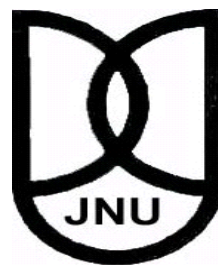


**HEALTH PROBLEMS OF THE 'LEFT-BEHINDS': AN EXPLORATORY
STUDY OF CHRONICALLY POOR BLOCKS OF RANCHI DISTRICT**

*Thesis submitted to Jawaharlal Nehru University
for award of the Degree of*

DOCTOR OF PHILOSOPHY

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CENTRE FOR SOCIAL MEDICINE & COMMUNITY HEALTH

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2017



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Date-20.07.2017

DECLARATION

I declare that the thesis entitled “**HEALTH PROBLEMS OF THE ‘LEFT-BEHINDS’: AN EXPLORATORY STUDY OF CHRONICALLY POOR BLOCKS OF RANCHI DISTRICT**”, submitted by me for the award of the degree of **DOCTOR OF PHILOSOPHY** of Jawaharlal Nehru University is my own work. The thesis has not submitted for any other degree of this university or any other university.


(MINASHREE HORO)

CERTIFICATE

We recommend that this thesis be placed before the examiners for evaluation.



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CONTENTS

	Page No.
Acknowledgement	i-ii
List of Figures, Maps, Tables, Appendices	iii-ix
Glossary	x-xi
INTRODUCTION	1- 6
CHAPTER I:	
Conceptual and Empirical Review of Literature	7- 48
CHAPTER II:	
Conceptualisation and Methodology	49-84
CHAPTER III:	
Socio-historic Context of Chotanagpur Region	85-113
CHAPTER IV:	
Contextual Factors: Socio-economic & Geographic Location Variations	114-165
CHAPTER V:	
Compositional Factors: Migrant, Non-Migrant and Commuter Households	166-254
CHAPTER VI:	
Collective Factors: Interpreting 'Left-Behinds' Health Experiences	255-300
CHAPTER VII:	
Health Problems of 'Left-Behinds': A Discussion	301-334
Bibliography	335-347
Appendices	348-404

LIST OF MAPS

No.	Title	Page No.
1.1	State Wise Income Poverty	22
1.2	Multidimensional Poverty Index (MPI) in India	32
1.3	Multidimensional Poverty Index (MPI) at Sub-National Level	33
2.1	Ranchi District Profile	62
2.2	Mandar Block/Villages	64
4.1	Social Map : Bobro (Mandar)	119
4.2	Social Map: Deuri Alias Dongatoli (Mandar)	120
4.3	Social Map: Katchancho	120
4.4	Social Map: Murma	121
5.1	Seasonal Out-Migration Flow of the study villages	215

LIST OF FIGURES

3.1	Chotanagpur	87
5.1	Migration Cycle	212

LIST OF TABLE

1.1	Composition of MPI by State (India)	27
1.2	Proportion of poor people and deprived in three dimensions	27
1.3	Percentage Attributable to Deprivation	28
1.4	Composition of MPI by Social Groups in India	28
1.5	Proportion of people poor and deprived by Social Groups	29
1.6	Percent Attributable to Deprivation by Social Groups	29
1.7	India Decomposition of the Least Poor and Poorest Social Groups by Region	29
1.8	Proportion of people poorest social groups and deprived by region	30

1.9	Percent attributable to deprivation of poor and poorest social groups by region	30
1.1	Multidimensional Poverty across Sub-National regions	30
2.1	Jharkhand Health Status and District 2012-13; Rural-Urban Differences	63
3.1	Chotanagpur – Trend of Immigration (1881-1951) Percentage Share of Total Immigrants	90
3.2	In-Migration into Santhal Parganas and Chotanagpur 1891-1971	91
3.3	In-Migration into Jharkhand, 1981	91
3.4	Volume of Migration, (erstwhile) Bihar, 1961-1991	112
4.1	Total Geographical area of Block/ Village	118
4.2	Total number of households	122
4.3	Total number of village population	122
4.4	Total Schedule Caste Population	123
4.5	Total Scheduled Tribes Population	124
4.6	Percent Distribution of Household by Religion groups in Mandar Block	124
4.7	The Total Forest Area of the Ranchi District	127
4.8	Total Forest Area of the Block/ Villages of Mandar Block	127
4.9	Total land area under Non-Agricultural Uses, Barren & Uncultivable Land, Land under Miscellaneous Tree Crops, etc. Area, Culturable Waste Land Area and Fallows Land other than Current Fallows Area of the Block/ Villages	128
4.1	The total Net Sown area, Un-irrigated land, Area irrigated by different sources in the Block/Villages	129
4.11	Landholding pattern of Ranchi District	130
4.12	Different Categories of Farm Household in Mandar block	131
4.13	Number and Area of house holding by Size group in Mandar	131

4.14	Distribution of the villages according to the distance of available Services and Amenities in the study villages	132/133/134
4.15	Distribution according to the Household Conditions of the Study Villages	142
4.16	Distribution according to the Material of the Roof of the house of the study villages	143
4.17	Distribution according to the material of wall of the houses in the study area	144
4.18	Distribution according to the material of floor of the houses in the study villages	145
4.19	Distribution according to the number of dwelling rooms of the study village	145
4.2	Distribution according to the Household size in the study villages	146
4.21	Distribution according to the ownership status of the Household in the study villages	146
4.22	Distribution according to the Married couple in the households in the study villages	147
4.23	Distribution according to the Main sources of drinking water in the study villages	147
4.24	Distribution according to the Location of drinking water sources in the study villages	148
4.25	Distribution according to the main source of lighting in the study villages	149
4.26	Distribution according to the households having latrine facility in the study villages	149
4.27	Distribution according to the Households not having a latrine facility in the study villages	150
4.28	Distribution according to the wastewater outlet drainage system of the study villages	151

4.29	Distribution according to the type of fuel used for cooking in the study villages	151
4.3	Distribution according to the Kitchen facility of the study villages	152
4.31	Distribution according to the household availing banking services in the study villages	153
4.32	Distribution according to the availability of assets in the households of the study villages	154
4.33	Distribution according to the Household by types of structure of the houses in the study villages	155
4.34	Typical Crops and Productivity Levels of Different Land Types in Mandar Block	156
4.35	Traditional Four-Year Crop Rotation	158
4.36	Infrastructure, Implements, and Institutions in the Mandar Block.	160
4.37	Important crops grown and crop seasonality of the Baseline villages of Mandar Block	161/162
4.38	Season wise crop was sown (ha) 2008 in Ranchi District	163
4.39	Area under Vegetables crops in Ranchi District (Acres) 2006.	163
4.4	Total Migrants Households in the Baseline Villages of Mandar Block	164
5.1.1	Sex wise distribution of Head of the Households & types of Households	167
5.1.2	Age-wise distribution of households' respondents in study villages	169
5.2.1	Proportion of the HH according to the Caste & Tribe	170
5.2.2	Proportion of the HH according to the Religion	171
5.3.1	Proportion of the Households distribution according to the Languages Spoken	172

5.4.1	Average Proportion of the Household's Respondents with ID/ provisioning Cards (in percent)	173
5.5.1	Proportion of the HH according to the Hearth Type	174
5.5.2	Proportion of Household with the House Details	176
5.6.1	Average Number of the Family Members in the Households	177
5.6.2	Average Number of Rooms and Distribution of Family Members into Rooms/ Space available	177
5.6.3	Average Proportion of the Households (In Percentage)	178
5.6.4	Average Number of the Members of the Household (Sex- Wise Distribution)	179
5.6.5	Age Wise Distribution of the Household Members (In Average)	179
5.6.6	Proportion of the population according to the age groups	180
5.6.7	Average Number of Members according to the Literacy Status	181
5.7.1	Average proportion of landholding by types of Households	182
5.8.1	Proportion of the households having an asset	195
5.8.2	List of Farm Tools/ Equipment/ Implements (Traditional)	197
5.8.3	Proportion of households having livestock and the average number of the particular livestock	199
5.9.1	Average annual income of the households with the different income sources in study villages	200
5.10.1	Highest expenditure wise ranking of expenditure heads by the types of households	203
5.10.2	Expenditure breakthrough in Range (INR) / (Annual) of different expenditure heads according to the household types	204
5.11.1	Average food security (in months) according to the Households types	207

