

**Construction of Human Development
Index of Gujjar Community in
Jammu and Kashmir**

THESIS

**SUBMITTED TO
BABASAHEB BHIMRAO AMBEDKAR UNIVERSITY
(A CENTRAL UNIVERSITY)**

LUCKNOW

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AMBEDKAR
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DOCTOR OF PHILOSOPHY**

**IN
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**Under the Supervision of
Prof. L.C. Mallaiah**

**Submitted By
Mohd Abdullah**

**DEPARTMENT OF ECONOMICS
SCHOOL OF ECONOMICS & COMMERCE
BABASAHEB BHIMRAO AMBEDKAR UNIVERSITY
(A CENTRAL UNIVERSITY)
Vidya Vihar, Raebareli Road, Lucknow-226025, (U.P.), India**

Enrolment No: 701/18

Year 2022

DECLARATION

I hereby, declare that this thesis entitled “**Construction of Human Development Index of Gujjar Community in Jammu and Kashmir**” submitted to Babasaheb Bhimrao Ambedkar University in fulfillment for the award of Doctor of Philosophy in Economics is my original work. It has not been submitted in part or full for any other diploma or degree of any other University. The indebtedness of the candidate to others has been duly acknowledged at relevant places.

This study is carried out under the supervision of Prof. L.C. Mallaiah, Department of Economics, Babasaheb Bhimrao Ambedkar University Lucknow, Uttar Pradesh, India. This is also declared that the thesis is essentially free from all kinds of plagiarism.

Place: Lucknow

Date: 26/08/22



Mohd Abdullah

(Enrolment No. 701/18)

Department of Economics

Babasaheb Bhimrao Ambedkar University,

Lucknow, Uttar Pradesh

CERTIFICATE

This is to certify that the Thesis entitled “**Construction of Human Development Index of Gujjar Community in Jammu and Kahmir**” submitted by **Mr. Mohd Abdullah** is an original research work and has not been previously submitted in part or full for the award of any degree or diploma to this or any other university.

The Thesis submitted to Babasaheb Bhimrao Ambedkar University, Lucknow satisfies all the requirements as stipulated in the *Doctor of Philosophy* Ph.D. Regulations amended in 2017 and it is fit for submission and evaluation for the award of the degree of Doctor of Philosophy of the University.

Date: 26/8/22


Supervisor

Prof. L.C. Mallaiiah
Department of Economics
B.B. Ambedkar University
Lucknow, U.P.-226025


Head of the Department
विभागाध्यक्ष/HEAD

अर्थशास्त्र विभाग/Dept. of Economics
एएसएसएसओ/A.S.S.S.
बी.बी.एम्.यू., लखनऊ/B.B.A.U., Lucknow



बाबासाहेब भीमराव अम्बेडकर विश्वविद्यालय

(केन्द्रीय विश्वविद्यालय)

विद्या विहार, रायबरेली रोड, लखनऊ-226 025

BABASAHEB BHIMRAO AMBEDKAR UNIVERSITY

(A Central University)

Vidya Vihar, Raebareli Road, Lucknow-226 025

Letter No:-497/COE/BBAU/2021

Dated: 10-03-2021

Ph.D. Course Work Certificate

This is to certify that **Mohd Abdullah**, Enrollment No.701/18, Ph.D. Research Scholar, Department of Economics of the University has successfully completed his Ph.D. Course work in the examination held during December, 2018.


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1 Chapter one Introduction 1.1 Introduction The concept of human development is complex and holistic. It is as old as the civilization of human beings, but it is still in a constant process of evolution. The technique of describing human development has been updated with the passage of time as per demand. Aristotle was the first scholar who first considered social values for the good of humanity, and he believed any action that promoted social welfare was the key to human progress. One of the simplest concepts of human growth was presented by Morris and Alpin (1982). According to them, human development is a way to expand the capacity and capability of individuals, which raises their living level. Many experts explain the concept of human development as per their knowledge and skills, but the true credit goes to Dr. Mahbub Ul Haq. He was the one professor among others who provided prior consideration to human

needs and also strengthened development policies. The major purpose of human development is to improve the competence and capacity of people, which leads to a wide spread of human demands and choices. The human development comprises of all parts of life, like social, cultural, political, and economic. Apart from this, it also focuses on the needs of underprivileged people. The concept of human development comprises the core demands of people as well as an end means of obtaining progress. Not only economic elements are considered in the concept of human development, but social aspects such as health and education are equally important to human well-being. Twentieth century policymakers have concentrated primarily on economic growth, and the term "development" was rarely used in economic literature. Even early theories of

2 development, such as the Harrod (1939 & 1948) and Domar (1946), focused on growth rather than development. (1946). But later on, it is understood that economic growth is derived from development and the quality component of development was a novel idea, but with the passage of time, it is called human development. The human development index can be defined as "a statistical tool which measures the overall achievement of a country in its social and economic characteristics such as health, education, and income." It was founded in 1990 by Mahbub ul Haq and was later endorsed by Amartya Sen, Gustav Ranis, and Meghnad Desai. The human development index is used to determine a country's level of development. Each year, the UNDP publishes a ranking of countries based on their social and economic development, which aids in keeping countries on track for development. Governments are now also ranking their states based on their human development index. The human development index is composed of three components: life expectancy in terms of health; predicted and mean years of schooling in terms of education; and gross national income per capita in terms of standard of living. It was the UNDP's first report in 1990, and it switched the focus away from wealth and toward liberty and choice. According to a 1990 UNDP report, human development is a process of expanding people's choices, the most important of which are a long and healthy life, adequate education, and a decent standard of living. However, human development does not stop there; it also includes political freedom, guaranteed human rights, and self-respect. The term "development" was reinterpreted in the 1970's in terms of poverty reduction, inequality, and unemployment in a developing economy.

1.2 HDI A New Measuring Methodology The UNDP adopted a new methodology for measuring the human development index in 2010. It is also based on the previous dimensions of HDI, which were an aggregate measure of three dimensions (health, education, and income), but changes have been made to the education and income dimensions in the new methodology. Previously, literacy rate and gross enrolment ratio

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Preface

This study entitled “Construction of Human Development Index of Gujjar Community in Jammu and Kashmir” is integral in research of human development. Attaining the status of human development is the core aim of each and every country. Human development is a multidimensional process that is inclusive of all necessary aspects of developments.

This study explores two districts of Jammu and Kashmir district Poonch and district Anantnag to understand the actual position of the Gujjar community. This community is one of the socially disadvantaged communities, that are vulnerable to all social and economic indicators. In this study, we explored their social and economic conditions by constructing the Human development index. we also compare the score of Human Development Index of Gujjar community with the union territory of Jammu and Kashmir and country level as well. We found they are still suppressed on all levels whether social or economic. In literacy, they are expressed as educational backward class, excluded class, illiterate people, and so on. As per recent HDI ranking India comes under medium category of HDI ranking whereas Jammu and Kashmir union territory also comes under medium category of HDI ranking among Indian states and union territories, but the HDI ranking of Gujjar community is much below than the HDI ranking of India and Jammu and Kashmir union territory. Still a lot of planned initiatives and efforts are much needed for improving and achieving better human developments. This study also done zone wise comparative analysis of HDI of Indian states and union territories. One key feature of the study is a detailed and descriptive analysis of HDI at blocks and districts level of district Poonch and Anantnag of Jammu and Kashmir.

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Abbreviations

| | |
|-------|---|
| AAY | Anthodia Anna Yojana |
| APL | Above Poverty Line |
| BC | Backward Classes |
| BPL | Below Poverty Line |
| CAGR | Compound Annual Growth Rate |
| EI | Education Index |
| EYSI | Expected Year of Schooling Index |
| FY | Financial Year |
| GDI | Gender Related Development Index |
| GDP | Gross Domestic Product |
| GEM | Gender Empowerment Measure |
| GHDR | Gross Human Development Report |
| GHDR | Gross Human Development Report |
| GII | Gender Inequality Index |
| GIS | Geographic Information System |
| GNIPC | Gross National Income Per Capita |
| GNP | Gross National Product |
| HD | Human Development |
| HDI | Human Development Index |
| HDR | Human Development Index |
| HH | House Hold |
| HI | Health Index |
| IHDI | Inequality Adjusted Human Development Index |
| II | Income Index |
| IMR | Infant Mortality Rate |
| J&K | Jammu and Kashmir |
| KVIB | Khandi and Village Industries Board |
| LEI | Life Expectancy Index |
| MPI | Multidimensional Poverty Index |

| | |
|-------|---|
| MYSI | Mean Year of Schooling Index |
| NCARE | National Council of Applied Economic Research |
| NSDP | Net State Domestic Product |
| OBC | Other Backward Class |
| PDS | Public Distribution System |
| PPP | Purchasing Power Parity |
| PQLI | Physical Quantity of Life Index |
| SC | Schedule Caste |
| SGSY | Swarna Jayanti Gram Swarajgar Yojana |
| ST | Schedule Tribe |
| UNDP | United Nation Development Programme |
| UT | Union Territory |
| VLW | Village Level Worker |
| WHOR | World Health Organisation Report |

Chapter 1

Introduction

1.1 Introduction

The concept of human development is complex and holistic. It is as old as the civilization of human beings, but it is still in a constant process of evolution. The technique of describing human development has been updated with the passage of time as per demand. Aristotle was the first scholar who considered social values for good humanity, and he believed any action that promoted social welfare is the key to human progress. One of the simplest concepts of human growth was presented by Morris and Alpin (1982). According to them, human development is a way to expand the capacity and capability of individuals, which raises their living level. Many experts explain the concept of human development as per their knowledge and skills, but the true credit goes to Dr. Mahbub Ul Haq. He was the one professor among others who provided prior consideration to human needs and also strengthened development policies. The major purpose of human development is to improve the competence and capacity of people which leads to a wide spread of human demands and choices. The human development comprises of all parts of life, like social, cultural, political and economic. Apart from this it also focuses on the needs of underprivileged people. The term "development" was reinterpreted in the 1970's in terms of poverty reduction, inequality, and unemployment in the developing economies. The concept of human development comprises the core demands of people as well as an end means of obtaining progress. Not only economic elements are considered in the concept of human development but social aspects such as health

and education are equally important to human well-being. Twentieth century policymakers have concentrated primarily on economic growth, and the term "development" was rarely used in economic literature. Even early theories of developments such as the Harrod (1939 & 1948) and Domar (1946), focused on growth rather than development. But later on it is understood that economic growth is derived from development and the quality component of development was a novel idea but with the passage of time it is called human development. The human development index can be defined as "a statistical tool which measures the overall achievement of a country in its social and economic characteristics such as health, education, and income." It was founded in 1990 by Mahbub ul Haq and was later endorsed by Amartya Sen, Gustav Ranis, and Meghnad Desai etc. The human development index is used to determine a country's level of development. Each year, the UNDP publishes ranking of countries based on their social and economic development, which aids in keeping countries on track for development. Governments are now also ranking their states based on their human development index. The human development index is composed of three components: life expectancy in terms of health, predicted and mean years of schooling in terms of education and gross national income per capita in terms of standard of living. It was the first report of UNDP (1990) which switched the focus away from wealth to toward liberty and choice. According to this report human development is a process of expanding people's choices, the most important of which are a long and healthy life, adequate education and a decent standard of living. However, human development does not stop here it also includes political freedom, guaranteed human rights and self-respect.

1.2 HDI: A New Measuring Methodology

The UNDP adopted a new methodology for measuring the human development index in 2010. It is also based on the previous dimensions of HDI, which were an aggregate measure of three dimensions (health, education and income). But changes have been made to the education and income dimensions in the new methodology. Previously literacy rate and gross enrolment ratio were used as education and knowledge indices, with literacy rate receiving two-thirds of the weightage and combined primary, secondary, and tertiary gross enrolment receiving one-third of weightage. However, the new methodology considers the average year of schooling and the predicted year of schooling as education indices. In the new methodology income is measured in terms of standard of life (GNI per capita) rather than GDP per capita because GNI per capita is greater than GDP per capita due to net factor income from abroad. In the old methodology basic means was used to calculate HDI. However, in the new methodology geometric means is used to calculate HDI. New method of calculating HDI is as below.

The dimension of health is assessed by life expectancy at birth

$$1) \quad \text{Life expectancy index (LEI)} = \frac{\text{LE} - 20}{85 - 20} \dots \dots \dots (1)$$

When life expectancy is 85 years it is considered as one (1) and if life expectancy is 20 years it will be considered as Zero (0).

The dimension of education is measured by mean years of schooling for adults aged 25 years and more and expected years of schooling for children of school entering age.

$$2) \quad \text{Education Index (EI)} = \frac{\text{MYSI} + \text{EYSI}}{2} \dots \dots \dots (2)$$

$$(i) \text{ (MYSI)} = \frac{\text{MYS}}{15} \dots \dots \dots (3)$$

Where MYSI refers to mean year of schooling Index.

15 years is the projected Maximum of this indicator for 2025.

$$(ii) \text{ (EYSI)} = \frac{\text{EYS}}{18} \dots \dots \dots (4)$$

Where EYSI refers to Expected year of schooling Index

Eighteen is equivalent to achieving a master's degree in most countries including India.

The dimension standard of living is measured by gross national income per capita.

3) Income Index (II)

A decent standard of living: GNI per capita

GNIpc: Gross national income at purchasing power parity per capita.

$$\text{Income Index} = \frac{\text{in (GNIpc-in (100))}}{\text{In 75000-in (100)}} \dots \dots \dots (5)$$

II is one (1) when GNIpc is \$75000 and II is Zero (0) when GNIpc is \$100

The scores for the three HDI dimension indices are aggregated into a composite index using geometric mean.

$$\text{HDI} = \sqrt[3]{\text{LEI} + \text{EI} + \text{II}} \dots \dots \dots (6)$$

1.3 Human Development Index in the context of India

India's human development index has been increasing steadily since independence with an average increase in per capita income, life expectancy, literacy rate and a variety of other measures of human well-being. However, India's problem is the mixed character of Indian society which makes it extremely difficult to understand the success and failures of the Indian economy. However, a frequently asked question is

why India's economy is so heterogeneous. The answer to this question is that Indian society is vastly diversifying its geographical area and internal diversity which aids in learning about nature. Dreze & Sen (2001) stated that when we look at the inner workings of the Indian economy, we discover that it is divided into four major sets. These four major sets are also explored and described in the context of Indian states in an excellent manner by Gustav Ranis and Ramirez. According to them one group of Indian states performs exceptionally well in terms of national growth with their economies growing at a rate significantly faster than the national average. These states perform well on economic and non-economic indicators but on the other hand they are lag behind in terms of economic growth and human development and the reason for their lag is social evils such as rapid population growth, poverty, low state per capita income, unemployment and a low standard of living that's why these states remain economically backward and are moving further and further away from the group of forward-thinking states. Keeping all of these factors in mind particularly the wide range of diversification among Indian states it is critical to develop and implement appropriate public policies. As Fukuda-Parr (2003) stated in his article it is critical to enhance the role of human agency in achieving growth and development and to formulate public-friendly policies. According to Dreze and Sen (2001) a radical change is necessary to assist the economy in achieving its goals and also to ensure a nation's long-term sustainable development. It is necessary for all sectors of the economy to grow concurrently and at the same rate. Human development is the primary indicator of a nation's development, that's why India's prioritises is human development as evidenced by the UNDP's annual human development reports. UNDP published the first GHDR in 1990 and almost every country has since published its own national human development report. In 2002 the Indian government and planning

commission jointly published India's first national human development report of 2001. According to UNDP human development reports India's HDI ranking has been steadily increasing since 1975 from 0.406 to 0.429 in 1990, 0.429 to 0.495 in 2000, 0.495 to 0.579 in 2010, 0.579 to 0.624 in 2015, 0.624 to 0.630 in 2016, 0.630 to 0.640 in 2017, 0.640 to 0.642 in 2018 and 0.642 to 0.645 in 2019. India's overall HDI increases, but growth in all sectors is uneven across states, regions, castes, and communities, resulting in enormous disparities between Indian states. India is currently at 131 ranks out of 189 countries in terms of HDI with 0.645 score. Certain states in India particularly Kerala is doing exceptionally well in terms of development. Kerala state is far ahead of many developed nations in terms of human development index, Kerala is at first rank among Indian states and union territories with 0.784 scores and comes under high HDI category. It is followed by Chandigarh, Goa, Lakshadweep, Delhi, Andaman and Nicobar, Puducherry, Punjab, Himachal Pradesh and Sikkim. Jammu and Kashmir is at 17th rank among Indian states and union territories in terms of HDI with 0.688 scores and falls into the medium category of HDI. Bihar, Uttar Pradesh, Jharkhand, Madhya Pradesh, and Odisha are those Indian states which have lowest HDI scores.

1.4 Review of Literature

UNDP Report (1990) The main objective of human development report was to meet all necessary needs of human beings with the increase in GDP. This report also said that human development is about more than GNP growth, more than producing commodities and accumulating capital which is the only means of enlarging choices.

HDR by UNDP (1990) According to definition of UNDP human development is a process of enlarging people choices and the most important choice is long and healthy

life, education and decent standard of living. In addition to these some choices are political freedom, guaranteed human rights and self-respect.

HDR (2011) India's human development report argues that interventions in human capital and expansion of human functioning are key requirement for economic growth and reducing poverty and create integration of social and economic policies.

UNDP Report (1990) quality aspect of development was a new concept which is related to human development and it was bought by UNDP first time in his HDI report 1990. The main concern of this report was to shift the focus from income to choices and freedom.

Bhullar (2012) This study was conducted in Haryana and Uttarakhand on comparison base through secondary data and the objective of the study was to analyses social and cultural change through development. Development is a long debateable concept but author said that development means not only to increase income and output process but it is a process through which economy will change and this change took place in social and cultural attitude, GNP and growth in human resource and physical resources.

Mishra & Nayak (2010) This study is related to Chhattisgarh and Odisha and based on primary as well as secondary data and the main objective was to analyses the human development through geographical conditions, socio-economics conditions and infrastructure they observed that geographical condition, historical facts, socio-economic condition, infrastructure and medium of connectivity are directly influenced the human development.

Annapoorani R. (2002) It is a comparative study of developed and less developed nations such as Germany, Japan and USA and India, this study is based on secondary

source of data. The main objective of the study was to check the relationship between human capital and physical capital in developed and developing nations. The author said that the most important resource of any nation in the world is human resource. He took HDI and PQLI and compare growth rate of both and found there is an inverse relationship between developed nations (USA, Japan, Germany) and developing nations like India. In developed nations human capital grow faster than physical capital but in India its inverse. finally, she suggested a special package is required for achieving better development status in India.

Duraisamy P. (2002) This study is only confined to Indian state of Tamil Nadu and it is based on primary data source and the objective of the study was to analyses the influence of education and health on income of the farmers and workers. The author analysis the return in health and education in rural agricultural-market and he find that if a worker not doing work one day due to illness than his or her daily wage reduce by 0.18% for male and 0.16% for female. Author studied that an educated farmer is more technically efficient and they earned 20% more than uneducated farmers.

Dhanasekarn Kasturi Bai (2002) This study is conducted in the context of India and it is based on both sources of data primary as well as secondary and the objective was to check the impact of poverty alleviation programmes on human development through public expenditure. The author argued that human development status can be improved by reduction the poverty. Poverty alleviation programmes helps in the improvements of health and education status as well as in population reduction. Author tries to know about enhancement of human development status through poverty alleviation programmes and expenditure on human resource development. But expenditure on human resource development is low in India as compare to others developing nations. The public expenditure on health and education were 0.9% and

3.2% of GDP respectively in 1990. But it was 1.4% and 3.6% on health and education respectively in same year in others developing nations. He also analyses poverty status of India pre and post reform periods and found that 2% poverty increases in rural India and 4% poverty decline in urban India in post reform periods. It shows inequality between rural and urban population of India.

Bhowmick Swagata Das (2002) This study is in general sense not confined to any specific country or area and it is based on secondary data. The main objective was to measure the socio-economic development through PCGNP. The author discusses the limitation of measuring well-being of people through per capita GNP because PCGNP give weightage to production of defence items rather than basic necessities of life. It also neglects non marketed productions and non-priced productions Author said that an increase in PCGNP does not mean there is an increase in socio-economic development and vice versa. Author said that human development is a dynamic, new and revolutionary approach to recast the conventional approach to development.

Khan Nisar Ahmed (2002) This study measures the inter-state variation of human development index among Indian states and the study is based on secondary data. The objective of the study was to know the cause of wide range of inter-state variation among Indian states. The author observed that India is far behind in human development index and also have a wide spread inter-state differences in human development index. Khan constructed two types of HDI one is HDI* which has same indicators health, education and income but 2nd HDI** which has one additional variable in HDI* and that additional variable was urbanisation because Khan assume that urbanisation is a part of development process and urban life is better than rural life due to better facilities.

Kohli & Kothari (2003) The present study is only confined up to western Indian states and it was based on secondary data source and the objective was to analyse the role of education and health facilities on human development. This study studied the human resource in western India like Gujarat, Rajasthan, Haryana, Punjab, western U.P and M.P and they found that these states are still backward in human development index and they suggested that health facilities have greater influence on human development rather than education facilities. On the basis of study, they suggested that government and policy makers give more focus on human development resources rather than capital resources.

Nayak, P (2005) This study is done in the light of north eastern states of India and taken eight states as study area. This study was based on secondary data and main objective of the study was to check the progress of human development in north eastern states and he found in these eight states mostly tribal people are living and this region is far behind in human development among Indian states as well as many other countries of the world. This region is not only low in human development but also has a wide disparity in gender as well as rural-urban population and uneven progress of HDI which is the main cause of low human development index.

Singh & Hauriyat (2006) conducted a study on human development all over India on the basis of secondary data and the objective was to analyse the role of government policies in human development and found that those states which have focus on socio-economic policies, good governance and efficient delivery system. They have relatively higher level of human development as compare to those states which have less focus on socio-economic policies and good governance and efficient delivery system.

Nayak & Ray (2010) This study is confined up to only for Meghalaya state and is conducted on primary source of data. The objective of study was to know about level of disparities in human development among districts of Meghalaya and also know about cause of disparities among districts. The study found that there is a significant level of disparities in income and non-income attainments of the districts and economic inequality is greater than human development. Finally, they suggested that there is a need of time to redesign policies which are directly increase the welfare of the people and reduce the economic inequality.

Mitra (2002) This study is conducted in Arunachal Pradesh on the basis of primary data and the objective was to check the impact of regional imbalances in human development. The study analyses the socio-economic condition of various districts of Arunachal Pradesh and identify relatively backwardness of districts which were due to regional imbalances and it can be reduced by investment and government policies which are helping in nature for reducing imbalances.

Tripura HDR (2007) Report analyse the status of human development in the state of Tripura and its districts the report was based on primary data which was obtained through survey. This report was on education index which include literacy rate and school enrolment of 06 to 14 years old. This report also includes health index which is based on life expectancy and income index which is based on per capita state domestic product. These three indices are jointly generated human development index of Tripura.

Psacharopoulos, G & Woodhall, M (1993) This study was conducted in Pakistan through secondary data source and the main objective was to check the education level which is directly influenced the human development and in the light of study

author observed that the academic performance and achievements of children are directly influenced by parents education, personal involvement of parents in education of their children and economic status of parents. If parents are able to do this than education standard will be increased which help in improving HDI.

Khan, M.Z Rahman, S & Chaudhry, A.R (2015) This study was conducted all over Pakistan through secondary data and the main objective was to check the illiteracy rate among heads of poor families and the study said that mostly heads of poor families are illiterate and this percentage is high in female heads as compare to male heads and this percentage was 90% and 70% respectively in 1994. The occupational status of poor families mostly is primary activities like agricultural activities, animal husbandry and forest which become main cause of illiteracy and poverty. In the light of study they suggested some policy measures such as public expenditure for welfare of poor, unemployment allowances, health and education facilities etc. which help in reducing illiteracy and poverty and improving HDI of the country.

Gustav Ranis and Frances Stewart (2000) This study was conducted in USA on the basis of primary data and the main objective was to check the human development status through equal distribution of income and they studied that with a given GNP human development can be improved by equal distribution of income because poor people are far behind in human development due to unequal distribution of income and poverty and if income is equally distributed than they are directly improve their human development by more spending on health, food and education.

Jahan K.K & Selvarani, D.C (2015) This study was conducted in the context of India through secondary data source and the objective of study was role of education in human development. This study observed that no matter which aspect to be

consider but education is the root of all development and education is also a scale to measure development but on the other side of development good health are equally important for development which help in human resource development.

David E. Bloom et.al (2001) This study was done in USA by the primary source of data and the main objective was to check the wage and salary differences of workers on the basis of their health and author observed that healthy workers earn more wages and salaries because they are physically and mentally stronger and more energetic and their level of development is also high and they contribute more in GNP as compare to unhealthy or ill workers.

Ahmad Alia (2003) This study was conducted in Nagaland through primary data and the objective of the study was to check the relationship between education and poverty. In the light of study author observed that there is an inverse relationship between education and poverty and studied that earners of poor households are generally engaged in low productive activities due to lack of secondary level of education. This lack of secondary education may force to them in primary activities which are less productive. But on the other hand, poverty leads to low level of investment in education which become hurdle for development.

Christopher Barrett & Brent M. Swallow (2003) This study was conducted for less developed nations through secondary data base and the objective of the study was to check the relationship of primary education with income and development and the authors found that primary education has a positive correlation with income and development in all over world except those countries which are very low in average primary education like Mozambique and Ethiopia.

NHDR (2001) Analysis and pointed by Indian planning commission that rural-urban gap play a major role in HDI that's why in India those states which have less rural-urban gap they have higher HDI and those states which have high rural-urban gap have less HDI. For example, Kerala & M.P, Kerala is at top in HDI ranking among Indian states because it has less rural-urban gap but M.P is in low range in HDI ranking due to high rural-urban gap.

UN Conference on Trade and Development (2001) The problem of unemployment, underemployment and poverty in developing nations like India increases the percentage of hunger and malnutrition. It may be different in different states of India but still existing and it leads to inequality in the development of India as well as world. Nutritional status of people depends upon consumption of food not by production or availability of foods and this nutritional behaviour determine health condition of people which is the most important indicator of HDI.

HDR (1990) Talk about equal distribution of income is the most effective way to achieve sustained human development but if social expenditure is low like in Pakistan and Nigeria or unequal distribution of income and public goods like Brazil than human development not improve much with the rise in GNP. The report suggested that equal distribution of income and expenditure on public goods rise the HDI.

Gawale R.H (2016) This study is confined to Parbhani and Latur districts of Maharashtra and study conducted through primary data source and the objective of the study was to check the effectiveness of education in human development index and he observed that Latur district is known for quality education at all level of education but Parbhani district not specialize in any indicator of human development index but both districts are almost in a same row in case of value of human

development index. The author tries to find the cause of this and he find that many hurdles are come in development specially health and income due to which the level of development is same in these districts.

Haq M. ul (1995) The main objective of UNDP report was to encourage the life for living in better conductions and rich life through full of opportunity and freedom and the central focus was to increase human well beings. Increase in income is an essential mean of development but not end mean of development because social indicators also equally determine the level of development.

Anand S & Sen (1994) The main concern of UNDP report of 1990 was to check the progress in living conduction of human life and they said life has intrinsic value whereas income and education have ordinary value but they equally contribute in measuring human development index.

WHO Report (1998) said that life expectancy is less important than health expectancy. It means health is more important as compare to life, health depend on income and the gap between poor and rich increases by the impact of poverty and malnutrition which decrease the life expectancy.

Malik K (2013) Human development report 2013 said that the developing economies such as India torture from low human development but it can be improved through investing in basic areas like health and education which are directly helps in human development and also improve living standard of people as well as help in attaining inclusive growth.

Chandra N.G (2014) This study is confined to north eastern region of India and it is based on secondary source of data. The main objective of the study was to check the status of human development in north eastern region and to also analyses inter-state

disparities in human development in this region. The author found that human development status in this region is uneven due to less focus and intervention of government to fulfil the basic necessities of life such as food, health, shelter and education. As per study the inter-state variation also exists due to regional imbalances and policies of government but over the decades this region improved in human development performance but still some states are below the national average level of human development index. According to this study Sikkim is at top in human development index ranking in north eastern states and Assam and Arunachal Pradesh are at lowest. The study suggested that investment done in social sector specially in health and education encourage the ranking of human development index. This study also found that the degree of disparity is more in non-economic indicators (health & education) as compare to economic indicator (income).

Antony G.M, Rao K.V, Balakrishna (2001) This study was done in the context of Indian states through secondary data and the objective was to study the nature of human development index with different indicators such as health, demography, nutritional status, dietary habits and socio-economic conduction. The study found that health is directly related to economic efficiency, education, social and cultural development and level of development. Besides this the study said that human development can be improved by implementation of government policies in a right way and policy makers keep poor and malnutritional people in mind during policy frame.

UN conference on trade and development (2000) This report observed that inequality increases day by day globally and its impact also seen among Indian states. A very common problem still exist in India is hunger and malnutrition and this problem exist due to poverty, unemployment, underemployment and over population

and these problems decrease the nutritional status of people and increase health problems, nutritional status depends on food consumption not on food production and food availability. This malnutrition will lead to inequality in the grade of development and it became a main cause of low ranking in human development index.

Parwez S (2016) This study is confined to Kerala and Gujarat states and it is based on secondary data, the objective of the study was to analyses the social and economic development status of concerned states in the light of special package of development for these states which is known as Kerala model and Gujarat model. The study observed that Kerala performed positively in social indicators but its economy in disarray as compare to Gujarat. The authors said that economy development cannot be attained without human development and he also said that if an economy want to attain long run growth than its necessary for that to invest in human development prior to economic development because human development leads to economic development. Author concludes that social development and economic development are equally important for achieving long run growth and development so, that government frame such type of policies which are directly helps in social and economic development.

Raza Nazia (2011) This study is confined to district Poonch of Jammu and Kashmir, it is based on primary and secondary data source, the main objectives of the study was the demographic profile, social characteristics, working groups and level of development of Gujjar community. The study found that Gujjar community mostly living in joint family and they are more socially. engaged in primary activities and they prefer to live in hilly and mountainous area because at there they can graze their cattle in forest land, to some extend they are still orthodox but they preserve their culture and custom till now.

Sen, Amartya (2014) Human development expend capacity and capabilities with entitlement. He elaborates the term capabilities which refer to a person what can do and what can't do with the given resources, similarly entitlement means freedom from hungerness and attaining institutional facilities like health, education and also having shelter. These things directly influence the human development.

Corrie (1995) Write an article on Dalit children of India and the source of data was secondary, the objective of the study was to measure quality of life of Dalit children. The study observed that Dalit children are more deprived from quality of life due to caste-based discrimination and inaccessibility of public goods equally as compare to other castes of children. The study also observed that this caste-based discrimination is the main cause of less development of Dalit children in India.

Kulkarni (2002) This study was confined to Indian social groups and based on secondary data of 1994 NCAER human development index survey in rural India. The objective was to examined the disparities in social groups on education and economic indicator and also check inter-state variations. The study found that disparities exist among social groups but disparities is not similar across states and the causes of disparities was differentials in school enrolment and income.

S. Mukherjee, D. Chakraborty (2014) This paper was an attempt to measure human development of 28 Indian states which was based on secondary data They used the methodology of National Human Development Report 2001 for constructing HDI for the analysis The main objective was to analysis the last three decades and their impact on growth. Their indices for urban and rural areas of each state are separately calculated and their study found that there is a high disparity of human development in urban and rural areas. Urban areas are developed as compared to rural areas and the

authors suggested that it's a need of hour to provide more resources to rural areas for development which ultimately leads to human development.

Ramchandra Murthy, K (2016) This study was only confined to Karnataka state and measure the human development disparities in schedule caste and schedule tribe population. It was based on primary as well as secondary data source. The objective of study was to analysis the progress of human development of schedule caste and schedule tribe and also check disparities between them. The author observed that there is a significant caste disparity in human development on the basis of health, education, income, occupation opportunities and accessibilities between schedule caste and schedule tribe. The study observed that schedule caste is in better position as compare to schedule tribe.

Sivakumar, M (2008) This study was conducted in the context of fifteen major Indian states, it was based on purely secondary data. The objectives were to analysis the relationship between consumption expenditure and human development, it also analysis the relationship among human deprivation and health, education, poverty and consumption expenditure. The study found that there is a significant relationship among consumption expenditure, health, literacy rate, and income with human development. The study also observed that all those states which are top in HDI ranking they have good health, literacy rate, income and consumption expenditure like Kerala, Punjab and Tamil Nadu, on the other hand Bihar, Orissa and Uttar Pradesh are at bottom in HDI ranking due to lack of good health, education, income and consumption. The study also said that lack of these factors become cause of human deprivation.

Bhat, Mohammad Sayid (2007) This study was confined to Gujjar and Bakarwal community of district Kupwara Jammu and Kashmir and based on primary data. The objectives were to study the socio-economic status of Gujjar and Bakarwal community and also analysis the facilities which were provided to them by the government. The study found that 67% Gujjar and Bakarwal population of Kupwara district not access two times meals and the major portion of this community fall in the category of BPL. 43% female and 23% male population having health issues due to non-availability of health care facilities like medicine at time, dispensary or hospital, doctors nearby, safe drinking water, lack of education and permanent house besides all these things 71% Gujjar and Bakarwal population were not aware about government schemes which are run for their welfare.

Rakesh, Maddela (2014) This study covers only Andhra Pradesh state and based on secondary data, the objectives of the study to examine the infant mortality rate, adult literacy rate, gender analysis and indices of quality of life based on safe drinking water, permanent house, toilet, electricity connection etc. The study observed that infant mortality rate increased from 43 to 46 during the time period of 2001 to 2011, adult literacy rate and status of women also increased in the same time period and still it increasing day by day. These factors influence the human development which ultimately lead to economic development.

Aslam, Mohammed (2015) This study was confined to district Rajouri of Jammu and Kashmir. It was based on both primary as well as secondary data. The main objectives of the study were to examine the impact of government schemes (SGSY, KVIB and SC/ST and BC corporation programmes) on the welfare of schedule tribe. The study found that in Rajouri district 245 household are beneficiaries from SGSY scheme but out of 245 household only 21 (9%) HH got financial assistance with in three-month

time period and the remaining 91% HH wait for more than three months for getting financial assistance. It is also found that lack of awareness among schedule tribe community only 43% beneficiaries know about SGSY through VLW, 24% through gram panchayat and 33% from other sources. Same case with KVIB and SC/ST and BC corporation only 9% people of ST know about KVIB from official source. The study also found that out of 245 HH not a single HH joined self-help group to avail financial assistance. The study concluded that these schemes are fruitful for the development of ST community but there are loopholes like awareness, lack of education and many more which are hurdle for them and it's a need of hour to remove all these loopholes for achieving development.

Banoo, Gulshan (2015) This study was conducted in the context of Gujjar and Bakarwal community of Pulwama district of Jammu and Kashmir. It was based on primary and secondary data and the main objectives of the study were to study about number of schools in Gujjar and Bakarwal areas of Pulwama district, to study about school going and dropout children of Gujjar and Bakarwal community of 6-14 years age group. The study found that 1850 students of Gujjar and Bakarwal are enrolled in 53 schools of Pulwama district and 137 teachers are posted in these 53 schools. The study found that more than 50% parents of dropout students are said if our financial condition allow to us then our children definitely go to school regularly.

Haq, Khadija (2018) Wrote a book "Economic growth with social justice" she quotes Dr. Mahbub ul Haq which was the pioneer of the human development concept and innovator of fresh ideas on human development. She said human development can be achieved only when people invest in education and government provide adequate facilities like food, health, education, drinking water, houses, electricity, equal opportunities and many more thing to all people without any discrimination.

She said priority should give to the richness of human life rather than richness of the economy then economy automatically developed.

Pandhi, Ritu (2012) This study was an inter-state analysis of health and nutrition and economic development, which was based on secondary data and the objectives were to examine the inequality in intake of nutrition among states and also to study about linkage between economic development and consumption expenditure on nutrition and health. The study concluded that health is a multi-dimensional aspect and it is a mean of human development, there is a positive relationship between health, nutrition and economic development. This study also analyses that all those states which have good physical and social infrastructure they perform well in health and vice versa. The state that there is a huge gap in calories intake between rural and urban areas and public expenditure in health and family welfare sector and in nutrition (food) sector was low which become cause of inequality and negative impact on human development and economic development.

Dar T.A, R, Saravanan (2017) This study was confined to Gujjar community of Anantnag district of Jammu and Kashmir. This study takes both sources of data primary and secondary and the objectives were to study socio-economic conditions, demography and health status of Gujjar community. To study the problems faced by the Gujjar community and awareness about government policies. The study found that majority of respondent are 31-45 years of age group but their mean age was 40.5 years, 71% are male and 29% are female respondent, 90% respondent are married remaining 10% are single, widowers, or divorced. The study found that Gujjar community not well aware about their rights and governments welfare schemes due to illiteracy among them and it became main cause of their backwardness in this modern era.

The major studies on human development are reviewed above and they express different opinion on human development index. However, there is no study on constructions of human development index of Gujjar community in Jammu and Kashmir, Hence this study will focus on highlight the human development of Gujjar community in Jammu and Kashmir.

1.5 Research Gap

This study is a unique study on human development index because all the previous studies on HDI are focusses on HDI in general sense like country wise, state wise or a comparative study between states or country or study of a specific tribe. All the previous studies were not touching this community in their studies but this study focusses only on a single community (Gujjar) of schedule tribe of Jammu and Kashmir. This community is underprivileged and known for its backwardness in the Union territory. This study helps in upliftment as well as empowerment of Gujjar community in future Insha'Allah.

1.6 Significance of the study

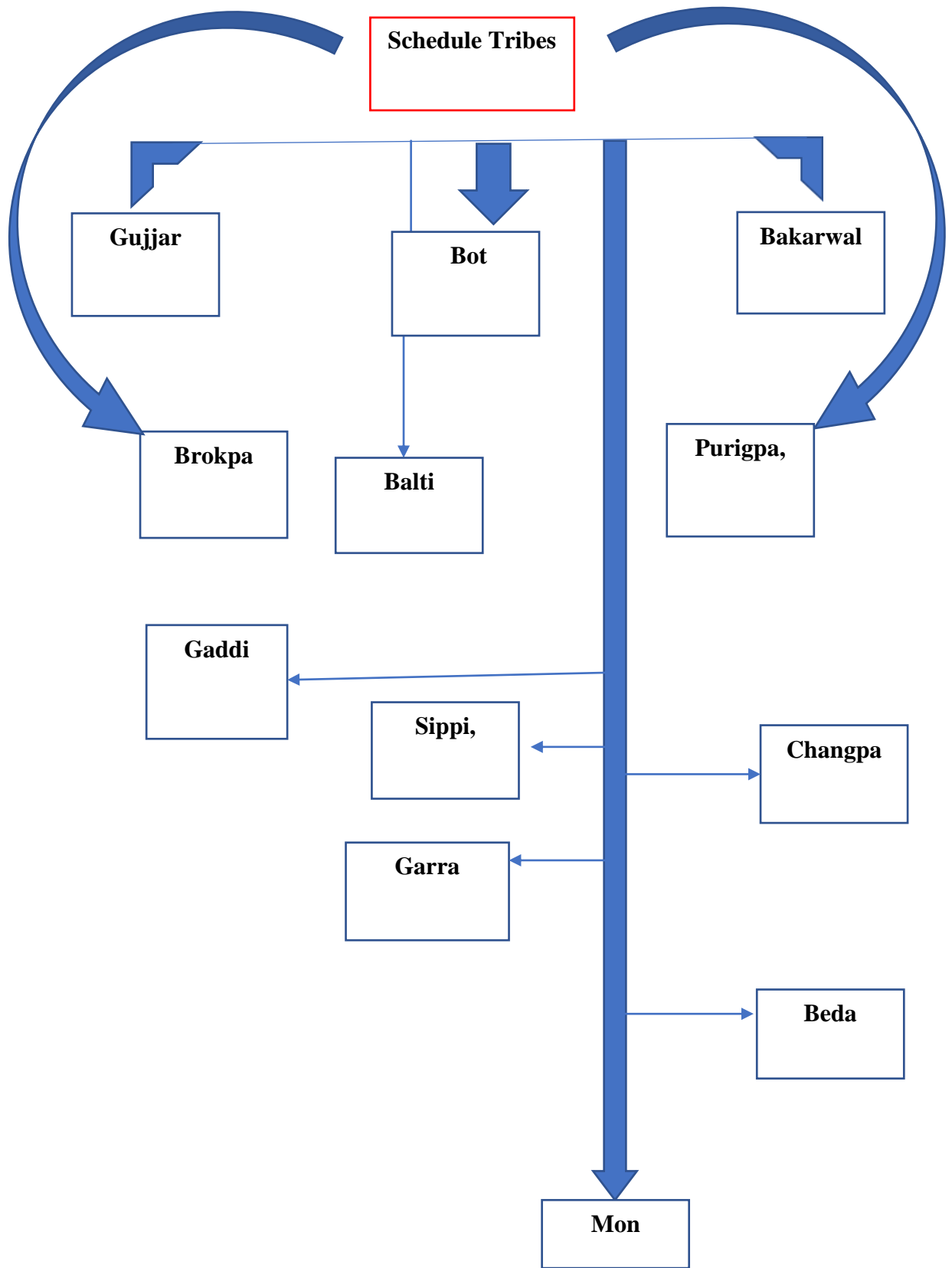
This study is focusing on human development index of Gujjar community in Jammu and Kashmir because this community is still underprivileged and known for its backwardness and social evils such as early marriage, illiteracy, low standard of livings etc. Besides these things Gujjar community faces some unique and serious challenges of life like migration from low altitude area to high altitude areas in summer season and vice-versa in winter season along with whole family, cattle and also carrying basic necessities of life like food, cloths and tents for shelters etc. It is an unorganized and mobile community which are facing the problems of institutional issues such as health and hygiene, drinking water and sanitation and education etc.

This community is unaware about their rights due to they are falling in the trap of injustices, harassment, exploitations, and other violations in daily life. This study is the first attempt focussing on one of the under privileged Gujjar community of schedule tribe in Jammu and Kashmir. This study tries to highlight the real problems of this under privileged sections of the society. This study helpful for policy makers and academicians to know the real cause of the pathetic and unstable life pattern of Gujjar community and to frame a suitable policy initiative so, that they could be empowered.

1.7 Why Jammu and Kashmir chosen as study area

Jammu and Kashmir having the second highest population of schedule tribes in India after Madhya Pradesh 14.7%, J & K constitute 11.9% STs population of India. Maharashtra 10.1%, Odisha 9.2%, and Rajasthan 8.9%. J&K have 14.9 lakhs STs population which is divided into 12 tribes such as Gujjar, Bakarwal, Bot, Brokpa, Balti, Purigpa, Gaddi, Sippi, Changpa, Mon, Garra and Beda out of these Gujjar, Bakarwal, Bot, and Brokpa jointly constitute 88% population of STs, Balti, Purigpa, Gaddi jointly constitute 10.1% population of STs and the remaining five castes Sippi, Changpa, Mon, Garra and Beda jointly constitute 1.9% population of STs. According to census of India (2011). Jammu and Kashmir have highest share of Gujjar population among Indian states due to availability of pasture land, forests land, grazing land, and mountainous area. Which attract Gujjar community to settle there. In Jammu and Kashmir twelve tribes come under STs category and out of these twelve tribes Gujjar is the most populous tribe which constitute about 69.1% population of STs.

Fig 1.1 Flow Chart of Schedule Tribe Population in Jammu and Kashmir



1.8 Why district Poonch and Anantnag are chosen

District Poonch has highest percentage of Gujjar population in comparison to other districts of Jammu division. The total population of Gujjar community in district Poonch is 45% as per census 2011. Whereas district Anantnag has been chosen as a comparative district from Kashmir division because it has the highest Gujjar population (7.82%) in Kashmir division.

1.9 Objectives of the Study

1. To study the socio-economic conditions of Gujjar community in Jammu and Kashmir.
2. To study the changes in occupational structure of Gujjar community in Jammu and Kashmir.
3. To construct human development index of Gujjar community in Jammu and Kashmir.

