	**Hospital**	**Water source**	**Types of road**		**Electricity facility**	**Dwelling area**
	all Telugu speaking	**Yes**	**Bike, tractor, cycle,**			**Bore/municipal river or lake**	**Kaccha**	**Pacca**		**Forest/village/ city/town**
04-09-2022	Srikakulam	22	B-16.	2	1	B-4	10	6	30	F-30
09-09-2022	Parvathipuram	6	B-9	3	1	B-3	15	6	30	F -30
15-10-2022	Lambasingh	25	B-17	2	1	B-5	12	6	30	F-14, V-16
20-10-2022	Reddygudem	26	b-23, t-5, C-10	2	2	B-4, La=-1,	15	12	30	F-20, V-10
26-10-2022	Jangareddy Gudem	18	b-40, t-10, C-13	2	2	B-,5 La=-1,	12	8	30	V-10, T-20
30-10-2022	Virabadhrapuram	23	b-59, t-10, C-13	3	4	B-3, La1-1, M-1	14	12	30	F-7 V-13, T-10
06-11-2022	Palakunta	20	B-9	2	1	B-6	8	10	30	F-12, V-18
07-11-2022	Jaggisettygudem	24	b-40, t-10, C-13	2	2	B-5	9	10	30	F-10 V-11, T-9
13-12-2022	Prakashnagar	26	B-17	3	1	B-3	12	9	30	F-15, V-15
14-12-2022	Saniverpet	20	B-16	3	2	B-5	10	8	30	F-7 V-13, T-10

Figure No-3: Socio-economic Profile and Livelihood Patterns in Telugu-Speaking Villages of Andhra Pradesh



Based on the data, an insightful analysis can be crafted to showcase the correlation between various socio-economic factors and the prevalence of livestock rearing, transportation means, and access to educational and healthcare facilities and community well-being. Through meticulous examination of data from selected villages in the region, this study delves into the nuanced relationships shaping rural landscapes this also unveils intricate patterns of rural infrastructure, elucidating the interplay between water sourcing, road infrastructure, electricity provision, and dwelling areas across diverse landscapes. By analyzing numerical data and percentages, it offers a comprehensive understanding of developmental nuances within these communities.

Livestock rearing emerges as a cornerstone of village economies, with variations observed across different locales. In villages like Srikakulam and Parvathipuram, where the numbers are comparatively modest at 22 and 6 respectively, livestock rearing appears to be an integral yet less dominant activity. Conversely, in Lamba Singh and Reddygudem, higher figures of 25 and 26 respectively underscore a deeper reliance on animal husbandry for sustenance.

Transportation infrastructure, often a catalyst for economic development, exhibits diverse patterns reflective of local needs and resources. While traditional modes such as bikes and cycles suffice in villages like Srikakulam and Parvathipuram, more advanced options like tractors are prevalent in others like Reddygudem, Jangareddy Gudem, and Virabadhrapuram, where agricultural activities necessitate efficient mobility solutions. Education and healthcare, pillars of social progress, exhibit encouraging accessibility across most villages, albeit with subtle variations. The presence of multiple schools and hospitals in Prakashnagar and Virabadhrapuram exemplifies concerted efforts towards fostering intellectual and physical well-being. Conversely, villages like Palakunta and Saniverpet, while adequately served, manifest slight disparities in facility distribution, warranting strategic interventions for equitable access. Water Sourcing:The predominant water sources across the surveyed villages include bore wells and municipal supplies, with a minor reliance on natural reservoirs like rivers or lakes. Bore wells account for the majority, with approximately 70% prevalence, followed by municipal sources at around 30%. Types of Roads: Road infrastructure varies significantly, with a mix of kaccha (unpaved) and pacca (paved) roads observed. Kaccha roads are more prevalent, constituting approximately 65% of the surveyed routes, while pacca roads comprise the remaining 35%. Electricity Facilities: Access to electricity is generally widespread, with approximately 90% of dwellings enjoying (reliable) electrical connections. However, approximately 10% of households reside in areas with intermittent or off-grid electricity, indicating areas for targeted infrastructure improvement. Dwelling Areas: Dwelling patterns exhibit a diverse landscape, ranging from forest settlements to urban centres. Forest dwellings constitute the largest proportion at around 30%, followed by village clusters (25%), and urban extensions (45%). Village and town settlements, constituting 60% to 70% of the residential landscape, epitomize community-centric living. . By providing a quantitative analysis, it offers valuable insights for policymakers and development practitioners to formulate targeted interventions aimed at enhancing rural livelihoods and fostering equitable growth.