5.11.2	Food Scarcity faced by the Average Households throughout the year (in months) in study villages	209
5.12.1	Reasons for leaving the village by the Migrants e in the study villages	214
5.12.2	Proportion of average members migrants in the households	216
5.12.3	Frequency of Remittances sent during the migration period	219
5.12.4	Proportion of the Households received gift apart from money	220
5.12.5	Proportion of the households according to the Receipt of Remittances	220
5.13.1	Steps taken by the household types to avoid suffering from lack of food during certain period of the year	227
5.13.2	Indigenous Foods consumed as a dried food by the local community in the study area	230
5.14.1	Average proportion of the Households with the beneficiary under the Government Schemes	231
5.15.1	Proportion of the households where any member suffering from any type of illness in the past 6 – 12 months	235
5.15.2	Proportion of the Households where any members suffering from Different Illness	236
5.15.3	Proportion of the households with the sufferings of the members according to the duration of Illness	238
5.15.4	Number of the Households seek treatments for the Illness	239
5.15.5	Proportion of the household first source of treatment for the Illness	240
5.15.6	Proportion of the household according to the Cost of the Treatments	245
5.15.7	Proportion of the household according to the Expenses	246

5.15.8	Proportion of the households where lost the wages due to the earning member's illness in last 6-12 months	247
5.15.9	Number of the Households faced any mortality in past 1 year	248
5.15.10	Mother and Child Health reports according to the Number of Households in Past 5 Years	249
5.15.11	Number of Households where children suffered earlier or been suffering from the Child Diseases	253
6.1	Monthwise Distribution of Morbidity Among Under 5 age group Children	284
6.2	Common Illnesses among Children	285

LIST OF APPENDICES

I	Village Schedule	348-371
II	Household Interview Schedule	372-392
III	Interview Guide	393-400
IV	Observational Checklist	401-403

GLOSSARY

<i>Adhbatiiya</i>	Sharecropping
<i>Akhra</i>	Adivasi's Meeting and Gathering Place
<i>Arbi</i>	Tuber vegetables
<i>Arhar</i>	Split Red Gram
<i>Bachha khiskna</i>	Pregnancy related problems
<i>Badd bimari</i>	Major Illness
<i>Bari</i>	Homestead land
<i>Bhagat/ Bhagtain</i>	Traditional Healers
<i>Bimari</i>	Illness
<i>Bonga</i>	God
<i>Bodi</i>	Legumes
<i>Chaura</i>	Medium land
<i>Chhot-mott bimari</i>	Minor Illness
<i>Chaura</i>	Medium land
<i>Chapapkal</i>	Hand Pump
<i>Chott bimari</i>	Minor Illness
<i>Chotta daktar</i>	Pharmacists, nurses and compounders (referred by local people)
<i>Chivda</i>	Rice Flakes
<i>Daal</i>	Pulse gravy
<i>Dai</i>	Midwife
<i>Daktar</i>	Local Quacks
<i>Dhenki</i>	Traditional grinder
<i>Dhibri</i>	Lamp
<i>Do bela</i>	Two halves of a day
<i>Doin</i>	Lowland
<i>Ghee</i>	Fat
<i>Githiya rog</i>	Arthritis
<i>Gondli</i>	Coarse millet
<i>Gora</i>	Upland
<i>Guni</i>	Traditional Healers
<i>Haat</i>	Weekly Market
<i>Handia</i>	Rice beer
<i>Her Puna</i>	Tribal Festival celebrated in January/February
<i>Jadi-booti</i>	Herbal Medicine
<i>Jau</i>	Barley

<i>Jagirdar</i>	Non-tribes emerged during the Nagbansi dynasty (Pre-colonial period) for collecting the revenue
<i>Jatra</i>	Festival that begins with the fall of winter
<i>Jhaara</i>	Loose Motion
<i>Jhola Daktar</i>	Local Quacks
<i>Jhor tiyyan</i>	Dry vegetables gravy local cuisine
<i>Jitiya</i>	Tribal Festival celebrated in August/September
<i>Kamzori</i>	Physical Weakness
<i>Karma</i>	Tribal Festival celebrated in August/September
<i>Katni Parab</i>	Harvesting Festival
<i>Kharif</i>	Monsoon crop
<i>khesari</i>	Grass pea
<i>Khoon ki Kami</i>	Anemic
<i>kurthi</i>	Horsegram
<i>Kutchra</i>	Brick & Mud
<i>Larsut</i>	Upper part of the tongue stuck and could not function properly
<i>Loo</i>	Sun Stroke
<i>Maad bhaat</i>	Rice with Starch
<i>Madua</i>	Millets
<i>Maddait</i>	Helping each other
<i>Masala</i>	Spices
<i>Masoor</i>	Lentil
<i>Maund</i>	Weight measuring unit
<i>Molana</i>	Muslim Priest
<i>Mukhiya</i>	Head of the village
<i>Munda</i>	Tribal Head of the Village
<i>Murfatna</i>	Nonunion of skull fontanelles of infants
<i>Murhi</i>	Popped up rice
<i>Nagbansi</i>	A Nagbansi Dynasty
<i>Najar-gujar</i>	Evil's Eye
<i>Najari /nad</i>	Evil's Eye
<i>Naskhichana</i>	Veins pulsating or bulging
<i>Oal</i>	Tuber vegetables
<i>Ojhas</i>	Spiritual Healer
<i>Paani bhaat</i>	Rice with water
<i>Pahan</i>	Adivasi Priest
<i>Parab</i>	Festivals

<i>Pechis</i>	Dysentry
<i>Pichli</i>	Women related disease with bleeding and weakness symptoms
<i>Pechis</i>	Dysentry
<i>Pucca</i>	Made up of concrete
<i>Rabi</i>	Winetr Crop
<i>Rang baad</i>	Where the reddish coloration in the skin of the entire body
<i>Safed pradar</i>	White Discharge
<i>Sajha</i>	Sharecropping
<i>Sakhin</i>	Tuber vegetables
<i>Sardar</i>	Labour contractors related to migration
<i>Sarhul</i>	Tribal Festival of spring
<i>Sarson</i>	Mustard
<i>Seam</i>	Legumes
<i>Sil-lodha'</i>	Grinding Stone
<i>Tabij</i>	Spell chanted thread
<i>Tand</i>	Upland
<i>Tappa</i>	Cluster of villages
<i>Tissi</i>	Oil seed
<i>Tiyyan</i>	Vegetable Gravy
<i>Totka</i>	Spell cast by the Spritual healer
<i>Toti</i>	Tuber vegetables
<i>Urad</i>	Split Black Gram
<i>Vaid</i>	Traditional Healer
<i>Zaid</i>	Summer Crop
<i>Zamindars</i>	Feudatory chiefs

HEALTH PROBLEMS OF THE ‘LEFT-BEHINDS’: AN EXPLORATORY STUDY OF CHRONICALLY POOR BLOCKS OF RANCHI DISTRICT

THE THEME OF RESEARCH

The ‘left-behinds’ is a new terminology in academic circles and was first introduced at an International Workshop on the impact of migration on the ‘left-behinds’ in Asia, which was held in Hanoi, Vietnam on 10th to 11th of March, 2005. The term was coined to refer to those ‘who were closely associated with migrants, but who did not, or choose not to move’. A new trend in migration studies that demonstrated a keen interest in the ‘left-behinds’, in turn, complicated the understanding of migration and created a chapter for the ‘left-behinds’ within this. Migration is a central livelihood strategy for many poor households that facilitates or constrained by relations within and between the institutions of household, community, state and market. The form and extent of transmitting various capitals within and between these institutions shape the implications of migration of poverty and the extent to which an individual and groups can adopt migration as a livelihood.

