

**VILLAGE SURVEY STUDY IN JHARKHAND**  
(Bargachha Hariyari Village)

*Sponsored by*

**Ministry of Agriculture & Farmers Welfare**  
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## Preface

The village study is relevant to understanding its development in a qualitative way the characteristics of the households, working and influence of relationship embodied in village society, politics and institutions. These observations supplement our quantitative data to identify the drivers of change for better development policy. The present survey is a base line survey with 300 households, out of a total of 481 households, in Bargachha Hariyari village of Godda district in Jharkhand. This study was sponsored by the Directorate of Economics & Statistics, Ministry of Agriculture & Farmers Welfare, Government of India and co-ordinated by the AER Centre, Visva-Bharati, Santiniketan, West Bengal.

Through the study, we have attempted to analyze the social dynamics, economic systems, ecological vulnerability sustainability and governance issues, apart an overview of the village and methods of the study. The village is dominated by the scheduled tribes (mainly Santals). Previous studies have amply demonstrated that, unlike our earlier assumptions, most adivasi societies are essentially patraichal. For the Santals, like for most societies, politics is an all-male affair. The economic system relies on agriculture, which is largely on subsistence level, resulted in seasonal migration. In terms of infrastructure, there is perceptible development in roads, transportation and communication and power but due to lack of livelihood opportunities, the life has become hard, besides weather and climatic vulnerabilities. The policy prescriptions arising from the study reveal need to focus on implementation of the programmes because the coverage under different schemes was found quite low, this is a serious phenomenon.

Since the study is the outcome of a team work and cooperation from various sources at different levels, so we deem it our duty to acknowledge them. First of all, we are grateful to the RAC (Research Advisory Council) of Ministry of Agriculture & Farmers Welfare, Government of India for assigning this study in the work plan year 2019-20. We express our deep gratitude to our Hon'ble Vice-Chancellor, Prof. Neelima Gupta, for providing all necessary support in completion of the study.

We are extremely grateful to Prof. B C Roy, Director, AERC, Visva-Bharati for his valuable comments on the draft report. We express our sincere thanks to Mukhiya and all other functionaries of the Village Panchayat, Volunteers, villagers particularly the respondents for sparing their valuable time and providing required information and data. We also express our thankfulness to the members of the Project team.

Further, we owe our gratefulness to the DES, MoA & FW, GoI for providing us notable comments on the presentation of the draft report, held on 25<sup>th</sup> October 2021 in virtual mode.

We do hope that the results of the study will be highly useful for the policy makers, officials, professionals and researchers in understanding various dimensions of the village and desirable policy and programme interventions thereon.

**Manindra Kumar Singh**  
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## Abbreviations

AATY/AAY	:	Antyodaya Anna Yojana
APL	:	Above Poverty Line
ASER	:	Annual Status of Education Report
BMI	:	Body Mass Index
BPL	:	Below Poverty Line
CGWB	:	Central Ground Water Board
CSC	:	Common Service Centre
DBT	:	Direct Benefit Transfer
DCH	:	District Census Handbook
DI	:	Direct Interaction
FGD	:	Focused Group Discussion
GCA	:	Gross Cropped Area
GoI	:	Government of India
GoJ	:	Government of Jharkhand
GP	:	Gram Panchayat
GPDP	:	Gram Panchayat Development Plan
HDI	:	Human Development Index
HMIS	:	Health Management Information System
IAY	:	Indira Awas Yojana
ICDS	:	Integrated Child Development Scheme
ICRISAT	:	International Crop Research Institute for the Semi-Arid Tropics
IFAD	:	International Fund for Agricultural Development
IHDS	:	India Human Development Survey
JTDP	:	Jharkhand Tribal Development Project
JTELP	:	Jharkhand Tribal Empowerment and Livelihood Project
KCC	:	Kishan Credit Card
KVK	:	Krishi Vigyan Kendra
LARR Act	:	Land Acquisition, Rehabilitation and Resettlement Act
LIC	:	Life Insurance Corporation
LPG	:	Liquefied Petroleum Gas
LVC	:	Least Vulnerable Crop
LVG	:	Least Vulnerable Group

MGNREGA	:	Mahatma Gandhi National Rural Employment Guarantee Act
MVC	:	Most Vulnerable Crop
MVTG	:	Most Vulnerable Tribal Group
NFHS	:	National Fertility Health Scheme
NH	:	National Highway
NGO	:	Non-governmental Organization
NH	:	National Highway
NSA	:	Net Sown Area
NSSO	:	National Sample Survey Organization
PARFI	:	Pan IIT Alumni Reach for India Foundation
PDS	:	Public Distribution System
PHC	:	Primary Health Centre
PKVY	:	Paramparagat Krishi Vikas Yojana
PMAY-G	:	Pradhan Mantri Awas Yojana - Gramin
PMFBY	:	Pradhan Mantri Fasal Bima Yojana
PMKSY	:	Pradhan Mantri Krishi Sinchayee Yojana
PM - KISAN	:	Pradhan Mantri Kisan Samman Nidhi
PM - UJJWALA	:	Pradhan Mantri Ujjwala Yojana
Pre JHA	:	IIT Alumni Reach for Jharkhand
PVTG	:	Primitive Vulnerable Tribal Group
SECC	:	Socio-Economic Census
SIA	:	Social Impact Assessment
SPT Act	:	Santhal Pargana Tenancy Act
SPU	:	Special Purpose Vehicle
TGA	:	Total Geographical Area

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## EXECUTIVE SUMMARY

### Introduction

Survey of the village 'Bargachha Hariyari' in Poreyahat Tehsil/Block of Godda district of Jharkhand is a baseline survey conducted during 2019-20 at the instance of Directorate of Economics & Statistics, Ministry of Agriculture & Farmers Welfare, Government of India under the Co-ordination of Agro-Economic Research Centre, Visva-Bharati, West Bengal. The village is located in Central and North-Eastern Plateau (Sub-Zone - IV) of the state with 7.19 square kilometers as total geographical area. The village falls in the rain shadow of Santhal Pargana Plateau and the average annual precipitation is 850 mm. The climate is warm and temperate. The soil of the village is mostly acidic, red and yellow; light textured and highly permeable with poor water holding capacity. As per 2011 census, the village had 481 households and the total population was 2189, constituting about 59 per cent scheduled tribes (mainly Santal & Sauria Paharia) followed by other backward castes (34%) and scheduled castes (6%). The literacy rate and sex ratio were 54.14 per cent and 988 females. Of the total population, the working population was 47.74 per cent and of them cultivators was 56.65 per cent followed by agricultural labourers (43.35%). The HDI of the district wherein the village lie was lowest (0.258) across the districts of the state in 2018. With this brief background, this survey was conducted with following specific objectives:

- i. To capture socio-economic dynamics of the village,
- ii. To assess the pace, process and pattern of rural change,
- iii. To focus on agricultural change and changing pattern of rural livelihoods, and its implication for future development, and;
- iv. To evaluate the efficiency of government interventions in rural areas, and the key drivers of changes in rural economy.

### Methods and Coverage

As per suggested methodology, a moderately developed village or the village surveyed earlier was to be selected either pilot/baseline survey or re-survey. In fact, in 1969 AERC, Visva-Bharati had conducted a study entitled **Santal Rural Economy--- A Study based on village survey in Santal Parganas**, covering 5 villages of Santal Parganas division. Out of these 5 villages, one was Hariyari, which in course of time divided into three villages and of them one is Bargachha Hariyari, a Gram Panchayat village of Jharkhand state. For the purpose of this survey, Bargachha Hariyari was selected for in-depth study. The sample forms 300 households, distributed across 8 tolas of the village. The sample constituted 79.4 per cent scheduled tribes (238 Hhs), 15.3 per cent other backward castes (46 Hhs) and 5.3 per cent scheduled castes (16 Hhs). Besides, information was also collected at village level and from Focused Group Discussions (FGDs), Annual Status

of Education Report (ASER) on 100 children.

### **Social Dynamics**

Of the surveyed households (300 Hhs), the total population was 1574. Nearly 78.78 per cent of the households belonged to STs followed by OBCs (14.29%) and SCs (6.93%). Total workers were 52.86 per cent and of the total workers, cultivators were 62.79 per cent, agricultural labourers (32.65%), workers in Hh industries (2.74%) and other workers (1.82%). The overall literacy rate was 58.70 per cent. As per distribution of population by caste/religion, 47.20 per cent belonged to Christian STs, 31.58 per cent Sarna-Dharm STs, 14.29 per cent were OBCs and 6.93 per cent SCs, who were followers of Hindu Sanatan Dharam. About 72 per cent Hhs were in BPL and 7 per cent in Antyodaya/MAPL categories. The total enrollment in schools was 181 and of them 52.43 per cent in government and 47.53 per cent in private schools. Total dropouts were 38 children, comprising 60.52 per cent female and 39.47 per cent male children. As per ASER test (based on Std. - II Level), 64.15 per cent and 48.93 per cent children were able to read paragraphs among the boys and girls respectively. About 49.07 per cent and 31.91 per cent children did have arithmetic competency among boys and girls respectively. Overall level of reading competency in government schools was 21.63 per cent, while in private schools, it was 74.60 per cent. The level of arithmetic competency at overall level, in government schools was 13.89 per cent only, while in private schools, it was 56.25 per cent. In regard to food security in the

village, the responses reveal that all the household do not seem to have faced food insecurity, which is a phenomenon experienced often by poor household. Moreover, in the district of the surveyed village, nearly 36 per cent of men and 27 per cent of women were below normal in respect of BMI (HMIS, 2019). Access to basic amenities was moderately good. Only 9 per cent of the Hhs had membership of Gram Sabha. In political space, the Santal traditional society was found to be male dominated with little room for women's issues and interests. However, in other cases, it was moderately fair.

### **Economic System**

Economic system of 300 households reveals that cultivators were larger in number, i.e., 65.33 per cent followed by agricultural labourers (8%), government salaried employees (6%), casual labour (4.67%) etc. It further reveals that about 73 per cent of the households were engaged in agriculture vocations, which were largely on subsistence level, which resulted to seasonal migration of 48 persons for outside jobs, as the village lacked employment opportunities for them. The analysis of agrarian economy shows that of the total geographical areas occupied by the households, nearly 34 per cent was cultivable and the net sown area was about 28 per cent of the TGA of the households. Cropping intensity was indicated at 121 per cent, and area under irrigation being 47.80 per cent. The sample households constituted 85.67 per cent marginal farmers who occupied 66.67 per cent of total operated areas, and 14.33 per cent small

farmers occupied 33.33 per cent of total operated areas. Average size of holdings was found to be 0.71 acres against the state's average of 4.23 acres. The cropping pattern mainly pertained to paddy (76.75% of GCA) in kharif season and wheat (only 9.13% of GCA) in rabi season, apart from pulses (8.26% of GCA), oilseeds (3.43 % of GCA) etc. Due to subsistence nature of agriculture, profit from cultivation ranged from 17 to 73 per cent across the crops. The overall per capita annual income was estimated as Rs. 18937 that resulted to low savings and high borrowings during the last five years, i.e., during 2014-19.

### **Ecology, Vulnerability and Sustainability**

Natural resources for the livelihood of the natives of Jharkhand are important, as they are socially and economically dependent upon these resources. The village had open forest, where more than 5000 plants were reported to be present. Further, diverse rocks of different ages ranging from archaean to the recent underlined in and around in the village. Excellent repository of groundwater (10-25 metres) was reported. Despite that, overall state of groundwater development in the village was found to be 25 per cent against the district's average of 38.68 per cent (CGWB, Ranchi, 2013). The analysis of qualitative information based on the report of majority of the participants reveals good connectivity in terms of road, electricity and mobile networks existed there. But, extreme weather and climatic events caused them hardships and vulnerabilities. Steps for providing good infrastructure, expansion in livelihood opportunities, need

based relief measures etc., were the major suggestions for their sustainability.

### **Policy and Governance**

A moderate coverage was reported under some of the selected government programmes. Coverage under agricultural development and other social security schemes were found quite low or absent mainly due to apathy of the local functionaries, reluctance of villagers/households and presence of the middlemen. This is a serious phenomenon and because of that the socio-economic situations of the village could not be considered as moderately developed. So, social auditing for determining the physical coverage and financial expenses is needed to enhance local governance, as policy alone may not be able for substantial change. To ameliorate the socio-economic conditions of PVTGs in fast mode in the village, a participatory approach of the governance should be adopted.

### **Policy Prescriptions**

- i. There is need to legitimize the identity of the Santals and other tribes through traditional social institutions with less interference of State's institutional framework/mechanism, which have increased over the time.
- ii. To protect from economic and ecological vulnerabilities, off farm and non-farm activities should be encouraged/extended in the village on priority basis.
- iii. Due to subsistence and low profitable agriculture, nearly 36 per cent of the cultivable land in the village remained fallow, which should be targeted to be

- developed as cropped area under 'Conversion of Fallow Land into Cropped Area Scheme,' implemented under State Plan for the development of agriculture.
- iv. There was lack of interventions of agricultural development programmes in the village, so the coverage of such programmes including 'Paramparagat Krishi Vikas Yojana (PKVY)' should be extended with emphasis on grass root motivation for adoption and implementation on priority basis.
  - v. In consonance with the emerging need for holistic development in the villages, Gram Panchayat of the surveyed village had not submitted its suggestions for Gram Panchayat Development Plan (GPDP) during 2019-20. So, there is need for focused attention for the village panchayat to make a comprehensive plan based on participatory process involving the community, particularly the Gram Sabha, in convergence with the schemes of all departments containing 29 subjects listed in the 11<sup>th</sup> schedule of the Indian Constitution. Thus, Gram Panchayat has to play a significant role on the subjects for transformation of the village.
  - vi. Healthcare delivery system and facilities in the village should be strictly strengthened and implemented with strict monitoring, so as to the villagers do not suffer to health related vulnerabilities, which existed in the village.
  - vii. To ensure well-being of the senior citizens and widows, pension and other welfare schemes should be extended at large to avoid insecurities among them in the village.
  - viii. The Jharkhand Tribal Empowerment and Livelihoods Project (JTELP) and IFAD, supported by Jharkhand Tribal Development Project (JTDP) meant for the welfare of tribal and backward communities in such villages, where ST population is more than 50 per cent (the surveyed village had 59 per cent of ST population as per 2011 Census), should come forward to reduce degree of vulnerability of the people in the village.
  - ix. NH-133 passes through the village, so there is wide scope to make the village as model village by adoption of cluster approach in agricultural marketing, building of handicrafts clusters and other skill development initiatives.
  - x. To combat the extreme environment/weather eventualities, a macro shocker strategy comprising drought mitigation measures, promotion for cultivation of rainfed crops, solar irrigation pump, tap water supply for drinking, agro-forestry, land leveling under watershed programme, plantation of horticultural crops etc., may be drawn for its implementation.

## CHAPTER – I

### INTRODUCTION

#### 1.1 Background of Village Studies

Today, almost three quarters of the world's population (7.8 billion) are in developing countries, and about 44 per cent of them reside in rural areas (USAID, 2020). It is clear that pathways of development cannot be understood without comprehending the functioning or the process of integration of villages with urban areas. This was also the primary concern for many development economists, such as *Lewis, Hirschman & Kuznets*. Insights from the functioning of village societies continue to enlighten many areas of contemporary development economics as well.

While the history of village surveys in India is over a century old, the study by **Harold Mann in 1915** of some households around Pune is, perhaps **the first recorded household survey**. The *Gilbert Slater Survey (1916)* constituted the first systematic attempt at documenting the functioning of a village in detail through structural questionnaires. This was also the beginning of a series of village surveys conducted in the pre-independence period. Some of the notable village surveys are 'the Punjab Board of Economic Enquiry (1920s),' the Bengal Board of Economic Enquiry (1935), the Indian Statistical Institute (1937), *Visva-Bharati (1946)*, the Congress Economic and Political Studies (1936), Gujarat Vidyapeeth (1931), the Gokhale Institute of Politics and

Economics (1940), and so on. These numerous, studies were not only crucial in generating a picture of rural India and understanding the functioning of village economics and societies, but were also useful in laying the foundation of a robust statistical system later. Their contribution in regard to the design of appropriate questionnaires for large scale surveys and the refinement of conceptual categories and sampling techniques were crucial in setting up the statistical system in India, particularly the Census of India and the NSSO, which undertook village surveys after independence in early 1950s and 1960s.

After independence notable studies were of Bisipara village in Orissa (*Bailey, 1957*), *Wangala & Dalena in Karnataka (Epstein, 1962)*, *Senapur in Uttar Pradesh (Hopper, 1965)* etc. Findings from these were important in understanding the nature and functioning of rural economics, particularly the behaviour of individuals and households in the largely closed setting of a village.

Moreover, these studies were also useful in providing insights for new theories. A large part of early Indian Anthropology and Sociology was built around evidence from village surveys, such as those by *Dubey (1955) & Srinivas (1955)*.

While early village studies, except for the re-survey of Slater (1916) villages, were less focused on economic issues, systematic surveys of Agro-Economic Research Centres/Units (AERCs/Us) were useful in creating a pool of village surveys looking at agricultural production, credit and tenancy relations (*Dasgupta, 1975*). Later studies expanded the scope to the understanding of issues related to markets, individual behavior towards shocks and risks, savings, investment decisions at the household level, informal credit arrangements, and interlinking between various markets. Notable among these are ICRISAT surveys, which systematically studied a set of villages in southern India annually for almost a decade.

One of the reasons for the centrality of village surveys in understanding the functioning of economic, social & political life in rural areas is that villages are the lowest administrative unit. An important reason, why the method of studying villages has continued to remain indispensable in many disciplines, is the advantage it offers in analyzing individual behavior in relation to institutional context. The fact that this has happened in an era where large scale surveys (such as NSSO, NFHS, IHDS etc.) have been conducted in prominence, not only in terms of availability, but also coverage, is testament to usefulness of village studies. Presence of large scale surveys has not led to a diminishing role of village surveys, but in fact, has contributed to strengthening the field and the nature of enquiry used in such surveys. Given that most village surveys

tried to understand and situate their observations within social, political and economic context of the villages they studied, variances from some notional average are both natural and interesting. At the same time, there are enough village studies to observe patterns emerging across villages, each of which might have its own history and social structure (*Himanshu et. al, 2018*).

### **1.1.1 Need and Scope of the Study**

Decades of research in development economics have enriched our understanding, which has usually been cumulative. Advances of our understanding for the process are still at work in development. So, it is clear that some understanding of the forces at work is essential for redesigning and implementation of economic policy to overcome poverty, and to promote sustainable and inclusive development. The determinants of livelihoods in villages, and how they respond to and drive change in the economy and society, as a whole, are clearly of fundamental importance. In view of the above, the Union and State Governments recognized that India lives in villages (6.49 lakhs) and the growth and transformation of the economy needed an accurate knowledge of the rural context. This approach means that we can get to know individuals and the society and their politics. Secondary data generated by different agencies of the government used to serve the essential purposes of understanding the broad purpose in larger

context. As local understanding of individuals and the community is a core feature of village studies, so this realization has led to series of village surveys and resurveys by various Agro-Economic Research Centres/Units and other institutions. These surveys and resurveys highlight conditions, which enable villages to survive through ups and downs in their socio-economic and political strength, as well as, constraints of village habitants to enable the policy planners for planning amicable policies and plans.

Keeping above facts in mind, this study entitled “**Village Survey Study in Jharkhand (Bargachcha Hariyari village),**” was conducted by this Centre under the work plan year 2019-20; which has wide scope and significance as well.

### **1.1.2 Objectives of the Study**

The overall objective is to create longitudinal panel dataset. However, the specific objectives are as below:

- i. To capture socio-economic dynamics of the village.
- ii. To assess the pace, process and pattern of rural change (followed by repeated or resurveys of the same village at an interval of 05 years).
- iii. To focus on agricultural change and changing pattern of rural livelihoods and its implication for future development, and;
- iv. To evaluate the efficiency of government interventions in

rural areas, and key drivers of changes in village economy.

## **1.2 Background Information**

### **1.2.1 Background Information about this Pilot Survey**

This is a pilot survey of Bargachha Hariyari village situated under Poreyahat block/tehsil of Godda district in Jharkhand state, which has been conducted during the year 2019-20, at the instance of the Directorate of Economics and Statistics, Ministry of Agriculture & Farmers Welfare, Government of India. This pilot survey study has been undertaken as a part of continuous village surveys and resurveys, which were used to be conducted by an all-India network of Agro-Economic Research Centres/Units till 1970s. The purpose of these surveys was to do village surveys and resurveys to document rural change and identify forces of change. These continuous village studies were discontinued for sometime in view of the perception that diagnostic studies needed more focus of late, however, in view of the agrarian crisis across the country, need for reviving village studies was felt, and thus, DES, MoA & FW, GoI has assigned this study, either as pilot or resurveys, as the case may be. It is to be noted here that the Agro-Economic Research Centre, Visva-Bharati (WB) earlier used to cover **the then Eastern-Bihar** as its territorial jurisdiction till 1995, so it had undertaken a village survey of 05 villages sometimes in early 70s. Out of the 05 villages that had been taken up for the study, three were purely tribal ones, while the remaining ones were mixed villages of

the present Jharkhand state out of which one was 'Hariyari,' which came in mixed category of village i.e., 22 Hhs of Santal and 33 Hhs of non-santal.

After a long span of time, this 'Hariyari,' village was bifurcated into Bargachha Hariyari, Hathi Hariyari and Kanadih Hariyari under Poreyahat block of Godda district in Jharkhand state. This village study has been undertaken in 'Bargachha Hariyari village as a pilot survey, which has now achieved status of a Gram Panchayat village.

### **1.1.1 Brief Review of the Earlier Surveys**

#### **Location**

As discussed in section 1.2.1, of the five villages that had been earlier taken-up for survey by AERC, Visva-Bharati (WB) sometimes in early, 1970s, that included 'Hariyari Village,' under Poreyahat block of Godda district, which then fell in Bihar State (now in Jharkhand state), located on the north-west part of the district bordering on the agricultural region of Bhagalpur district (Bihar).

#### **Demography and Literacy**

At that time of survey, total population of 'Hariyari' Village was 273 persons and out of that, 107 persons (39.19%) belonged to santal tribe. Total number of households were 55, constituting 22 (40%) santals and 33 (60%) non-santals. Average size of households was 4.7 persons and the literacy among the adults was 14.95 per cent. Percentages of santal children and labour force to total population were 51.40 and

45.79 respectively. Percentage of school going children was 34.55. Female working force, as the percentage of total number of female, in working age-group was 86.96 per cent.

#### **Occupational Pattern**

Distribution of workforce by their primary occupation was 66.67 per cent cultivators on wholly owned land followed by agricultural labour (15.55%), cultivators on wholly un-owned land (8.89%), arts and crafts (6.67%) and others (2.22%). Similarly, by secondary occupation, 56.66 per cent was agricultural labour followed by cultivators on wholly owned land (16.67%), other miscellaneous labour (16.67%) and others (10%).

#### **Land Holding Pattern**

Out of the 25 Santal households, land holding pattern data reveal that 19 Hhs (76%) owned land, and the remaining ones i.e., 6 Hhs (24%) did not own land. Of those, who owned land, 11 Hhs (44%) had up to 1 ha, 7 (28%) owned 1-2 ha and 1 (4%) 2-4 ha. Average size of land was 0.78 ha per household.

#### **Cropping Pattern**

The cropping pattern data revealed that of the cultivated area, 39.76 per cent was devoted to paddy, 20.02 per cent maize, 16.42 per cent under Kulthi (pulse) and 23.80 per cent were occupied by other crops. The cropping intensity was 121.20 per cent.

## **Income**

Average per capita annual income was estimated at Rs. 228.98 and out of it, 56.68 per cent was contributed by cultivation followed by agricultural labour (16.93%), remittance (9.31%), poultry & piggery (5.57%), livestock rearing (4.24%) and crafts & miscellaneous (7.27%).

## **Dwelling Structure**

Dwelling structure of the 18 Hhs (72%) was wall and floor constructed by using mud with thatched roof and 7 Hhs (28%) wall and floor mud with tiled roof.

## **Problems of Development: Santal Vs. Non-Santal**

Out of the total 55 households in the village, there were 22 Santal households (40%) and the remaining ones belonged to Hindu community, such as; Bhagat (a trading-cum-money lending caste), Mandal (a cultivating caste of Bengali origin) and Kalwars. There was also one Brahmin household, following caste profession of priesthood in the village.

A comparative analysis of these groups of households (Santals and Non-santals) in terms of their respective levels of enterprise and levels of living had also been made. Such a comparison is significant that old whether a tribal group, as Santals within the comparable constraints behaved in the same way as the Non-santals.

Distribution of each set of households by per capita land ownership position at once reveals that in mixed village of Hariyari, Non-santals had larger command over land

than the Santals. Whereas, a little more than 50 per cent of the Santal households were either landless, or had per household land less than 0.6 ha, the corresponding proportion among the Non-santals was roughly 30 per cent. In groups of 0.4 ha to 0.5 ha and above, the proportion of Santal households was 14 per cent, whereas the corresponding proportion among the Non-santal households was 32 per cent.

Despite a relatively larger command over land, the Non-santal households had per capita income a little less than that of Santal households (Rs. 224 and Rs. 228 per capita annual income respectively). Tendency of suppressing income from other petty businesses by the Non-santal households played a significant role and this might be responsible for such income difference. Participation in various forms of day labour, including by women of Santals on a large scale helped to compensate to some extent for relatively smaller size of land holding.

In terms of per hectare productivity of crops or per hectare value of crops, Santal households, in comparable positions, were performing better than their Non-Santal counterparts. As regards per capita income, which is ultimate indicator of economic condition, the results, though did not show significant variation.

Conditions of housing show a perceptible level of difference between the Santal and Non-santal households. In first case, the ratio of households to houses was nearly 1:1, in the later case; it was a more than 1:1.5. Secondly, the qualities of structures

also varied largely. Out of the 25 Santal buildings, 18 were of purely kachcha type with mud walls, mud floors and straw thatching, while the rest were partially kachcha type with tile roofing. Of the 53 Non-santal buildings, 19 were of pure kachcha and 31 were partially kachcha with tile roofing. There were 03 remaining buildings, which were of pucca type, 1 purely pucca, and two partially pucca with tin roofing.

Extent of possession of durable consumer goods also showed significant variation. Besides, Santal spent a good amount on liquor, while Non-santals did not. And this, along with the factor of cultural difference, accounted for the difference in levels of livings and life styles.

