

**LIVING ENVIRONMENT AND HOUSING CONDITIONS OF JAGTI  
VILLAGE: A GEOGRAPHICAL ANALYSIS (2019)**

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## 1.1 INTRODUCTION

“Everyone has the right to a standard of living adequate for the health and well-being of himself and his family, including food, clothing, and housing and medical care and necessary social services, and the right to security in the event of unemployment, sickness, disability, widowhood, old age or other lack of livelihood in circumstances beyond his control.” Universal Declaration of Human Rights (Article 25.1)

Housing is a basic requirement of human well-being. Along with the requirement of shelter, other facilities in the micro environment of housing such as type of dwelling unit, drinking water, sanitation, drainage, etc., constitute housing condition of the people that forms a vital component of their overall quality of life. Housing is one of the basic needs of every individual as besides providing shelter and security, it also enables easy access to the credit market by working as collateral comfort / security. Inadequate and inappropriate housing is a manifestation of deprivation and is important both as a factor in enhancing human development that would not only contribute to enhancing productivity and efficiency but also enhance social dignity. Housing condition is the reflection of the socio-economic status of the human being. It provides significant economic security and dignity in society to a person. Shelter is one of the most important basic necessities of human being. Even the naked saints and pygmies need sound sleep and it is their physiological need. At some place man also need some sort of shelter places and it becomes the most concrete expression of human cultural activity and assumes various names and forms as well. Housing is one of the basic needs of man next to food and clothing as it provides him shelter and protection. The place or the environment in which the major part of the life of man is spent is the home and right from the beginning humans have devoted much of their time and energy towards the construction of comfortable dwellings. Its construction and location derive its importance in accordance with the existing natural conditions and the material available, as per his need. The size, type and quality of facilities available in a house reflect the social and economic status of the household. A house is meant to live in and to work in and store things in it , it is also a symbol of regional character, now a days, shelter doesn't meant just primitive shelter, but adequate quality, quantity and environment that it provides. House to a modern man is a comfortable shelter with all amenities and connivance of modern life and its surroundings would keep him healthy and cheerful throughout the year (Naik, 1981). Proper housing exerts a profound influence on human health and develops a character among them (Singh, 2009). The overall conditions, structure, type of house, pucca or kucha, number of rooms, space reflect the socio-economic status of the household. It is very simple to understand that if the house is zhopri or kucha, it means that the living conditions or status of the family is very poor. It is generally believed that health promoting factors such as housing conditions, availability of pure drinking water, sanitation, electricity etc. contribute a lot for the maintenance of good health of people which work more than the health facilities and the services (Nayar, 1997). If housing is to be considered as a basic deprivation, then the state in a democratic polity has a primary obligation to ensure that it is not just alleviated but eradicated altogether.

However, studies focusing on this basic deprivation in India is far and few although periodic collection of information relating to housing and related aspects are collected nationally by the Registrar of Census Operations through its decennial population census as well as by the National Sample Survey Organization for selected years. It is also equally important to note that while struggles for other basic entitlements such as food security, employment, social security, basic education and basic health care have a long history and are continuing such broad-based and prolonged struggle and advocacy for housing are relatively absent. This is not to underestimate the importance of the struggles in specific locations and for specific groups such as slum dwellers in many of the cities. As we shall see in this report, the condition of housing in rural areas is quite appalling and requirement exceeds that of urban areas. Going by several indicators, more than half the households in India i.e. covering more than half the population want and need better housing. Families in poverty seize every available opportunity to own a quality home. Indians take pride in their homes, patching them up after they crumble every monsoon by scavenging bricks and building their homes a wall at a time. The problem, however, is that a quality house is getting further and further out of reach for the common man and woman with bricks, mortar and labor costs up over fifty percent in many areas across India in recent years. A severe lack of financing for the rural poor without land title makes quality housing difficult to attain. The economic status of the household can be adjudged on the basis of size and quality of the house along with the provision of facility made in it. Not only the building and the facility but what sort of assets are in the house. Now there are assets like television, fan, telephone, internet services, two- wheeler or four- wheeler etc. These are very important indicators to comprehend the socio-economic status of people.

## **INDICATORS OF HOUSING CONDITION**

1. Condition of structure of houses: Condition of structure means the physical condition of the structure of the house. Both the Census and NSSO (National Sample Survey Organization) classifies the condition of households by means of a three-fold classification. While it is 'good', 'livable', and 'dilapidated' in the Census, it is 'good', 'satisfactory' and 'bad' in NSSO (National Sample Survey Organization). But both give similar definition to the categories. The condition of the house was considered to be 'good' if the structure did not require any immediate repairs, 'satisfactory' if the structure required immediate repairs but no major repairs and 'bad' if the structure required immediate major repairs.
2. Type of Structure of the Houses: Since the classification of households on the basis of the condition of structure is subjective, a more appropriate and objective indicator is the type of structure of the houses. NSSO (National Sample Survey Organization) classifies structure of houses as 'pucca', 'semi-pucca' and 'katcha'. By their constructional characteristics 'pucca' houses were considered better than 'semi- pucca' houses, which are again better than 'katcha' houses.
3. Number of Dwelling Rooms: In order to understand the quality of housing, the number of rooms in the dwelling is very important as an indicator of the level of congestion in the house.

4. Ventilation in Houses: Ventilation of housing units that is an important indicator of the quality of housing and living. Ventilation meant the extent to which the rooms were open to air and light.

5. Kitchen Type: The type of kitchen in the households which is also an important indicator of the quality of housing.

6. Predominant Material for Roofing: Roofing material like grass/thatch, bamboo, wood, mud, burnt brick etc. is another important indicator of housing.

Basic Amenities within Dwelling: The different characteristics of the structure of the dwelling, examined in earlier paragraphs, though important are only one element of the housing condition. Without amenities like drinking water facility, sanitation, electricity and other basic amenities in a household cannot function as a useful one.

7. Drinking Water: This is one of the most important aspects of housing. Tap water, hand pump and well are generally the three major sources among households.

8. Nature of access to source of drinking water

9. Distance to the source of drinking water

10. Adequacy of drinking water

11. Availability of Bathing Facility

12. Availability of Toilet Facility

13. Lighting

14. Cooking Fuel

Access to Basic Facilities outside the Dwelling: Access to basic facilities outside the dwelling like distance to the place of work, garbage and drainage facilities, access to road, etc is also an important indicator of the quality of life.

15. Access to road

16. Availability of Drainage Facilities: This facility is also an important one from the point of sanitation and its link with the health status of the people living in a locality.

17. Drainage arrangement: Drainage arrangement meant a system for carrying off waste water and liquid waste of the house. It may be noted that if no system existed to carry off the waste water of the house, but water flowed down by its own gravity, in an unregulated manner, it was considered as no drainage.

18. Garbage collection arrangement: Garbage collection arrangement meant the arrangement which usually exist to carry away the refuse and waste of households to some dumping place

away from the residential areas. In some places, the public bodies collected the garbage from the

premises of the household or from some fixed points in the locality where the residents put their garbage; in others, a body of residents themselves made the arrangement of carrying the garbage to the final dumping place away from residential areas without participation of any public body.

Thus, housing is one of the important and basic necessities of mankind. Adequate housing is an important component in overall growth and development of an individual wherewith he can enjoy mental and physical health and live in a state of security, peace and dignity. Housing is a fulcrum on which rests all the basic requirements required for a better living. It provides a shelter and raises the quality of life. It generates the conditions which are congenial to the achievement of social objectives such as health, sanitation and education. Housing performs multiple functions including many social needs of the household. In nutshell, it is closely associated to the process of overall socio-economic development.

Source: (HOUSING CONDITION IN INDIA: With special focus on Rural Areas and Socially Disadvantaged Sections, Volume I, Study sponsored by the SR Sankaran Chair, National Institute of Rural Development Hyderabad, Laurie Baker Centre for Habitat Studies Vilappilsala, Trivandrum 695573 Kerala, India December 2014).

## **1.2 STATEMENT OF THE PROBLEM**

Housing is a basic requirement of human well-being. Along with the requirement of shelter, other facilities in the micro environment of housing such as type of dwelling unit, drinking water, sanitation, drainage, etc., constitute housing condition of the people that forms a vital component of their overall quality of life. Housing is one of the basic needs of every individual as besides providing shelter and security, it also enables easy access to the credit market by working as collateral comfort / security.

Qualitatively speaking the housing conditions in most of the households in the study area is miserable. Most of the people don't have basic amenities like safe drinking water, bathroom facilities, toilets etc. which can raise health issues. Safe drinking water is the basic need and in the study area its unavailability is the biggest issue. People of the study area have no choice other than drinking this unsafe water. Another basic need i.e. indoor toilet facilities are either not available or not as per the required standards. Proper drainage facilities are not available creating problems during rainfall. The conditions are worse for the people occupying the periphery of the study area. Health facilities are negligible; number of educational institutes is far less to meet their educational needs. They are not well- aware of various programs being run by the government to take them out of such conditions.

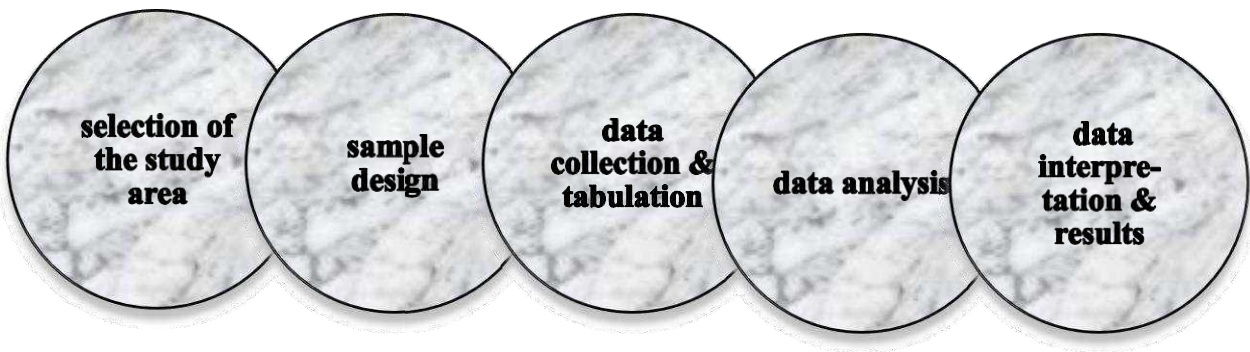
## **1.3 OBJECTIVES**

The objective of the present study is:

1. To analyze the living conditions of the study area on the basis of certain indicators:
  - a. Quality of housing, housing conditions,
  - b. Access to basic amenities within and outside the households.
2. To study and analyze the reasons for the present living conditions in the study area.