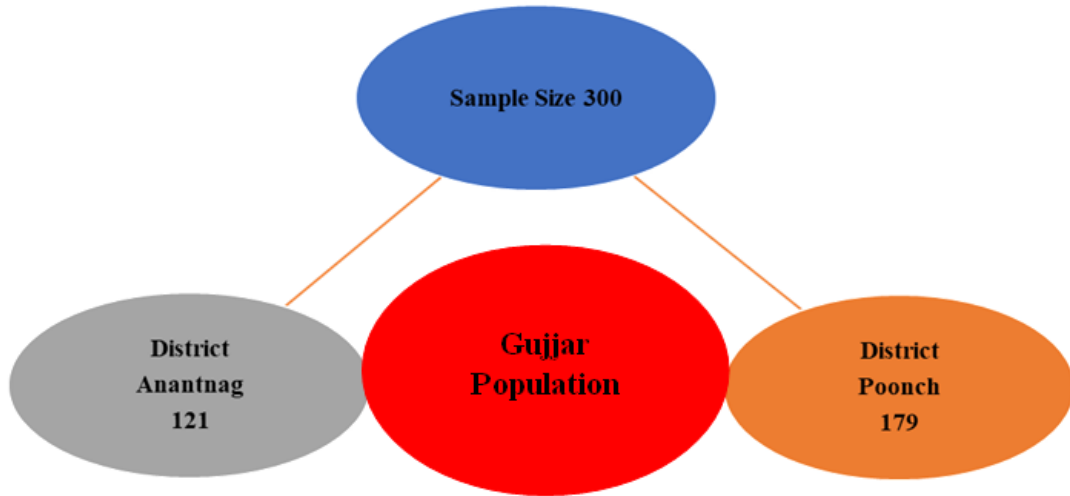
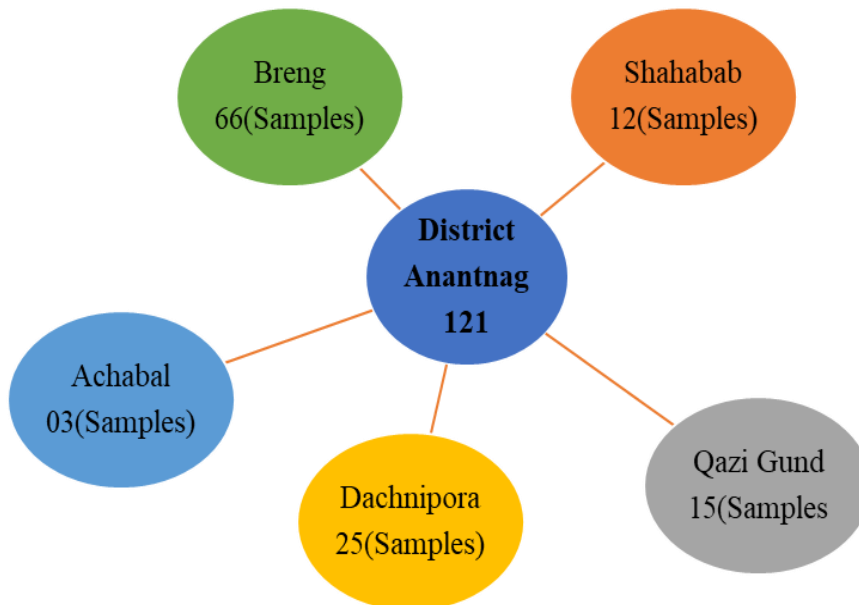
1.10 Hypotheses

1. H0: The socio-economic conditions of Gujjar community in Jammu and Kashmir have improved
H1: The socio-economic conditions of Gujjar community in Jammu and Kashmir are not improved.
2. H0: Human development index of Gujjar community in Jammu and Kashmir is very much below than the HDI of Jammu and Kashmir.
H1: Human Development index of Gujjar community in Jammu and Kashmir is improved significantly

1.11 Methodology of the study

This study is based on new methodology of UNDP of measuring human development index which include health, education and income as indicators. This study is analysed on both primary and secondary data sources. **Primary data** is collected by the well-designed interview schedule and the study area are two districts of Jammu and Kashmir one is from Jammu division and second is from Kashmir division namely Poonch and Anantnag districts respectively. The Sample size is 300 respondents. 179 samples are collected from district Poonch and 121 samples are collected from district Anantnag on the basis of proportionate random sampling technique. Each district is divided into five blocks. **Secondary data**, the secondary data is collected from Global data lab, India stat, JK statistical digest, census of India, central statistical office, All India education survey, Economic survey of concerned states, Ministry of health and family welfare, UNDP reports, WHO reports and world bank reports etc.

Methods, we analyse the data of human development index and we use basic econometric and statistical tools to check the real inferences of all the dimensions of human development index. We also use Tables, Graphs, Bar-diagram, histogram and pie chart for better results.

Fig 1.2 Flow chart of sampling**Fig. 1.3 Flow chart of Blocks of District Anantnag****Fig. 1.4 Flow chart of Blocks of District Poonch**

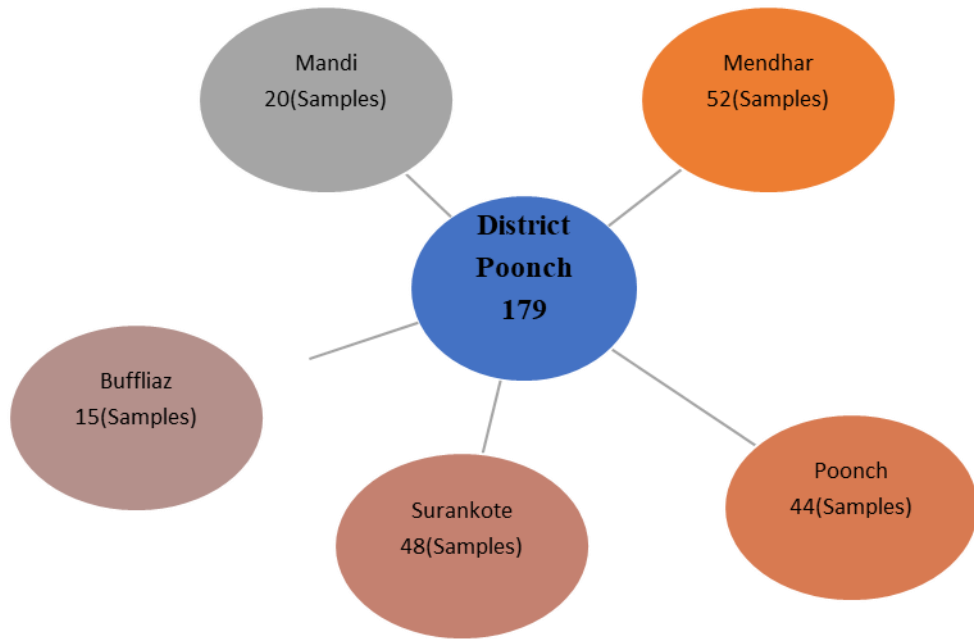
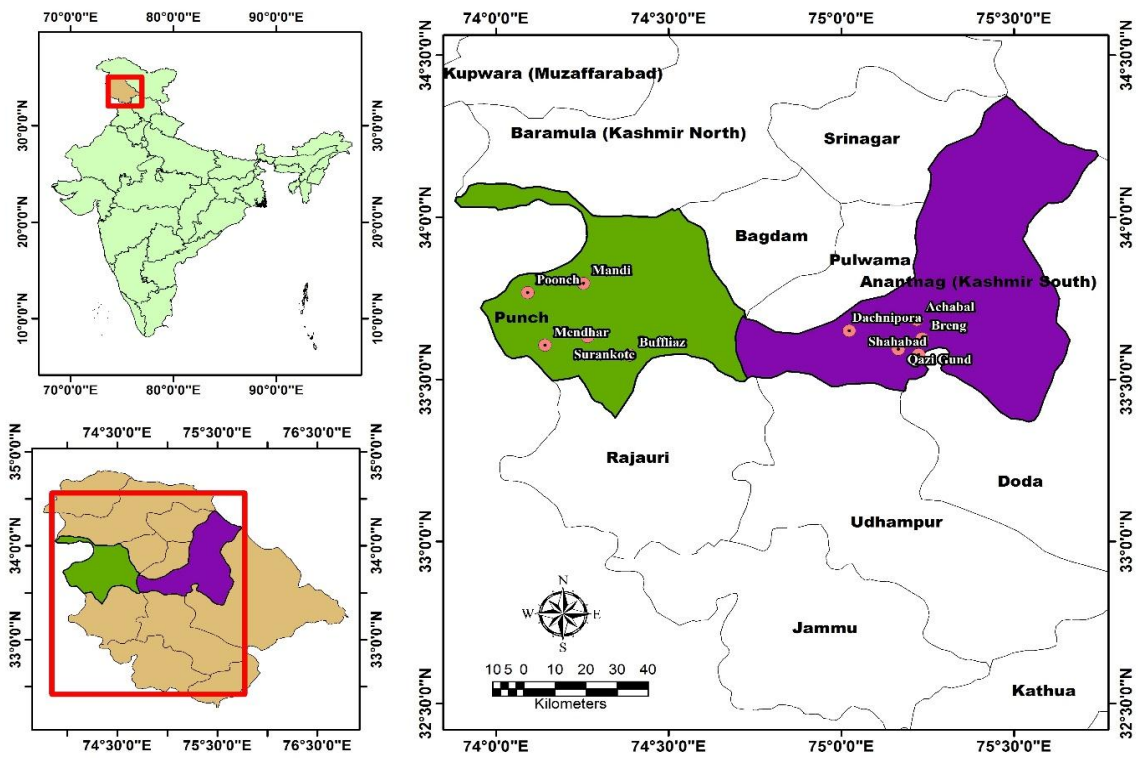


Fig. 1.5 Location Map of study area



Source: ARC GIS. Survey of India.

1.12 Plan of the Study

This study is based on seven chapters **first chapter:** entitled as introduction which consist of general introduction of topic and then in Indian context, review of literature, Research gap, Significance of the study, Study area, objective of the study, hypothesis of the study and methodology of the study Chapterization of the study.

Second chapter: Theoretical and conceptual framework of human development which consists of theories of human development, UNDP reports on human development, national human development reports and new methodology of measuring human development index.

Third chapter: entitled as human development in Jammu and Kashmir. It consists the trend analysis of human development index in Jammu and Kashmir and India. Zone wise comparison of HDI of Indian states and union territories and compound annual growth rate of human development index.

Fourth chapter: entitled as Socio-economic conditions of Gujjar community in Jammu and Kashmir. Which depend upon health, education, income and occupation. A detailed analysis of above mention indicators reflects their status in this chapter, it is based on primary data.

Fifth chapter: entitled as occupational structure of Gujjar community in Jammu and Kashmir. A detailed analysis of engagement of Gujjar population in primary activity, secondary activity and territory activity. This chapter also based on primary data source.

Sixth chapter: entitled as construction of human development index of Gujjar community in Jammu and Kashmir. The construction of HDI is based on new methodology of measuring HDI. Block wise Health index, Education index and Income index of Sample Population from selected districts of Poonch and Anantnag.

Performance of human development indicators in district Poonch and Anantnag. Comparative analysis of HDI of Gujjar community, J&K and India.

Seventh chapter: entitled as conclusions findings and policy recommendations which includes detailed analysis of summary, conclusions and findings of the study and also suggest some policy recommendations for the development of Gujjar community in Jammu and Kashmir Limitation of the study.

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Chapter 2

Theoretical and Conceptual Framework of Human Development

2.1 Introduction

Human development (HD) in any nation on the planet is the result of economic growth, government policies, and the widespread implementation of poverty-eradication programmes. Human development is concerned with the improvement of human functioning in terms of health and educational attainment as well as the reduction of income and poverty. Human development is defined as the primary objective of development being the enhancement of people's lives. Mahbub ul Haq pioneered the concept of human development during the North-South Roundtable meeting in which he played a pivotal role. He formed a team to work on human development which included Amartya Sen, Gustav Ranis, and Paul Streeten among others because from the beginning of human development, the primary goal of all government actions and policies has been to improve people's quality of life which is determined by a number of factors such as social and economic factors. Although Mahbub ul Haq coined the term "human development" Amartya Sen is credited with operationalizing it through developmental policy and planning. In 1995 a summit was held in Copenhagen to discuss ways to improve people's quality of life throughout the world with an emphasis on human development. As a result, the UNDP publishes human development report. The first human development report established the human development index (HDI) as a proxy for a country's human development achievements. It is composed of three components (i) life expectancy which serves as a proxy for health, (ii) literacy which serves as a proxy for education (iii) per capita

income which serves as a proxy for national income. Martha Nussbaum was a philosopher and economist who pioneered the capability approach, which sheds light on the conceptual framework of human development. Although her approach is incompatible with both the human development and capability approaches. While the capability approach is grounded in practise. Human development takes real-world applications into account. It has more to do with a people-cantered approach. Amartya Sen elaborated on the capability approach. However, both scholars explained the approach in a limited sense. In a broader sense the capability approach provides a more comprehensive framework for evaluation paying attention to both process freedoms and principles such as equity and sustainability (Puthenkalam and George, 2012). Amartya Sen 1980 lecture "Equality of What" emphasised the capability approach, which refers to what a person can or cannot have. As an example (Freedom of choice, easily access of health, education, food and shelter and free to participate in any political process) etc. He defined capability in terms of standard of living not per capita income. Sen argued that a society's standard of living should be defined in terms of its capabilities rather than its standard of living. Sen also stated that development should be viewed as a means of enhancing capability and liberty, rather than as a purely economic phenomenon. World Development Report 1980 placed a premium on living standards rather than economic development. Human beings are the source of ideas, decision-making and innovation as stated in this report. It also emphasised on aspects of human development such as health, fertility control, education and nutrition. According to the first global human development report 1990 of UNDP a nation's true wealth is its people. Human development is all about expanding people's choices and decisions. The primary focus is on the development of human capability, health, education, and skill formation all of which contribute to

improving the quality of human capital. Additionally, this report discusses restructuring budget expenditures in a way that benefits human development directly such as by deducting military expenditures and increasing spending on social overhead capitals that contribute to human development. "Human Development is a paradigm for development that promotes an environment in which people can maximise their productive capacity and creative lives in accordance with their needs and interests. Thus, development entails broadening people's options for living in better conditions. (Mahbub ul haq)

2.2 History of Human Development

Human development is a novel concept and reintroduced in the modern era. Initially the concept of human development was found in early human history of ancient time as well as in their cultures and religions. According to Aristotle it was not necessary to seek wealth but rather to seek a path of development. Human development index is a composite statistic that measures life expectancy, education, and per capita income. It was developed by Pakistani economist Mahbub ul Haq for the purpose of ranking countries according to their performance of HDI indicators. UNDP uses it to determine a country's ranking and development. In 2010, human development report introduced an inequality-adjusted human development index (IHDI). According to IHDI, the actual level of human development (adjusted for inequality) and the HDI can be viewed as indicators of potential human development (or the maximum IHDI that could be achieved if there were no inequality). The index omits several other variables such as total wealth per capita or the relative quality of goods produced in a country. The index is based on human development approach of Mahbub ul Haq. Which is frequently expressed in terms of people's ability to "be" and "do" desirable things in life. Several examples are health, education, income, voting and involvement

in community life. The right to choose is critical someone who chooses to be hungry (as during a religious fast) is quite different from someone who is hungry because they cannot afford to purchase food or because the country is experiencing famine.

William Petty, Gregory King, Francois Quesnay, Antoine Lavoisier, and Joseph Lagrange and the works of prominent political economists (Adam Smith, Robert Malthus, Karl Marx, and John Stuart Mill) all concur with Aristotle's views. The fundamental concerns of development are the quality of people's lives, what they were capable of and what they actually accomplished. The biases they encountered is struggles they waged and the expanding choices they benefited from. This expanding not only to economic choices but to any area in which they could influence greater control over their lives. Welfare was one of these options but it had not yet become the limiting factor. In the twentieth century greater emphasis was given to economic development (NNP) as was the case during the Mercantilism period. In this century the desire to earn money and accumulate wealth is much stronger than the desire to improve one's quality of life. Human Development is an approach that takes into account the various socio-economic dimensions of human life not only economic but also social aspects of human development are considered in order to promote human well-being. Human development achievement is quantified using the Human Development Index in this approach. Human development according to Paul Streeten is necessary for the following reasons (i) Human development is the ultimate goal whereas economic growth is a means to an end. The ultimate goal of development as a whole is to treat men, women, and children both current and future generations as ends, to improve the human condition and to broaden people's options. (ii) Human development serves as a catalyst for increased productivity. The most valuable productive asset is a well-nourished, healthy, educated, skilled, and alert labour force.

Thus, investments in nutrition, health care, and education can be justified on the basis of their productivity benefits. (iii) It contributes to family size reduction by slowing human reproduction. All developing countries have found that increasing education levels (particularly for girls) improving health facilities, and lowering infant mortality rates leads to decrease in birth rates. While improved education facilities raise awareness of the benefits of small families (a higher income level, a higher standard of living, etc.) decreases in infant mortality rates reduce the incentives for having children. (iv) Human development can contribute to a society civil unrest reduction and political stability.

Human development has two components the formation of human capabilities such as improved health, knowledge and skills and the use of those capabilities by individuals for recreation, productive purposes or involvement in cultural, social, and political affairs. If the scales of human development are not finely balanced between the two extremes significantly than human frustration may result. Income is clearly not the only option that people desire although it has significance under this concept of human development. However, this is not the entirety of their lives. Therefore, development must encompass more than the expansion of income and wealth. Its primary objective must be to improve people.

UNDP published the first Global Human Development Report (GHDR) in 1990 and every year since then, UNDP has published a global HDR and almost every country has published a national human development report. In accordance with this Indian government and planning commission jointly published India's first national human development report of 2001 in 2002. As per UNDP report of human development India's HDI ranking increasing since 1975 from 0.406 to 0.429 in 1990, 0.429 to 0.495 in 2000, 0.495 to 0.579 in 2010, 0.579 to 0.624 in 2015, 0.624 to 0.630 in 2016,

0.630 to 0.640 in 2017, 0.640 to 0.642 in 2018 and 0.642 to 0.645 in 2019. India's overall HDI increases, but growth in all sectors is uneven across states, regions, castes, and communities, resulting in enormous disparities between Indian states. India is currently at 131 ranks out of 189 countries in terms of HDI with 0.645 score. The overall HDI increases and the country grows in all sectors but this growth is uneven across states, regions, castes, and communities, resulting in enormous disparities between Indian states. Three indices were launched in 2010 to track poverty, inequality, and gender empowerment across multiple dimensions of human development.

- The Multidimensional Poverty Index (MPI),
- The Inequality-adjusted Human Development Index (IHDI)
- The Gender Inequality Index (GII).

Several pertinent theories of economic growth and human development are discussed below which are occasionally advanced by economic thinkers. They account for the occurrence and persistence of disparities in human development both during economic and human development.

2.3 Concept of Human Development

Human development is a much broader concept than human resource development because it requires that all efforts to improve economic growth or development be directed toward the masses and their well-being. The concept of human development encompasses not only the present generation but also the future generation's well-being. Human development is necessary for economic development to continue as well as for its qualitative and distributive aspects. Human development is defined as the improvement of a person's economic, social, cultural, educational, health, and

civic circumstances. Human resource development and human development are inextricably linked but they are not synonymous. The term "human resource" refers to the human being as an input to production similar to capital or machinery. Human resource development is intended to boost economic growth not to improve human lives. As a result, a distinction between human resource development and human development has been made. Human development is not a new concept it dates all the way back to the beginning of human civilizations with roots dating all the way back to Aristotle's time. According to him while wealth is not a good indicator of human development it is beneficial for economic growth. He emphasised the importance of sound political governance in fostering human development and resulting in flourishing lives. The human development concept establishes a distinction between economic growth and development. Economic growth is concerned with per capita gross domestic product or gross national product whereas economic development is concerned with the improvement or well-being of human lives however, the two are inextricably linked. Since the Second World War Asian and African nations have pursued economic development policies. At the time policymakers reasoned that if the country grew economically (as a PCGDP or PCGNP) poverty, illiteracy, and unemployment would be eliminated as a result of trickle-down growth to the bottom of society. When the GDP or GNP approaches fail or are deemed insufficient for measuring human well-being, economic growth is converted into human well-being or standard of living. Economists recognised the significance of socio-economic factors in developing new approaches to development that include the basic needs of human well-being include health, basic education, nutrition, water supply, sanitation, housing, and the ability to earn income. The significance of both the social and economic dimensions of human development becomes a primary goal of alternative

measures. 'UNDP took a broader view of human well-being and development. The UNDP's approach to evaluating alternative development paths is based on the premise that development should provide people with basic capabilities that improve their quality of life. Human development in light of the new approach to measuring economic development is the process of broadening people's options and increasing their level of improvement. Human development is a process that broadens people's options and increases their level of well-being. The approach to human development is centred on indicators of capability levels and their development.

2.4 Definitions of human development.

The United Nations Development Programme (UNDP) launched the first human development report in 1990 introducing a novel approach to advancing human wellbeing. Human development or the human development approach –is about increasing the richness of human life not just the economy in which humans exists. It is a human centred approach that prioritises individuals and their opportunities and choices. Human development, as defined by HDR 1990, is a process of expanding people's choices, the most critical of which are a long and healthy life, education, and a decent standard of living. Additionally, some options include political liberty, guaranteed human rights, and self-respect. Human capital is defined as "the body of knowledge that people possess and their capacity to use that knowledge effectively" (T.W. Schultz, 1961). According to HDR 1993 human development is defined as the development of people, for people, and by people. Development for the people entails ensuring that the economic growth they generate is distributed widely and fairly as well as investing in human capabilities such as health, education or skills that enable them to work creatively and productively.

Human development is defined in HDR 1995 in terms of gender equality. It emphasised the importance of human development for all segments of society particularly the marginalised section of the society. The report also examines the global status of women, emphasising the disparity between women's growing capabilities and the still limited opportunities available to them. Human development report 2002 talk about people and their expanding choices economic growth, increased international trade and investment and technological advancement are all critical components of human development. However, they are merely means to an end. Whether they contribute to human development in the twenty-first century will depend on whether they broaden people's options and contribute to the creation of an environment conducive to people reaching their full potential and leading productive, creative lives. Human development report 1997 focuses on poverty reduction not just on income poverty, but also on poverty as a 'denial of choices and opportunities for living a tolerable life'. The report advocated for poverty eradication as a global goal and a practical possibility. The means to this end must go beyond income growth and must include action aimed at promoting gender equality and good governance among other things.

Human development report 2010 is also defined as the expansion of people's freedoms to live long, healthy, and creative lives to advance other goals they value and to actively shape development equitably and sustainably on a shared planet. Individuals and groups are both beneficiaries and drivers of human development. Human development report 2011 defines by mid-century development progress in the world's poorest countries may be halted or even reversed unless bold steps are taken now to slow climate change to prevent further environmental degradation and alleviate deep inequalities within and between nations. Sustainability and Equity: A

Better Future for All argues that environmental sustainability can be accomplished most fairly and effectively by addressing disparities in health, education, income, and gender, as well as the need for global action on energy production and ecosystem protection.

HDR 2014 establishes sustaining human progress through vulnerabilities reduction and resilience building provides a new perspective on vulnerability and suggests strategies for enhancing resilience. This affirmation reaffirms the centrality of human development emphasising its themes of sustainability, equity and empowerment as well as its inherent adaptability. Due to the fragility and reversibility of gains as well as the need to treat future generations fairly special efforts are required to ensure that human development is sustainable. Human development must also address structural inequity and it's about empowering people by enabling them to make their own choices and to participate in shape and benefit from processes at the household, community and national levels.

2.5 Components of Human Development

Human development is defined as the acquisition of the capacity to enjoy the components of well-being that are generally desired by humans. The following are the components of human development.

1. Prosperity.
2. Possessing the ability to read and write.
3. Conscious participation in social interactions with other human beings.
4. Access to post-secondary education.
5. Craftsmanship and skill development.
6. Capacity to acquire and exercise command over goods and services.

Three dimensions comprise the index of human development. Specifically (i) longevity of life (ii) knowledge and (iii) living standard. Thus, a composite index called human development index which includes variables such as birth expectancy, adult literacy rate, combined primary, secondary, and tertiary enrolment ratio, and real GNP per capita (in PPP). The process of expanding people's options and the level of well-being attained are central to the concept of human development. These choices include living a long and healthy life, acquiring knowledge and acquiring the resources necessary to maintain a decent standard of living. Apart from these additional options exists ranging from political, economic, and social freedom to opportunities for creativity and productivity as well as self-esteem and guaranteed human rights. Income is a critical option and a means to an end namely human development. The three indicators of health, education and income. Human development goals must be attained in order to eradicate human poverty.

2.6 Theories of Human Development

Erik Erikson theory described the impact of social experiences over the course of a person's life. Erikson was particularly interested in the role of social interactions and relationships in the growth and development of human beings. In Psychosocial theory (1963) he describes eight stages of human development and discusses the role of society in development. He places a greater emphasis on environmental factors than on heredity factors in development. According to him human development should be recognised through individual experimental backgrounds that play a significant role in development. Erikson also makes it abundantly clear that reconciling is a necessary component of success-oriented movement and that every individual passes through it.

Arnold Gesell's Maturation growth and development theory (1928). The theory developed by Gesell is referred to as a maturational-developmental theory. Gesell was the first researcher to develop a theory for studying the stages of development in a systematic manner. Dr Gesell observed in the early twentieth century that all children follow similar and predictable sequences though each child follows these sequences at his or her own rate or pace. He concentrated on the nervous system's maturation which is responsible for the physical motor aspects of human behaviour and development. He also stated that the general age period exhibits a wide range of initial abilities during the infancy stage and its maturation-based tasks also play a significant role in social emotional growth and development. According to Gesell the nodal stage is a state of immediate mastery over a situation. He also discusses the evolutionary process and child development. Gesell's developmental cycles are divided into six distinct stages that repeat throughout life. The stages of one cycle are as follows Smooth, Break-Up, Sorting Out, Inward zing, Expansion and Neurotic Fitting Together. Additionally, Gesell development is influenced by a variety of factors such as the environment, cultural influences, family background, early interactions with peers and adults, parenting styles and health conditions. Growth according to Gesell can be viewed as a cyclical spiral. Each spiral cycle represents the time required to progress through six stages or half-year increments. Take note that the time required to complete a cycle of the six stages is quite rapid during childhood and gradually decreases with increasing age. Gesell's research established normative trends in four domains of growth and development: (1) motor, (2) adaptive (cognitive), (3) language, and (4) personal-social behaviour.

2.6.1 Theories on Education

Theodore W. Schultz 1961 introduced the Human capital theory. Human capital is an investment in people. He stated that knowledge and skill are both forms of capital and that capital is the result of "deliberate investment". In the context of western economies Schultz stated that investment in human capital is the primary driver of growth in their national output. Which demonstrates a direct correlation between an increase in human capital investment and human development. Prof. Schultz suggests six ways to improve one's quality of life. (i) Health care facilities and services (ii) Job training (iii) Formally organised education at the elementary, secondary, and post-secondary levels (iv) Adult education programmes (v) Individual migration due to job changes (vi) Social and economic equity. He argues that investments in health, education, and training generate opportunities, alternatives and modes of production that require knowledge and skill. Schultz makes a comparison between acquiring knowledge and skills and acquiring "means of production". Schultz argues in his theory that disparities in access to education and health care are the primary cause of disparities in earnings between people. Additionally, Schultz argues that the primary concern of underdeveloped nations is not food and shelter but rather a short-term investment made to address these crises. There is an opportunity for long-term investment in education and health in those countries where basic needs are not a priority. (Nutrition & Shelter) According to Schultz investing in human capital through education and skill advancement has a direct effect on one's ability to perform productive work. He makes the assumption that investing in these capabilities will result in an increase in human development. Many economists, educators, and thinkers continue to believe that in order to expand people's opportunities and choices,

government, non-governmental organisations and society must invest on people for the sake of a stronger and more productive economy, which ultimately results in human development.

Becker Gary (1967) Becker published a book titled "human capital" in which he makes the analogy between human capital and physical means of production. Human capital is a productive asset in which additional investment results in increased output. If one has the ability to invest in human capital (via education, training, and skills) and if one's outputs are partially dependent on the rate of return on the human capital one owns. Human capital is interchangeable but unlike land, labour or fixed capital (not transferable). Human capital is a more significant concept in labour-surplus countries. In these countries a high birth rate is a primary reason for surplus labour, which becomes a human resource. This human resource can be converted into human capital through the application of effective inputs such as health, education, skill development and moral values. These inputs transform raw human capital into highly productive human capital thereby resolving the issue of human capital scarcity. As a result, it becomes an effective instrument for promoting the nation's economic growth which ultimately results in human development. Gary Becker views education investment as a critical indicator of human capital. His theory evolved primarily around the concept of calculating the rate of return on an individual's investment in self-improvement. He defined human capital as "activities that affect future monetary and psychic income by increasing people's resources". (Becker 1994, 11). Its primary forms were education and on-the-job training but he also included medical care, migration and searching for information about prices and incomes. His strategy had the advantage of providing a unifying explanation for a variety of human capital-related behaviours. To begin his work aided in the analysis of the needs of the

younger generation. He discussed the advantages of prolonged schooling. His theory provided an explanation for the high rate of internal migration within economies. According to him imparting targeted training is far more beneficial than imparting general education. Investment in this training will enable individuals particularly female labourers to earn a living wage. Additionally, it will aid economies in terms of income growth. The spill over effect of education has been extensively discussed. Becker's perspective on education was largely influenced by technological inducement. If demand for skilled workers increases the revenue generated by this demand will have a positive effect on individual income. Finally, he discussed the possibility of financing human capital investment over a lifetime. Becker (1967) and a few other economists believed that human capital investment should be concentrated at a young age. This is because two forces are operating concurrently (a) Human beings have a finite life expectancy. (b) As human capital is acquired the opportunity cost of investing increases. Human capital increases the marginal product of an individual and as a result the opportunity costs of time spent on human investment. Modern economists appear to agree that education and health care are critical to building human capital and ultimately increasing the nation's economic output. (1993, Becker).

Dennison (1967) states that investing in human capital stock results in increasing labour productivity and human capital is a collection of qualitative attributes such as knowledge, skills, training, talents, abilities, intelligence, judgement, experience and wisdom that individuals and groups within a population possess individually and collectively. These resources are the people's total capacity which represents a form of wealth that can be used to accomplish the nations or states goals. Further human capital is classified into three categories (I) intellectual capital (ii) social capital and

(iii) emotional capital. Additionally, this investment results in an increase in society welfare through an increase in educational output. He established a direct link between educational attainment and a nation economic and social well-being. In the modern era conventional inputs such as labour and capital could account for only 60% of the United States total growth. The remaining 40% increase in real national income can be attributed to human capital improvements. The direct benefit of education is estimated to account for 11% while the remaining 29% is due to indirect influence in the form of advances in knowledge (Dutt 2003). He stated that numerous theories exist regarding investment in human capital for educational development and the role of human capital in economic development, productivity growth and innovation has frequently been cited as justification for government subsidies for education and job skills training. The stock of health, knowledge, skills, habits, social and personality characteristics (including creativity) that contribute to economic productivity is referred to as human capital. Human capital is both unique and distinct from other forms of capital. It is required for all developmental processes and for the continuation of innovation. Everyone desires to invest in human capital such as education and training in order to maintain or improve existing levels of quality and production.

Harbison (1971) Human development began with the birth of a nation. He asserted that human capital is the ultimate source of a nation's wealth. While natural resources and capital are passive factors of production. Human beings are active agents who accumulate capital and natural resources and use them to form social, economic and political organisations for national development. He stated plainly that if a nation is unable to develop the knowledge and skills of its citizens it will be unable to utilise human resources for national infrastructure. Investment in education, health, nutrition,

and income is a central component of the human development approach. He classified factors in his capital theory as active and passive. Physical capital and natural resources, such as land and capital are the society's passive or inactive agents. While active agents are human beings who accumulate passive agents exploit them and use them for economic development. He stated that a country that invests in human capital resources insufficiently and is unable to develop skilled and efficient labour will be unable to develop at all. Human capital is the ultimate source of national wealth.

Paul Streeten (1970) defined basic needs in terms of food, housing, health, sanitation and education. He expresses clearly fulfilment of basic needs is a primary condition for economic development. He identified five reasons why human development should be promoted. Human development is a self-contained end in and of itself.

- (i) It is a means of increasing productivity.
- (ii) It suppresses human reproduction by reducing the ideal family size.
- (iii) Human development has a beneficial effect on the physical environment. It helps to mitigate deforestation and desertification.
- (iv) Reduced poverty promotes the development of a healthy civil society, democracy, and social stability.
- (iv) It mitigates civil unrest and promotes political stability.

Miniature (1991) He stated that when we employ skilled human capital in the manufacturing process. He introduces new innovations into the manufacturing process through the use of technology which increases total productivity. When productivity increases income increases as well resulting in economic and human development. He also discovered that education and training are the primary causes of labour income.

"Future productivity can be increased only at a cost otherwise, schooling and training would be very popular". He applied the post-schooling model to data from the 1960 United States Census's 1/1000 sample. Rephann 2002 identifies education costs as the primary determinant of private returns to education (Fleischhauer 2007). As with physical capital investments and human capital investments are made only when the expected return (equal to the net internal rate of return) is greater than the market rate of interest. Education is an investment made with the expectation of future income for those who receive it. The return on education is realised through increased earnings for the worker, increased productivity for the business and increased employment opportunities (Ibid). According to K. Seeta Prabhu available evidence from developing economies indicates that the social returns on investment in primary education are more than double ten percent standard for opportunity cost of capital. According to Psacharopoulos (1993) the social returns to primary education in developing economies in the 1990s were greater than 18 percent per year while the private rate of return was greater than 29 percent per year.

Tinbergen (1975) investigates the connection between human capital and inequality. According to him inequality is primarily caused by a lack of education and technology. He continued by stating that the race between technological development and education determined the relationship between inequality and growth. He identified five human characteristics that promote economic development including (i) an interest in material well-being. (ii) a desire to learn about new techniques and innovations. (iii) a capacity for foresight and a willingness to take calculated risks. (iv) Perseverance and (v) the ability to work cooperatively with others and adhere to certain rules.

Mahbub Ul Haq (1997) defined human development as "the process of expanding people's options" which can be limitless and change over time. However, the most critical and fundamental choice is to live a long and healthy life, to be educated, and to have access to the resources necessary to maintain a reasonable standard of living. Without these options a plethora of other opportunities remain inaccessible. He stated that the primary goal of development is to encourage people to live better lives through opportunities and freedom and that the primary focus should be on increasing human well-being. He added that while income growth is a necessary but not sufficient condition for development. Social indicators also play a role in determining the level of development. He suggested four critical facets of human development. (i) Development must put people first and each activity should be analysed to determine how much each person contributes and benefits from it. (ii) Human development is examined from two perspectives (a) the formation of human capabilities and (b) the application of those capabilities. (iii) The significance of human development is determined by the distinction between development's ends and methods. (iv) The concept of human development encompasses all factors of society like economic, social, political, psychological and cultural.

According to Amartya Sen Capability Approach Theory (1998) human development increases capacity and capabilities through entitlement. He elaborates the term capabilities which refers to a person's ability to do and not to do with given resources similarly. whereas entitlement refers to a person's freedom from hunger and access to institutional facilities such as health, education and shelter. These factors have a direct effect on human development. He added that a society's standard of living should be measured not by its per capita income but by its citizens capacity to live the lives they value. Additionally, he stated that commodities should not be valued in and of

themselves but rather as means of enhancing capabilities such as health, knowledge, self-esteem and the capacity to participate actively in common life. Capabilities refer to what a person is (or is not) capable of doing or being. Freedom from hunger, participation in the political process, adequate housing, access to health and education and so on can all be cited as manifestations of capabilities. Sen argued that development should be viewed as an expansion of capability and liberty rather than as a purely economic phenomenon. Development should be judged in terms of enriching human life with a particular emphasis on (i) Entitlements such as good health and education. (ii) Capabilities which are generated as a result of entitlements and can enable individuals to choose between alternative modes of living. (iii) Functioning's which refer to the 'actions and beings' that define an individual's social existence. In summary, the theoretical perspective on human development traces human development's evolution from the human capital concept. The basic needs approach is an endogenous factor that expands people's options regarding human capability. Human poverty and deprivation, human security and ultimately human liberty. As a result, the list of indicators of human development has been growing ever since. This analysis lays the groundwork for comprehending critical issues concerning regional disparities in human development.

2.6.2 Health

Health is a fundamental right enshrined in India's constitution for all citizens. A healthy citizen benefits the nation. It is every government's obligation to provide health care services to every citizen. Healthcare is inextricably linked to a society socio-economic, political, environmental factor and create difficulties for country's economic advancement. Throughout the world each and every government's primary objective is to expand and improve the basic healthcare services provided to its

citizens. Education is only one component of human capital other critical components include health, income and technology. Investment in healthcare services is necessary to develop human capital which ultimately leads to human development.

Grossman's Theory of Health Care Demand

Grossman (1881-1950) was interested in how individuals allocate their resources in order to improve their health. The model transcends conventional demand analysis and has had a significant impact on health economics. By removing the artificial distinction between consumption and production the theory utilises the concept of the individual as a producer of health. It emphasises the importance of investing in human capital including health and education in order to improve outcomes in both the market (work) and non-market sectors (household). The theory was developed on the basis of several assumptions including the following

- (i) Health care is a continuous investment over the course of a person's life.
- (ii) Individuals place a premium on health but not above all else.
- (iii) Individuals have limited incomes with which to finance health and other activities neither of which is free.
- (iv) A moderate degree of control over health as a result of its ability to influence health-related consumption patterns, health care utilisation and the environment. The theory emphasises that healthcare demand is derived from demand for health which is derived from utility demand. It refers to health as a capital good because it depreciates over time.
- (v) According to Howitt's theory of health human capital and economic growth (2005) stated that the gap between rich and poor has widened in the twenty-first century with developing countries experiencing poverty while developed countries continue to grow and prosper. Between 1960 and 1995 the

developed countries GDP per capita was 2.6 percent greater than that of developing countries. This is an undesirable and unsustainable situation. The primary reason for this was poor health conditions in developing countries. The average mortality rate for children under the age of five years was 84 per 1000. All those who live in developing countries with low incomes lack access to safe drinking water which makes them affected by to a number of diseases such as malaria, tuberculosis and others. The time series analysis of Arora confirms that health conditions play a significant role in the growth process. A person's health has an effect on their well-being. The term "health capital" refers to investments in a person's health and capacity. A person's good health is treated as a consumable good because it provides pleasure. Investments in health capital increase population and working capacity while also lowering illness and death rates which has a positive effect on human capital and development. Health dictates the amount of time a person can spend working and because a healthy person never misses a day of work, he or she is more productive than an ill worker. Additionally, health reduces the number of sick days and increases the number of working days. This increases the possibility of receiving incomes commensurate with development. He also stated that health like education is a form of human capital that affects economic growth through factors such as life expectancy, productive efficiency, creativity and learning capacity. With any given combination of labour, technical knowledge, physical capital and skills. Healthy workers are more effective in the production process. Increases in the stock of human capital as well as continuous human development are a result of investment in education and skill development combined with a healthy lifestyle. This increases the stock

of human capital in terms of quantity and quality. (Gardner et al., 2001) Health dictates the total number of hours an individual wishes to work in order to earn money (Basov, 2002). When compared to unhealthy workers a healthier worker can reduce the depreciation of education capital, thereby increasing the positive effect of education on national and individual growth and development. He concludes that the productivity of a healthy worker is dependent on number of factors including the given quantity of labour hours, physical capital, workers education, skills and experience, and so on. Along with this direct effect improved health reduces mortality and disease rates lowering the effective rate of depreciation on human capital. (Barro, 2013).

Samuel Preston conducted the first study of the relationship between health and income, concluding that there is a proportional relationship between national income and life expectancy. Improved population health has a positive effect on economic productivity and development. The combination of health and education determines an individual's productivity and efficiency. The study demonstrates that healthy workers have superior physical and mental health which enables them to be more productive in nature than unhealthy workers. They demonstrated in the study that improved cognitive abilities, skills and educational qualifications are a result of improved health. It can be concluded that healthy and educated workers are more capable of utilising technology and newly created innovative ideas in the economic growth process which ultimately results in human development. Generally every country places a higher premium on healthcare in urban areas than in rural areas despite the fact that rural areas have a higher population density. The health department's primary function is to provide adequate health care by establishing primary healthcare services on the ground. Almost everywhere in the world healthcare

services are public and entirely run by the government. However, in our country the private sector is still operational and meets the healthcare needs of nearly 80-85 percent of the population which means that only about 15 to 20% of the population is treated in government-run hospitals. There are numerous reasons for this including lack of doctors and paramedical staff, absenteeism, lack of specialised treatment, the nature and arrogance of the staff, accessibility to basic amenities and time management. Health is a critical factor in determining human well-being and economic growth. Health is a critical factor in economic growth and human development. Additionally, it is influenced by a variety of other factors including social and cultural factors, biological factors, economic factors and nutritional factors etc.

2.6.3 Income

Income is a critical factor in the development of an individual or a nation. The term "income" refers to the total of all wages, salaries, profits, interest payments, rents, and other forms of earnings received during a specified time period. It is the instrument that everyone desires. In the first human development report UNDP1990 income was identified as a critical component of development alongside health and education. Sen stated that income is a component that enables the other two components to be met and development to occur. Income is one way to exert control over the resources necessary to maintain a reasonable standard of living. It is used as an indirect measure of human development and capability enhancement. In other words, income can be used to determine a person's quality of life in ways that other aspects of human development (health and education) cannot. In public economics the term refers to the accumulation of both monetary and non-monetary consumption capacity with the former (monetary) serving as a proxy for total income. Haig Simons defines income

as the product of the market value of consumption rights and the change in the value of the store of property rights. Numerous countries per capita income increases as a result of a variety of factors including increased income, education, and favourable political conditions such as economic freedom and peacekeeping. In general, we consider inequality to exist in terms of income and wealth but also in terms of health, education, dignity and respect for human rights. Human development is a people-centred and capability-based approach. To understand income disparities, it is necessary to first examine other forms of inequality.

2.7 Indicators of HDI

The human development index is based on three basic indicators of human development such as (i) health (ii) education (iii) income. These three basic indicators are related to three basic choices (a) To live a long and healthy life (b) To be educated (c) To enjoy decent standard of living. The HDI is calculated as a simple average of these three basic indicators.

$$1) \quad \text{Life expectancy index (LEI)} = \frac{LE - 20}{85 - 20} \dots \dots \dots (1)$$

When L.E is 85 years it is considered one (1) and if L.E is 20 years it will be considered Zero (0).

$$2) \quad \text{Education Index (EI)} = \frac{MYSI + EYSI}{2} \dots \dots \dots (2)$$

$$(i) \quad (MYSI) = \frac{MYS}{15} \dots \dots \dots (3)$$

Where MYSI refers to mean year of schooling Index.

15 is the projected Maximum of this indicator for 2025.

$$(ii) \quad (EYSI) = \frac{EYS}{18} \dots \dots \dots (4)$$

Where EYSI refers to Expected year of schooling Index

18 s equivalent to achieving a master degree in most countries.

(3) Income Index (II)

$$\text{Income Index} = \frac{\ln(\text{GNIPC} - \ln(100))}{\ln 75000 - \ln(100)} \dots (5)$$

II is one (1) when GNIPC is \$75000 and II is Zero (0) when GNIPC is \$100

$$\text{Finally, HDI} = \sqrt[3]{LEI + EI + II} \dots \dots \dots (6)$$

2.8 Implication of the Theories

The purpose of this study is to evaluate various human development theories such as Erikson, A. Gesell, T.W. Schultz's, G. Becker's, Mahbub ul Haq, Grossman's theory of the demand for health care, and Amartya Sen's capability approach theory. There are several development paradigms or models popular today as well as numerous perspectives or viewpoints. A theory is expected to serve two primary functions to explain and to predict a phenomenon. There is no universally accepted model or theory of human development that can adequately explain the current state of human development and forecast its future progression. However, the aforementioned theories shed light on various aspects of human development including human development measurement, economic growth and human development, gender disparities in human development, human development at the global, national, state level, and social group disparities as well as on several contemporary development paradigms and their relevance to human development in the Indian context.