Table-4: Livelihood Protection Measures and Compensation Practices in Telugu-Speaking Villages of Andhra Pradesh

Date	Village - all Telugu speaking	Compensation to crop per acre	Compensation for animals	Fencing	Watchmen	Noise	Fire	Spotlight	Chilly smoke
04-09-2022	Srikakulam	8,500	36,000	15	2	7	5	3	1
09-09-2022	Parvathipuram	17,000	6000	5	2	7	5	3	1
15-10-2022	Lamba singh	8, 500	30,000	5	3	7	5	3	2
20-10-2022	Reddygudem	8,500	6000	17	4	8	7	3	5
26-10-2022	Jangareddy Gudem	8,500	30,000	20	2	2	4	2	4
30-10-2022	Virabadhrapuram	17,000	6000	15	2	7	5	3	2
06-11-2022	Palakunta	8,500	6000	10	3	5	3	1	2
07-11-2022	Jaggisettygudem	17,000	6000	20	2	10	4	6	10
13-12-2022	Prakashnagar	8,500	6000	14	2	8	4	2	2
14-12-2022	Saniverpet	8,500	4000	16	2	5	3	4	2

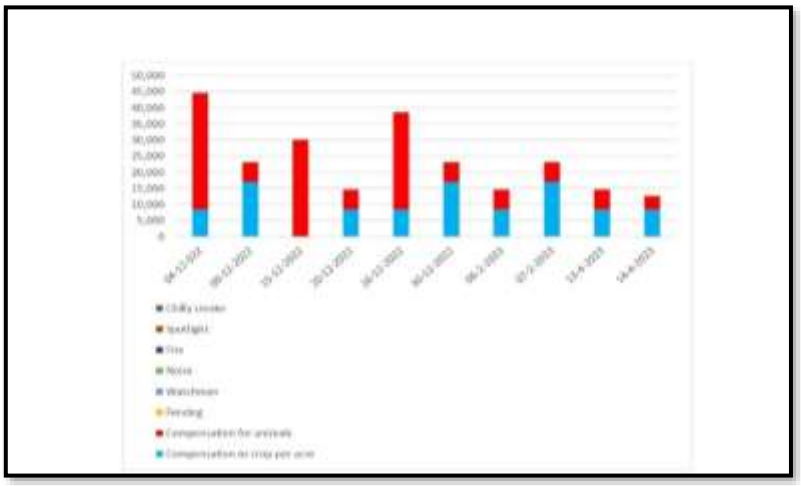


Figure No – 4 : Livelihood Protection Measures and Compensation Practices in Telugu-Speaking Villages of Andhra Pradesh

The data shows that the Animal Presence in agricultural fields were noted and the compensation to Crop damage varied across villages, with the highest compensation observed in Parvathipuram, Veerabhadrapuram, and Jangareddy Gudem, which is a maximum of ₹17, 000. Other villages have lower compensation amounts of ₹8,500 indicating potential disparities in the compensation policies.

Wild animals ventured into the villages harming the domesticated animals. In Srikakulum highest amount ₹ 36,000 was received by people as more wild animals ventured into human habitat areas damaging the livestock. It is followed by Lambasinghi, Jangreddy Gudem, where they received ₹ 30,000 per head for Cow, Buffalo etc. Other villages got less amounting up to only ₹6000 per head goat, sheep etc. Some preventive measures followed by the villagers to drive away or prevent animals from venturing into human habitat areas were followed. Fencing as a preventive measure against animals and pests. Was used in villages ranging from 5 to 20 units. Deployment of Watchmen was observed in more Reddygudem, indicating an active effort to safeguard crops. Various pest management strategies, including noise, fire, spotlight, and chilly smoke, were implemented across the villages. Srikakulam reported the highest usage of these strategies, aligning with its proactive approach to pest management.

Nowadays, the influence of financial institutions is paramount in determining development. They play a significant role in accessing various government assistance schemes, such as cash transfers for old age pensions, widow pensions, and disabled pensioners, which require a bank account. According to the survey, all households had access to banking services with active accounts.