#### 1.4 DATABASE AND METHODOLOGY

- **Methodology:** It simply means a system of methods followed or the process used to collect information and data for the purpose of making decisions.  
The methodological aspects of the present study include selection of the village, sample-size, sources of data and data analysis are detailed here:
- **Methodology for Data Collection:** The interview schedule was designed in such a manner so as to obtain information on the social, economic and demographic background of the respondents including the age, material status and income, household assets, living conditions etc. The relevant data were collected by personally visiting the study area and interviewing all the respondents on the structured schedule. A total of 300 household were interviewed. For the present study, data and information has been collected from both the primary as well as secondary sources.
- **Primary Sources:** The main tool for the collection of primary data was the structured interview schedule. Personal observations were recorded, additional and specific information if any, was noted down. All possible care was taken regarding appropriate, valid and reliable information being noted down in the schedule.
- **Secondary Sources:** In order to have a clear understanding of the problem in the study area, relevant literature was screened. Census data of Jagti village was collected from District Census Handbook. Other sources which supplement the data information were: Department of land records, J&K, Department of rural development, J&K and internet.
- **Methodology for Data Analysis:** Master tables were prepared from the data collected in the schedule from the respondents. Aggregates and percentages were calculated and wherever possible, coefficient of correlation was applied.



## 1.5 REVIEW OF LITERATURE

- **INTERNATIONAL :**

**Hartman (1975)** in his book *Housing and Social Policy*, argued that conditions of housing should be comprehensively understood to include not only physical aspects of the dwelling unit, but also control over living conditions and the cost of housing in its relation to its perceived value and ability of economy to meet the expenses. The facilities that go along with housing includes the conditions of surrounding neighborhood, access to education, social life, access to community facilities and employment.

**George (1984)** found a significant increase in income and employment of the beneficiaries under rural development. The distribution of dairy to total family income increased from five per cent in pre-implementation period to thirty six per cent in post-implementation period.

**Thaha et al (1984)** observed that due to faulty identification, half of the identified families were already above the poverty line and were ineligible for getting assistance under the govt. program. There was acute coordination problem between the financing institutions, DRDA, Block authorities and the lead bank and sectoral bank that provided the infrastructure and technical support for implementation of rural development.

**Byrne (1985)** in his study on the effect of housing and other factors on respiratory conditions said that people in area of bad housing conditions were found to report more respiratory problems than those in good housing conditions.

**Varghese (1987)** felt that the housing problem is deep and could prove a waterloo. This book tries to discuss certain important implications and intricacies of Indian housing problem such as rural-urban dichotomy. It tries to show that real problem lies in the population explosion, urban expansion and widespread poverty.



**Yang (1997)** studied the damp housing conditions and respiratory symptoms in primary school children and found to report more respiratory symptoms was higher in homes with indicators of dampers with non-damper homes.

**Uyanga (2012)** find out the relationship between the ill-health and housing conditions in rural Akara Iborm state and explained that housing conditions of the people were found to be inadequate and failed to guarantee the health of the occupants.

**Howden (2012)** said that the quality of an indoor environment in health terms relies on the three factors – temperature, humidity and ventilation.

**Pickett (2012)** found that the three R's (reduce, reuse, recycle) hardly encapsulates effective home waste management. Composting outdoor trash and even some indoor trash such as non-animal kitchen scraps and paper and with worms, composting can be done in indoor with virtually no residual odors.

- **NATIONAL:**

**Govt. of India (1985)**, Planning Evolution organization revealed that twenty-six per cent of the beneficiaries were already above the poverty line in terms of the norms of annual income of Rs.3500 of a family of five and strictly speaking, didn't quality for provision of benefit under program.

**Department of Rural Development (1987)** conducted concurrent evaluation on rural development and reported that fifty six per cent beneficiaries were selected in the meetings of Gram Sabha, thirty-nine per cent by officials and other five per cent by others. It was observed that assets generated incremental income of more than Rs.2000 in twenty-seven per cent cases, between Rs.1001 to Rs.2000 in twenty-four per cent cases, between Rs.501 and Rs.1000 in seventeen per cent cases and up to Rs.500 in ten per cent cases, forty eight per cent of the old beneficiaries belonging to destitute and very poor group crossed the poverty line of Rs.3500 of the same group crossed the raised poverty line of Rs.6400.

- **STATE:**

**National Family Health Survey, Housing Characteristics of Jammu & Kashmir (NFHS-4, 2015-16):** Seventy-one percent of the households in J&K live in a pacca house and almost all household have electricity. Eighty-nine percent of the household use an improved source of drinking water, but only fifty three percent of the household use an improved sanitation facility (sixty-six percent in urban and forty-six percent in rural areas). One of the five household don't have sanitation facilities, which means that household members practice open defecation. Less than half (forty-six percent) in rural J&K have improved sanitation facilities. Almost two-thirds of the household (sixty four percent) have drinking water piped into their dwellings, yard. Forty-seven percent of the household appropriately treat their drinking water to make it potable. More than half of household (fifty-eight) percent use a clean fuel for cooking. Agricultural land is hold

- **LOCAL:**

**Krishnan (1984)** reported that selection of beneficiary families was not poor, as only 16 out of 80 sample households were really eligible for assistance under rural development. Out of these, only 3 crossed the poverty line. There was no significant impact of rural development on income generation. Largely the better off section got the beneficiaries.

**Chand (1986)** revealed that a majority of the beneficiaries indicated that their identification was done through village survey. Only 20 per cent of the beneficiaries crossed the poverty line of Rs. 3500 per annum and the remaining showed the improvements in their income but the incremental income was very much short of the poverty line.

**Khatkar (1987)** reported that majority of the rural development beneficiaries were wrongly identified because their annual income was already above the poverty line. The village level workers were assigned the responsibility of the household survey that was not properly trained to calculate annual income of the households. However the study showed that the rural development assistance made some positive impact on generating gainful employment and significantly increased their earnings and family expenses.

**Singh (1998)** observed that in certain case the individuals and the families were engaged not only in one type of occupation but also in two or more occupations and the importance of literacy and education was realized by the villagers. The number of illiterate persons was lower than those who knew reading and writing, though the number of educated individuals was very low.

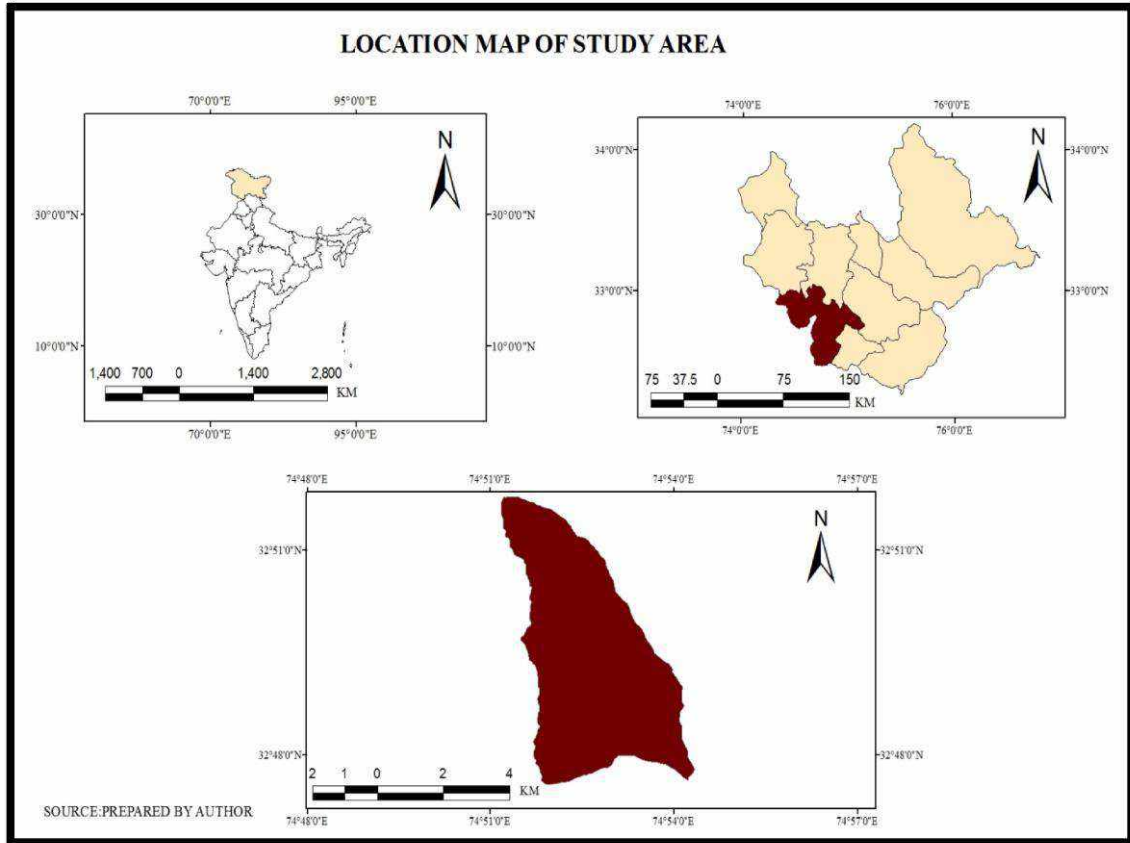
**Sundaram (1998)** argued that in pongalur block of Tamilnadu, there was improvement in income, employment level and asset position. The average asset improvement was highest among big farmers and least among landless laborers.

**Krishnamurty (2000)** highlighted the fact that there are inadequacies in respect of infrastructure facilities like roads, safe drinking water supplies, health care, educational facilities and so on. Fifty-five per cent of the household of the villages in study area had an income under Rs. 3000 per annum.

**Shylendra et.al. (2005)** revealed that high incidence of illiteracy among the SHG members caused higher dependency on leaders, poor record keeping and inability to meet the demand for loans. Illiteracy is a big obstacle in the growth of SHGs.