2.9 Conclusion

The review of human development theories demonstrates that disparities exist in the process of human development and that development does not occur simultaneously everywhere. Numerous theories support this phrase including the growth pole theory Amartya Sen capability approach theory, Howitt's theory of health, human capital, economic growth as well as several other development paradigms or models that are currently popular as well as numerous perspectives or viewpoints. A review of empirical research demonstrates that development without human development is futile and ineffective. Globally policymakers, economists, and planners have recognised the role of countries in promoting human development through improved health care, education, income earning opportunities and a decent standard of living. As a result, it has long been accepted that increased education results in increased income earning opportunities which in turn results in a more affluent standard of living which reflects human development. It is also confirmed by the preceding arguments that economic and human development are inextricably linked economic development precedes human development in the early stages of development but later human development results in improved economic and human development. A theory is expected to serve two primary functions to explain and to predict a phenomenon. As a result the concept of development has shifted from economic to human development.

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Chapter 3

Human Development Index in Jammu and Kashmir

3.1 Introduction

The concept of human development is very rich and vast. UNDP popularized this new concept of human development which leads to further addition to the progress and vastness of the subject. There is hardly any aspect in economic, social, political and cultural life of human beings which is not included in the overall universal subject of human development. There are only few indices available to measure the concept of human development. These include human development index, gender development index and poverty index. The most important index which has catch the attention of policy makers throughout the world is human development index. The first human development report brought out by United Nations Development Programme (UNDP) in 1990 started with a simple but far-reaching statement 'People are the real wealth of nation'. The basic objective of development is to create an enabling environment for people to enjoy long, healthy and creative lives, to be educated and to have an access to resources needed for a decent standard of life. In principle these choices can be infinite and change over time. Human development report (HDR, 2010) introduced a new approach for measuring human well-being in a multidimensional approach. Hitherto, economists have tried to develop certain alternative indicators of development. Economists such as Morris D. Morris developed an abstract idea of Physical Quality of Life Index (PQLI) and economists like Paul Streeten supported strongly to the concept of a basic needs approach. All these approaches and concepts significantly contributed to birth of new measurement, Human Development Index

(HDI) as a measurement road of human development. The concept of HD and the methodology of measuring HD technically and theoretically was developed and introduced by United Nations Development Programme (UNDP) in 1990. Mahbub ul Haq, Amratya Sen, Paul Streeten and others have immensely contributed for the genesis of the concept of HD scientifically. This was a historical landmark in measuring development in terms of Human Development by using HDI. Besides the HDI, UNDP also introduced two more indicators namely Gender-related development index (GDI) and Gender Empowerment Measures (GEM) in the year 1995. The basic objective of the development is to improve the welfare of the people and every nation try hard not only to increase her wealth and productive resources but also to ensure better standard of living for her citizens by making available to them with adequate food, clothing, housing, medical facilities and education etc. Apart from the fact that HDI was a landmark achievement in the measurement of development. It is failed to recognize women related problems, women empowerment and gender bias. Therefore, economists and social scientists tried to develop and formulate such measures which could include women and their related problems in comparison with men. UNDP is pioneer in this regard developed, GDI and GEM which are annually being published along with HDI since 1995. Gender-related Development Index While the HDI measures average achievements, the GDI adjusts the average achievement to reflect the inequalities between the following dimensions (i) A long and healthy life as measured by life expectancy at birth. (ii) Knowledge as measured by the adult literacy rate and combined gross enrolment ratio. (iii) A decent standard of living as measured by estimated earned income (PPP US \$). Health, education and income indicators are separately computed for male and female to measure GDI. The Gender Empowerment Measures (GEM) GEM is the decision-making power of both

male and female. GEM focuses on women's opportunities rather than their capabilities, GEM captures gender inequalities in three key areas (i) Political participation and decision-making power as measured women's and men's percentage share of parliamentary seats. (ii) Economic participation and decision-making power as measured by two indicators-women's and men's percentage share of positions as legislators, senior officials and managers and women's and men's shares of professional and technical positions. (iii) Power over economic resources as measured by women's and men's estimated earned income (PPP US dollars). Interestingly GDI and GEM will not measure the disparities between male and female instead of that they penalize the disparities and compute the HD with gender perspective. Therefore, HDI, GDI and GEM failed to show the disparities among male and female. These indicators only show how much males and females have achieved in their respective fields. It is also worth to note here that these indicators discussed above, under the UNDP methodology fails to show why there are disparities in health, education, income and decision making between male and female. It gives tremendous avenues for further research to find-out and understand the reasons for gender disparities in human development. Disparities between male and female are considered as serious hurdles in the process of human development and achieving the welfare of the people. The improvement only in HDI does not represent the development of all. Hence higher the value of HDI is not the replica of development of both male and female. Existence of differences among HDI, GDI and GEM are the clear indications of disparities between male and female. Therefore, to solve these problems related to these aspects, understanding the genuine reasons for disparities could be worth enough. Trends and disparities in human development, Gender-related development index (GDI) and Gender empowerment measures (GEM) of India over the years. The

concept of Human Development (HD) is most widely accepted development approach in recent years. Since two and half decades a debate has been going on using Gross Domestic Product as sole measurement of economic development which does not give the overall picture of development. India is ranked 131 among 189 countries in the HDI rankings released by the United Nations Development Programme report (2019). This clearly indicates the position and condition of human development among India states within states of India there are wide disparities in human development. There are considerable inter-state variations from Kerala to Bihar. Kerala being 1st (0.779) and Bihar last (0.576). Whereas Jammu Kashmir is at 17th rank among Indian states and union territory with a score of 0.688 with this score J&K comes under medium category of human development among Indian states and union territory. The UT of Jammu and Kashmir is the 19th populous among states and UTs with 12,541,302 persons and constitutes approximately 1% of the country's population. Its sex ratio places the UT at 27th rank among Indian states and UTs with 889 females per thousand males (census 2011) and its literacy rate is 67.16 % but contrarily it is the 6th educationally backward UTs among states and UTs of the country. The present study would try to examine the key components of human development status of J&K on certain indicators viz. health, education and the issues related to poverty and income.

3.2 Per Capita Income

Jammu and Kashmir per capita income was Rs 65615 in financial year 2018, which is below the national average of around Rs 98000. Despite the low per capita income, the poverty rate in J&K is 10.35% which is almost half of the national average of around 21%. Human development index for Jammu & Kashmir is higher than the national average of HDI. The minimum wage for unskilled labour was Rs 225 per day

in J&K (Economic Survey 2018-19). Expenditure on the social sector in the last five years rose by 148% and was Rs 24350 crore in 2018-19. The UT tax revenue rose by 78 % and was Rs 11190 crore in the last five years whereas the non-tax revenue surged by 100% Rs 5750 crore during the period. Despite the increase in tax collections, the gross fiscal deficit of J&K has been estimated around Rs 7720 crore for the year 2018-19, which has shot up by 69.6 % in the last five years (RBI).

3.3 Literacy and Unemployment

The literacy rate in Jammu and Kashmir was 67.16% (census 2011). The urban unemployment rate was 70%, which is more than double the national average of 34%. Currently youth unemployment is one of the major challenges faced by the UT of Jammu & Kashmir. (Economic Survey 2018-19). The trend in the development of Jammu and Kashmir is not encouraging. It has been lagging behind most of the states in regard to the growth of Net State Domestic Product (NSDP) at current prices. The average annual growth of Net State Domestic Product at current prices during 1980-81 to 1999-2000 was 12.45% for Jammu and Kashmir against 15.01%, 14.28%, 13.83 % and 14.3 % for Andhra Pradesh, Gujarat, West Bengal and Kerala respectively. In the case of growth of Per Capita Net State Domestic Product at current prices the UT of Jammu and Kashmir was lagging behind most Indian States. The average annual growth of Per Capita Net State Domestic Product at current prices during 1980-2000 was estimated as 9.63 % for Jammu and Kashmir against 12.9%, 11.63%, 11.63%, and 12.86 % for Andhra Pradesh, Gujarat, West Bengal and Kerala respectively. Between 1993-94 and 2011-12 the percentage of people living below the poverty line in the erstwhile Jammu and Kashmir reduced from 26.3% to 8.1% according to Tendulkar poverty estimates. Yet militancy strengthened or abated based largely on extraneous geopolitical factors as data from the south Asia terrorism portal show and

expert's saying 3060 persons were served by one government doctor in J&K in 2018. Only six States have had lesser people served by one doctor. The best State was Delhi (2203 people per government doctor) while the worst State was Bihar (28391 persons served by one government doctor).

3.4 Life expectancy

Jammu and Kashmir ranked third out of 22 States and union territory in terms of life expectancy. The former State had an average life expectancy of 73.5 years between 2012-16. Kerala had the highest life expectancy of 75.1 years while Uttar Pradesh had the lowest 64.8 years, and the national average was 68.7 years.

3.5 Rural unemployment rate

Jammu and Kashmir were placed 21st for rural unemployment rate in 2011-12. Out of every 1000 people, 25 were unemployed in the rural areas of Jammu and Kashmir. The best State was Gujarat (3 out of every 1000 people were unemployed) while Nagaland was the worst (151 were unemployed out of every 1000 people). The national average of unemployment was 17 out of every 1000 people. Poverty rate in J&K stood at 8th rank in terms of poverty rate 10.35%. Goa had the lowest poverty rate of 5.09% while Chhattisgarh had the highest poverty rate of 39.93%. The national average was 21.92%. Infant mortality rates the former State had an infant mortality rate (IMR) of 24 and was placed 10th in the country in 2016. Goa had the lowest IMR (8 infant deaths per 1000) while Madhya Pradesh had the highest (47 infant deaths per 1000). The national average for IMR was 31. Per capita net State GDP (2016-17) Jammu and Kashmir had per capita net State GDP of Rs.62145. Goa was the top-ranked State (Rs.308823) while Bihar (Rs.25950) was the lowest ranked State.

3.6 Human development index

Jammu and Kashmir human development index 2019 (HDI) was 0.688, higher than West Bengal, Rajasthan, Assam, Andhra Pradesh and Gujarat. Kerala had the highest HDI (0.782) while Bihar had the least (0.574). The Human Development Index (HDI) is a composite index of life expectancy, education, and per capita GNP.

Table 3.1 HDI value of India and Jammu and Kashmir.

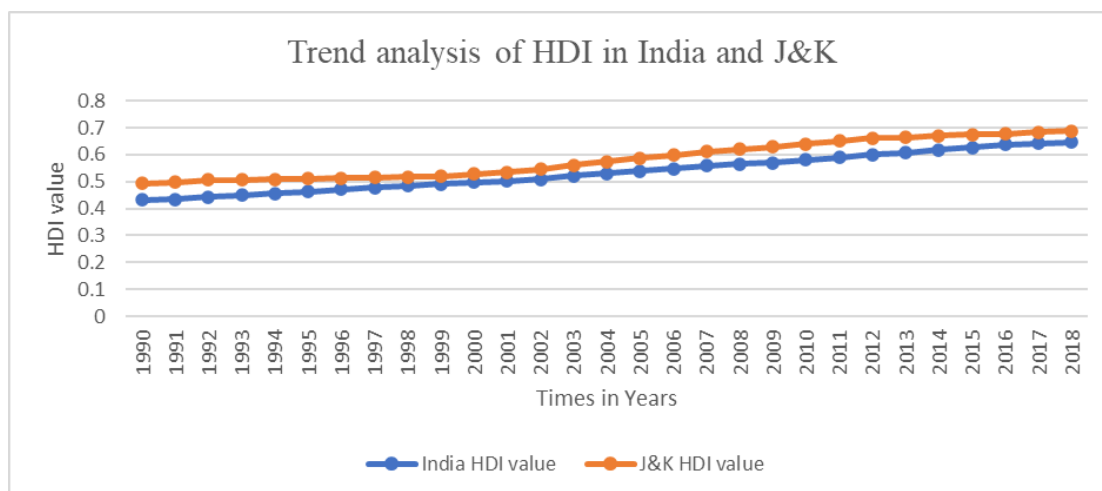
| Years | India HDI value | J&K HDI value |
|-------|-----------------|---------------|
| 1990 | 0.431 | 0.493 |
| 1991 | 0.435 | 0.498 |
| 1992 | 0.442 | 0.506 |
| 1993 | 0.449 | 0.506 |
| 1994 | 0.456 | 0.509 |
| 1995 | 0.463 | 0.511 |
| 1996 | 0.471 | 0.514 |
| 1997 | 0.477 | 0.515 |
| 1998 | 0.484 | 0.517 |
| 1999 | 0.492 | 0.520 |
| 2000 | 0.498 | 0.528 |
| 2001 | 0.502 | 0.536 |
| 2002 | 0.508 | 0.546 |
| 2003 | 0.521 | 0.562 |
| 2004 | 0.530 | 0.575 |
| 2005 | 0.539 | 0.587 |

| | | |
|------|-------|-------|
| 2006 | 0.548 | 0.599 |
| 2007 | 0.558 | 0.611 |
| 2008 | 0.565 | 0.621 |
| 2009 | 0.571 | 0.628 |
| 2010 | 0.582 | 0.640 |
| 2011 | 0.590 | 0.652 |
| 2012 | 0.600 | 0.663 |
| 2013 | 0.607 | 0.665 |
| 2014 | 0.618 | 0.671 |
| 2015 | 0.627 | 0.674 |
| 2016 | 0.637 | 0.678 |
| 2017 | 0.643 | 0.684 |
| 2018 | 0.647 | 0.688 |

Source: Global Data Lab.

As shown in the above table 3.1 The progress in the process of human development index of India and Jammu and Kashmir continuously increasing from 1990 to 2018 with 0.431 to 0.647 and with 0.493 to 0.688 respectively. The HDI value of Jammu and Kashmir is greater than the HDI value of India because India's HDI value is the average value of all Indian states and union territories and the HDI value of these states and union territories varies from high HDI states to low HDI states like Kerala to Bihar. Jammu and Kashmir in a said period of time continuously lies in medium category of HDI. Whereas India comes under medium category of HDI with 131 rank among 189 countries of the world (UNDP 2021)

Fig 3.1 Trend analysis of HDI of India and Jammu and Kashmir.



Source: Estimated from Secondary Data Source

Table 3.2 HDI value of North Indian states and union territories

| Years | J&K | H. P | Punjab | Haryana | Uttarakhand | U. P | Rajasthan | Delhi |
|-------|-------|-------|--------|---------|-------------|-------|-----------|-------|
| 1990 | 0.493 | 0.479 | 0.496 | 0.467 | 0.629 | 0.397 | 0.403 | 0.577 |
| 1991 | 0.498 | 0.484 | 0.501 | 0.471 | 0.634 | 0.401 | 0.406 | 0.583 |
| 1992 | 0.506 | 0.491 | 0.508 | 0.479 | 0.643 | 0.407 | 0.412 | 0.592 |
| 1993 | 0.506 | 0.503 | 0.517 | 0.487 | 0.639 | 0.414 | 0.419 | 0.600 |
| 1994 | 0.509 | 0.516 | 0.526 | 0.497 | 0.637 | 0.422 | 0.427 | 0.609 |
| 1995 | 0.511 | 0.530 | 0.536 | 0.506 | 0.635 | 0.429 | 0.436 | 0.620 |
| 1996 | 0.514 | 0.543 | 0.546 | 0.516 | 0.634 | 0.437 | 0.443 | 0.630 |
| 1997 | 0.515 | 0.554 | 0.554 | 0.524 | 0.631 | 0.443 | 0.450 | 0.639 |
| 1998 | 0.517 | 0.566 | 0.563 | 0.533 | 0.639 | 0.450 | 0.456 | 0.649 |
| 1999 | 0.520 | 0.581 | 0.574 | 0.544 | 0.629 | 0.458 | 0.464 | 0.661 |
| 2000 | 0.528 | 0.589 | 0.578 | 0.549 | 0.630 | 0.463 | 0.469 | 0.664 |
| 2001 | 0.536 | 0.596 | 0.581 | 0.554 | 0.631 | 0.468 | 0.474 | 0.666 |

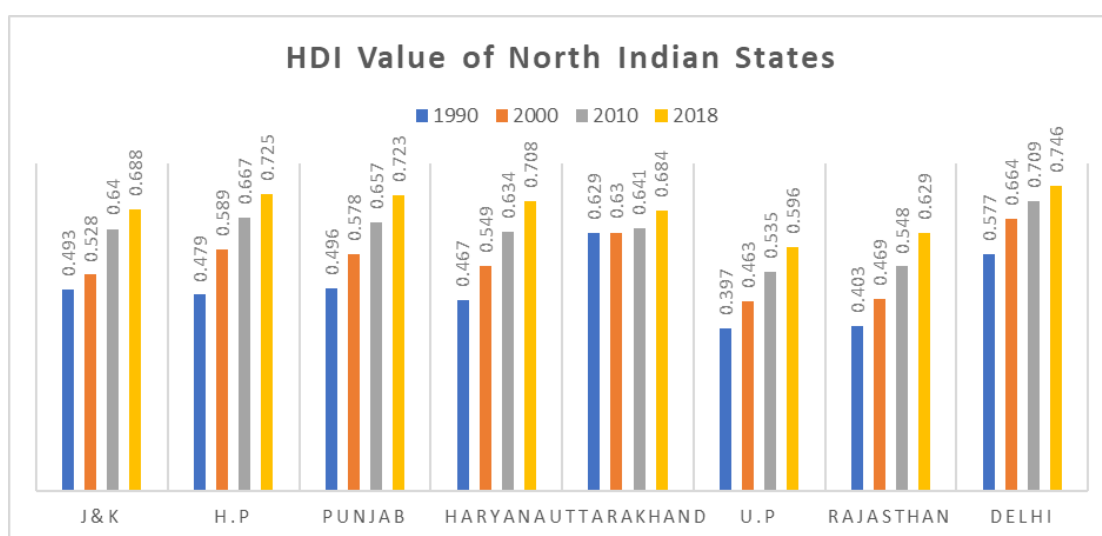
| | | | | | | | | |
|------|-------|-------|-------|-------|-------|-------|-------|-------|
| 2002 | 0.546 | 0.604 | 0.587 | 0.559 | 0.633 | 0.474 | 0.479 | 0.668 |
| 2003 | 0.562 | 0.620 | 0.599 | 0.573 | 0.644 | 0.487 | 0.492 | 0.679 |
| 2004 | 0.575 | 0.632 | 0.607 | 0.582 | 0.650 | 0.496 | 0.501 | 0.685 |
| 2005 | 0.587 | 0.644 | 0.615 | 0.591 | 0.656 | 0.504 | 0.510 | 0.690 |
| 2006 | 0.599 | 0.556 | 0.623 | 0.600 | 0.663 | 0.513 | 0.519 | 0.697 |
| 2007 | 0.611 | 0.660 | 0.633 | 0.610 | 0.658 | 0.520 | 0.527 | 0.702 |
| 2008 | 0.621 | 0.662 | 0.640 | 0.618 | 0.651 | 0.525 | 0.534 | 0.704 |
| 2009 | 0.628 | 0.661 | 0.646 | 0.623 | 0.643 | 0.528 | 0.539 | 0.704 |
| 2010 | 0.640 | 0.667 | 0.657 | 0.634 | 0.641 | 0.535 | 0.548 | 0.709 |
| 2011 | 0.652 | 0.671 | 0.665 | 0.643 | 0.638 | 0.542 | 0.556 | 0.711 |
| 2012 | 0.663 | 0.675 | 0.675 | 0.653 | 0.635 | 0.548 | 0.565 | 0.716 |
| 2013 | 0.665 | 0.683 | 0.683 | 0.662 | 0.643 | 0.556 | 0.576 | 0.719 |
| 2014 | 0.671 | 0.695 | 0.694 | 0.675 | 0.655 | 0.568 | 0.592 | 0.726 |
| 2015 | 0.674 | 0.704 | 0.703 | 0.686 | 0.664 | 0.577 | 0.605 | 0.730 |
| 2016 | 0.678 | 0.714 | 0.713 | 0.698 | 0.674 | 0.587 | 0.620 | 0.735 |
| 2017 | 0.684 | 0.721 | 0.719 | 0.704 | 0.680 | 0.593 | 0.625 | 0.741 |
| 2018 | 0.688 | 0.725 | 0.723 | 0.708 | 0.684 | 0.596 | 0.629 | 0.746 |

Source: Global Data Lab.

As shown in the above table 3.2 the human development index of these states continuously in a progressive form since 1990 to 2018 but their HDI value varies yearly among states. This value of HDI indicates that Indian states are continuously improving their health, education infrastructure and income as well. This can be proved in such a form like in 1990 the HDI value of J&K was 0.493 but it increases to 0.688 in 2018, in the same way the HDI value of Himachal Pradesh, Punjab, Haryana, Uttarakhand, Uttar Pradesh, Rajasthan and Delhi also increases from 0.479 to 0.725,

0.496 to 0.723, 0.467 to 0.708, 0.629 to 0.684, 0.397 to 0.596, 0.403 to 0.629 and 0.577 to 0.746 in the same time period. Initially Uttarakhand was at top among northern states in terms of HDI followed by Delhi, Punjab, J&K, but after 1996 Delhi top in northern states in terms of HDI followed by Uttarakhand, Himachal Pradesh, Punjab but after 2004 Himachal Pradesh comes at second number in terms of HDI after Delhi.

Fig 3.2 HDI value of North Indian states



Source: Estimated from Secondary Data Source

Table 3.3 HDI value of southern states and Union Territories of India.

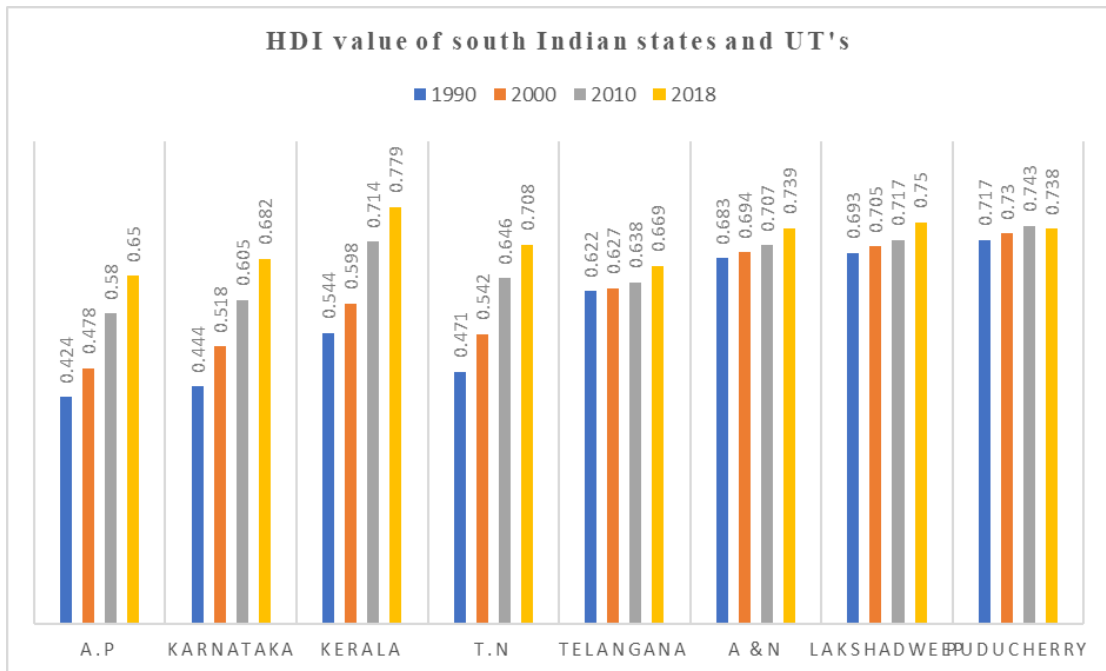
| Years | Andhra Pradesh | Karnataka | Kerala | Tamil Nadu | Telangana | Andaman and Nicobar | Lakshadweep | Puducherry |
|-------|----------------|-----------|--------|------------|-----------|---------------------|-------------|------------|
| 1990 | 0.424 | 0.444 | 0.544 | 0.471 | 0.622 | 0.683 | 0.693 | 0.717 |
| 1991 | 0.428 | 0.449 | 0.550 | 0.476 | 0.628 | 0.690 | 0.699 | 0.722 |
| 1992 | 0.434 | 0.456 | 0.558 | 0.484 | 0.637 | 0.700 | 0.709 | 0.730 |
| 1993 | 0.439 | 0.462 | 0.560 | 0.490 | 0.634 | 0.696 | 0.706 | 0.732 |
| 1994 | 0.444 | 0.470 | 0.564 | 0.497 | 0.632 | 0.694 | 0.705 | 0.730 |

| | | | | | | | | |
|------|-------|-------|-------|-------|-------|-------|-------|-------|
| 1995 | 0.450 | 0.479 | 0.568 | 0.504 | 0.630 | 0.693 | 0.704 | 0.730 |
| 1996 | 0.456 | 0.487 | 0.573 | 0.512 | 0.629 | 0.693 | 0.704 | 0.729 |
| 1997 | 0.459 | 0.494 | 0.576 | 0.518 | 0.626 | 0.691 | 0.701 | 0.727 |
| 1998 | 0.464 | 0.502 | 0.579 | 0.525 | 0.625 | 0.691 | 0.701 | 0.726 |
| 1999 | 0.470 | 0.511 | 0.584 | 0.534 | 0.626 | 0.692 | 0.702 | 0.728 |
| 2000 | 0.478 | 0.518 | 0.598 | 0.542 | 0.627 | 0.694 | 0.705 | 0.730 |
| 2001 | 0.484 | 0.524 | 0.610 | 0.549 | 0.628 | 0.695 | 0.706 | 0.731 |
| 2002 | 0.493 | 0.531 | 0.623 | 0.558 | 0.630 | 0.698 | 0.708 | 0.734 |
| 2003 | 0.508 | 0.545 | 0.645 | 0.575 | 0.641 | 0.709 | 0.719 | 0.745 |
| 2004 | 0.519 | 0.555 | 0.661 | 0.587 | 0.647 | 0.714 | 0.725 | 0.751 |
| 2005 | 0.530 | 0.565 | 0.678 | 0.599 | 0.652 | 0.720 | 0.731 | 0.757 |
| 2006 | 0.542 | 0.576 | 0.695 | 0.612 | 0.658 | 0.726 | 0.737 | 0.764 |
| 2007 | 0.553 | 0.585 | 0.701 | 0.621 | 0.654 | 0.722 | 0.732 | 0.759 |
| 2008 | 0.562 | 0.591 | 0.705 | 0.629 | 0.648 | 0.716 | 0.727 | 0.753 |
| 2009 | 0.568 | 0.595 | 0.707 | 0.635 | 0.640 | 0.709 | 0.719 | 0.745 |
| 2010 | 0.580 | 0.605 | 0.714 | 0.646 | 0.638 | 0.707 | 0.717 | 0.743 |
| 2011 | 0.590 | 0.613 | 0.719 | 0.656 | 0.635 | 0.703 | 0.714 | 0.739 |
| 2012 | 0.600 | 0.622 | 0.726 | 0.666 | 0.633 | 0.701 | 0.712 | 0.737 |
| 2013 | 0.608 | 0.632 | 0.735 | 0.672 | 0.637 | 0.706 | 0.716 | 0.733 |
| 2014 | 0.620 | 0.647 | 0.747 | 0.682 | 0.646 | 0.714 | 0.725 | 0.733 |
| 2015 | 0.629 | 0.659 | 0.757 | 0.689 | 0.651 | 0.721 | 0.732 | 0.730 |
| 2016 | 0.640 | 0.673 | 0.768 | 0.698 | 0.659 | 0.729 | 0.740 | 0.728 |
| 2017 | 0.646 | 0.678 | 0.774 | 0.704 | 0.665 | 0.735 | 0.746 | 0.734 |
| 2018 | 0.650 | 0.682 | 0.779 | 0.708 | 0.669 | 0.739 | 0.750 | 0.738 |

Source: Global Data Lab.

As shown in the above table 3.3 the human development index of above mention states and union territories is consistently in a gradual form from 1990 to 2018 but their HDI values differs yearly among states and UTs. These HDI value indicates that Indian states are continuously enhancing their health, education infrastructure and income as well. The HDI value of Andhra Pradesh, Karnataka, Kerala, Tamil Nadu, Telangana, Andaman & Nicobar, Lakshadweep and Puducherry increases from 0.424 to 0.650, 0.444 to 0.682, 0.544 to 0.779, 0.471 to 0.708, 0.622 to 0.669, 0.683 to 0.739, 0.693 to 0.750 and 0.717 to 0.738 respectively.

Fig 3.3 HDI value of South Indian states and union territories



Source: Estimated from Secondary Data Source

Table 3.4 HDI value of North Eastern states of India.

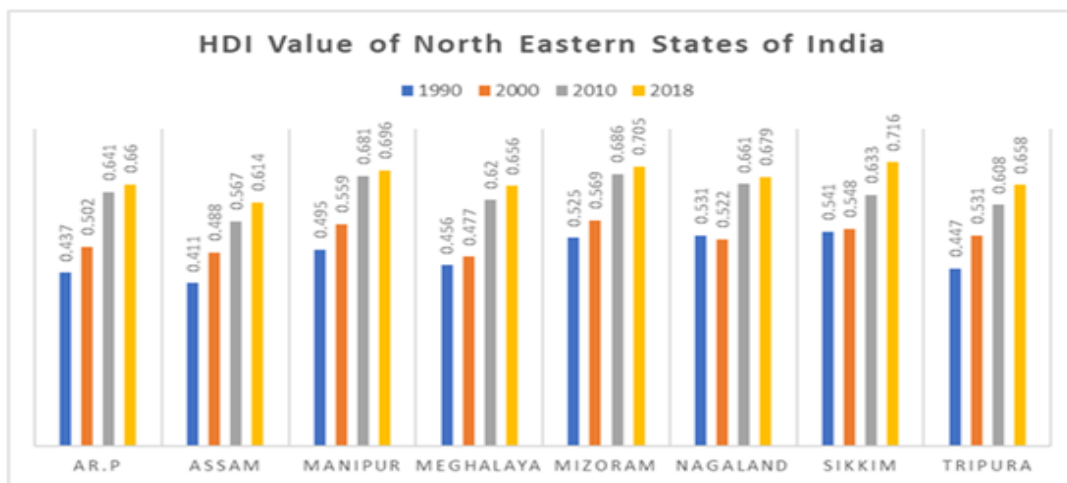
| Years | Arunachal Pradesh | Assam | Manipur | Meghalaya | Mizoram | Nagaland | Sikkim | Tripura |
|-------|-------------------|-------|---------|-----------|---------|----------|--------|---------|
| 1990 | 0.437 | 0.411 | 0.495 | 0.456 | 0.525 | 0.531 | 0.541 | 0.447 |
| 1991 | 0.442 | 0.415 | 0.500 | 0.461 | 0.530 | 0.536 | 0.546 | 0.451 |
| 1992 | 0.448 | 0.421 | 0.507 | 0.467 | 0.539 | 0.544 | 0.554 | 0.458 |
| 1993 | 0.455 | 0.429 | 0.513 | 0.467 | 0.540 | 0.540 | 0.551 | 0.467 |
| 1994 | 0.463 | 0.438 | 0.519 | 0.468 | 0.543 | 0.536 | 0.549 | 0.477 |
| 1995 | 0.471 | 0.447 | 0.526 | 0.469 | 0.547 | 0.533 | 0.548 | 0.488 |
| 1996 | 0.479 | 0.456 | 0.534 | 0.470 | 0.551 | 0.530 | 0.547 | 0.498 |
| 1997 | 0.484 | 0.464 | 0.539 | 0.469 | 0.552 | 0.525 | 0.544 | 0.507 |
| 1998 | 0.491 | 0.472 | 0.546 | 0.468 | 0.555 | 0.521 | 0.543 | 0.516 |
| 1999 | 0.499 | 0.482 | 0.554 | 0.469 | 0.560 | 0.519 | 0.543 | 0.527 |
| 2000 | 0.502 | 0.488 | 0.559 | 0.477 | 0.569 | 0.522 | 0.548 | 0.531 |
| 2001 | 0.506 | 0.493 | 0.563 | 0.485 | 0.578 | 0.526 | 0.553 | 0.533 |
| 2002 | 0.510 | 0.500 | 0.568 | 0.494 | 0.588 | 0.531 | 0.559 | 0.537 |
| 2003 | 0.521 | 0.513 | 0.581 | 0.510 | 0.604 | 0.543 | 0.573 | 0.548 |
| 2004 | 0.528 | 0.522 | 0.589 | 0.521 | 0.617 | 0.550 | 0.582 | 0.554 |
| 2005 | 0.535 | 0.531 | 0.598 | 0.533 | 0.630 | 0.557 | 0.590 | 0.561 |
| 2006 | 0.543 | 0.542 | 0.607 | 0.544 | 0.644 | 0.565 | 0.599 | 0.568 |
| 2007 | 0.570 | 0.549 | 0.627 | 0.565 | 0.655 | 0.590 | 0.609 | 0.579 |
| 2008 | 0.594 | 0.554 | 0.644 | 0.583 | 0.665 | 0.614 | 0.617 | 0.589 |
| 2009 | 0.616 | 0.558 | 0.661 | 0.600 | 0.674 | 0.636 | 0.623 | 0.596 |
| 2010 | 0.641 | 0.567 | 0.681 | 0.620 | 0.686 | 0.661 | 0.633 | 0.608 |
| 2011 | 0.665 | 0.574 | 0.699 | 0.638 | 0.696 | 0.683 | 0.641 | 0.619 |

| | | | | | | | | |
|------|-------|-------|-------|-------|-------|-------|-------|-------|
| 2012 | 0.689 | 0.582 | 0.719 | 0.657 | 0.709 | 0.709 | 0.650 | 0.630 |
| 2013 | 0.679 | 0.586 | 0.710 | 0.653 | 0.704 | 0.698 | 0.662 | 0.633 |
| 2014 | 0.672 | 0.593 | 0.703 | 0.652 | 0.702 | 0.689 | 0.678 | 0.639 |
| 2015 | 0.681 | 0.598 | 0.694 | 0.648 | 0.698 | 0.679 | 0.691 | 0.643 |
| 2016 | 0.651 | 0.605 | 0.686 | 0.646 | 0.695 | 0.669 | 0.706 | 0.648 |
| 2017 | 0.657 | 0.610 | 0.692 | 0.652 | 0.701 | 0.675 | 0.711 | 0.653 |
| 2018 | 0.660 | 0.614 | 0.696 | 0.656 | 0.705 | 0.679 | 0.716 | 0.658 |

Source: Global Data Lab.

As shown in the above table 3.4 the human development index of above states is always in increasing form since 1990 to 2018 but the value of HDI of Indian states is different from state to state. This HDI value shows that the above mention states are continuously increasing their infrastructure in the field of health, education and income as well. The HDI value of Arunachal Pradesh increases from 0.437 to 0.660 during 1990-2018 during the same time period Assam 0.411 to 0.614, Manipur 0.495 to 0.696, Meghalaya 0.456 to 0.656, Mizoram 0.525 to 0.705, Nagaland 0.531 to 0.679, Sikkim 0.541 to 0.716 and Tripura 0.447 to 0.658.

Fig.3.4 HDI value of North Eastern states of India.



Source: Estimated from Secondary Data Source

Table 3.5 HDI value of Western states and union territories of India.

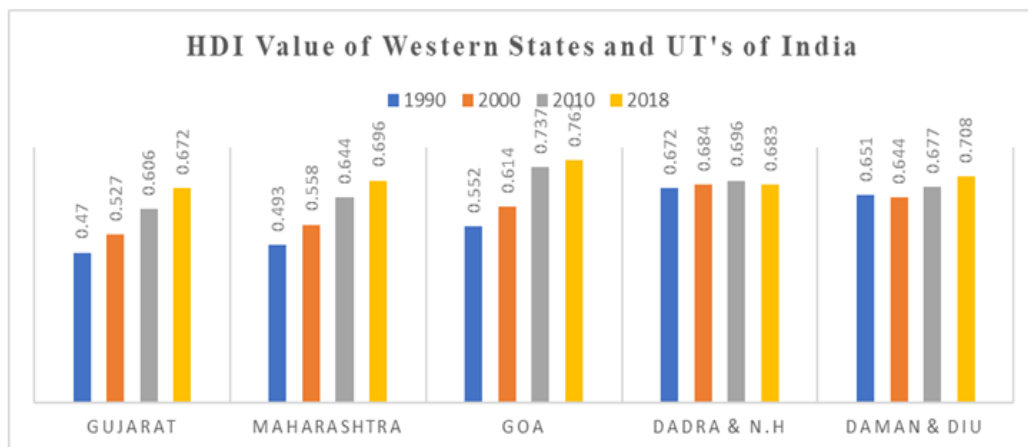
| Years | Gujarat | Maharashtra | Goa | Dadra and Nagar Haveli | Daman and Diu |
|-------|---------|-------------|-------|------------------------------|------------------|
| 1990 | 0.470 | 0.493 | 0.552 | 0.672 | 0.651 |
| 1991 | 0.475 | 0.498 | 0.557 | 0.679 | 0.657 |
| 1992 | 0.482 | 0.506 | 0.565 | 0.689 | 0.666 |
| 1993 | 0.487 | 0.511 | 0.569 | 0.685 | 0.664 |
| 1994 | 0.491 | 0.518 | 0.575 | 0.684 | 0.663 |
| 1995 | 0.498 | 0.525 | 0.581 | 0.683 | 0.662 |
| 1996 | 0.504 | 0.536 | 0.587 | 0.683 | 0.662 |
| 1997 | 0.508 | 0.537 | 0.593 | 0.681 | 0.661 |
| 1998 | 0.514 | 0.544 | 0.598 | 0.680 | 0.661 |
| 1999 | 0.521 | 0.551 | 0.606 | 0.681 | 0.662 |
| 2000 | 0.527 | 0.558 | 0.614 | 0.684 | 0.664 |
| 2001 | 0.533 | 0.563 | 0.621 | 0.684 | 0.665 |
| 2002 | 0.540 | 0.569 | 0.630 | 0.686 | 0.668 |
| 2003 | 0.554 | 0.584 | 0.647 | 0.698 | 0.678 |
| 2004 | 0.564 | 0.593 | 0.659 | 0.703 | 0.683 |
| 2005 | 0.573 | 0.602 | 0.671 | 0.709 | 0.688 |
| 2006 | 0.584 | 0.613 | 0.685 | 0.716 | 0.695 |
| 2007 | 0.591 | 0.622 | 0.699 | 0.711 | 0.691 |
| 2008 | 0.595 | 0.629 | 0.711 | 0.705 | 0.685 |

| | | | | | |
|------|-------|-------|-------|-------|-------|
| 2009 | 0.598 | 0.634 | 0.721 | 0.698 | 0.679 |
| 2010 | 0.606 | 0.644 | 0.737 | 0.696 | 0.677 |
| 2011 | 0.612 | 0.652 | 0.749 | 0.692 | 0.673 |
| 2012 | 0.619 | 0.661 | 0.764 | 0.690 | 0.672 |
| 2013 | 0.628 | 0.666 | 0.759 | 0.680 | 0.676 |
| 2014 | 0.641 | 0.674 | 0.758 | 0.673 | 0.684 |
| 2015 | 0.651 | 0.680 | 0.754 | 0.683 | 0.690 |
| 2016 | 0.663 | 0.687 | 0.750 | 0.653 | 0.697 |
| 2017 | 0.668 | 0.692 | 0.756 | 0.659 | 0.704 |
| 2018 | 0.672 | 0.696 | 0.761 | 0.683 | 0.708 |

Source: Global Data Lab.

As shown in the above table 3.5 the human development index of Gujarat, Maharashtra, Goa, Dadra and Nagar Haveli and Daman and Diu is in increasing form since 1990 to 2018 from 0.470 to 0.672, 0.493 to 0.696, 0.552 to 0.761, 0.672 to 0.683 and 0.651 to 0.708 respectively. This HDI value shows that the above mention states and union territories are continuously increasing their infrastructure in the field of health, education and income.

Fig. 3.5 HDI value of Western states of India.



Source: Estimated from Secondary Data Source

Table 3.6 HDI value of Central and Eastern states of India.

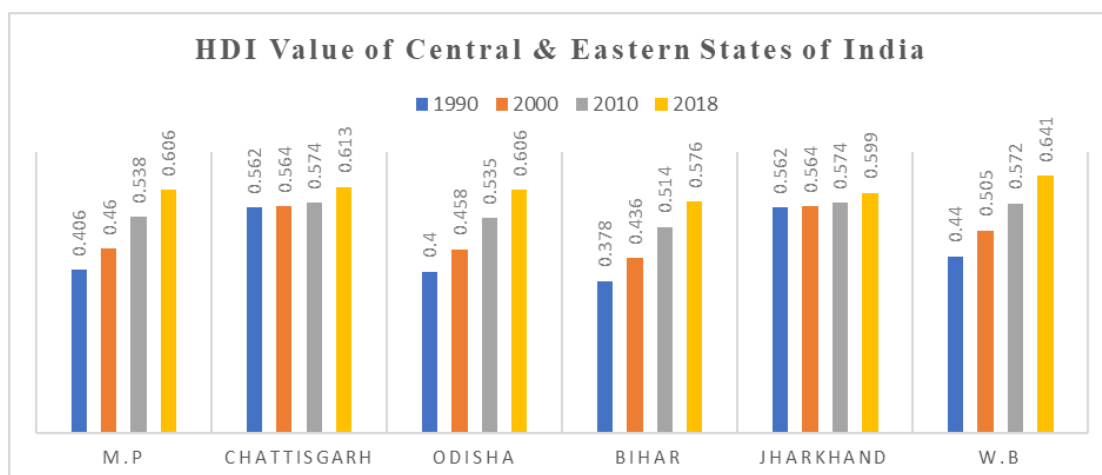
| Years | Madhya Pradesh | Chhattisgarh | Odisha | Bihar | Jharkhand | West Bengal |
|-------|----------------|--------------|--------|-------|-----------|-------------|
| 1990 | 0.406 | 0.562 | 0.400 | 0.378 | 0.562 | 0.440 |
| 1991 | 0.410 | 0.567 | 0.404 | 0.382 | 0.567 | 0.445 |
| 1992 | 0.416 | 0.575 | 0.410 | 0.388 | 0.575 | 0.452 |
| 1993 | 0.421 | 0.572 | 0.415 | 0.394 | 0.571 | 0.458 |
| 1994 | 0.426 | 0.569 | 0.422 | 0.401 | 0.569 | 0.465 |
| 1995 | 0.433 | 0.569 | 0.429 | 0.407 | 0.568 | 0.473 |
| 1996 | 0.439 | 0.567 | 0.436 | 0.414 | 0.567 | 0.481 |
| 1997 | 0.443 | 0.564 | 0.441 | 0.419 | 0.564 | 0.487 |
| 1998 | 0.448 | 0.562 | 0.447 | 0.425 | 0.563 | 0.493 |
| 1999 | 0.454 | 0.563 | 0.454 | 0.432 | 0.563 | 0.501 |
| 2000 | 0.460 | 0.564 | 0.458 | 0.436 | 0.564 | 0.505 |
| 2001 | 0.465 | 0.564 | 0.462 | 0.440 | 0.564 | 0.508 |
| 2002 | 0.470 | 0.567 | 0.467 | 0.444 | 0.567 | 0.513 |
| 2003 | 0.483 | 0.577 | 0.479 | 0.455 | 0.577 | 0.524 |
| 2004 | 0.492 | 0.582 | 0.487 | 0.463 | 0.583 | 0.531 |
| 2005 | 0.501 | 0.588 | 0.494 | 0.470 | 0.588 | 0.539 |
| 2006 | 0.510 | 0.594 | 0.503 | 0.478 | 0.594 | 0.546 |
| 2007 | 0.519 | 0.589 | 0.512 | 0.488 | 0.589 | 0.554 |
| 2008 | 0.524 | 0.583 | 0.519 | 0.497 | 0.583 | 0.559 |
| 2009 | 0.529 | 0.576 | 0.525 | 0.504 | 0.576 | 0.564 |
| 2010 | 0.538 | 0.574 | 0.535 | 0.514 | 0.574 | 0.572 |

| | | | | | | |
|------|-------|-------|-------|-------|-------|-------|
| 2011 | 0.546 | 0.571 | 0.545 | 0.524 | 0.572 | 0.579 |
| 2012 | 0.553 | 0.569 | 0.554 | 0.533 | 0.569 | 0.587 |
| 2013 | 0.562 | 0.576 | 0.563 | 0.539 | 0.572 | 0.596 |
| 2014 | 0.574 | 0.586 | 0.575 | 0.550 | 0.579 | 0.609 |
| 2015 | 0.585 | 0.594 | 0.585 | 0.557 | 0.584 | 0.619 |
| 2016 | 0.596 | 0.604 | 0.597 | 0.567 | 0.590 | 0.631 |
| 2017 | 0.602 | 0.609 | 0.602 | 0.572 | 0.595 | 0.636 |
| 2018 | 0.606 | 0.613 | 0.606 | 0.576 | 0.599 | 0.641 |

Source: Global Data Lab.