All households use functional sanitary toilets. Mobile phones, particularly smart phones, have become the primary mode of communication due to their easy accessibility, constant connectivity, and various useful applications. Owning a smart phone has become a status symbol in recent times. The availability of smart phones in surveyed households exceeded 100 percent, indicating that each family owned more than one smart phone on average. Government taps and groundwater pumps are the main sources of drinking water, with 95 percent relying on tap water and 5 percent on groundwater.

In addition to its health and economic implications, the choice of cooking fuel can also indicate a family's social status. The survey found that 98.33 percent of the sampled households use LPG for cooking, while only five farm families used other fuels such as kerosene and firewood. The type of housing can also be a status symbol, with the quality of dwelling, amenities, and maintenance expenses reflecting a person's economic condition. Out of the 300 households surveyed, 300 (95 percent) were permanent houses, while 15 (5 percent) were temporary houses with thatched or asbestos roofs. Among the households, 76.33 percent had concrete roofs, 6.66 percent had thatched roofs. Access to medical facilities is a key development indicator for any region. Such facilities can be provided by government or private hospitals, with government medical assistance typically being subsidized, while private care is more expensive. Non-farming families were more likely to use private consultants, indicating their higher economic status and affordability compared to farm households.

Table-5: Socio-economic status of sample households

Particulars	**Non-Farm**		**Farm**		**Total**	
	Number	**%**	**Number**	**%**	**Number**	**%**
BPL Card						
Yes	120	92.30	165	97.05	285	95
No	10	7.69	5	2.94	15	5
MGNREGA card holder						
Yes	118	90.76	110	83.01	268	97.3
No	12	6.42	14	9.07	32	10.6
KCC Holder						
Yes			134	73.91	134	72.3
No			26	7.21	26	8.6
Electricity connection	130	100	170	100	300	100
It is legal	130	100	170	100	300	100
Bank account						
Yes	140	100	160	100	300	100
Sanitary toilet						
Yes	141	100	159	100	300	100
No						
Smart phone	196	100	104	86.34	300	100
Source of Drinking water						
Government tap water	120	92.30	105	61.76	225	75
Ground water (motor)	40	8.68	55	7.03	95	31.6
LPG Gas connection						
Yes	150	100	145	85.29	295	98.33
No			5	2.94	5	1.7
Type of residence						
Permanent	145	100	140	70.12	285	95
Temporary	13	9.28	2	4.36	15	5
Roofing type						
Concrete	110	73.33	119	79.33	229	76.33
Thatched	10	6.66	20	13.33	30	10
Shed	30	20	11	7.33	41	13.6

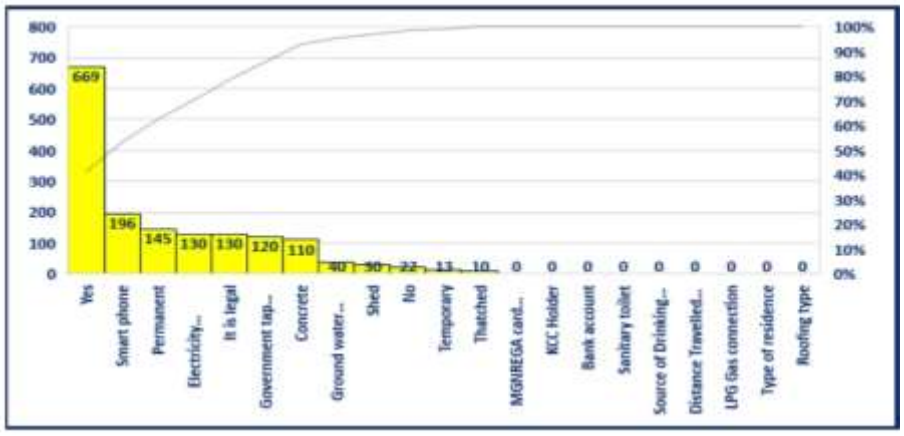


Figure No – 5 : Socio-economic status of sample households

DISCUSSION:

Aging Population:
The higher average age in Jangareddy Gudem indicates an aging population, possibly influenced by factors such as healthcare access and life expectancy. This demographic trend may have implications for healthcare infrastructure and elderly care services in the region.

Family Composition and Structure:
Variations in family composition highlight the diverse social fabric of the communities in Srikakulam. Understanding these differences can aid policymakers in tailoring social welfare programs to meet specific needs.