**Bhide et.al. (2009)** in his working paper revealed that not only the physical infrastructure but also social infrastructures such as education and health have remained ignored. Thus, the rural areas have been bypassed by the successive economic revolution that has made India a vibrant economic superpower.

**Parida (2012)** in his study showed that the socio-economic development of areas considering health, education, income and other variables were generally positively correlated with the type



## **2.1 STUDY AREA**

Jagti is a village in Dansal Block in Jammu district of Jammu and Kashmir, India. It is located 12km towards north from district headquarters Jammu. It is located 162km from state summer capital Srinagar. According to the census of 2011, the location code or village code of Jagti village is 005764. It is situated 20 km away from Jammu which is both district and sub district headquarters of Jagti village. As per 2009 statistics, Jagti village is also a gram panchayat.

## **2.2 CLIMATE**

The climate of Jagti is a humid subtropical climate (Koppen Cfa) much cooler than what is found in rest of the India, due to its moderately high elevation and northerly position. The village is surrounded by the Himalayas on all sides. Winters are cool, with daytime temperature averaging to 2.5 degree celsius and drops below freezing point at night. The average annual rainfall is around 720mm. Spring is the wettest season while autumn is the driest. The highest temperature reliably recorded is 38.3 degree Celsius.

## **2.3 VEGETATION**

Natural vegetation, often called as “green gold” is an important source of revenue in the state. The species and density of forests are directly influenced by lithology, rock structure, and altitude, aspect of slope, insolation and precipitation. These factors influence the vegetation of the region to a great extent. 10.54 square kilometer (51%) of the total village’s area is covered by forest.

## 2.4 SOIL

The undulating topography and steep slopes influence the formation of soil in Jagti. There is less absorption of moisture in soil due to more run-offs which washes away the upper layer of the soil and also the weathered material on steeper slopes. The depth of soil and soil profiles on steeper slopes are consequently shallower than that on gentle slopes. The soils are shallow, immature and highly susceptible to soil erosion.

The humus content varies from slope to slope and altitude to altitude. Depending on the availability of sunshine and rains, these soils are generally devoted to the cultivation of maize and wheat.

Being situated in the vicinity of Siwaliks, the village is traversed by numerous hill torrents, locally known as **KHAD**. These torrents remain dry over the greater parts of the winter and summer seasons and attain enormous size during rains.

## 2.5 DEMOGRAPHIC CHARACTERISTICS

Jagti is a large village located in Jammu tehsil of Jammu district, Jammu and Kashmir with total 668 families residing .The Jagti village has population of 3539 of which 1865 are males while 1683 are females as per Population Census 2011.

In Jagti village population of children with age 0-6 is 528 which make up 14.92 percent of total population of village. Average sex ratio of Jagti village is 907 which is higher than Jammu and Kashmir state average of 889. Child sex ratio for the Jagti as per census is 1008, higher than Jammu and Kashmir average of 862. Jagti village has higher literacy rate compared to Jammu and Kashmir in 2011. Literacy rate of Jagti village was 71.21 percent compared to 67.16 percent of Jammu and Kashmir. In Jagti male literacy stands at 81.04 percent while female literacy rate was 60.16 percent. As per constitution of India and Panchyati Raj Act, Jagti village is administered by Sarpanch (Head of Village) who is elected representative of village.

**Caste Factor:** In Jagti village, most of the population is from Schedule Tribe (ST). ST population constitutes 50.18 percent while Schedule Caste (SC) was 9.72 percent of the total population in Jagti village.

**Work Profile:** In Jagti village out of total population, 989 were engaged in work activities. 86.55 percent of workers describe their work as main work (Employment of earning more than 6 months) while 13.45 percent were involved in marginal activity providing livelihood for less

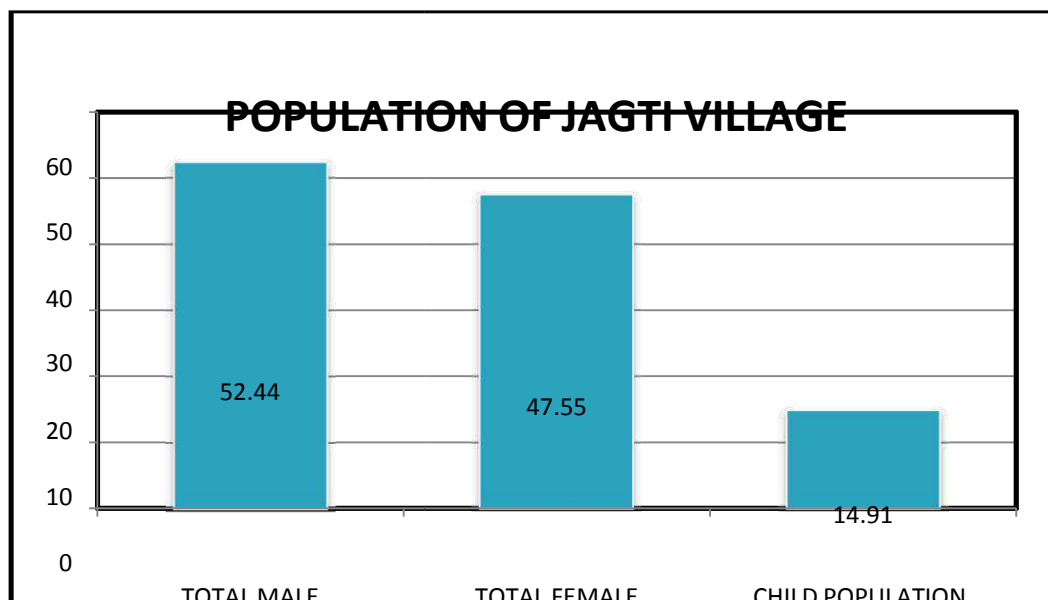
than 6 months. Of 989 workers, 784 were engaged in main work, 131 were cultivators (owners or co-owner) while 74 were agricultural laborers.

### GROWTH OF POPULATION

Population of the village has increased by 28.6 per cent in last 10 years. In 2001 census total population here was 2753. Female population growth rate of the village is 29.3per cent which is 1.4per cent higher than male population growth rate of 27.9per cent. General caste population has increased by 5.2 per cent. Schedule caste population has increased by 95.5 per cent. Schedule tribe population has increased by 44.6 per cent and child population has increased by 24.2 per cent in the village since last census.

**Table No. 2.1: Demographic dynamics of Jagti village**

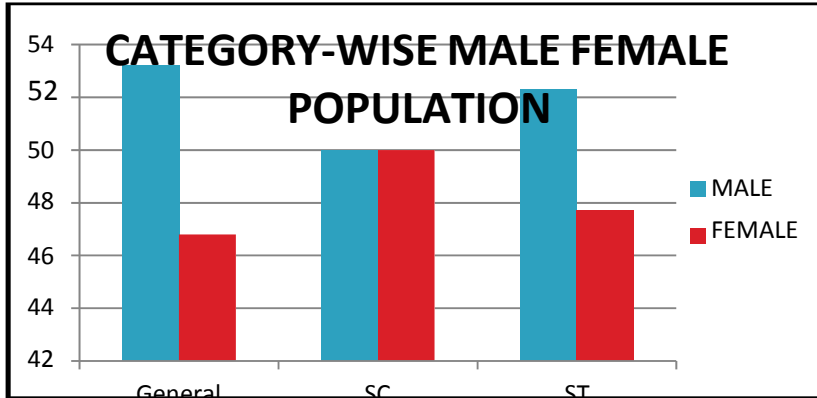
Particulars	Total	Male	Female
Total No. of Houses	668	-	-
Population	3539	1856	1683
Child (0-6)	528	263	265
Schedule Caste	344	172	172
Schedule Tribe	1776	929	847
Literacy	71.21per cent	81.04per cent	60.16per cent
Total Workers	989	901	88
Main Worker	856	-	-



**Table No. 2.2: Category-wise male female population (per cent) of Jagti village (2011)**

Category	Male	Female	Total
General	53.20	46.80	100
Scheduled Caste	50	50	100
Scheduled Tribe	52.30	47.70	100

Source: Census of India, 2011



### SEX RATIO-FEMALES PER 1000 MALES

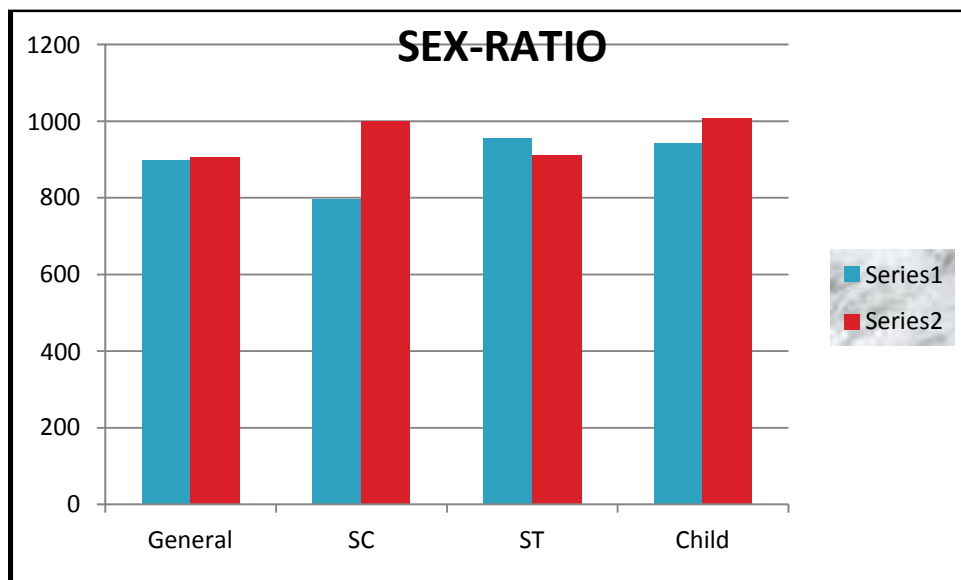
As of 2011 census there are 907 females per 1000 male in the village. Sex ratio in general caste is 879, in schedule caste is 1000 and in schedule tribe is 912. There are 1008 girls under 6 year of age per 1000 boys of the same age in the village. Overall sex ratio in the village has increased by 10 females per 1000 males during the years from 2001 – 2011. Child sex ratio here has increased by 67 girls per 1000 boys during the same time.