The ‘left-Behinds’ are the vulnerable groups or an individual from the migrating households or areas who stays back at their place due to social, cultural, economic, political and geographical exclusions which cease poor to move out of poverty, even though in the environment characterised by an out-migration. Apart from systemic, structural and individual reasons the other basic reasons that hinder the move includes domestic and familial obligations and responsibilities, disability and illness, age, education and skills, and an absence or lack of access to networks and relationships that reflect their experiences of exclusion or adverse incorporations. In another word, ‘moving out’ or ‘staying back’ for livelihood deeply set in specific economic and social relational contexts. The multiple deprivations and its relation with the ‘left-behinds’ can understand better in terms of owning poverty-related capitals and being excluded from

it. In the other word, their ownership, or accessibility is the shaping up factors that decide migration as a major livelihood strategy of the poorest group of people. The multidimensional poverty or multiple deprivations carry the intergenerational aspects as it passes generation to generation. Moreover, due to the durational aspect added into it, this poverty is said to be chronic. Not everybody in these groups suffers chronic poverty, but those who experience several forms of disadvantage and discrimination simultaneously is most likely to be chronically poor. The multiple disadvantages or chronic poverty of the 'left-behinds' is blocking their access to the opportunities and resources to escape from poverty. In addition, literally force them into marginal, exploitative, unsustainable livelihoods that allow survival, but further undermine well-being in the long term. In such conditions, the well-being unequally divided within household, groups, and community. The combinations of multiple factors such as the structural factors like labour and product market, ethnicity, race, caste, gender, religion, tribes, class, disability, refugee status and geographic locations; life cycle factors like widowhood, household composition, being young or elderly and the idiosyncratic factors like natural disaster, ill health, damage, and robbery altogether creates and uphold the poverty of some while gaining others to chance to avoid or escape poverty. The multidimensional poverty is interpreted as the 'pulling down' factors that don't let the poor to get out of it and makes the situation more vulnerable for the 'left-behinds' those can portray as poorest of the poor. The multiple deprivations are reasons, consequences as well as the maintainers of the poverty. Whereas, the migration or seasonal out-migration is interpreted as the way to 'pulling-out' factors that people opt for a strategy to break or move out from the poverty. Indeed, the chronic poor is crucial to a group which needs special attention by considering and understanding their problems and solving it through understanding their need instead of homogenising poor as a single group. Because of chronic poor and poverty, carry many aspects such as durational, severity, and multidimensionality, and it becomes more important when the 'left-behinds' belong to such group. Therefore, the research is primarily concentrated on understanding the health problems of 'left-behinds' that arise in the presence of both the forces namely multidimensional poverty i.e. 'pulling-down factors' and seasonal out-migration i.e. 'pulling out factors' on the social determinants of health. And will analyse

the whole phenomenon by apprehending the variations in the health status of the ‘left-behinds’ in the study location.

The researchers’ keen interest in studying the impact of seasonal out- migration on the ‘left-behinds’ in terms of their health problems that they confront during staying back at their source areas and exploring the other related issues within this. Studying the health problems of the ‘left-behinds’ women, children, elderly people were analysed primarily by focusing on the accessibility of the health care services, people’s perception of the health system and the approach to the health care treatment sources. Considering this is important as it is eventually leading towards the well-being of the people for which they struggle or make efforts.

Thus, the study based on literature review keen to fill up the gap by studying the relationship between the chronic poverty, migration and both implication on the health determinants of the ‘left-behinds’. This study will be carried out with the hope that the result obtained from it will generate an answer to the questions that arise in debates on how the migration and multiple deprivations affect the ‘left-behinds’ and on their healthcare accessibility, affordability, availability and acceptability when they stay back at their place of origin in the Ranchi district of Jharkhand. Therefore, the outcomes in different areas such as rural and peri-urban areas or villages and the study population (‘left-behinds’ of the migrants family those opt for seasonal migration and based on inter-state based economy, non-migrants based on the village economy, and the non-migrants those are commuters those are based on peri-urban economy) to understand the health problems.

THE ORGANISATIONS OF CHAPTERS

There are seven chapters, and it is further divided into different sections and sub-sections.

The **Chapter I** is about the conceptual and empirical review of the literature. It is further divided into the different sections that reviewed the dynamics of poverty. Other sections explored the multidimensional poverty. Moreover, the third section reviewed the migration and its link with the 'left-behinds'. In addition, final sections the statement of the problems were explained.

Chapter II is about the conceptualisation and methodology. In this chapter, the conceptualization of the research problems with the conceptual definition of 'Left-Behinds' was explained. Another section described the research settings with the area profile and the methodology part of the study.

Chapter III is the socio-historic context of Chotanagpur. It is further divided into four sections. The first describes the geographical locations and the natural settings of the Chotanagpur. The second section attempts a study of the people of the Chotanagpur by examining the tribal ethnicity and their conflict and integration in the colonial period. This is further divided into the subsections that explain the agrarian relations and development of peasant systems in the colonial period. The third sections examined the ecological basis of the subsistence economy and its distinctive features by looking at the forest economy in the earlier colonial Chotanagpur and the land use pattern in the subsistence economy during the early colonial period. The fourth and final section examines the impact of the colonial rule's the breakdown of agro-ecological subsistence and the beginning of out-migration by looking upon the sub-section on forest restriction under the colonial rule, an extension of cropland under the colonial rule and examining the out-migration history of Chotanagpur region.

Chapter IV is about the socioeconomic contextual understanding of social and physical opportunities in the study villages. The chapter is divided into two broad sections and with its sub-sections. The first and second section is about the context of the area specifically the demographic profile of the Mandar block of the Ranchi district

and the four study villages namely Bobro, Deuri Alias Dongatoli, Katchancho, and Murma. Rest four sections are of the socioeconomic profile of the surveyed villages. In the third section, it is about the contemporary status of the agricultural land in the study villages of the Mandar block. In the fourth section, the section discussed the village profile of the study area with the basic amenities, infrastructures, housing pattern and the accessibility of the facilities. Moreover, the fifth section discussed the agricultural pattern in the baseline villages by further divided into the traditional and contemporary agriculture and the important crops. The final section is about the migration, covering the information on out-migrant, non-migrant and the commuter households in the baseline villages. This chapter is to profile some of the key characteristics and opportunities of/in the study area in order to provide the backdrop for the in-depth study of the four villages of the Mandar block of Ranchi District.

Chapter V is about exploring the compositional factors of the study populations. The chapter will mostly study the compositional variable that is related to socio-demographic characteristics of individuals living in a certain place, i.e. in the study area. The chapter will examine the several major variables of the migrant, non-migrant and commuter households, and study the basic characteristics, family structure and composition, household types, economy, assets, income, budget composition, food security, migration, food sufficiency, provisioning and health profile of the study populations. The chapter closely examines the compositional factors, to find out the similarities and differences between the households and the aggregated effects of collective attributes of populations to portray the conditions of the migrants, non-migrants and the commuters households.