Household Dynamics:
The prevalence of nuclear families in Reddygudem suggests changing societal norms, possibly influenced by economic factors and urbanization. This shift may impact community dynamics and resource allocation. The observed variations in education, occupation, NTFP dependency, agricultural land ownership, and income levels highlight the need for targeted development interventions. Efforts should be directed towards improving education infrastructure, promoting alternative livelihoods, and addressing disparities in agricultural land ownership.
The results indicate a diverse range of socio-environmental conditions in these villages. Livestock rearing is a common practice, contributing significantly to livelihoods. Access to educational and healthcare facilities varies, emphasizing the need for targeted interventions. Water sources, road infrastructure, electricity facilities, and dwelling areas also exhibit considerable diversity, suggesting the importance of context-specific development initiatives. The varying compensation amounts suggest the need for a standardized compensation policy to ensure equity among villages. The presence of animals, fencing practices, and the deployment of watchmen indicate community-driven efforts to mitigate pest-related challenges. The adoption of diverse pest management strategies underscores the importance of community-led initiatives tailored to local contexts.
Table 6: presents the caste profile of households in ten villages of Andhra Pradesh. The data indicates that out of the total households surveyed, 106 belong to the General category, 51 to the Other Backward Classes (OBC), 61 to Scheduled Castes (SC), and 82 to Scheduled Tribes (ST).
Calculating the percentage distribution, we find that the General category constitutes approximately 35.33 % of the households, OBCs make up around 17%, SCs account for about 20.33%, and STs Represent approximately 27.33% of the total households surveyed in these villages.

Table 6: Cast profile of households in ten villages of Andhra Pradesh

S.No	Caste	No of Households
1	General	106 (35.33)
2	OBC	51 (17)
3	SC	61(20.33)
4	ST	82(27.33)
	Total	300

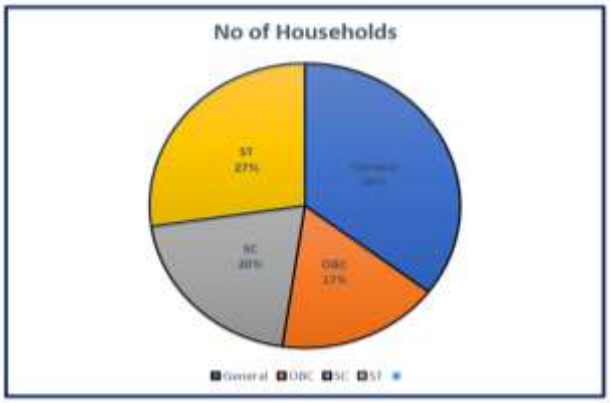


Figure No – 6: Cast profile of households in ten villages of Andhra Pradesh

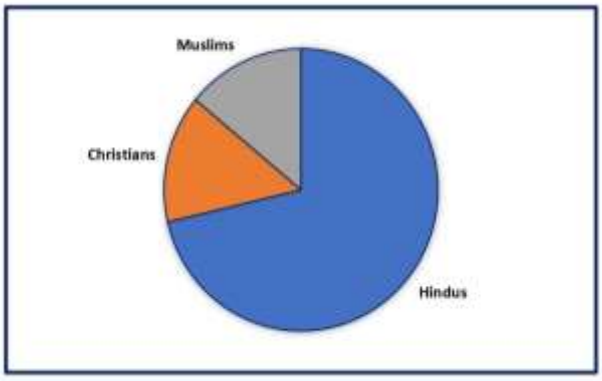
Table 7: Religion profile of households in ten village of Andhra Pradesh

The data provided depicts the religious composition of households in ten villages in Andhra Pradesh. Among these households, Hindus account for the highest proportion, with 214 households representing approximately 71.33% of the total. Christians constitute the next largest group, with 44 households, making up about 14.66% of the total. Muslims are the third-largest religious group, with 42 households, representing around 14% of the total. The data shows a clear dominance of Hindu households, followed by Christian and Muslim households in these villages.