**Table No: 2.3 Change in sex ratio (2001-2011) in Jagti Village**

Category	2001	2011	Change	ST	CHILD
General	879	861	18	-43	67
SC	796	1000	204	912	1008

Source: Census of India, 2011





Series 1 – 2001, Series 2 - 2011

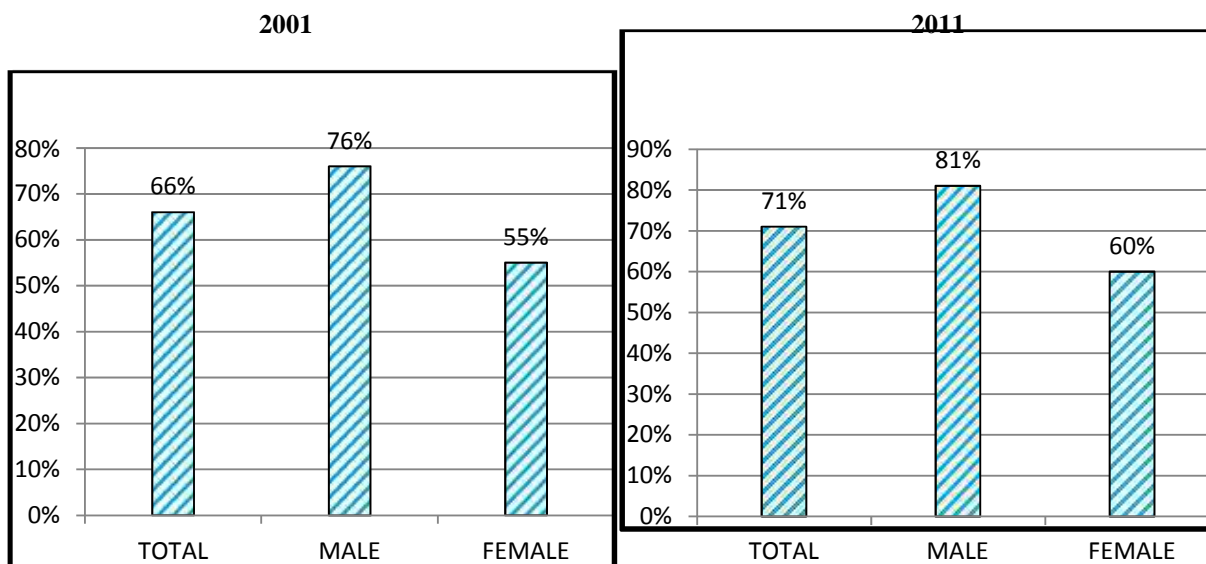
### LITERACY

Total 2144 people in the village are literate, among them 1291 are male and 853 are female. Literacy rate (children under 6 excluded) of Jagti is 71per cent.81per cent of male and 60per cent of female population are literate here. Overall literacy rate in the village has increased by 5per cent. Male literacy has gone up to 5 per cent and female literacy has gone up to 6 per cent.

Table No: 2.4 Change in literacy rate (per cent) (2001 – 2011) of Jagti Village

Particular	2001	2011
Male	76	81
Female	55	60

SOURCE: CENSUS OF INDIA, 2011



Bar graphs showing literacy of both male and female according to the census data of 2001 and 2011

### 03.1 INTRODUCTION

As discussed in chapter-I and II, the housing conditions of any household depends upon the basic amenities within the house, outside the house and other contributing factors like surrounding environment and many more. Today in the present era, basic amenities don't mean food, shelter and cloth only. It is much more than that. It includes type of structure of house, number of dwelling rooms, availability of adequate amount of water, electricity facilities, type of lighting equipments used, and availability of modern electronic gadgets and so on within the house. Basic amenities outside the house include accessibility and connectivity to road and so on. Last but not least, major contributing factor, on which housing condition of any household depends largely, which would be the first aspect of the household to search upon, from which it would be easy to determine that what kind of facilities a household can afford, is income of the household. Thus, all these factors largely or wholly control the housing or living conditions of any household anywhere.

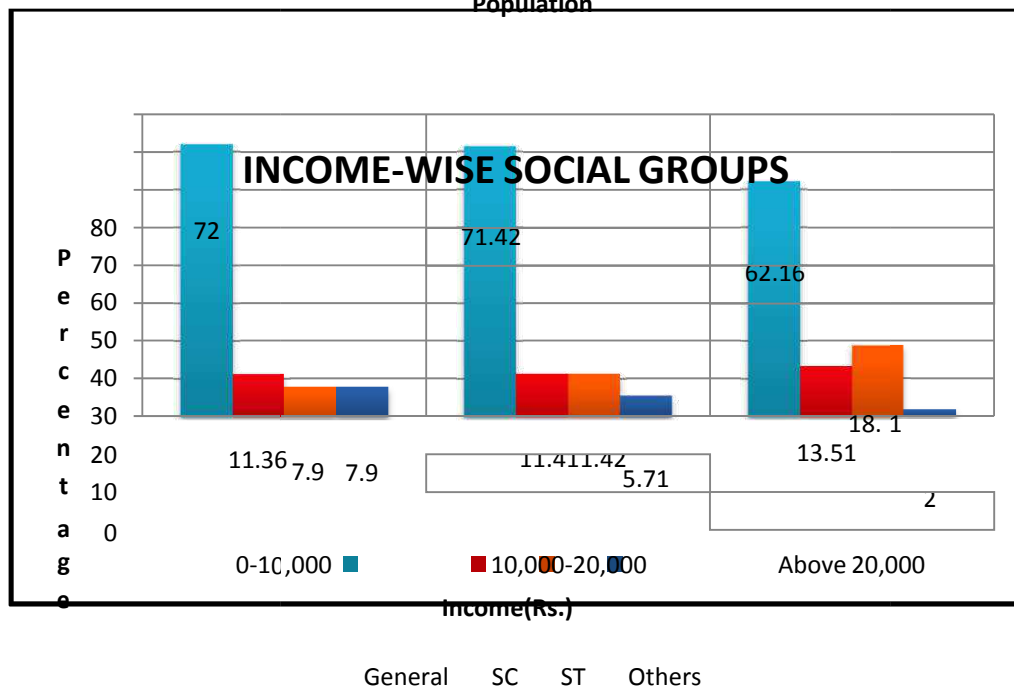
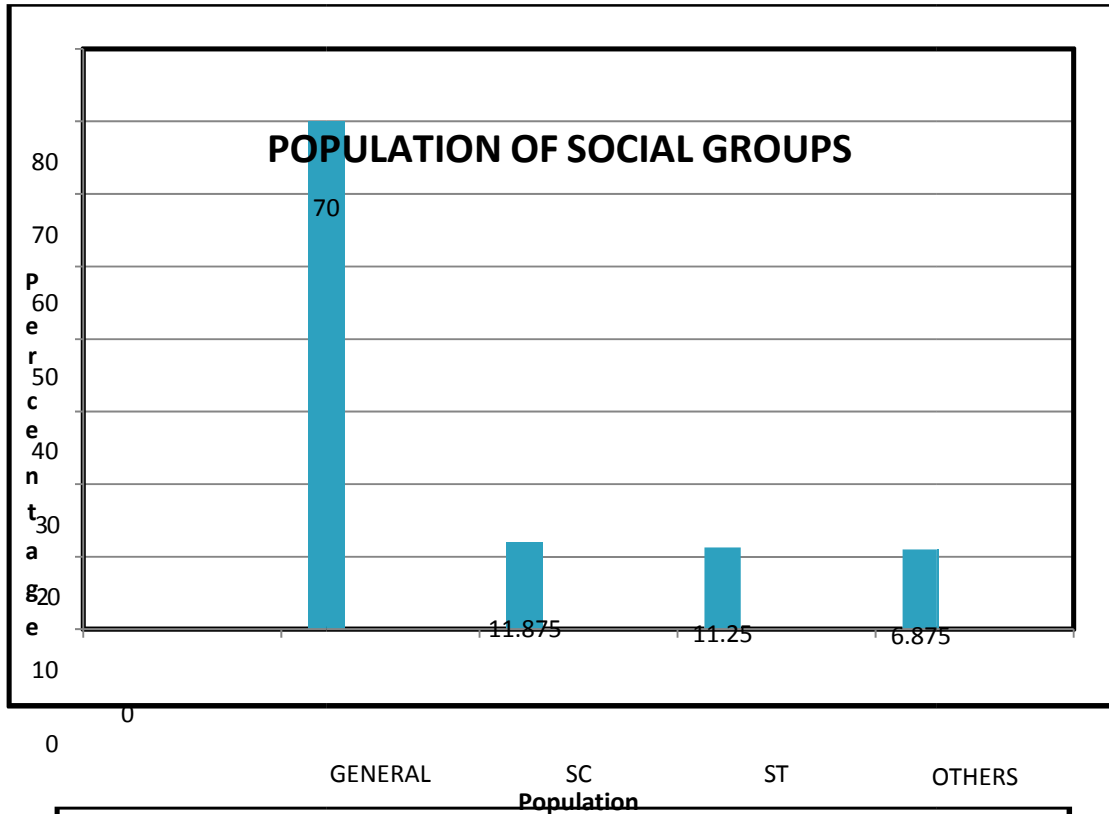
In this chapter, we will discuss all those aspects of housing which are indicators of the housing condition, some of which also measure the quality of the dwellings of households, of the study area. This chapter is divided into four sections including introduction, as the first. In the second section, the physical characteristics of houses which are indicators of the quality of housing have been discussed. In the third section we had focused on basic amenities within the dwelling and the fourth section presents a discussion on access to basic facilities outside the dwelling followed by conclusion. The second, third and fourth sections have further been divided into certain indicators to present the housing conditions of the households All the indicators have been studied with respect to income of the household and type of social group. The present analysis of housing conditions of the study area is based purely on the primary data collected through the structured interview schedules by personally visiting the study area.