It was observed that through several decades of the 19<sup>th</sup> century, the Santals, by side of their struggle for setting to cultivation, had migrated in thousands to industrial sector till the sources of these industries had dried up. Seasonal migration in terms of labour from agriculture has been the major form of migration since. Thus, in an overall stagnating situation, the 'pull' had slackened with very little potentialities of developing along modern lines from within and thus, fate of this 'otherwise vigorous community' depended on a massive impact from outside or else, distortions in the process of very slow development were bound to occur.

### **1.2.3 Changes occurred in the village during last 5 decades**

It has to be noted that the 1970 survey report mainly focuses on Santal Rural

Economy such as organization and level of functioning of rural economy, level of living and problems of development whereas this survey is relating to entire village incorporating social dynamics, economic system, ecology vulnerability--sustainability and policy and governance. So some perceptible changes between the two surveys have been noticed, which may be noted as below:

- i. Earlier to this survey, the village was named as Hariyari, which in course of time, divided into three villages and the present study has been undertaken in one village, out of those three villages, which is now a panchayat village; namely Bargachha Hariyari.
- ii. The population of the village jumped to 2189 in 2011 census from 273 during the 1970 survey.
- iii. The share of tribal population during 1970 survey was about 39.40 per cent, which increased to 59.07 per cent in 2011.
- iv. In 1970 survey, of the total workforce, 66.67 per cent were cultivators whereas it slashed to 56.65 per cent in 2011.
- v. Average per capita annual income was Rs. 228.98 in 1970 survey whereas it is Rs. 18937 in present survey.
- vi. The economy was based on settled cultivation on individually owned land. There were, however restrictions on free transfers or alienation of land, the restrictions having been necessitated by

continued infringement on their land by dikku (outsiders) or government projects. Dependence on forest becomes marginal as the forests have now the Government reserves.

- vii. Earlier there was a natural source of employment in the village in stone quarrying, which has now been depleted, resulted in migration.

### 1.2.4 Historical Profile of the Village

As per the available information gathered from the village, the naming of the village could be traced, which is more than one century old, i.e., perhaps its origin is rooted in 1902 and something around this year.

In fact, the village, which now exists between Godda district headquarters and Poreyahat block headquarters, was popularly known as 'Murut' (Palas), Gajar (Shrub) in santal script (Godda district), Jharkhand was surrounded by dense forest and having high vegetation during that times. Connecting roads were not available and within the forest area, there was a century old Banyan (Bargad) tree, beneath which a local santal in habitant, namely; Jadu Tudu with a non-tribal (belonging to Surhi caste), used to sell taree (juice of date palm and palm tree) and puffed rice (murhi) respectively to local people and passersby. Later that spot got status of a village known as 'Bargachha Hariyari.' In erstwhile Bihar, the village was a Panchayat village under **Bihar Panchayati Raj Act, 1993**. After creation of Jharkhand state in November, 2000, it was retained as a Panchayat village under Jharkhand

Panchayati Raj Act, 2001. The first Mukhiya of the village was Smt. Munni Hansda (W/o Shri Hemlal Murmu) and the present one is Smt. Mary Hansda (W/o Sri Sushil Tudu) since 2015. The village panchayat election is due for 2020, but due to Covid-19 pandemic, the tenure of the Mukhiya has been extended till the next election is completed.

### 1.3 Review of Literature

The state of Jharkhand has, in fact, long been criticized for its outsiders. *Weiner (1988)* comments that regional development of Chotanagpur (Jharkhand) was not successful, because it being a primarily migrants' dominant region, and not the local people, who could be benefitted. Only a small number of tribals were found in industry. Improvement in agriculture was accompanied by, what a government report referred to as the "usurpation" of land by outsiders. Local services by government increased, but few tribals were employed by expanding their bureaucracy. The colleges and university grew, but few local tribal students attended. In fact, Weiner quotes from his interview with Lalit Kuzur that 'the Bihar government officers in Ranchi mainly employ outsiders. The Biharis, who work there, even bring own peons from their own villages.

This gives one to believe that anti-dikhu sentiment among the tribes was more secular than religious, and the leadership of tribes, which had mostly remained concentrated with the educated Christians, and was unable to give effectively a communal stance to their movement for an

autonomous homeland. On the other hand, a strong middle class, which could lead effectively a battle for regionalism, through the pattern one witnesses in the country today, was than to develop in these areas, but with the existing rate of literacy, such a process far from vigorous in these areas. Again these tribals were faced with the problem of a late start (*Sengupta, 1973*).

For a long time, there has been a movement campaigning for Jharkhand to gain independence from Bihar. This was based on the idea that Jharkhand was a tribal area, but had been made a colony of the Hindu Caste dominated Bihar State. The movement finally turned in separation and gained independence on 15<sup>th</sup> November, 2000, the day when (*Alpa Shah, 2003*) arrived to undertake field work in India, a culmination that seemingly signaled the 'success of India's democracy (*Kohli, 2001*).

Jharkhand was carved out of Southern Bihar at a time when concern about better development related decentralized governance, rather than linguistic identity was prevailing strongly. But a study (*Sharma, 2019*) that covered 225 Hhs from 07 villages of Palamu district (Jharkhand), revealed that the incidence of food insecurity was quite high among scheduled tribes' families. Assured food supply exists for only 3 to 4 months of the year, especially in winter, following the harvest season. Here, main challenge is how to generate additional income locally, as otherwise there is a risk that families of the entire area will move to major conurbations and may never return (*Dhar, 2014*).

Migration, violation as a result of Naxalism, agrarian crisis and displacement due to mining and other development projects besides, a host of other factors, led to alienation and deprivation of forest dwellers from their land, and resources in Jharkhand. The enactment of Scheduled Tribes and other Traditional Forest Dwellers (Recognition of Rights) Act, 2006 raised hope among the forest dwellers with the objective to bring justice to these people, who have been deprived from their land rights for centuries. A study by Geetanjoy Sahu, Abhilash Toppo & Aindrila Ganguly (*Sahu et. al, 2018*), conducted in 19 villages of Jharkhand (including 06 villages of Godda district (i.e., the survey district of this study), reveals that the most visible symptom of administration ineffectiveness has been appropriation of forests and land, and the increasing expression of public dissatisfaction with sub-divisional and district level Committees' members for not arbitrarily rejecting and not processing the pending claims. It is, therefore, no surprise was there to find continuous protests in several parts of Jharkhand.

A report on baseline survey on livelihood in the villages of Jharkhand (*GKF, 2015*) revealed through qualitative data tools (FGD & DI) that lack of irrigation facility and lack of proper electricity were grossly affected overall agricultural output, and thus, affected the livelihood of its residents. At overall level, 27.5 per cent of the population was not engaged in any activity and thus, a significant proportion of qualified workforce had remained out of the workforce. There was a need to offer

suitable opportunities for gainful employment to those sections of the population in order to improve their livelihood status. One important aspect of the study was to find out the reasons of migration. In a state like Jharkhand, the study of movement of population to different parts of the country helps in understanding the dynamics of the present livelihood avenues in the society. In the tracked area, 29.9 per cent of the households had someone in the family residing outside the village panchayat or region continuously for 15 days or more for work. In the control area, 36.4 per cent of the households had the same proportion of family members residing out of the area of village panchayat.

In a village study (*Kumar, 2014*) of 'Hosapiri' (Ranchi, Jharkhand), it was revealed that economic status of the people of village was based on agriculture and its allied activities. But, because of the low fertility of soil and, lack of irrigation facilities, agriculture in the village lags behind. Consequently, villagers earned a large proportion of their income by growing and selling vegetables. In some of the households, female also played a significant role in earning livelihood by making mats and selling handiya, i.e., a local beer.

Chitrangada Choudhury (*Choudhury, 2018*) wrote in his article that land records in Jharkhand have not been updated since 1932. Documents around the project, including the Social Impact Assessment (SIA) Report, seem to be an unreliable

guide. Perhaps the most serious impact of the Jharkhand government's use of the Land Acquisition, Rehabilitation and Resettlement (LARR) Act, which declares a private project, as public purpose, where it has to secure informal consent of 80 per cent of the landholders. Despite that, the acquisitions by Adani's Power Project in the surveyed district i.e., Godda (Jharkhand) has impacted 841 families. Out of them number of dalit and adivasi families were 130 (15%). This is how the dalit and adivasi families are losing their cultivable lands. This vulnerability has become a reality for many in Godda district.

The village survey, has thus, attempted to capture various phenomenon associated with rural change, and to understand, how rural transformation is taking place in a tribal village (Bargachha Hariyari, Godda, Jharkhand). Apart from the village study, it is important, as it assesses socio-economic status of the households and overall progress and development status of the village, at a particular point of time i.e., 2019-20.

#### **1.4 Scheme of the Chapters**

Chapter-I provides introduction to the study. Besides, stating background of village studies, need & scope of the present study, objectives, historical profile of the village etc. have also been encompassed. It also presents review of earlier survey of Jharkhand state itself. Chapter - II discusses methodology and analytical tools along with limitations of the study.

An overview of the study village has been depicted in Chapter - III. Chapter - IV dwells on social dynamics of the surveyed village. Economic system has been discussed in Chapter - V. Chapter - VI focuses on ecology, vulnerability and

sustainability issues. Policy and governance related inputs have been discussed in Chapter - VII. The last Chapter presents summary and policy recommendations.

### **Group Discussion**



### **Interaction in the Village**



## CHAPTER – II

### METHODOLOGY

#### 2.1 Definitions and Concepts

**Village:** A village is a clustered human settlement or community, larger than a hamlet, but smaller than a town, with a population typically ranging from a few hundred to a few thousand. It is often located in rural areas and is normally permanent with fixed dwellings.

**Gram Panchayat (Village Council) :** Gram Panchayat (GP) is a basic village governing institute in Indian villages. It is a democratic structure at the grass root levels in India. It is a political institute, acting as cabinet of the village. The Gram Sabha works as the general body of GP. The members of GP are elected by Gram Sabha.

**Household:** A household consists of one or several persons, who live in the same dwelling and share meals. It may also consist of a single family or another group of people. The household is the basic unit of analysis in many social, microeconomic and government models, and is important to economics and inheritance.

**Farmer:** A tiller who cultivates his own land mainly with hired labourers.

**Cultivator :** One who cultivates land mainly owned by him/her (sometimes land taken on lease).

**Agricultural Labourer :** One who cultivates others land either for wages or customary payment.

**Net Sown Area (NSA):** Net sown area is the area sown with crops, but is counted only once in a year.

**Gross Cropped Area (GCA):** GCA represents the total area sown once and/or more than once in a particular year i.e., the area is counted as many times as there are sowings in a year.

**Reference Period:** It means the period to which survey data refers. In case of this study, the reference period was the year 2018-19.

**Operational Holdings:** An operational holding includes all land, which is wholly or partly used for agricultural production, and is operated as one technical unit by one person alone irrespective of title, legal status, size or location. The technical unit is that, which is under the same management and has the same means of production, such as labour force, machinery and animals.

**Land Holdings:** As per the Department of Agriculture, Co-operation & Farmers Welfare (Agriculture Census, 2015-16), Government of India, the size of land holding has been classified into following five categories:

SN	Type	Particulars
1.	Marginal	< 1 hectare (<2.471 acres)
2.	Small	1-2 hectares (2.471-4.942 acres)
3.	Semi - Medium	2-4 hectares (4.942-9.884 acres)
4.	Medium	4-10 hectares (9.884-24.71 acres)
5.	Large	10 & above hectares (24.71 acres & above)

**Joint Family:** An extended family, typically consisting of three or more generations and their spouses, living together as a single household.

**Nuclear/Unitary Family:** A nuclear family, elementary family or conjugal family is a family group consisting of parents and their children (one or more).

**Primary Occupation:** It broadly refers to the kind of works; a person does pay most of the time. More specifically, the term is used to describe the occupation corresponding with a person's primary job.

**Secondary Occupation:** It refers to the occupation, for which additional tasks are performed along with the primary source of occupation. It includes private business, performing assignments and others.

**Livelihood:** A person's livelihood refers to their means of securing basic necessities, such as, food, water, shelter and clothing of life. It is defined as a set of activities essential to everyday life that are conducted over one's life span.

**Household Income:** It includes current income of all members of the household from all sources. It consists of farm, off-farm and non-farm incomes.

**Food Security:** Food security is defined as the means needed by all people, at all times with have physical, social and economic access to sufficient, safe and nutritious food that meets their food preferences and dietary needs for an active and healthy life.

**Migration:** Migration involves the movement of people from one place to another with intentions of settling, permanently or temporarily, at a new location.

**Cropping Intensity:** It refers to raising of a number of crops from the same field during one agricultural year. In formula terms, it may be presented as  $\text{Cropping Intensity} = \frac{\text{GCA}}{\text{NSA}} \times 100$ .

## 2.2 Data Base

Data base of the present survey consisted of both primary and secondary. Secondary data and information were gathered from District Census Handbook (DCH) of Godda District (Census, 2011), Poreyahat block office, Panchayat Office of the surveyed village, Economic Survey of Jharkhand (GoJ), different government institutions of the village Panchayat area apart from published and unpublished paper, documents etc. Persons and functionaries like Pradhan, Mukhia, Sarpanch, Anganwadi workers and old citizens across the tolas of the surveyed village were consulted to elicit desired information and know the functions and functioning of

different social and economic institutions in the area. A local investigator was also deployed to procure different types of information and data along with administration of household schedule (*Appendix- I*). Apart from personal contact with the Panchayat's personnel, group discussions were also organized with the villagers to capture their views and options in sequential mode.

## **2.3 Sampling Design**

### **2.3.1 Criteria for Selection of the Village**

Earlier all AERCs/Units used to conduct periodic village studies to ascertain their socio-economic conditions and changes in the same over the period of time. This practice was later discontinued. But it will be interesting to look at the village surveys with a view to understand the changing nature of villages and rural India. Accordingly, the AER Division of the MoA & FW, GoI felt the need of such periodic village studies, communicated vide its letter dated 05<sup>th</sup> December, 2018 that each AER Centre/Unit will identify one such abandoned village (a village which was studied earlier) for resurvey during the work-plan year 2019-20. Subsequently this centre informed the Ministry and the Co-ordinating Centre (i.e., Visva-Bharati, Santiniketan) that before the establishment of this Centre in 1996, a study on Santal Rural Economy--- A study based on village survey in Santhal Parganas, was undertaken, which got published in March, 1973 by AERC, Visva-Bharati, Santiniketan. That study had covered 05 purposively

selected villages including Hariyari in Poreyahat block of Godda District in Jharkhand, which over the time had been divided three villages, and out of these, Bargachha Hariyari village got the status of Panchayat village in erstwhile Bihar. Status of this village remained the same even after formation of Jharkhand state in 2000 under Jharkhand Panchayat Raj Act, 2001. This was submitted in village survey study workshop held at Visva-Bharati, Santiniketan (WB) during 29-30 September 2019, where the selection of Bargachha Hariyari village for the survey was confirmed. Accordingly, the village Bargachha Hariyari was finally taken-up for pilot study.

### **2.3.2 Criteria for Selection of Households**

As per common guidelines for selection of households, for villages with number of households less than 400, Census Method was suggested. In case of villages with number of households 400 and more, proportionate sampling was to be made. The selected village for the present study is of moderate size and consisted of 481 households (Census, 2011). Out of it, Scheduled Tribe constituted for about 57 per cent followed by others (35%) and Scheduled Caste 6 per cent. There were 8 tolas in the village, and out of these, 5 tolas were inhabited Scheduled Tribes and 3 of mixed population. After tola wise by enumeration of households, a total of 300 households were selected representing all social groups and tolas for in-depth study. The sample constituted 238 scheduled tribes (79.4%), 46 other backward castes

(15.3%) and 16 scheduled castes (5.3%), and was drawn on the basis of proportionate availability of households during the course of survey period. In this way, the number of sample households is about two-thirds of the total households of the village.

## **2.4 Survey Approach**

### **2.4.1 For Village Level Information**

Village level information were collected from village panchayat functionaries including Mukhiya, Village Pradhan, senior teachers residing in the village and senior citizens in regards to developmental issues, historical perspectives and social & cultural activities as well. Social volunteers and Anganwadi workers were also consulted for other driving forces of changes, occurred in the village.

### **2.4.2 For Group Level Information**

Group level information was collected from each tola of the village. The information was mainly collected through focused group discussions (FGDs) regarding dynamics of rural change with the help of 3 sets of duly structured schedule. First set was focused on shocks during the last 5 years, i.e., during 2013-14 to 2018-19, degree of hardships faced by the villagers along with coping and adaptation strategies, whereas the second set consisted of issues like; groundwater, application of fertilizers and soil health cards, and driving forces for changes on various accounts in the village. The third set was optional for BMI and ASER test. But this study has covered

ASER test only on 100 children constituting 53 boys (53%) and 47 girls (47%).

### **2.4.3 For Household Level Information**

The household level information was collected with the help of two duly structured schedules. Household Schedule - I that consisted of general information, occupations/livelihood, family details, employment pattern, socio-economic status, ownership of assets, income and expenditure details, food security, issues, savings and borrowings pattern, governance and policy issues and perceptions about the changes. Under household Schedule - II was administered for farmers/cultivators relating to their crop areas, cropping pattern and crop diversification.

## **2.5 Dimensions Covered**

As the study is a pilot survey in place of re-survey, so it covered social, economic, agrarian, farming, ecological and policy issues in respect of the surveyed village at length and width.

## **2.6 Analytical Tools**

Simple statistical tools, such as; percentage change and percentage share have been used and presented in tabular formats, duly prepared and circulated by the Co-ordinating Centre. Besides, ASER (Annual Status of Education Report) tool kits were also used to test the reading and arithmetic competency of children aged between 5 to 15 years.

## **2.7 Limitations of the Study**

- i. Despite our best efforts, the study is limited to a pilot study only, because the earlier study (1972-73) was a study based on 5 villages of Santal Pargana (Jharkhand) focusing on Santal Rural Economy, that was not designed like the present one. So, comparative analysis of the last survey could not be possible with the present one.
- ii. The village data base was inadequate, which resulted to more reliance on primary survey.
- iii. The village was largely dominated by tribal population, who were, by habit, supposed to be reluctant due to low literacy, indifferent attitudes and by remaining away from development spectrum, so these issues prohibited us in collection of smooth data and information.
- iv. Prolonged Covid - 19 lockdowns in Jharkhand during the survey also hindered frequent desired interactions of the research team with the villagers.

## CHAPTER – III

### AN OVERVIEW OF VILLAGE BARGACHHA HARIYARI

#### 3.1 Village Profile

##### 3.1.1 Geographical and Administrative Location

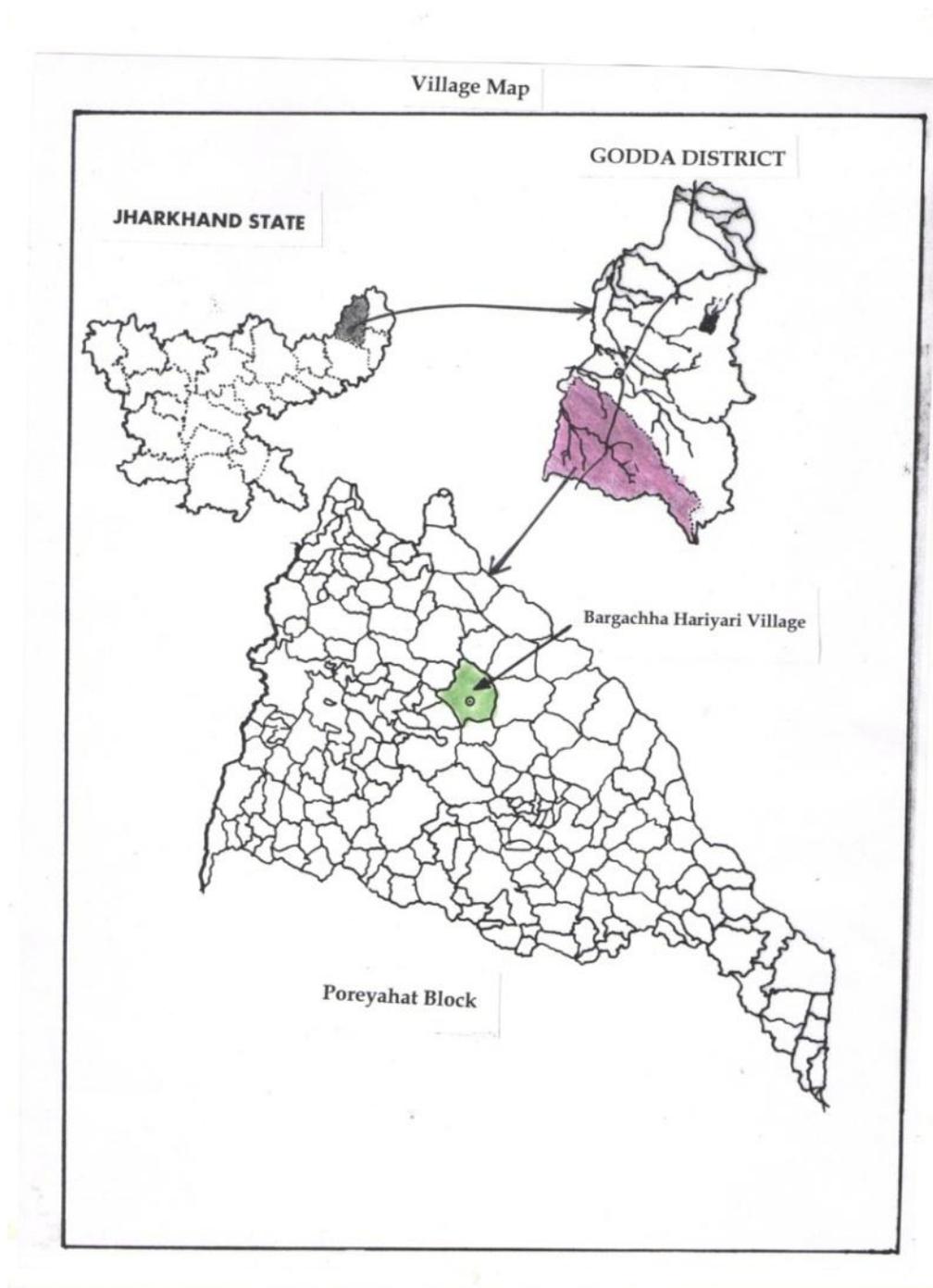
The village is situated in Poreyahat block/tehsil, located in the southern part of Godda district of Santal Pargana Division of Jharkhand state. As is seen from the village location map, Godda district is located in north-western part of Rajmahal highlands of the state. It is surrounded by Bhagalpur district (Bihar) in north, Dumka (Jharkhand) in south, Sahibganj and Pakur districts (Jharkhand)

in the east and Banka (Bihar) in the west. The village lies between 24°35'0" N to 2°0'0" N latitude and 87°5'0" E to 87°30'0"E longitude within northern hemisphere. As per available information, the Human Development Index (HDI) of Godda district was the lowest (0.258) across the districts in Jharkhand (*see Kumar, 2018*). Total geographical area of the village is 7.19 square kilometers. Table 3.1 presents basic geographical and administrative information about the village.

**Table 3.1 : An overview of the village Bargachha Hariyari**

Particulars	In 2018
Location Code (as per 2011 Census)	357462
Geographical area of the village (in hect./sq.km)	719.37/7.1937
Total Households	481
Total Population	2189
Post Office and Pin code	1 & 814153
Gram-Panchayat	Baragachha Hariyari
Assembly Constituency	Poreya Hat (No. 16)
Parliament Constituency	Godda (No. 05)
Block/Tehsil	Poreya hat
District	Godda
State	Jharkhand
Nearest Primary School(with distance)	1 (0.25 km)
Nearest Secondary/Higher Secondary School (with distance)	1 (< 5 km)
Nearest College (with distance)	Poreyahat (5 km), Suraj Mandal Inter College
Nearest Health Centre/Hospital (with distance)	1 (0.00 km)
Nearest City or Town (with distance)	Godda (15 km)
Nearest Railway Station (with distance)	Poreyahat (6 kms)
Nearest Airport (with distance)	Ranchi (285 km)

Source: Kumar, Shivo (2018). *Human Development Index: Encapsulation of Indicators of Well-being of Jharkhand, Jharkhand Journal of Development and Management Studies, XISS-Ranchi, Vol. 16, No. 3, Sept., pp 7808-7809.*



### 3.1.2 Climate and Rainfall

The village falls in the rain shadow of Santal Pargana Plateau. Average annual precipitation is 850 mm and the average number of rainy days is 59. Even this meager precipitation is erratic, which is coupled with inter spell factors in the area to suffer from drought. The climate is

warm and temperate. The summers have a good deal of rainfall, while the winters experience very little rainfalls. The average annual temperature is 25-30° Celsius, but during summer, hot conditions develop and temperature rises up to 43° Celsius.

### 3.1.3 Soil

Soil of the village is mostly acidic, red and yellow; light textured and highly permeable with poor water holding capacity. The village is situated in Poreyahat block, where more than 95 per cent of the total geographical area is formed of the same soil features. During the year 2018, KVK, Godda had tested 5054 number of soil samples collected across the blocks of the district. Findings of the block under which the surveyed village lies, revealed that 58 per cent of the samples were acidic (pH<6.49), 32 per cent neutral (pH 6.5-7.49) and 10 per cent alkali (pH >7.5). About 48 per cent of soils did contain low organic carbon content, 52 per cent soils had medium content of potash, 34 per cent low in nitrogen content, sulphur deficiency (36%), zinc deficiency (14%) etc. In the surveyed region, most of the micro nutrients were sufficient, whereas macro nutrients were in deficit quantum.

### 3.1.4 Communication : Telecommunication

As per 2011 Census, the block under which the surveyed village lies, only 17.26 per cent villages did have postal facility, and 45.18 per cent had telephone facility. As regards the surveyed village, there was a functional sub-post office, which is inactive at the time of survey. At present, postal facility for villagers is at the distance of 5 to 10 kilometers. Apart from postal facility, telephone (landline) facility were also at a distance of 10 kilometers

plus. However, mobile network facility in the village was reported to be available. Private courier services, Common Service Centre (CSC), Internet Cafes etc. were at the district headquarters, which is at a distance of about 15 kilometers from the village. So, the communication facilities are poor in the village.

### 3.1.5 Transportation

The village is well connected mainly by roadways. A spur road of National Highway -133 passes through the village, which is well connected by road with other important cities of Jharkhand. The nearest railway station is at a distance of 5 kms i.e., Poreyahat block headquarters under the Eastern Railway Zone. Rail links to the district headquarters (Godda) is under progress, which is likely to be connected/commenced during this year itself i.e., 2021. Almost all tolas/hamlets of the village are connected by link roads to NH-133. Though there link roads are mostly kutcha but due to undulated terrain, these link roads are motorable in all weathers. Thus, the means of transportation in the village is moderately good.