Chapter VI will try to explore the collective variables related to the ‘left-behinds’ health, by understanding the underlying relation of an ‘area’ and ‘individual’ level characteristics along with the locales socio-cultural beliefs and its impact on the individuals’ accessibility to the existing health care facilities. This chapter will look at the perceptions and experiences of the ‘left-Behinds’ general health condition. A holistic view of women, men, elderly and children’s illnesses and health are trying to focus on better understanding of their health by including their perception of illness and the health

care seeking behaviours. The chapter is divided into two broad sections. The first section investigates into the experiences, definitions, and explanations of ‘left-behinds’ illnesses, pains, and sufferings and their perceptions of causation. Continuing by the migrant family member’s own descriptions, the questions primarily concentrating on their illness and ill-being. The second section will be focusing on the assessment of their health care seeking behaviours and the sources of health care providers they approach for the treatments.

Chapter VII is the discussion of the health problems of ‘left-behinds’ by discussing the underlying core variables of contextual, compositional and collective factors on the health determinants of the migrant households and the ‘left-behinds’ population. To discuss the analysis of the health problems in terms of the accessibility of healthcare services and systems, sources of health care treatment and health seeking behaviours, the chapter is organised into six broad sections. The first section discusses upon the Chotanagpur’s socio-economy by understanding the historical takes on region’s chronic poverty. The second section discusses the ‘pulling-down’ factors and its Processes of multidimensional deprivation. The third part, try to understand the ‘pulling-out’ factors and the seasonal out-migration and its effects on the migrant household. The fourth section will focus on the continuation of the effects of seasonal out-migration and effects on ‘left-Behinds’ and the implications of seasonal out-migration through analysing the work burdens on the ‘left-behinds’ women and elderly. The fifth section is all about the health problems of the ‘left-behinds’ and access to the health care services and systems. And at the end, the sixth section discusses the linkages between the multidimensional poverty, seasonal out-migration and health of the ‘left-behinds’ to draw a conclusion of the study.

CONCEPTUAL AND EMPIRICAL REVIEW OF LITERATURE

A] LITERATURE REVIEW

1.0. DYNAMICS OF POVERTY

The poverty reduction strategies are the present global concerns of development discussion and policy. Several studies evident the much-troubled state of the poverty persistence in rural areas. In pursuit of poverty alleviation and development in rural areas, many approaches and strategies have incorporated into the development process by integrating the ideas of inter-disciplinarity, different centre of learning, international think tanks, international agencies, and governments. A clear change has taken place in the recent past in rural development pattern from the top-down to the bottom-up approach underlying with the community participation in the development. The major approaches that underlined within the anti-poverty strategies were the institutional and technical options or mostly combining both. The main idea of any such institutions is to provide the structure and rules for social and economic interactions that designed to improve the quality of life of poor people. For example, the global institutions such as - United Nations Development Programs (UNDP), Regional Organizations, International and Bilateral institutions work together to promote the anti-poverty program. The UNDP rallied the entire international community to support the Millennium Development Goals (MDGs) perspective aimed at halving the number of poor people by 2015.

Now the central focus of decline in poverty has become MDG comprising eight goals, eighteen targets and forty-eight indicators. The MDG Goal 1, and its target 1, clearly is all about dividing the proportion of people into halves, whose income is less than a dollar a day, between the year 1990 and 2015. Many scholars reviewed this for its narrow interpretation of poverty with its causes and solution only considering the monetary aspect of impoverishments. Hulme & Shepherd (2003), Green & Hulme (2005) said that this method encourages the poor whose prime problem is low income as a single homogenous group. They added that the poverty reduction and development policy analysis is continuing to dominate by the understandings of money metric theory

of poverty. Despite recent theoretical advances, they stuck to the understanding of poverty as income or consumption shortfall. They argued that MDG is influenced by the neoliberal vision in the era of globalisation. Moreover, it is focused on the rapid reduction of poverty headcounts. In addition, poverty in development thinking is just a lack of resources ignoring the fact of absence of entitlements. Hulme & Shepherd (2003) supported this by clearing that such approach is helpful to many poor but uncertain about the underlined problems that may be unable to meet the needs of all the different types of poor people. They criticised the money metric understanding and approach of assisting poor to elude from poverty and that by focusing only on the monetary aspects. They condemned the money metric comprehension and approach of helping poor to escape from destitution and that by concentrating just on those poor whom, the market can easily liberate them from poverty. This approach disregards the requirements of the individuals who require distinctive types of support, policy or strategy changes or more extensive changes in society that require time.

The poverty can be understood through the analysis of its dynamics, that importantly focusing on two significant aspects, firstly, poverty at a time or else. Secondly, on its trends of incidence, severity depth over time. This gives an insight of the influences that decides the households movements into or out of poverty, and the reasons for them to remain poor. This highlighted on differentiating the poor according to their level to the consumptions, expenditures or income those lives below the poverty line and or by gender, educational attainment, and assets both physical and human related or the types of occupation. Overall, it gives another dimension to understand the nature of poverty in the country. Finally able to identify and help the ‘deserving poor’ instead of the present-time focus on the ‘easy to aid poor or casual poor’. This understanding of poverty was also encouraged by the MDG (Oduro 2002; Hulme & Shepherd 2003).

Based on poverty dynamics approach different studies and scholars tried to define poverty and poor. Following the definition of the International Bank Of Reconstruction and Development (IBRD) 2000-01, poverty is a circumstance of marked deprivation in prosperity. It explained as hunger, the absence of a safe house, ill health,

and lack of education. The study reported poor people as vulnerable to adverse events outside their control and excluded by institutions of state and society from their voice and power. Elaborating it further Mehta & Shah (2001) relate poor as who lack ownership of or need access to resources, for example, land, water, forest, house, credit, education, longevity, voice and capital both physical and social. They pointed that the individuals who extremely below the poverty line are included in subsistence. Furthermore, despite intense physical labour, their difficulties follows through exploitatively poor returns and undertaking grave risks to earn a meagre income. Since the gross income of the poor is below the poverty line, i.e. Not exactly a \$ 1 a day as per World Development Report 2000-01 is less to the low existence for the survival. This may also worsen the situation of their power relationship. It brings about hardly accessible common resources, for example, drinking water and open reserve that implied for poverty easing and control redirected by the locally powerful and corrupts. Moreover, as a whole, it understood as a poverty trap where social and political reasons are as important as income factors to get away from this trap.

The different study classified poor into different groups for a better understanding of its severity and trends. Categorisation such as chronically poor, transiently poor, persistently poor, always poor, churning poor, occasionally poor and never poor termed and explained by the different authors. Mehta & Shah, 2001; Jalan & Ravallion, 2000; Hulme & Shepherd, 2003 studies divided poor into three main groups. The classification is as indicated by poverty measures as far as income, consumption and expenditure. It continued out with alternate indicators, such as, resources or nutrition, or a mix of indicators, for example, household level human deprivation index. In the first place, the chronically poor are depicted as individuals those who are poor over an extended duration. The household units those don't have a consumption level below the poverty line at every date, yet their average consumption is below the poverty line. It is the aggregate mix of 'always poor' that is those whose poverty scores, for example, income, utilization, dietary status, human deprivation index and so on in every period is below the poverty line. It terms as persistently poor, that is the household those are poor at every date. Also, of 'usually poor' i.e. those whose mean poverty score over all periods

is less than the poverty line, however, are not in every period. Second, the 'transient poor' that portrayed as the individuals who have a average consumption level over the poverty line however who are poor sometimes. It is a total of the two groups, for example, 'churning poor' i.e. those whose mean poverty scores around poverty line who are yet poor in a few periods yet not in others. Moreover, of 'occasionally poor' i.e. whose mean poverty score is over the poverty line yet have encountered no less than one period in poverty. In addition, the third classification is 'never poor' depicted as whose poverty scores in all periods over the poverty line. Therefore, this classification is clearly depicting the severity of poverty in a different segment of the poor people and supporting towards their different problems, needs, and the solutions.