As shown in the above table 3.6 the human development index of above-mentioned states is consistently increasing since 1990 to 2018 but their HDI value differ from state to state. The HDI value of Madhya Pradesh has increased from 0.406 to 0.606, Chhattisgarh has increased from 0.562 to 0.613, Odisha has increased from 0.400 to 0.606, Bihar has increased from 0.378 to 0.576, Jharkhand has increased from 0.562 to 0.599 and West Bengal has increased from 0.440 to 0.641. This value of HDI indicates that the Indian states are continuously enhance their health and education infrastructure and income as well.

Fig. 3.6 HDI value of Central and Eastern states of India.



Source: Estimated from Secondary Data Source

Table. 3.7 Compound Annual Growth Rate of Indian states and union territories in terms of HDI.

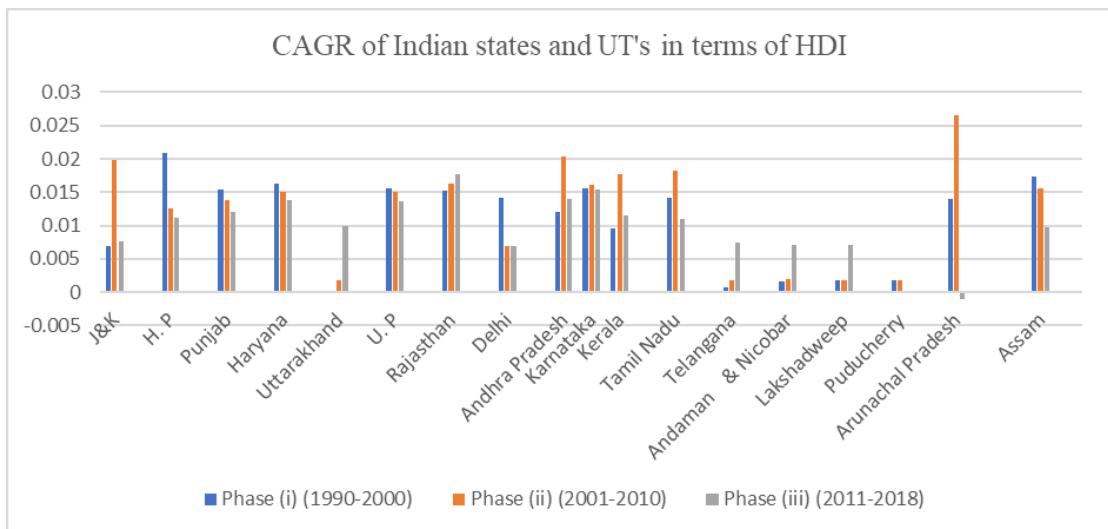
| S.no | States | Phase (i) (1990-2000) | Phase (ii) (2001-2010) | Phase (iii) (2011-2018) |
|------|-------------------|--------------------------|---------------------------|----------------------------|
| 01 | J&K | 0.006882 | 0.019899 | 0.007707 |
| 02 | H. P | 0.020888 | 0.012584 | 0.011119 |
| 03 | Punjab | 0.015417 | 0.013753 | 0.012018 |
| 04 | Haryana | 0.016308 | 0.015163 | 0.013852 |
| 05 | Uttarakhand | 0.000159 | 0.001749 | 0.009995 |
| 06 | U. P | 0.015498 | 0.014978 | 0.01366 |
| 08 | Rajasthan | 0.015282 | 0.016249 | 0.017779 |
| 09 | Delhi | 0.014143 | 0.006976 | 0.006888 |
| 10 | Andhra Pradesh | 0.01206 | 0.020308 | 0.013932 |
| 11 | Karnataka | 0.015534 | 0.016099 | 0.015355 |
| 12 | Kerala | 0.009509 | 0.017645 | 0.011516 |
| 13 | Tamil Nadu | 0.01414 | 0.018242 | 0.010957 |
| 14 | Telangana | 0.000801 | 0.001757 | 0.007479 |
| 15 | Andaman & Nicobar | 0.001599 | 0.001904 | 0.00716 |
| 16 | Lakshadweep | 0.001718 | 0.001719 | 0.007052 |

| | | | | |
|----|------------------------|----------|-----------|----------|
| 17 | Puducherry | 0.001798 | 0.001811 | -0.00019 |
| 18 | Arunachal Pradesh | 0.013963 | 0.026625 | -0.00108 |
| 19 | Assam | 0.017321 | 0.01566 | 0.00967 |
| 20 | Manipur | 0.012233 | 0.0221368 | -0.00061 |
| 21 | Meghalaya | 0.004513 | 0.027661 | 0.003983 |
| 22 | Mizoram | 0.008081 | 0.019216 | 0.001837 |
| 23 | Nagaland | -0.00171 | 0.025709 | -0.00084 |
| 24 | Sikkim | 0.001286 | 0.015126 | 0.015933 |
| 25 | Tripura | 0.017369 | 0.014736 | 0.008767 |
| 26 | Gujarat | 0.011513 | 0.014364 | 0.013451 |
| 27 | Maharashtra | 0.012462 | 0.015048 | 0.009373 |
| 28 | Goa | 0.010702 | 0.019211 | 0.002273 |
| 29 | Dadra and Nagar Haveli | 0.001772 | 0.001934 | -0.00187 |
| 30 | Daman and Diu | 0.001979 | 0.001989 | 0.007269 |
| 31 | Madhya Pradesh | 0.012566 | 0.016334 | 0.015006 |
| 32 | Chhattisgarh | 0.000355 | 0.001955 | 0.010191 |
| 33 | Odisha | 0.013633 | 0.016434 | 0.015272 |
| 34 | Bihar | 0.014377 | 0.017422 | 0.013608 |
| 35 | Jharkhand | 0.000355 | 0.001955 | 0.006611 |
| 36 | West Bengal | 0.013874 | 0.013271 | 0.014639 |

Source: Estimated from Secondary Data Source

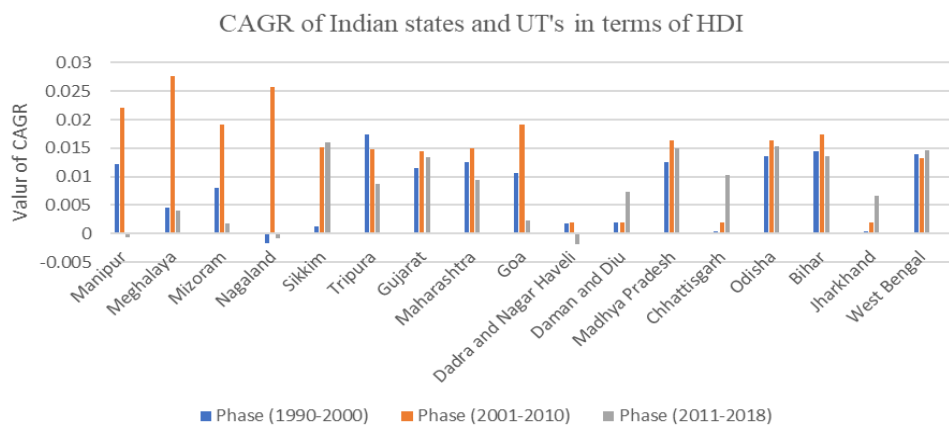
Table 3.7 shows the decadal Compound Annual Growth Rate (CAGR) of Indian states and union territories in terms of HDI from 1990 to 2018. As shown in the table there are three decades. In the first decade (1990-2000) The CAGR value of H.P was highest with 0.020888 and Nagaland has lowest CAGR value -0.00171, whereas the CAGR value of J&K was 0.006882. In 2nd decade (2001-2010) Meghalaya has highest CAGR value 0.027661 whereas Daman & Diu has lowest CAGR value 0.001989 among Indian states and UTs. In 3rd decade (2011-2018) Rajasthan has highest CAGR value with 0.017779 whereas Nagaland has lowest CAGR value with -0.00084.

Fig 3.7 CAGR of Indian states and union territories in terms of HDI



Estimated from Secondary Data Source

Fig 3.8 CAGR of Indian states and union territories in terms of HDI



Estimated from Secondary Data Source

3.7 Conclusion

The HDI gives an overall index of economic development consists of both strengths and weaknesses but there are certain differences among Indian states and union territories. It is quite evident that there were disparities in human development index of Indian states and union territories. It is also evident from the analysis that human development of Kerala was higher than other states and UTs of India. It is further evident that human development of Jammu & Kashmir is higher than India's average human development index because India's human development index is the average of all states and union territories. It's clearly seen in the trend there is a huge difference among Indian states e.g, Kerala to Bihar in terms of human development index. Disparities are the common features in the process of development. However, there is a need to rectify these disparities, in order to ensure better well-being of the people of India.

3.8 References

1. Global Data Lab.
2. Mahbub ul Haq. Cited in Purnachandra Rao (2007): Human Development in India: Analysis of Andhra Pradesh, Labour and Development, Vol. 12, No. 2 and Vol. 13, No. 1, June 2007, p. 47.
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6 Ibid p.345

Chapter 4

Socio-economic conditions of Gujjar community in Jammu and Kashmir

4.1 Introduction

Jammu and Kashmir blessed with multi-cultural, multi-linguistic and also having a wide range of diversity of ethnic groups like a lawn with multi-plants. Gujjar community is certainly one of them and is a crucial factor of composite culture and tradition of Jammu and Kashmir. The evidence of residing of Gujjar community in Jammu and Kashmir is very antique, many tribes and ethnic groups are immigrated in Jammu and Kashmir from all sides but Gujjar community immigrated from Georgia via central Asia to Gujarat, Rajasthan, Punjab and finally in J&K. Gujjar speak a dialect known as Gojri. (Warikoo.K) They are residing in deplorable conditions and inaccessible the basic necessities of life due to their migratory nature of life span. The Gujjar community mostly perceived as pastoral and nomadic life, but now turned into permanent settlers spreading across northern India. Gujjar community is a pastoral agricultural ethnolinguistic and a linguistic group found in India, Pakistan, and a small portion of northern Afghanistan. Gujjar community is classified as other backward classes (OBC) in some parts of India, but are classified as schedule tribes in J&K and Himachal Pradesh. According to the 2011 census 99.3 percent of Gujjar population in Jammu and Kashmir are Muslims. Gujjar is a nomadic community doing seasonal migration from low land areas to high land areas (Dhook) for grazing their animals. Some of them are settled permanently in Kandi areas and doing work as labourer, self-employment, private or government job etc. A section of Gujjar community

which is doing seasonal migration is live mostly in tents or thara and the permanently settled section of Gujjar community are live in Kotha which are made up of stone, mud and wood etc. Gujjar community is outstanding followers of their culture their traditional dress for male is shalwar-kameez with vaskat and a turban on head which is called Longi or safo and for female is shalwar-kameez with their heads covered by a cap called Tealaa-wali topi and shawl. The majority of Gujjar are non- vegetarians but they prefer their traditional dishes Maki ki Roti, Sarsoo-ka-Saag, milk-based products, Noon tea etc. The word Gujjar is derived from two words of Sanskrit ‘Gur’ means ‘enemy’ and ‘Jar’ means ‘destroyer’ which means “destroyer of enemy” (Sanskrit dictionary ‘Shakabada’ p.1181). According to the tribal research and cultural foundation of Jammu and Kashmir the word ‘Gujjar’ is originated from central Asian Turkic language. According to a renowned sociologist ‘G.S Ghurye’ The word Gujjar is derived from their principal profession ‘cattle breeding’. Gujjar community was found in the territory of Georgia called ‘Gurjistan’ which lies in between Caspian Sea and black sea. In the 5th century this Gurjistan was a separate kingdom of Gujjar community. But latter on they (Gujjar) start migration from their native place due to push and pull factors via central Asia, they reached in Iraq, Iran, Afghanistan while crossing the Suleiman and Khyber passes, they reached in Indus valley of Indian sub-continent. With the passage of few years, they again started migration from that towards south via Baluchistan and entered in Gujarat but that time they are wandering in Gujarat, latter on they settled in western India. (Raina A.N) the early history of India in which he mentioned that Gujjar are originated in India in 465 A.D with white Huns and they entered in India as nomadic hordes and also become early immigrants of Indian sub-continent. But in the 5th and 6th century in Gujarat a series of serious drought and a disease of Plagued spread all over Gujarat then they

move out from Gujarat and entered in Rajasthan but according to archaeological evidences of 6th and 7th centuries a spell of dryness and famines occur in Rajasthan which become again a cause of migration for these people and they started migration towards green pastures of Shivalik's and sub-Himalayas. (Smith V.A) According to Chauhan R.A.H (2015) *Tarikh -e Gujjar* in which he wrote about the origin of Gujjar community was from central Asia but they (Gujjar) started migration towards India through Afghanistan and established a kingdom in Rajasthan until they were defeated by the Muhammadans, then after they settled in Gujarat. The composite cultural of Jammu and Kashmir is still alive and its credit goes to whole civil society who preserve their cultural heritage, folk-lore and art. (Sharma). A study conducted by Naikoo, A. A, Thakur, S. S, & Guroo, T. A (2018) on socio-economic conditions of Gujjar in south Kashmir and they find that they are mostly engaged in primary activities specially rearing of Buffaloes, Sheep's and Goats, these people are nomads having cultural and traditional value. These people are mostly backward due to many reasons like seasonal migration, illiteracy, lack of awareness, lack of Government policies for their upliftment etc.

This chapters puts light on socio economic conditions of Gujjar community in J&K. The respondents are taken from two districts of Jammu and Kashmir which are Poonch and Anantnag from Jammu division and Kashmir division respectively. Total sample population of our study is 300 samples. We have explained in details all the socio-economic parameters of Gujjar community in Jammu and Kashmir.

4.2 Demographic Profile of Gujjar community in Jammu and Kahmir

Table 4.1 District wise distribution of samples and their percentage

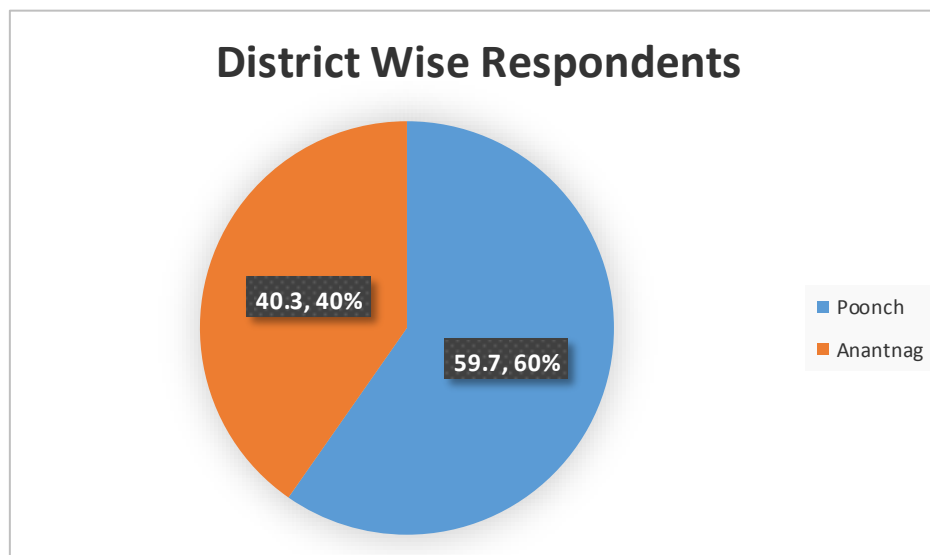
| District | Frequency | Percent |
|----------|-----------|---------|
| Poonch | 179 | 59.7 |
| Anantnag | 121 | 40.3 |
| Total | 300 | 100.0 |

Source: Estimated from field data.

Note: figure in parenthesis is percentage of total.

Table 4.1 shows district wise distribution of sample. The total sample size of the study is 300 samples. From district Poonch we have collected 179 samples which contribute 59.7 percent of respondents and from district Anantnag we have collected 121 sample which contribute 40.3 percent of total samples.

Fig 4.1 District wise percentage distribution of respondents



Source: Estimated from field data.

Table 4.2 Block wise distribution of samples

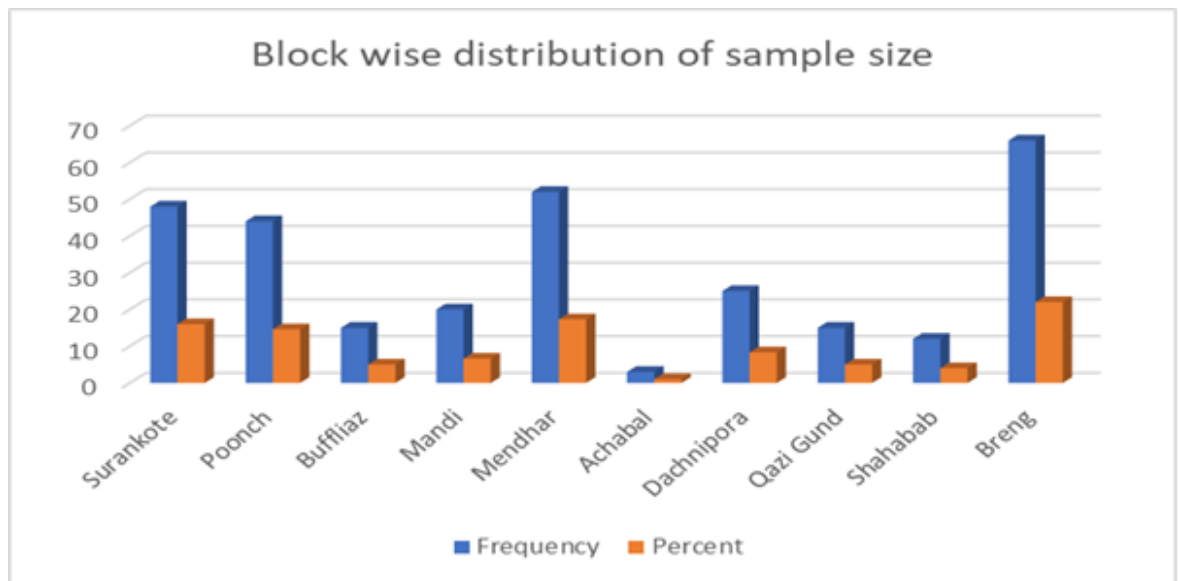
| Block | Frequency | Percent |
|------------|-----------|---------|
| Surankote | 48 | 16.0 |
| Poonch | 44 | 14.6 |
| Buffliaz | 15 | 5.0 |
| Mandi | 20 | 6.6 |
| Mendhar | 52 | 17.3 |
| Achabal | 3 | 1.0 |
| Dachnipora | 25 | 8.3 |
| Qazi Gund | 15 | 5.0 |
| Shahabab | 12 | 4.0 |
| Breng | 66 | 22 |
| Total | 300 | 100.0 |

Source: Estimated from field data.

Note: figure in parenthesis is percentage of total.

Table 4.2 shows the block wise distribution of sample. Out of the total sample population of 300 respondents, we have collected 48 sample respondents from Surankote block, 44 sample respondents from Poonch block, 15 respondents from Buffliaz block, 20 sample respondents from Mandi block, 52 samples from Mendhar block, 3 sample respondents from Achabal block, 25 respondents from Dachnipora block, 15 sample respondents from Qazi Gund block, 12 respondents from Shahabab block and 66 sample respondents are collected from Breng block. Therefore, maximum sample respondents are from Breng which contributes 21.7 percent of the total.

Fig 4.2 Block wise Distribution of sample size



Source: Estimated from field data.

Table 4.3 Gender of respondent

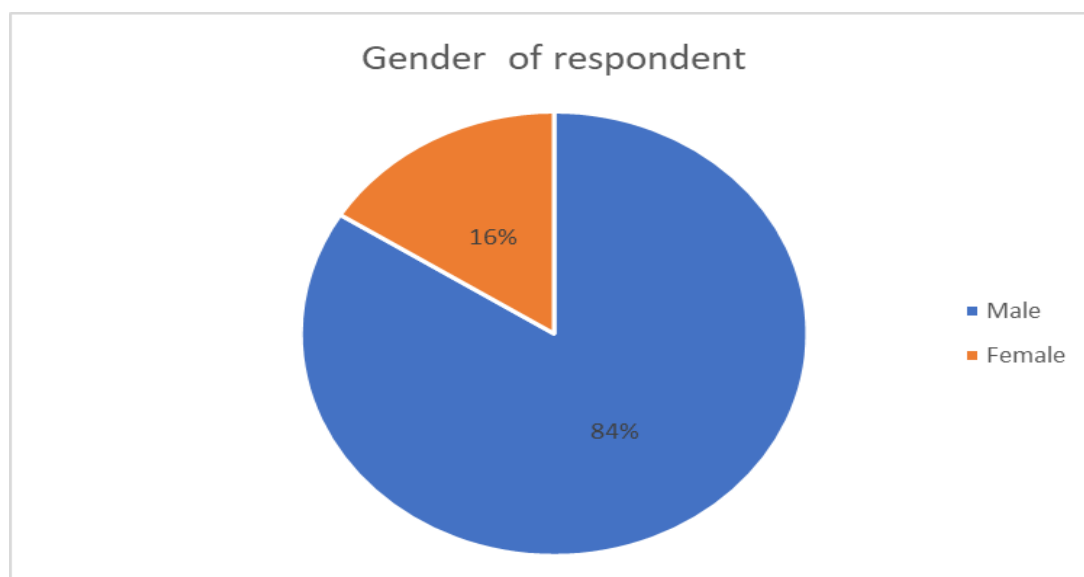
| Gender | Frequency | Percent |
|--------|-----------|---------|
| Male | 252 | 84.0 |
| Female | 48 | 16.0 |
| Total | 300 | 100.0 |

Source: Estimated from field data.

Note: figure in parenthesis is percentage of total.

Table 4.3 Shows the gender wise distribution of sample of the field survey data collected. Out of the total sample population of 300 respondents 252 sample respondents are males and 48 sample respondents are females. Therefore, maximum sample respondents are males which contribute 84 percent of the total.

Fig 4.3 Gender of respondent



Source: Estimated from field data.

Table 4.4 Income of the respondent

| Income (Annually) | Frequency | Percent |
|-------------------|-----------|---------|
| 100000-150000 | 46 | 15.3 |
| 150001-250000 | 7 | 2.3 |
| 250001-350000 | 109 | 36.3 |
| 350001-450000 | 91 | 30.3 |
| 450001-550000 | 14 | 4.7 |
| 550001 above | 33 | 11.0 |
| Total | 300 | 100.0 |

Source: Estimated from field data.

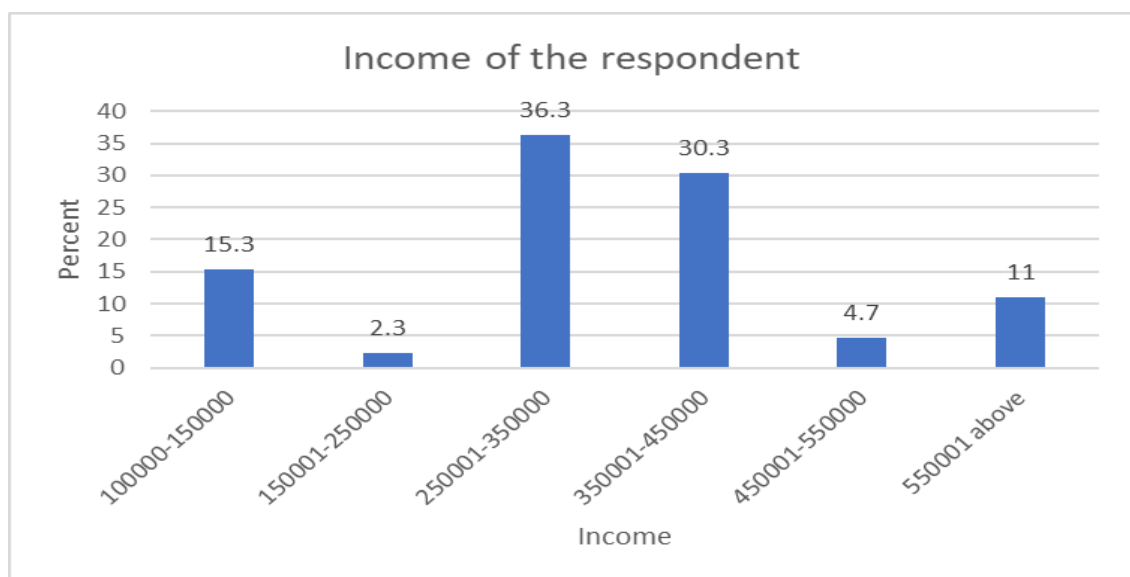
Note: figure in parenthesis is percentage of total

Table 4.4 Shows the income wise distribution of sample based on field survey data.

Out of the total sample population of 300 respondents we have collected 46 sample respondents who fall in the income group of 100000-150000, 7 sample respondents who fall in the income group of 150001-250000. While 109 sample respondents fall

in the income group of 250001-350000, 91 samples respondents fall in the income group of 350001-450000. The income group of 450001-550000 contains 14 samples, and 33 sample respondents fall in the income group of 550001 and above. Therefore, maximum and minimum sample respondents fall in the income group of 250001-350000 and 150001-250000 which contributes 36 percent and 2.3 percent of respectively of the total.

Fig 4.4 Income of the respondent



Source: Estimated from field data.

Note: figure in parenthesis is percentage of total.

Table 4.5 Education of the respondent

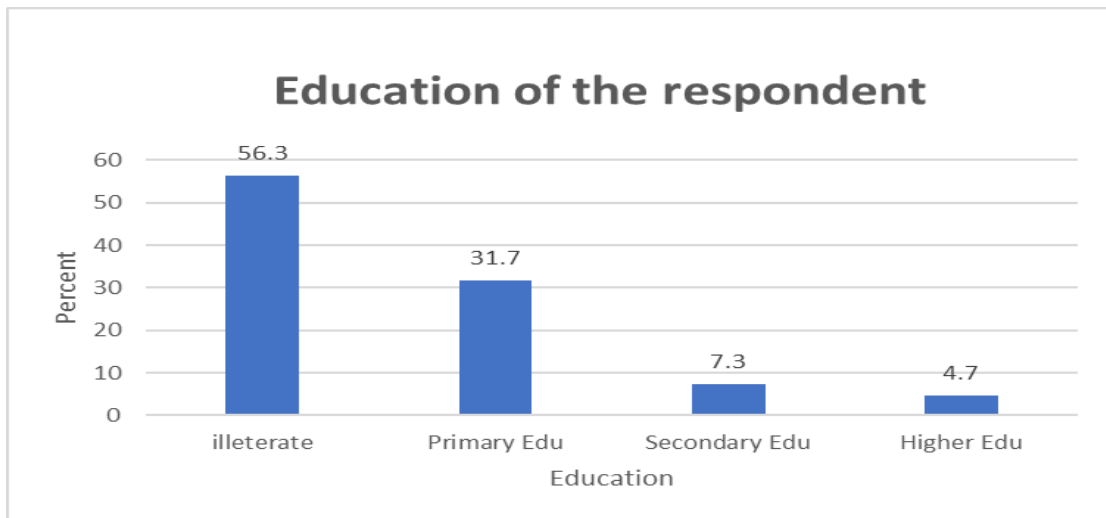
| Education | Frequency | Percent |
|---------------|-----------|---------|
| Illiterate | 169 | 56.3 |
| Primary Edu | 95 | 31.7 |
| Secondary Edu | 22 | 7.3 |
| Higher Edu | 14 | 4.7 |
| Total | 300 | 100.0 |

Source: Estimated from field data.

Note: figure in parenthesis is percentage of total.

Table 4.5 Shows education wise distribution of sample of the field survey data. The education of respondents is divided into 4 groups for which the total sample population is 300. We have collected 169 samples from illiterates which is 56.3 percent of the total sample population. 95 samples are from the category of primary education and contribute 31.7 percent of the total. While the sample from category of secondary education has 22 respondents and comprises 7.3 percent of the total sample population. We have collected 14 samples from the total sample population who belong to the category of higher education and comprise 4.7 percent of the total sample population. Our maximum samples are from illiterates and minimum samples are from higher education group.

Fig 4.5 Education of the respondent



Source: Estimated from field data.

Note: figure in parenthesis is percentage of total.

Table 4.6 Age of respondent

| Age | Frequency | Percent |
|--------------------|-----------|---------|
| Less than 20 years | 4 | 1.3 |
| 21-30 years | 69 | 23.0 |
| 31-40 years | 114 | 38.0 |
| 41 -60 years | 113 | 37.7 |
| Total | 300 | 100.0 |

Source: Estimated from field data.

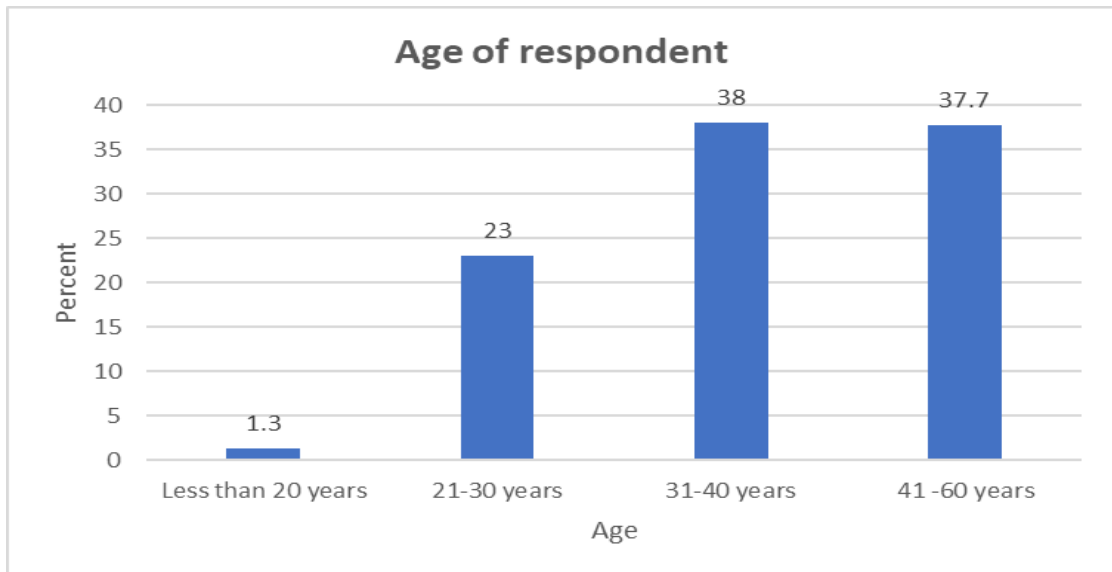
Note: figure in parenthesis is percentage of total.

Table 4.6 shows Age wise distribution of the sample population of 300 respondents.

The sample population is divided into four age groups. We have collected 4 sample respondents who fall in the age group of less than 20 years which contribute 1.3 percent of the total sample population. Form the age group of 21-30 years we have collected 69 sample respondents which contribute 23 percent of the total sample population. We have collected 114 sample respondents from age group of 31-40

years. 113 sample respondents belong to the age group of 41-60 years. Thus, maximum and minimum sample are collected from the age group of 31-40 years which contribute 38 percent and 1.3 percent of the total sample population respectively.

Fig 4.6 Age of the respondent



Source: Estimated from field data.

Note: figure in parenthesis is percentage of total.

Table 4.7 Marital Status of respondents

| Marital Status | Frequency | Percent |
|----------------|-----------|---------|
| Married | 227 | 75.7 |
| Unmarried | 66 | 22.0 |
| Divorced | 5 | 1.7 |
| Widow | 2 | 0.7 |
| Total | 300 | 100.0 |

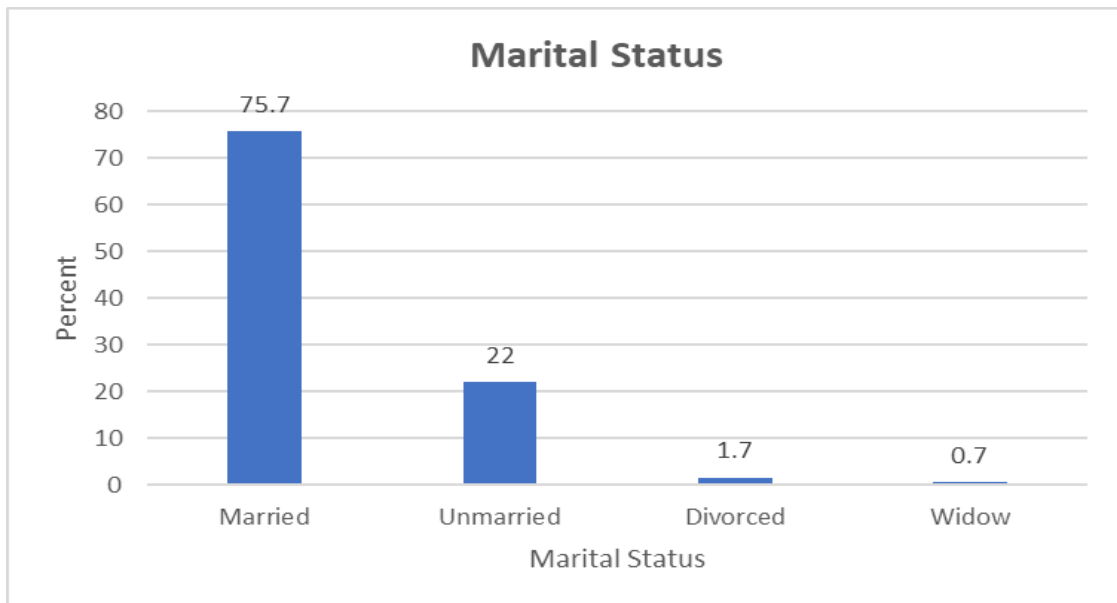
Source: Estimated from field data.

Note: figure in parenthesis is percentage of total.

Table 4.7 Shows that distribution of sample population based on marital status. From the total sample population of 300, 227 sample respondents are married and they

contribute 75.7 percent of the total sample population. 66 sample respondents are unmarried, 5 sample respondents are divorced and, 2 sample respondents are widows. Therefore, maximum sample respondents are married and minimum sample respondents are widow.

Fig 4.7 Marital Status of the respondents



Source: Estimated from field data.

Note: figure in parenthesis is percentage of total.

Table 4.8 Family size respondents

| Family Size | Frequency | Percent |
|--------------|-----------|---------|
| Joint Family | 259 | 86.3 |
| Nuclear | 41 | 13.7 |
| Total | 300 | 100.0 |

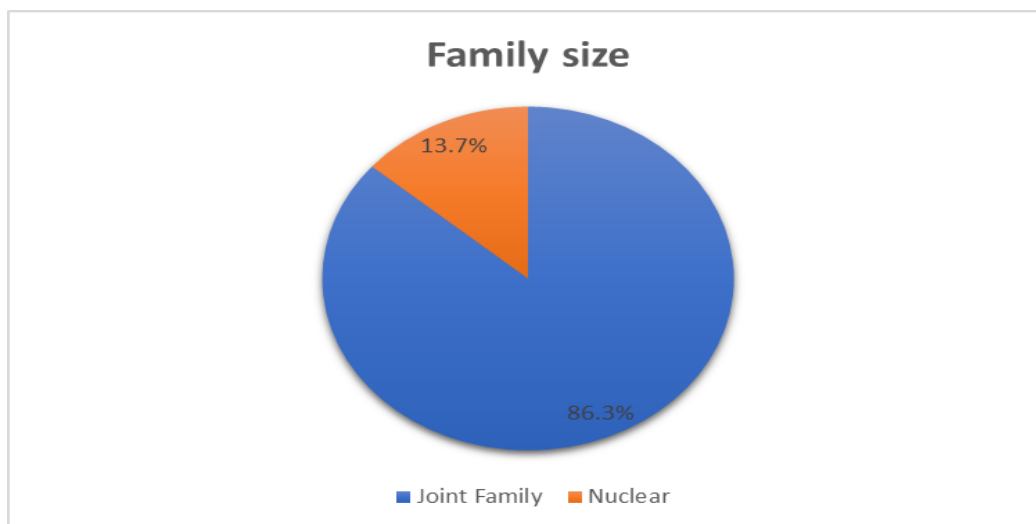
Source: Estimated from field data.

Note: figure in parenthesis is percentage of total.

Table 4.8 Shows that the distribution of sample population based on the type of family size is as follows. From the total sample population of 300, 259 samples have joint families. They contribute 86.3 percent of the total sample population. On the

other hand, 41 samples are from nuclear families and their share is 13.7 percent of the total sample population. Thus, maximum samples are from families with joint family system.

Fig 4.8 Family size of the respondents



Source: Estimated from field data.

Note: figure in parenthesis is percentage of total.

4.3 Livelihood Pattern of Gujjar community in Jammu and Kashmir

Table 4.9 How much expenditure for accommodation/houses

| Expenditure for accommodation | Frequency | Percent |
|-------------------------------|-----------|---------|
| 5000-10000 | 24 | 8.0 |
| 10001-15000 | 74 | 24.7 |
| 15001-20000 | 46 | 15.3 |
| 20001-25000 | 156 | 52.0 |
| Total | 300 | 100.0 |

Source: Estimated from field data.

Note: figure in parenthesis is percentage of total.

Table 4.9 Shows distribution of sample based on the amount of expenditure on accommodation/houses. The expenditure for accommodation by respondents is divided into four categories from sample population of 300. We have collected 24

samples who spend between 5000-10000 which is 8 percent of the total sample population. 74 samples are from the group who spend between 10001-15000 and contribute 24.7 percent of the total sample population. While 46 sample respondents spend between 15001-20000 and comprises 15.3 percent of the total sample population. While we have 156 samples from the total sample population who spend between 20001-25000. Consequently, maximum samples are collected from the group who spend between 20001-25000 and minimum samples are collected from the group who spend between 5000-10000.

Table 4.10 Type of house of the respondents

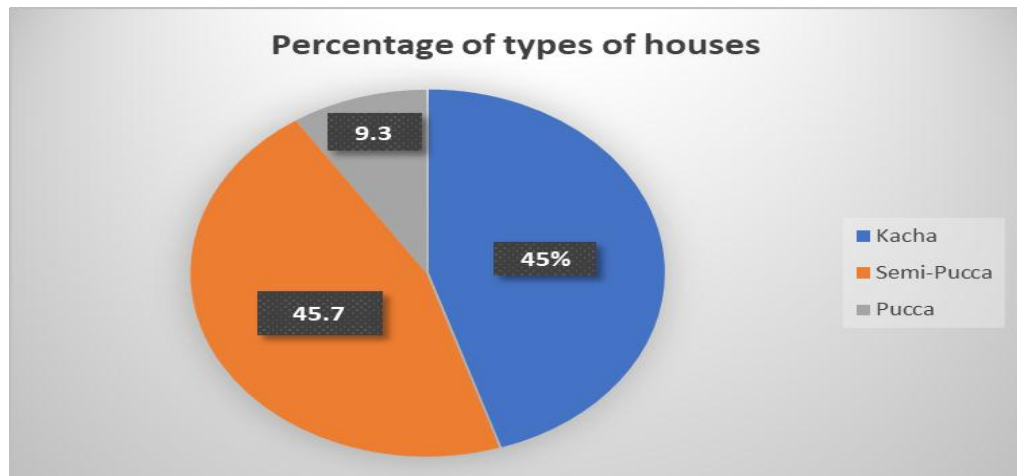
| Type of house | Frequency | Percent |
|---------------|-----------|---------|
| Kacha | 135 | 45.0 |
| Semi-Pucca | 137 | 45.7 |
| Pucca | 28 | 9.3 |
| Total | 300 | 100.0 |

Source: Estimated from field data.

Note: figure in parenthesis is percentage of total.

Table 4.10 shows types of houses from the total sample population of 300, 135 samples are those who have Kacha houses, and they comprise 45 percent of the total sample population. On the other hand, 137 samples are those who have semi pucca houses, and they share 45.7 percent of the total sample population. Furthermore, 28 samples are those who have Pucca houses. They contribute 9.3 percent of the total sample population. Therefore, maximum sample are from Semi Pacca houses.

Fig 4.10 Type of house



Source: Estimated from field data.

Note: figure in parenthesis is percentage of total.

Table 4.11 If owned, is it made or inherited?

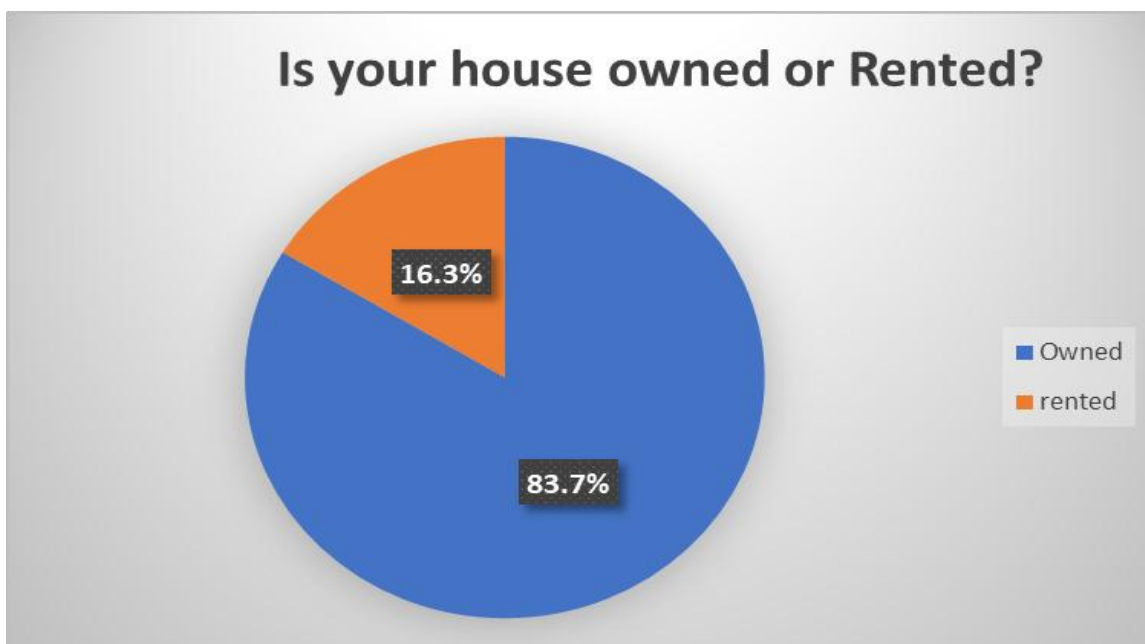
| Type of House | Frequency | Percent |
|---------------|-----------|---------|
| Owned | 251 | 83.7 |
| Rented | 49 | 16.3 |
| Total | 300 | 100.0 |

Source: Estimated from field data.

Note: figure in parenthesis is percentage of total.