### 3.1.6 Natural Resources

Forest cover of the district (13.51%) is low compared to the state average (29.2%). As regards forest coverage in the surveyed village is concerned, there is neither very dense nor moderately dense forest. Less than 5 per cent of the total geographical

area of the village has some kind of open forest and scrubs. Similarly, there are no rivers either originating from the village or passing through the village or through the nearby areas of the village. Hydrologically, the village and block area as well, are underlain by Granite-gneiss of Achaean age forming the basement. These occur as large batholiths are present there and are intruded by basic rocks. Groundwater occurs mostly under pheratic condition within shallow aquifers, and locally under semi-confined and confined conditions in case of deeper aquifers. In fact, the groundwater is restricted to weathered and fractured zone, down to 150, metres (CGWB, 2013). Besides, it is interesting to mention here that in Pahadia tola of the surveyed village, an unchecked afflux of groundwater has been going for 24 hours

continuously since 2005, when exercise for a deep boring for providing drinking water to the local inhabitants was being undertaken. Villagers reported that the water outflow had been taking place naturally in a water scarce village that may be due to natural linking with the groundwater source.

The flora and fauna in the village are moderately available. Among fruit bearing trees; Jack tree, Date palm, Imli, Custard apple and Bair (*Ziziphus Mawritina*) tree are most common. Trees of Awla, Guava, Papaya etc. are also available across the village. Mahua (*Basis latitolia*), Shisham (*Dahbergia sisson*), Sal (*Shorearobusta*), Palash (*Butea monesperma*) and Sahjan (*Moringa aneiphera*) are used as timber trees. Some medicinal plants, such as; Tulsi (*Ocimum tenuiflorum*) is one of such plants easily available in the village.

### Open Forest & Scrubs



### 3.1.7 Demographic Profile

#### 3.1.7.1 People

Demographic and occupational profile some of the important aspects for understanding people of the village. Data presented in table 3.2 showed these figures based on Census - 2011 and the current survey conducted during 2019-20

with 300 selected households. As per Census - 2011, the village had 481 households and the total population was 2189 persons (average size of Hhs was 4.55 persons). Out of the total population, children comprised 12.13 per cent. It was observed that the share of females was 49.70 per cent in total population. As regards social groups, scheduled tribes

were 59.07 per cent followed by other (34.10%) and scheduled castes (6.03%). Total workers and non-workers were 43.01 per cent and 56.99 per cent respectively. Of the total workers, main workers were 62.68 per cent and marginal

workers 37.32 per cent. Out of the total workers, cultivators were 56.65 per cent followed by agricultural labourers (43.35%). Literacy rate and sex ratio were 54.14 per cent and 988 females per 1000 males.

**Table 3.2 : Demographic profile of the village Bargachha Hariyari**

Particulars	As per Census, 2011			As per Sample Survey : 2019-20		
	Male	Female	Total	Male	female	Total
Number of households	NA	NA	481	295	5	300
Total Population	1101 (50.30)	1088 (49.70)	2189 (100.00)	777 (49.36)	797 (50.64)	1574 (100.00)
Adult	NA	NA	NA	453	471	924 (58.70)
Child (0-17)	144 (13.08)	132 (12.13)	276 (12.61)	324	326	650 (41.30)
Scheduled Caste	71 (6.45)	61 (5.61)	132 (6.03)	61	48	109 (6.93)
Scheduled Tribe	637 (57.86)	656 (60.29)	1293 (59.07)	598	642	1240 (78.78)
Total Workers	577 (52.41)	468 (43.01)	1045 (47.74)	437 (56.25)	395 (49.56)	832 (52.86)
Main Worker	449	206	655 (62.68)	220	238	458 (55.05)
Marginal Worker	128	262	390 (37.32)	217	157	374 (44.95)
Cultivator	398	194	592 (56.65)	285	110	395 (47.48)
Agricultural Labourer	179	274	453 (43.35)	137	281	418 (50.24)
Workers in household industries	NA	NA	NA	10	01	11 (1.32)
Other workers	NA	NA	NA	05	03	8 (0.96)
Non worker	524 (47.59)	620 (56.99)	1144 (52.27)	340 (43.76)	402 (50.44)	742 (47.16)
Literate population	734 (66.67)	451 (41.45)	1185 (54.14)	558 (71.55)	368 (46.18)	924 (58.71)
Illiterate population	367 (33.33)	637 (58.55)	1004 (45.87)	221 (28.45)	429 (53.83)	650 (41.30)
Literacy (%)	76.70	47.18	54.14	71.55	46.18	58.71
Sex Ratio	---	---	988	---	---	1025

*NB: In parenthesis percentage to respective total is shown.*

As per 2019-20 survey data of 300 households, total population was 1574 (the average size of Hhs was 5.24 persons), constituting 50.64 per cent females and 49.36 per cent males. Out of the total population, children constituted 9.15 per cent. The population of scheduled tribes out of the total was 78.78 per cent followed by other backward castes (14.29%) and scheduled castes (6.93%). The share of total workers in the population was 52.86 per cent and out of it, main workers were 55.05 per cent. Occupationally, the percentage of agricultural labour was 50.24 per cent followed by cultivators (47.48%), workers in Hh industries (1.32%) and other workers (0.96%). Literacy rate among the sample households was 51.86 per cent and sex ratio 1025 females per 1000 males.

Above details showed decline in work force participation rate, share of cultivator and increase in agricultural labourer as per 2019-20 surveyed data than as revealed in 2011 census data.

### **3.1.7.2 Religion**

As per the primary survey, 47.20 per cent belonged to Christian religion, 31.58 per cent Sarna-Dharm (by ST) and remaining ones were Hindu. Those who were Christians and followed Sarna-Dharm were scheduled tribes (78.78%). In fact, Sarna-Dharm is sacred groves in the religious traditions meant for 'santal tribe' in Jharkhand, besides other tribal regions of the country.

### **3.1.7.3 Village Settlement Pattern**

The settlement pattern of the village denotes habitation pattern of the population. Village habitation is divided in 8 tolas/hamlets and lies on both sides of NH-133 that passed through the village. In the west of NH-133, 5 tolas and part of 2 other tolas are located and the remaining part of 2 tolas and 1 tola is east of NH-133. Rassi tola (125 Hhs) lies in east of NH and Suri-Cum-Paharia tola (135 Hhs) in west of NH, were the largest ones. Besides, Janum tola (31 Hhs) and Sadak Tola (20 Hhs) are located in both sides of NH. Manjhi (34 Hhs), Shirma (13 Hhs), Bhuiyan (53 Hhs), Khayar (20 Hhs) tolas were in the western side of the NH. This way, all the 481 households of the village are settled on both sides of the NH, largely in western part of NH and concentrated as per their social compositions.

### **3.1.7.4 Literacy**

As per Census, 2011, overall literacy rate in the village was 54.14 per cent, which was bit lower to district of Godda (55.01%), and much lower than the state's average (67.63%). Among males, literacy rate in the village was 66.67 per cent (Godda District: 66.74% and Jharkhand State: 78.45%), whereas that in case of females, it was 41.55 per cent (Godda District : 42.47 % and Jharkhand State : 56.21%).

### **3.1.7.5 Poverty**

As per the Public distribution shop data (updated on 31/03/2021), a total of 597 ration cards have been issued in the surveyed village. Out of it, 365 ration cards (61.14%) are issued to BPL families, 174 (29.15%) to APL families and 58 (9.71%) to eligible families under Antyodaya Anna Yojana (AAY).

## **3.2 Livelihood / Employment and Migration Status**

As discussed earlier, out of the total population of the village, about 63 per cent of workers described their work as main works i.e., earning for more than six months, while 37 per cent were employed in marginal activities, providing livelihood for less than six months. Of the total workers, about 57 per cent were cultivators, who largely operated their own fields. About 43 per cent earned their livelihoods from agricultural wage labour. Besides agricultural activities, petty traders were also found whose livelihoods were anyhow met by the business. There were few, who got their livelihoods from the service sector, mostly in private enterprises. There are no industries in the village. Moreover, the dependence of villagers on agriculture has substantially declined over the years, mainly due to lack of assured irrigation facilities and

soaring input prices. Most of the agricultural labourers (male+female) used to migrate in nearby areas of West Bengal during sowing/transplantation and harvesting periods (approx. for 3 months). About 25-30 were engaged outside the village in construction works. A few (about 5-10 persons) have migrated to Pune, Delhi, Gujarat and Kerala to earn their livelihoods from construction work, besides some brick making, tractor and auto driving in nearby areas. This clearly indicates that occupational diversification is taking place in the village with integration to nearby urban areas and even outside the state.

## **3.3 Agricultural Status of the Village**

### **3.3.1 Land Utilization Pattern**

Table 3.3 presents information about land use pattern of the village as a whole in 2020, collected from the respective block office. Table shows that out of the total geographical area (1777.63 acres), cultivable area is 444.41 acres (25 % of the TGA), and other described area taken together comes to 144.28 acres (16.23 % of TGA), while the remaining area (69.8% of TGA) was un-described, which could be the uncultivated area. In fact, accurate data as per the standard land classification could not be available to us.

**Table 3.3 : Land Utilization Pattern in Bargachha Hariyari Village**

<b>SN</b>	<b>Particulars</b>	<b>Area in Acre (In %)</b>
1.	Total Geographical Area	1777.63 (100.00)
2.	Path Area	18.89 (1.06)
3.	River, Drains, Land holes etc.	7.79 (0.44)
4.	Hill & Stone Area (full of stones)	34.37 (1.93)
5.	Moisture Land etc.	50.24 (2.83)
6.	Pasture and Grazing Land	26.56 (1.49)
7.	Misc. Trees & Palash Forest	6.43 (0.36)
8.	Agriculture/Culturable Land	444.41 (25.00)
9.	Irrigated & Unirrigated Area in %	
	i. Irrigated Area	133.00 (30.00)
	ii. Un-irrigated Area	311.00 (70.00)

*Source: Poreyahat Block Office, dated 03/03/2020*

Further table 3.4 shows the survey data. These data are not comparable with secondary data, as presented in table 3.3, because table 3.4 is prepared on the basis of primary survey of 300 households and discussions with the local officials. It is observed from table 3.4 that the total geographical area with the respondents

was 533.29 acres and, out of it, 39.96 per cent was agricultural land. It is also observed that the percentage of net sown area was merely 27.97 (149.18 acres). The gross cropped area was 180.67 acres, indicating the cropping intensity of 121.10 per cent

**Table 3.4 : Land use pattern in village Bargachha Hariyari***(Unit: in acres)*

<b>Particulars</b>	<b>In 2019-20 (during current survey)</b>
Area covered by the sample households	533.29
Agricultural/ Cultivable Land	213.11
Net Sown Area	149.18
Uncultivated area	320.18
Barren Land	134.37
Forest Area	--
Pasture and Grazing Land	26.56
Cultivable Waste Land	26.68
Misc. Trees & Groves	6.43
Current Fallow	75.90
Others	50.24
Gross Cropped Area	180.67
Net Irrigated Area	71.31
Gross Irrigated Area	90.00
% area under irrigation	47.80
Cropping Intensity	121.10
Irrigation Intensity	126.20
% of agricultural land in geographical area	39.96
% of current fallow in geographical area	14.23
Main sources of irrigation	Only Wells

*Source: Primary Survey*

On the basis of above analysis, it is noticed that net sown area in the village was less than 30 per cent of the total geographical area, and remaining areas were either barren, fallow, pasture and unspecified because of undulated terrains.

### **3.3.2 Irrigation**

It is observed from the table 3.3 that irrigated area was about 33 per cent of the

total agricultural lands. It means about 67 per cent area is rainfed, which depends upon the monsoon rain only. Further, as per the survey data, presented in table 3.4, it is noticed that net irrigated area corresponding to the net sown area was around 48 per cent and irrigation intensity was measured at 126.20 per cent. As regards the source of irrigation, wells are prominent, besides from water locked area, which are usually drowned during the

monsoon season. In all the 8 tolas, 2-3 dug wells were found, from which irrigation was being made through half-hp-pumping sets. Though, the number of pumping sets was 5-6 only. Moreover, there was no public source of water satisfying irrigational needs of the agricultural lands.

### 3.3.3 Cropping Pattern

As per discussions held with the local officials and villagers, agricultural economy of the village is very much tilted in favour of subsistence sector, since the acreage under food grains is more than 95 per cent, the share of cereals is around 80 to 85 per cent, pulses around 13 to 15 per cent and oilseeds 2 to 3 per cent. During kharif season, paddy, arhar/tur and kulthi (horse gram) were the main food grains grown in the village. Wheat, oilseeds, pulses (mainly lentil) etc were grown in rabi season. Potato and mustard were also grown during rabi season as commercial crops in the village.

#### Threshing of Paddy



### 3.3.4 Livestock Resources

In tribal economy, the role of livestock rearing is paramount to support

households' income. In the village, goat rearing was high followed by cattle, pigs, buffalo, sheep and others (pigeon, duck, hens etc.). As bullocks were least used for tillage, so the number of bullocks were found less. Cows were mainly of indigenous breed and reared largely to meet consumption needs of milk. Besides, goats and sheeps were also indigenous. Almost all the households were found to have reared some kind of livestock.

### 3.3.5 Land Tenure System and Land Reform Measures

The village lies under Santal Pargana Division of Jharkhand State, where 'Santal Pargana Tenancy Act' enacted in 1876, prevailed. The Act prohibits sale of Advasi land to non-advasi in Santal pargana region along Jharkhand's border with Bengal. This Act had been passed following the Santhal rebellion in 1855 against feudal land tenure systems of the colonial government. The laws amended earlier in 1990s to permit use of land for public sector mining and industries, but agricultural land was not yet permitted to be used for non-agricultural purposes. Santal Pargans Tenancy Act, 1949; (last updated in December, 2019) is an act to amend and supplement certain laws relating to landlord and tenant in the Santal Parganas. This new amendment may benefit a few high income group Adivasis, but it may lead to agree scale alienation of land from Adivasi farmers. Presently, no land reform measures are being taken up in the area. However, there is a formal practice of leasing-out and leasing-in of agricultural

land in the village, mainly by those, who used to go outside for livelihoods and of course, having owned very small holdings.

### 3.4 Development Institutions & Infrastructure

Information relating to development institutions and infrastructure in the village shows availability of basic infrastructure during the survey year 2019-20. It reveals that the village had only one primary school and for secondary level education, the facility was at the block headquarters' level (5 kms away from the village) and higher education (colleges etc) were located at the district headquarters (15 kms away from the village). As regards health

infrastructure, there is only a PHC (Primary Health Centre), which lacks basic staff and facilities. A rural bank branch and Post Offices were there, but Post-Office had become non-functional. Two public distribution shops were reported to be functional. There were three ICDS centres for nutrition of children and women. Veterinary facility was at a distance of about 5 kilometres at the block headquarters. Development in terms of main road due to state highways was quite satisfactory, which passed through the village. However, village link roads were not in good condition (table 3.5).

**Table 3.5 : Details of Development and infrastructures in and near Village Bargachha Hariyari during 2019-20**

SN	Institutions and Infrastructure	Available in Village		If no, then place of availability (Name of place)	Distance in kms
		Yes/No	Number		
1.	Primary School	Yes	01	---	---
2.	Higher Secondary School	No	---	Poreyahat	05
3.	Primary Health Centre	Yes	01	---	05
4.	Private/Medical Practices	No	---	Poreyahat	05
5.	Veterinary Dispensary	No	---	Poreyahat	05
6.	Degree College	No	---	Godda	15
7.	Govt. Training Centres (ITI & Polytechnic etc.)	No	---	---	---
8.	SHGs or NGOs (Nos)	Yes	NA	---	---
9.	Nearest Motorable Road	Yes	SH-1	---	---
10.	Post Office	Yes	1 (Non-functional)	---	---
11.	Commercial Banks/Financial Institutions	Yes	01	---	---
12.	Co-operative Society	No	---	Poreyahat	05
13.	Public distribution system shop (PDS)	Yes	02	---	---
14.	Integrated Child Development Scheme ICDS)	Yes	03	---	---
15.	ASHA (Accredited Social Health Activist)	Yes	03	---	---

Source: Primary Survey.

### Primary Health Centre



### 3.5 Village Infrastructure

Information relating to other village infrastructures shows basic infrastructure like; village market/hat, drinking water and electricity. Village hats were within a radius of 2 kms at nearby village, namely Bhatonda, which was operated on bi-weekly basis, i.e., on Monday & Friday. However, on Tuesday & Friday, a big rural hat was also operated at block headquarters (5 kilometres from the village). Moreover, the main source of drinking water was hand pumps, numbers of which were 1 or 2 in each tolas of the village, depending on its sizes. Electricity connection was found in almost all households, and the supply position was quite satisfactory (14-16 hours in a day).

### 3.6 Cultural Profile of the Village

Like any other village, Bargachha Hariyari village has its traditional and cultural life. 'Sohrai (Bandna)' and Baha are two main festivals for scheduled tribe population. Sohrai is celebrated for 3 weeks during

December-January every year. In addition, as having nearly 50 per cent of the total population belong to non-tribe class, so Holi, Dusshera and Diwali are also celebrated.

Besides, there is a 'Jahersthan;' a tribals' temple or place of worship for people of scheduled tribe community. Goddess Durga and Kali temples are also there, which are mainly worshipped by non-tribals' Santal Christians visit Church, which is at a distance of 5 kilometres in Poreyahat. Scheduled tribe women wear/Panchi (Half-saree) and Salwar suit, saree, dhoti-kurta, suiting-shirting, etc. are more commonly worn by non-tribal population.

As regards languages spoken, tribal population spoke in Santali and Kortha (a local dialect of ST population) Apart from this, Bhojpuri is also spoken by businessmen (Bhagat) community. A few people also spoke Bangla language as a result of being in proximity with Bengal. Hindi is a well known language, which are

commonly spoken almost all people of the village.

Rice is largely used by tribal population, besides Rice-Dal, Sabji and Roti are the common foods, which are taken to be granted as food habits of the village. A Large section of population was reported to be non-vegetarian, irrespective of castes, creed and culture.

No untouchability among people belonging to different castes and creed did prevail there. 'Bonga ritual' is celebrated by tribal women, when child birth taken place.

Dowry system was not there, particularly among the tribals. However, some dowry cases were reported among the non-tribals.

### **3.7 Others**

Sanitation and housing were the major issues, which could not be seriously taken up by the development functionaries. Practice of open defecation was (till the time of survey), prevalent in the village. Though a large number of households had temporarily constructed toilets at their own levels, and sometimes, by own labour and expenses. A few (less than 30-40%) used pucca toilets.

In recent times, many tribal and non-tribal households were sanctioned pucca houses under 'PM Aawas Yojana,' which were largely found under construction stage.

The specific feature of the village is to live in togetherness and thus, there was almost

no conflict or crime in the village. Since the tribals are peace-loving and indifferent towards matters of others, so quiet and calm like situation prevailed there, despite open sale of indigenous liquor at nooks and corners of the village.

### **3.8 Concluding Remarks**

Information relating to the village, as revealed from the Census (2011) data, the population of the village is 2189, distributed across 481 households and 8 tolas. Except the road infrastructure, particularly the main road (NH-133) which passes through the village, other infrastructural facilities were at the low ebb. As per Census, 2011 majority of the people were belonged to scheduled tribes (59.07%). Of the total workers (47.74% of the total population), cultivators and agricultural labourers together constitute 100 per cent. As according to current survey, the share of total workers increased from about 48 per cent to 53 per cent and cultivators and agricultural labourers together constituted for about 97 per cent. Besides agricultural activities, petty traders were also found, livelihoods of who were anyhow met by the businesses. Survey reveals that of the TGA, only 25 per cent was under agriculture, and of it, only 30 per cent was irrigated, mainly by dug wells. Agricultural life of the village got tilted in favour of subsistence economy and cultural life had a traditional mix of tribals and Hinduism.

## CHAPTER – IV

### SOCIAL DYNAMICS

#### 4.1 Introduction

The chapter attempts to understand social dynamics of the surveyed village Bargachha Hariyari. Purpose of this chapter is to analyze the responses of the sample households through field survey and understand the demographic and social aspects of the village, which are separately discussed hereunder.

#### 4.2 Population and Households

During the survey conducted in 2019-20, the number of surveyed households was 300, which formed 62.37 per cent of the total households (481 Hhs) in the village as per the Census, 2011. The table 4.1 shows demographic profile of the surveyed village. It is noted that of the sample households, the total population was 1574 persons, indicating an average of 5.25

persons per sample households. Out of the population, 58.70 per cent were adults and remaining 41.30 per cent children below the age of 18 years. Almost 78.78 per cent of the households belonged to scheduled tribes followed by other backward castes (14.29%) and scheduled castes (6.93%). Total workers were 832 persons (52.86% of the total population) and non-workers (47.14%). Of the total workers, cultivators were 62.79 per cent followed by agricultural labourers (32.65%), workers engaged in household industries (2.74%) and other workers (1.82%). The literacy rates were 58.70 per cent; however, it was 71.55 per cent for male and 46.17 per cent for female. Sex wise features reveal that of the total population, males were 49.36 per cent. Males also dominated in the activities of total workers (52.52%), cultivators (64.72%), agricultural labourers (71.33%) etc.

**Table 4.1 : Demographic Profile of the Village Bargachha Hariyari 2019-20**  
(In %)

Particulars	In 2019 (during current survey)		
	Total	Male	Female
Number of households	300	295	05
Total Population	1574 (100)	777 (49.36)	797 (50.64)
Adult	924 (58.70)	453 (28.78)	471 (29.92)
Child (0-17)	650 (41.30)	324 (20.58)	326 (20.72)
Scheduled Castes	109 (6.93)	61 (3.88)	48 (3.05)
Scheduled Tribes	1240 (78.78)	599 (30.06)	641 (40.72)
Others/OBCs	225 (14.29)	117 (7.43)	108 (6.86)
Total Workers	832 (52.86)	437 (52.52)	395 (47.48)
Main Workers	438 (27.83)	254 (53.00)	184 (42.00)
Marginal Workers	394 (25.03)	183 (46.45)	211 (53.55)
Cultivators	275 (62.79)	178 (64.72)	97 (35.27)
Agricultural Labourers	143 (32.65)	102 (71.33)	41 (28.67)
Workers in Hh industries	12 (2.74)	10 (83.33)	02 (16.67)
Other workers	08 (1.82)	05 (62.50)	03 (37.50)
Non workers	742 (47.14)	340 (43.76)	402 (50.44)
Literate population	924 (58.70)	556 (71.55)	368 (46.17)
Illiterate population	650 (41.30)	221 (28.45)	429 (53.83)
Literacy (%)	58.70	71.55	46.17

Source: Primary Survey.

**Social Composition**

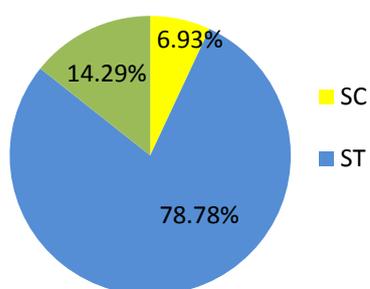


Figure: 1

**Occupational Composition**

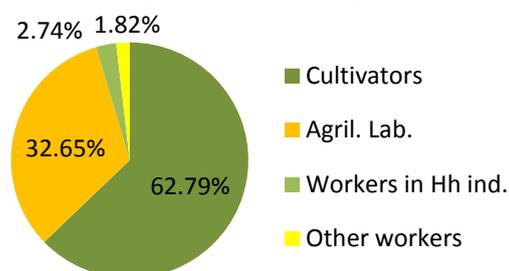


Figure: 2

### 4.3 Sex Composition and Age Distribution

Sex and age distribution of the population (1574 persons) have been presented in table 4.2. As noted earlier that out of the total population, male constituted 49.36 per cent (777 persons) and female 50.64 per cent (797 persons). Of the males, a large proportion i.e., 38.35 per cent were in the age bracket of

16 to 35 years followed by 35.26 per cent in the age bracket of 36 to 55 years, 14.80 per cent in the age bracket of 56 to 60 years, 5.66 per cent in the age bracket of 6 to 15 years and so on. Almost similar trend was indicated in case of females. The data further indicate that the number of working population, irrespective of sex, was more than 50 per cent.

**Table 4.2 : Age and sex distribution of the population in the village Bargachha Hariyari (In %)**

Age Groups	In 2019		
	Male	Female	Total
0-1	05 (0.65)	03 (0.38)	08 (0.51)
1-5	20 (2.58)	17 (2.13)	37 (2.35)
6-15	44 (5.66)	50 (6.27)	94 (5.97)
16-35	298 (38.35)	325 (40.78)	623 (39.58)
36-55	274 (35.26)	281 (35.26)	555 (35.26)
56 -60	115 (14.80)	102 (12.80)	217 (13.79)
60 and above	21 (2.70)	19 (2.38)	40 (2.54)
<b>Total</b>	<b>777 (100.00)</b>	<b>797 (100.00)</b>	<b>1574 (100.00)</b>

Source: Primary Survey



Figure: 3

**Table 4.3 : Distribution of population by age and marital status in the village Bargachha Hariyari**

(In %)

Age Groups	In 2019 (Marital Status)			
	Married	Unmarried	Widow/er	Divorced & others
0-10	---	64 (11.35)	---	---
11-15	04 (0.40)	71 (12.59)	---	---
16-20	42 (4.25)	267 (47.34)	---	---
21-25	197 (19.94)	103 (18.26)	---	---
26-30	344 (34.82)	32 (5.67)	---	---
31 and above	401 (40.59)	27 (4.79)	19 (100.00)	03 (100.00)
<b>All age groups</b>	988 (100.00)	564 (100.00)	19 (100.00)	03 (100.00)
Male	490 (49.60)	293 (51.95)	05 (26.32)	01 (33.33)
Female	498 (50.40)	271 (48.05)	14 (73.68)	02 (66.67)

Source: Primary Survey

Further in table 4.3, data reveal that of the total population, 988 persons (62.77%) were married, 564 (55.83%) unmarried, 19 (12.07%) widow/er and 3 (0.19%) divorced. Of the married, majority of them was in the age bracket of 31 years and above (40.59%) followed by 34.82 per cent (26 to 30 years), 19.94 per cent (21 to 25 years) and so on. In case of unmarried, majority persons were in the age bracket of 16 to 20 years (47.34%) followed by 21 to 25 years of age bracket (18.26%). Moreover, all widow/er and divorcee were in the age bracket of 31 years and above.