1.1 CHRONIC POVERTY: DEFINITION

Chronic poverty idea is urging researchers to move out from poverty as a state or static to poverty as a dynamic. It is one such idea concentrated on poverty duration and dynamics highlighting the types of social relations that create poverty and regularly set in inside political organisations and economic structures (Green and Hulme 2005). The chronic poor experience deprivation over numerous years, frequently over their whole lives, and regularly passes poverty on their children. Numerous chronically poor individuals die from the health problems that casued by the preventable diseases. For them, destitution is not just about having a low income. In fact, it is about multidimensional deprivation like hunger, under-nutrition, dirty drinking water, lack of education, having no access to health service facility, social confinement, and exploitation [Chronic Poverty Research Center (CPRC) 2004-05]. Chronic poverty evolves through the multidisciplinary approach important for the region, which faced with a situation of multiple deprivations. This may be in terms of the resource base, social identity, geographical locations, infrastructural development, political representation and developmental interventions (Bird et.al 2001). It has defined by Mehta et al. (2011) that "chronic poverty describes people (individuals, households, social groups, geographic areas, and territories) who are poor, for significant periods of their lives, who may pass their poverty on their children and whom finding an exit from poverty is difficult". The other proposed definition says, "Chronic poverty views as

occurring when an individual experiences significant capability deprivation for five years or more". Here the distinguished highlight of chronic poverty is its extended duration. Here he clarified the 'five years' is made out for a huge timeframe, in a person's life course, in the vast majority of the way of life. Second, there is frequently a five-year gap between information gathering focuses when panel data create. So in practical terms, the investigation of the duration of poverty will regularly base on a five-year time period. Third, some experimental materials demonstrate that individuals who remain poor for a long time or more have a high probability of staying poor for whatever is left of their lives. He additionally said that in such case, the probability of intergenerational transmission would likewise be high and the five years would permit distinguishing the most extraordinary types of chronic poverty. The second stress of the author's definition was on the capacity deprivation that is utilised to recognise chronic poverty. Income and consumptions measures may not be sufficient where poverty is relentless, as multidimensional deprivation is probably going to support long-term poverty. However, measures, for example, education or substantial resources take a more drawn out period, and along these lines, it shows poverty as transient phenomena (Hulme and Shepherd 2003). According to CPRC (Oct 2008:27), "poverty that persists for at least five years, often passes from one generation to the next within a family". In addition, said that it has the distinguishing features and that is its extended duration in absolute poverty (when people do not have enough money to meet the basic needs for survival). Chronic poor are a heterogeneous group and incorporate the individuals who may not support and strengthen themselves, and also the individuals who are financially active and stay poor. It is from different deprivations, for example, mediocre financial status, geological area, the absence of decisions and weaknesses. The definition incorporates extreme poor, ultra poor, and the poorest of poor people while including a period. In the more extensive casing, CPRC characterises chronic poverty regarding extreme poverty, extended duration poverty, and multidimensional poverty. It says that chronic poverty is dynamic in nature where the population climbs out of or falls into poverty in huge number, so existing such sort of poverty can demonstrate troublesomely. CRPC clarified serious destitution where poverty is chronic or extremely below the poverty line or with incomes that are 75 per cent of the poverty line or less. Furthermore, where there is enduring

hunger or not getting even two square meals a day as an extreme type of deprivation. In addition, where there is a failure to retain the effect, failure can prompt extreme poverty, starvation, and suicide. The extended time or non-transitory destitution is considered by taking a look at a similar household over the span of five, ten, fifteen or more years to get the reasonable picture. Furthermore, the significance of multidimensional poverty supported by clarifying it as the whole of assortment which incorporates income and calorie access, as well as access to land and credit, nutrition, well-being and longevity, proficiency or literacy and safe drinking water, sanitation and other infrastructural facilities (Mehta and Shah 2001). The author outlines the definitions and further clarified the chronic poor experience as extreme deprivation for extended periods of their lives or over the span of their lives. Generally, they are the unfortunate one of inter-generational poverty, originating from poor families and creating posterity who experiences childhood in their poverty. He additionally clarified it by saying the persistent poverty of the chronic poor relationship with some shocking and non-recoverable fall in livelihood. This might be idiosyncratic for e.g. drawn out sickness of the household or covariant for e.g. a locale sliding into a complex political crisis (Dashingkar 2010). Based on the same line of thought the authors supported this in their study and tried to explain chronic poverty's according to duration, severity, and multidimensionality by analysing different empirical studies (Mehta & Shah 2003).

1.1.1 CHRONIC POVERTY: DURATION

The importance of inculcating the durational aspects to understand the poverty dynamics recognises and is believed for the main four reasons. To start with is, for the basic rationale that says that if, one individual has encountered similar types of the depth of poverty from another, however for an any longer period. At that point, a moral concern is with helping the more disadvantaged needs since they have encountered more deprivation. Second, an inability to analyse distribution spells in poverty in a population is probably going to prompt frail investigations of why individuals are poor, and possibly to the weak policies. Third, is the linkage between the depth of poverty. This may be as far as material and social resources, and the span of poverty at the household level and last for the term of time spent in poverty that has an essential ramification for

the individual (child) and family future systems (Dashingkar 2010). Poverty over the five years is defined as the chronic poverty in terms of duration. In addition, later defined it as “people who remain poor for much of their life course, who may ‘pass on’ their poverty to their children, and who may die of easily preventable deaths because of poverty they experience”. An imperative piece of chronic poverty is intergenerational transmission when poverty status exchanges from parents to kids; those get in a proceeding with the cycle of deprivation (Green & Hulme 2005: 874). Oduro (2002: 4) defined it as “the state of being poor over an extended period of time”. This raises several issues first, defining being poor. The definition clearly depicts and accepts the multidimensionality of the poverty. The definition concurred that poverty is more than just having a consumption and expenditure or income level below a suggested minimum. Second, how long an individual or a household should exist in poverty to describe as being in chronic poverty or transient poverty. Jalan & Ravallion (2000: 83) defined chronic poverty as “Poverty that remains when intertemporal variability in consumption smoothens out”. Chronic poverty looks to recognise those in society who have insignificant or no prospects for financial and social mobility and basically obliged by the social relations, which create poverty impacts. This thought contributes hypothetically to the outline of a strategy for understanding poverty in better places and crosswise over various circumstances and must move beyond essentially recognising a bunch of symptoms (Green & Hulme 2005). McKay & Lawson (2003) underline the chronic poverty’s most defining feature i.e. extended duration. While this shows, the general population moves into and out of poverty after some time. However, the chronic poor endure persistent poverty. It might likewise be serious as far as depth or the deprivation might be multidimensional in nature.