Table 4.12 Shows distribution of sample based on the factor if the house is owned or rented. From the total sample population of 300, 251 samples from those who own houses and they comprise 83.7 percent of the total sample population. On the other hand, 49 samples are those who live in rented houses and they share 16.3 percent of the total sample population. Therefore, maximum sample are from those who own the houses.

Fig 4.11 Is your house owned or rented?



Source: Estimated from field data.

Note: figure in parenthesis is percentage of total.

Table 4.12 If owned, is it made or inherited?

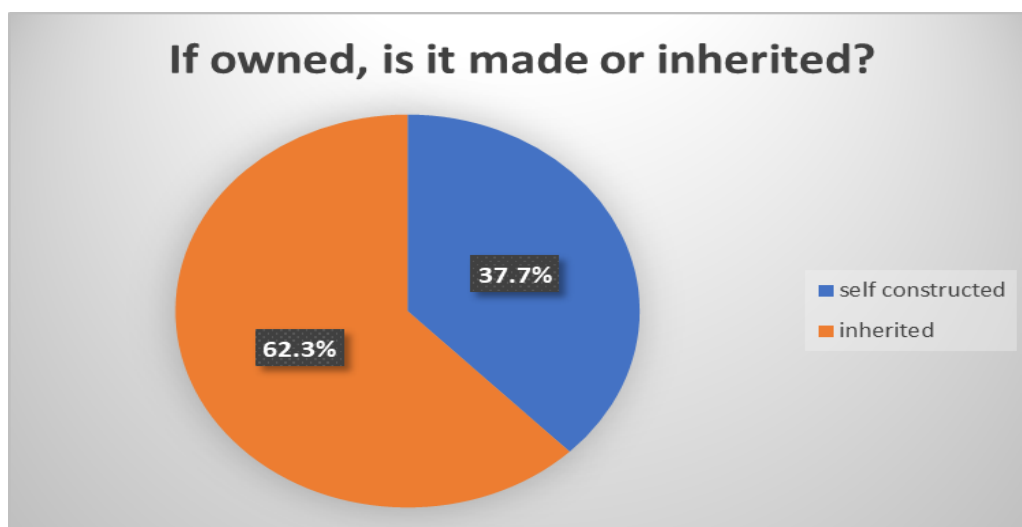
| | Frequency | Percent |
|------------------|-----------|---------|
| self-constructed | 113 | 37.7 |
| Inherited | 187 | 62.3 |
| Total | 300 | 100.0 |

Source: Estimated from field data.

Note: figure in parenthesis is percentage of total.

Table 4.12 Shows distribution of sample population based on self -constructed or inherited houses. From the total sample population of 300, 113 samples from those who have constructed the houses themselves and they comprise 37.7 percent of the total sample population. On the other hand, 187 samples are taken from those who have inherited the houses and they constitute 62.3 percent of the total sample population. Therefore, maximum sample are collected from those who have inherited the houses.

Fig 4.12 If owned, is it made or inherited?



Source: Estimated from field data.

Note: figure in parenthesis is percentage of total.

Table 4.13 Main Material of Floor

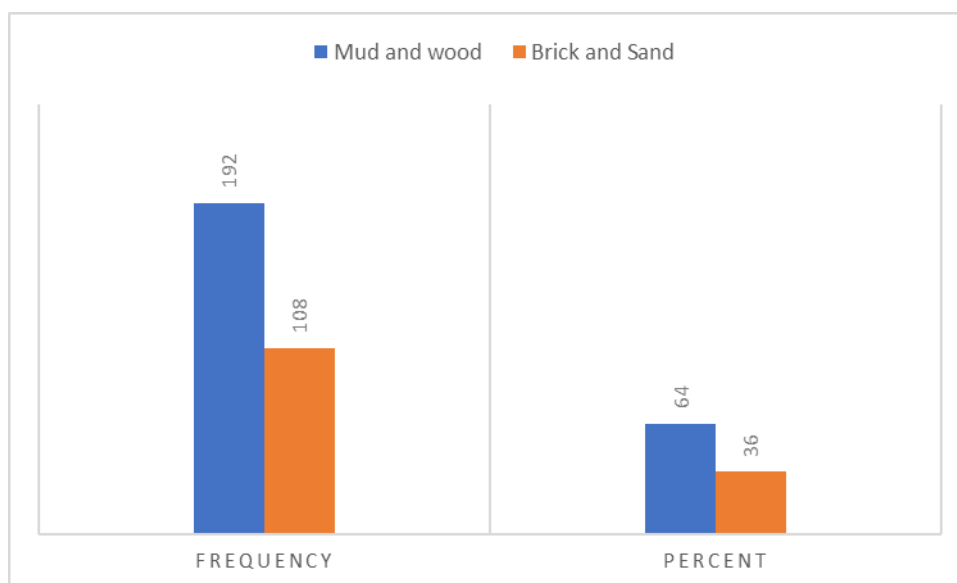
| Main Material of Floor | Frequency | Percent |
|------------------------|-----------|---------|
| Mud | 192 | 64.0 |
| Brick and Sand | 108 | 36.0 |
| Total | 300 | 100.0 |

Source: Estimated from field data.

Note: figure in parenthesis is percentage of total.

Table 4.13 Shows the main material of floor is mud, sand and bricks. From the total sample population of 300, 192 samples from those whose houses have mud as the main material of floor and they comprise 64 percent of the total sample population. On the other hand, 108 samples are those whose houses have bricks and sand as the main material of floor and they comprise 36 percent of the total sample population. Therefore, maximum sample population are those whose houses have mud as the main material of the floor.

Fig 4.13 Main Material of Floor



Source: Estimated from field data.

Note: figure in parenthesis is percentage of total.

Table 4.14 Main Material of Roof

| Main material of roof | Frequency | Percent |
|-----------------------|-----------|---------|
| Concrete | 43 | 14.3 |
| Thatch | 64 | 21.3 |
| Wood and Mud | 193 | 64.3 |
| Total | 300 | 100.0 |

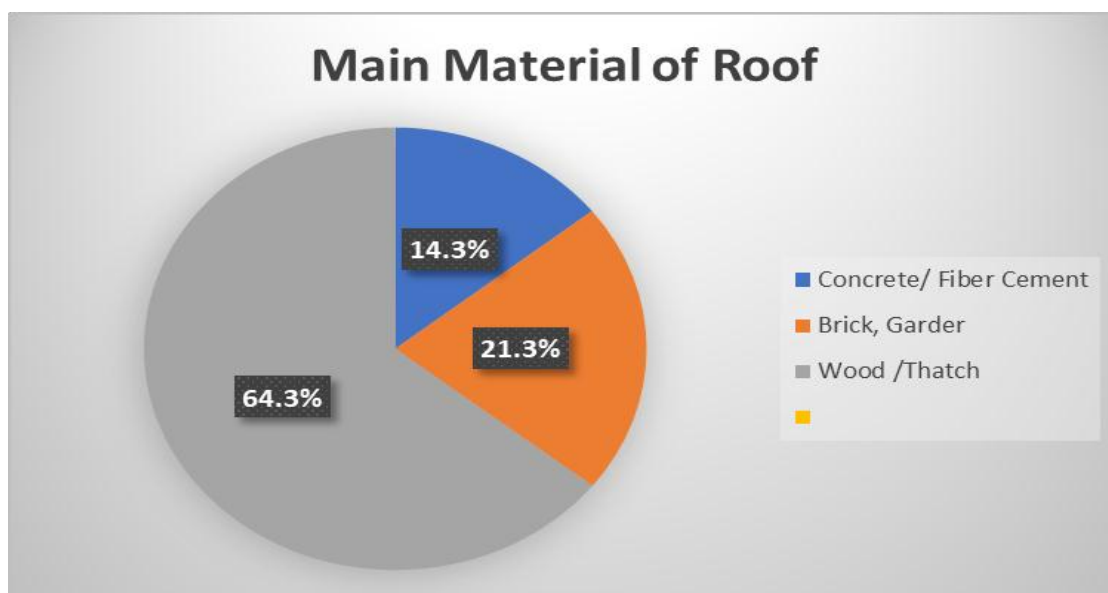
Source: Estimated from field data.

Note: figure in parenthesis is percentage of total.

Table 4.14 Shows distribution of sample population whose main material of roof is concrete, thatch, wood and mud. From the total sample population of 300, 43 samples from those whose houses have concrete roofs and they comprise 14.3 percent of the total sample population. On the other hand, 64 samples are taken from those whose houses have thatch as the main material of roof and they comprise 21.3 percent of the total sample population. Furthermore, 193 sample respondents have wooden and mud

roofs and they comprise 64.3 percent of the total sample population. Therefore, maximum sample is collected from those whose houses have wood and mud as the main material of the roof.

Fig 4.14 Main Material of Roof



Source: Estimated from field data.

Note: figure in parenthesis is percentage of total.

Table 4.15 How many rooms are there in your house?

| No. of Rooms | Frequency | Percent |
|--------------|-----------|---------|
| two rooms | 231 | 77.0 |
| three rooms | 55 | 18.3 |
| four rooms | 14 | 4.7 |
| Total | 300 | 100.0 |

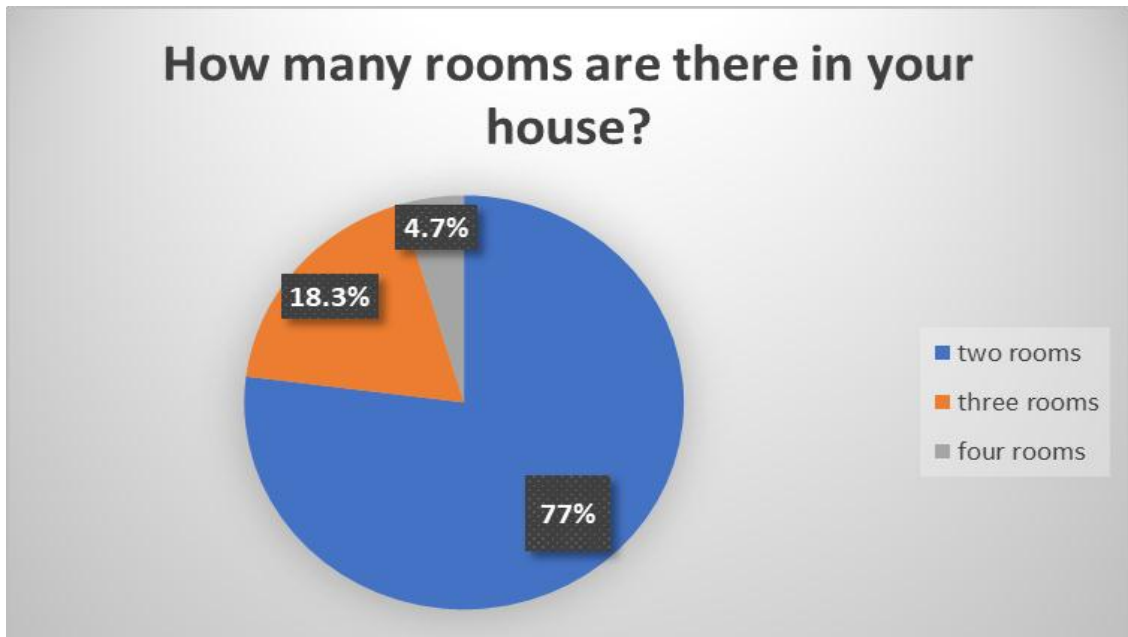
Source: Estimated from field data.

Note: figure in parenthesis is percentage of total.

From the table 4.15 sample of the field survey data collected is as follows. Out of the total sample population of 300 respondents, 231 sample respondents have two rooms in their house. They contribute 77 percent of the total sample population. While 55

sample respondents have three rooms in their houses which contribute 18.3 percent of the total sample population. 14 sample respondents have four rooms in their house and they comprise 4.7 percent of the total sample population. Therefore, maximum sample respondents have two rooms in their house.

Fig 4.15 How many rooms are there in your house?



Source: Estimated from field data.

Note: figure in parenthesis is percentage of total.

Table 4.16 What is the present value of the house in rupees?

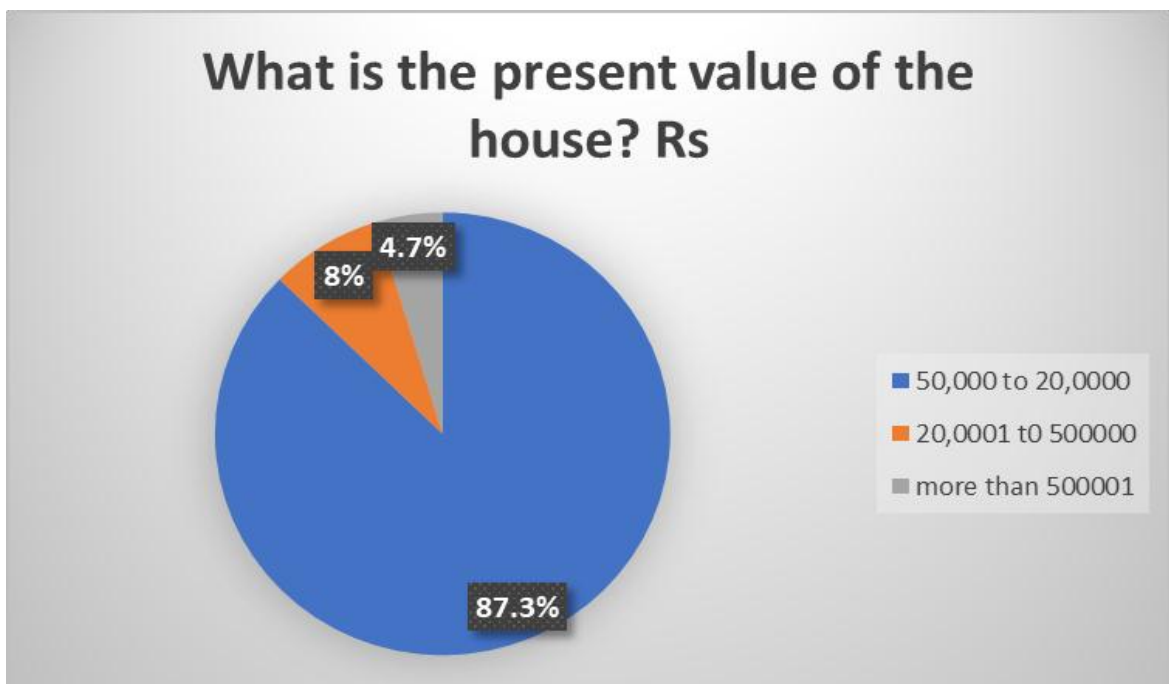
| | Frequency | Percent |
|------------------|-----------|---------|
| 50000 to 200000 | 262 | 87.3 |
| 200001 to 500000 | 24 | 8.0 |
| more than 500001 | 14 | 4.7 |
| Total | 300 | 100.0 |

Source: Estimated from field data.

Note: figure in parenthesis is percentage of total.

Table 4.16 Shows that the distribution of sample based on the present value of the house in rupees. From the total sample population of 300, 262 samples who fall in the group of those whose present value of house is ₹ 50000-200000. They contribute 87.3 percent of the total sample population. On the other hand, 24 samples are taken from group whose present value of house is in between ₹ 200001-500000, and they share 8 percent of the total sample population. Furthermore, we have collected 14 samples from those whose present value of house is more than ₹ 500001, and they comprise 4.7 percent of the total sample population. Therefore, maximum sample are collected from those whose present value of house is in between ₹ 50000-200000.

Fig 4.16 What is the present value of the house in rupees?



Source: Estimated from field data.

Note: figure in parenthesis is percentage of total.

Table 4.17 Category as per Ration Cards

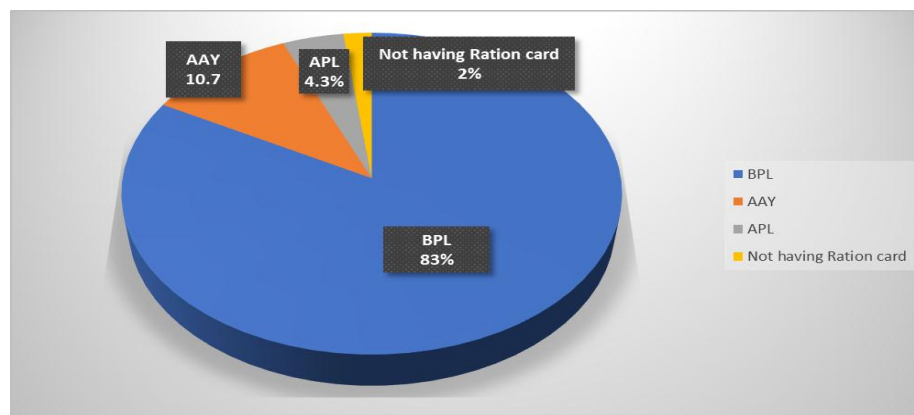
| Category as per ration card | Frequency | Percent |
|-----------------------------|-----------|---------|
| BPL | 249 | 83 |
| AAY | 32 | 10.7 |
| APL | 13 | 4.3 |
| Not having Ration card | 06 | 02 |
| Total | 300 | 100.0 |

Source: Estimated from field data.

Note: figure in parenthesis is percentage of total.

Table 4.17 Shows category of ration card of the sample respondent, different categories of ration cards are as follows. 249 sample respondents from BPL which contribute 83 percent of the total sample population. 32 samples respondent are from AAY which comprise 10.7 percent of the sample population. 13 sample respondents are from APL and their share is 4.3 percent of total sample population. 6 sample respondents are those who's not having ration card and their share is 2 percent of the total sample population. Therefore, the maximum sample are collected from BPL category.

Fig 4.17 Category as per Ration Cards



Source: Estimated from field data.

Note: figure in parenthesis is percentage of total.

Table 4.18 Do you have ration card?

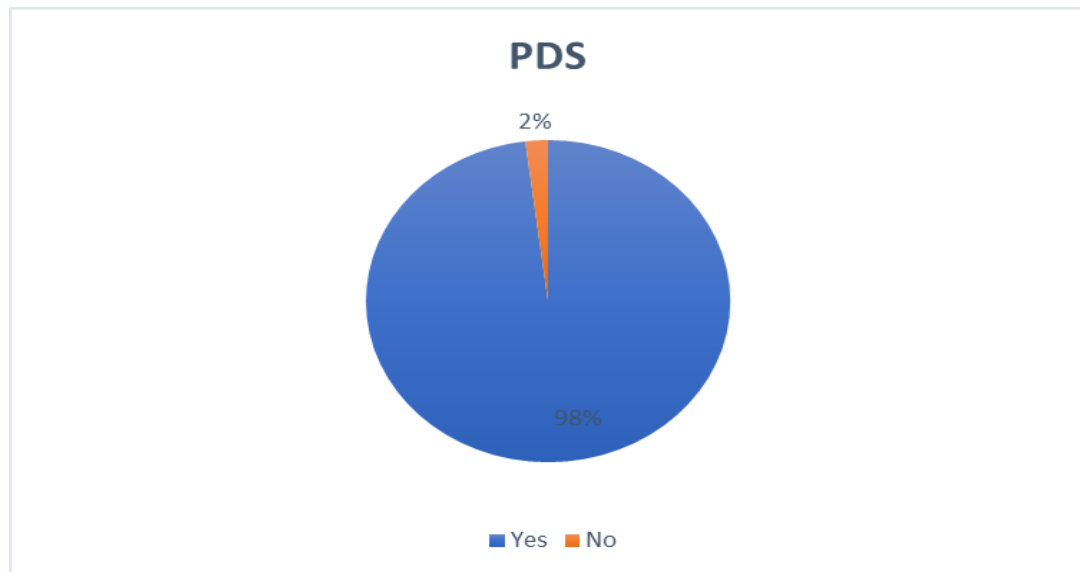
| PDS | Frequency | Percent |
|-------|-----------|---------|
| Yes | 294 | 98.0 |
| No | 6 | 2.0 |
| Total | 300 | 100.0 |

Source: Estimated from field data.

Note: figure in parenthesis is percentage of total.

Table 4.18 show distribution of the sample population based on the factor whether they are under PDS or not. Our sample population is of 300 respondents. Out of which 294 samples are those who avail the benefits of PDS. On the other hand, 6 samples respondents are those who do not have PDS. Thus, maximum sample respondents are from the those who avail benefits of PDS.

Fig 4.18 Do you have ration card?



Source: Estimated from field data.

Note: figure in parenthesis is percentage of total.

Table 4.19 What is the main source for drinking water?

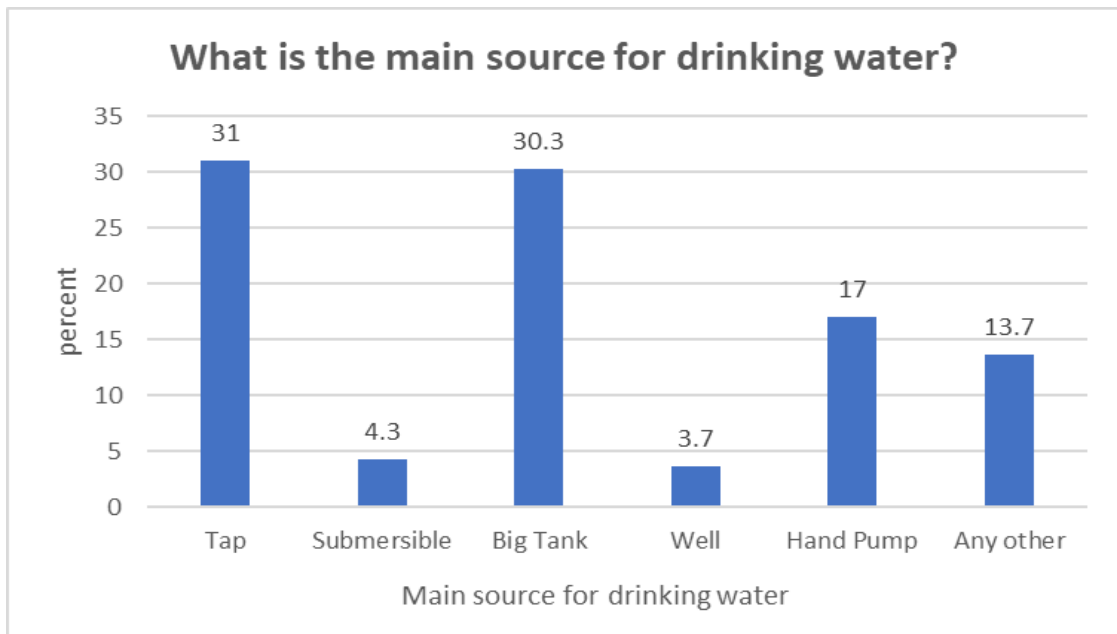
| Source | Frequency | Percent |
|-------------|-----------|---------|
| Tap | 93 | 31.0 |
| Submersible | 13 | 4.3 |
| Big Tank | 91 | 30.3 |
| Well | 11 | 3.7 |
| Hand Pump | 51 | 17.0 |
| Any other | 41 | 13.7 |
| Total | 300 | 100.0 |

Source: Estimated from field data.

Note: figure in parenthesis is percentage of total.

Table 4.19 shows distribution of sample population based on the factor of main source for drinking water. From the total sample population of 300, 93 samples from households who use tap water for drinking, they contribute 31 percent of the total sample population. On the other hand, 13 samples households whose main source for drinking water is submersible and they share 4.3 percent of the total sample population. Furthermore, 91 samples from those whose main source for drinking water is big tanks and they comprise 30.3 percent of the total sample population. 11 sample respondents have wells and use its water for drinking and comprise 3.7 percent of the total population. Moreover, 51 samples from those whose main source for drinking water is handpump and they comprise 17 percent of the total sample population. While 41 sample respondents have other source for drinking water. Therefore, maximum sample are collected from households that have Tap water as main source for drinking.

Fig 4.19 What is the main source for drinking water?



Source: Estimated from field data.

Note: figure in parenthesis is percentage of total.

Table 4.20 source of drinking water is inside/outside of the house?

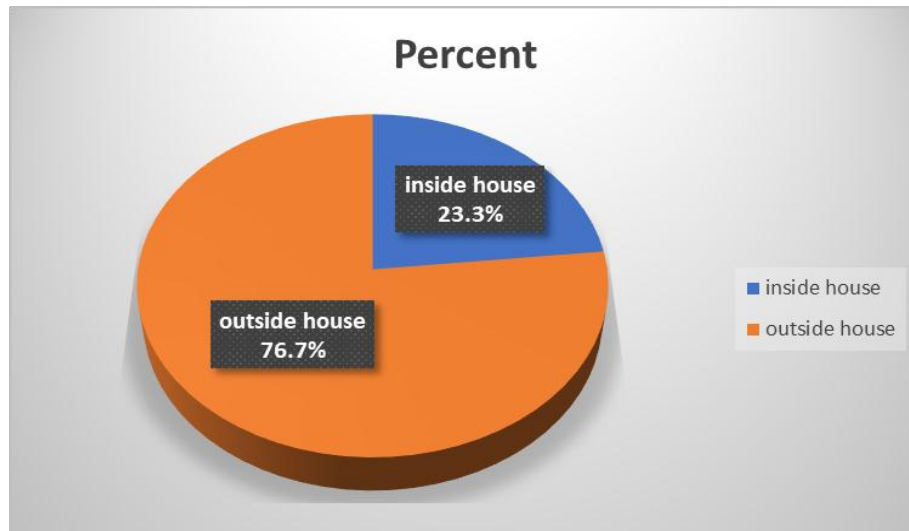
| | Frequency | Percent |
|---------------|-----------|---------|
| inside house | 70 | 23.3 |
| outside house | 230 | 76.7 |
| Total | 300 | 100.0 |

Source: Estimated from field data.

Note: figure in parenthesis is percentage of total.

Table 4.20 shows distribution of sample based on the factor whether the source for drinking water is inside the house or outside the house. The total sample population is 300. Out of which 70 sample respondents have main source for drinking water inside the house and comprise 23.3 percent of the total population. While as 230 sample respondents have main source of drinking water outside the house and comprise 76.7 percent of the total population. Therefore, maximum sample is taken from those who have main source for drinking water outside the house.

Fig 4.20 source of drinking water is inside/outside of the house?



Source: Estimated from field data.

Note: figure in parenthesis is percentage of total.

Table 4.21 If outside, do you share this source?

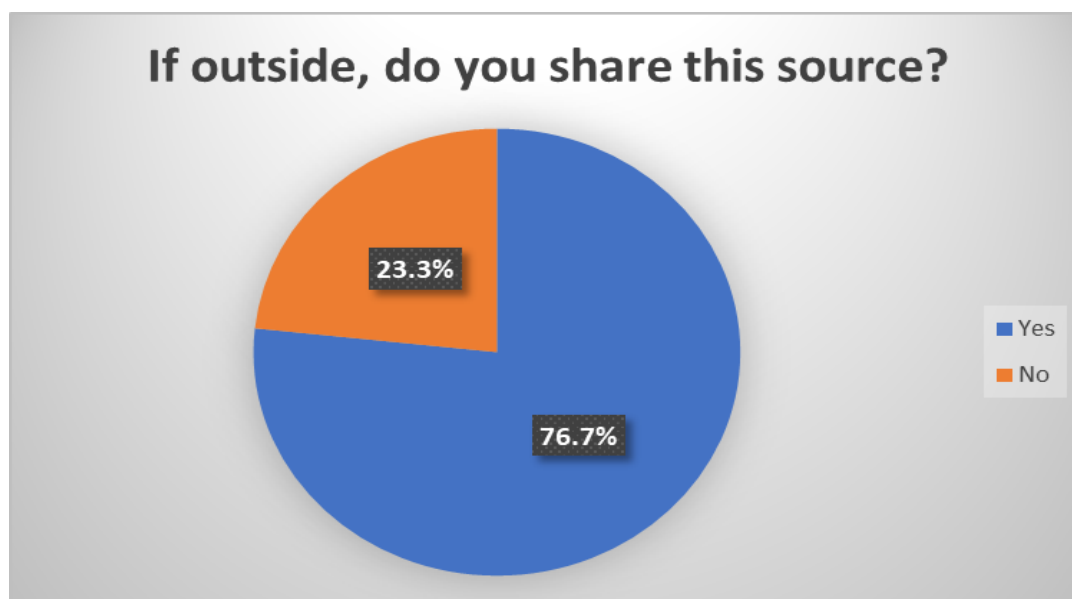
| | Frequency | Percent |
|-------|-----------|---------|
| Yes | 230 | 76.7 |
| No | 70 | 23.3 |
| Total | 300 | 100.0 |

Source: Estimated from field data.

Note: figure in parenthesis is percentage of total.

Table 4.21 shows distribution of the sample population based on the factor if the water source is shared when it is outside the house. Our data has a sample population of 300 respondents. Out of which 230 samples are those who share the water source and comprise 76.7 percent of the total. On the other hand, 70 samples are taken from those that do not share the water source and contribute 23.3 percent of the total. Thus, maximum sample is collected from the those who share the water source.

Fig 4.21 If outside, do you share this source?



Source: Estimated from field data.

Note: figure in parenthesis is percentage of total.

Table 4.22 Is water from this source scarce?

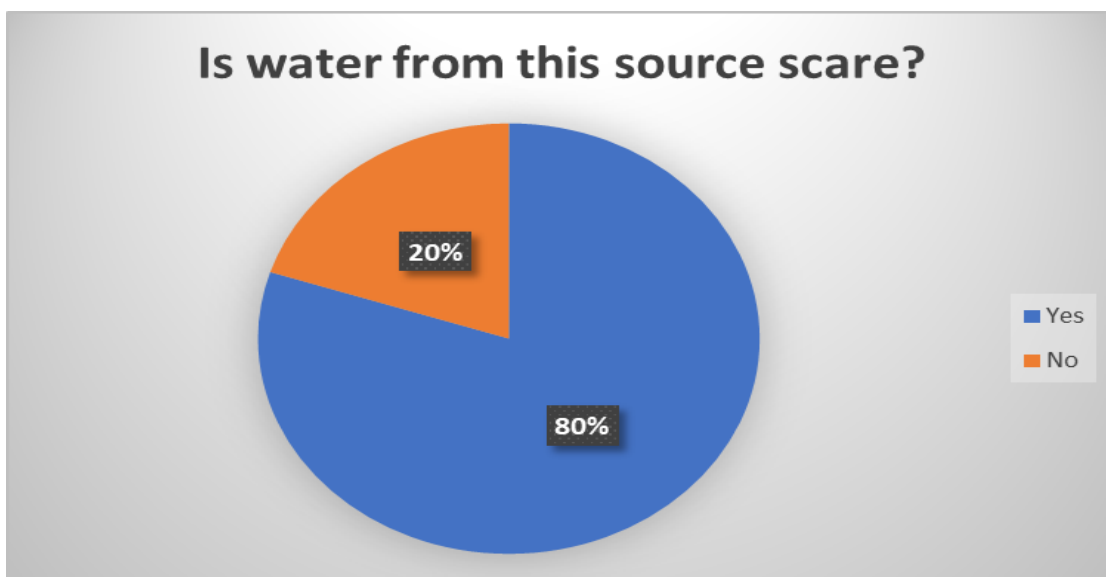
| | Frequency | Percent |
|-------|-----------|---------|
| Yes | 240 | 80.0 |
| No | 60 | 20.0 |
| Total | 300 | 100.0 |

Source: Estimated from field data.

Note: figure in parenthesis is percentage of total.

Table 4.22 shows distribution of sample based on the factor if the water source is scarce. We have a total sample population of 300. 240 sample respondents are from the households for whom the water source is scarce and comprise 80 percent of the total population. While as 60 sample respondents belong to those who do not have scarce water source and contribute 20 percent of the total. Thus, maximum sample is taken from those who have scarce source of water.

Fig 4.22 Is water from this source scare?



Source: Estimated from field data.

Note: figure in parenthesis is percentage of total.

Table 4.23 Is the availability of drinking water normally adequate?

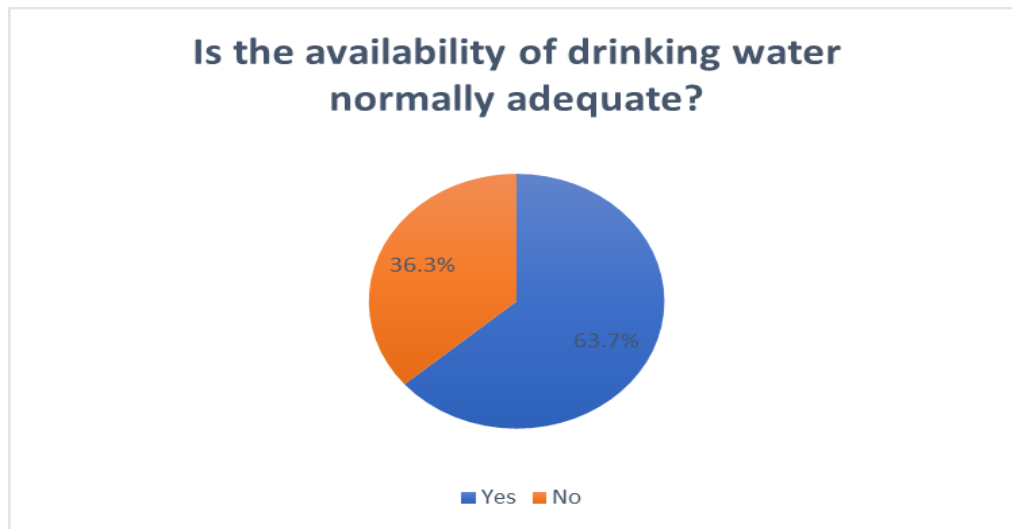
| | Frequency | Percent |
|-------|-----------|---------|
| Yes | 191 | 63.7 |
| No | 109 | 36.3 |
| Total | 300 | 100.0 |

Source: Estimated from field data.

Note: figure in parenthesis is percentage of total.

Table 4.23 shows distribution of sample based on the factor if the availability of drinking water is normally adequate. We have a total sample population of 300. For 191 sample respondents, availability of drinking water is normally adequate and comprise 63.7 percent of the total population. While as for 109 sample respondents' availability of drinking water is not normally adequate and contribute 36.3 percent of the total. Thus, maximum sample is taken from those for whom availability of drinking water is normally adequate.

Fig 4.23 Is the availability of drinking water normally adequate?



Source: Estimated from field data.

Note: figure in parenthesis is percentage of total.

Table 4.24 Do you treat water in any way to make it safer to drink.

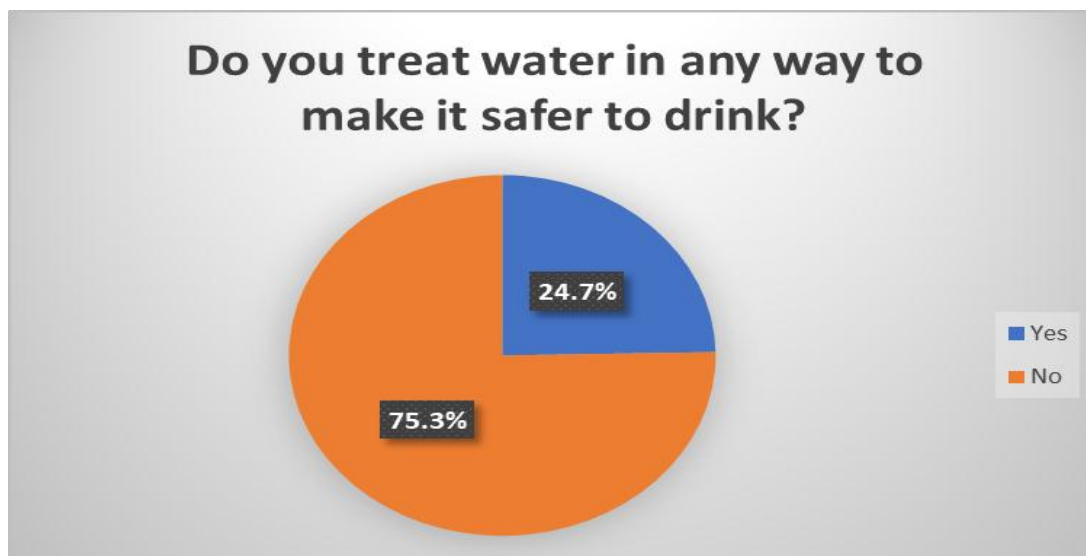
| | Frequency | Percent |
|-------|-----------|---------|
| Yes | 74 | 24.7 |
| No | 226 | 75.3 |
| Total | 300 | 100.0 |

Source: Estimated from field data.

Note: figure in parenthesis is percentage of total.

Table 4.24 shows distribution of sample based on the factor if the sample respondents treat water in any way to make it safer to drink. We have a total sample population of 300. 74 sample respondents treat water in any way to make it safer to drink, and comprise 24.7 percent of the total population. While 226 sample respondents do not treat water in any way to make it safer to drink and contribute 75.3 percent of the total. Thus, maximum sample population not treat water in any way to make it safer to drink.

Fig 4.24 Do you treat water in any way to make it safer to drink.



Source: Estimated from field data.

Note: figure in parenthesis is percentage of total.

Table 4.25 If yes, how do you treat water?

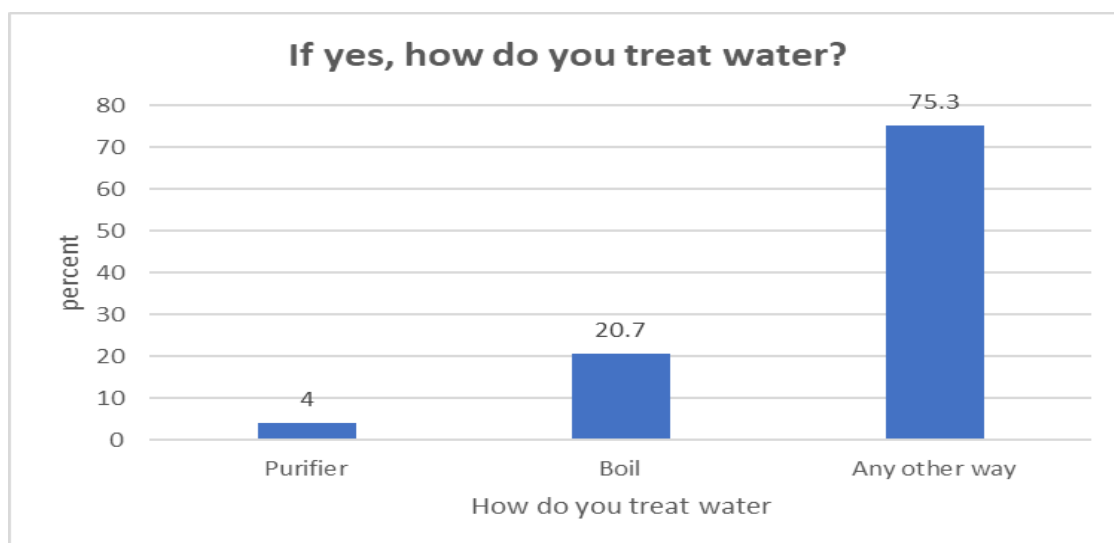
| | Frequency | Percent |
|---------------|-----------|---------|
| Purifier | 12 | 4.0 |
| Boil | 62 | 20.7 |
| Any other way | 226 | 75.3 |
| Total | 300 | 100.0 |

Source: Estimated from field data.

Note: figure in parenthesis is percentage of total.

Table 4.25 shows distribution of sample based on how sample respondents treat water to make it safer to drink. The total sample population is 300. 12 sample respondents use purifier to treat water and comprise 4 percent of the total. 62 sample respondents boil water to make it safer for drinking and comprise 20.7 percent of the total. While as 226 sample respondents use other ways to treat water to make it safer to drink and contribute 75.3 percent of the total.

Fig 4.25 If yes, how do you treat water?



Source: Estimated from field data.

Note: figure in parenthesis is percentage of total.

Table 4.26 Do you have kitchen.

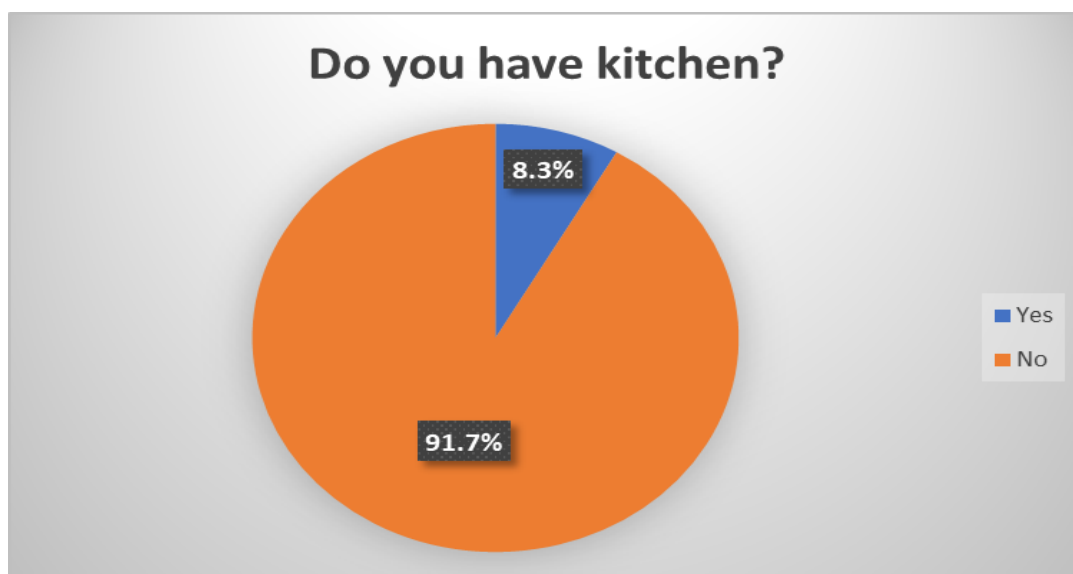
| | Frequency | Percent |
|-------|-----------|---------|
| Yes | 25 | 8.3 |
| No | 275 | 91.7 |
| Total | 300 | 100.0 |

Source: Estimated from field data.

Note: figure in parenthesis is percentage of total.

Table 4.26 shows distribution of sample based on the factor if the sample respondents have kitchen. Out of the total sample population of 300, 25 sample respondents have a kitchen. They comprise 8.3 percent of the total. While as 275 sample respondents do not have a kitchen and comprise 91.7 percent of the total.

Fig 4.26 Do you have kitchen.



Source: Estimated from field data.

Note: figure in parenthesis is percentage of total.

Table 4.27 If no, where is the cooking, generally done for this household?

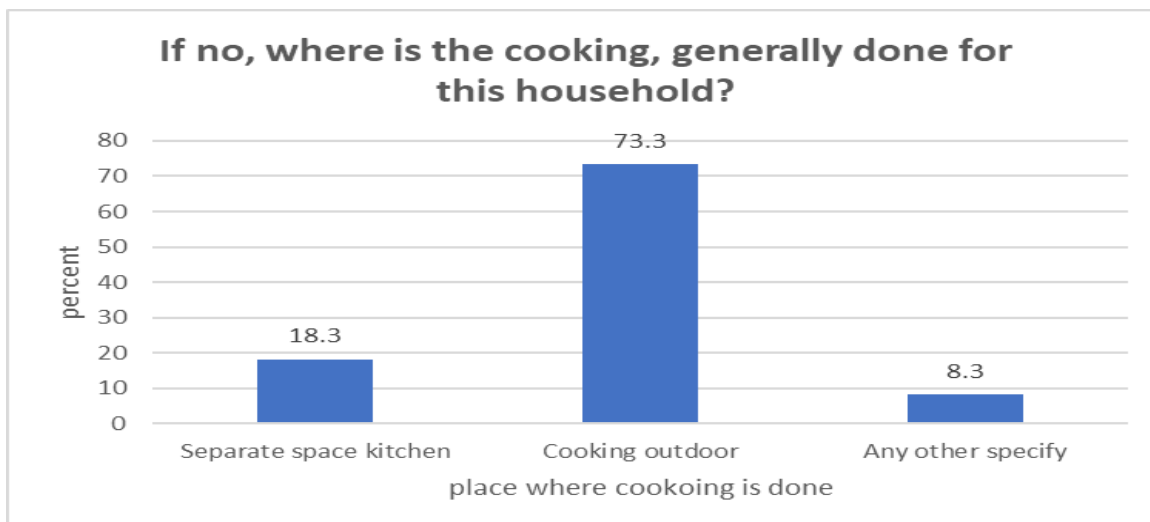
| | Frequency | Percent |
|------------------------|-----------|---------|
| Separate space kitchen | 55 | 18.3 |
| Cooking outdoor | 220 | 73.3 |
| Any other specify | 25 | 8.3 |
| Total | 300 | 100.0 |

Source: Estimated from field data.