#### A GENERAL OVERVIEW OF THE STUDY AREA

**Table No.3.1: Total no. of households, income and social group**

<b>A. Income Group (Rs.)</b>	<b>No. of Households (per cent)</b>
0-10,000	55
10,000-20,000	21.875
Above 20,000	23.125
Total	100
<b>B. Social Group</b>	<b>No. of Households (per cent)</b>
General	70
Schedule Caste	11.875
Schedule Tribe	11.25
Others	6.875
Total	100

Source: Field Survey, 2019



### 3.2 QUALITY OF HOUSING

This section deals with the quality of dwelling units with respect to income of the household, type of the structure of houses in which households live, number of living rooms in the dwelling and, kitchen facility, ventilation.

**1. Type of structure of the household:** Since the classification of households on the basis of the

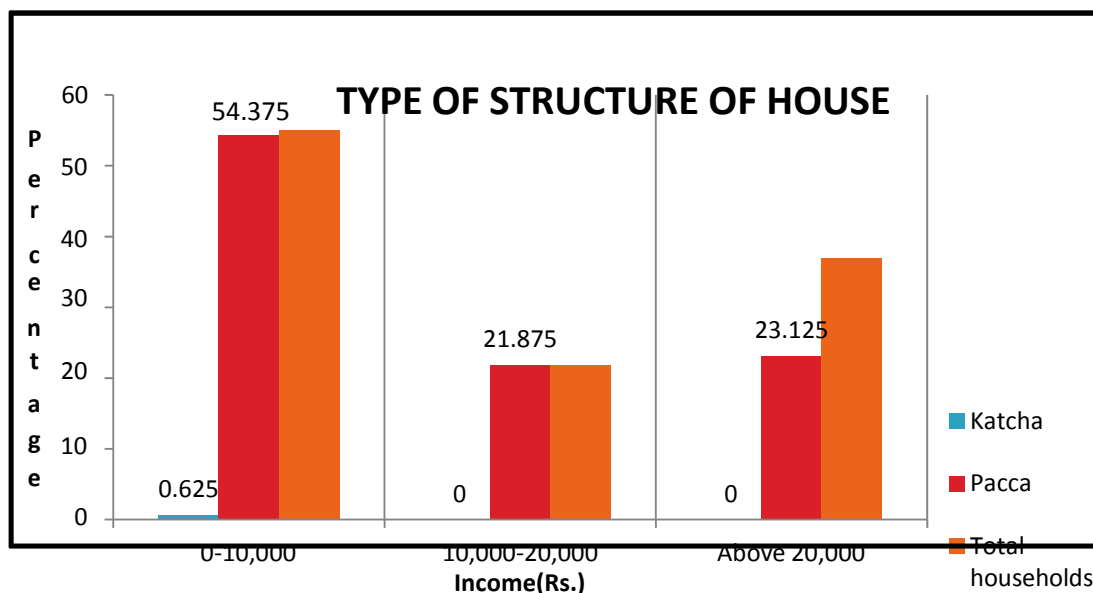
condition of structure is subjective, a more appropriate and objective indicator is the type of structure of the houses. NSSO (National Sample Survey Organization) classifies structure of

houses as ‘pucca’, ‘semi-pucca’ and ‘katcha’. By their constructional characteristics ‘pucca’ houses were considered better than ‘semi-pucca’ houses, which are again better than ‘katcha’ houses. Pucca structure: A pucca structure was one whose walls and roofs are made of pucca materials such as cement, concrete, oven burnt bricks, hollow cement / ash bricks, stone, stone blocks, jack boards (cement plastered reeds), iron, zinc or other metal sheets, timber, tiles, slate, corrugated iron, asbestos cement sheet, veneer, plywood, artificial wood of synthetic material and poly vinyl chloride (PVC) material. Katcha structure: A structure which had walls and roof made of non-pucca materials was regarded as a katcha structure. Non-pucca materials included unburnt bricks, bamboo, mud, grass, leaves, reeds, thatch, etc. Katcha structures could be of the following two types: (a) Unserviceable katcha structure included all structures with thatch walls and thatch roof, i.e., walls made of grass, leaves, reeds, etc. and roof of a similar material and (b) Serviceable katcha structure included all katcha structures other than unserviceable katcha structures. Semi-pucca structure: A structure which could not be classified as a pucca or a katcha structure as per definition was a semi-pucca structure. Such a structure had either the walls or the roof but not both made of pucca materials.

**Table No.3.2: Income-wise type of structure of house**

Income(Rs.)	Type of Structure of House	
	Katcha (%)	Pacca (%)
0-10,000	0.625	54.375
10,000-20,000	0	21.875
Above 20,000	0	23.125
Total	0.625	99.375

Source: Field Survey, 2019



**Interpretation:** It is clear from the table and the bar graph that out of total number of households, 88 are in the category of low income group i.e. 0-10,000, out of which one is katcha

while the remaining other houses of this category are all of pucca type. Houses which belong to

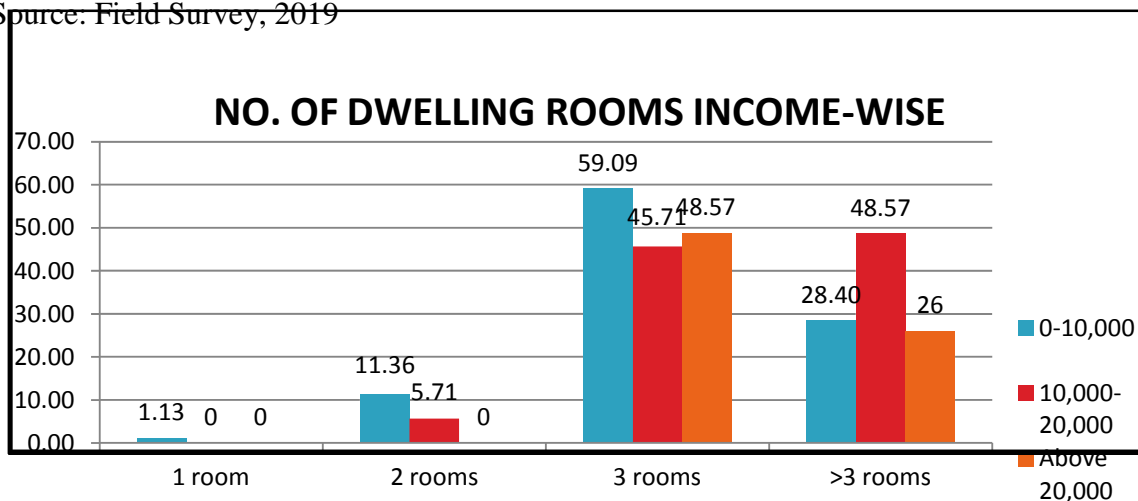
comparatively better income groups i.e. 10,000-20,000 & above 20,000 are all of pacca type. It shows that income has a direct bearing on the type of structure of houses somehow. Overall, the condition of the study area in terms of type of structure of houses is good.

**2. Number of Dwelling Rooms:** A dwelling room would include living room, bedroom, dining room, drawing room, study room, servant's room and other habitable rooms provided they satisfy the criterion of their dimensions. Do not include kitchen, bathroom, latrine, store room, passageway and veranda which are not normally usable for living. A room, used for multipurpose such as sleeping, sitting, dining, storing, cooking, etc., should be regarded as a dwelling room. In order to understand the quality of housing, the number of rooms in the dwelling is very important as an indicator of the level of congestion and comfort of the house.

**Table No.3.3: Income-wise number of dwelling rooms**

Income(Rs.)	No. of dwelling rooms			
	1	2	3	>3
0-10,000	1.13	11.36	59.09	28.40
10,000-20,000	0	5.71	45.71	48.57
Above 20,000	0	0	29.72	70.27

Source: Field Survey, 2019



**Interpretation:** It is clear from the bar graphs that highest no. of households have 3 dwelling rooms out of which more than 50 per cent belongs to 0-10,000 income group. Among the total no. of households in all income groups, 70.27 per cent having more than three rooms was from above 20,000 income group. 92 per cent of the households belonging to the second income group have either 3 or more than 3 rooms. Out of total households, only 28.40 per cent have more than 3 rooms. In short, the trend in the study area is; higher the income more is the number of dwelling rooms. This also shows that people belonging to low income group have not a very good condition in this term, and they live a life of congestion.

### 3. TYPE OF KITCHEN

Type of kitchen in the households which means whether it is separate or not is also an important



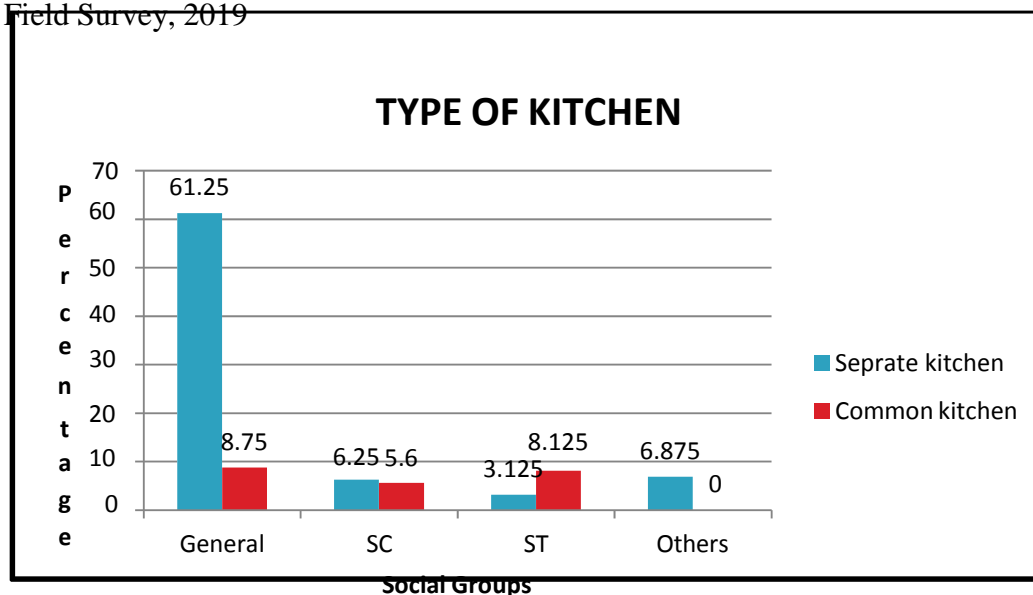
indicator of the quality of housing. Very few people would think of a house without a kitchen

because it is so central to the existence of the family. But that seems to be a luxury for a significant share of Indian households.