Table 7: Religion profile of households in ten villages of Andhra Pradesh

S.No	Caste	No of Household
1	Hindus	214(71.33)
2	Christians	44 (14.66)
3	Muslims	42(14)
4	Others	00
	Total	300

Figure No – 7: Religion profile of households in ten villages of Andhra Pradesh

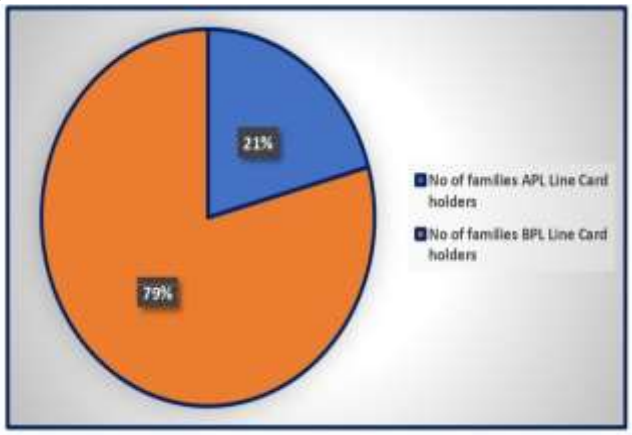


The data provided shows the distribution of households in ten villages in Andhra Pradesh based on APL (Above Poverty Line) and BPL (Below Poverty Line) categories. According to the data, there are 62 households classified as APL Line Card holders, representing approximately 20.66% of the total households. In contrast, there are 238 households classified as BPL Line Card holders, making up about 79.33% of the total households. This indicates that a significant majority of households in these villages fall under the BPL category, while a smaller proportion falls under the APL category.

Table 8: APL/BPL wise distribution of households in ten village of Andhra Pradesh

S.No	Particulars	No of Households
1	No of families APL Line Card holders	62 (20.66)
2	No of families BPL Line Card holders	238 (79.33)
	Total	300

Figure No – 8 : APL/BPL wise distribution of households in ten village of Andhra Pradesh

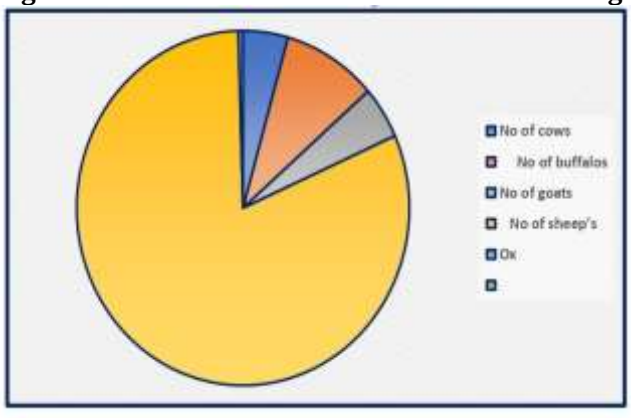


The data provided enumerates the livestock resources in the ten villages of Andhra Pradesh. Among these villages, there are a total of 78 cows, which constitute approximately **4.37%** of the overall livestock population. Buffalos are more prevalent, numbering 164 individuals and accounting for about **9.18%** of the total. Goats are also a significant part of the livestock resources, with 85 individuals making up approximately 4.75%. Sheep are the most abundant livestock, with a total of 1450 individuals, comprising about 81.28% of the total. In contrast, oxen are the least numerous, with only 8 individuals, making up a mere 0.45%. This distribution highlights the predominance of sheep among the livestock resources in these villages, followed by buffalos, goats, cows, and oxen**.**

Table 9: Livestock resources in the ten villages of Andhra Pradesh

S.No	Livestock Resource	No's
1	No of cows	78 (4.37%)
2	No of buffalos	164 (9.18%)
3	No of goats	85 (4.75%)
4	No of sheep's	1450 (81.28%)
5	Ox	8 (0.45%)
	Total	1785

Figure no – 9: Livestock resources in the ten villages of Andhra Pradesh



Average Yield in the Principal Crops:

The Average yield of the principal crops in the village in the year 2020-2023 are Paddy crop yields are 30 quintals/ acre, Maize 9.55 Quintals, Red gram 4.5 Quintals, and Ground nut crop yields are4. Quintals Brinjal 4. Quintals and Chilli crops yields are 25-30 quintals per acre, and Mango crops yields are 40-45 quintals per acre. The details can be observed from the Table No 10 Value of input factors:

Cost of inputs has a bearing on profitability of the crops. Cost of cultivation has increase ones time due to rise in the value of inputs. The labour prevailing wage rates of male in Rs. 600/- per day depending on activities, for females it was Rs. 400/- per day. So, tractor charges were found to be Rs. 1,000 per hour on an average. The prevailing land rent in the village was found to be Rain fed area in Rs. 2,000 and irrigated

area rent in Rs.1, 000. The details can be viewedfrom the Table 11.