Note: figure in parenthesis is percentage of total.

Table 4.27 shows distribution of sample based on the place where cooking is done if the sample respondents do not have a kitchen. From the sample population of 300, the total number of respondents that have a separate space for kitchen is 55. They 18.3 percent of the total sample population. On contrary, 220 samples are taken from the category of cooking outside. And they share 73.3 percent of the total sample population. Furthermore 25 sample respondents are taken from households that fall in the category of those who use any other source for cooking contributing 8.3 percent of the total. Thus, from the table it can be concluded that maximum samples are taken from those who cook outside.

Fig 4.27 If no, where is the cooking, generally done for this household?



Source: Estimated from field data.

Note: figure in parenthesis is percentage of total.

Table 4.28 If yes, then your kitchen is attached with.

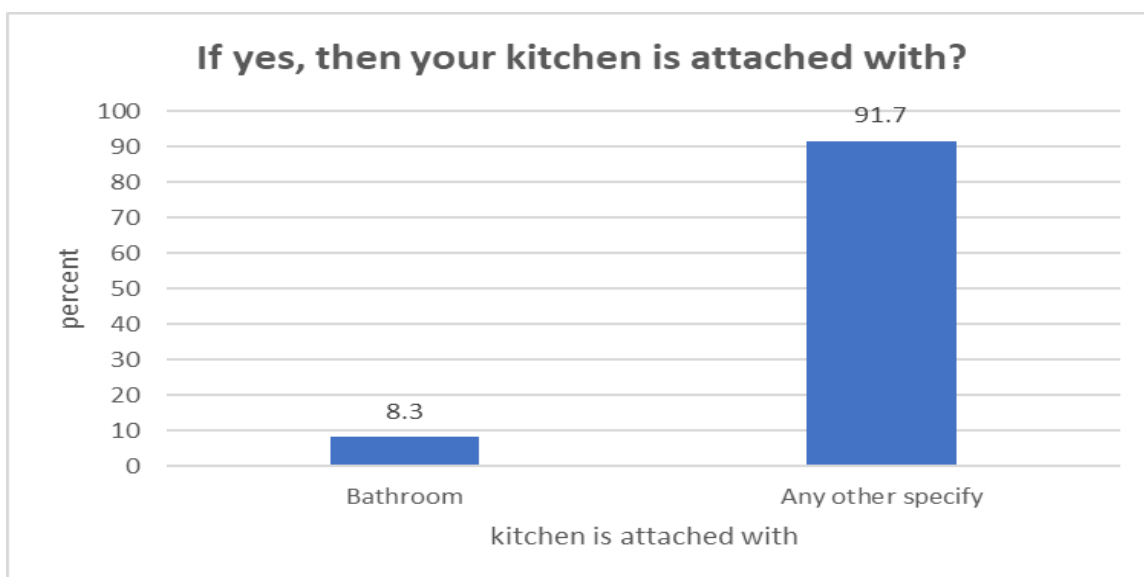
| | Frequency | Percent |
|-------------------|-----------|---------|
| Bathroom | 25 | 8.3 |
| Any other specify | 275 | 91.7 |
| Total | 300 | 100.0 |

Source: Estimated from field data.

Note: figure in parenthesis is percentage of total.

From the table 4.28 the sample of the field survey data is collected from 300 households. We have collected sample based on the factor that if the sample respondents have a kitchen, then what is the kitchen attached with. From the total sample population, 25 sample respondents have bathroom attached with the kitchen and contribute 8.3 percent of the total. On the contrary we have collected 275 samples that have any other thing attached to the kitchen and share 91.7 percent of the total. Therefore, the maximum sample is collected from those whose kitchen is attached with any other thing.

Fig 4.28 If yes, then your kitchen is attached with.



Source: Estimated from field data.

Note: figure in parenthesis is percentage of total.

Table 4.29 What type of energy or fuel is most often used by your household for cooking?

| | Frequency | Percent |
|---------------|-----------|---------|
| LPG | 20 | 6.7 |
| Firewood | 105 | 35.0 |
| Cow dung cake | 73 | 24.3 |
| Leaves | 15 | 5.0 |
| Crop residue | 11 | 3.7 |
| Kerosene | 76 | 25.3 |
| Total | 300 | 100.0 |

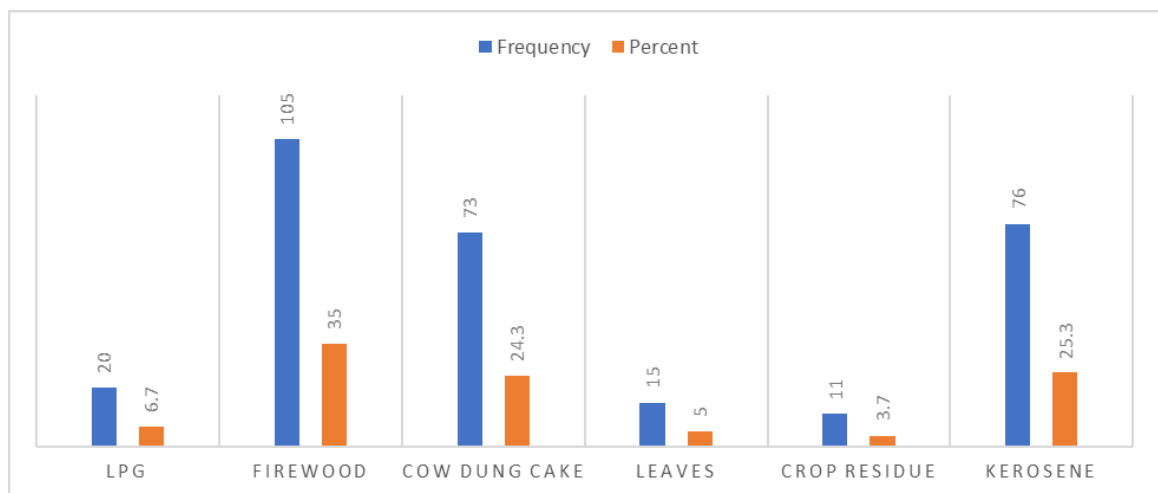
Source: Estimated from field data.

Note: figure in parenthesis is percentage of total.

Table 4.29 shows distribution of sample based on the energy or fuel mostly used by the households for cooking. From the total sample population of 300, 20 respondents use LPG for cooking and share 6.7 percent of the total. 105 respondents use firewood

for cooking and share 35 percent of the total. 73 respondents use cow dung cakes for cooking and share 24.3percent of the total. 15 respondents use leaves for cooking and share 5 percent of the total. 11 respondents use crop residue for cooking and share 3.7 percent of the total. While as 76 respondents use kerosene for cooking and share 25.3 percent of the total. Thus, maximum sample is taken from those who use firewood for cooking.

Fig 4.29 What type of energy or fuel is most often used by your household for cooking?



Source: Estimated from field data.

Note: figure in parenthesis is percentage of total.

Table 4.30 Does the household have electricity.

| | Frequency | Percent |
|-------|-----------|---------|
| Yes | 201 | 67.0 |
| No | 99 | 33.0 |
| Total | 300 | 100.0 |

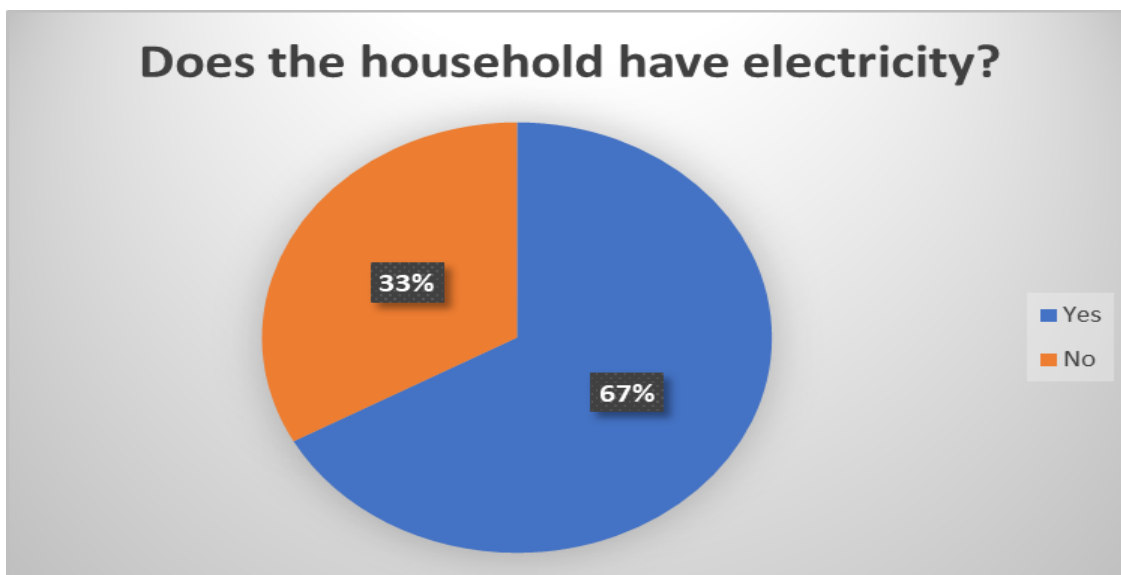
Source: Estimated from field data.

Note: figure in parenthesis is percentage of total.

Table 4.30 shows distribution of sample based on the factor if the households have electricity or not. From the total sample population of 300, 201 sample respondents

have electricity and share 67 percent of the total. While as 99 sample respondents fall in the category of those who do not have electricity and share 33 percent of the total. Thus, maximum sample is taken from those who have access to electricity.

Fig 4.30 Does the household have electricity?



Source: Estimated from field data.

Note: figure in parenthesis is percentage of total.

Table 4.31 If yes, how many hours per day do you generally get electricity during

| | Frequency | Percent |
|---------------------|-----------|---------|
| summer 2 to 4 hours | 201 | 67.0 |
| winter 0 to 1 hour | 99 | 33.0 |
| Total | 300 | 100.0 |

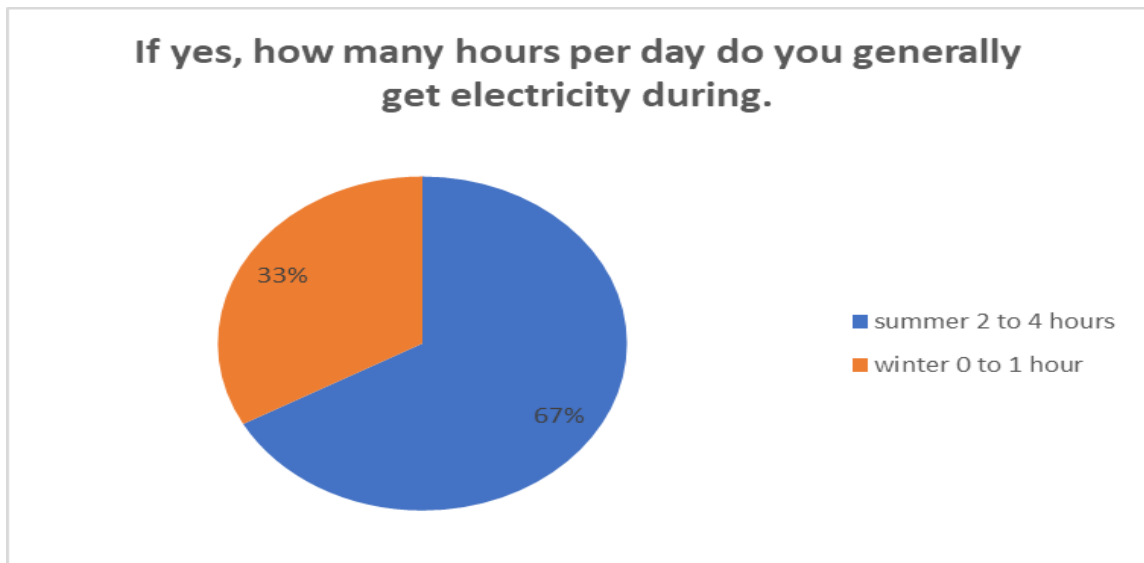
Source: Estimated from field data.

Note: figure in parenthesis is percentage of total.

Table 4.31 shows distribution of sample based on the factor that how many hours households generally get electricity. From the total sample population of 300, 201 sample respondents get electricity for 2-4 hours during summer and share 67 percent of the total. While as 99 sample respondents fall in the category of those who get electricity for 0-1 hours during winter and share 33 percent of the total. Thus,

maximum sample is taken from those who get 2-4 hours of electricity during summer.

Fig 4.31 If yes, how many hours per day do you generally get electricity during



Source: Estimated from field data.

Note: figure in parenthesis is percentage of total.

Table 4.32 When there is no electricity in your houses, how you survive?

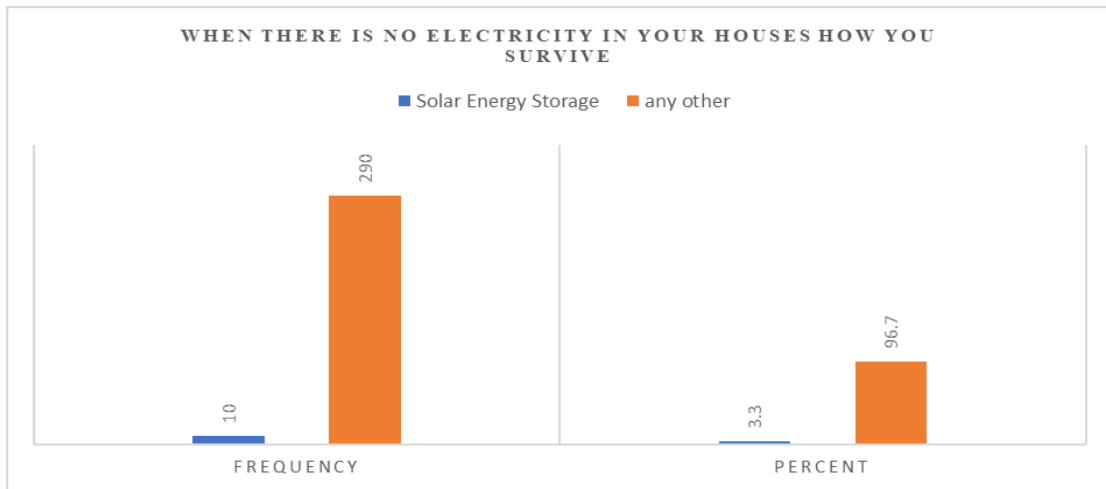
| | Frequency | Percent |
|----------------------|-----------|---------|
| Solar Energy Storage | 10 | 3.3 |
| any other | 290 | 96.7 |
| Total | 300 | 100.0 |

Source: Estimated from field data.

Note: figure in parenthesis is percentage of total.

Table 4.32 shows distribution of sample based on the factor that how sample respondents survive when there is no electricity. From the total sample population of 300, 10 sample respondents use solar energy and share 3.3 percent of the total. While as 290 sample respondents use other source to survive when there is no electricity and share 96.7 percent of the total. Thus, maximum share is taken from those who use other source to survive when there is no electricity.

Fig 4.32 When there is no electricity in your houses how you survive?



Source: Estimated from field data.

Note: figure in parenthesis is percentage of total.

Table 4.33 Do you have bathroom facility?

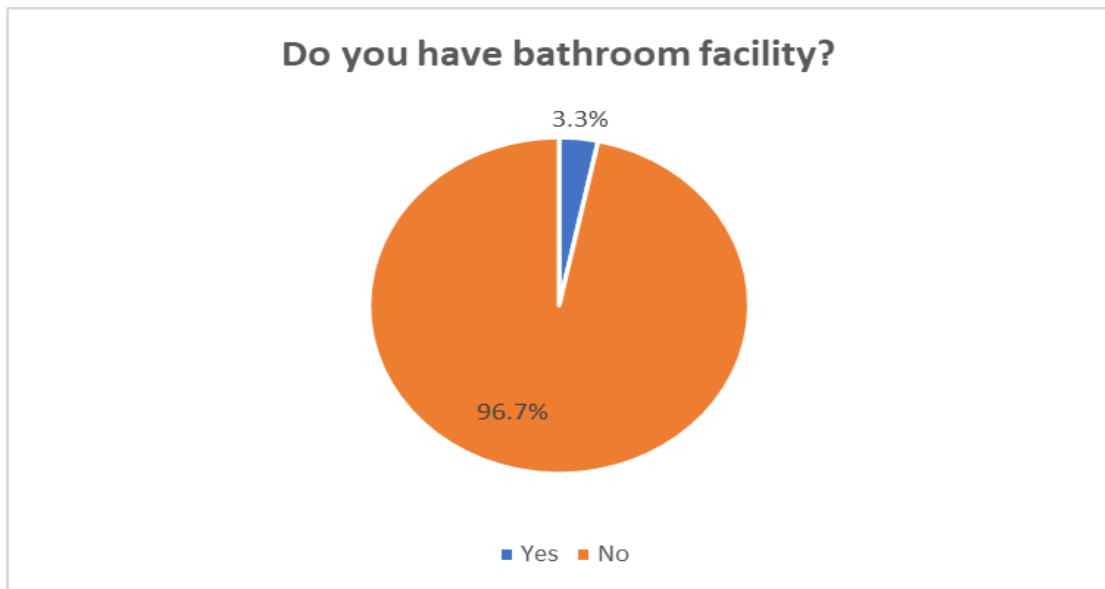
| | Frequency | Percent |
|-------|-----------|---------|
| Yes | 10 | 3.3 |
| No | 290 | 96.7 |
| Total | 300 | 100.0 |

Source: Estimated from field data.

Note: figure in parenthesis is percentage of total.

Table 4.33 shows distribution of sample based on the factor if the sample respondents have bathroom facility. From the total sample population of 300, 10 respondents have bathroom facility and share 3.3 percent of the total. While as 290 sample respondents do not have bathroom facility and share 96.7 percent of the total. Therefore, maximum samples are taken from those who do not have bathroom facility.

Fig 4.33 Do you have bathroom facility?



Source: Estimated from field data.

Note: figure in parenthesis is percentage of total.

Table 4.34 If yes, please mention whether

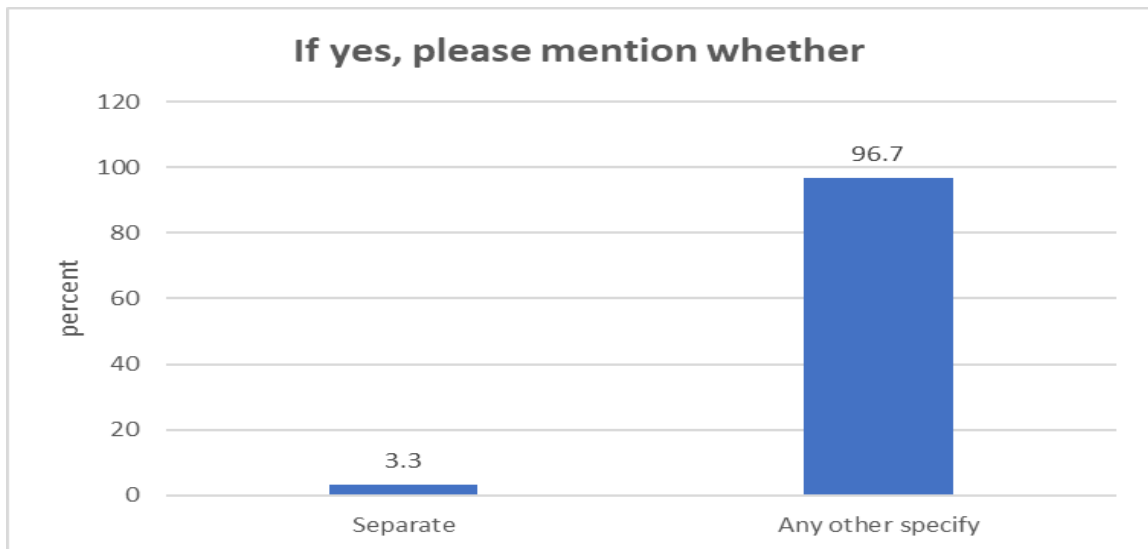
| | Frequency | Percent |
|-------------------|-----------|---------|
| Separate | 10 | 3.3 |
| Any other specify | 290 | 96.7 |
| Total | 300 | 100.0 |

Source: Estimated from field data.

Note: figure in parenthesis is percentage of total.

Table 4.34 shows distribution of sample based on the factor that if the sample respondents have a separate bathroom or not. From the total sample population of 300, 10 sample respondents have a separate bathroom and share 3.3 percent of the total. While as 290 sample respondents fall in the category of those who do not have a separate bathroom and share 96.7 percent of the total. Thus, maximum sample is taken from those who do not have a separate bathroom.

Fig 4.34 If yes, please mention whether



Source: Estimated from field data.

Note: figure in parenthesis is percentage of total.

Table 4.37 If no, where you bath?

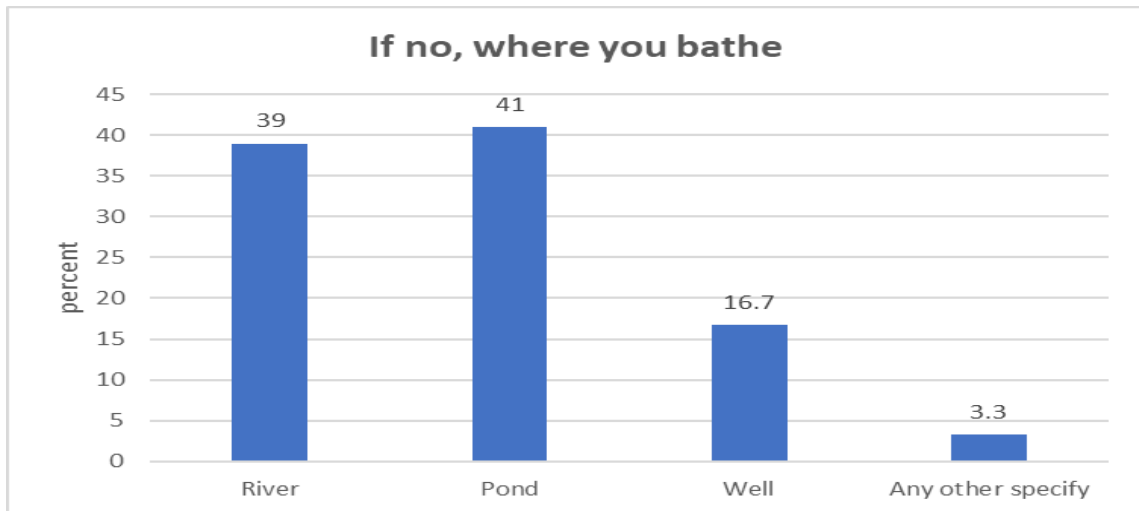
| | Frequency | Percent |
|-------------------|-----------|---------|
| River | 117 | 39.0 |
| Pond | 123 | 41.0 |
| Well | 50 | 16.7 |
| Any other specify | 10 | 3.3 |
| Total | 300 | 100.0 |

Source: Estimated from field data.

Note: figure in parenthesis is percentage of total.

Table 4.35 shows distribution of sample based on where do sample respondents take bath if they do not have a separate bathroom. From the total sample population of 300, 117 sample respondents take bath at river and share 39 percent of the total. 123 sample respondents take bath at pond and share 41 percent of the total. 50 sample respondents take bath at well and share 16.7 percent of the total. Furthermore 10 sample respondents take bath at any other source and share 3.3 percent of the total. Thus, maximum sample is takes from those who take bath at pond.

Fig 4.35 If no, where you bath



Source: Estimated from field data.

Note: figure in parenthesis is percentage of total.

Table 4.36 Do you have toilet facility at home?

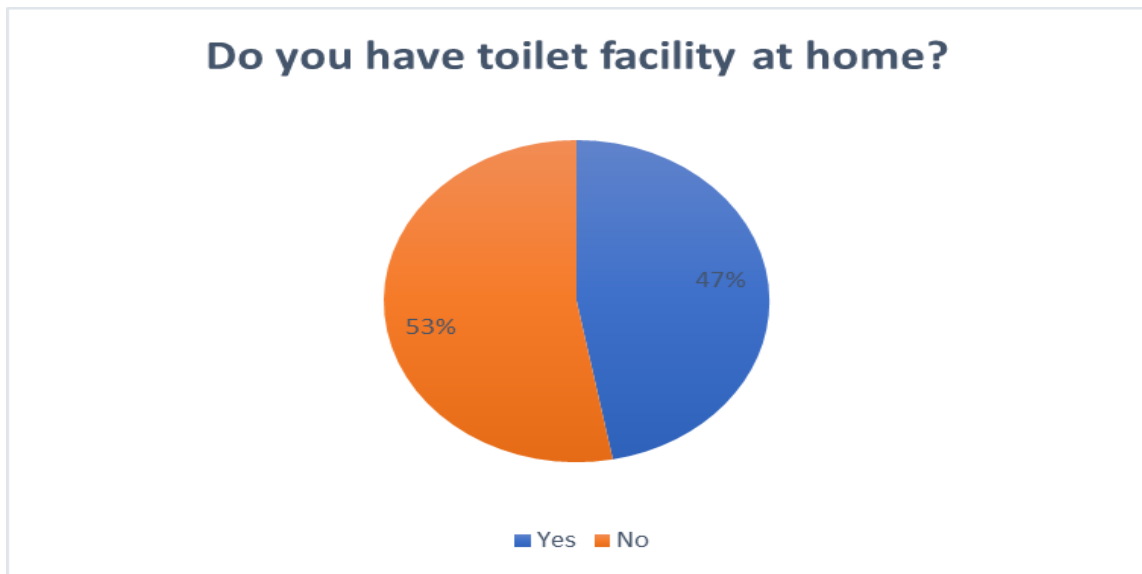
| | Frequency | Percent |
|-------|-----------|---------|
| Yes | 141 | 47.0 |
| No | 159 | 53.0 |
| Total | 300 | 100.0 |

Source: Estimated from field data.

Note: figure in parenthesis is percentage of total.

Table 4.36 shows the distribution of sample based on the factor if the sample respondents have toilet facility at home. From the total sample population of 300, 141 sample respondents have toilet facility at home and share 47 percent of the total. While as 159 sample respondents do not have a toilet facility at home and share 53 percent of the total. Thus, maximum sample is taken from those who do not have a toilet facility at home.

Fig 4.36 Do you have toilet facility at home?



Source: Estimated from field data.

Note: figure in parenthesis is percentage of total.

Table 4.37 If yes, what kind of toilet facility your households have?

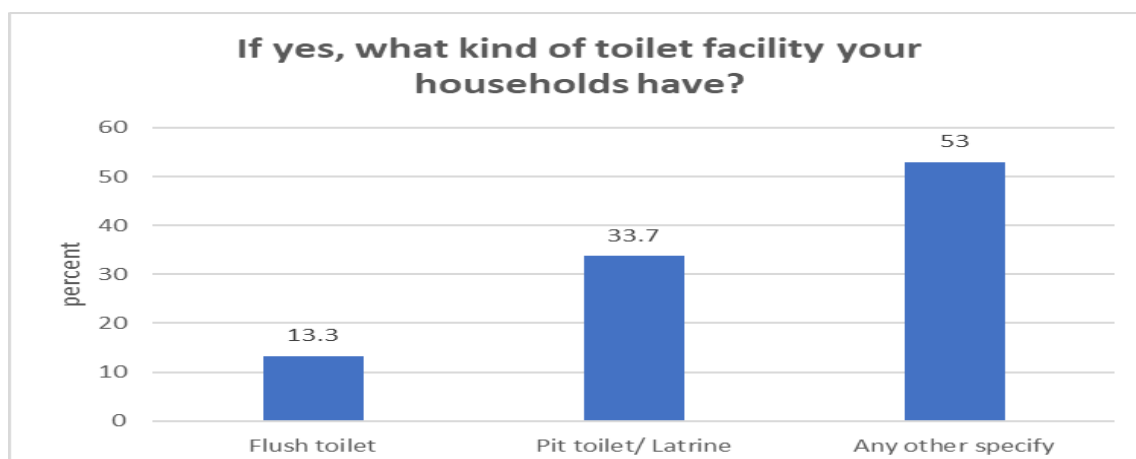
| | Frequency | Percent |
|---------------------|-----------|---------|
| Flush toilet | 40 | 13.3 |
| Pit toilet/ Latrine | 101 | 33.7 |
| Any other specify | 159 | 53.0 |
| Total | 300 | 100.0 |

Source: Estimated from field data.

Note: figure in parenthesis is percentage of total.

Table 4.37 shows distribution of sample based on the factor that what kind of toilet facility is available to the households. From the total sample population of 300, 40 respondents have flush toilets and share 13.3 percent of the total. 101 respondents have pit toilets/ latrine and share 33.7 percent of the total. While as 159 sample respondents have any other toilet facility and share 53 percent of the total. Therefore, maximum sample is taken from those who have any other means of toilet facility.

Fig 4.37 If yes, what kind of toilet facility your households have?



Source: Estimated from field data.

Note: figure in parenthesis is percentage of total.

Table 4.38 If no, own toilet, where do you defecate?

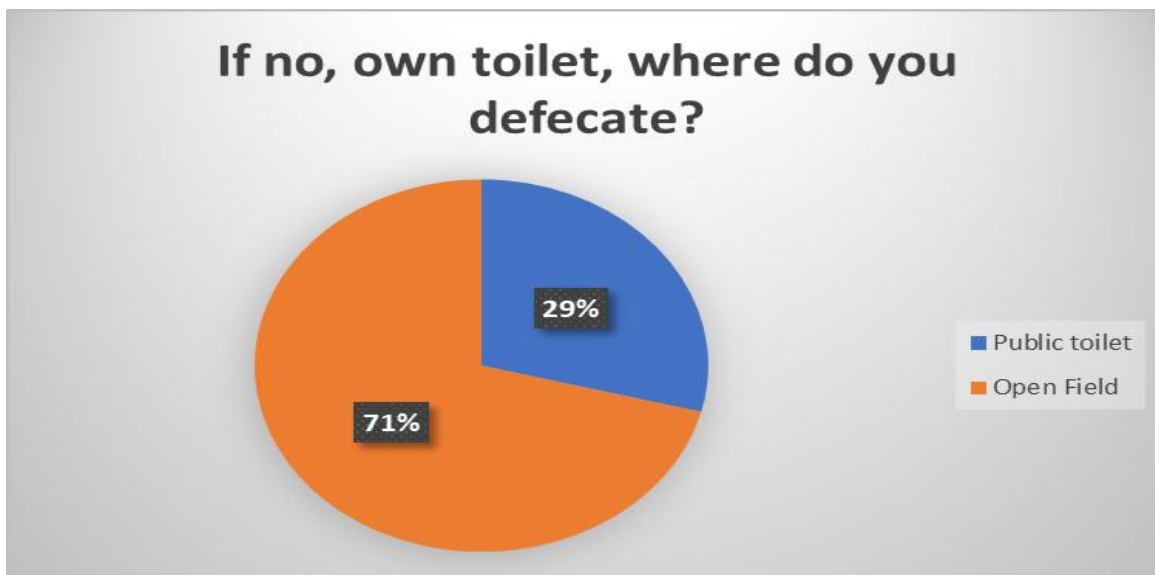
| | Frequency | Percent |
|---------------|-----------|---------|
| Public toilet | 87 | 29.0 |
| Open Field | 213 | 71.0 |
| Total | 300 | 100.0 |

Source: Estimated from field data.

Note: figure in parenthesis is percentage of total.

Table 4.38 shows distribution of sample based on the factor where do sample respondents defecate if they do not have a toilet facility. From the total sample population of 300, 87 respondents use public toilet to defecate and share 29 percent of the total. While as 213 respondents defecate in open fields and share 71 percent of the total. Therefore, maximum sample is taken from those who defecate in open fields.

Fig 4.38 If no, own toilet, where do you defecate?



Source: Estimated from field data.

Note: figure in parenthesis is percentage of total.

Table 4.39 If yes, what do you use to wash your hands?

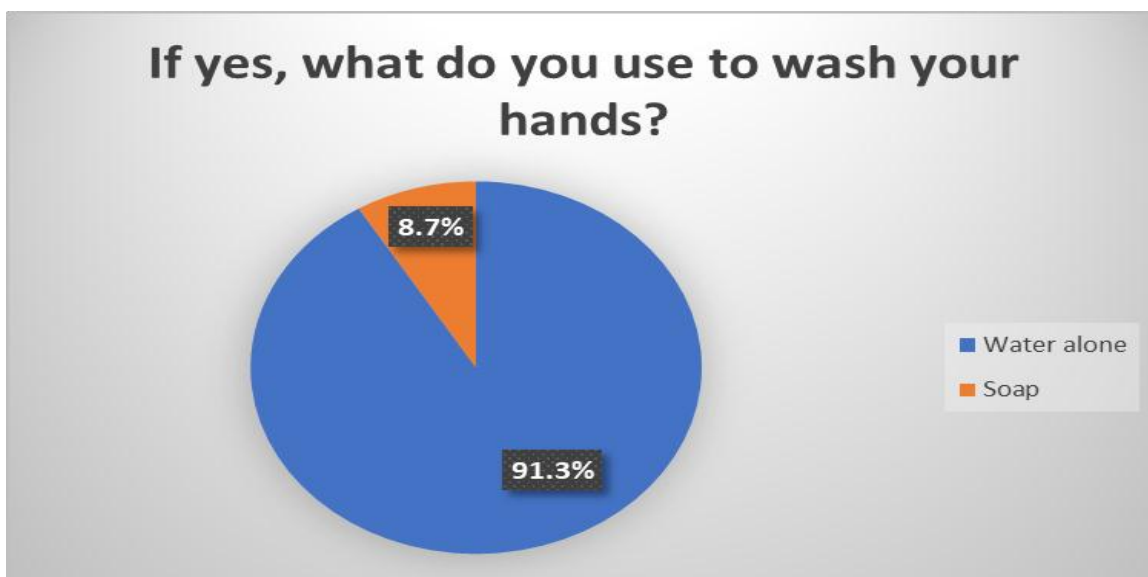
| | Frequency | Percent |
|-------------|-----------|---------|
| Water alone | 274 | 91.3 |
| Soap | 26 | 8.7 |
| Total | 300 | 100.0 |

Source: Estimated from field data.

Note: figure in parenthesis is percentage of total.

Table 4.39 shows the distribution of sample based on the factor that where do sample respondents wash hands after defecating. From the total sample population of 300, 274 sample respondents wash hands with only water and share 91.3 percent of the total. While as 26 sample respondents wash hands with soap and share 8.7 percent of the total. Thus, maximum sample is taken from those who use only water to wash hands.

Fig 4.39 If yes, what do you use to wash your hands?



Source: Estimated from field data.

Note: figure in parenthesis is percentage of total.

Table 4.40 How does the household dispose of its garbage?

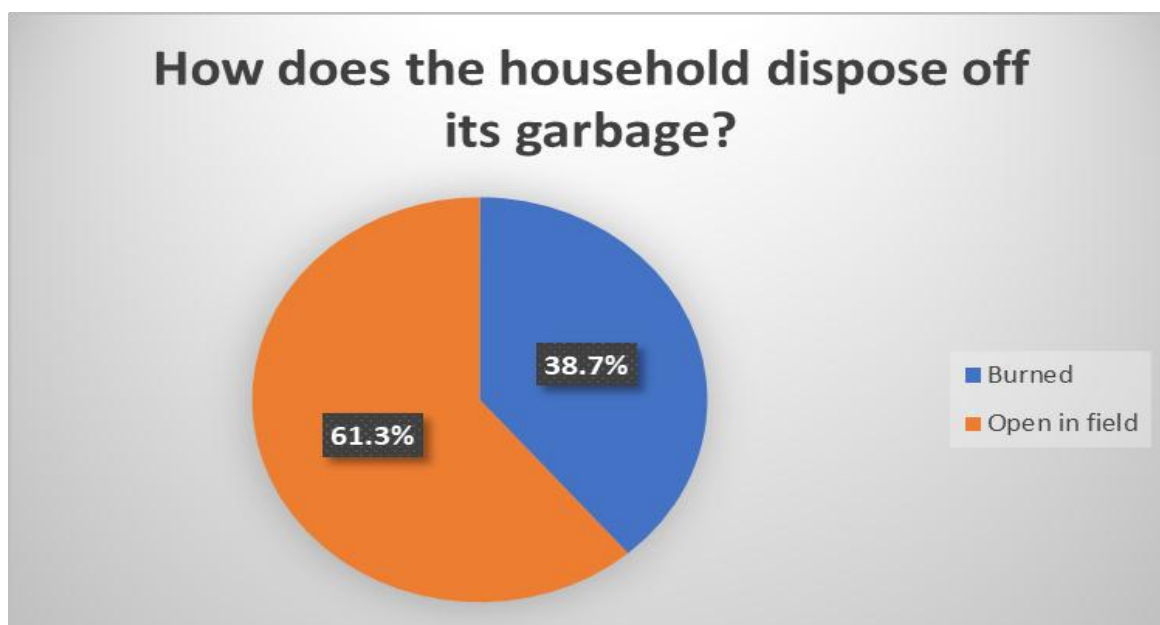
| | Frequency | Percent |
|---------------|-----------|---------|
| Burned | 116 | 38.7 |
| Open in field | 184 | 61.3 |
| Total | 300 | 100.0 |

Source: Estimated from field data.

Note: figure in parenthesis is percentage of total.

Table 4.40 shows distribution of sample based on how does the household dispose of its garbage. From the total sample population of 300, 116 sample respondents burn the garbage and they share 38.7 percent of the total. While as 184 sample respondents dispose of the garbage in open fields, and they share 61.3 percent of the total. Thus, maximum sample respondents are taking from those who dispose of the garbage in open fields.

Fig 4.40 How does the household dispose of its garbage?



Source: Estimated from field data.

Note: figure in parenthesis is percentage of total.

4.5 Hypothesis Testing

H0: The socio-economic conditions of Gujjar community in Jammu and Kashmir have improved

H1: The socio-economic conditions of Gujjar community in Jammu and Kashmir are not improved.

| Pearson Chi-Square | | | | |
|--------------------------------------|------------------|----|-------------------------------|---------|
| District 1= Anantnag 0= Poonch | Calculated Value | df | Asymp. Sig. (2-sided) p-value | Remarks |
| Income | 20.227 | 5 | .001 | Reject |
| Education | 52.482 | 3 | .000 | Reject |
| Occupation | 45.873 | 6 | .000 | Reject |

From the Pearson's chi-square table all the p-values of income, education and occupation are below level of significance 0.05% therefore we reject null hypothesis and accept alternative hypothesis that the socio-economic conditions of Gujjar community in Jammu and Kashmir are not impressive.

4.4 Conclusions

The overall condition of Gujjar community in Jammu and Kashmir is still worst. They are still facing challenges to full fill the basic necessities of life. They are facing discrimination socially educationally as well as economically. The literacy rate of Gujjar community is less than the literacy rate of other communities of the union territory of J&K. They are lacking behind in health, education, income, accessibility of government schemes due to number of reasons like illiteracy, lack of unawareness about government schemes at local and national level which are run for their upliftment, and seasonal migration. Women of this community are more vulnerable as compare to male in every field of life specially in education, occupation and decision making. The employment rate is also very low in Gujjar community of J&K. Therefore, we can say that this community is still backward in the field of development and struggling for fulfil of basic necessities of life.

Chapter 5

Occupational Structure of Gujjar community in Jammu and Kashmir

5.1 Introduction

Scheduled Tribes (STs) population of Jammu and Kashmir mostly live in the hilly as well as Kandi areas of Jammu and Kashmir and rely heavily on primary activities for their livelihood and income. They are economically disadvantaged and underdeveloped. Numerous disadvantages are common including geographical isolation, underdevelopment, economic stagnation, deprivation, illiteracy, poverty, indebtedness, and a reduced ability to access assets and public services (Hanumantha & Grover 1979). Historically, they have lived primarily in forests, hills, and undulating terrain. These terrains are inaccessible in plateau areas with abundant natural resources (Ministry of Tribal Affairs, 2013). They have consistently been at the 'lower end of the distribution in terms of living conditions and household assets' (Bhagat, 2013:64) primarily as a result of the government's unbalanced development programmes. However, generalising about would be STs across India incorrect due to differences in education, health, and income disparities exist across Indian states. Jacques Chaube (1999) warns that India's STs are a diverse group. As a result, the common definition of tribe or tribal does not apply not exist as a result of differences in social, economic, and administrative structures or as a result of customary norms, value system, geographical isolation, and underdevelopment all contribute to this state of underdevelopment. The tribal is a way of life or a way of life system (Sikidar, 1990). Tribal societies are structured around cultural values and distinct from one

another in terms of kinship and lineage but not in terms of occupation (Corbridge, 1988). On the contrary, India's occupational system is deeply ingrained in Hindu caste (Horan, 1974). The traditional social hierarchy or caste hierarchy that exists in Hinduism does not exist among the scheduled tribe population of J&K (Sundaram). et al., 2003 & Bhagat, 2013). But they face numerous disadvantages in social and economic status in comparison to non-tribal people. (Srivastava, 2008) Economic underdevelopment occurs as a result of settlement in geographically isolated areas with difficult terrain and They rely on shifting or jhum cultivation for their subsistence (Sundaram and Tendulkar, 2003). However, in recent years the primary source of income has shifted away from agricultural activities to non-agricultural activities. It means their employment status change from primary sector to secondary sector. (Marchang, 2016) The chapter examines how the occupational structure of Gujjar community in Jammu and Kashmir.

5.2 Occupational Structure and socio-economic status of Gujjar community in Jammu and Kashmir

Table 5.1 Gender of respondent * Occupation/Profession Crosstabulation

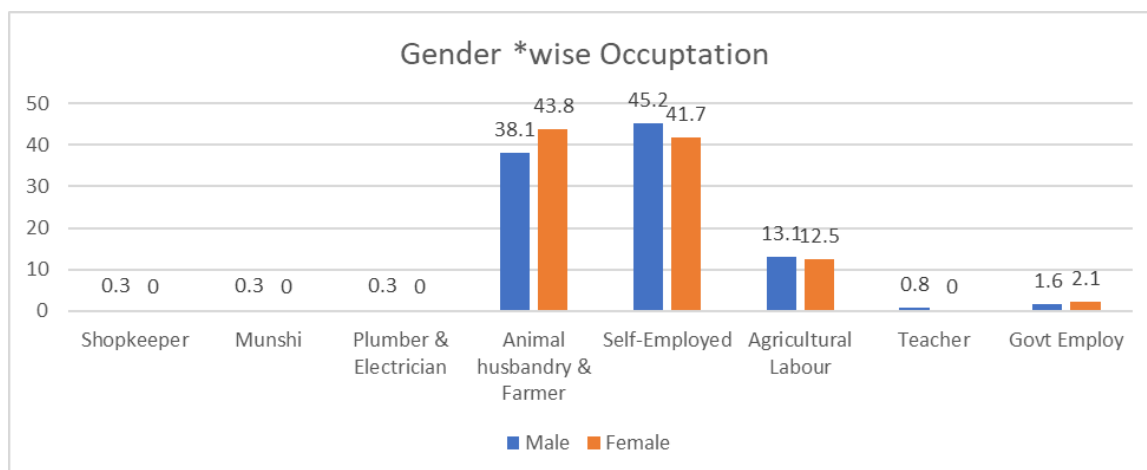
| | | Gender of respondent * Occupation/Profession Crosstabulation | | | | | | | |
|--------|------------|--|-----------------------|---------------------------|---------------|---------------------|---------|-------------|--------|
| Gender | Shopkeeper | Munshi/Arzanavish | Plumber & Electrician | Animal husbandry & Farmer | Self-Employed | Agricultural Labour | Teacher | Govt Employ | Total |
| Male | 1 | 1 | 1 | 96 | 114 | 33 | 2 | 4 | 252 |
| | 0.3% | 0.3% | 0.3% | 38.1% | 45.2% | 13.1% | 0.8% | 1.6% | 100.0% |
| Female | 0 | 0 | 0 | 21 | 20 | 6 | 0 | 1 | 48 |
| | 0.0% | 0.0% | 0.0% | 43.8% | 41.7% | 12.5% | 0.0% | 2.1% | 100.0% |
| Total | 1 | 1 | 1 | 117 | 134 | 39 | 2 | 5 | 300 |
| | 0.3% | 0.3% | 0.3% | 39.0% | 44.7% | 13.0% | 0.7% | 1.7% | 100.0% |

Source: Estimated from field data.