#### **4.4 Caste / Religion wise Distribution**

Relevant data on caste/religion of total population has been depicted in table 4.4, which shows that Christian-STs were in larger proportion i.e, 47.20 per cent followed by Sarna-Dharm-STs (31.58%), which is a traditional religion of Hindu Santals, who worship nature like trees, sun, moon etc; and the worship venue is under trees, popularly known as 'Jahersthan.' The share of other backward castes was 14.29 per cent and scheduled castes 6.93 per cent. This reveals that, Hindu religion dominated in the surveyed village accounting for 52.80 per cent. The overall sex ratio was

estimated at 97.49 per cent. Though, it was higher for scheduled castes (127.09%) and other backward castes (110.28%) and lower for Christian-STs (92.99%) and Sarna-Dharm-STs (93.39%). Average size of

households was 5.25 and the highest i.e., 6.82 household size was found among scheduled castes and the smaller among other backward castes (4.90 per Hh).

**Table 4.4 : Distribution of Population by Caste/Religion**

(In %)

Particulars	In 2019				
	Male	Female	Total	Sex ratio	Average size of households
Christian STs	358 (46.07)	385 (48.30)	743 (47.20)	92.99	5.21
Sarna-Dharm STs	240 (30.89)	257 (32.25)	497 (31.58)	93.39	5.23
OBCs (Hindu)	118 (15.19)	107 (13.43)	225 (14.29)	110.28	4.90
SCs (Hindu)	61 (7.85)	48 (6.02)	109 (6.93)	127.09	6.82
<b>Total</b>	<b>777 (100.00)</b>	<b>797 (100.00)</b>	<b>1574 (100.00)</b>	<b>97.49</b>	<b>5.25</b>

Source: Primary Survey

**Distribution of Population by Caste/Religion**

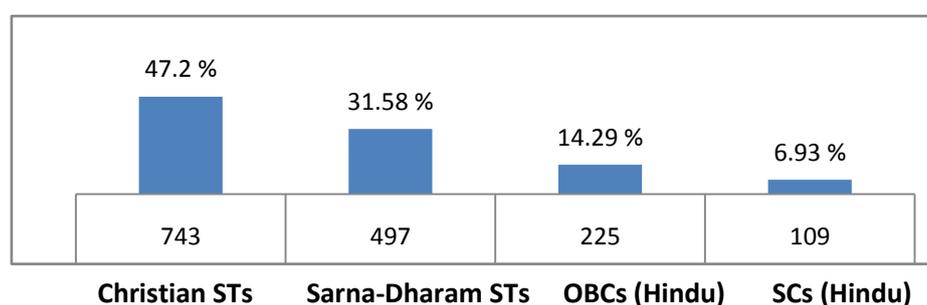


Figure: 4

#### 4.5 Literacy Pattern by Sex

Table 4.5 indicates educational status of the population in the village. Of the total males (777), 43.63 per cent were illiterates and less than half-per cent was hardly able to read

and write. About 22.97 per cent males attained education up to secondary level followed by primary (14.03%), intermediate/higher secondary (10.68%) and less than 7 per cent were graduates and

post-graduates including technical education. Similarly, in case of females, 49.94 per cent were illiterates, 34 per cent attained education up to primary level, 9.16

per cent secondary level, 3.64 per cent up to intermediate/higher secondary level and about 2 per cent were graduates/technical degree holders.

**Table 4.5 : Educational status by Sex**

Educational Status	In 2019			
	No. of male	% of total	No of female	% of total
Illiterate	339	43.63	398	49.94
Able only to read or write	03	0.38	09	1.13
Up to Primary	109	14.03	271	34.00
Up to Secondary	194	24.97	73	9.16
Up to Intermediate	83	10.68	29	3.64
Technical	17	2.19	07	0.88
Graduates	22	2.83	10	1.25
Post graduates & professionals	10	1.29	---	---
<b>Total</b>	<b>777</b>	<b>100.00</b>	<b>797</b>	<b>100.00</b>

*Source : Primary Survey*

#### **4.6 APL/BPL wise Distribution**

The distribution of APL/BPL, as according to castes, is presented in table 4.6. The table shows that of the total respondents, BPL families were 72 per cent followed by APL (12.33%), others (8.67%) and MAPL (7%). Of the BPL households i.e., (72%), 59.33 per cent were scheduled tribes, 3.67 per cent scheduled castes and 9 per cent other

backward castes. Similarly, in APL households i.e., (12.33%), 9 per cent were scheduled tribes and 3.33 per cent other backward castes. It reveals that nearly three-fourth of the scheduled tribes' households were in BPL category, whereas nearly two-third of scheduled castes' households was in BPL category.

**Table: 4.6 : Distribution of APL/BPL and Caste**

(In Nos. &amp; %)

Particulars	Caste Categories				
	Gen	OBC	SC	ST	All
APL	---	10 (3.33)	---	27 (9.00)	37 (12.33)
MAPL/Antyodaya	---	05 (1.67)	03 (1.00)	13 (4.33)	21 (7.00)
BPL	---	27 (9.00)	11 (3.67)	178 (59.33)	216 (72.00)
Others	---	04 (1.33)	02 (0.67)	20 (6.67)	26 (8.67)
Total	---	46 (15.33)	16 (5.34)	238 (79.33)	300 (100.00)

*Source: Primary Survey*

#### 4.7 Birth and Death by BPL/APL Categories and Castes

Birth and death rate by BPL/APL categories and castes of the households during 2014-19 have been worked out in table 4.7. Table showed that total births and deaths were 71 and 19 respectively; of the total births, 58 were from BPL, 12 from MAPL and 11 from APL categories. Caste wise analysis revealed that of the total births, 47 (66.20%) was from scheduled

tribe households, 32.39 per cent from scheduled caste households and 15.49 per cent from other backward castes. Similarly, of the total deaths, 47.37 per cent were from scheduled tribe households 36.84 per cent from scheduled caste households and 15.79 per cent from other backward castes.

Above analysis reveals that birth rate was comparatively higher at around 3.74 times of death rate.

**Table 4.7 : Birth rate and death rate by categories of households during 2014-2019**

Particulars	Number of births/household				Number of deaths/household			
	APL	MAPL	BPL	Overall	APL	MAPL	BPL	Overall
General Caste	---	---	---	---	---	---	---	---
OBC	07	---	04	11	---	01	02	03
Scheduled Caste	---	05	18	23	---	03	04	07
Scheduled Tribe	04	07	36	47	01	04	04	09
All Categories	11	12	58	71	01	08	10	19

*Source: Primary Survey*

#### 4.8 Enrollment and Dropouts in Different Educational Level

Table 4.8 shows gender wise and caste wise enrolment and dropouts during 2019-20. It

also shows share of male and female students in total enrolment and dropouts as well. The number of students enrolled was more than four times higher than dropouts.

In enrollment, the share of male students (54.14%) was higher than female students (45.86%). The share of dropouts was higher in case of female students (60.53%) than male students (39.47%).

There are many factors which cause drop-outs. Some of them are child related issues,

like poor health or malnutrition and lack of motivation while others emerge from their household situations like child labour and poverty. Factors like teacher absenteeism, school's location in remote areas and poor quality educational provisions also play a role in causing drop-outs (GoI, 2021).

**Table 4.8 : Enrollment and Dropouts in different Educational Level (Gender wise Nos & %)**

Children Categories	Govts. School			Total	Private School			Total	G+P
	Primary	Middle	High		Primary	Middle	High		
<b>All Enrollment Children</b>									
Gen.Caste	---	---	---	---	---	---	---	---	---
SC	17	16	05	38	01	03	---	04	42
ST	15	21	06	42	17	19	12	48	90
OBC	09	05	01	15	10	15	09	34	49
Total	41 (22.65)	42 (23.20)	12 (6.64)	95 (52.43)	28 (15.47)	37 (20.44)	21 (11.60)	86 (47.51)	181 (100.00)
<b>Female Children Enrolment</b>									
SC	08	09	01	18	---	01	---	01	19
ST	04	11	02	17	11	07	06	24	41
OBC	05	04	---	09	03	06	05	14	23
Total	17	24	03	44	14	14	11	39	83 (45.86)
<b>Male Children Enrolment</b>									
SC	09	07	04	20	01	02	---	03	23
ST	11	10	04	25	06	12	06	24	49
OBC	04	01	01	06	09	07	04	20	26
Total	24	18	09	51	16	21	10	47	98 (54.14)
<b>All Dropouts Children</b>									
SC	02	04	03	09	---	03	01	04	13
ST	03	06	03	12	01	02	06	09	21
OBC	---	---	01	01	---	---	03	03	04
Total	05	10	07	22	01	05	10	16	38 (100.00)
<b>Female Children</b>									
SC	---	03	02	05	---	02	---	02	07
ST	02	05	01	08	01	01	04	06	14
OBC	---	---	---	---	---	---	02	02	02
Total	02	08	03	13	01	03	06	10	23 (60.52)
<b>Male Children</b>									
SC	---	01	03	04	---	01	01	02	06
ST	01	01	02	04	---	01	02	03	07
OBC	---	---	01	01	---	---	01	01	02
Total	01	02	06	09	---	02	04	06	15 (39.47)

Source : Primary Survey

Out of the total enrolment (181), the enrolment in government vernacular students (52.49%) was higher than private vernacular students (47.51%). The rate of enrolment at primary and middle level schools was higher than that of high schools in both types of school i.e., government and private. Almost similar trend was indicated in regard to male and female students. It is interesting to note that enrolment among the scheduled tribe students (49.72%) was higher followed by scheduled castes (23.20%) and other backward castes (21.08%).

Out of the total dropouts (38), dropouts among female students (60.53%) were higher than male students (39.47%). Of the male students, the dropouts at government middle school level (26.31%) were higher followed by government high school (18.42%) and government primary school levels (13.16%). Similarly, in case of private vernacular schools, the dropouts at high school level (23.69%) were higher followed by middle level school (15.79%) and primary level schools (2.63%). The dropouts among scheduled tribe (55.26%) were higher than scheduled castes (34.21%) and other backward castes (10.53%).

#### **4.9 Quality of Basic Education (ASER Toolkit Based)**

As stated in Chapter-I the quality of basic education has been examined with the help of annual status of education report (ASER) toolkits, meant for Std. - II level, conducted

with 100 children in the age group of 5 to 15 years comprising 53 per cent boys and 47 per cent girls. Moreover, of the total examined children (boys + girls), 50 children belonged to Pre-school to Std.- II level and remaining 50 from Std. - III to Std. - X level. During the test, reading and arithmetic competency of these children were evaluated by sex and castes.

Table 4.9 shows the level of reading competency of children by sex. The table reveals that out of the total boys, 64.15 per cent were able to read paragraphs, 11.32 per cent each could recognize words and read simple sentence, 7.55 per cent could hardly recognize letters and 5.66 per cent could do nothing. Out of the total girls, 48.93 per cent were able to read paragraphs, 19.15 per cent could recognize words, 14.89 per cent could read simple sentence and 4.26 per cent could do nothing. It further reveals that reading competency among boys in overall level was better than girls. Class wise analysis reveals that from standard-III to standard-X, all boy children were able to read paragraphs, while from standard-IV to standard-X, all girls children were able to read paragraphs. Among boys, who were at pre-school level, 57.14 per cent could recognize letters and 42.86 per cent could do nothing. While 75 per cent girls able to recognize letters and could do nothing as revealed in case of 25 per cent at pre-school level. In standard-I & II, recognition of words and reading capabilities of simple sentences among the boys were better than girl students.

## Primary School



## Children in Primary School

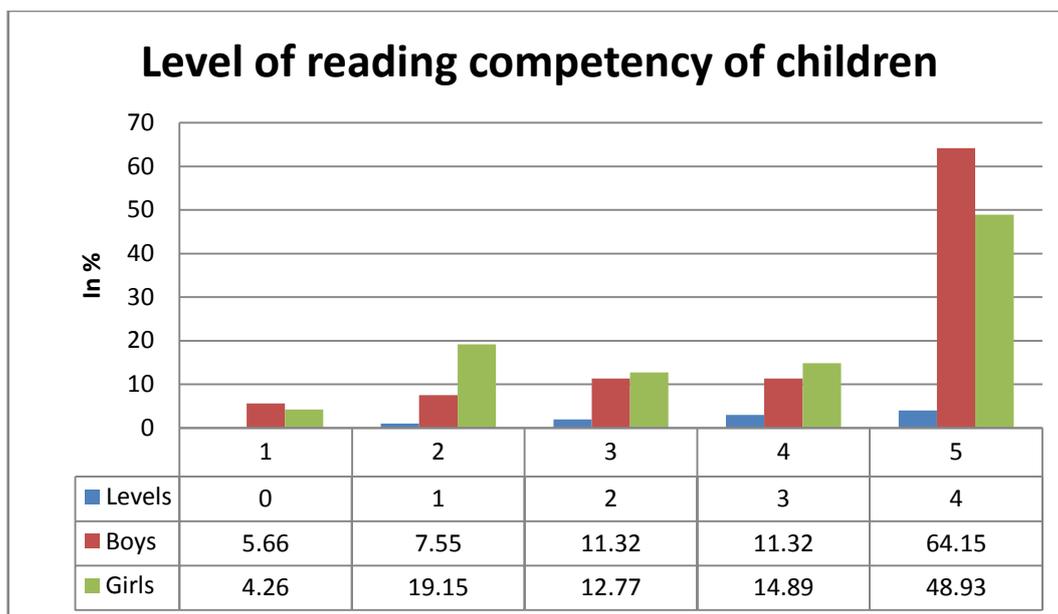


**Table 4.9 : Level of reading competency of children (age group 5-15 years) by sex  
(As per ASER Toolkit test)**

(% of total in particular category)

Class of study	Boys (N=53)					Girls (N=47)				
	0	1	2	3	4	0	1	2	3	4
Pre school	42.86	57.14	---	---	---	25.00	75.00	---	---	---
Standard-I	---	---	37.50	50.00	12.50	---	33.33	33.34	22.22	11.11
Standard-I I	---	---	30.00	20.00	50.00	---	---	25.00	25.00	50.00
Standard-III	---	---	---	---	100.00	---	---	11.11	33.33	55.56
Standard-IV	---	---	---	---	100.00	---	---	---	---	100.00
Standard-V	---	---	---	---	100.00	---	---	---	---	100.00
Standard-VI	---	---	---	---	100.00	---	---	---	---	100.00
Standard-VII	---	---	---	---	100.00	---	---	---	---	100.00
Standard-VIII	---	---	---	---	100.00	---	---	---	---	100.00
Standard-IX	---	---	---	---	100.00	---	---	---	---	100.00
Standard-X	---	---	---	---	100.00	---	---	---	---	---
All	5.66	7.55	11.32	11.32	64.15	4.26	19.15	12.77	14.89	48.93

Levels : 0=Nothing; 1=Can recognise letters; 2=Can recognise words; 3=Can read simple sentence;  
4=Can read paragraphs



**Figure: 5**

Table 4.10 shows the level of arithmetic competency of children by sex. It reveals that out of the overall boys, 40.07 per cent were able to do simple division, 20.75 per cent could recognize numbers (10-99), 16.98 per cent could do simple subtraction, 9.43 per cent could recognize numbers (0-9) and 3.77 per cent could do nothing. On the other hand, out of the total girls, 31.91 per cent were able to do simple division, 25.53 per cent could recognize numbers (0-9), 19.15 per cent each could recognize numbers (10-99) and able to do simple subtraction. Thus, it reveals that on overall level, the arithmetic competency among boys was superior to girls. Further, class wise analysis reveals that the level of

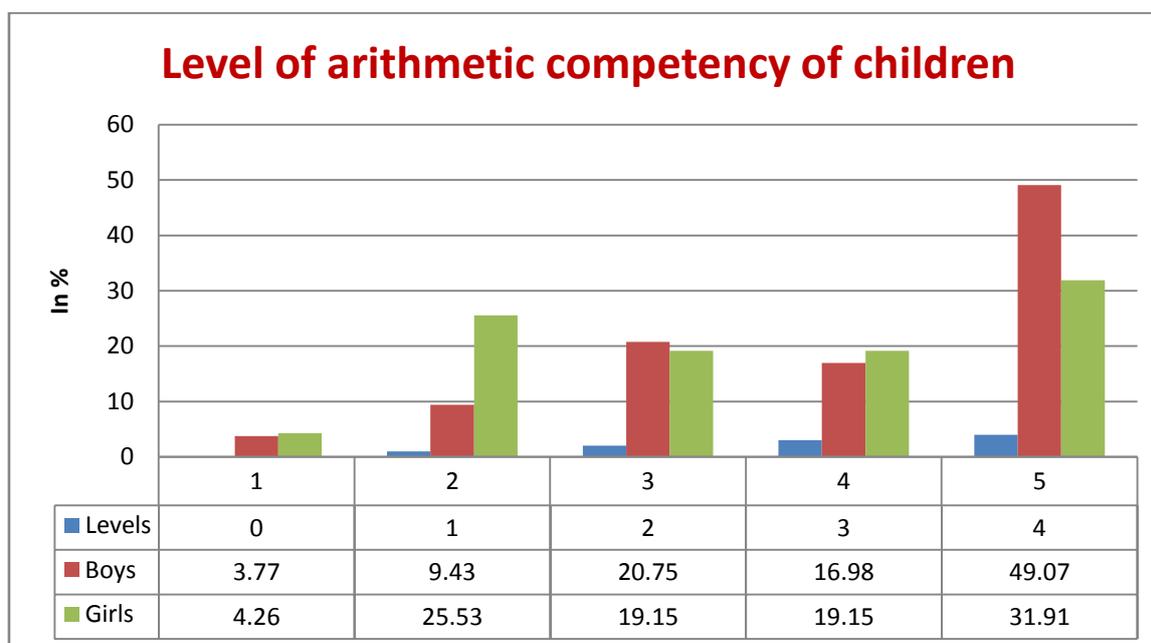
arithmetic competency among boys of pre-school level was almost similar in case of boys and girls. However, at standard-I, II & III levels, boys were again better than girls. In standard-IV, 50 per cent of the boys were able to do simple subtraction and division each as well. Nearly 44.3 per cent and 33.3 per cent from out of the girls were able to do simple subtraction and division. From standard-IV to standard-X, all boys were able to do simple division, whereas only from standard-VII to standard-IX, all girls were able to do simple subtraction. Therefore, it is clearly revealed from the analysis that boys were much better than girls in terms of arithmetic competency in the surveyed village.

**Table 4.10 : Level of arithmetic competency of children (age group 5-15 years)  
by sex (As per ASER Toolkit test)**

*(% of total in particular category)*

Class of study	Boys (N=53)					Girls (N=47)				
	0	1	2	3	4	0	1	2	3	4
Pre school	28.57	71.43	---	---	---	25.00	75.00	---	---	---
Standard-I	---	---	75.00	25.00	---	---	66.67	22.22	---	11.11
Standard-I I	---	---	50.00	40.00	10.00	---	---	37.50	25.00	37.50
Standard-III	---	---	---	50.00	50.00	---	---	22.22	44.44	33.33
Standard-IV	---	---	---	---	100.00	---	---	25.00	25.00	50.00
Standard-V	---	---	---	---	100.00	---	---	33.33	33.33	33.33
Standard-VI	---	---	---	---	100.00	---	---	---	50.00	50.00
Standard-VII	---	---	---	---	100.00	---	---	---	---	100.00
Standard-VIII	---	---	---	---	100.00	---	---	---	---	100.00
Standard-IX	---	---	---	---	100.00	---	---	---	---	100.00
Standard-X	---	---	---	---	100.00	---	---	---	---	---
All	3.77	9.43	20.75	16.98	49.07	4.26	25.53	19.15	19.15	31.91

*Levels: 0=Nothing; 1=Can recognise numbers (0-9); 2=Can recognise numbers (10-99);  
3=Can do simple subtraction; 4=Can do simple division*



**Figure: 6**

Table 4.11 contained level of reading competency of children by castes and type of schools. As per overall level the data presented in the table it is revealed that in government schools, 37 children were examined, comprising 14 boys (37.84%) and 23 girls (62.16%). In case of private schools, 63 children were canvassed for the ASER tests, comprising 39 boys (61.90%) and 24 girls (38.10%). Of the total children in government schools, 24.32 per cent recognized letters followed by 21.63 per cent each who could read paragraph and recognized letters, 18.92 per cent could read simple sentences and 13.51 per cent could

do nothing. In regard to private schools, 74.60 per cent were able to read paragraph. It shows that reading competency in case of private schools' children was much better than that of government schools. Among the males and females taken together (at overall level) by social groups, reading competency among other backward castes' children followed by scheduled tribes and scheduled castes were indicated better in private schools as compared to government schools. Almost similar trend was noticed in case of female and male children of other backward castes of the social group.

### ASER Test

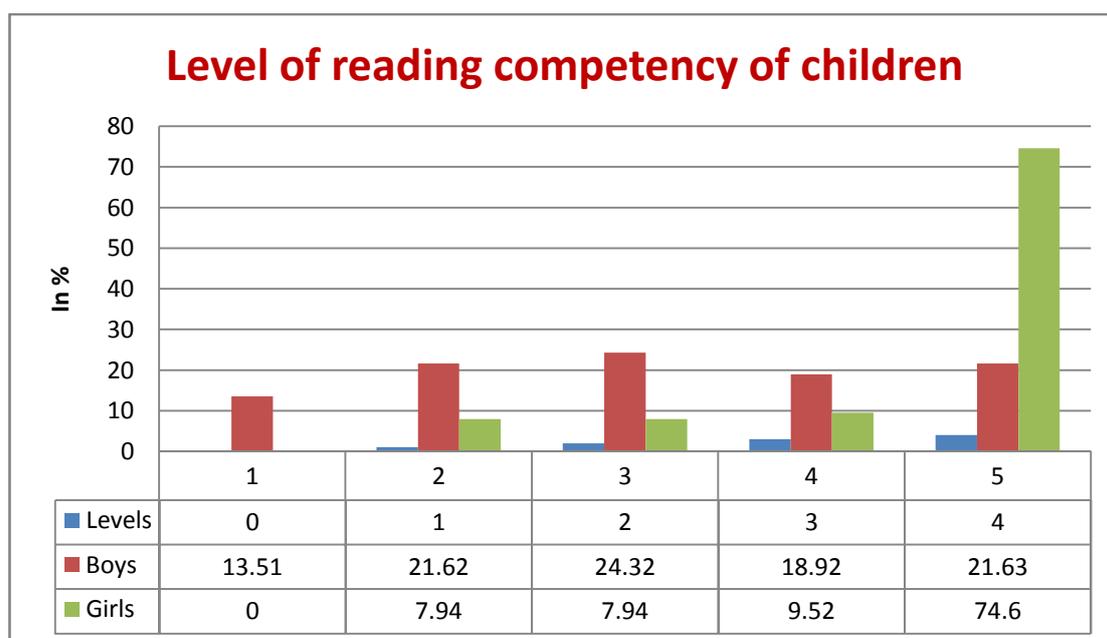


**Table 4.11 : Level of reading competency of children (age group 5-15 years) by caste and school types (As per ASER Toolkit test)**

(% of total in particular category)

Categories of students	Government school (B-14 &G-23)					Private School (B-39 & G-24)				
	0	1	2	3	4	0	1	2	3	4
<b>Male</b>										
Scheduled Caste	28.57	14.29	14.29	14.29	28.56	---	---	---	50.00	50.00
Scheduled Tribe	---	---	40.00	20.00	40.00	---	10.00	5.00	10.00	75.00
OBC	50.00	50.00	---	---	---	---	---	11.77	5.00	82.35
Total	21.43	14.29	21.43	14.29	28.56	---	5.13	7.69	10.26	76.92
<b>Female</b>										
Scheduled Caste	11.11	33.33	33.33	22.23	---	---	100.00	---	---	---
Scheduled Tribe	11.11	11.11	22.22	22.22	33.34	---	15.38	15.38	7.69	61.55
OBC	---	40.00	20.00	20.00	20.00	---	---	---	10.90	90.00
Total	8.69	26.09	26.09	21.74	17.39	---	12.50	8.33	8.33	70.84
<b>Overall (Male + Female)</b>										
Scheduled Caste	18.75	25.00	25.00	18.75	12.50	---	33.33	---	33.33	33.34
Scheduled Tribe	7.14	7.14	28.57	21.43	35.72	---	12.12	9.09	9.09	69.70
OBC	14.29	42.85	14.29	14.29	14.28	---	---	7.41	7.41	85.18
Total	13.51	21.62	24.32	18.92	21.63	---	7.94	7.94	9.52	74.60

Levels : 0=Nothing; 1=Can recognise letters; 2=Can recognise words; 3=Can read simple sentence; 4=Can read paragraphs



**Figure: 7**

Table 4.12 shows level of arithmetic competency of children by castes and school types. Data presented in table reveals that in government schools, 36 children were surveyed the test for in regard to arithmetic competency, which comprised 17 boys (47.22%) and 19 girls (52.73%). Similarly, in private schools, 64 children appeared in the test, comprising 36 boys (56.25%) and 28 girls (43.75%). Of the total children in government schools, 33.34 per cent were able to recognize numbers (0-9) followed by 19.44 per cent recognizing numbers (10-99) and able to do simple subtraction each and 13.89 per cent each were able to do simple division and did nothing. In private schools, of the total

children, 56.25 per cent were able to do simple division, 20.31 per cent were able to recognize numbers (10-99), 17.19 per cent could do simple subtraction and 6.25 per cent could only recognize numbers (0-9). Caste wise data on level of arithmetic competency of children reveals that at overall level, again other backward castes (61.29%) were able to do simple division followed by scheduled tribes (51.61%) and scheduled castes (50%). Almost similar trend was indicated in regard to male and female categories of social groups. Thus, it may be concluded that children belonging to were much better other backward castes in terms of level of arithmetic competency in the surveyed village.