**Table no. 3.4: Classification of social groups by type of kitchen**

SOCIAL GROUP	TYPE OF KITCHEN	
	SEPARATE (%)	COMMON (%)
GENERAL	61.25	8.75
SC	6.25	5.625
ST	3.125	8.125
OTHERS	6.875	0
TOTAL	77.85	22.5

Source: Field Survey, 2019



**Interpretation:** From the figure, it is clear that across the social group, ST population has highest no. of common kitchen followed by SC population. However, the condition is much better in general and other social groups. The social profile of not having a separate kitchen has disproportionately been on the SC and ST communities. It means that majority of population of the study are having 3 dwelling rooms have kitchen included in it. This shows quality of life of people of the study area especially of the SC and ST population.

#### 4. VENTILATION

Ventilation meant the extent to which the rooms were open to air and light.

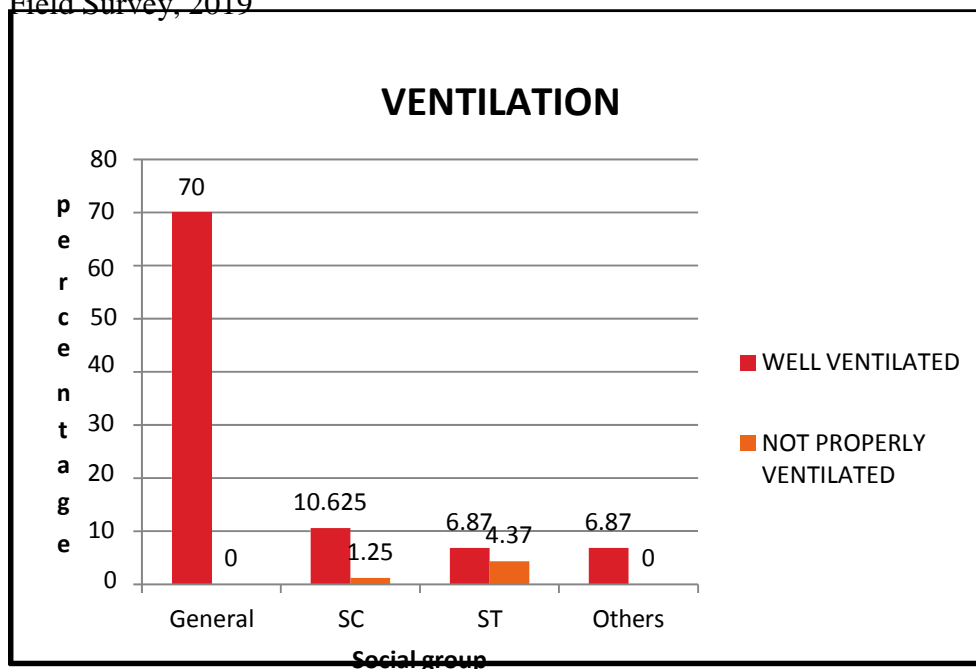
**Table no. 3.5. Ventilation in houses of different social groups**

SOCIAL GROUPS	WELL-VENTILATED (%)	
	YES	NO
GENERAL	70	0
SC	10.625	1.25

ST	6.87	4.37
OTHERS	6.87	0

TOTAL	94.37	5.62
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Source: Field Survey, 2019



**Interpretation:** From above figure, it is clear that among all social groups in the study area, general and other category, all have well ventilated houses whereas some proportion of the SC and ST communities don't have well ventilated houses which shows that some proportion of the population of the Jagti village is still living in conditions lacking in open air and light which reflects their poor housing condition too.

### 3.3 BASIC AMENITIES WITH IN THE HOUSE

In the second section we had discussed basic amenities within the dwelling such as drinking water, sanitation facilities such as bathing and toilet, type of lighting and cooking fuel. The different characteristics of the structure of the dwelling, examined in earlier paragraphs, though important are only one element of the housing condition. Without amenities like drinking water facility, sanitation, electricity and other basic amenities in a household cannot function as a useful one. So, in this section we had discussed basic amenities within the dwelling.

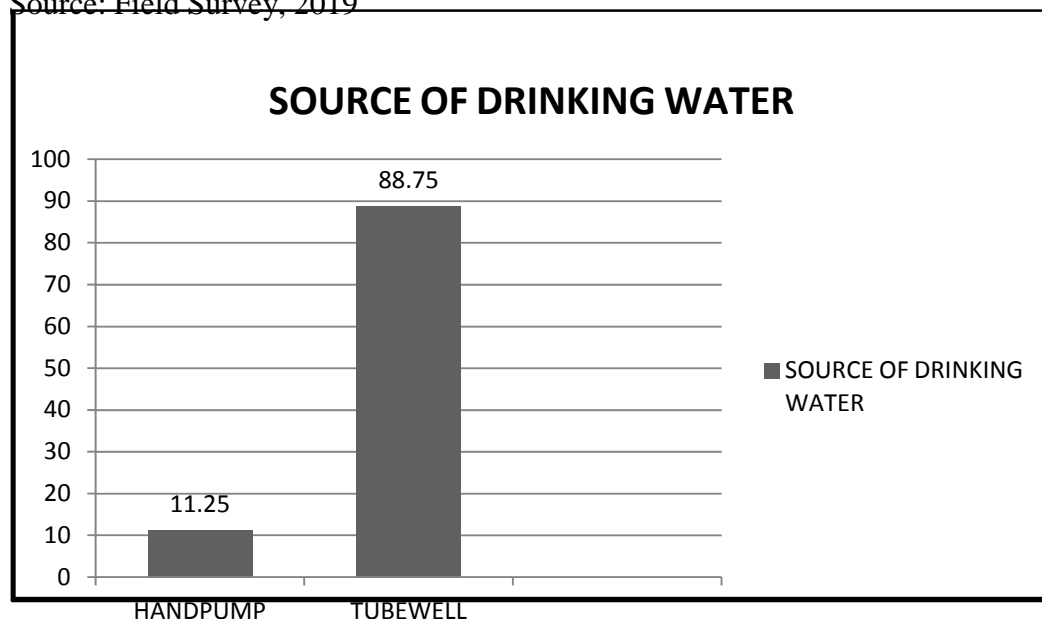
**1. Main source of drinking water and availability of drinking water source:** This is one of the most important aspects of housing. In the study area, there were only two sources of drinking water namely hand pumps and tube-well. The world civilization and system of agricultural have started on the banks of river. Now the question of availability of water may not be that important as the pure drinking water is for the human beings for the maintenance of good health. If water is not pure, it may lead to certain types of health problems.

**Table no.3.6: Supply of drinking water and source of drinking water**

Supply of drinking water	Source of drinking water
	22

Regular by households (%)	Irregular by households (%)	Hand pump used by households (%)	Tube well used by households (%)
88.75	11.25	11.25	88.75

Source: Field Survey, 2019



**Interpretation:** From the bar graph it is clear that 88.75 per cent of the household in study area use tube well water for drinking purposes. And the supply of drinking water from tube wells is regular and satisfactory however the quality of water is not so good. Very few people in the study area use their own or govt. hand pumps because of irregular supply of drinking water from tube wells. Here also the quality of water is not so good. And they too boil water before drinking it.

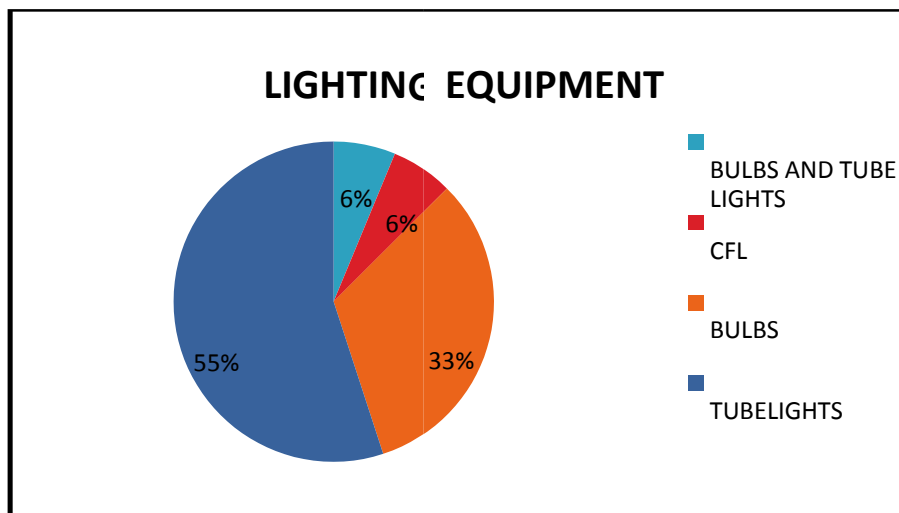
## 2. TYPE OF LIGHTING EQUIPMENT

Nowadays type of lighting equipment used in the household is the hallmark of condition of electricity. In the study area almost all the houses has electricity as the source of lighting but very few people have alternating source of electricity. Types of lighting equipment include bulbs, tube lights, CFL.

**Table no.3.7: Type of lighting equipment used in the households**

Type of lighting equipment used	Used by households (%)
Bulbs	32.5
Tube lights	55
Bulbs & tube lights	6.25
CFL	6.25

Source: Field Survey, 2019



**Interpretation:** From the pie chart drawn above, showing types of lighting equipments used by the people in the study area it is clear that 55 per cent of the people use tube bulbs followed by tube lights. The poor people or the people belonging to the low income group mainly use bulbs however not all. Most of the people in the study area use tube lights as lighting equipment. Condition of electricity is good and regular due to IIT being adjacent to the village. Out of all the households, 86.975 per cent was well electrified.