1.1.2 CHRONIC POVERTY: SEVERITY

The severity of chronic poverty was seen in terms of the extent of the deprivation. Mehta & Shah (2001) reviewed many papers such as CERFE Research Program and Kozel & Parker (2001) and sorted chronic poverty into four groups. These are like prone-to-risk, borderline poor, those are near to the below the poverty line, overall poor and the extreme poor and proposed the term destitute poor, structural poor and mobile poor to

describe this. Further, added to this Mehta & Shah (2003) speaks of the importance of the understanding severer aspect of chronic poverty, focusing on two facts. To begin with, severe income that says that severe poverty is concentrated in a few regions of higher-level income poverty states and poverty traps exist territorially even in the more developed states. Regarding poverty reduction policy and execution, it was progressively evident that notwithstanding, when nations or households 'performed' well, noteworthy minorities of their kin or individuals stayed deprived (Green and Hulme 2005). Second, the hunger and absence of accessibility of two square meals a day upheld by the confirmations demonstrate that in developing world; around 790 million individuals don't have enough to eat. Mehta and Shah (2003) unmistakably substantiate this reality by drawing out the picture of Indian situation that tells that India alone has more undernourished individuals (240 million) than all of Sub-Saharan Africa. The population portrays as undernourished in India and known as a subset that can't access to even two square meals a day. They overwhelmingly associated the effect of the lack of malnutrition and hunger with the chronic poverty by making the causal relationship. For instance, chronic food insecurity may prompt lack of malnutrition, which causes diminished physical capacity, stunting, represses learning and may have long-term dietary health and efficiency related impacts for present and generation. They additionally elaborated it with a few figures as taking hunger and under-nourishment as a major issue in rural India and support it with the figure as 4.2 per cent rural and 11.1 per cent urban households revealed two square meals a day just in six months of the year. CPRC 2004-05 additionally discussed this in their report the hunger and ill health both are the supporters of and the consequence of chronic poverty. The family confronting chronic food insecurity falls into hunger trap. Hence, the insufficiency and vulnerability of their food supply make it troublesome for them to exploit any improvement opportunities that may develop. The report here says the low food intake is the exacerbating impact it has on the individual and household ill health, debt and failure to work (or study), and rising tension and stress. Low energy level individuals, eminently children, vulnerable to disease. Here the most vital discoveries, discuss the significance of the well-being of the fundamental breadwinner. The review says that breadwinner sickness is a noteworthy reason for the budgetary decay of a poor

household. The cost is immediate as the medical expenses and treatments and the indirect cost, for example, lost wages or production, care, withdrawal of children from school, resource exhaustion and long-term indebtedness. So, by and large, the decisions chronically poor individuals compelled to do to survive can impact to their well-being. Such seriousness can change into a portion of the choices that may have high physical and mental costs, such as, heart attacks and hypertension.

1.1.3 CHRONIC POVERTY: MULTIDIMENSIONAL DEPRIVATION

Understanding chronic poverty with the conceptualisation of its multidimensional way on which an individual can deprive is likely to be important. In addition, it lets or less likely limited the exit routes that individual to escape poverty (Hulme & Shepherd 2003). Thorbecke (2005) supported this by using the Sen's "Capabilities and functioning" theoretical framework that is eventually underlining on the freedom of a person to choose their functioning. This measure capability to freedom to achieve alternative functioning. It understands as if that an individual claims a sufficiently extensive endowment or set of capabilities, then that individual at a fundamental level, pick a particular functioning to escape poverty. Here the author believed in the importance of multidimensionality despite considering income as the sole indicators of well-being. They say that its neglect to incorporate and reflects a few keys of poverty, for example, life expectancy or lifespan, education, gives public goods and even at the breaking point flexibility and security. Apart from these, the tangible basic needs as nutrition, health, education, shelter, clothing, and access to information and health care services are the top listed crucial features. It uses to judge whether a person is poor or not. The author highlighted to the next conceivable measurements of poverty that are not so obvious, but rather its belonging is more critical, such as, different freedoms, i.e. of oppression, of religion, of expression; security and the level of discrimination and social exclusion beneath which an individual deprives of their rights. These can't be sidestepped as their deprivation could push people into poverty. This is on the grounds that the trouble increased by the standards relies on upon the acknowledgement to work with a nobility that is setting particular and shift broadly starting with one society then onto the next and starting with one setting then onto the next. In light of this thought, a

man who lives under a severe oppressive regime or conditions, victimised or socially prohibited, limitations in its functioning and in that sense can imagine as poor. In a similar line of thought, Mehta and Shah (2003) likewise discussed the few types of human deprivation. This including poor survival chances, unjustifiable employment of children, child prostitutions, bonded labour, environmental pollution, abusive behaviour at home, and social exclusion emerging out of caste and gender discrimination. The author additionally added the poor need access to resources, for example, credit, education, lifespan, voice, land, water, and forests. Toward the end, in review plainly says that those defenceless against extreme and long duration poverty endure deprivation in various and commonly fortifying ways. Kwak and Smith (2011) agreeing to the fact that the presence of the various human capital deprivations may function as self-reinforcing for low human capital accumulation and in this manner lead poverty to persist. Moreover, the concurrent presence of various sorts of poverty traps makes poverty reduction for the poor more troublesome for instance, low ownership of resources; poor nutrition and absence of education may each bring about income additions to be moderate. For instance, a causal impact on a low health capital and under-nutrition may bring down the return on investment as though it might decrease the school attendance. The undernourished youngsters may perform inadequately regardless of the possibility, that they may go to school, and undernourished people are less ready to utilise the education anytime in life beneficially. Then again, public health and nutrition program is probably going to be unsuccessful when planned recipients are unskilled, and absence of schooling means youngsters may not find out about the essential individual nutritional guidelines, cleanliness and sanitation. Consequently, the chronic deprivation of one type of human capital may prompt disincentives to put resources into different types of human capital. In addition, this issue can be basic at a low utilisation when savings funds are challenging. Nonetheless, even with some accessibility, there is the likelihood the other human capital combination may lessen the capability of advantages of other types of benefits accumulation. So all these interrelates each other, and for the poor having assets, for example, health or education can integrally change the family resource development capacities.

1.1.4 CHRONICALLY POOR & THEIR CHARACTERISTICS

The chronically poor are not a distinct homogenous or merely a list of vulnerable groups, in fact, this is the group of individuals who normally encounter a few types of disadvantage and discrimination in the meantime. Both the objective and subjective research have identified several different bases. These are following such as according to the 'ascribed statuses' for example, ethnicity, race, religion and caste. According 'oppressive labour relation' for example, migrants stigmatised and bonded labourers. In view of the position as an "outsider" for instance migrant workers, refugees, and internally uprooted individuals and those without the records important to get into citizenship rights. In light of disability; stigmatised sick health, particularly HIV/AIDS, leprosy; gender; age for instance children, youth and older individuals and widows, that all leads towards social marginalisation, discrimination and disadvantage. The report says that not everyone in these groups endures chronic poverty, the individuals who encounter a few types of burden and discrimination at the same time is well on the way to be chronically poor. Furthermore, the different burden block access to the opportunities and resources important to escape poverty and constrain numerous into minimal, exploitative, unsustainable employments that let survival however additionally undermine prosperity in the more drawn out term. This review additionally highlighted the chronically poor household where a few people in the less poor household may likewise be chronically poor. Besides, their destitution is enduring and difficult to escape. Notwithstanding, when different individuals from the household appreciate a moderately decent quality of life. In such condition, the prosperity is unequally shared inside family along the lines of gender, age, marital status, fertility, spouse arrange, birth arrange, health status and disability and in addition to the family. The varying mixes of the various components, for example, structural factors (labour and product markets, ethnicity, race, caste, gender, religion, class, disability, displaced person status, geographic area); life cycle variables (widowhood, household structure, being youthful or elderly) and idiosyncratic factors (natural disaster, ill health, impairment, theft) together makes and keep up the destitution of a few while picking up others to take it as an opportunity to stay away from or escape it (CPRC Report 2004-05). Radhakrishan

et.al (2007); Mackay & Lawson (2003) pointed out towards the demographic factors such as the average household is large, their number of children is large, the low percentage aged above 40 years and the younger age of household commonly suggesting towards the chronically poor household's initial stages of the family life cycle with the higher dependency ratio. They also further explained the living standard of chronically poor that their per capita expenditure, human capital (such as female literacy, the number of workers and the number of days of employment per work) is low in chronically poor. Oduro (2002) characterised chronically poor households, according to the employment pattern where the marginalised household that has no access to wages or remittances from the formal sector, as well as no access to welfare benefits. In addition, it registered the smallest proportion of the households that moved from poor to a non-poor status or the upward mobility. The author further added the households that earned income from the secondary labour market that characterises by limited security and skill requirements or opportunities for upward mobility had a higher tendency to experience a downward mobility than did household in primary activities. As indicated by the support in the economy, the reports extensively recognise into two specific groups of individuals persevering chronic poverty. In the first place, that long-term poor who are not monetarily dynamic due to health, age, physical or mental disability. Second, the individuals who are financially dynamic yet not able to escape poverty due to the terms of their employment, their absence of access to gainful resources; or social obstructions that mean they oppress. This refinement perceives the diverse individuals who encounter chronic poverty and the distinctive procedures that are attempting to keep them in destitution. Therefore, the qualification is hazy as might show up and clarify individuals 'not financially dynamic' take part in household work or in exercises with the low monetary return, for example, begging (CPRC Report 2004-05). Along these lines, it says that ordinarily the individuals who participate in easygoing work; the individuals who live in families with high reliance proportions and those with a couple of benefits (human and social, and in addition physical or money related) are the general population who are chronically poor.