Note: figure in parenthesis is percentage of total.

Table 5.1 depicts the gender distribution of the sample population by occupation. There are 252 male respondents in total. One respondent is a Shopkeepers, accounting for 0.3 percent of the male category. one sample from the male category is a Munshi/Arzanavish, accounting for 0.3 percent of this group. one sample from male category is Plumber/Electricians account for 0.3 percent of male respondents. Additionally, 96 male respondents are from animal husbandry and farmers category, accounting for 38.1 percent of the male population. 114 male respondents are self-employed, accounting for 45.2% of this group. The total number of male respondents who are agricultural labourers is 33, accounting for 13.1 percent of the male population. two male respondents are teachers, accounting for 0.8% of all male respondents. While four male respondents work in government jobs, accounting for 1.6 percent of this category. There are 48 female samples in total. 21 female respondents are from animal husbandry and farmers category, accounting for 43.8 percent of this category. Additionally, 20 female sample respondents are self-employed, accounting for 41.7 percent of the female population. six female sample respondents are from agricultural labour category and their share is 12.5% of the female category. And one female respondent works in government job, accounting for 2.1 percent of the female category. No female sample respondent in the category of Shopkeepers, Munshi/Arzanavish, Plumber/Electrician or teacher. it can be concluded that male respondents have the largest share in self-employed and female respondents are more in animal husbandry and farmers category.

Fig.5.1 Gender of respondent



Source: Estimated from field data.

Table 5.2 Income of the respondent * Occupation/Profession Crosstabulation

| Income (Annually) | Income of the respondent * Occupation/Profession Crosstabulation | | | | | | | | |
|-------------------|--|-------------------|---------------------|------------------|---------------|---------------------|---------|---------------|--------|
| | Shopkeepers | Munshi/Arzanavish | Plumber/Electrician | Animal husbandry | Self-Employed | Agricultural Labour | Teacher | Govt Employee | Total |
| 100000-150000 | 0 | 0 | 0 | 27 | 4 | 13 | 1 | 1 | 46 |
| | 0.0% | 0.0% | 0.0% | 58.7% | 8.7% | 28.3% | 2.2% | 2.2% | 100.0% |
| 150001-250000 | 0 | 0 | 0 | 0 | 7 | 0 | 0 | 0 | 7 |
| | 0.0% | 0.0% | 0.0% | 0.0% | 100.0% | 0.0% | 0.0% | 0.0% | 100.0% |
| 250001-350000 | 1 | 0 | 0 | 32 | 63 | 10 | 0 | 3 | 109 |
| | 0.9% | 0.0% | 0.0% | 29.4% | 57.8% | 9.2% | 0.0% | 2.8% | 100.0% |
| 350001-450000 | 0 | 1 | 1 | 42 | 37 | 8 | 1 | 1 | 91 |
| | 0.0% | 1.1% | 1.1% | 46.2% | 40.7% | 8.8% | 1.1% | 1.1% | 100.0% |
| 450001-550000 | 0 | 0 | 0 | 10 | 2 | 2 | 0 | 0 | 14 |
| | 0.0% | 0.0% | 0.0% | 71.4% | 14.3% | 14.3% | 0.0% | 0.0% | 100.0% |
| Above 550001 | 0 | 0 | 0 | 6 | 21 | 6 | 0 | 0 | 33 |
| | 0.0% | 0.0% | 0.0% | 18.2% | 63.6% | 18.2% | 0.0% | 0.0% | 100.0% |
| Total | 1 | 1 | 1 | 117 | 134 | 39 | 2 | 5 | 300 |
| | 0.3% | 0.3% | 0.3% | 39.0% | 44.7% | 13.0% | 0.7% | 1.7% | 100.0% |

Source: Estimated from field data.

Note: figure in parenthesis is percentage of total.

Table 5.2 depicts the sample populations income distribution by occupation including shopkeeper, Munshi/Arzanavish, plumber/electrician, animal husbandry and farmer, self-employed, agricultural labourer, teacher, and government employee. The total

number of respondents in the income range of 100000- 150000 is forty-six out of which twenty-seven respondents are belong to animal husbandry and farmers category accounting for 58.7% of this income category. While four samples in this category are self-employed, they account for 8.7 percent of the total. Thirteen sample respondents are agricultural labourers accounting for 28.3% of this group. Additionally, one sample respondent is a teacher, accounting for 2.2% of the sample. And one sample respondent is a government employee accounting for 2.2% of this group. The total number of respondents in the income range of Rs 150001-250000 is seven, and all respondents are from self-employed category, they account for 100% of this income category. There are one hundred nine respondents in the income range of Rs 100001-150000. One respondent is a shopkeeper accounting for 0.9% of this income category. While thirty-two of the samples in this category are from animal husbandry and farmers, they account for 29.4% of the total. Sixty-three sample respondents in the income range of Rs 250001-350000 are self-employed accounting for 57.8% of this group. Additionally, ten sample respondents accounting 9.2% from agricultural labourers' category. And three sample respondents are from government employee category accounting for 2.8% of this group. There are ninety-one respondents who fall into the income range of Rs 350001-450000. One respondent is a Arzanavish/Munshi accounting for 1.1% of this income category. One sample in this category is a plumber/electrician accounting for 1.1% of the total. Forty-two sample respondents in the income range Rs 450001-550000 are from animal husbandry and farmers category and accounting for 46.2% of this group. Thirty-seven respondents of this income range are self-employed and accounting for 40.7% of this group. Additionally, eight sample respondents are agricultural labourers accounting for 8.8% of the sample. This group has one sample respondent who is a teacher and represents 1.1% of the income

group. Furthermore, one sample respondent is a government employee also accounting for 1.1% of this group. There are a total of fourteen respondents who fall within the income range of Rs 200001-250000. Out of which ten respondents are from animal husbandry and farmers category accounting for 71.4% of this income category. Two respondents in this category are self-employed accounting for 14.3% of the total. Two respondents in the income group 200001-250000 are agricultural labourers accounting for 14.3% of this group. There are thirty-three respondents who fall into the income range of above Rs 550001. Six sample respondents are from animal husbandry and farmers category accounting for 18.2% of this group, twenty-one respondents in the sample are self-employed accounting for 63.6% of this income group. Additionally, six sample respondents are agricultural labourers accounting for 18.2% of the sample. As a result of the table, it can be concluded that respondents with an income of below Rs 100000-150000 have the largest sample of animal husbandry and farmers category. Additionally, respondents with incomes between Rs 150001- 250000 is 100% from self-employed group. While those with income range between Rs 250001- 350000 have the highest proportion of self-employed people and the lowest proportion of shopkeepers. Additionally, the sample with an income range of Rs 350001-450000 has the highest proportion of animal husbandry and farmers. Additionally, the highest percentage of respondent is from animal husbandry and farmers category with an income of Rs 450001-550000. Finally, the self-employed accounting for the highest percentage of income group of above Rs 550001.

Table 5.3 Education of the respondent * Occupation/Profession Crosstabulation

| | | Education of the respondent * Occupation/Profession Crosstabulation | | | | | | | |
|---------------|-------------|---|---------------------|---------------------------|---------------|---------------------|---------|-------------|--------|
| Education | Shopkeepers | Munshi/Arzanavish | Plumber/Electrician | Animal husbandry & Farmer | Self-Employed | Agricultural Labour | Teacher | Govt Employ | Total |
| Illiterate | 0 | 0 | 0 | 92 | 53 | 17 | 0 | 0 | 162 |
| | 0.0% | 0.0% | 0.0% | 56.79% | 31.71% | 10.49% | 0.0% | 0 | 100.0% |
| Primary Edu | 0 | 0 | 0 | 25 | 53 | 14 | 0 | 2 | 94 |
| | 0.0% | 0.0% | 0.0% | 26.3% | 55.8% | 14.7% | 0.0% | 2.1% | 100.0% |
| Secondary Edu | 0 | 0 | 0 | 0 | 14 | 8 | 0 | 0 | 22 |
| | 0.0% | 0.0% | 0.0% | 0.0% | 63.6% | 36.4% | 0.0% | 0.0% | 100.0% |
| Higher Edu | 1 | 1 | 1 | 0 | 14 | 0 | 2 | 3 | 22 |
| | 4.54% | 4.54% | 4.54% | 0.0% | 63.63% | 0.0% | 9.09% | 13.63% | 100.0% |
| Total | 1 | 1 | 1 | 117 | 134 | 39 | 2 | 5 | 300 |
| | 0.3% | 0.3% | 0.3% | 39.0% | 44.7% | 13.0% | 0.66% | 1.6% | 100.0% |

Source: Estimated from field data.

Note: figure in parenthesis is percentage of total.

Table 5.3 illustrates the distribution of the sample population by occupation, including Shopkeepers, Munshi/Arzanavish, Plumber/Electrician, Animal husbandry and Farmer, self-employed, agricultural labourer, teachers, and government employee. There are 162 respondents who are illiterate in total. There are 92 respondents from animal husbandry and farmers who are illiterate, accounting for 56.79 percent of all animal husbandry and farmers. 53 sample respondents are self-employed, accounting for 31.71 percent of the total. 17 of the sample respondents are agricultural labourers, accounting for 10.49 percent of the illiterate population. Additionally, 94 respondents have a primary level of education. Out of these 25 are classified as animal husbandry and farmers, accounting for 26.3 percent of the total. While 53 sample respondents are self-employed, this category accounts for 55.8 percent of the total. 14 respondents identify as agricultural labourers, accounting for 14.7% of this group. Additionally,

two sample respondents are government employees, accounting for 2.1 percent of the sample. There are a total of 22 samples with a secondary education. And 63.6 percent of respondents are self-employed, while 36.4 percent work in agriculture. 22 samples with a higher level of education, 1 sample each are Shopkeepers, Munshi, and Plumber/Electrician which comprises 4.54 percent, 14 samples are self-employed consists of 63.63 percent. 2 samples are teachers comprises of 9.09 percent and 3 sample are govt. employees. As a result of the table, it can be concluded that the respondents who are illiterate are primarily Animal husbandry and Farmers. And those with only a primary education have the highest proportion of self-employed individuals and the lowest proportion of teachers. Additionally, those with a secondary education have the highest proportion of self-employed individuals. The majority of those with a higher education are self-employed.

Table 5.4 Age of the respondent * Occupation/Profession Crosstabulation

| Age of the respondent * Occupation/Profession Crosstabulation | | | | | | | | | |
|---|-------------|--------------------|---------------------|---------------------------|---------------|---------------------|-----------|-------------|---------------|
| Age | Shopkeepers | Munshi/Arzana vish | Plumber/Electrician | Animal husbandry & Farmer | Self-Employed | Agricultural Labour | Teacher | Govt Employ | Total |
| Less than 20 | 0 0.0% | 0 0.0% | 0 0.0% | 1 25.0% | 2 50.0% | 1 25.0% | 0 0.0% | 0 0.0% | 4 100.0% |
| 21-30 years | 0 0.0% | 0 0.0% | 0 0.0% | 22 31.9% | 32 46.4% | 13 18.8% | 1 1.4% | 1 1.4% | 69 100.0% |
| 31-40 years | 1 0.9% | 1 0.9% | 0 0.0% | 49 43.0% | 50 43.9% | 10 8.8% | 1 0.9% | 2 1.8% | 114 100.0% |
| 41 -60 years | 0 0.0% | 0 0.0% | 1 0.9% | 45 39.8% | 50 44.2% | 15 13.3% | 0 0.0% | 2 1.8% | 113 100.0% |
| Total | 1 0.3% | 1 0.3% | 1 0.3% | 117 39.0% | 134 44.7% | 39 13.0% | 2 0.7% | 5 1.7% | 300 100.0% |

Source: Estimated from field data.

Note: figure in parenthesis is percentage of total.

Table 5.4 Shows the sample population age distribution by occupation, including Shopkeepers, Munshi/Arzanavish, Plumber/Electrician, animal husbandry and farmer, self-employed, agricultural labourer, teacher, and government employee. The total number of respondents aged less than 20 years is four. One respondent is from animal husbandry and farmer category, accounting for 25% of this age group. Two samples in this category are self-employed, accounting for 50% of the total. And one sample respondent under the age of 20 years is an agricultural labourer, accounting for 25% of this group. The total number of respondents aged 21-30 years is 69. 22 respondents are animal husbandry and farmers, accounting for 31.9 percent of this age group. 32 respondents in the sample are self-employed, accounting for 46.4 percent of this group. Among the 13 respondents, 18.8 percent are agricultural labourers. One respondent is a teacher, accounting for 1.4 percent. And one sample respondent is a government employee, accounting for 1.4 percent of the respondents in this age group. There are 114 respondents in the age group of 31-40 years. One respondent is a shopkeepers, accounting for 0.9 percent of this age group. While one sample respondent in this category is a Munshi/Arzanavish, accounting for 0.9 percent of the total. 49 respondents are Animal husbandry and Farmers, accounting for 43% of the total. 50 sample respondents between the ages of 31 and 40 are self-employed, accounting for 43.9 percent of this group. Additionally, ten sample respondents are agricultural labourers, accounting for 8.8 percent of the sample. 0.9 percent of this group's sample respondent is a teacher. Additionally, one respondent is a government employee, accounting for 1.8 percent of this group. The total number of respondents aged 41-60 years is 113. One respondent is a Plumber/Electrician, accounting for 0.9 percent of this age group. 45 of the samples in this category are animal husbandry and farmers, accounting for 44.2% of this group. 50 of the sample respondents are self-

employed, accounting for 44.2% of this group. Additionally, 15% of the sample respondents are agricultural labourers. 2 of the sample respondents are government employees, accounting for 1.8 percent of this group. As a result of the table, it can be concluded that respondents under the age of 20 years have the highest proportion of self-employed respondents. Additionally, the sample respondents between the ages of 21 and 30 years have the highest proportion of self-employed individuals. While those between the ages of 31 and 40 years old have the highest proportion of self-employed individuals and the lowest proportion of Munshi/Arzanavish and teachers. Additionally, the sample with an age range of 41-60 years has the highest proportion of self-employed individuals and the lowest proportion of Plumber/Electricians.

Table 5.5 Division wise * Occupation/Profession Crosstabulation

| | | Division wise * Occupation/Profession Crosstabulation | | | | | | | |
|----------|-------------|---|---------------------|---------------------------|---------------|---------------------|---------|-------------|---------|
| Division | Shopkeepers | Munshi/Arzanavish | Plumber/Electrician | Animal husbandry & Farmer | Self-Employed | Agricultural Labour | Teacher | Govt Employ | Total |
| Jammu | 1 | 1 | 1 | 76 | 58 | 39 | 1 | 2 | 179 |
| | 0.55% | 0.55% | 0.55% | 42.45% | 32.40% | 21.78% | 0.55% | 1.11% | 100.00% |
| Kashmir | 0 | 0 | 0 | 41 | 76 | 0 | 1 | 3 | 121 |
| | 0.0% | 0.0% | 0.0% | 33.88% | 62.80% | 0.0% | 0.82% | 2.47% | 100.00% |
| Total | 1 | 1 | 1 | 117 | 134 | 39 | 2 | 5 | 300 |
| | 0.55% | 0.55% | 0.55% | 39.0% | 44.7% | 14.0% | 0.3% | 1.0% | 100.00% |

Source: Estimated from field data.

Note: figure in parenthesis is percentage of total.

Table 5.5 illustrates the sample population's distribution by occupation, including Shopkeepers, Munshi/Arzanavish, Plumber/electrician, animal husbandry and farmer, self-employed, agricultural labourer, teacher, and government employee. There are 179 respondents from Jammu in total. In the category of shopkeepers and Munshi/Arzanavish there is no respondent. Plumber/Electricians make up 0.5 percent of this group, according to one sample respondent. 42.5 percent of the 76 sample respondents are animal husbandry and farmers. 59 respondents are self-employed, accounting for 33 % of this group. Additionally, 39 sample respondents are agricultural labourers, accounting for 23.5 percent of the sample. 0.6 percent respondents are in teacher Profession. Additionally, 1 respondent is government employee who collectively own 0.55 percent of the Jammu division. There are 120 respondents from the Kashmir division in total. 41 respondents are animal husbandry & farmers, accounting for 33.1 percent of the sample. 75 respondents are self-employed, accounting for 62.5 percent of this group. Additionally, 1 sample is teacher 0.8 percent and three sample respondents are government employees who collectively own 2.5 percent of the Kashmir division.

Table 5.6 Marital Status:

Married/Unmarried/Divorced/Widow*Occupation/Crosstabulation

| | | Marital Status: Married/Unmarried/Divorced/Widow * | | | | | | | |
|----------------|-------------|--|---------------------|---------------------------|---------------|---------------------|---------|-------------|--------|
| | | Occupation/Profession Crosstabulation | | | | | | | |
| Marital Status | Shopkeepers | Munshi/Arzanavish | Plumber/electrician | Animal husbandry & Farmer | Self-Employed | Agricultural Labour | Teacher | Govt Employ | Total |
| Married | 1 | 0 | 1 | 88 | 92 | 39 | 2 | 4 | 227 |
| | 0.4% | 0.0% | 0.4% | 38.8% | 40.5% | 17.2% | 0.9% | 1.8% | 100.0% |
| Unmarried | 0 | 0 | 0 | 29 | 36 | 0 | 0 | 1 | 66 |
| | 0.0% | 0.0% | 0.0% | 43.9% | 54.5% | 0.0% | 0.0% | 1.5% | 100.0% |
| Divorced | 0 | 0 | 0 | 0 | 5 | 0 | 0 | 0 | 5 |
| | 0.0% | 0.0% | 0.0% | 0.0% | 100.0% | 0.0% | 0.0% | 0.0% | 100.0% |
| Widow | 0 | 1 | 0 | 0 | 1 | 0 | 0 | 0 | 2 |
| | 0.0% | 50.0% | 0.0% | 0.0% | 50.0% | 0.0% | 0.0% | 0.0% | 100.0% |
| Total | 1 | 1 | 1 | 117 | 134 | 39 | 2 | 5 | 300 |
| | 0.3% | 0.3% | 0.3% | 39.0% | 44.7% | 13.0% | 0.7% | 1.7% | 100.0% |

Source: Estimated from field data.**Note:** figure in parenthesis is percentage of total.

Table 5.6 depicts the population's marital status distribution by occupation, including Shopkeepers, Munshi/Arzanavish, Plumber/electrician, animal husbandry and farmer, self-employed, agricultural labourer, teacher, and government employee. There are 227 married respondents in total. one is a shopkeeper, accounting for 0.55 percent of this category. Plumber/Electricians account for 0.4 percent of sample respondents. There are 88 respondents who are animal husbandry and farmers, accounting for 38.8 percent of this group. 40.5 percent of the 92 sample respondents are self-employed. Additionally, 39 respondents are agricultural labourers, accounting for 17.2 percent of the sample. However, two respondents are teachers, accounting for 0.9 percent of the married group, and four respondents are government employees, accounting for 1.8 percent of the married group. Unmarried respondents 66. 29 of the unmarried

respondents are animal husbandry and farmers, accounting for 43.9 percent, while 36 are self-employed, accounting for 54.5 percent. While one unmarried respondent is a government employee who contributes 1.5 percent to the total. There are five divorced respondents in total, and they are all self-employed. As a result of the table, it is clear that the majority of samples from the married category are taken from self-employed individuals. Further removed from the unmarried category, the highest sample size is taken from self-employed individuals and the lowest sample size is taken from government employees. And the majority of samples from the divorced category come from self-employed individuals.

Table 5.7 Family size * Occupation/Profession Crosstabulation

| Family size * Occupation/Profession Crosstabulation | | | | | | | | | |
|---|-------------|-------------------|---------------------|---------------------------|---------------|---------------------|---------|-------------|--------|
| Family Size | Shopkeepers | Munshi/Arzanavish | Plumber/Electrician | Animal husbandry & Farmer | Self-employed | Agricultural labour | Teacher | Govt employ | Total |
| Joint Family | 1 | 1 | 1 | 102 | 124 | 24 | 2 | 4 | 259 |
| | 0.4% | 0.4% | 0.4% | 39.4% | 47.9% | 9.3% | 0.8% | 1.5% | 100.0% |
| Nuclear | 0 | 0 | 0 | 15 | 10 | 15 | 0 | 1 | 41 |
| | 0.0% | 0.0% | 0.0% | 36.6% | 24.4% | 36.6% | 0.0% | 2.4% | 100.0% |
| Total | 1 | 1 | 1 | 117 | 134 | 39 | 2 | 5 | 300 |
| | 0.3% | 0.3% | 0.3% | 39.0% | 44.7% | 13.0% | 0.7% | 1.7% | 100.0% |

Source: Estimated from field data.

Note: figure in parenthesis is percentage of total.

Table 5.7 illustrates the sample population family size distribution by profession, including Shopkeepers, Munshi/Arzanavish, Plumber/electrician, animal husbandry and farmer, self-employed, agricultural labourers, teachers, and government employees. There are 259 sample respondents who fall into the joint family category. One respondent is a Shopkeepers, accounting for 0.4 percent of this group. 1 respondent is a Munshi/Arzanavish, accounting for 0.4% of this group. 1 respondent

is a Plumber/electrician, accounting for 0.4% of this group. Additionally, 102 respondents are animal husbandry and farmers, accounting for 39.4 percent of respondents in the joint family category. 47.9 percent of the 124 sample respondents are self-employed. Additionally, 24 respondents (9.3 percent) are agricultural labourers. Two respondents are teachers, accounting for 0.8 percent of respondents in this category. Additionally, four respondents are government employees, accounting for 1.5% of this group. The total number of respondents who belong to a nuclear family is 41. 15 are animal husbandry and farmers, accounting for 36.6 percent of this category. Ten respondents are self-employed, accounting for 24.4 percent of the total. Additionally, fifteen respondents are agricultural labourers, accounting for 36.6 percent of the nuclear family. Additionally, one respondent is a government employee who contributes 2.4 percent. Thus, the table indicates that the majority of samples from joint families are self-employed. Similarly, the largest sample size is taken from animal husbandry and farmers and agricultural labourers, while the smallest sample size is taken from government employees.

Table 5.8 Category of Ration Cards * Occupation/Profession Crosstabulation

| Category as per Ration Cards * Occupation/Profession Crosstabulation | | | | | | | | | |
|--|-------------|-------------------|---------------------|---------------------------|---------------|---------------------|---------|-------------|--------|
| Ration Card | Shopkeepers | Munshi/Arzanavish | Plumber/Electrician | Animal husbandry & Farmer | Self-employed | Agricultural labour | Teacher | Govt employ | Total |
| BPL | 1 | 1 | 1 | 104 | 119 | 25 | 1 | 5 | 257 |
| | 0.38% | 0.38% | 0.38% | 40.46% | 46.30% | 9.72% | 0.38% | 1.94% | 100.0% |
| AAY | 0 | 0 | 0 | 13 | 15 | 14 | 1 | 0 | 43 |
| | 0.0% | 0.0% | 0.0% | 30.2% | 34.9% | 32.6% | 2.3% | 0.0% | 100.0% |
| APL | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| | 0.0% | 0.0% | 0.0% | 0.0% | 0.0% | 0.0% | 0.0% | 0.0% | 0.0% |
| Not having Ration card | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| | 0.0% | 0.0% | 0.0% | 0.0% | 0.0% | 0.0% | 0.0% | 0.0% | 0.0% |
| Total | 1 | 1 | 1 | 117 | 134 | 39 | 2 | 5 | 300 |
| | 0.3% | 0.3% | 0.3% | 39.0% | 44.7% | 13.0% | 0.7% | 1.7% | 100.0% |

Source: Estimated from field data.

Note: figure in parenthesis is percentage of total.

Table 5.8 illustrates the distribution of the sample population by category according to Ration Cards, including businessmen, Munshi/Arzanavish, Plumber/Electricians, animal husbandry and farmers, self-employed, agricultural labourers, teachers, and government employees. There are 249 sample respondents who fall into the BPL category. One respondent is a Shopkeepers, accounting for 0.4 percent of this group. one respondent is a Munshi/Arzanavish, accounting for 0.4% of this group. one respondent is a Plumber/electrician, accounting for 0.4% of this group. Additionally, 104 respondents are Animal husbandry and Farmers, accounting for 41.7 percent of the BPL population. 46.3 percent of the 119 sample respondents are self-employed. Additionally, 25 respondents (9.7 percent) are agricultural labourers. one respondent is a teacher, accounting for 0.4 percent of respondents in this category. Furthermore, five respondents are government employees, accounting for 1.9 percent of this group.

There are a total of 43 respondents in the AAY category. 13 are animal husbandry and farmers, accounting for 30.2 percent of this category. 15 respondents are self-employed, accounting for 34.9 percent of the total. Additionally, 14 respondents are agricultural labourers, accounting for 32.6 percent of all AAY. And one respondent is a teacher, accounting for 2.3 percent of the total. Thus, the table indicates that the majority of samples from BPL are self-employed. Similarly, AAY draws the largest sample of self-employed individuals and the smallest sample of teachers.

5.3 Correlation of Occupation and Demographic Variables

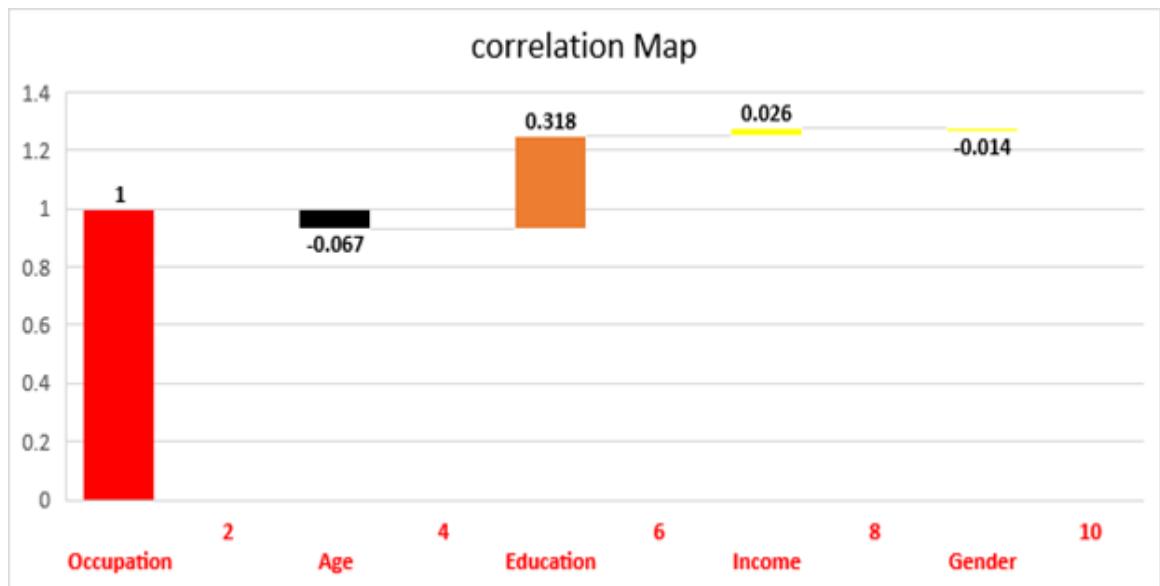
Table 5.9 shows over all correlation of occupation with other demographic variables of Schedule tribe (Gujjar) population of Jammu and Kashmir.

| | Occupation | Age | Education | Income | Gender |
|------------|------------|-------|-----------|--------|--------|
| Occupation | 1 | -.067 | .318 | .026 | -.014 |
| Age | -0.067 | 1 | -.034 | .115 | -.054 |
| Education | 0.318 | -.034 | 1 | -.005 | .056 |
| Income | 0.026 | .115 | -.005 | 1 | .091 |
| Gender | -0.014 | -.054 | .056 | .091 | 1 |

Source: Estimated from field data.

Table 5.9 shows the correlation between occupation and other demographic variables such as Age, Education, Income and Gender. With age and gender there is negative correlation of -0.067 and -0.014 and with Education and Income there is positive correlation of 0.318 and 0.026 respectively.

Fig 5.2 correlation Map



Source: Estimated from field data.

5.4 Conclusion

The overall occupation pattern of Gujjar community is found that they are mostly engaged in sub-employment, animal husbandry and agriculture activities mostly. Participation in government services is very less. The good sign is that education has increased over the period of time and is found one of the deciding factors to have better occupation. Income is also found equally responsible for having better occupation. Gujjar community of Jammu and Kashmir showed no discrimination on the bases of age and gender in participating in particularly occupation. In comparison between Jammu and Kashmir there is no found any such difference on the bases of occupation. Therefore, on the bases of primary study evidences, both the regions need attention of policy makers for the development of Gujjar population for their well beings in future.

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Chapter 6

Construction of Human Development Index of Gujjar Community in Jammu and Kashmir

6.1 Introduction

The purpose of this chapter is to provide an overview of the human development index (HDI) as discussed by economists and estimate the human development index of Gujjar community. In economics, the term 'development' refers primarily to income growth. Economic development in terms of income growth is a necessary but insufficient condition for improving human welfare. As a result, there is a need for improved quality of life, which can be achieved through increased knowledge and improvements in individual health outcomes. Individual improvement will result in an increase in social welfare. Numerous economists have conducted comparative studies on the HDI of developing and less developed countries. They discovered that it is extremely difficult to compare developed and developing countries using literacy and health indicators from the HDI. They proposed a new quantitative vision of human development as a valuable tool for governments and businesses to use in determining their activities and operations, by providing a skilled workforce with access to quality education and health care. Additionally, obtaining data on such indicators may be a more effective use of the HDI resources than developing new ways to express existing indicators. This chapter is based on primary investigation of Gujjar community in Jammu and Kashmir. Apart from income, development encompasses a plethora of other dimensions. One cannot solely speak of development in terms of socio-economic advancements, It is concerned with an individual's awakening and well-being and its objective is to establish harmony between

the individual, the family and the community. Moral, cultural, social, spiritual, economic, and political dimensions must all be incorporated into development. This is referred to as 'whole development'. Apart from income, holistic development is the unfolding of freedom, joy, health, and ease (Esterlin, 2000). The concept of 'Human Development' was developed by Mahbub-Ul Haq and Amartya Sen and popularized by the United Nations Development Programme (UNDP). Human development is a process that involves the development of people, development for people, and development by people. Human development entails the development of human capabilities via the development of human resources. Development for the people implies that the benefits of growth must be reflected in people's lives, while development by the people emphasizes the importance of people being able to influence the processes that shape their lives actively.

6.2 Human Development Definition and indicators

According to the UNDP Human development is a process that enlarges or broadens people's options and builds human capabilities. As per the new methodology of UNDP to construct human development index is as below

The dimension of health is assessed by life expectancy at birth

$$1) \quad \text{Life expectancy index (LEI)} = \frac{\text{LE}-20}{85-20} \dots \dots \dots (1)$$

When life expectancy is 85 years it is considered as one (1) and if life expectancy is 20 years it will be considered as Zero (0).

The dimension of education is measured by mean of years of schooling for adults aged 25 years and more and expected years of schooling for children of school entering age.

$$2) \quad \text{Education Index (EI)} = \frac{\text{MYSI}+\text{EYSI}}{2} \dots \dots \dots (2)$$

$$(i) \quad (\text{MYSI}) = \frac{\text{MYS}}{15} \dots \dots \dots (3)$$

Where MYSI refers to mean year of schooling Index.

15 years is the projected Maximum of this indicator for 2025.

$$(ii) \quad (EYSI) = \frac{EYS}{18} \dots\dots\dots (4)$$

Where EYSI refers to Expected year of schooling Index

Eighteen is equivalent to achieving a master's degree in most countries including India.

The dimension standard of living is measured by gross national income per capita.

3) Income Index (II)

A decent standard of living: GNI per capita

GNIpc: Gross national income at purchasing power parity per capita.

$$\text{Income Index} = \frac{\text{in (GNIpc-in (100))}}{\text{In 75000-in (100)}} \dots\dots\dots (5)$$

II is one (1) when GNIpc is \$75000 and II is Zero (0) when GNIpc is \$100

The scores for the three HDI dimension indices are aggregated into a composite index using geometric mean.

$$\text{HDI} = \sqrt[3]{LEI + EI + II} \dots\dots\dots (6)$$

6.3 Critical Review of Human Development Index

Kelley's (1991) early criticism of HDI is noteworthy. He argued that the HDI 'provides only a limited amount of information beyond what can be gleaned from small adjustments to simple measures of economic output' (p. 315). The 'end points' of indicators used to calculate the HDI are 'biased' For instance, in the 1991 HDI calculation, the maximum life expectancy value taken was 78 years, a value attained by only Japan. If a lower life expectancy value had been taken than more countries would have achieved a higher HDI

level. For example, if life expectancy is set at 73 years, then twenty-two more countries would have moved from low to medium category of HDI and ten additional countries would have moved from medium to high category in terms of HDI performance. As a result, the end-points are also sensitive. Additionally, the HDI creates the impression that developed countries that have achieved 100% literacy and life expectancy have little or no room for further improvement in the HDI. Similarly, the various HDI indicators are weighted equally. However, the per capita income used in the HDI should be given more weight because it increases individuals' opportunities to access the HDI's other two indicators – improved health and education. As a result, the indicators included in the HDI are not independent, as is commonly assumed, but are interdependent, with an increase in one indicator for example, income having a non-linear effect on other indicators. Similarly, if the relative position of a country's HDI remains stable despite significant improvement in some of the HDI's indicators, this indicates that the country's HDI has not improved over time. Kelley (1991) cautions that the HDI should be handled with care due to these issues.

Lind (1991) also conducted a critical examination of the HDI and its components, focusing on their accuracy, sensitivity, and discriminatory power. Different implications for evaluating a specific project or regulation were derived, and suggestions for improving the HDI were made. The inclusion of GDP in the HDI is fundamentally sound particularly when purchasing power is corrected. It does however, misrepresent the generation of available wealth and is applicable only if all significant economic activity is reflected in the national accounts and if all public spending reflects popular will. This would rule out a large number of nations accounting for a significant portion of the world's population, due to significant nomadic activity, subsistence farming, underground

economy, capital export, or unrepresentative government. According to him life expectancy at birth must be viewed as a proxy for health-related life expectancy. Infant mortality is not always detrimental to human development and life expectancy at one year appears to be a more appropriate indicator. The author asserts that the literacy rate used to calculate the HDI may not be a good indicator of human development. Because literacy is not well-defined measuring literacy is also difficult and the concept of literacy may not adequately capture a nation's rich cultural aspects. For instance, some countries may be culturally superior despite having a low literacy rate. Due to the fact that the HDI accounts for a greater proportion of the monetary value of life, it cannot account for the value of life that is non-monetary in nature; the value of life is also infinite. Additionally, the HDI implies an economic value for human longevity and literacy, and any relationship between these values and wealth, longevity, or culture should be thoroughly examined. Despite some limitations, HDI is regarded as a potentially powerful instrument for global social development.

McGillivray (1991) examined HDI critically and described it as another redundant composite development indicator for assessing people's well-being. The HDI compares development levels between countries using three so-called deprivation indicators: life expectancy, adult literacy and the logarithm of purchasing power adjusted per capita GDP. However, using straightforward statistical analysis the author cast doubt on both the HDI's composition and utility as a new indicator of development. The statistical analysis revealed that the index's composition was flawed as it is significantly and positively correlated with each of its constituent variables. When inter-country development levels were compared using any of the variables used to estimate the HDI, the results were found to be comparable to those produced by the index itself. Except for a small number

of countries groups the index provides little additional information about inter-country development levels than a more traditional indicator such as per capita GDP can. As a result, the HDI generates no additional information that the individual components cannot independently generate that is useful for policymaking. Thus, obtaining data on such indicators rather than developing new ways to express existing indicators, may be the most effective contribution of the HDI. Anand and Ravallion (1993) conducted a study on human development in developing countries, focusing on the influence of private income and public services on the HDI. They analyzed data from 1950 to 1986. They attempted to identify and quantify the relative importance of the major channels through which aggregate economic growth could promote human development. They discovered that public health spending is quantitatively significant and that income has a positive effect on public health spending. Additionally, they have noted that fundamental health capabilities may be more amenable to this type of public action than other capabilities, such as those related to education. Their analysis supported the argument that certain components of public spending can have a significant impact on human development in poor countries, regardless of whether they result in reduced income poverty. From 1990 on, as a result of various criticisms, the construction of HDI saw significant improvements due to the expansion of knowledge through various empirical researches on HDI conducted throughout the world.

Ivanova et al. (1998) investigated the properties of HDI the most widely used indicator of human development. It assesses human development across the globe by examining three factors longevity, knowledge and GDP measured in purchasing power. The purpose of this study is to assess HDI's contribution to measuring the quality of a nation's human capital component of competitiveness. The study is concerned with two primary issues

HDI's information properties in relation to its components and its measurement properties as an index. By recognizing the interdependence of economic growth and quality of life in the maintenance and improvement of a country's human infrastructure, it has opened new perspectives on measuring and analyzing national prosperity and development potential. The existence of such a comprehensive index contributes significantly to the analysis of countries competitiveness by connecting the quality of their human capital to their economic base. As a result, it provides a new quantitative perspective on human development and serves as a valuable tool for governments and businesses in determining their global activities and operations by providing an overall assessment of a country's labour force quality.

On a technical level the HDI evaluation can be summarized as follows

- a) The analysis findings indicate that the UNDP combination of the three indicators used to calculate the HDI requires further refinement. This is most likely accomplished by altering the weights or the nature of the HDI equation
- b) The HDI provides for more information about a country ranking than any of its components – life expectancy at birth, educational attainment, and adjusted real GDP
- c) The explanatory power of the life expectancy at birth indicator is distributed evenly across all groups of countries, making it an excellent proxy for group comparisons
- d) The ability of the existing index to quantify human development varies according to a country's income level and HDI status

e) Classifying countries according to their level of human development, income, or industrialization does not significantly improve the HDI's ability to conduct cross-country comparisons

f) The HDI is used as a proxy for past efforts, rather than an estimate of current efforts or a forecast of the future, due to the lag in the effect of its components over time.

As a result, the index does not convey information about future levels of development, but rather a snapshot of the current one. In this regard, its application to future planning should be handled with caution. It is concluded that additional research is necessary to develop a more accurate index for one of the most critical determinants of a nation's competitiveness namely human capital.

Alkire (2002) demonstrated the utility and limitations of human development both broadly and in relation to Amartya Sen's capability approach. The term "capability" refers to an individual's or group's ability to promote or achieve beneficial functioning. The definition of capability makes no reference to a particular subset of capabilities as being of special significance. Rather than that, Sen argues that prioritizing capabilities is a value judgement that must be made explicitly, and in many cases through a process of public debate. Thus, unlike the approaches to basic human needs, Sen has refrained from developing a list of fundamental capabilities and a procedure for determining which categories and subcategories of capabilities should be prioritized. Martha Nussbaum has proposed a list of ten fundamental universal, normative human capabilities that should be protected by constitutional safeguards. However, her work is primarily directed at national legislative bodies and provides little guidance for specific microeconomic initiatives, which require a much more participatory approach. Thus, if a set of

dimensions is to be proposed, it must avoid being derived from a particular metaphysical perspective being excessively specified, or being overly prescriptive.

The philosophical work of an inter-disciplinary group led by John Fennis has resulted in the development of a concept of basic human values, which appears to be a promising way to address Sen's concerns while also providing a useful tool. Fennis and his colleagues demonstrated the enormous practical value of defining fundamental reasons for action as follows a) life itself b) knowledge and aesthetic experience c) some level of excellence in work and play d) friendship e) self-expression or practical reasonableness and f) religion. The fundamental reasons for action in Fennis approach are a collection of the reasons why people pursue wholeness or well-being through human development.

Dimensions of human development are non-hierarchical, incommensurable, and thus represent fundamental types of human ends. Dimensions do not derive from or divide up an idea of what constitutes a good life rather, they are values or reasons for action that people from diverse language groups and neighborhoods can identify based on practical reason that is on their own experience deciding what to do or on their observation of other people's experience. Finally, she concluded by arguing that Fennis foundational account of fundamental reasons for action should be viewed as dimensions of human development. Alkire (2002) defines the dimensions of human development in the second section of the paper. Martha Nussbaum developed a neo-Aristotelian account of universal values as a foundation for fundamental political principles that should underpin constitutional safeguards. The list of Central capabilities compiled by Nussbaum has been revised several times. The most recent edition includes the following headlines life, bodily health, bodily integrity, senses, imagination, thought, emotion, practical reasons, affiliation with other species, play, and control over one's environment and material.

Max-Neef and his associates, on the other hand, had developed a matrix of human needs. Max-matrix Neef's contains nine elements subsistence, protection, affection, comprehension, participation, leisure, creation, identity and freedom.

The new methodology of measuring human development index was adopted by the UNDP in 2010, it is also based on old dimensions of HDI which were an aggregate measure of three dimensions (health, education and income) but in new methodology changes are doing in education and income dimensions. Earlier literacy rate and gross enrolment ratio consider as education and knowledge index and given two-third weightage to the literacy rate and one- third weightage to combined primary, secondary and tertiary gross enrolment. But in new methodology mean year and expected year of schooling are consider as education index. In new methodology income dimension measured by decent standard of living GNI per capita instead of old method standard of living (income) measured by GDP per capita because GNI per capita is greater than GDP per capita due to net factor income from abroad. In old methodology simple mean was used to measure HDI but in new methodology geometric mean used to measure HDI.

The following chapter comprises of four board sections. Section 6.4 Health Index, Section 6.5 Education Index, Section 6.6 Income index, Section 6.7 HDI Index and Section 6.8 District wise compose Human Development index

Table 6.1 Block-wise sample size of district Poonch and Anantnag

| Block | Frequency | Percent |
|--------------|------------------|----------------|
| Surankote | 48 | 16.0 |
| Poonch | 44 | 14.7 |
| Buffliaz | 15 | 5.0 |

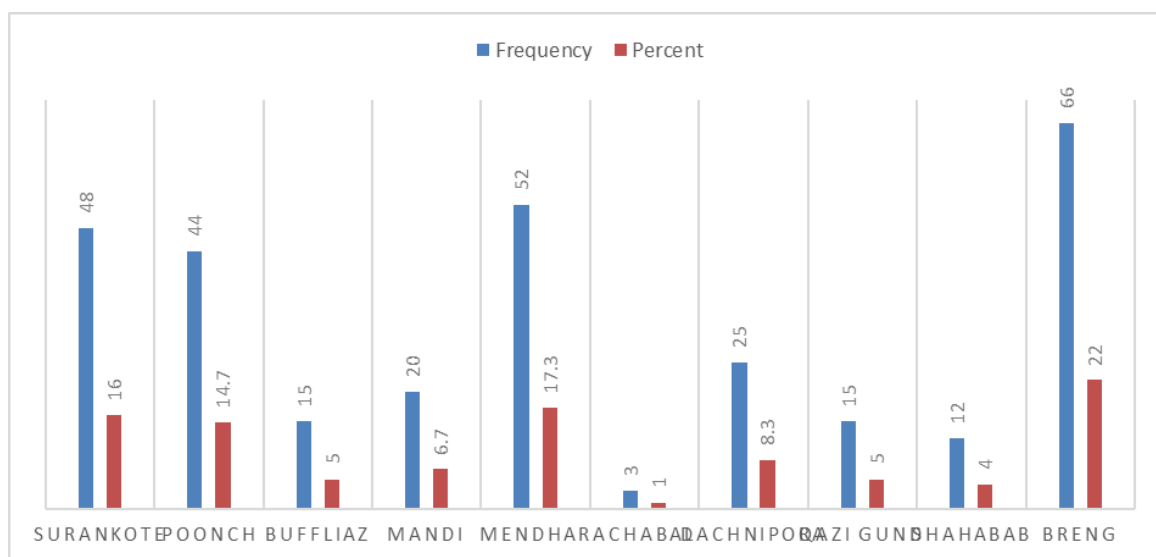
| | | |
|------------|-----|-------|
| Mandi | 20 | 6.7 |
| Mendhar | 52 | 17.3 |
| Achabal | 3 | 1.0 |
| Dachnipora | 25 | 8.3 |
| Qazi Gund | 15 | 5.0 |
| Shahabab | 12 | 4.0 |
| Breng | 66 | 22 |
| Total | 300 | 100.0 |

Source: Estimated from field data.