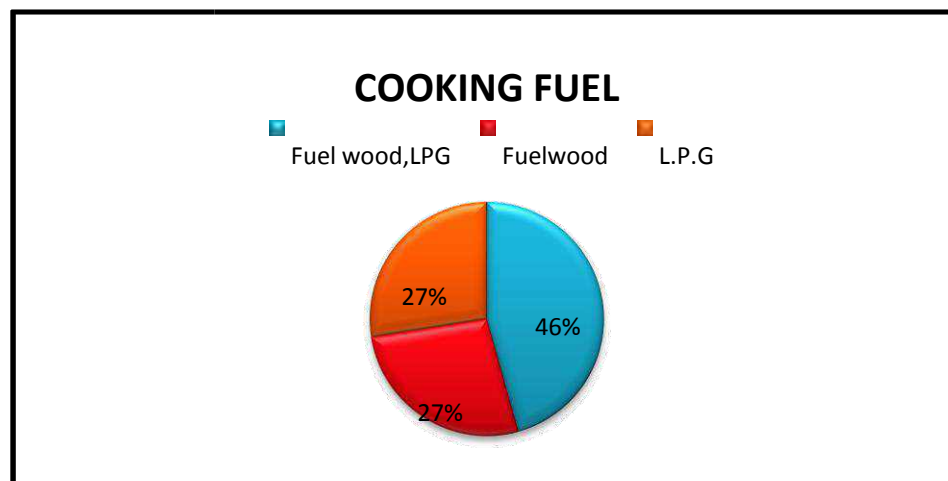
### 3. COOKING FUEL

Cooking fuel include LPG, Firewood in the study area. Type of cooking fuel used in the kitchen determines the condition of kitchen in which people cook. Fuel wood can cause indoor pollution which may impose serious health issues on the family members.

**Table no.3.8: Type of cooking fuel used in the households**

Type of cooking fuel	Used by households (%)
L.P.G & Fuel wood	45.65
Fuel wood	26.875
L.P.G	27.5

Source: Field Survey, 2019



**Interpretation:** From the table and pie chart, it is clear that 46 per cent of the households uses L.P.G and fuel wood both as cooking fuel. Since the study area is a rural area and also has forest and their own land and major proportion of the households belong to the middle income group, that's why they prefer to use both fuel wood and L.P.G as cooking fuel. Social groups such as ST and SC use mostly fuel wood as cooking fuel. It shows that in these social groups, the kitchen conditions are not very good and their family members are more prone to health hazards than others.

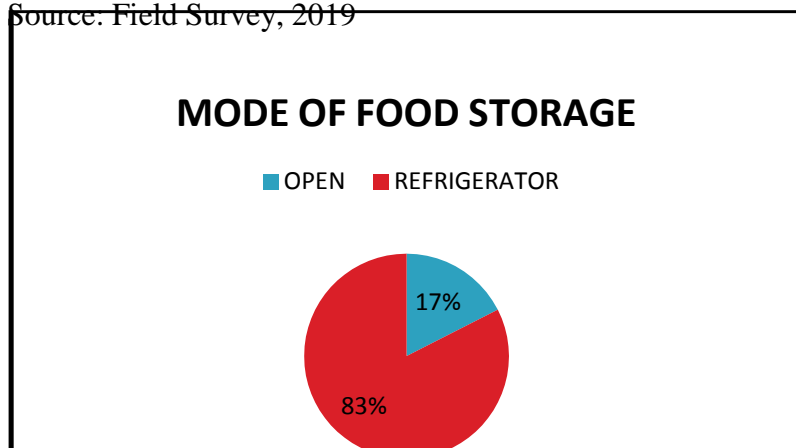
#### 4. MODE OF FOOD STORAGE

It includes whether the households store their food in refrigerator or they have to store it in open which they don't have any modern day food storage appliance.

**Table no.3.8: Mode of food storage**

Mode of food storage	Households (%)
Refrigerator	82.5
Open	17.5

Source: Field Survey, 2019



**Interpretation:** 83 per cent of the people in the study area have refrigerator to store their food. Some people of the social groups like ST don't have refrigerator to store their food. So, they store their food in open and factors for this no doubt are low wages, bad housing conditions etc.

#### 5. INDOOR TOILET FACILITIES

In the present era, indoor toilet facility is considered as the most important basic amenity within the house. It is a major indicator of standard and quality of life people of that very particular house are living.

**Table no.3.9: Availability of indoor toilet facility**

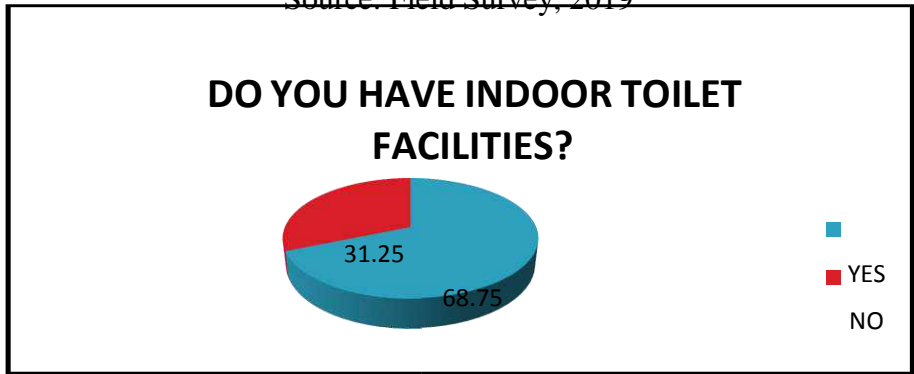
Indoor toilet facility	Households (%)
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Yes	68.75
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No	31.25
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Source: Field Survey, 2019



**Interpretation:** Out of total households, 31.25 per cent of households don't have indoor toilet facilities which mean that they go for defecation in open. This could be risky and even not good from the environmental point of view. While 68.75 per cent households have indoor toilet facilities with well constructed sewage pipes. Peoples who don't have this facility are poor and have very low per capita income, savings are almost negligible and that's why they are unable to build them. Even they do have knowledge of various programs being run by govt. like HAR GHAR SHOCHALAYA but don't know how to get access to authorities for getting benefit of such programs.

### 3.4. ACCESS TO BASIC FACILITIES OUTSIDE THE DWELLING

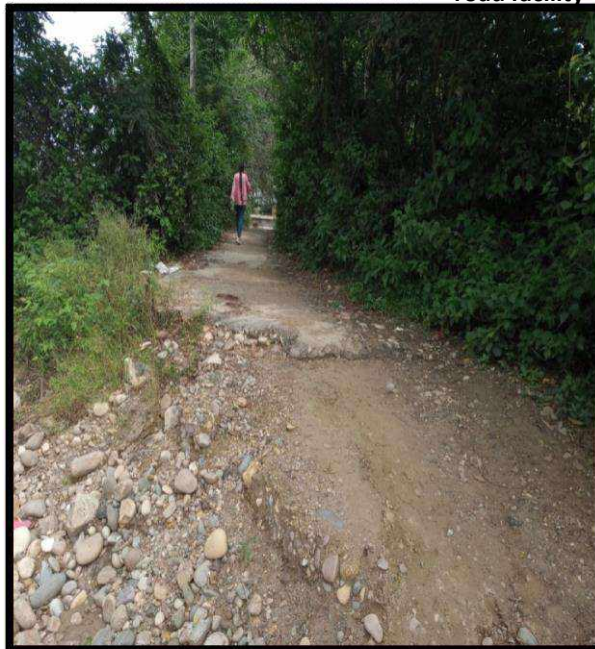
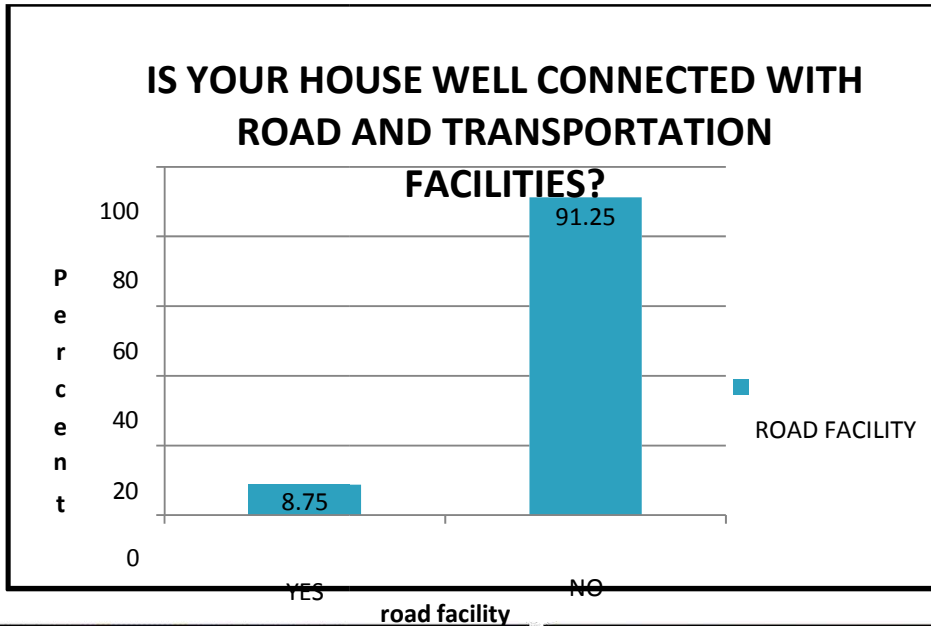
Access to basic facilities outside the dwelling like distance to the place of work, garbage and drainage facilities, access to road, etc is also an important indicator of the quality of life.

**1. ACCESS TO ROAD:** Access to roads is an important indicator that shows accessibility and connectivity of any place with the outside world. Connection with the outside areas for transportation, travelling, schooling and for going anywhere is very important.

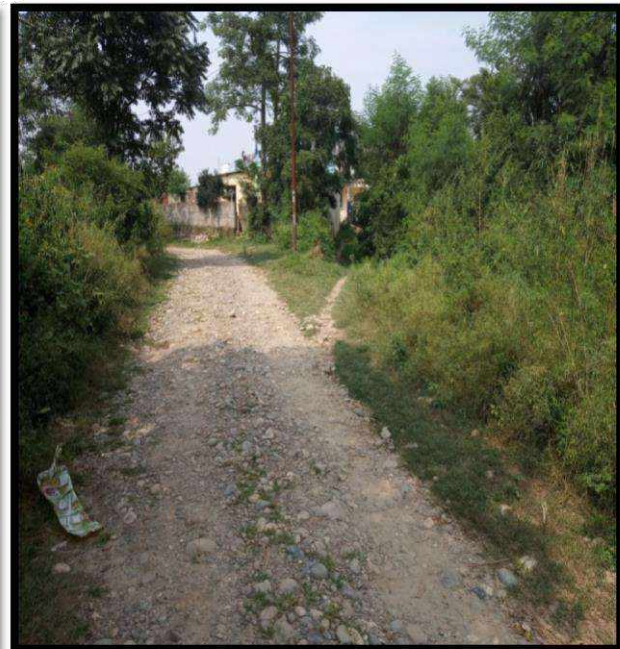
**Table no.3.10: Accessibility to roads**

Proper road facility	Percentage of households
Yes	8.75
No	91.25

Source: Field Survey, 2019



Broken road as seen in in Jagti village



Kutchra road as seen in Jagti village

**Interpretation:** From the bar graph and the plates above, it is very clear that the condition of road facility is very worse in the study area. In the study area, it is the biggest flaw. There are almost no roads in the study area. The study area is a kandi area, there is a khad in the area. Most of people had to cross that khad on foot to reach to the main highway. According to locals, during rainy days khad get inundated with water due to which they lost connectivity with the main roads and it becomes very risky to go through that khad. Major proportion of the households in the study area is not connected to roads and till this date the situation is as it is i.e. worse.