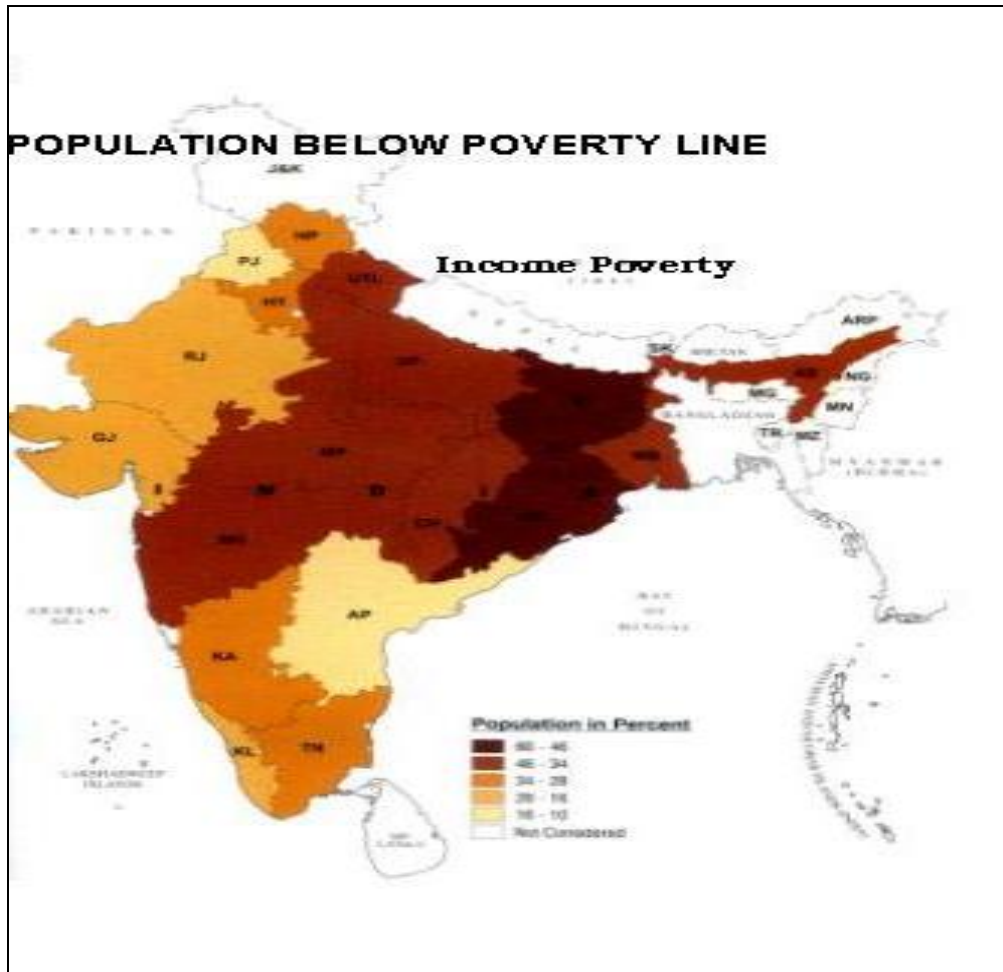
1.1.5 CHRONIC POVERTY: THE SPATIAL DISTRIBUTION

Chronically poor individuals live in all locales yet packed in specific places and patterns to move in local poverty traps as opposed to equally spread over a nation. Seeing at multidimensional poverty crosswise over regions draws out the increments in poverty and desperation in specific regions, even, in nations where general income poverty is generally declining. The worldwide measurement of chronic poverty highlights its dissemination. To begin with, as indicated by the nations with the most elevated amounts of chronic poverty which get exclusive in the Sub-Saharan Africa as broke down by CPRCs bunch investigation. Here the issue is most profound where the most astounding extents of individuals are poor and stay poor over long periods. Second, the nations with the best quantities of chronically poor individuals found in South and Southeast Asia. Where monetary development rates have been enhanced, poverty rates are lower yet substantial quantities of individuals stay in chronic poverty, reflecting the population size. In India, chronic poverty remains broadly critical, progressively thought inside diligently poor states and districts. Moreover, here it is packed in Center and East of the nation. Notwithstanding, in that, extreme poverty is concentrated in remote regions, the exemplary cases being the Kalahandi-Koraput locales of southern Orissa, the southern and western regions of Madhya Pradesh and adjoining areas in Maharashtra (CPRC Report 2004-05; Dashingkar 2010; Bird et.al 2001; Kwak and Smith 2011). These are a case of spatial poverty traps, i.e. the land ranges which stay disadvantage, whose individuals remains multi-dimensionally deprived and poor over drawn out stretches of time (CPRC Report 2004-05). Inside nations, chronic poverty is normally unevenly scattered. The local measurement of the frequency of poverty demonstrates the more noteworthy extents of poor families are in remote (zones that are a long way from the focuses of monetary and political activity and these characterizes with distance multiplies by time and known as 'frictional distance'), less-favored (politically burdened territories), low potential (zones that have low agrarian or natural resources frequently roughly compared with dry land and highlands) or in struggle influenced regions. At the end of the day, this additionally describes the districts that prone to have centralisations of chronic poverty with frail incorporation (the regions with low network both

physically and as far as correspondence and markets). The basic qualities of the different deprivation related with spatial destitution traps, for example, poor agro-environment i.e. soil quality, rainfall, quality and circulation, temperature, vulnerability to natural hazards; poor infrastructure, for example, poor streets, rail, waterway connection, prompting high transport costs; frail establishments or associations particularly powerless market organizations, prompting high exchange costs and the political disengagement especially related with powerless political groups and systems, feeble claims on local and social government services are altogether connected with the spatial poverty traps. Pockets of chronic poverty exist where socio-political rejection, regularly by dialect, ethnicity, religion, character, or gender shapes the possibilities of a huge extent of the general population and it can undermine by concealed advancement, extending imbalance and absence of access to basic administrations will nearly encounter persistent poverty. Both rural and urban poverty traps support by a blend of location particular reasons and by the connections, they have (streams of individuals, labour, finance, resources) with alternate regions. The social, financial, political and environmental factors are vital in advancing uneven advancement and prompts a few zones having a population with high occurrences of chronic poverty (CPRC Report 2004-05; Dashingkar 2010). There is an unmistakable proof of the presence of 'hardcore poverty' in spatial poverty traps in rural areas in the developing world (Bird et.al 2001). The Remote rural areas (RRAs) have brought down levels of access to primary health services, consumable water, and sanitation and there is much proof of larger amounts of morbidity and mortality. The far-reaching episodic confirmation says that all the more topographically remote and monetarily peripheral rural area is more grounded the probability that health services won't just be beneath national midpoints additionally below rural averages. The RRAs contain 'residual population' where reliance is high, human capital diminishes and resources are powerless (*ibid*). The purpose behind RRAs probability to encounter chronic poverty is a complex and varyig arrangement of supported centralisations of tireless destitution amongst areas and inside locales. While geological remoteness i.e. physical distance from major urban areas or the drift; the land confinement i.e. trouble of getting to on account of geography and the physical requirements on agricultural productivity is basic to numerous regions. Interlocking