Note: figure in parenthesis is percentage of total.

Table 6.1 Demonstrates the percentage distribution of block-level samples. Surankote 16 percent, Poonch 14.7 percent, Buffliaz 5 percent, Mandi 6.7 percent, Mendhar 17.3 percent, Achabal one percent, Dachnipora 8.3 percent, Qazi Gund 5 percent, Shahabab 4 percent and Breng 22 percent

Fig.6.1 Block-wise sample size of district Poonch and Anantnag



Source: Estimated from field data.

Note: figure in parenthesis is percentage of total.

6.4 Health Index

$$\text{Life expectancy index (LEI)} = \frac{\text{LE} - 20}{85 - 20} \dots \dots \dots (1)$$

When life expectancy is 85 years it is considered one (1) and if life expectancy is 20 years it will be considered Zero (0).

Table 6.2 Block wise Health Index of Sample Population from Selected Districts of Poonch and Anantnag

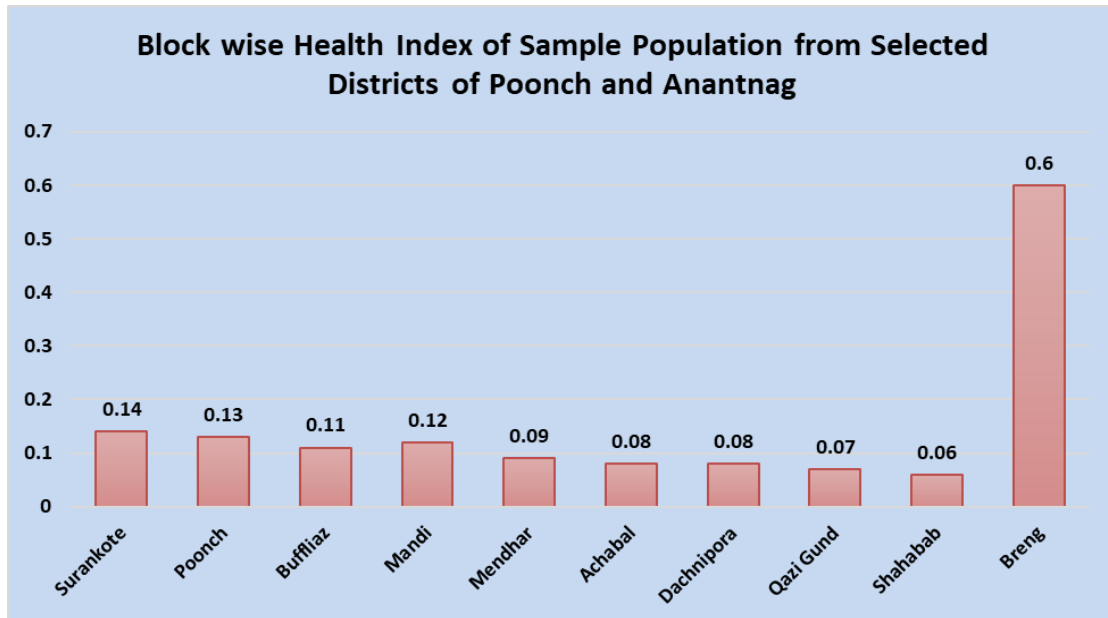
| Block | Health Index | Rank |
|------------|--------------|------|
| Surankote | 0.14 | 2 |
| Poonch | 0.13 | 3 |
| Buffliaz | 0.11 | 5 |
| Mandi | 0.12 | 4 |
| Mendhar | 0.09 | 6 |
| Achabal | 0.08 | 7 |
| Dachnipora | 0.08 | 7 |
| Qazi Gund | 0.07 | 8 |
| Shahabab | 0.06 | 9 |
| Breng | 0.60 | 1 |

Source: Estimated from field data.

Note: figure in parenthesis is percentage of total.

Table 6.2 Demonstrates the health index of the blocks in Poonch and Anantnag. The health index score indicates that the Breng block in the selected districts of Jammu and Kashmir is performing the best, with a score of 0.60 and a rank first. Surankote ranked second with 0.14, Poonch ranked third with 0.13, Mandi ranked fourth with 0.12, Buffliaz ranked fifth with 0.11, Mendhar ranked sixth with 0.09, Achabal and Dachnipora tied for seventh with 0.09, Qazi Gund ranked eighth with 0.07 and Shahabad ranked ninth with 0.06.

Fig 6.2 Block wise Health Index of Sample Population from Selected Districts of Poonch and Anantnag



Source: Estimated from field data.

6.5 Education Index

$$(EI) = \frac{MYSI + EYSI}{2} \dots \dots \dots (2)$$

$$(MYSI) = \frac{MYS}{15} \dots \dots \dots (3)$$

Where EI: Education Index

MYSI refers to mean year of schooling Index. 15 years is the projected Maximum of this indicator for 2025.

$$(EYSI) = \frac{EYS}{18} \dots \dots \dots (4)$$

Where EYSI refers to Expected year of schooling Index, 18 years is equivalent to achieving a master's degree in most countries including India.

Table 6.3 Block wise Education index of Sample Population from Selected Districts of Poonch and Anantnag

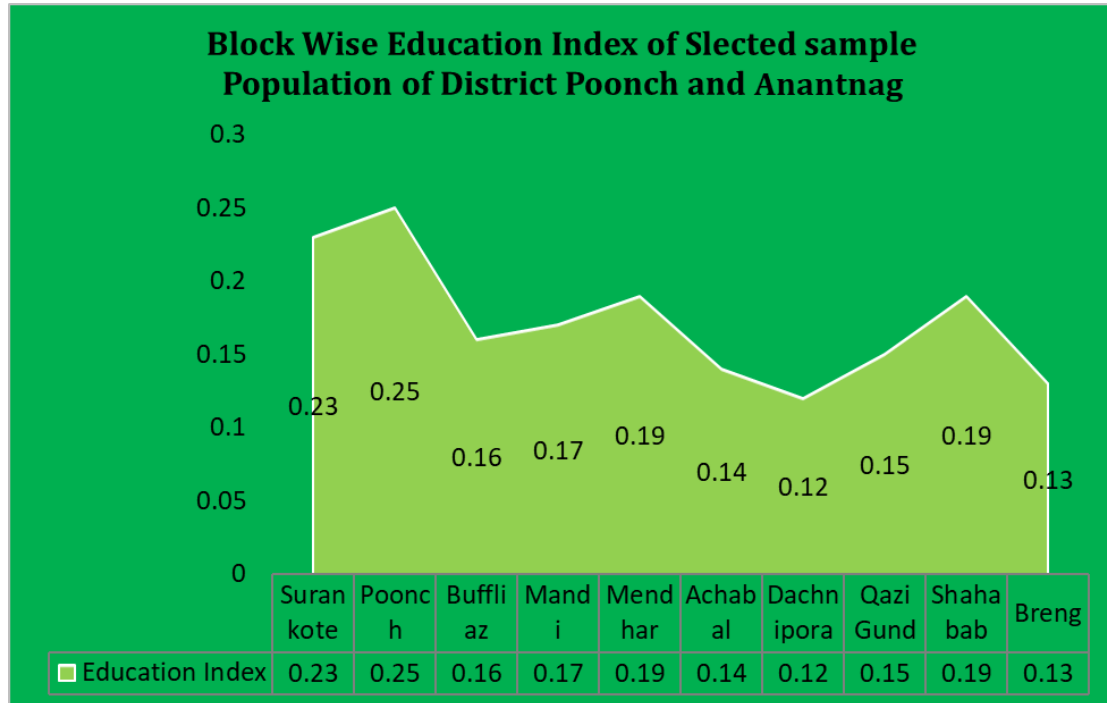
| Block | Education Index | Rank |
|------------|-----------------|------|
| Surankote | 0.23 | 2 |
| Poonch | 0.25 | 1 |
| Buffliaz | 0.16 | 5 |
| Mandi | 0.17 | 4 |
| Mendhar | 0.19 | 3 |
| Achabal | 0.14 | 7 |
| Dachnipora | 0.12 | 9 |
| Qazi Gund | 0.15 | 6 |
| Shahabab | 0.19 | 3 |
| Breng | 0.13 | 8 |

Source: Estimated from field data.

Note: figure in parenthesis is percentage of total.

Table 6.3 shows Education index block wise. The highest performing block is Poonch with a score of 0.25 and at rank first, followed by Surankote with 0.23 and at rank of 2nd, Mendhar and Shahabad with 0.19 at ranking of 3rd, Mandi with 0.17 score at rank 4th, Buffliaz with 0.16 and at rank of 5th, Qazi Gund with 0.15 at rank of 6th, Achabal with 0.14 at rank of 7th, Breng with 0.13 at rank of 8th, and Dachnipora with 0.12 at rank 9th. Therefore, in terms of Education, district Poonch is more developed than district Anantnag.

Fig 6.3 Block wise Education index of Sample Population from Selected Districts of Poonch and Anantnag



Source: Estimated from field data.

6.6 Income Index

$$\text{Income Index} = \frac{\text{in}(\text{GNIPc} - \text{in}(100))}{\text{in}75000 - \text{in}(100)} \dots \dots \dots (5)$$

Income index is one (1) when GNIPc is \$75000 and Income index is Zero (0) when GNIPc is \$100

Table 6.4 Block wise Income Index of Sample Population from Selected Districts of Poonch and Anantnag

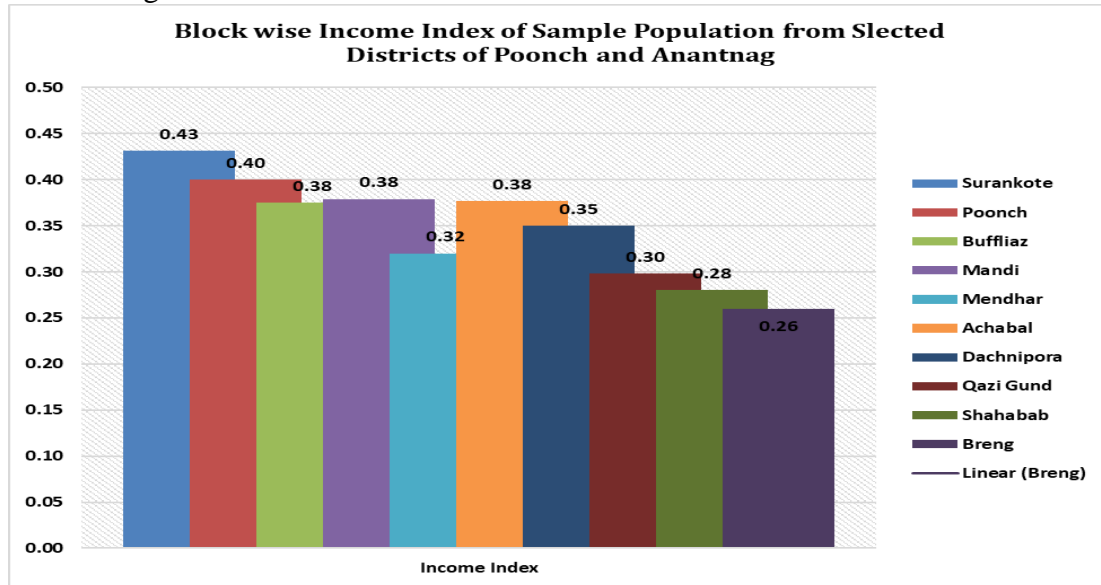
| Block | Income Index | Rank |
|------------|--------------|------|
| Surankote | 0.431 | 1 |
| Poonch | 0.400 | 2 |
| Buffliaz | 0.375 | 5 |
| Mandi | 0.379 | 3 |
| Mendhar | 0.320 | 7 |
| Achabal | 0.377 | 4 |
| Dachnipora | 0.350 | 6 |
| Qazi Gund | 0.298 | 8 |
| Shahabab | 0.280 | 9 |
| Breng | 0.260 | 10 |

Source: Estimated from field data.

Note: figure in parenthesis is percentage of total.

Table 6.4 shows income index block wise for a sample population from selected districts of Jammu and Kashmir. The block wise income index performance and ranking are as follows. Block Surankote with score of 0.431 at rank first, Poonch with 0.400 at rank 2nd, Mandi with 0.379 at rank 3rd, Achabal with 0.377 at rank 4th, Buffliaz with 0.375 at rank 5th, Dachnipora with 0.350 at rank 6th, Mendhar with 0.320 at rank 7th, Qazi Gund with 0.298 at rank 8th, Shahabab with 0.280 at rank 9th and Breng with 0.260 at rank 10th. Once again, district Poonch is performing better than district Anantnag. As far as the income index is concerned, the schedule tribe population in Kashmir division is more vulnerable than in Jammu division.

Fig 6.4 Block wise Income Index of Sample Population from Selected Districts of Poonch and Anantnag



Source: Estimated from field data.

6.7 Human Development Index

$$HDI = \sqrt[3]{LEI + EI + II} \dots \dots \dots (6)$$

Table 6.5 Block Wise Human Development Index of district Poonch and Anantnag

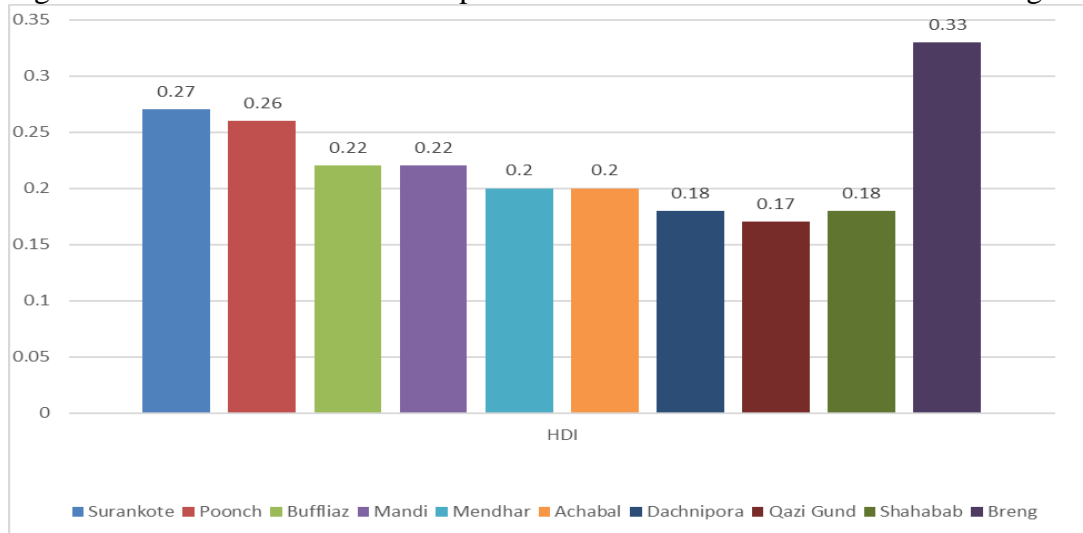
| Block | HDI | Rank |
|------------|------|------|
| Surankote | 0.27 | 2 |
| Poonch | 0.26 | 3 |
| Buffliaz | 0.22 | 4 |
| Mandi | 0.22 | 4 |
| Mendhar | 0.20 | 5 |
| Achabal | 0.20 | 5 |
| Dachnipora | 0.18 | 6 |
| Qazi Gund | 0.17 | 7 |
| Shahabab | 0.18 | 6 |
| Breng | 0.33 | 1 |

Source: Estimated from field data.

Note: figure in parenthesis is percentage of total.

Table 6.5 shows overall human development index blocks wise, the best performing block is Breng from district Anantnag with a score of 0.33 and at rank first. The performance of the remaining blocks is as follows, Surankote with 0.27 score at rank 2nd, Poonch with 0.26 at rank 3rd, Buffliaz and Mandi with 0.22 at rank 4th, Mendhar and Achabal with 0.20 at rank 5th, Dachnipora and Shahabab with 0.18 at rank 6th and Qazi Gund at rank 7th with a score of 0.17. In conclusion, the best and worst performing block is from district Anantnag, but in overall block wise performance of HDI, district Poonch is better than district Anantnag.

Fig 6.5 Block Wise Human Development Index of district Poonch and Anantnag



Source: Estimated from field data.

6.8 District wise composition of Human Development index

Table 6.6 Performance of Human Development Indicators in District Poonch and Anantnag

| District | Health Index | Education Index | Income Index | HDI Index |
|----------|--------------|-----------------|--------------|-----------|
| Poonch | 0.11 | 0.20 | 0.38 | 0.23 |
| Anantnag | 0.17 | 0.14 | 0.31 | 0.21 |

Source: Estimated from field data.

Table 6.6 shows Performance of human development indicators in district Poonch and Anantnag. Health index of district Anantnag is better than district Poonch with score of 0.17 and 0.11 respectively. But Education Index of district Poonch is higher than the district Anantnag with a score of 0.20 and 0.14 respectively. In case of Income index again district Poonch is better than district Anantnag with a score of 0.38 and 0.31 respectively. In overall performance of human development index district Poonch is at rank first with 0.23 score and district Anantnag is at rank second with 0.21 score. Therefore, we conclude that the HDI of Gujjar community is higher in district Poonch as compare to district Anantnag.

Fig 6.6 Performance of Human Development Indicators in District Poonch and Anantnag



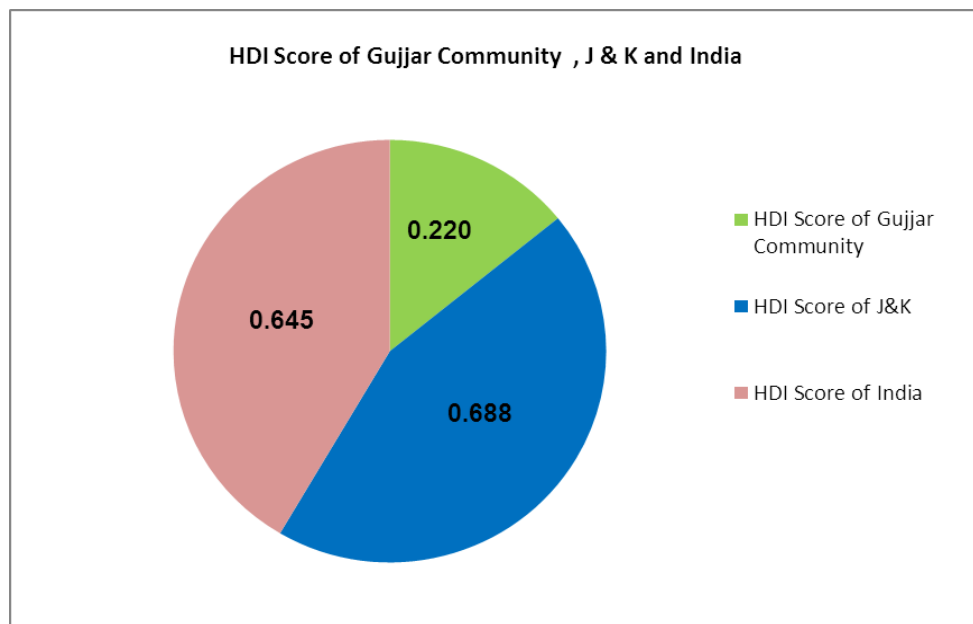
Table 6.7 Comparative Analysis of HDI

| HDI Score of Gujjar Community | HDI Score of J&K | HDI Score of India |
|-------------------------------|---|---|
| 0.220 | 0.688 | 0.645 |
| NA | 17 th Rank among Indian states and union territories (NSO) | 131 Rank out of 189 countries of the world (UNDP, 2020) |

Source: Estimated from field data and HDI Report

Table 6.7 shows the overall HDI score of Gujjar community in Jammu and Kashmir calculated from the sample population of (Poonch and Anantnag) is 0.220. The union territory HDI score is 0.688 (UNDP report 2019) which is more than three time higher than the HDI score of Gujjar community. The HDI score of India is 0.645 (UNDP report 2019) which is also higher than the HDI score of Gujjar community.

Fig. 6.7 Comparative Analysis of HDI



Source: Estimated from field data and HDI Report

6.9 Findings

- In case of health index out of ten blocks of district Poonch and Anantnag. Breng block of district Anantnag is performing better with 0.60 score and block Shahabad performing worst with 0.06 score.
- In case of education index out of ten blocks of both districts block Poonch is better with 0.25 score and block Dachnipora is worse performing block with 0.12 score.
- In case income index out of ten blocks of both districts block Surankote at rank first with 0.431 score and block Breng is worse performing block with 0.260 score.
- The overall performance of Education index and Income index is better in district Poonch as comparison to district Anantnag with 0.20 and 0.14 score of education index respectively, and 0.38 and 0.31 score of income index respectively.
- The overall performance of Health index is better in district Anantnag as comparison to district Poonch with 0.17 and 0.11 respectively.
- In terms of human development index of Gujjar community district Poonch perform better than Anantnag with HDI score 0.23 and 0.21 respectively.
- Comparatively Gujjar population in the Kashmir division is more vulnerable than Jammu division.
- In overall human development index of district Poonch is better than district Anantnag.

6.10 Hypothesis Testing

H0: Human development index of Gujjar community in Jammu and Kashmir is very much below than the HDI of Jammu and Kashmir.

H1: Human Development of Gujjar community in Jammu and Kashmir is improved significantly

| Pearson Chi-Square | | | | |
|--------------------------------------|---------------------|----|--------------------------------------|----------|
| District 1= Anantnag 0= Poonch | Calculated Value | df | Asymp. Sig. (2- sided) p-value | Remarks |
| HDI | 6.000 | 5 | .306 | Accepted |

From the Pearson's chi-square table, the HDI p-values (0.306) is more than level of significance 0.05% therefore we accept null hypothesis which means Human development of Gujjar community in Jammu and Kashmir is very much below than the HDI Jammu and Kashmir.

6.11 Conclusion

The health index of district Anantnag is better than district Poonch but Education and Income index of district Poonch is better than district Anantnag. In overall performance of human development index district Poonch is better than district Anantnag. Therefore, we conclude that district Poonch has a higher human development index than district Anantnag,

6.12 References

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Chapter 7

Conclusion Findings and Policy Recommendations

7.1 Conclusion

Disparities and delays in human development have been documented through examination of many theories on how people develop. "Growth pole theory," "Capability Approach" and "Howitt's theory of human capital and economic growth" are only a few of the many ideas that support this term. There are also numerous perspectives or viewpoints to consider. A review of empirical evidence shows that human development is useless and ineffectual without development. International politicians, economists, and planners understand the importance of improving health care, education, economic possibilities, and a good standard of living in encouraging human development. Affluent standards of living are a reflection of human development because of expanded educational options which in turn result in more money in the bank. Furthermore, the preceding reasons show that economic and human growth are intimately linked economic development occurs first, but human development afterward leads to better economic and human development. One of the fundamental goals of a theory is to explain and predict a phenomenon. With this shift in emphasis human development has supplanted the economy as the primary measure of progress.

Despite the fact that the HDI is an overall index of economic progress, there are certain variances among Indian states. In terms of human development, it is abundantly clear that India and its various states differed. According to the findings, Kerala had a greater level of human development than the rest of India. The fact that Jammu & Kashmir human development index is greater than India's is more evidence that India's human development index is based on the average of all states and federal territories. In terms of the human development index, the disparity between Indian states like Kerala and Bihar can clearly be observed in the pattern. The development process is characterized by disparities. However, these inequalities must be addressed if India's citizens are to enjoy greater prosperity.

Gujjar community in Jammu and Kashmir continue to live in appalling conditions. They still have difficulties in meeting their fundamental needs. They are subjected to social, educational, and economic prejudice. There is a discrepancy in the literacy rates of the Gujjar and other communities in the union territory of Jammu and Kashmir. They lag behind in terms of health, education, income and government programs due to a variety of factors, including low literacy, malnutrition among children, a lack of hospitals in their neighbourhood, seasonal migration, and a lack of knowledge about local and national government programs aimed at improving their lot. In terms of education, employment, and decision-making. Women in this community are more vulnerable than men. They continue to live in their traditional

homes and wear their traditional clothing, which is still a big part of their culture. There is also a low employment rate among Gujjar population in Jammu and Kashmir. It's safe to conclude that this town is still far behind in terms of progress and struggles to meet even the most basic of needs.

Gujjar population work primarily in animal husbandry, agriculture and subcontracting, according to the data collected from field survey. The number of people who participate in government services is quite low. The good news is that educational attainment has risen steadily over time and is now considered a key determinant of having a better job. Income is also discovered to play a significant role in a person's ability to land a better job. Gender and age were not a factor in Gujjar participation in particular occupations in Jammu and Kashmir. There is no discrimination on the bases of occupation in Jammu and Kashmir. On the basis of primary research evidence both division demand attention from policymakers for the development of Gujjar populations there health, road, education, and infrastructure is not enough to fulfil the basic requirements of Gujjar communities. In terms of Employment they should be given all the tools they need to get a better job.

Comparatively district Poonch is better than district Anantnag in educational. In case of education and income index district Poonch is better than Anantnag but in case of health index Anantnag is better than Poonch. The tribal population in the Kashmir

division is more at risk than the population in the Jammu division based on the income index. The division of Kashmir has the best and worst-performing blocks, although the division of Jammu does better overall. Overall, the study found that District Poonch had a higher Human Development Index (HDI). Based on the Gujar population, we conclude that Poonch has a higher HDI than Anantnag.

7.2 Findings of the Study

- The accumulation of empirical information demonstrates that human development is both fruitless and ineffective in the absence of development.
- After that, better economic and social growth will follow as a natural consequence of human development.
- Regarding the human development index, there is a significant gap among different states/ union territories of India.
- In comparison to the rest of India states the level of human development is high in Kerala and low in Bihar.
- In case of health index out of ten blocks of district Poonch and Anantnag. Breng block of district Anantnag is performing better with 0.60 score and block Shahabad performing worst with 0.06 score.
- In case of education index out of ten blocks of both districts block Poonch is better with 0.25 score and block Dachnipora is worse performing block with 0.12 score.

- In case income index out of ten blocks of both districts block Surankote at rank first with 0.431 score and block Breng is worse performing block with 0.260 score.
- The overall performance of Education index and Income index is better in district Poonch as comparison to district Anantnag with 0.20 and 0.14 score of education index respectively, and 0.38 and 0.31 score of income index respectively.
- The overall performance of Health index is better in district Anantnag as comparison to district Poonch with 0.17 and 0.11 respectively.
- In terms of human development index of Gujjar community district Poonch perform better than Anantnag with HDI score 0.23 and 0.21 respectively.
- Comparatively Gujjar population in the Kashmir division is more vulnerable than Jammu division.
- In overall human development index of district Poonch is better than district Anantnag.

7.3 Policy Recommendations

- The problem of rising inequalities should be addressed to overcome the development disparities among the states/UTs in the different regions of the country.
- Open new dispensaries/ hospitals, schools and appoint doctors, para medical staff and teacher in their residing areas of Gujjar community.

- Much needed focus is required to fulfil basic necessities of life like food, shelter, health care facilities, establishment of new mobile schools in their residing areas, roads, drinking water facilities, electricity facility etc.
- A special financial package is required for Gujjar community from UT administration and central government to fulfil the basic requirements of their areas like water, road and electricity connections.
- The multidimensional poverty index of Gujjar community demands the development of health and educational infrastructure in those areas.
- Gender and caste-based inequality should be addressed by creating equal opportunities in every sector for women without any discrimination.
- Gujjar population of Kashmir division need special attention in comparison to Jammu division to achieve the better score in the Human development index.

7.4 Limitations of the Study

- This study is limited to the Gujjar community of tribal population of two selected districts of Jammu and Kashmir
- The results of the study is unable to implement on entire country due to limited number of participants in the study.
- One of the limitations is that there exist regional differences on the bases of geography and climatic conditions.

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Appendices

| Block | Education Index | Rank | Health Index | Rank | Income Index | Rank | HDI | Rank |
|--------------------------------------|----------------------------|-------------|-------------------------|-------------|-------------------------|-------------|-------------|-------------|
| Surankote | 0.23 | 2 | 0.14 | 1 | 0.431 | 1 | 0.27 | 1 |
| Poonch | 0.25 | 1 | 0.13 | 2 | 0.4 | 2 | 0.26 | 2 |
| Buffliaz | 0.16 | 6 | 0.11 | 4 | 0.375 | 4 | 0.22 | 3 |
| Mandi | 0.17 | 5 | 0.12 | 3 | 0.379 | 3 | 0.22 | 4 |
| Mendhar | 0.19 | 3 | 0.09 | 5 | 0.32 | 7 | 0.20 | 5 |
| Achabal | 0.14 | 8 | 0.08 | 6 | 0.377 | 5 | 0.20 | 6 |
| Dachnipora | 0.12 | 10 | 0.08 | 7 | 0.35 | 6 | 0.18 | 7 |
| Qazi Gund | 0.15 | 7 | 0.07 | 8 | 0.298 | 8 | 0.17 | 8 |
| Shahabab | 0.19 | 4 | 0.06 | 9 | 0.28 | 9 | 0.18 | 9 |
| Breng | 0.13 | 9 | 0.60 | 10 | 0.26 | 10 | 0.33 | 10 |
| (District) Poonch | 0.20 | 1 | 0.11 | 2 | 0.38 | 1 | 0.23 | 1 |
| (District) Anantnag | 0.14 | 2 | 0.17 | 1 | 0.31 | 2 | 0.21 | 2 |

Source: Estimated from field data.

HDI value of India and Jammu and Kashmir.

| Years | India HDI value | J&K HDI value |
|--------------|------------------------|--------------------------|
| 1990 | 0.431 | 0.493 |
| 1991 | 0.435 | 0.498 |
| 1992 | 0.442 | 0.506 |
| 1993 | 0.449 | 0.506 |
| 1994 | 0.456 | 0.509 |
| 1995 | 0.463 | 0.511 |
| 1996 | 0.471 | 0.514 |
| 1997 | 0.477 | 0.515 |
| 1998 | 0.484 | 0.517 |
| 1999 | 0.492 | 0.520 |
| 2000 | 0.498 | 0.528 |
| 2001 | 0.502 | 0.536 |
| 2002 | 0.508 | 0.546 |
| 2003 | 0.521 | 0.562 |
| 2004 | 0.530 | 0.575 |
| 2005 | 0.539 | 0.587 |
| 2006 | 0.548 | 0.599 |
| 2007 | 0.558 | 0.611 |
| 2008 | 0.565 | 0.621 |
| 2009 | 0.571 | 0.628 |
| 2010 | 0.582 | 0.640 |
| 2011 | 0.590 | 0.652 |

| | | |
|------|-------|-------|
| 2012 | 0.600 | 0.663 |
| 2013 | 0.607 | 0.665 |
| 2014 | 0.618 | 0.671 |
| 2015 | 0.627 | 0.674 |
| 2016 | 0.637 | 0.678 |
| 2017 | 0.643 | 0.684 |
| 2018 | 0.647 | 0.688 |

CAGR of Indian states and union territories in terms of HDI.

| S.no | States | Phase (i) (1990-2000) | Phase (ii) (2001-2010) | Phase (iii) (2011-2018) |
|------|-------------------|--------------------------|---------------------------|----------------------------|
| 01 | J&K | 0.006882 | 0.019899 | 0.007707 |
| 02 | H. P | 0.020888 | 0.012584 | 0.011119 |
| 03 | Punjab | 0.015417 | 0.013753 | 0.012018 |
| 04 | Haryana | 0.016308 | 0.015163 | 0.013852 |
| 05 | Uttarakhand | 0.000159 | 0.001749 | 0.009995 |
| 06 | U. P | 0.015498 | 0.014978 | 0.01366 |
| 08 | Rajasthan | 0.015282 | 0.016249 | 0.017779 |
| 09 | Delhi | 0.014143 | 0.006976 | 0.006888 |
| 10 | Andhra Pradesh | 0.01206 | 0.020308 | 0.013932 |
| 11 | Karnataka | 0.015534 | 0.016099 | 0.015355 |
| 12 | Kerala | 0.009509 | 0.017645 | 0.011516 |
| 13 | Tamil Nadu | 0.01414 | 0.018242 | 0.010957 |
| 14 | Telangana | 0.000801 | 0.001757 | 0.007479 |
| 15 | Andaman & Nicobar | 0.001599 | 0.001904 | 0.00716 |
| 16 | Lakshadweep | 0.001718 | 0.001719 | 0.007052 |

| | | | | |
|----|------------------------|----------|-----------|----------|
| 17 | Puducherry | 0.001798 | 0.001811 | -0.00019 |
| 18 | Arunachal Pradesh | 0.013963 | 0.026625 | -0.00108 |
| 19 | Assam | 0.017321 | 0.01566 | 0.00967 |
| 20 | Manipur | 0.012233 | 0.0221368 | -0.00061 |
| 21 | Meghalaya | 0.004513 | 0.027661 | 0.003983 |
| 22 | Mizoram | 0.008081 | 0.019216 | 0.001837 |
| 23 | Nagaland | -0.00171 | 0.025709 | -0.00084 |
| 24 | Sikkim | 0.001286 | 0.015126 | 0.015933 |
| 25 | Tripura | 0.017369 | 0.014736 | 0.008767 |
| 26 | Gujarat | 0.011513 | 0.014364 | 0.013451 |
| 27 | Maharashtra | 0.012462 | 0.015048 | 0.009373 |
| 28 | Goa | 0.010702 | 0.019211 | 0.002273 |
| 29 | Dadra and Nagar Haveli | 0.001772 | 0.001934 | -0.00187 |
| 30 | Daman and Diu | 0.001979 | 0.001989 | 0.007269 |
| 31 | Madhya Pradesh | 0.012566 | 0.016334 | 0.015006 |
| 32 | Chhattisgarh | 0.000355 | 0.001955 | 0.010191 |
| 33 | Odisha | 0.013633 | 0.016434 | 0.015272 |
| 34 | Bihar | 0.014377 | 0.017422 | 0.013608 |
| 35 | Jharkhand | 0.000355 | 0.001955 | 0.006611 |
| 36 | West Bengal | 0.013874 | 0.013271 | 0.014639 |

**Construction of Human Development Index of Gujjar
Community in Jammu and Kashmir**



Interview Schedule

Research Study

By

Mohd Abdullah
Research Scholar (Ph.D.)

BABASAHEB BHIMRAO AMBEDKAR UNIVERSITY
(A CENTRAL UNIVERSITY)
Vidya Vihar, Raebareli Road, Lucknow-226025, (U.P.), India

| | |
|--|---|
| Questionnaire No | District |
| Date of Interview | Block |
| Name of the Respondent | |
| Address of Respondent's Household | |
| 1. Age of Respondent: | _____ Years |
| 2. Gender of Respondent | Male <input type="checkbox"/> Female <input type="checkbox"/> |
| 3. Marital status of Respondent | 1. Married 2. Unmarried 3. Divorced 4. Widow |
| 4. Types of Respondent family | 1. Joint Family <input type="checkbox"/> 2. Nuclear Family <input type="checkbox"/> |
| 5. Education of Respondent | 1. Illiterate <input type="checkbox"/> 2. Primary Edu. (Up to Class V) <input type="checkbox"/> 3. Secondary Edu. (IX to X) <input type="checkbox"/> 4. Higher Edu. |
| 6. Occupation of Respondent | Shopkeeper <input type="checkbox"/> Munshi/Arzanavish <input type="checkbox"/> Plumber/Electrician <input type="checkbox"/> Animal husbandry & Farmer <input type="checkbox"/> Self-Employed <input type="checkbox"/> Agricultural Labour <input type="checkbox"/> Teacher <input type="checkbox"/> Govt. Employees <input type="checkbox"/> |
| 7. Annual Income of Respondent (Please only include individual income of the respondent and it should not be aggregated with income of other members of the household) | 100000-150000 <input type="checkbox"/> 150001-250000 <input type="checkbox"/> 250000-350000 <input type="checkbox"/> 350001-450000 <input type="checkbox"/> 450001 -550000 <input type="checkbox"/> 550001 above <input type="checkbox"/> |
| 8. Type of House | 1. Kacha 2. Semi Pucca 3. Pucca |
| 9. Is it made or inherited | 1. Owned 2. Rented |
| 10. If owned, is it made or inherited | 1. self-constructed 2. inherited |
| 11. Main material of floor is | 1. Mud 2. Brick and sand |
| 12. Main material of roof is | 1. Concrete 2. Thatch 3. Wood & mud |
| 13. How many rooms are in your house | 1. Two room 2. Three room 3. Four room |
| 14. Do you have kitchen? | 1. Yes 2. No |
| 15. If no, where you cook? | 1. separate space kitchen 2. Cooking outside 3. Any other specify |
| 16. What is the present value of your | 1. 50000 -200000 2. 200001-500000 3. Above |

| | |
|--|---|
| house? | 500001 |
| 17. What is the main source of your Drinking Water? | 1.Tap 2. Submersible 3. Big tank 4. Well 5. Hand Pump 6. Any other |
| 18. Is it inside/outside the house | 1.inside house 2. Outside house |
| 19. If outside, do you share this source of water | 1.Yes 2. No |
| 20. Is water from this source scare | 1.Yes 2. No |
| 21. Do you treat water in any way to make it safer to drink | 1.Yes 2. No |
| 22. If yes, how you treat water for it purify | 1.Purifier 2. Boil 3. Any other way |
| 23. Does the respondent's house have electricity? | 1. Yes. 2.No |
| 24. If yes, how many hours per day you got electricity during | 1. Summer 2 to 4 hrs 2. Winter 0 to 1 hour |
| 25. When there no no electricity in your house, how you survive? | 1.Solar energy 2. other sources |
| 26. What type of cooking fuel do you use | 1. LPG/Gas 2. Kerosene 3. Firewood 4. Cow dung cake 5. Crop residue 6. Leaves |
| 27. What toilet arrangements do you have? | 1. separate 2. Others: Specify |
| 28. Do you have toilet facility at home? | 1. Yes 2. No |
| 29. If yes, what kind of toilet facility your household have? | 1. Flush toilet 2. Pit toilet/ Latrine 3. Any other specify |
| 30. If no own toilet, where you defecate? | 1. Public toilet 2. Open field |
| 31. Do you have ration card? | 1.Yes 2. No |
| 32. If yes, what Category of Ration card you have | 1. BPL 2. APL 3. AAY 4. Not having Ration card |

Sanitation and Hygiene

1. Do you have bathroom facility?

| | |
|--------|--------|
| i) Yes | ii) No |
|--------|--------|
2. If yes, please mention whether:

| | |
|--------------------------|----------------------------|
| i) Attached with kitchen | ii) Attached with Room |
| iii) Separate | iv) Any other specify_____ |
3. If no, where you bathe:

| | |
|-----------|----------------------------|
| i) River | ii) Pond |
| iii) Well | iv) Any other specify_____ |
4. Do you have toilet facility at home?

| | |
|--------|--------|
| i) Yes | ii) No |
|--------|--------|
5. If yes, what kind of toilet facility your households have?

| | |
|-------------------|----------------------------|
| i) Flush toilet | ii) Pit toilet/ Latrine |
| iii) Water closet | iv) Any other specify_____ |
6. If no, own toilet, where do you defecate?

| | |
|---------------------------|----------------|
| i) Public toilet | ii) Open field |
| iii) Other (Specify)_____ | |
7. Do you wash your hands after defecating?

| | |
|--------|--------|
| i) Yes | ii) No |
|--------|--------|

If yes, what do you use to wash your hands?

| | |
|----------------|----------------------------|
| i) Water alone | ii) Soap |
| iii) Hand Wash | iv) Any Other Specify_____ |
8. Is there drainage in the yard?

| | |
|--------|--------|
| i) Yes | ii) No |
|--------|--------|
9. What kind of drainage facility does your household have?

| | |
|-----------------------|----------------------------|
| i) Underground drains | ii) Open drains |
| iii) Soak pit | iv) Any other specify_____ |
10. How does the household dispose of its garbage?

| | |
|-----------------------------------|-----------------------|
| i) Collected by garbage truck | ii) Private collector |
| iii) Dumped | iv) Burned |
| v) Dumped and used for fertilizer | vi) Open in field |

Other (specify)_____

Standard of Living

1. Type of Housing:

| | |
|-------------|--------------------|
| i) Pucca | ii) Semi-Pucca |
| iii) Katcha | iv) Any other_____ |
2. Category of House:

| | |
|----------------|------------|
| i) Traditional | ii) Modern |
|----------------|------------|
3. Ownership Status of House:

| | | |
|----------|------------|----------------------|
| i) Owned | ii) Rented | iii) Any other _____ |
|----------|------------|----------------------|
4. If owned, is it made or inherited?

| | |
|--------------|---------------|
| i) Self-made | ii) Inherited |
|--------------|---------------|
5. Main Material of Floor:

| | |
|------------|-----------------|
| i) Mud | ii) Brick, Sand |
| iii) Tiles | iv) Other_____ |
6. Main Material of Roof:

| | |
|--------------------------|-------------------|
| i) Concrete/Fiber Cement | ii) Brick, Garder |
| iii) Wood /Thatch | iv) Other_____ |
7. How many rooms are there in your house? _____
8. What is the present value of the house? Rs. _____

Water Facility

1. What is the main source for drinking water?

| | |
|---------------|---------------------|
| i) Tap | ii) Submersible |
| iii) Big Tank | iv) Well |
| vi) Hand Pump | vi) Any other _____ |
2. Is it inside/outside the house or compound?

| | |
|-----------|-------------|
| i) Inside | ii) Outside |
|-----------|-------------|
3. If outside, do you share this source?

| | |
|--------|--------|
| i) Yes | ii) No |
|--------|--------|
4. How many households share this source?

| |
|---------------------------|
| i) No. of households_____ |
|---------------------------|
5. Is water from this source scare?

| | |
|--------|--------|
| i) Yes | ii) No |
|--------|--------|
6. How far is this source from your household? _____

7. Is the availability of drinking water normally adequate?
 - I) Yes
 - ii) No
8. Do you treat water in any way to make it safer to drink?
 - i) Yes
 - ii) No
9. If yes, how do you treat water?
 - i) Purifier
 - ii) Boil
 - iii) Public RO Purifier
 - iv) Any other way_____

1.1 Fuel and Energy:

1. Do you have kitchen?
 - i) Yes
 - ii) No
 2. If no, where is the cooking, generally done for this household?
 - i) Separate space kitchen
 - ii) Cooking outdoor
 - iii) Cooking in a living room
 - iv) Any other specify_____
 3. If yes, then your kitchen is attached with?
 - i) Bathroom
 - ii) Bedroom
 - iii) Lobby
 - iv) Any other specify_____
 4. What type of stove (chulah) does the household use?
 - i) Stove with kerosene
 - ii) Open fire chulah
 - iii) Traditional chulah without chimney
 - iv) Improved chulah with chimney
 - v) Stove with LPG
 - vi) Any other specify_____
 5. What type of energy or fuel is most often used by your household for cooking?
 - i) LPG
 - ii) Electricity
 - iii) Fire wood
 - iv) Cow dung cake
 - v) Leaves
 - vi) Crop residue
 - vii) Kerosene
 - viii) Any other_____
 6. Does the household have electricity?
 - i) Yes
 - ii) No
 7. If yes, how many hours per day do you generally get electricity during;
 - i) Summer_____Hour's
 - ii) Winter_____Hour's
 8. When there is no electricity in your, how you survive?
 - i) Candle/Torch
 - ii) Generator
 - iv) Any other_____
- Solar Energy Storage