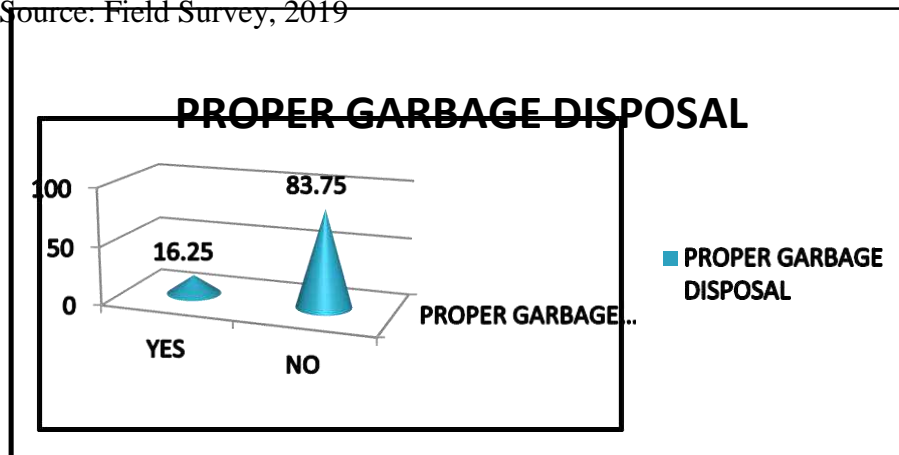
## 2. GARBAGE DISPOSAL&COLLECTION

Garbage collection arrangement: Garbage collection arrangement meant the arrangement which usually exist to carry away the refuse and waste of households to some dumping place away from the residential areas. In some places, the public bodies collected the garbage from the premises of the household or from some fixed points in the locality where the residents put their garbage; in others, a body of residents themselves made the arrangement of carrying the garbage to the final dumping place away from residential areas without participation of any public body.

**Table No.3.11: Garbage Disposal Arrangements**

Proper garbage disposal	No. of households
Yes	16.25
No	83.75

Source: Field Survey, 2019



**Interpretation:** From the figure shown above, it is clear that proper garbage disposal in the study area is negligible. Study area doesn't come under any municipal corporation which will collect and dispose off the garbage judiciously. People used to throw the garbage in open, in nearby khad. This would impose a serious threat to their environment. Even some of the people dispose their garbage in front of their houses, so definitely this going to pollute th environment.

#### 4.1. CONCLUSION

Located in Nagrota, Jagti is situated 20 kms away from Jammu city. There are a total 11 wards in the whole village. The attributes or parameters under consideration were quality of housing, type of structure of houses, basic facilities inside and outside the houses constituting their over-all living conditions. The survey indicated the following points-

- 99 per cent of the household in the study area were having pucca house.
- 77.5 per cent of the households were having a separate kitchen whereas 22.5 per cent were having common kitchen. Category wise Scheduled Caste represents a most disadvantaged group in which approximately 72 per cent of the households don't have separate kitchen.
- 94.37 per cent of the households were well ventilated in the study area.
- 88.75 per cent of the households were provided with the regular water supply by the tube-wells.
- 45.65 per cent of the households use both L.P.G and fuel-wood, 26.875 per cent use only fuel wood, 27.5 uses L.P.G only.
- 82.5 per cent of the households use refrigerator for storing food, 17.5 per cent didn't have refrigerator.
- 68.75 per cent of the households were having indoor toilet facilities whereas 31.25 per cent didn't have.
- 91.25 per cent of the households were not well-connected with the roads. Only 8.75 per cent of houses were connected to the roads.
- 83.75 per cent of the households didn't dispose garbage properly. Only 16.25 per cent did.

Thus it can be concluded that quality of housing in Jagti village is average. Basic amenities within the dwellings are good in high income category and socially high recognized groups, whereas these are a sort of luxuries which lower income group households cannot afford. Basic facilities outside the dwellings in the study area are the poorest in all terms. Lack of awareness of most of the programs being run by government to uplift the standard of living of poor rural masses, lack of willingness of the ruling authorities to improve the basic infrastructure of the study area on the one hand and environment, geographical conditions on the other hand are some of the limiting factors responsible for the prevailing socio-economic scenario of the study area. Changing environment mainly due to developmental activities has a very bad impact on the study area. Although the government has taken some steps and has planted trees to increase the forest cover in the study area, yet the incidents of deforestation have become too large to cover this gap as early as possible. Figures A and B clearly depict the extent of deforestation in the area from the year 2006 to 2019. In these two images, lesser forest cover and more development of infrastructure in the form of national highway and IIT are conspicuous.



Figure (A): Google Earth Image of Jagti Village in the year 2006

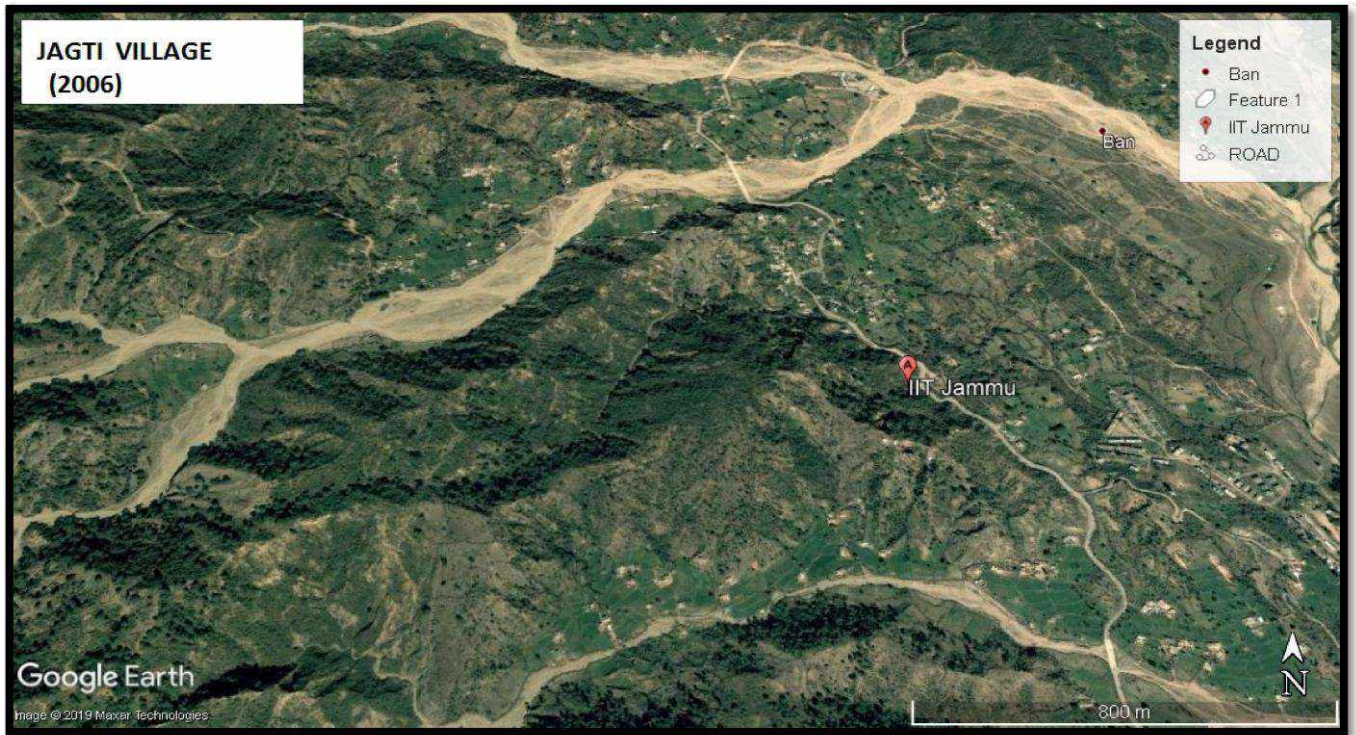


Figure (B): Google Earth Image of Jagti Village in the year 2019



## 4.2. SUGGESTIONS

- Cutting of forests etc. for the developmental activities has a direct impact on the environment of the study area and that's why it must be ensured by the higher authorities that whatever kind of activities that are being carried near or in the study area should not interfere with the environment and well-being of the locals of the study area. Development should be for all, not for few at the cost of most and most importantly, it must be inclusive i.e. including the poorest and sustainable.
- A balance needs to be maintained between the development of infrastructural facilities and its impacts on the study area.
- Road and transportation facilities in the area need to be improved.
- Though they have agricultural land but due to various factors, are unable to use it. The proper use of agricultural land would become an additional source of earning which would help in generating their economic standards and living conditions. Thus, diversion of agricultural land, which is fertile, for non-agricultural purposes, needs to be stopped.
- Leaving behind the servitude of present environment, locals of study area must come forward to have access to the basic developmental incentives provided by the government and try their best to get maximum benefits from various schemes of government that are specially designed for the poor rural masses. For this, the head of the village can play important linking role in uplifting their living standard by addressing the needs of people to the higher authorities.
- Governmental initiatives to enhance the quality of life of the study area are almost negligible and that is the main reason for the underdevelopment of this village. For the overall development of the people of the study area, it is the responsibility of the government to implement the programs at the grass root level. Awareness campaigns must be run by the government to make these programs a success.

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