**Table 4.12 : Level of arithmetic competency of children (age group 5-15 years) by caste and school types (As per ASER Toolkit test)**

*(% of total in particular category)*

Categories of students	Government school (B-17 & G-19)					Private School (B-36 & G-28)				
	0	1	2	3	4	0	1	2	3	4
<b>Male</b>										
Scheduled Caste	14.29	28.57	14.29	28.57	14.28	---	---	---	---	100.00
Scheduled Tribe	14.29	28.57	28.57	14.29	14.28	---	---	23.53	17.65	58.82
OBC	---	33.33	33.33	33.33	---	---	---	16.67	11.11	72.22
Total	11.76	29.42	23.53	23.53	11.76	---	---	19.44	13.89	66.67
<b>Female</b>										
Scheduled Caste	---	50.00	16.67	---	33.33	---	---	---	100.00	---
Scheduled Tribe	25.00	37.50	---	25.00	12.50	---	14.28	21.43	21.43	42.86
OBC	20.00	20.00	40.00	20.00	---	---	15.38	23.08	15.38	46.16
Total	15.79	36.84	15.79	15.79	15.79	---	14.29	21.43	21.43	42.85
<b>Overall (Male + Female)</b>										
Scheduled Caste	7.69	38.47	15.38	15.38	23.08	---	---	---	50.00	50.00
Scheduled Tribe	20.00	33.33	13.33	20.00	13.33	---	6.45	22.58	19.36	51.61
OBC	12.50	25.00	37.50	25.00	---	---	6.45	19.36	12.90	61.29
All Total	13.89	33.34	19.44	19.44	13.89	---	6.25	20.31	17.19	56.25

*Levels: 0=Nothing; 1=Can recognise numbers (0-9); 2=Can recognise numbers (10-99); 3=Can do simple subtraction; 4=Can do simple division*

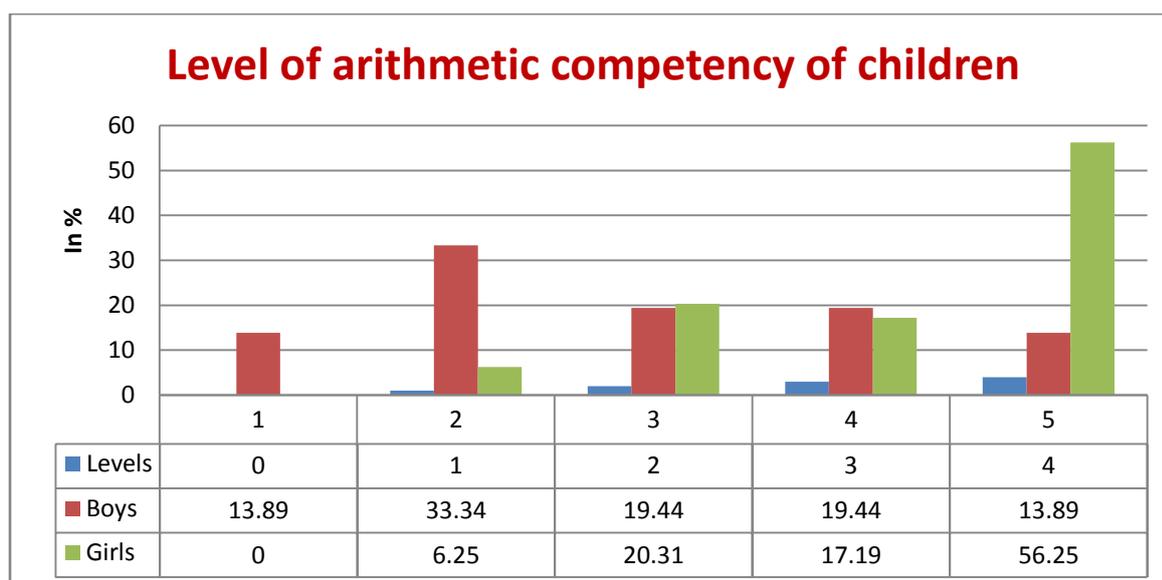


Figure: 8

#### 4.10 Food Security and Body Mass Index (BMI)

Food security is nothing, but timely access to food in terms of affordability and nutritional requirement. The poverty ratio in Jharkhand was 37 per cent and for rural areas it was 40.8 per cent in 2011-12 (GoI, 2019). Fluctuations in agricultural production in the state are common. Perhaps due to this, the state has become the first state in the country to establish a comprehensive protocol to identify 'hunger deaths.' Among other meaningful interventions, it has prioritized a quick and thorough investigation of the cause of death, medical check-up of the surviving family within 24 hours, assessment of food security and health conditions of the surroundings, as well as surveillance of the affected area for a period of three years. However, the success of the protocol would depend on its proper implementation (GoJ,

2020). In the surveyed village, responses about food security issues were recorded, which are presented in table 4.13. The responses reveal that no households go remain either without eating a whole day and night due to poverty or went to sleep hungry due to inability to purchase food and ever worried that they would not have enough food. Besides, 93 per cent never ate some poor quality of foods that one really did not like. About 88 per cent were able to eat the kind of food that he/she preferred rather 46 per cent of the households, sometimes offered food to the neighbours and guests. However, it is interesting to note that about 95 per cent of the households never went outside for eating in hotel or restaurant and nearly 75 per cent never ate too much packed food like; ice-cream, cold-drinks etc. Thus, it can be said that food security was there, irrespective of its nutritional values.

**Table 4.13 : Food Security issues at village level***(% of respondents)*

During last 12 months any member of the household	Never	Rarely	Some times	Often	Total
a. Went a whole day and night without eating due to poverty?	100.00	---	---	---	100.00
b. Went to sleep hungry due to inability to purchase food?	99.67	0.33	---	---	100.00
c. Ever worried that the households would not have enough food?	100.00	---	---	---	100.00
d. Ate some poor quality foods that you really did not like?	93.00	7.00	---	---	100.00
e. Were not able to eat the kind of food you preferred?	88.00	9.67	2.34	---	100.00
f. Did you offer food to your neighbors and guests?	5.67	16.33	46.00	32.00	100.00
g. Went for outside eating in hotel/restaurant?	95.34	3.33	1.33	---	100.00
h. Are you eating too much packed food/purchased food like ice-cream, cold-drinks, etc?	75.67	16.67	7.66	---	100.00

*Source : Primary Survey*

As regards the BMI, the prevalence of malnutrition continues to remain astonishingly high in the state; obesity too has reached endemic levels in some of the districts of Jharkhand. BMI is an index of weight to height commonly used to classify underweight, overweight and obesity in adults. It is defined as the weight in kilograms divided by the square of the height in metres ( $\text{kg}/\text{m}^2$ ). In the district of surveyed village, nearly 36 per cent men and 27 per cent women were below normal, whose BMI was ( $<18.5 \text{ kg}/\text{m}^2$ ). 7 per cent men and 7.2 per cent women were overweight ( $\geq 25 \text{ kg}/\text{m}^2$ ), as per HMIS, 2019. It can now be well understood about the BMI in the surveyed village, as the figures of the district reveal overall status of the BMI at the overall level.

#### **4.11 Access to Basic Amenities**

Table 4.14 presents information relating to access to basic amenities by the sample households. It is seen that majority (72%) of the households were having MPL/Antyodaya cards under Public Distribution System (PDS), 74 per cent of Hhs had MGNREGA Job cards and only 4 per cent KCC holders. About 60.67 per cent of the Hhs did have legal electricity connections, though the village is fully electrified.

Besides, financial inclusion, which opens access to several government schemes in terms of Direct Benefit Transfer (DBT), the survey reveals that 92.67 per cent of Hhs were having bank accounts. About 71 per cent of the Hhs did have sanitary toilets mostly constructed under 'Swachh Bharat Abhiyan Gramin (SBM-G)' and 'PM Aawas

Yojana.’ Drinking water facility was provided mainly through government hand pumps (96.33%). Nearly 85 per cent Hhs were found using smart phones. LPG connections were found available to 63 per cent Hhs, either through traditional channel or Ujjwala Yojana. As regards the dwelling structure, 59.67 per cent of Hhs did have

thatched roofs, 34 per cent had roofed with iron sheets and 6.33 per cent pucca structure. In regard to membership in Gram Sabha, which is a reflection of participation in development process, dismal picture was observed because only 19 per cent of these respondents had membership.

**Table 4.14 : Access to Basic Amenities of the households (In %)**

SN	Particulars	Response
1.	PDS Card type	
	APL	12.33
	BPL	7.00
	MPL/Antyodaya	72.00
	Others	8.67
2.	MGNREGA Job Card Holder	
	Yes	74.00
	No	26.00
3.	KCC Holder	
	Yes	04.00
	No	96.00
4.	Electricity Connection	60.67
5.	Bank Accounts	
	Yes	92.67
	No	7.33
6.	Sanitary Toilet	
	Yes (functional)	71.00
	No	29.00
7.	No. of Smart Phones	
	Yes	85.00
	No	15.00
8.	Source of Drinking Water	
	Govt. Hand pump	96.33
	Own Hand pump	3.67
	Distance travelled for drinking water	0 km to 0.5 km
9.	LPG Connection	
	Yes	63.00
	No	37.00
10.	Type of Residence	
	Roofing Thatched	59.67
	Roofing Concrete	6.33
	Roofing Iron Sheet	34.00
11.	Health Insurance Policy	Nil
12.	Doctors Consultation	
	Govt. Doctor	83.00
	Pvt. Doctor	17.00
13.	Membership in Gram Sabha	
	Yes	9.00
	No	91.00

Source: Primary Survey.

#### **4.12 Participation, Inclusiveness and Empowerment**

As stated earlier, the surveyed village is largely dominated by Santals (ST) and Bhagats (businessmen community). For the Santals, like other societies, politics is an all-male affair (Nathan & Kelkar, 1991). Male dominance is exemplified in the organization and functioning of the traditional village institution i.e., the Gram Sabha or more hor. Assembly meetings have an all-male composition and so an all-male deliberation process with a near total absence of women, did prevail despite having woman Mukhiya (Santal) in the surveyed village panchayat. The general idea is that 'politics is for male and the private household chores for females.' It applies to Santal society as well. The political space in Santal traditional society is male dominated with little or no room for women's issues and interests. Almost the same was revealed in case of the women of business community households in the village in terms of political participation particularly. However, in regards to occupational behavior, women of Bhagat community were found actively involved in the process.

#### **4.13 Perception about Different Changes**

Over the time, the perception of villagers, irrespective of social groups, has changed. But, as regards the rigidity in caste system is concerned, no substantial changes were reported among the Santhal households, particularly in regard to marriage issues.

However, one santhal household's son was married to agrawal family bride, which was later accepted by both the communities. In fact, due to change in economic status of santhal households, barring marriage rigidity, others were reported to be resolved in social, cultural and religious occasions. But, due to extreme economic conditions of paharai households, who were very few in numbers, living in isolation and rigidity were view to some extent in all other spheres. Non-tribal households were found rapidly changing in terms of social, cultural and spiritual issues, where as among the tribal households, particularly santhal women were virtually given no space in religious sphere.

Almost all societies have certain taboos that determine practices they consider ominous. A gendered analysis of taboos, which have variously described as negative 'sacred belief' (Sinha, 2005), holy dread' (Vidhyarthi & Rai, quoted in Sinha, 2005) and symbols of power, help reveal the politics of male power. As Nathan & Kelkar (1991) argue, "The asymmetric nature of taboos, for there are no corresponding taboos for men, shows that they are meant to establish an unequal ordering, a definite hierarchy in the family." These taboos, combined with near complete denial of property rights to tribal women, are because of social organization among Santhal women is patrilineal, patrilocal and patriarchal. Group discussions and observation taken so far in the surveyed village, corroborate above analysis.

In political paradigm, deprivation was not found in the sense that the village panchayat of the surveyed village was then being headed by women Santhal Mukhiya. However, like in other women Mukhiyas, their husbands largely disposed of the affairs for respective office of the Gram Panchayats. Moreover, till the time of survey, provision of Revenue law of the district fell under the draft regulations of Santhal Pargana Tenancy (SPT) Act, 1949 gave discretion to recognize claims of daughters married in the 'ghar jawae' form of marriage to the office of manjhi, i.e., the village headman (Kumari, 2021). If this ultimately becomes law, we may expect a gradual growth of female participation in social and political institutions at large in the region, obviously in the surveyed village itself, which now suffers from some kind of political deprivation.

#### **4.14 Concluding Remarks**

This chapter has been analyzed on social dynamics, largely based on 300 households' surveyed (2019-20) in Bargachha Hariyari village of Jharkhand state. The demographic profile of village reveals that out of the total population (1574 persons) belonging to survey households, the share of scheduled tribe population was about 79

per cent with 73 per cent of main workers engaged in farm sector. Literacy rate was 58.70 per cent against the state's average of 68.7 (2017-18). Of the total scheduled tribes' population, 47 per cent belonged to Christian religion and 32 per cent sarana-dharam. About 72 per cent belonged to BPL category. Out of total births (71 in number) and deaths (19 in number) during the last five years, i.e., 2014-15 to 2019-20, the share of scheduled tribe Hhs was higher i.e., 66.20 and 47.37 per cent respectively. Reading and arithmetic competency based on ASER test reveals that among the boys & girls, 64.15 per cent and 48.93 per cent were capable to read the paragraphs and 49 per cent and 32 per cent capable were to do simple division. Food security was indicated at 100 per cent level. Access to basic amenities was found at moderate level. In political space, the Santhal traditional society was found to be male dominated with little room for women's issues and interests. However, in other cases, it was moderately fair. The draft of the SPT Act, 1949 does not restrict women from being appointed as head of the social institutions. Thus, if law is enacted, there may be a gradual growth of female participation in santal social organizations in particular and political participation in general.

## CHAPTER – V

### ECONOMIC SYSTEM

This chapter attempts to describe existing economic system of 300 Hhs in the surveyed village. It includes livelihoods and employment pattern, agrarian status, poverty, income and consumption pattern, financial position and perceptions of the villagers in regards to economic changes that have taken place over the time period.

#### **5.1 Livelihood, Employment and Migration**

The distribution of households by occupations and social groups are presented in table 5.1. The table 5.1 shows that nearly 65.3 per cent of the households were cultivators followed by 8 per cent agricultural labourers, 12.3 per cent salaried (Govt. or private) and pensioners and remaining were engaged in caste based

occupations, and casual activities as well as marginal labourers. This reveals that about 73 per cent of the households were in agriculture vocation and thus, their livelihood depends on agriculture earnings.

Livelihood vis-à-vis social composition data show that of the total scheduled tribes (238), 68.9 per cent were cultivators, 9.6 per cent agricultural labourers and remaining were either in salaried jobs or engaged as casual and marginal labourers. Similarly, in other backward castes, nearly 50 per cent were primarily cultivators and other 50 per cent were either in salaried jobs or worked as casual and marginal labourers. Almost same trend was noticed among the scheduled caste households. It is, therefore, fairly concluded that major source of livelihood was agriculture among all the social groups in the surveyed village.

**Table 5.1 : Distribution of households by occupations/livelihood by Castes**

(No of households & %)

Livelihood Groups	General	SC	ST	OBC	All
Cultivator	---	09 (56.25)	164 (68.91)	23 (50.00)	196 (65.33)
Agricultural labour	---	01 (6.25)	23 (9.66)	---	24 (8.00)
Dairy/Fishing/Poultry keeping	---	---	---	---	---
Govt. Salaried	---	---	11 (4.62)	07 (15.22)	18 (6.00)
Private Salaried	---	---	09 (3.78)	03 (6.52)	12 (4.00)
Pensioners	---	---	05 (2.10)	02 (4.35)	07 (2.33)
Caste based profession	---	---	02 (0.84)	04 (8.70)	06 (2.00)
Trade & business	---	---	---	05 (10.87)	05 (1.67)
Entrepreneur	---	---	---	---	---
Casual labour	---	04 (25.00)	10 (4.20)	---	14 (4.67)
Marginal labour	---	02 (12.50)	07 (2.94)	---	09 (3.00)
Household Industries	---	---	06 (2.53)	02 (4.34)	08 (2.67)
Others	---	---	01 (0.42)	---	01 (0.33)
<b>Overall</b>	---	16 (100.00)	238 (100.00)	46 (100.00)	300 (100.00)

Note: Based on primary occupation only for households

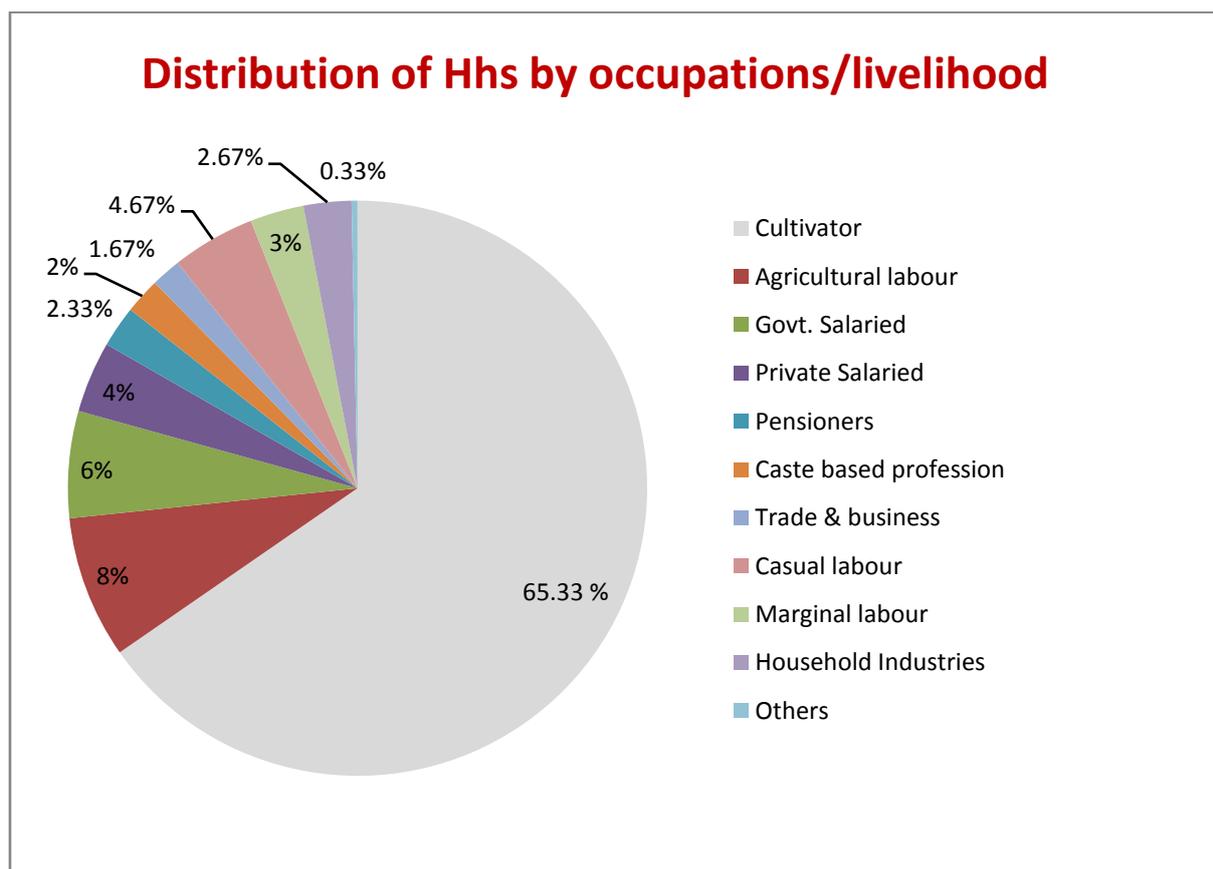


Figure: 9

Caste wise adults analysis reveals that out of the 336 adult members (72.10%) belonging to scheduled tribes, nearly 70 per cent were in agriculture vocation, such as, cultivators and agricultural labourers, 18.75 per cent were in non-farm occupations and remaining about 11 per cent in off-farm occupations. Similarly, in other backward castes (18.45%), about 42 per cent were found engaged as cultivators, 48 per cent in non-farm occupations and 10 per cent in off farm occupations. Among

scheduled caste adult members (9.44%), about 39 per cent were engaged in non-farm occupations followed by 36 per cent as either cultivators or agricultural labourers, and remaining 25 per cent in off farm activities as primary occupation. The analysis reveals that majority of scheduled tribes' adult population had agriculture as the main or primary vocation, other backward castes in nonfarm occupations and scheduled castes in off farm occupations (table 5.2).

**Table 5.2 : Distribution of adult population by occupations / livelihood**  
(No. of adults & %)

Livelihood Groups	General	SC	ST	OBC	All
Cultivator	---	12 (27.27)	197 (58.63)	36 (41.86)	245 (52.58)
Agricultural labour	---	04 (9.09)	39 (11.61)	---	43 (9.23)
Dairy/Fishing/Poultry keeping	---	---	---	---	---
Govt Salaried	---	---	17 (5.06)	8 (9.30)	25 (5.36)
Private Salaried	---	---	09 (2.68)	3 (3.88)	12 (2.57)
Pensioners	---	---	06 (1.78)	02 (2.31)	08 (1.72)
Caste based profession	---	---	08 (2.38)	13 (15.11)	21 (4.50)
Trade & business	---	---	---	15 (17.44)	15 (3.22)
Entrepreneur	---	---	---	---	---
Casual labour	---	17 (38.64)	23 (6.85)	---	40 (8.57)
Marginal labour	---	11 (25.00)	18 (5.36)	---	29 (6.23)
Household	---	---	11 (3.27)	09 (10.46)	20 (4.30)
Others	---	---	08 (2.38)	---	08 (1.72)
<b>Overall</b>	---	44 (100.00)	336 (100.00)	86 (100.00)	466 (100.00)

Note : Based on occupation of individual adult members

Extent of migration by economic categories and castes is presented in table 5.3. As per given table, 48 persons had migrated and of them, larger migration was indicated from BPL category (62.50%) followed by Antyodaya (31.25%) and APL (6.25%) categories. Caste wise analysis reveals that among the overall, larger migration took place from scheduled tribes (47.91%) followed by scheduled castes (29.17%) and other backward castes (22.92%). In fact, all the migration was seasonal in nature and outside the state. Most of the migrants were for doing agricultural activities, such as transplantation, harvesting and other cultivation practices in nearby districts of

West Bengal for total period of 6 to 8 months. However, some migrants were engaged in construction works as unskilled labourers in big cities like; Delhi, Mumbai, Pune and some others in brick-making sector in the states of Karnataka, Tamil Nadu, Kerala etc. and a few migrated for driving vehicles like tractor, auto-rickshaw etc. in the cities. But, they were not permanent migrants. They go outside in search of jobs, which suited them and come to the village on family and social occasions at certain intervals. These migrations are nothing, but the result of lack of employment in and around the village.

**Table 5.3 : Extent of migration by caste and economic status**

*(No. & % of respondents who reported migration)*

Particulars	Economic Categories			
	APL	MAPL/ Antyodaya	BPL	Overall
General Caste	---	---	---	---
OBC	01 (9.08)	05 (45.46)	05 (45.46)	11 (22.92)
Scheduled Caste	---	03 (21.42)	11 (78.58)	14 (29.17)
Scheduled Tribe	02 (8.70)	07 (30.43)	14 (60.87)	23 (47.91)
All Categories	03 (6.25)	15 (31.25)	30 (62.50)	48 (100.00)

*Source: Primary Survey.*

## 5.2 Agrarian System/Status

The analysis of agrarian system includes land use pattern, distribution of holdings and operated areas along with the basic characteristics of farm households in the village. Data depicted in table 5.4 show land use pattern of the surveyed

households. Total geographical area of the village is 1777.63 acres and out of it, the sample households occupied 533.29 acres (30%) only. Out of about 533.29 acres of land, the cultivable area was 213.11 acres (39.96%) and 320.18 acres and (60.04%) being uncultivated lands. The net sown

area was 149.18 acres (27.97%) of the total geographical area. Due to undulated terrain of Jharkhand state, the area under barren lands (25.20%), pasture and grazing lands (4.98%), cultivable waste (5.02%), current fallow (14.23%), others (9.42%) etc.

owned by sample households were high. The cropping intensity was calculated at 121.10 per cent, and the area under irrigation of the net sown area was (47.80%). Major source of irrigation was wells and seasonal filled-up pits and holes.

**Table 5.4 : Land use pattern in the village Bargachha Hariyari (In acre)**

Particulars	2019-20 Survey
Geographical Area of the Sample Hhs	533.29
Agricultural/ Cultivable Land	213.11
Net Sown Area	149.18
Uncultivated area	320.18
Barren Land	134.37
Forest Area	---
Pasture and Grazing Land	26.56
Cultivable Waste	26.68
Misc. Trees & Groves	6.43
Current Fallow	75.90
Others	50.24
Other lands	---
Gross Cropped Area	180.67
Net Irrigated Area	71.31
Gross Irrigated Area	90.00
% area under irrigation of NSA	47.80
Cropping Intensity	121.10
Irrigation Intensity	126.20
% of agricultural land in geographical area	39.96
% current fallow in geographical area	14.23
Main sources of irrigation	Well

*Source: Primary Survey.*

Further, in regard to distribution of land holdings and operated area across the farm sizes, the data given in table 5.5 shows that of the total sample households, marginal farmers were 257 (85.67) and 43 (14.33%) were small farmers. Marginal farmers occupied 142.06 acres (66.67%) of the operated lands, of 71.05 acres (33.33%) were owned by the small farmers. On overall

level, total operated area was 213.11 per cent, accounting for 39.96 per cent of the total geographical area of the sample households. Moreover, average size of holdings, on overall farms, was calculated at 0.71 acres, and while that of marginal farmers was 0.55 acres and 1.65 acres meant for small farmers.

**Table 5.5 : Distribution of land holdings in the village Bargachha Hariyari (In acres)**

Particulars	In 2019 (during current survey)
<b>Total number of holdings</b>	<b>300 (100.00)</b>
Marginal farms	257 (85.67)
Small farms	43 (14.33)
Medium & others	---
All Farms	300 (100.00)
<b>Total area operated</b>	<b>---</b>
Marginal farms	142.06 (66.67)
Small farms	71.05 (33.33)
Medium & others	---
All Farms	213.11 (100.00)
<b>Average size of holdings</b>	<b>---</b>
Marginal farms	0.55
Small farms	1.65
Medium & others	---
All Farms	0.71

*Source: Primary Survey*

Besides above, basic characteristics compiled for the farm households is very interesting, which may be seen from table 5.6. It reveals that on an average, the size of family at total farms was 5.05 persons, which differed slightly between the marginal and small farms. The average operated area on overall level was 0.710 acres. Accordingly, the land man ratio in

the village varied from 0.111 among marginal farms to 0.326 among small farms, and 0.140 on overall farms. The cropping intensity was 121.10 per cent on overall farm level; however, it was 106.87 per cent among marginal farms and 151.27 per cent among small farms. The net irrigated area was 47.8 per cent on overall farms, though it was higher on small farms (64.3%) as

compared to just 40 per cent on marginal farms. Regarding the level of education on overall farms, 38.33 per cent were illiterate, 36 per cent literate, 20 per cent attained education up to secondary and 5.67 per cent above secondary. In case of marginal farmers, the educational status was little

lower than small farmers. Average number of crops grown during the agricultural year was mainly two viz; paddy in kharif and wheat and pulses in rabi season. But, except the staple crops, other crops were also grown in negligible area.