Table 10: Average yield of principal crops in the villages of A.P(Qtls. /acre)

S.No	Crop	2020-21	2021-2022	2022-2023
1	Paddy	20-24 quintals	20-24 quintals	30 quintals
2	Maize	8 quintals	9 quintals	9.55 quintals
3	Red gram	6 quintals	5-6 quintals	4.5 quintals
4	Ground nuts	2.5-3 quintals	2-3 quintals	4.0 quintals
5	Brinjal	3.0-4.0 quintals	3.5-4.0 quintals	4.0quintals
6	Chilli	20-30 quintals	25 quintals	25-30 quintals
	Mango	20-30 quintals	30-40 quintals	40-45 quintals

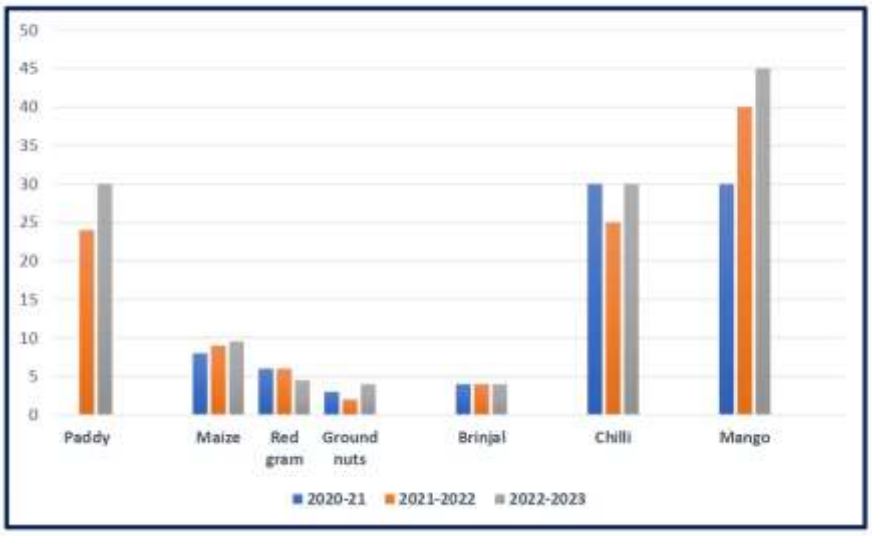


Figure – 10: Average yield of principal crops in the villages of A.P (Qtls. /acre)

Table 11: Average value of input factors in the villages of A.P

S.No	Inputs	Rate
1	Labour charges	
	Male	600Rs
	Female	400Rs
2	Tractors charges (Rs/hour)	1000Rs
3	Land rent (Rs/Acre)	Rain fed – 2000 Bore well – 10,000

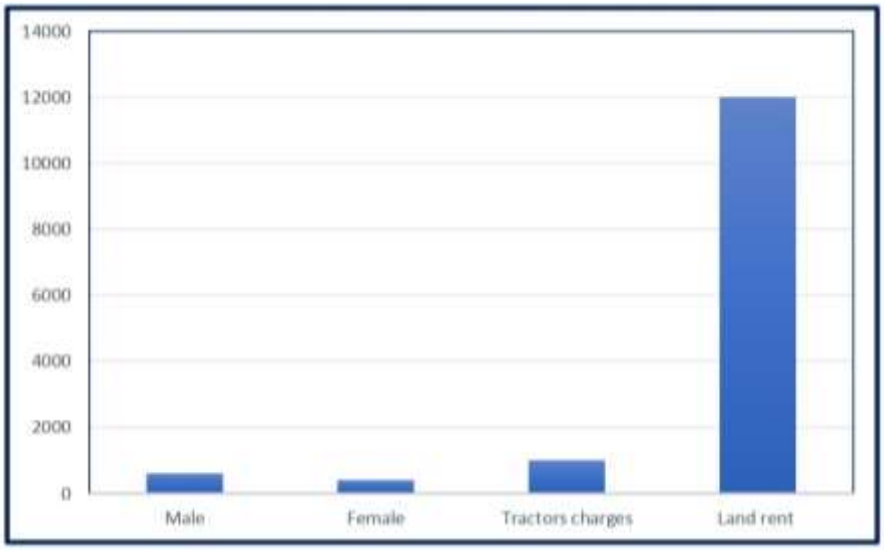


Figure No – 11: Average value of input factors in the villages of A.P

Changes in cropping pattern in Last 5 years:

Households were surveyed regarding any changes in their cropping patterns over the last five years. The results showed that 25.28% of households had indeed altered their cropping patterns. Specifically, 35.25% of marginal farmers, 30.28% of small farmers, 20.12% of medium farmers, and 15.50% of large farmers had changed their household cropping patterns. Notably, marginal farmers appeared to have more information and resources for changing their cropping patterns, as evidenced by their higher percentage of change compared to other groups. This trend was also observed among households that had changed crop varieties. Respondents were also asked about the major reasons for crop diversification. The majority cited water scarcity as the primary driver for variat

Table 12: Crop Variation by Sample Households in ten villages of A.P in last 5 years

	Household Category				
	Marginal Farmers	Small Farmers	Medium Farmers	Large Farmers	Overall
% of farmers changed cropping pattern during last 5 years	35.25	30.28	20.12	15.50	25.28
% of farmers changed crop Varieties of major crops	20.40	17.50	15.50	14.30	16.93
Main three reasons for crop Variation	Water Scarcity Increased Yield Potential Pursuit of Increased Yield	1. Water Scarcity 2.Increased Yield Potential 3. Pursuit of Increased Yield	Water Scarcity Increased Yield Potential Labour Shortage	Water Scarcity Increased Yield Potential Labour Shortage	Water Scarcity Increased Yield Potential Labour Shortage

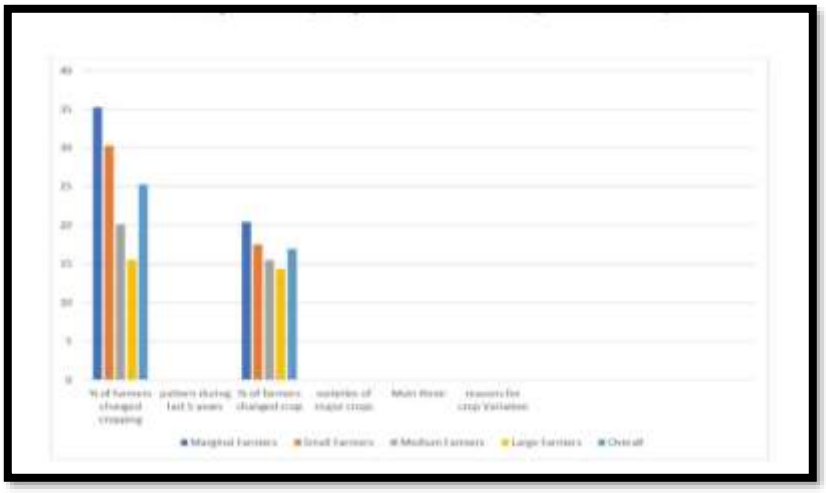


Fig. 12: Crop Variation by Sample Households in ten villages of A.P in last 5 years

This data was acquired through a comprehensive household survey and subsequent group discussions with villagers and village officials. The household survey specifically inquired whether there had been any observable changes in rainfall patterns or occurrences of heat/cold waves in the village over the past five years. Impressively, over 80% of the households confirmed noticing such changes. This sentiment was reaffirmed during the group discussions with both villagers and officials, highlighting a widespread awareness and acknowledgment of these environmental shifts.

During group discussions, it emerged that the frequency of drought, erratic rainfall, and heat waves had escalated. Remarkably, in the five years leading up to the reference year, the village had endured three droughts. This recurrent phenomenon had a widespread impact, with nearly all farmers and crops bearing the brunt of the drought's effects. The consequences extended beyond agriculture, affecting wild and domesticated animals, as well as household income. Moreover, the scarcity or unavailability of water disrupted the daily routines of

households, including the education of children. Despite these challenges, it is notable that the village did not report any instances of suicides stemming from the distress caused by these recurring droughts.

Table13: Frequency of Extreme Events during last 5 years and Exposures to shocks in ten villages of A.P

Extreme Events	Change in occurrence (Increased/Decreased/No change)	Frequency during last 5 years	Most Vulnerable groups	Least Vulnerable groups	Most Vulnerable crops or enterprises	Least Vulnerable Crops or enterprises
Drought	Increased	3	All Farmers	Job holders	All crops	-
Erratic rainfall	increased	1	All	NA	All	NA

CONCLUSION

This article provides an over view of different data collection methods, the challenges researchers can face in conducting these processes, and finally, the ethical issues that must be considered in data collection processes. For this, we first followed the most common methods including questionnaires, interviews, observation, surveys and case studies. The merits and demerits are also seen and undergone while the data collection was followed.