**Table 5.6 : Basic characteristics of farm households in Bargachha Hariyari**

Category	Average family size	Average operated area (In Ha)	Land man ratio	Cropping intensity (%)	Net irrigated area (%)	Education of head of family (%)				Average nos. of crop grown
						Illit.	Lit.	Up to Secondary	Above Secondary	
Marginal	5.04	0.553	0.110	106.87	40.0	39.30	36.19	20.23	4.28	Two
Small	5.07	1.652	0.326	151.27	64.3	32.56	34.88	18.60	13.95	Two
Medium & above	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
<b>Total</b>	<b>5.05</b>	<b>0.710</b>	<b>0.140</b>	<b>121.10</b>	<b>47.8</b>	<b>38.33</b>	<b>36.00</b>	<b>20.00</b>	<b>5.67</b>	<b>Two</b>

*Source: Household survey data, 2019.*

### 5.3 Cropping Pattern and yield Rates

The surveyed village lies in the Central North-Eastern Plateau (Zone-IV) of Eastern Plateau and Hilly region (agro-climatic zone-VII) of the country. The region is characterized by undulating terrain having largely mono-cropped area due to low water retention capacity of the soils. So, the cropping pattern mainly pertains to paddy (76.75% of GCA) in kharif season and wheat crop (only 9.13% of GCA) in rabi season,

apart from pulses (8.26% GCA), potato (1.54% of GCA), oilseeds (3.43% of GCA) and others (0.89 % of the GCA). Further, due to non-existence of perennial river, erratic rainfall, low groundwater level etc., the percentage of irrigated crops was reported to be around 31 only, which were met out of available wells and seasonally filled-up pits as well. Relevant data on cropping pattern of the sample households are presented in table 5.7.

Data presented in table 5.8 shows the trends in cropping pattern. The data reveals that the agricultural economy of the surveyed village is very much tilted towards subsistence economy, since the acreage

under cereals was around 86 per cent. The shares of area under pulses were 8.26 per cent, oilseeds 3.43 per cent, vegetables 1.54 per cent and others 0.88 per cent.

**Table 5.7 : Cropping Pattern in the village Bargachha Hariyari in 2019**

*(Unit: in acre)*

Particulars	Kharif	Rabi	Summer/ Zaid/Boro	Perennia l crops	Total
<b>Irrigated</b>					
1. Cereal Crops					
Paddy	31.42	---	---	---	31.42
Wheat	---	16.50	---	---	16.50
2. Pulses	---	---	---	---	---
3. Oilseeds					
Mustard	---	5.20	---	---	5.20
4. Fruits & vegetables					
Potato	1.78	1.00	---	---	2.78
5. Others	---	---	---	---	---
<b>Rainfed</b>					
1. Cereal Crops					
Paddy	107.25	---	---	---	107.25
Wheat	---	---	---	---	---
2. Pulses					
Lentil	---	01.24	---	---	01.24
Tur (Arhar)	3.71	02.79	---	---	06.50
Horse Gram (Kulthi)	4.28	2.90	---	---	07.18
3. Oilseeds					
Tisi	---	1.00	---	---	1.00
4. Fruits & vegetables					
Potato	---	---	---	---	---
5. Others	---	---	---	1.60	1.60

*Source: Primary Survey*

As regards yield rates of the crops grown by the households, the related data given in table 5.9 show that the same were 8.05 quintals per acre for irrigated paddy crop and 6.40 quintals per acre for rainfed paddy crop. The yield rate of wheat was 6.85 quintals per acre and pulses around 3 quintals per acre. It is to be pointed out

here that the yield rates of different crops grown by the households were lower than the state's average yields as the village had subsistence agricultural economy and less prone to modern technology practices. Moreover, fluctuations in agricultural productions are common in the Jharkhand region.

**Table 5.8 : Trends in cropping pattern in Bargachha Hariyari during 2019-20**

Crop groups	Share in total cropped area ( In %)
	In 2019-20
Cereals	85.89
Pulses	8.26
Oilseeds	3.43
Cash crops	---
Fruits	---
Nuts	---
Condiments & Spices	---
Vegetables	1.54
Others	0.88
<b>Total</b>	<b>100.00</b>

Source: Primary Survey

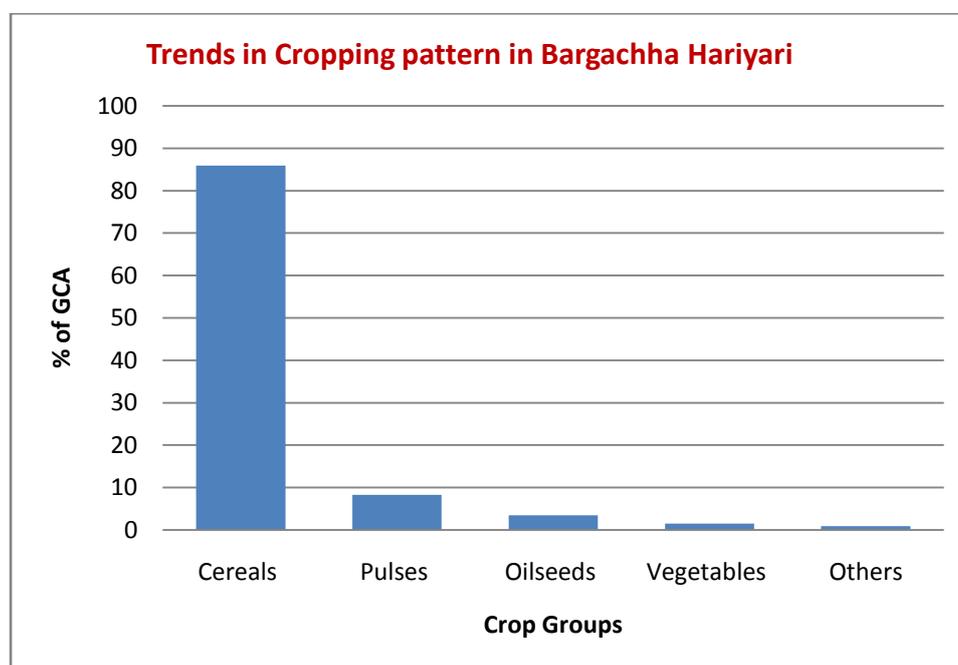


Figure: 10

#### 5.4 Profitability of Major Crops

Obtaining profitable crop production is the key to having a viable farming business or proposition, especially when land resources are limited. The profitability of major crops cultivated by the households in the surveyed village is presented in table 5.10, which shows that 73.67 per cent of the

households, who cultivated irrigated paddy, were reported to be profitable and remaining 26.33 per cent were in no profit-no loss situation. Similarly, in case of 56 per cent wheat grown by farmers in irrigated condition were in profitable situation, 12.67 per cent in no profit and no loss situation

**Table 5.9 : Yield of major crops in the village Bargachha Hariyari**

(Unit: Qtl/acre)

Particulars	In 2019 (during current survey)
<b>Irrigated</b>	
1. Cereal Crops	
Paddy	8.05
Wheat	6.85
2. Pulses	
3. Oilseeds	
Mustard	2.60
4. Fruits & vegetables	
Potato	8.50
5. Others	
<b>Rainfed</b>	
1. Cereal Crops	
Paddy	6.40
Wheat	---
2. Pulses	
Kulthi (Horse Gram)	3.02
Arhar (Tur)	3.54
3. Oilseeds	
Tisi	1.09
4. Fruits & vegetables	
Potato	
5. Others	---

Source: Primary Survey

and 31.33 per cent incurred losses. Potato was profitable for 58.33 per cent farmers, while it was profitable in regard to 28 per cent of mustard growing farmers. In rainfed conditions, the profitability for paddy growers was 17.33 per cent only, whereas wheat 37.33 per cent and horse gram 60.33 per cent. It can thus be safely concluded

that irrigated crops were more profitable than rainfed crops and on the other hand, the situation of no profit and no loss was higher compared to profitability of the crops grown. It could be possibly due to subsistence agriculture and undulated terrain of the village.

**Table 5.10 : Profitability of major crops cultivated in the village Bargachha Hariyari**  
(% respondents)

Particulars	Profitable	No profit no loss	Incurred loss	Total
<b>Irrigated</b>				
Paddy	73.67	26.33	---	100.00
Wheat	56.00	12.67	31.33	100.00
Potato	58.33	41.67	---	100.00
Mustard	28.00	68.33	3.67	100.00
<b>Rainfed</b>				
Paddy	17.33	52.67	30.00	100.00
Wheat	37.33	32.67	30.00	100.00
Horse Gram (Kulthi)	60.33	39.67	---	100.00
Arhar (Tur)	---	73.67	26.33	100.00
Tisi	---	75.00	25.00	100.00

Source: Primary Survey

### 5.5 Disposal of Major Farm Produces and Price Realization

The disposal pattern of major farm produces and price realization by the farmers are presented in table 5.11. It shows that the marketed surplus of cereal crops was up to 30 per cent. In case of

potato, it was 30 per cent, arhar pulse 20 per cent and poultry also 30 per cent. It reveals that the share of home consumption was high. This may be due to the presence of marginal and small farmers in large number. The price received by them out of their produces, which were marketed, was

not fair, rather much lower than the minimum support prices. Actually, all the produces were sold in small quantities and in local haats, or with the local traders. The

practice of distress selling was also reported mainly due to purchase of some other essentials out of their own produces.

**Table 5.11 : Disposal of major farm produces and price realization**

Particulars	% produce sold	Average price received	Units
Crops/Produces			
Paddy	25.00	950.00	Rs./Qtl
Wheat	30.00	1500.00	Rs./Qtl
Potato	30.00	800.00	Rs./Qtl
Mustard	0.00	---	Rs./Qtl
Horse Gram (Kulthi)	0.00	---	Rs./Qtl
Arhar	20.00	600.00	Rs./Qtl
Tisi (Linseed)	0.00	---	Rs./Qtl
Milk	---	---	Rs./lit
Fish	---	---	Rs./kg
Poultry (Deshi)	30.00	175	Rs./kag
Egg	---	---	Rs./dozen

Source: Primary Survey

### 5.6 Distribution of Livestock Resources

As discussed in section 3.3.4, livestock rearing in tribal region is common. In the surveyed village, dairy and goatry were being undertaken most commonly, but on very small scale. During the survey 2559 livestock were possessed by the households (table 5.12). Out of these 1512 (59.09%) were birds, pigeons, hens and ducks. It was followed by goats (645 i.e.,

25.2%), 208 (8.13%) cattle, 53 (2.07 %) buffaloes, pigs (4.38) and sheep (1.13%). As tribals' agricultural economy is largely at survival level, so to optimize resource use efficiency with some gains from livestock rearing to meet their day to day affairs is practiced by them. But, the rearing had not emerged as enterprise due to low investment and less marketed surplus.

**Table 5.12 : Livestock Composition in the village Bargachha Hariyari****(%)**

<b>Livestocks</b>	<b>Crossbreed</b>	<b>Improved</b>	<b>Indigenous/ Desi</b>	<b>Predominant breeds</b>	<b>Type of changes in composition during 2014-2019</b>
Cattle	---	7 (0.28)	201 (7.85)	---	---
Buffalo	---	---	53 (12.07)	---	---
Goat	---	---	645 (25.20)	---	---
Sheep	---	---	29 (1.13)	---	---
Pigs	---	---	112 (4.38)	---	---
<b>Birds:</b>					
Pigeons, Hens & Ducks	---	---	1512 (59.08)	---	---
<b>Total</b>	---	---	2559 (100.00)	---	---

*Source: Primary Survey*

### **5.7 Annual Income by Livelihood Groups**

The composition of average annual per capita income of households by livelihood groups is presented in table 5.13, which indicates that on overall farms, total income was estimated at Rs. 18937.55 per capita per annum. Among the cultivators group, total per capita annual income was estimated at Rs. 3575, constituting Rs. 1925 as farm income (53.85%) and Rs. 1650 as off-farm income (46.15%). Similarly, among agricultural labour livelihood group, it was Rs. 21550, govt. salaried households Rs. 16,000/-, private salaried households Rs. 9183, pensioners Rs. 21605, caste based

profession Rs. 15560, trade and businesses Rs. 70570, casual labour Rs. 19250, marginal labour Rs. 14435, households engaged in household industries Rs. 9760, and others Rs. 6845. On overall farms' level, the total per capita annual incomes were estimated at Rs. 3236 from farm income, Rs. 21595 as off farm income and Rs. 11750 as non-farm income. It reveals that per capita annual off farm income was much higher as compared to non-farm income and farm income of the sample households,. The farm income was reported to be low mainly because of large number of the sample households belonging marginal and small categories of cultivators (196 in number).

**Table 5.13 : Composition of Annual income of households by Livelihood Groups**

(Rupees per capita per annum)

Livelihood Groups	Nos.	Farm Income	Off-farm Income	Non-farm Income	Total
Cultivator	196	1925	1650	---	3575
Agricultural labour	24	---	18400	3150	21550
Dairy/Fishing/Poultry keeping	---	---	---	---	---
Govt Salaried	18	3500	---	12500	16000
Private Salaried	12	2775	---	6408	9183
Pensioner	07	3260	---	18345	21605
Caste based profession	06	---	---	15560	15560
Trade & business	05	4720	47080	18770	70570
Entrepreneur	---	---	---	---	---
Casual labour	14	---	19250	---	19250
Marginal labour	09	---	---	14435	14435
Household Industries	08	---	---	9740	9740
Others	01	---	---	6845	6845
<b>Overall</b>	<b>300</b>	<b>3236.0</b>	<b>21595.0</b>	<b>11750.33</b>	<b>18937.55</b>

Source: Primary Survey

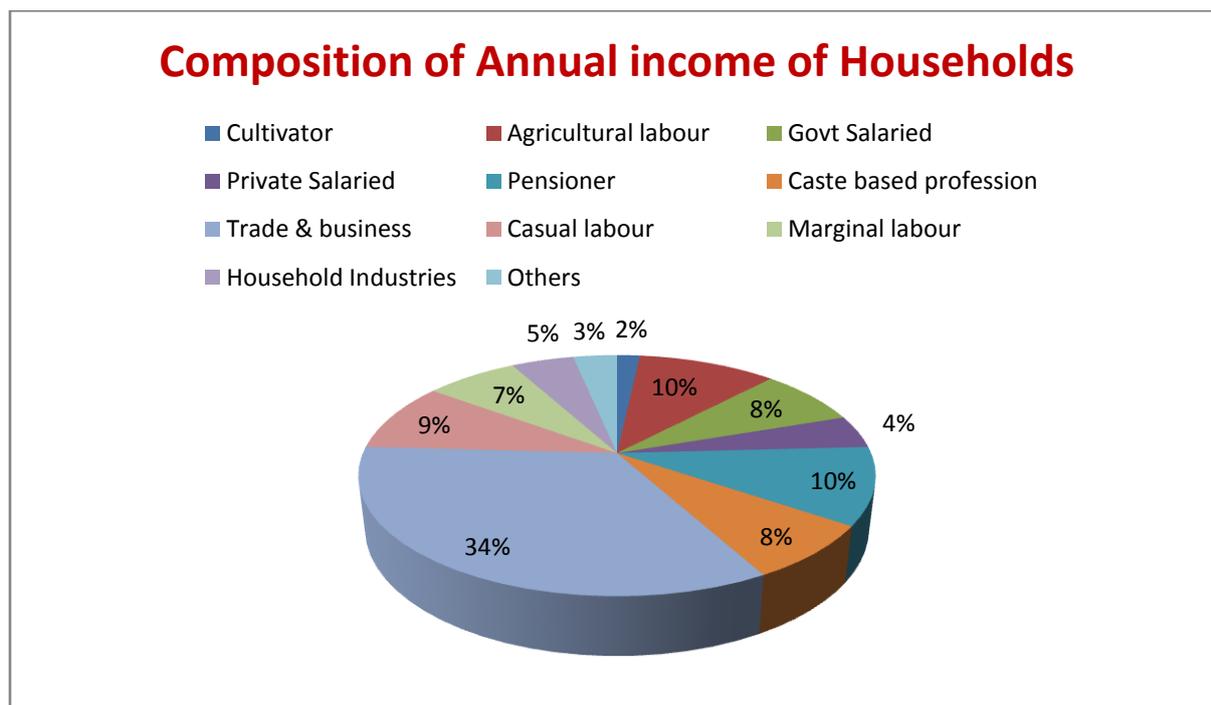


Figure: 11

## 5.8 Savings and Borrowings of the Sample Households

It is seen from the table 5.14 that 30.67 per cent of the households had savings and these household had saved on an average, with more than one financial institution. Households which had savings, 37 (12.85%) belonged to farm livelihood 28 (21.05%) from off farm livelihood and 27 (60%) from non-farm livelihood activity categories. Per household savings at overall level was

reported to be Rs. 19069. In the farm occupation, it was Rs. 5554, off farm Rs. 5000 and non-farm Rs. 22777. It is easily seen from the data that per household savings at farm livelihood was much lower as compared to non-farm household livelihood. It is, perhaps due to low return from farming. Further, households used to keep their major savings in banks, with small proportions of it in LIC and Post Office.

**Table 5.14 : Savings of Sampled Households during 2019-20 (Rs./household)**

Source	Farm	Off-farm	Non-farm	Total
Number of households reported savings (%)	37 (12.85)	28 (21.05)	27 (60.00)	92 (30.67)
Bank	4054.05	5000.00	6944.12	4435.33
Post Office	1500.00	---	3333.33	2133.33
LIC	---	---	12500.00	12500.00
Total	5554.05	5000.00	22777.45	19068.66

Source: Primary Survey

*In parenthesis, percentage figures are of respective totals.*

Further in table 5.15, borrowings status of the sample households for last five years is depicted. It includes the number of borrowed households, amount of borrowings, purpose of borrowings and outstanding amounts. Out of the total households, only 41 households (13.67%) borrowed and out of them, 18 households (43.09%) were from farming, 15 (36.6%) from off farming activity and 8 (19.5%) from non family vocations. As regards the amount of borrowings, it was Rs. 2, 41, 500 at overall farms' level. About 60 per cent of

the total borrowing was obtained from Gramin Banks, followed by traders/money lenders (22.36%) and friends/relatives (17.60%). In regard to purpose of borrowings, about 70.73 per cent was for other purposes like; marriage, illness etc. It was followed by house repairing (12.20%), personal loan (9.76%) and cultivation (7.32%). The average amount of outstanding was reported to be Rs. 117725, which stood for nearly half of the overall level of borrowings.

**Table 5.15 : Details of Borrowings of Sampled Households during last 5 years  
(2014-15 to 2019-20)**

SN	Particulars	Farm	Off Farm	Non-farm	Total
<b>1.</b>	<b>Number of Borrowed Households (%)</b>				
	Commercial Bank	---	---	---	---
	Co-operative Bank	---	---	---	---
	Gramin Bank	2 (11.11)	1 (6.66)	4 (50.00)	7 (17.07)
	Traders/Moneylenders	7 (38.89)	4 (26.67)	3 (37.50)	14 (34.15)
	Friends/relatives	9 (50.00)	10 (66.67)	1 (12.50)	20 (48.78)
	<b>Total</b>	<b>18 (100.00)</b>	<b>15 (100.00)</b>	<b>8 (100.00)</b>	<b>41 (100.00)</b>
<b>2.</b>	<b>Amount Borrowed (Rs.)</b>				
	Commercial Bank	---	---	---	---
	Co-operative Bank	---	---	---	---
	Gramin Bank	40000 (47.90)	15000 (41.67)	90000 (73.77)	145000 (60.04)
	Traders/Moneylenders	21000 (25.15)	8000 (22.22)	25000 (20.49)	54000 (22.36)
	Friends/relatives	22500 (26.95)	13000 (36.11)	7000 (5.74)	42500 (17.60)
	<b>Total</b>	<b>83500 (100.00)</b>	<b>36000 (100.00)</b>	<b>122000 (100.00)</b>	<b>241500 (100.00)</b>
<b>3.</b>	<b>Purpose of Loan</b>				
	Farming	2 (11.11)	1 (6.67)	---	3 (7.32)
	House repairing	2 (11.11)	1 (6.67)	2 (25.00)	5 (12.20)
	Personal loan	1 (5.56)	2 (13.33)	1 (12.50)	4 (9.75)
	Others, marriage, sickness, 6 months' migration for Rojgar	13 (72.22)	11 (73.33)	5 (62.50)	29 (70.73)
	<b>Total</b>	<b>18 (100.00)</b>	<b>15 (100.00)</b>	<b>8 (100.00)</b>	<b>41 (100.00)</b>
<b>4.</b>	<b>Amount Outstanding (Rs.)</b>				
	Commercial Bank	---	---	---	---
	Co-operative Bank	---	---	---	---
	Gramin Bank	12800 (28.94)	7500 (34.88)	45000 (86.54)	65300 (55.47)
	Traders/Moneylenders	14625 (33.07)	5000 (23.26)	---	19625 (16.67)
	Friends/relatives	16800 (37.99)	9000 (41.86)	7000 (13.46)	32800 (27.86)
	<b>Total</b>	<b>44225 (100.00)</b>	<b>21500 (100.00)</b>	<b>52000 (100.00)</b>	<b>117725 (100.00)</b>

*Source: Primary Survey*

*In parenthesis, percentage to respective total is given.*

### 5.9 Concluding Remarks

Analysis of the data in this chapter reveals that of the total sample, cultivators (65.33%) were larger in number followed by agricultural labour (8%). It means nearly 73 per cent of the households were engaged in

agricultural activities. Seasonal migration was also reported by only 16 per cent of the respondents. Land use pattern data reveals that about 40 per cent of the total geographical area was used for agricultural purposes and the cropping intensity was 121 per cent. Moreover, about 86 per cent

of the households belonged to marginal category, which operated nearly 67 per cent of the total areas with an average size of 0.55 acre. Out of the gross cropped area (GCA), only 31 per cent was irrigated with wells and seasonally filled-up holes and pits. Cereals (86%) were the major produces in the cropping pattern. Due to

subsistence agriculture, profitability out of the cultivation was between 17 to 73 per cent across major crops. The overall per capita annual income was estimated as Rs. 18937, resulting to low savings (Rs. 19069) and high borrowings during the last five years, i.e., during 2014-15 to 2019-20 (Rs. 241500/-).

### Conducting Interview



### ECOLOGY, VULNERABILITY AND SUSTAINABILITY

The landscape of Jharkhand is known for its natural resources which include flora, fauna, water and mineral resources. Natural resources are important for the livelihood of the motives of Jharkhand, as they are socially and economically dependent on these resources. The forest area is mainly classified into three group viz., very dense, moderately dense and open forest. In the surveyed village, there was open forest. The change in percentage of forest area to geographical area in the surveyed village was reported to be around 2 per cent plus only during the last 5 years i.e., during 2014-2019, and the share of shrubs also marginally increased. More than 5000 plants were reported in the village. Further, the village was underlain by diverse rock-types of different geonological ages ranging from archaean to the recent. The major rock types are igneous and metamorphic covering nearly 60 to 70 per cent of the geographical area in the village. The weathered zone, ranging between 10-25 metres acted as an excellent repository of groundwater. However, the secondary porosities below the weathered zones also form potential aquifers. The overall stage of ground water development in the village was been found to be around 25 per cent as against the block (24.66%)

and the district (38.68%), as per 2013 report of Central Ground water Board, Ranchi Unit. In the rural areas, water supply was dependant on groundwater, mainly carried out through dug wells and hand pumps.

Most vulnerable tribal groups (MVTGs) in the village were Santhal, constituting about 30-40 per cent of the total tribal population. Since they are primarily rural, about 90 per cent of them resided in the village itself. Other primitive vulnerable tribal groups (PVTGs) are Paharias viz., Sauria and Mal Paharias, concentrated in this region.

These two groups of tribal population faced vulnerability, particularly in cultivation and forest use. This chapter mainly deals with the extreme events and exposures to shocks relating to farmers, labourers etc., and major adoption strategies by different stakeholders to combat such extreme events during the last five years.

#### **6.1 Frequency of Extreme Events and Exposure to Shocks**

The data relating to extreme events and exposures to shocks are presented in the table 6.1, which reveals that the occurrences of droughts during the last five years (i.e., 2014-2019) had increased.

**Table 6.1 : Frequency of extreme events during last 5 years (2014-2019)  
and exposures to shocks**

Extreme Events	Change in occurrences (Increased/Decreased/ No change)	Frequency during last 5 years	Most vulnerable groups* (MVGs)	Least vulnerable groups*(LVGs)	Most vulnerable crops or enterprises (MVCs)	Least vulnerable crops or enterprises (LVCs)
Drought	Increased	Often	MVGs: Are Poor Agricultural Labourers, Sauria Paharia Groups, marginal & small farmers		MVCs: Are mainly irrigated crops due to erratic rainfall and poor irrigational facilities. These crops are mainly paddy wheat, maize potato, etc.	
Flood	---	---		---		---
Cyclone	---	---		---		---
Erratic	Increased	Often	LVGs : Private & Govt. employees and construction workers.		LVCs: Are mainly those crops, which require less irrigation and also low input costs in cultivation. These crops are mainly arhar and kulthi.	
Heat wave	Increased	Often				
Cold wave	Increased	Often				
Land slides	---	---		---		---
Epidemic	---					
Major	---	---		---		---
Suicide	---	---		---		---
Robbery	Decreased	Rare		---		---
Violence	---	---		---		---
Loss of job	---	---		---		---
Price crush	---	---		---		---
other	---	---		---		---

Source: Based on GDs in the Surveyed Village.

Erratic rainfall, heat wave etc., were the frequent phenomenon. These extreme occurrences very oftenly pushed them in great crisis in regard to their livelihood. On

the one hand, poor agricultural labourers, small & marginal farmers, particularly Santhal and Sauria Paharia, were found to be most vulnerable groups in the village,

while households engaged in jobs, either in government and private sectors, were in least vulnerable groups. On the other hand, paddy, wheat, maize and potato crops were the most vulnerable crops, mainly due to poor irrigation facilities. The least vulnerable crops were reported to be arhar/tur and kulthi (pulses), which are more or less sustained even in warm and moderate rains. Besides, no cases of floods, cyclones, landslides, epidemics, accidents, suicides, violences etc., were reported, however, while cases of robbery were rarely reported.

## 6.2 Degree of Hardship Faced Vulnerability

The degree of hardship faced vulnerability during last five years i.e., during 2014-2019 in the surveyed village has been presented in table 6.2 on 0-5 scale. The table indicates that due to drought, damages to crops, hardships to cattle, poor ruminants, children, aged people and women, as well were reported to the high (04) during the last five years.

**Table 6.2 : Degree of hardships faced (vulnerability) during last 5 years 2014-2019 (in 0-5 scale)**

Climate Extremes	Damages to crops	Hardship to cattle	Hardship to small ruminants	Damages to fisheries NA	Hardship to poor	Hardship to children	Hardship to aged people	Hardship to women
Drought	4	4	4	---	4	4	4	4
Flood	---	---	---	---	---	---	---	---
Cyclone	---	---	---	---	---	---	---	---
Erratic Rainfall	3	---	3	---	3	---	---	3
Heat wave	4	3	3	---	3	3	3	3
Cold wave	3	3	2	---	4	3	3	3
Land slides	---	---	---	---	---	---	---	---
Epidemic	---	---	---	---	---	---	---	---
Major accident	---	---	---	---	---	---	---	---
Suicide	---	---	---	---	---	---	---	---
Robbery	---	---	---	---	---	---	---	---
Violence	---	---	---	---	---	---	---	---
Loss of job	---	---	---	---	---	---	---	---
Price crush	---	---	---	---	2	---	---	---
Any others	---	---	---	---	---	---	---	---

*Note : Rank (0=Nil; 1=Negligible; 2= Low; 3=Moderate; 4=High; 5=Extreme); Consider only relevant shocks, if there was any during last 5 years*

Due to erratic rainfall, damages to crops and small ruminants and hardships to poor & women were also reported to be moderate (03). Recent heat wave was found to be high (04) in case of damages to crops. Due to heat wave, hardship to cattle, small ruminants, poor, children and aged people were found at moderate scale (03). Cold wave also caused damages to crops moderately (03). Further, flood cycle, landslides, epidemic etc., were not reported in the surveyed village. It can thus, be safely concluded that the sample households largely faced vulnerability of drought and heat wave at higher scale, while erratic rainfall at moderate level was witnessed across the different natural hardships.

### **6.3 Major Coping Strategies for Different Extreme Events**

Major coping strategies at the households level for different extreme events during last five years i.e., during 2014-2019, are presented in table 6.3, which reveals that for combating the drought, the coop farming

community mortgaged their assets and also borrowed amount as coping strategies. In case of dairy farmers, they used to reduce their consumption, labour class and other poor seasonally migrate in search of jobs outside the village. To cope with the events like erratic rainfall, particularly the marginal farmers and agricultural labourers migrated to nearby districts falling under West Bengal for transplanting paddy seeds and many times, they put their small holdings on crop sharing basis as coping strategy. For combating with heat and cold waves, migration, change of lifestyles and passive sufferings were reported as coping strategies by farming and labour class communities in particular. Robbery, violence, suicide, loss of job, price crush etc., were not reported in the village. Moreover, due to subsistence agriculture and events like hardship in survival, they had to mortgage their assets, livestock etc., and managed their lifestyles anyhow along with seasonal migration as major coping strategies. This results them to be gradually poor and poorest.

**Table 6.3 : Major coping strategies at household level for different extreme events**

Extreme Events	Crop farming Community	Dairy farmers	Fish farmers	Labour class	Poorest people	Others 1 (.....)	Others2 (.....)	Others3 (.....)
Drought	1, 5	6	---	4	4	---	---	---
Flood	---	---	---	---	---	---	---	---
Cyclone	---	---	---	---	---	---	---	---
Erratic	4, 14	---	---	4	14			
Heat wave	4	12	---	11	4	---	---	---
Cold wave	1	12	---	12	12	---	---	---
Land slides	---	---	---	---	---	---	---	---
Epidemic	---	---	---	---	---	---	---	---
Major accident	---	---	---	---	---	---	---	---
Suicide	---	---	---	---	---	---	---	---
Robbery	---	---	---	---	---	---	---	---
Violence	---	---	---	---	---	---	---	---
Loss of job	---	---	---	---	---	---	---	---
Price crush	---	---	---	---	---	---	---	---
Any others	---	---	---	---	---	---	---	---

Note : 1=Mortgaged assets; 2=Sold assets; 3=Used savings; 4=Migration; 5=Borrowing; 6=Reduced consumption; 7=Rely on help/relief; 8=Postpone family festivals; 9=Increase working hours; 10=Change crop/livelihood; 11=Change lifestyle; 12=Passive sufferings; 13=Suicide; 14= Any other (specify)

#### **6.4 Major Adaptation Strategies to Combat Extreme Events**

The relevant data on major adaptation strategies to combat extreme events are presented through table 6.4, which shows that to combat with drought in the village during last five years (2014-19), to some extent livelihood diversification was adopted at the individual level. At the government level, MGNREGA was

extended based on demand for jobs. Since the village is largely inhabited by tribal population and their reluctant attitude towards search or demand for jobs, are well known, but a few involved themselves in MGNREGA works. Again for erratic rainfall, heat and cold waves, livelihood diversification in the form of dairy farming and casual labour in MGNREGA schemes were adopted at individual and

government's levels respectively. To a little extent, crop diversification at individual level was also reported to combat the heat wave particularly. No relief programmes were reported to have been undertaken,

either by NGOs or by the community. Besides drought, erratic rainfall, heat and cold waves, no substantial extreme events were reported by the households in the village.

**Table 6.4 : Major Adaptation Strategies by different Stakeholders to combat extreme events**

Extreme events	Individual level	Government level	By NGO	Community level
Drought	1	9	---	---
Flood	---	---	---	---
Cyclone	---	---	---	---
Erratic Rainfall	1	9	---	---
Heat wave	2	---	---	---
Cold wave	1	---	---	---
Land slides	---	---	---	---
Epidemic	---	---	---	---
Major accident	---	---	---	---
Suicide	---	---	---	---
Robbery	---	---	---	---
Violence	---	---	---	---
Loss of job	---	---	---	---
Price crush	---	---	---	---
Any others	---	---	---	---

*Note: 1= Livelihood diversification; 2=Crop diversification; 3=Crop insurance; 4= Health insurance; 5=General insurance; 6=Pond making; 7=Relief programme; 8=Income support schemes;; 9=MGNAREGA; 10=Livelihood creation; 11=Afforestation; 12=Immunization; 13= Infrastructure (road, irrigation, storage) development; 14=Easy lending; 15.=Loan waiving; 16=Community preparedness; 17=specific (mention)*

## **6.5 Concluding Remarks**

The analysis of qualitative information is based on group discussions organized at several locations/tolas in the village. According to majority of the participants in the referred discussions, the villagers enjoyed good connectivity in terms of roads, electricity and mobile networks, but the village infrastructure, as well as, economic status of the habitats have not

substantially increased during the last five years, i.e., during 2014-19. Extreme weather and climatic events caused them hardships and vulnerabilities. Therefore, steps for providing better infrastructure, expansion in livelihood opportunities, need based relief measures, particularly during drought etc., were major suggestions extended by the villagers for their sustainability.

## CHAPTER – VII

### POLICY AND GOVERNANCE

In Jharkhand state, nearly 76 per cent of the population lives in rural areas as compared to the National average of 70 per cent. Scheduled tribes and scheduled castes are more ruralised than rest of the communities. In fact, more than 90 per cent of the scheduled tribes and 80 per cent of scheduled castes live in the rural areas. The Socio-Economic Caste Census (2011) data reveals that about 82 per cent of the scheduled caste households in rural Jharkhand had a monthly income of less than Rs. 5000. Overall status of the scheduled tribe households was better than the scheduled caste households, but in some districts including the district of the surveyed village it was equally bad. Besides, in rural Jharkhand, nearly 68 per cent of the households have kucha houses compared to 37 per cent in India. Health condition among the tribals of surveyed village and vision as well were also poor. They oftenly remained excluded from the mainstream society and found it difficult to access medical facilities. In regard to livelihood security, the Government of Jharkhand and Pan IIT Alumni Reach for India Foundation (PARFI) have set up a SPU (Special Purpose Vehicle), namely IIT alumni Reach for Jharkhand (PReJHA) Foundation with a mission to design, implement and scale-up self sustainable initiatives for skill development and livelihood enhancement with special focus

on the marginalized communities, such as Scheduled Tribes (STs), Particularly Vulnerable Tribal Groups (PVTGs), Scheduled Castes (SCs), and other minority communities.

It is in this context, the policy and governance played an important role in ameliorating the socio-economic conditions of the PVTGs, constituting the most vulnerable tribal entities in Jharkhand (*Appendix – II*). Policy is a plan of actions chosen by the Government and Governance refers to structures and processes that are designed to ensure accountability, transparency, responsiveness, rule of law, stability, equity and inclusiveness, empowerment and broad based participation. This chapter focuses briefly on such issues. As also discussed earlier that out of the total population (Census, 2011) of the surveyed village, schedule tribes constituted about 59 per cent and scheduled castes 6 per cent, taking together it comes to 65 per cent i.e., two-thirds of the total population. As far composition small is concerned, besides, constituted nearly 79 per cent scheduled tribes, 5 per cent scheduled castes and other backward castes 15 per cent. Minorities and general castes population were not reported in the village.

#### **7.1 Coverage under Different Government Sponsored Schemes**

Table 7.1 contained the coverage of households under different government

sponsored schemes. The table reveals that under the BPL card scheme, out of the total entitled households (254 Hhs) in the village during last 5 years i.e., during 2014-19, 199 Hhs (78.35%) had availed the facility and those availed, were reported to be 100 per cent satisfied with the scheme.

Under KCC Scheme 23 Hhs were entitled, and of them, 47.85 per cent had availed the facility with 72.72 per cent satisfactory performance of the scheme. The poor entitlement for availing the KCC was mainly due to reluctance in obtaining the requisite papers such as income certificate, land possession certificate etc; and procedural complexities, apart having marginal and small sizes of the land holdings and increased involvement of middlemen. Public health insurance card and soil health card were not reported by any of the households. Under MGNREGA job card scheme, 218 households were reported entitled, but 69.72 per cent of them had availed the scheme. Similarly, for ICDS/Mid day meal and government scholarship schemes, 106 and 113 households reported about their entitlement, against which 84.9 per cent and 15.04 per cent only were reported to have been covered respectively. As regards the rural housing scheme, Indira Aawas Yojana (IAY) launched in 1996 has now merged with Housing for All by 2022 and had been restructured into Pradhan Mantri Aawas Yojana-Gramin (PMAY-G) in 2016. In Jharkhand, to ensure that assistance is targeted at those, who are genuinely

deprived and that the selection is objective and verifiable, PMAY-G, instead of selecting the beneficiary from among the BPL households selects beneficiary using housing deprivation parameters contained in the Socio-Economic and Caste Census (SECC, 2011), which captures specific deprivations related to housing among households. Accordingly, of the total BPL households (254 in number), 168 Hhs (66.14%) availed the facility under the housing programme, and of them, 75 per cent were satisfied with the scheme. But, during the survey year (2019-20), only 15.43 per cent houses were completed against the target set for the district of the surveyed village, which was distressing despite involvement of the Gram Sabha. Other programmes relating to agriculture such as crop insurance (PMFBY), irrigation (PMKSY), Seed Minikit Scheme, Farm Mechanization Scheme, PM- KISAN Life Insurance Scheme & Income support scheme were not reported to have been availed by any of the households, which was again a matter of concern for policy interventions. Under the old age pension scheme and widow pension scheme, the entitlements were reported for 17 and 14 persons respectively, and against them, 58.82 per cent and 57.14 per cent respectively availed the scheme out of them, 90 per cent were satisfied with the scheme. Under the LPG scheme (PM-UJJWALA Yojana), 232 Hhs (73.33% of the total Hhs) were entitled, but only 94 Hhs (40.51%) availed, and those availed, all were satisfied with the scheme (60:30:10).

**Table 7.1 : Coverage under different government sponsored schemes**

Name of the scheme	Number of entitled households	No of Hhs/ beneficiaries availed the facility	% coverage	% of beneficiaries satisfied with the scheme
1. BPL Card	254	199	78.35	100.00
2. KCC Card	23	11	47.83	72.72
3. Public Health Insurance Card	NA	NA	NA	NA
4. Soil Health Card	NA	NA	NA	NA
5. MGNREGA Job Card	218	152	69.72	75.00
6. ICDS/Mid Day Meal	106	90	84.90	100.00
7. Govt. Scholarship Schemes	113	17	15.04	100.00
8. Govt. Housing Scheme (IAY/PMAY)	254	168	66.14	70.00
9. Crop Insurance: PMFBY/Others	NA	NA	NA	NA
10. Irrigation: PMKSY/Others	NA	NA	NA	NA
11. Seed Minikit scheme	NA	NA	NA	NA
12. Farm machinery or implements	NA	NA	NA	NA
13. Life Insurance (Govt sponsored)	NA	NA	NA	NA
14. CG Farm Income Support (PM-KISAN)	NA	NA	NA	NA
15. SG Farm Income Support Schemes	NA	NA	NA	NA
16. Old Age Pension Schemes	17	10	58.82	90.00
17. Farm Pension Scheme (PM-KMY)	NA	NA	NA	NA
18. Widow Pension Scheme	14	8	57.14	87.50
19. Farm Loan Waiver Scheme	NA	NA	NA	NA
20. LPG scheme ( PM UJJWALA)	232	94	40.51	100.00
21. PMKVY/Organic Farming	NA	NA	NA	NA
22. MSP/PM-AASHA Scheme				
23. Any Other (Specify)	NA	NA	NA	NA
i. ODF (Swachh-Bharat Mission --	NA	NA	100.00*	---

\* Economic Survey of Jharkhand: 2019-20, Government of Jharkhand

Source: Primary Survey & Government of Jharkhand

## 7.2 Concluding Remarks

The analysis under this chapter reveals that moderate coverages have been given under some of the selected government programmes. Coverage under agricultural development and other social security schemes were found quite low or absent mainly due to apathy of local functionaries, reluctance of the villagers/households and presence of the middlemen. This is a serious phenomenon and because of that the socio-economic conditions of the village could not be considered as moderately developed. So, social audit in this regard is need of the hour. As social audit is a process of reviewing official records and determining, whether reported

expenditures by reflected the actual money spent on the ground. Moreover, the state government has made social auditing mandatory with a view to enhance local governance, particularly for strengthening accountability and transparency in implementation of government schemes. The state planned for social audit at least once in 2019-20 in 51 per cent of the total 4403 Gram Panchayats. The district of the surveyed village is also covered under social auditing exercise, where more than 50 per cent of the Gram Panchayats were covered. No doubt, this social auditing programme will reveal real scenario for needful actions.



## CHAPTER – VIII

### SUMMARY AND POLICY RECOMMENDATIONS

#### 8.1 Introduction

The history of village surveys in India is over a Century old, and one of the reasons of village surveys is to understand the socio-political-economic life in rural areas because villages are at the lowest ebb of an administrative set up. Advances in our understanding in regard to process are still at work in development economics. The government also recognizes the need for an accurate knowledge of the rural context, as local understanding of individuals and the community is the core issues for setting-up the development agenda. It is perhaps due to this, the Directorate of Economics and Statistics, Ministry of Agriculture & Farmers Welfare; Government of India had assigned this study entitled “Village Survey Study of Bargachha Hariyari Village of Poreyahat Block under Godda District in Jharkhand” under the work-plan year 2019-20, as a base line survey, designed & Co-ordinated by AERC, Visva-Bharati with following specific objectives:

- I. To capture socio-economic dynamics of the village.
- II. To assess the pace, process and pattern of rural change.
- III. To focus on agricultural change and changing pattern of rural livelihoods, and its implication on future development, and;
- IV. To evaluate the efficiency of government interventions in rural areas, and key drivers of changes in village economy.

#### 8.2 Methods and Coverage

As per the suggested guidelines, a moderately developed village, or the village surveyed before, was to be selected for pilot study. In case of this study, despite being the baseline/pilot survey, the selection of one village, has been done, which was made out of such five villages. These villages were surveyed sometimes in 1969 by AERC, Visva-Bharati entitled ‘Santal Rural Economy--- A Study based on Village Survey in Santal Parganas.’ The selected village is Bargachha Hariyari, which was bifurcated from Hariyari village, the then one village comprising five villages surveyed in 1969. Presently, this is a Panchayat village of Godda district (Jharkhand), located in north-west part of the district bordering the agricultural region of Bhagalpur division of Bihar. The village is of moderate size and consisted of 481 households, comprising about 57 per cent scheduled tribe, 6 per cent scheduled caste and 35 per cent others, i.e., mainly other backward castes. The sample for primary survey was 300 households, representing all social groups and tolas (total 8 in numbers) for in depth study. The

sample constituted 79.4 per cent scheduled tribe, 15.3 per cent other backward castes and 5.3 per cent scheduled castes. Besides, on the basis of duly canvassed schedule, information were also collected at village, group levels through FGDs (Focused Group Discussions) and ASER (Annual Status of Education Report) test, based on Std.- II level of toolkit of 100 children, constituting 53 boys and 47 girls.

### **8.3 An Overview of the Village**

The village is located in the southern part of Godda district of (HDI: 0.258) Santhal Pargana division of Jharkhand State. Total geographical area is 7.19 km<sup>2</sup> and population was 2189 (Census, 2011). The village lies in the rain shadow of Santhal Pargana Plateau with average annual precipitation of 850 mms. Soil of the village being mostly acidic, red & yellow; light textured and highly permeable with poor water holding capacity. Forest coverage is low (13.51%) as compared to the states average (29.2%). A spur road of NH-133 passed through the village, showing good transport facility. The overall literacy rate was 54.14 per cent, much lower to the state's average (67.43%). A total of 597 ration cards were issued, comprising 61.14 per cent BPL families, 29.15 per cent APL families and 9.71 per cent under AATY (Antyodaya Anna Yojana). The share of cultivable land to total geographical area (TGA) was about 40 per cent and net sown area 32 per cent with cropping and irrigation intensities of 129 per cent and 120 per cent respectively. Major source of irrigation was well. Like any other village,

the village has its traditional and cultural life. A mix of Tribals' and Hindu culture were found there.

### **8.4 Social Dynamics**

Of the surveyed households (300 Hhs), total population was 1574. Nearly 78.78 per cent of the households belonged to STs followed by OBCs (14.29%) and SCs (6.93%). Total workers were 52.86 per cent and of the total workers, cultivators were 62.79 per cent, agricultural labourers (32.65%), workers in Hh industries (2.74%) and other workers (1.82%). The overall literacy rate was 58.70 per cent. As per distribution of population by caste/religion, 47.20 per cent belonged to Christian STs, 31.58 per cent Sarna-Dharm STs, 14.29 per cent were OBCs and 6.93 per cent SCs, who were followers of Hindu Sanatan Dharam. About 72 per cent Hhs were in BPL and 7 per cent in Antyodaya/MAPL categories. 181 children were enrolled in schools, and of them 52.43 per cent in government and 47.53 per cent in private schools. Total dropouts were 38 children, comprising 60.52 per cent female and 39.47 per cent male children. As per ASER test, 64.15 per cent and 48.93 per cent children were able to read paragraphs among the boys and girls respectively. About 49.07 per cent and 31.91 per cent children did have arithmetic competency among boys and girls respectively. Overall level of reading competency in government schools was 21.63 per cent, while in private schools, it was 74.60 per cent. The level of arithmetic competency at overall level, in government schools was 13.89 per cent only, while in private schools, it was 56.25

per cent. In regard to food security in the village, 100 per cent of the Hhs did not remain without eating either for the whole day and night. Moreover, in the district of the surveyed village, nearly 36 per cent of men and 27 per cent of women were below normal in respect of BMI (HMIS, 2019). Access to basic amenities was moderately good. Only 9 per cent of the Hhs had membership of Gram Sabha. In political space, the Santhal traditional society was found to be male dominated with little room for women's issues and interests. However, in other cases, it was moderately fair.

### **8.5 Economic System**

Economic system of 300 households reveals that cultivators were larger in numbers, i.e., 65.33 per cent followed by agricultural labourers (8%), government salaried employees (6%), casual labour (4.67%) etc. It further reveals that about 73 per cent of the households were engaged in agriculture vocations, which were largely on subsistence level, which resulted to seasonal migration of 48 persons for outside jobs, as the village lacked employment opportunities for them. The analysis of agrarian economy shows that of the total geographical areas occupied by the households, nearly 34 per cent was cultivable and the net sown area was about 28 per cent of the TGA of the households. Cropping intensity was indicated at 121 per cent, and area under irrigation being 47.80 per cent. The sample households constituted 85.67 per cent marginal farmers who occupied 66.67 per cent of total

operated areas, and 14.33 per cent small farmers occupied 33.33 per cent of total operated areas. Average size of holdings was found to be 0.71 acres against the state's average of 4.23 acres. The cropping pattern mainly pertained to paddy (76.75% of GCA) in kharif season and wheat (only 9.13% of GCA) in rabi season, apart from pulses (8.26% of GCA), oilseeds (3.43 % of GCA) etc. Due to subsistence nature of agriculture, profit from cultivation ranged from 17 to 73 per cent across the crops. The overall per capita annual income was estimated as Rs. 18937 that resulted to low savings and high borrowings during the last five years, i.e., during 2014-19.

### **8.6 Ecology, Vulnerability and Sustainability**

Natural resources for the livelihood of the natives of Jharkhand are important, as they are socially and economically dependent upon these resources. The village had open forest, where more than 5000 plants were reported to be present. Further, diverse rocks of different ages ranging from archaean to the recent underlined in and around in the village. Excellent repository of groundwater (10-25 metres) was reported. Despite that, overall state of groundwater development in the village was found to be 25 per cent against the district's average of 38.68 per cent (CGWB, Ranchi, 2013). The analysis of qualitative information based on the report of majority of the participants reveals that good connectivity in terms of road, electricity and mobile networks existed there. But, extreme weather and climatic events caused

them hardships and vulnerabilities. Steps for providing good infrastructure, expansion in livelihood opportunities, need based relief measures etc., were the major suggestions for their sustainability.

## **8.7 Policy and Governance**

A moderate coverage was reported under some of the selected government programmes. Coverage under agricultural development and other social security schemes were found quite low or absent mainly due to apathy of local functionaries, reluctance of the villagers/households and presence of the middlemen. This is a serious phenomenon and because of that the socio-economic situations of the village could not be considered as moderately developed. So, social auditing for determining the physical coverage and financial expenses is needed to enhance local governance, as policy alone may not be able for substantial change. To ameliorate the socio-economic conditions of PVTGs in fast mode in the village, a participatory approach of the governance should be adopted.

### **8.8.1 Policy Prescriptions**

- i. There is need to legitimize the identity of the Santals and other tribes through traditional social institutions with less interference of State's institutional framework/mechanism, which have increased over the time.
- ii. To protect from economic and ecological vulnerabilities, off farm and non-farm activities should be

encouraged/extended in the village on priority basis.

- iii. Due to subsistence and low profitable agriculture, nearly 36 per cent of the cultivable land in the village remained fallow, which should be targeted to be developed as cropped area under 'Conversion of Fallow Land into Cropped Area Scheme,' implemented under State Plan for the development of agriculture.
- iv. There was lack of interventions of agricultural development programmes in the village, so the coverage of such programmes including 'Paramparagat Krishi Vikas Yojana (PKVY)' should be extended with emphasis on grass root motivation for adoption and implementation on priority basis.
- v. In consonance with the emerging need for holistic development in the villages, Gram Panchayat of the surveyed village had not submitted its suggestions for Gram Panchayat Development Plan (GPDP) during 2019-20. So, there is need for focused attention for the village panchayat to make a comprehensive plan based on participatory process involving the community, particularly the Gram Sabha, in convergence with the schemes of all departments containing 29 subjects listed in the 11<sup>th</sup> schedule of the Indian Constitution. Thus, Gram Panchayat has to play a significant role on the subjects for transformation of the village.

- vi. Healthcare delivery system and facilities in the village should be strictly strengthened and implemented with strict monitoring, so as to the villagers do not suffer to health related vulnerabilities, which existed in the village.
- vii. To ensure well-being of the senior citizens and widows, pension and other welfare schemes should be extended at large to avoid insecurities among them in the village.
- viii. The Jharkhand Tribal Empowerment and Livelihoods Project (JTELP), and IFAD supported by Jharkhand Tribal Development Project (JTDP) meant for the welfare of tribal and backward communities in such villages, where ST population is more than 50 per cent (the surveyed village had 59 per cent of ST population as per 2011 Census), should come forward to reduce degree of vulnerability of the people in the village.
- ix. NH-133 passes through the village, so there is wide scope to make the village as model village by adoption of cluster approach in agricultural marketing, building of handicrafts clusters and other skill development initiatives.
- x. To combat the extreme environment/weather eventualities, a macro shocker strategy comprising drought mitigation measures, promotion for cultivation of rainfed crops, solar irrigation pump, tap water supply for drinking, agro-forestry, land leveling under watershed programme, plantation of horticultural crops etc., may be drawn for its implementation.

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Appendix - I

**Village Survey Study (Household Schedule-Part-I)**

**Funding Agency** : AER Division, Min. of Ag. & Farmers' Welfare, Govt. of India, New Delhi

**Coordinating Centre** : AERC, Visva Bharati, Santiniketan, West-Bengal

**Implementing AERC** : AERC, TM Bhagalpur University, Bhagalpur (BIHAR)

**Survey Village : Bargachha Hariyari State : Jharkhand Schedule/Household No.....**

**A. General information:**

1. **Name of the respondent ):**..... **Mobile no:** .....
2. **Age/Sex/Caste:** .....Yr Male/Female Gen/OBC/SC/ST
3. **Religion & Type of Family** Hindu/Muslim/Sikh/Jain/Buddhist/Christian/Other\  
Joint/Unitary/Others
4. **Occupations/Livelihoods of the household:**
  - a. Primary.....
  - b. Secondary.....
  - c. Tertiary.....
  - d. Others.....

**5. Family member details**

Sl. No	Name	Age (Yrs)	Sex	Relation with head of family	Marital Status*	Education*	Livelihood (For adults & working)

Code: \* Married=1, Unmarried=2, Widowed/Widower=3, Separated/divorced=4, Others (Live together)=5

\*\* Illiterate =0, Primary = 1, Secondary = 2, Intermediate = 3, Technical (ITI, Polytechnic) = 4, Graduate=5; Professional (MBBS, MBA, Ph.D) =6

\*\*\* Cultivator=1, Agril. labour=2, Dairying/Fishing/Poultry keeping=3, Salaried govt.=4, Salaried pvt=5, Pensionar=6, Caste based profession= 7, Trade & business=8, Entrepreneur=9; Casual labour =10, Marginal work (construction, rickshaw puller, etc)=11 Household work=11, Others=12

**6. Working family members employment pattern (Serial no as above: 5) :**

Sl. No.	No of days employed in a year in different occupations			Any out migration for job/employment? If yes, answer the followings.					Any change in occupation in last five years?. If yes, why?
	Primary (.....)	Secondary (.....)	Other (.....)	No. of days/yr?	No of times in a year?	Places & Distance (KM)	Nature (Alone/family)	Reason for migration	

**7. Information about birth & death during last 5 years : (2014-2019)**

No of birth: Male:-----Female.....No. of death: Male:-----Female.....

Cause of death(other than age):.....