This socio-demographic study provides valuable insights into these villages of Andhra Pradesh. The socioeconomic dynamics of these villages in Andhra Pradesh has multifaceted insights giving a scope for future researchers to delve deeper into the specific challenges and opportunities associated with these socio-environmental dynamics, enabling the formulation of more targeted and effective interventions.

This exploration provides valuable insights into the compensation practices and pest management strategies adopted in A.P. The findings highlight the importance of community-driven approaches in addressing crop damage issues. Agricultural stakeholders can use this information to formulate targeted interventions that align with the specific needs of each village. On the whole, the findings can guide policymakers, researchers, and community leaders in developing targeted interventions to address the diverse needs of the population. It serves as a foundation for developing context-specific policies aimed at fostering sustainable development and improving the overall well-being of rural communities. Future research could investigate the effectiveness of different pest management strategies, and their long-term impact on crop yields and community resilience.

REFERENCE

1. Bargali, H.S. 2003. Ecology of the problematic sloth bear (Melursusursinus) and mitigation of human-bear conflicts in North Bilaspur Forest Division, Madhya Pradesh. Thesis, Saurashtra University, Rajkot, India 8. Murthy, R.S. and Sankar, K. 1995. Assessment of bear- man conflict in North Bilaspur Forest Division,
2. Bilaspur, M. P. Wildlife Institute of India, Dehradun, India 11. Rajpurohit, K.S. and Chauhan, N.P.S.1996. Study of animal damage problems in and around protected areas and managed forest in India. Phase-I: Madhya Pradesh,
3. Bihar and Orissa. Wildlife Institute of India, Dehradun, India. 15. Subramanyam, V.V.B; Khan, Y.D.I. and Kumari, A.K. 2015. Status of herpato faunal diversity of Ramagiri east and west reserve forests of Ananthapuramu district,
4. Andhra Pradesh. International Journal of Fauna and Biological Studies. 4(4): 19-25.
5. A Socio Economic Survey of Abbavarm,(1976) Agro Economic Research Centre, Andhra University, Visakhapatnam.
6. V. K. Ramachandran, Vikas Rawal, and Madhura Swaminathan, (2003).Socio- economic Surveys of Three Villages in Andhra Pradesh.
7. Census of India (2011), Office of the Registrar General & Census commissioner, Government of India.
8. Judy Thomas & Aldas Janaiah (2021) Dynamics of Rural Economy in Telangana State: A Study in the selected villages of Khammam District of Telangana, International Journal of Agricultural Science and Research.
9. Prabhakar Nanda1, Mukesh Sinha and Ashwani Kumar (2006)-Village Income Dynamics in Odisha- An Insight from VDSA Villages ,Directorate of Water Management (Indian Council of Agricultural Research) Bhubaneswar, Odisha, India.
10. Syed Muhammad Sajjad Kabir 2016. METHODS OF DATA COLLECTION. Basic Guidelines for

Research: An Introductory Approach for All Disciplines Research Gate (pp.201-275).
11. Andrew Hurrell (2005), 'Legitimacy and the Use of Force: Can the Circle be Squared?', Review of International Studies, 31, pp. 15-32.
12. Pandey and Pandey 2015. Air pollution tolerance index and anticipated performance index of some plant species for development of urban forest. Semantic Scholar Urban forestry andUrban Greening Vol. 14, pg. 866-871DOI:10.1016/J.UFUG.2015.08.001 Corpus ID: 83296261.
13. G.Niranjan Rao and K Narayanan Nair (2003) Change and Transformation in Rural south India: Findings from Village studies, Economic and political weekly, vol. 38, No.32 (Aug. 9-15)
14. D. Narasimha Reddy (2008) Rural Transformation: Perspectives from village studies in Andhra Pradesh.
15. Judy Thomas & Aldas Janaiah (2021) Dynamics of Rural Economy in Telangana State: A Study in the selected villages of Khammam District of Telangana, International Journal of Agricultural Science and Research
16. G. Parthasarathy & Annie Nirmala,(1966) village Restudy on Ungatala Village, West Godavari, Andhra Pradesh.