**8. Information about school dropouts for children (4 to 14 Years):**

Nos. enrolled in school: Male: .....Female..... Type of school (Govt/Pvt/Others):

Male: .....Female.....

Medium (Vernacular/English): Male: .....Female..... Regularly attending school?

Male: Yes/No. Female: Yes/No

Any drop out from school? Male: Yes/No. Female: Yes/No Taking mid-day/ICDS meal? Male: Yes/No. Female: Yes/No

Class & reasons for drop out: Male..... Female.....

**B. Socio-Economic status of the household:**

- PDS Card type: APL/BPL/MAPL/Others.
- MGNAREGA Card Holder? (Yes/No)
- KCC Holder? (Yes/No)
- Electricity Connection? (Yes/No)
- If yes, is it legal? (Yes/No)
- Bank Accounts: (Yes/No)
- Sanitary Toilet: (Yes/No)
- If yes, is it functional? (Yes/No)
- No of smart phone:.....
- Source of Drinking Water: .....
- Distance travelled for water.....KM
- LPG connection: (Yes/No)
- Type of residence? .....
- Roofing : Thatched/Concrete/Iron sheet
- Health insurance policy? Nil/Govt/Pvt
- During new born delivery or medical emergency whom did you consult? Govt. Doctor/Govt. Hospital/Private Doctor/Private Nursing Home
- Any membership in gram sabha/gram sansad/SHG/club/organization? Yes/No. If Yes give details.....

**C. Ownership of assets :**

**1. Land ownership & transaction**

Type of Land	Owned (Yes/No)	Area (Acres)	Value (Rs)	Sold during 2014-2019	Purchased during 2014-19
Residential land					
Residential house					
Commercial land/building					
Cultivable land					
Cattle sheds/Farm					
Pond/Tank					
Any others					

**2. Ownership of Assets (Other than land)**

S.No	Items	No	Value (Rs.)	S.No	Items	No	Value (Rs.)
<i>Agriculture Assets</i>				<i>Non- Agriculture Assets</i>			
1	Work cattle			1	Bicycle		
2	Milch cattle			2	Rickshaw		
3	Young stock			3	e-Rickshaw/Auto		
4	Sheep, goats, pigs			4	Two Wheeler		
5	Poultry & Duck			5	Four wheeler		
6	Tractor			6	Any other vehicle		
7	Power tiller			7	Sewing machine		
8	Bullock cart			8	Radio		
9	Wood/iron			9	TV		
10	Water pump etc			10	Computer		
11.	Threshers etc			11	Refrigerator/Washing		
12	Sprayers etc			12	LPG & with cooking		
13	Fishing boat			13	AC machines		
14	Other farm			14.	Jewellery etc		
15	Others			15.	Others		

Did you invested in land/jewellery/shares/other fixed assets during last 5 years? Yes/No

If yes, total amount:.....

#### D. Income and expenditure details (During current year only)

##### 1. Average household expenditures (Rs./year) : During current year only

Items	Amount	Items	Amount	Items	Amount
Foods (Total)		Clothes		Asset purchase	
Staple foods		Education		Land	
Milk/Egg/Fish/C		Medical expenses		Livestock	
Fruits/Vegetables		House rent/repairs		Jewelry	
Processed foods (sweets /snacks/ drinks/etc)		Electricity, phone, DTH expenses		Cycle/Bike/Tractor/etc	
Fuels charges		Family festivals		Furniture	
Others (food		Any other		Other purchase	

##### 2. Average household net income (Rs./year): During current year only

Items	Amount	Items	Amount	Items	Amount
Farming activity		Off-farm activity		Non-farm activity	
Crop farming		Labour earning		Service/salary	
Fishing		Other off farm		Wage-earning	
Livestock rearing		Asset hiring		Business/trade	
Poultry/Duckery		Relief/Crop Insurance		Asset transactions	
Orchards etc		Farm income support		Govt. releif/pension	
Any others		Any others		Any other	

##### 3. Food Security Issues: (Tick the appropriate one)

During last 12 months any member of the household	Never	Rarely	Sometimes	Often
a. Went a whole day and night without eating due to poverty?				
b. Went to sleep hungry due to inability to purchase food?				
c. Ever worried that the households would not have enough food?				
d. Ate some poor quality foods that you really did not liked?				
e. Were not able to eat the kind of food you preferred?				

f. Did you offered food to your neighbors and guests?				
g. Went for outside eating in hotel/restaurant?				
h. Are you eating too much packed food/purchased food like ice-cream, cold-drinks, etc?				

## E. Savings and Borrowings

### 1. Details of borrowings during last 5 years

Borrowings (Source)*	Amount (Rs)	Year	Purpose	Rate of interest	Mortgage (if any)	Repaying regularly	Amount outstanding	Remarks
1								
2								
3								
4								
5.								

Code \* 1=commercial bank; 2=cooperative bank; 3=other banks; 4=government programme; 5=traders/money lenders; 6=Ahartia / Commission agent; 7=landlord/employer; 8=friends/relatives; 9=others, specify.....

### 2. Details of savings in terms of cash during last 12 months only

Places of savings	With Bank	Post Office	LIC	Chit funds	Relatives	Neighbors	Others
Amount of savings (in Cash)							
Purpose of savings							
Type of savings (Fixed/Savings)							
Net amount available (Rs.)							

### G. Governance and Policy Issues during last 5 years

1. Did any member of your family participate in Gram Sabha/Gram Sansad meetings? Yes/No  
If yes, how many times?.....Nature of participation: (Active/Passive) If no, Why?.....
2. Have you approached any elected representatives (Panchayat/MLA/MP etc)for problem resolutions? Yes/No  
If yes, to whom & why? .....How many times?.....  
Was the problem resolution satisfactory? Not at all/Somehow/Mostly
3. Did any of your family member received assistance under any government sponsored schemes during last 5 years?:

<i>Name of the scheme</i>	<i>Entitled? (Yes/No)</i>	<i>Received? (Yes/No)</i>	<i>REMARKS: Satisfied? If yes, to what extent? If no, why?</i>
1. BPL Card			
2. KCC Card			
3. Public Health Insurance Card			
4. Soil Health Card			
5. MGNAREGA Job Card			
6. ICDS/Mid Day Meal			
7. Govt. Scholarship Schemes			
8. Govt. Housing Scheme (IAY/PMAY)			
9. Crop Insurance: PMFBY/Others			
10. Irrigation: PMKSY/Others			
11. Seed Minikit scheme			
12. Farm machinery or implements			
13. Life Insurance (Govt sponsored)			
14. CG Farm Income Support (PM-KISAN)			
15. SG Farm Income Support Schemes			
16. Old Age Pension Schemes			
17. Farm Pension Scheme (PM-KMY)			
18. Widow Pension Scheme			
19. Farm Loan Waiver Scheme			
20. LPG scheme ( PM UJJALA)			
21. PMKVY/Organic Farming			
22. MSP/PM-AASHA Scheme			
Any Other (Specify)			
1.			
2.			
3.			
4.			



## Village Survey Study (Household Schedule-Part-II)

**(Only for farmers/cultivators)**

### A. Area under Cultivation (in acres)

Land Type	Owned Land	Leased In	Leased out	Net cultivated Area
Rainfed area				
Irrigated area				
<b>Total</b>				
Sources of irrigation				

### B. Cropping Pattern and Marketing during 2018-19

Crops	Irrigated		Rainfed		Earned profit (+) Incurred loss (-) ? (Rupees)	% produce sold & average price received (Rs./Qtl)
	Area (Acres)	Yield (Qtl/acres)	Area (Acres)	Yield (Qtl/acres)		
<b>Kharif</b>						
1.						
2.						
3.						
4.						
5.						
6.						
<b>Rabi</b>						
1.						
2.						
3.						
4.						
5.						
<b>Summer</b>						
1.						
2.						
3.						
4.						
<b>Perennial crops</b>						
1.						
2.						
3.						
4.						

### C. Crop Diversification

Items	Yes/No?	Why yes/No?
Did you change your cropping pattern during last 5 years?		
Did you change crop varieties during last 5 years?		

## Village Survey Study (Group Discussion Schedule-I)

**Funding Agency** : AER Division, Min. of Ag. & Farmers' Welfare, Govt. of India, New Delhi

**Coordinating Centre** : AERC, Visva Bharati, Santiniketan, West-Bengal

**Implementing AERC** : AERC, TM Bhagalpur University, Bhagalpur (BIHAR)

**Survey Village** : Bargachha Hariyari    **State** : Jharkhand    **Group discussions No**.....

### **A. Shocks : Frequency and exposures to shocks during last 5 years**

Extreme Events	Change in occurrence (Increased/Decreased / No change)	Frequency during last 5 years	Most vulnerable groups*	Least vulnerable groups*	Most vulnerable crops or enterprises	Least vulnerable crops or enterprises
Drought						
Flood						
Cyclone						
Erratic Rainfall						
Heat wave						
Cold wave						
Land slides						
Epidemic						
Major accident						
Suicide						
Robbery						
Violence						
Loss of job						
Price crush						
Any others						

Note: Consider only relevant shocks if there was any during last 5 years only; Groups may be as per livelihoods or any other groups

### B. Shocks : Degree of hardship faced (vulnerability) during last 5 years (in 0-5 scale)

Climate Extremes	Damages to crops	Hardship to cattle	Hardship to small ruminants	Damages to fisheries	Hardship to poor	Hardship to children	Hardship to aged people	Hardship to women
Drought								
Flood								
Cyclone								
Erratic Rainfall								
Heat wave								
Cold wave								
Land slides								
Epidemic								
Major accident								
Suicide								
Robbery								
Violence								
Loss of job								
Price crush								
Any others								

Note : Rank (0=Nil; 1=Negligible; 2= Low; 3=Moderate; 4=High; 5=Extreme); Consider only relevant shocks if there was any during last 5 years

### C. Main coping strategies at household level

Climate Extremes	Crop farming Community	Dairy farmers	Fish farmers	Labour Class	Poorest peoples	Others 1 (.....)	Others2 (.....)	Others3 (.....)
Drought								
Flood								
Cyclone								
Erratic Rainfall								
Heat wave								
Cold wave								
Land slides								

Epidemic								
Major accident								
Suicide								
Robbery								
Violence								
Loss of job								
Price crush								
Any others								

Note: 1=Mortgaged assets; 2=Sold assets; 3=Used savings; 4=Migration; 5=Borrowing; 6=Reduced consumption; 7=Rely on help/relief; 8=Postpone family festivals; 9=Increase working hours; 10=Change crop/livelihood; 11=Change lifestyle; 12=Passive sufferings; 13=Suicide; 14= Any other (specify)

#### D. Adaptation strategies by different stakeholders

Climate Extremes	Individual level	Government level	By NGO	Community level
Drought				
Flood				
Cyclone				
Erratic Rainfall				
Heat wave				
Cold wave				
Land slides				
Epidemic				
Major accident				
Suicide				
Robbery				
Violence				
Loss of job				
Price crush				
Any others				

Note: 1= Livelihood diversification; 2=Crop diversification; 3=Crop insurance; 4= Health insurance; 5=General insurance; 6=Pond making; 7=Relief programme; 8=Income support schemes;; 9=MGNAREGA; 10=Livelihood creation; 11=Afforestation; 12=Immunization; 13= Infrastructure (road, irrigation, storage) development; 14=Easy lending; 15.=Loan waiving; 16=Community preparedness; 17=specific (mention)

## F. Natural disaster management and relief operations during last 5 years

1. Whether early warning was communicated through newspaper/radio/TV etc? Yes/No
- a. If yes, whether it was timely? Yes/No
- b. Was it accurate? Yes/No

### 2. How many days in advance the warning was communicated and through which media?

Media	Drought	Flood	Cyclone	Heat wave	Cold wave	Erratic rain	Epidemic	Others
TV								
Radio								
Newspaper								
Campaign								
Social Media								
Other								

3. Whether the efficacy of such mechanisms improved over the years? Yes/No  
If so, why?
4. Any suggestion to improve preparedness?
5. Whether any relief work started or not during or after calamity events? Yes/No  
If yes, was it timely? Yes/No  
Was it adequate? Yes/No  
If no, to why it was inadequate?
6. Who started such relief programmes?  
Govt./NGO/SHG/International Agencies/None
7. If there was more than one organization who was most efficient and who was least efficient?  
a. Most efficient: Govt./NGO/SHG/International Agencies/NA  
b. Least efficient: Govt./NGO/SHG/International Agencies/NA

### 8. What kind of relief the villagers received after major shocks during last five years (if any)?

ITEMS	Drought	Flood	Cyclone	Heat wave	Cold wave	Erratic rain	Epidemic	Landslide	Violence	Price crush	Others
Food											
Medicine											
Clothes											
Housing											
Cash money											
Employment/ Livelihood											
Cattles											
Inputs (Seed/ Fertilizer etc)											
Feed or fodder for animals											
Others											

9. Was the relief program fare (i.e., for those who need it)? Yes/No
10. If not, who in the village gets more benefited from such programmes and how?



## Village Survey Study (Group Discussion Schedule-III : OPTIONAL)

### Schedule for calculating malnutrition (BMI) & quality of basic education (ASER test)

#### Methodology :

- Use the ASER Toolkit & procedure
- Sample size: Try to cover around 100 children covering different categories of households across the village
- **For Malnutrition/BMI:**
  - ✓ Contact the ICDS Centre in the village & get the list of children along with their Name, Age, Height, Weight
  - ✓ If needed also visit the primary school or even households in the village to have representative sample
  - ✓ Calculate BMI using Height & Weight (Relate it with age-groups)
- **For quality of basic education:**
  - ✓ Conduct ASER test in the ICDS Centre; Primary School or in other places if needed
  - ✓ Consider students from Class-I to Class VIII (Age 5 -16 years) only
  - ✓ Provide the ASER Toolkit in their medium of instruction in the school
  - ✓ Time to be given: 15 Minutes for each test (15 for reading; 15 for doing basic arithmetic)
  - ✓ The purpose is to assess the Childs' ability to read and do basic arithmetic .
  - ✓ Each test have 4 difficulty levels (1,2,3,4). Find out the highest level that the child can do comfortably

#### Compile data in the following format :

Sl No.	Name of the Children	Household No. (Link him/her with the Household schedule: Part-I)	Age (Years)	Height (Cms)	Weight (Kgs)	Class of study	Type of school	ASER Math Level	ASER Reading Level
1									
2									
3									
...									
...									
...									
...									
...									
...									
...									
...									
...									
...									
...									
...									
...									
99									
100									

\* Type of School: Medium (Vernacular or Others); Government/Private/Madrassa/Others

Appendix - II

**Demographic Trends of Particularly Vulnerable Tribal Groups  
(PVTGs) in Jharkhand**

As per Census 2001, there are 75 different groups of PVTGs in India out of whom 8 are found in Jharkhand namely *Asur, Birhor, Birjia, Korwa, Mal Pahariya, Pahariya, Sauria Pahariya and Savar*. These PVTGs are 8 among the 32 tribal groups that exist in Jharkhand.

**Trends in Demography**

A close look at the variation in PVTGs population reflects that there has been growth in their absolute number but their overall population remains relatively small (*table - 1*). The decadal growth rate reflects it better (*table - 2*). Some of the PVTGs like; *Birhor, Birjia, Korwa, Sauriya Pahariya and Savar* have even witnessed negative growth rates in some decades. These communities have witnessed very low decadal compound annual growth rates as well with some groups registering negative rates (*table - 3*).

**Table 1 : Population Distribution of PVTGs in Jharkhand from 1941 to 2011**

PVTGs	1941	1951*	1961	1971	1981	1991	2001	2011
Asur	4388	---	5819	7026	7783	9122	10347	22459
Birhor	2550	---	2438	3464	4377	8038	7514	10726
Birjia	2075	---	4029	3628	4057	4529	5365	6276
Korwa	NA	---	21162	18717	21940	24146	27177	35606
Mal Pahariya	40148	---	45423	48636	79322	79154	115093	135797
Pahariya	10134	---	12268	14651	24012	29256	20786	25585
Sauria Pahariya	58654	---	55606	59047	39269	47826	31050	46222
Savar	1645	---	1561	3548	3014	4203	6004	9688
<b>Total</b>	<b>119594</b>	<b>---</b>	<b>148306</b>	<b>158717</b>	<b>183774</b>	<b>206274</b>	<b>223336</b>	<b>292359</b>

**Table 2 : Decadal Growth Rate of PVTGs Population**

Year	Asur	Birhor	Birjia	Korwa	Mal Pahariya	Pahariya	Sauria Pahariya	Savar	Total
1941	---	---	---	---	---	---	---	---	---
1951	---	---	---	---	---	---	---	---	---
1961	32.6	(-) 4.4	94.2	---	13.1	21.1	(-) 5.2	(-) 5.1	24.0
1971	20.7	42.1	(-) 10.0	(-) 11.6	7.1	19.4	6.2	127.3	7.0
1981	10.8	26.4	11.8	17.2	63.1	63.9	(-) 33.5	(-) 15.1	15.8
1991	17.2	83.6	11.6	10.1	(-) 0.2	21.8	21.8	39.4	12.2
2001	13.4	(-) 6.5	18.5	12.6	45.4	(-) 29.0	(-) 35.1	42.9	8.3
2011	117.1	42.7	17.0	31.0	18.0	23.1	48.9	61.4	30.9

**Table 3 : Annual Compound Growth Rate of PVTG Population**

PVTGs	1961-71	1971-81	1981-91	1991-2001	2001-2011
Asur	0.008	0.004	0.007	0.005	0.435
Birhor	0.015	0.010	0.026	(-) 0.003	0.403
Birjia	(-) 0.005	0.005	0.005	0.007	0.380
Korwa	(-) 0.005	0.007	0.004	0.005	0.455
Mal Pahariya	0.003	0.021	0.000	0.016	0.513
Pahariya	0.008	0.021	0.009	(-) 0.015	0.441
Sauria Pahariya	0.003	(-) 0.018	0.009	(-) 0.019	0.466
Savar	0.036	(-) 0.007	0.014	0.015	0.399
<b>Total</b>	<b>0.003</b>	<b>0.006</b>	<b>0.005</b>	<b>0.003</b>	<b>0.547</b>

Note: \* Caste wise census data not available for census, 1951.

Source: Sahu, Santanu (2019); Demographic Trends and Occupational Structure of Particularly Vulnerable Tribal Groups of Jharkhand, International Journal of Reviews and Research in Social Sciences, Vol. -7, Issue - 2, Pp - 317-320.

## Annexure - I

### Peer Reviewed Comments on the Draft Study Report

1. **Title of report** Village Survey Study in Jharkhand  
(Village: Bargachha Hariyari, Dist.: Godda)
2. **Date of receipt of the draft report** 25 August 2021 (Through e-mail)
3. **Date of dispatch of the comments** 15 September 2021 (Through e-mail)

#### 4. **Comments on the Title of the Study**

In order to maintain symmetry and as discussed in the methodology workshop a uniform pattern of Title should be used. Thus the title may please be revised as: ***Village Survey Study in Jharkhand (Bargachha Hariyari Village)***

#### 5. **Comments on the objectives**

The specific objectives framed for the study are in the tune of overall objectives supplied by the Coordinating Centre (AERC, Visva-Bharati).

#### 6. **Comments on the methodology**

Methodology followed in the study is, by and large, in tune with the stated objectives and as supplied by the co-coordinating centre. Though studied earlier in 1970s, this village survey has been done afresh as a base-line survey with 300 sample households out of a total of 481 households in the village. The study has used most of the suggested analytical tools including ASER tool kit for assessing the educational attainment of children.

#### 7. **Comments on analysis, organization, presentation, etc.**

- a. The overall presentation of the report is quite good. Detailed and worthy presentation is undertaken as to the overview of the selected village. A brief review of the earlier surveys of the village is also provided along with base line background information for 2019-20. Also, detailed analysis is undertaken and organized as required to satisfy the objectives of the study.

- b. However, following corrections are needed:
- i. The study has generated a good amount of database that is well presented too. Basic information about the village for the period 1970s is well documented in section 1.2.2. It is also important to examine the changes occurred during last 5 decades. Therefore, a brief discussion about the social, economic and agrarian changes taken place during last 5 decades will justify the Objective-2 of the study.
  - ii. The location map of the village and few photographs as well as graphs/figures can add value to the report. For example population pyramid can be used to show the age-wise distribution of total population.
  - iii. ST and OBC constitute 59% and 34% of the total population in the village but their corresponding share in the sample is 79.4 % and 15.3% respectively. A proportionate sample should have been drawn.
  - iv. Different figures for the share of SC, ST, OBC in total population is mentioned in different places. Please check.
  - v. Map 1.1 is missing
  - vi. Table 3.2: Direct comparison of total figures are misleading as 2011 data is for the entire village while 2019 data for selected households only.
  - vii. Why share of literate population is 58.71% but literacy rate is 51.86%. How these two are different?
  - viii. Table 3.3 & 3.4: How geographical area of a village can be different in different Tables. There is nothing like geographical area of sample households.
  - ix. Compare and check the figures of adult population in Table 3.2 and 4.1 It seems data in Table 3.2 are not correct.
  - x. The supplied ASER Toolkit was for Std-2. Thus inferences should have been drawn accordingly.
  - xi. Rewrite the policy recommendation-1 & be specific regarding policy recommendation-2
  - xii. There are a few typographical errors in write-up that needs correction. For example:
    - Content 4.3: ad or and?
    - Page-iii: "...workers were about 43% and of the total workers." Lacks clarity
    - Page-iv: It is convention not to start a sentence or paragraph with digits

- Page-iv: "...100 per cent of the Hhs did not remain without eating either for the whole day and night." This statement lacks clarity.
- Page-v: Intelligible?
- Page-1: Reference for data in 1<sup>st</sup> paragraph?
- Page-15: Formula for cropping intensity
- Page-33: sows or shows?
- Table-5.3: unit?
- Table 5.5: What is the definition used for small farmers. The standard definition is farms between 1 and 2 hectares not acres.
- Table-7.1: Why entitlement for KCC is only 23 out of 300 households?
- Follow uniformity (% , per cent, percent, etc)

## **8. Overall view on acceptability of report**

The overall quality of the report is quite good and covered most of the issues decided during the Initiation Workshop held at IEG, Delhi and in the Methodology Workshop held at AERC, Visva- Bharati, Santiniketan. The report is very informative and the researchers deserve credit for conducting the field survey even under Covid-19 situation. The report may be accepted after making necessary corrections as suggested above.

**Prof. Bidhan Chandra Roy**  
Hony. Director  
AERC, Visva-Bharati, Santiniketan (WB)

## Annexure – II

### **Agro-Economic Research Centre for Bihar & Jharkhand T M Bhagalpur University, Bhagalpur – 812 007**

#### **Action Taken Report**

1. Title of the Report : **Village Survey Study in Jharkhand  
(Bargachha Hariyari Village)**
2. Date of dispatch of the draft report : 25<sup>th</sup> August 2021
3. Date of receipt of the comments on draft report : 15<sup>th</sup> Sept. 2021
4. Date of dispatch of the revised report : 27<sup>th</sup> Sept., 2021
5. Actions Taken on 7 b.
  - i. Incorporated as Section 1.2.3
  - ii. Incorporated village map as well as graphs at appropriate places.
  - iii. The sample consisted of 79.4 per cent STs, 15.3 per cent OBCs and 5.3 per cent SCs, against 59.07 per cent STs, 34.90 per cent OBCs and 6.03 per cent SCs population, as per 2011 census. The sample in OBCs category reduced mainly due to their unavailability in course of the survey time, as they are mostly traders and jobs, who find themselves outside the village during the day time. Moreover, the survey has captured all the eight tolas in terms of proportionate availability of the habitants in respective tolas.
  - iv. Checked.
  - v. Incorporated.
  - vi. Table 3.2 was designed/structured by the co-ordinating Centre. However, the caption of the table has been revised to make it clearer.
  - vii. Checked and corrected.
  - viii. In table 3.3 total geographical area is shown for entire village whereas in table 3.4 it is not of entire village's geographical area rather it is the area covered by the sample households, based on primary survey.
  - ix. Checked and corrected.
  - x. Explained the class standard i.e., Std. – II of ASER Toolkit and distribution of examined children, belonged up to Std. – II and Std. – III to X levels.
  - xi. All the typographical errors (12 in numbers) corrected and appropriately addressed with respective need based justifications.

**Ranjan Kumar Sinha  
Rosline Kusum Marnadi**

### Annexure – III

#### **Comments/Observations/Remarks on the Presentation made by Dr. Ranjan Kumar Sinha, AERC, T M Bhagalpur University, Bhagalpur on the Draft Report of Village Survey Study in Jharkhand (Bargachha Hariyari Village)**

1. The name of author may be mentioned again while referring (*Sahu et.al, 2018*) at page no. 11 so it reflects the views of the author quoted.
2. The name of author (*Choudhary, 2018*) may be mentioned in the beginning as well for the reason mentioned in the point No. 1 above. This will reflect the views of earlier studies on the subject clearly.
3. Further, in section 2.3.1, the point on trends in national accounts may be omitted as it required in the present context.
4. In general, the editing of the draft report should be looked into. For e.g., in section 4.14, “*Out of total births and deaths during the last five years, i.e., 2014-15 to 2019-20 the share of scheduled tribes was 66 and 47 per cent respectively*” may be drafted properly so that the message is clearly communicated to the wider audience.
5. In page No. 16, ‘Cropping Intensity’ formula/equation is right. Definition in words needs correction.
6. In Annexure – 1 of the report, the title of the page should clearly mention that the page has peer-reviewed comments on the draft study report.
7. As a practice followed in the standard study report, a list of abbreviations may be incorporated.
8. Reasons of low beneficiaries were mentioned during presentation were coverage with respect to Government interventions and secondly reluctance to avail the government schemes. These may be appropriately included.
9. Three pages Policy Brief on the above report may be sent which may inter-alia, include brief introduction of topic, need for the study, major findings and policy recommendations. The cover page may be picturesque depicting subject concerned. This will be forwarded to ministries/department concerned.

AER Division  
Directorate of Economics & Statistics  
Department of Agriculture & Farmers Welfare  
Ministry of Agriculture & Farmers Welfare  
Government of India  
NEW DELHI

Dated: 27/10/2021

Annexure – IV

**Action Taken Report on Directorate of Economics & Statistics, Ministry of  
Agriculture & Farmers Welfare, Government of India's Comments**

Attended comments (Sl. No. 1 to 8) as suggested. For comments at (Sl. No. 9), policy brief sent separately in suggested mode.

Ranjan Kumar Sinha  
Rosline Kusum Marandi  
Agro-Economic Research Centre for Bihar & Jharkhand  
T M Bhagapur University  
Bhagalpur – 812 007  
(BIHAR)

Dated: 23/11/2021