arrangements of financial, social and political variables shape examples of destitution traps. Though, other vital elements, for example, 'market disappointments' prompt under interest in such locales and concentrates with no concurring advantages as far as pro-poor development. The 'state disappointment' that implies the infrastructure urgent for 'empowering environment', fundamental health services and education and social insurance are lacking in RRAs. Moreover, it assumes an imperative part of the area's flourishing. This may have a few political measurements, for example, sub-national measurements (e.g. The disappointment of a common government to work viable), a national measurement (e.g. Public policy shortcoming) and a global measurement (e.g. Deficiencies in the reaction of neighboring nations and International Development or security organizations). The 'social disappointment' between and inside social groups, prompts social exclusion and discrimination, breakdowns in security and political solidness and expanding and monetary disparity is likewise made pushed to fall into the spatial poverty traps. The qualities of the RRAs populations is the higher reliance proportion because of higher fertility, mortality of individuals of working age, and out-migration, the introduction of more elevated amounts of hazard, and lower level of social assurance, poor agroecology, food insecurity, poor policy and low levels of service delivery, obliging social factors and including this the poor agriculture, corruption, interlocked market of labour, credit and products (Kwak and Smith 2011; Bird et.al 2001). An expected 130 million Indians live in chronic poverty as referred to CPRC India (Kwak and Smith 2011; Brauholtz 2007). India and China represent right around a half (49-51 per cent) of chronic poverty worldwide and a little more than a half (55 per cent) of extreme poverty. The nation shares for higher offers of worldwide chronic poverty than China in view of the higher chance of remaining poor in India. Indeed, known pockets of chronic poverty in India is the focal 'poverty square' include the connecting forested zone cutting crosswise over Eastern Maharashtra, Eastern Gujarat, Southern Madhya Pradesh, Northern Andhra Pradesh, Orissa, and Jharkhand. The vast parts of Special Economic Zone (SEZ) states are likewise chronically poor and there are substantial pockets of chronic poverty inside prosperous states, for example, Tamil Nadu.

Map 1.1 State wise Income Poverty



(Sources: Jayaraman V and Srivastava S.K 2003)

In India, less-favored territories incorporate the dry land portrayed by regular yield, failure and sporadic opportunities for employment. Besides, forested regions included especially in uneven locales with a transcendence of tribal populations, and with constrained access to regular resources, information, and markets. The report says that chronic poverty is most serious where ecological and social deprivation cover. The tribal zones which rule of oppressive tribal as well as medieval, agrarian and gender relations and the population living in forested territories, for example, South-Western Madhya Pradesh, are lopsidedly tribal groups confronts the chronic poverty. Individuals in spatial poverty traps are frequently undetectable to policymakers, somewhat as an impression of troubles in numbers and gathering exact measurements in the remote and troublesome

territory, or in reaching to marginalised groups. In addition, particularly with indigenous people, this is awful by the inclination for local information to neglect to desegregate by ethnicity (CPRC Report 2004-05).

1.1.6 MEASUREMENTS OF CHRONIC POVERTY

Chronic poverty has normally evaluated in two ways with income and/or consumption information. To start with, the 'Spells Approach', which concentrates on moves into and out of destitution and is wide uses to overestimate transient poverty (Hulme and Shepherd 2003). A required panel data set was recognising the poverty status of the households in the diverse periods. The instrument utilised for this kind of investigation is the 'Transition Matrix'. While, second the 'Component Approach' which tries to detach the permanent or fundamental part of poverty from momentary moves, and measure either by normal income or consumption after some time or by an expectation of income in light of known household characteristics. The approach is to recognise chronic and transient, which constructs to a great extent with respect to perpetual consumption or income (Oduro 2002). The 'spells approach' concurs more to the natural thought of chronic poverty as persistent poverty, while 'component approach' impact by the depth of destitution both gives important bits of knowledge. Multidimensional poverty or deprivation has most ordinarily measured at the national level through the Human Development Index (HDI) and different indices, for instance, the physical quality of life index (Hulme & Shepherd 2003).

1.2 MULTIDIMENSIONAL POVERTY: GLOBAL SCENARIO

The author clearly characterises the multidimensional poverty is a whole of a variety of variables. The multidimensional indicators of poverty are those that are reflecting human and gender development and strengthening and through assessing HDI, GDI, GEM and HPI, Infant Mortality (Mehta and Shah 2001). Multidimensional Poverty Index (MPI) is a record that reflects the covering deprivation that individual from households encounters. This index gives data on the joint dissemination of deprivation identified with the Millennium Development Goals (MDGs) which demonstrates the power and makes a few viewpoints out of poverty in the meantime. It is an index of intense,

multidimensional poverty that reflects deprivations in simple services and center human functioning for individuals crosswise over 104 nations. In a human-rights based approach and numerous other moral approaches, each human life is to give equal weight. Therefore, the MPI accentuation is on the quantity of a population whose lives diminishes by numerous deprivations and not the number of countries. MPI has three dimensions and ten indicators inside it to be specific: Health that incorporates child mortality and nutrition; Education includes years of schooling and child enrollment; and a way of life or standard of living which incorporates power, drinking water, sanitation, flooring, cooking fuel and resources. Each of them conveys a weight where the weight is to the health indicators. In the arrangement of 104 nations spread crosswise over UN locales that incorporates 24 nations of Europe and Eastern Europe and the Commonwealth Independent States (CIS) signifying population of 400 million in 2007, 11 Arab States signifying population of 217.5 million , 18 Countries in Latin America and Caribbean signifying 491 million in 2007, five Countries in South Asia signifying a population of 1,544 million in 2007; nine nations of East and the Specific signifying a population of 1,868 million in 2007 and 37 nations of Sub-Saharan Africa signifying a population of 710.4 million in 2007. The chronic poverty in South Asia can comprehend by the territorial examination, which demonstrates that a population-weighted average of 54.7 per cent poor individuals, which implies around 843.8 million individuals are MPI poor in this area of the world. South Asia has the world's most astounding poverty as far as destitution. As indicated by the MPI report (2010), around 51per cent of the number of inhabitants in Pakistan, 58 per cent in Bangladesh, 55 per cent in India and 65per cent in Nepal are MPI poor. In India, Bangladesh and Nepal, deprivation in the expectation for everyday comforts is the most elevated donors of poverty, trailed by health and education. In South Asia, Srilanka is the just a single of the five nations considered as low poverty region with five per cent of the MPI poor individuals. Headcounts of the other four nations are generally more uniform than in different regions. In the way of life indicators, the water has low deprivations levels among the MPI poor in these nations where the most elevated being 14per cent in Nepal and in India. Bangladesh and Nepal run from 26 per cent to 63 per cent, which says that it is by and large especially high in Nepal. The deprivation rates in the two health indicators are likewise high with 30 per

cent in Pakistan and Nepal are poor and live in a household where no less than one child passed on; this rate is 24 per cent in Bangladesh and 23 per cent in India. 40 per cent of the population in Nepal and 39 per cent in India live in a poor household where at any rate, on children or women is under nourish, signalling towards the high deprivation in the nutrition of children and women. Despite the fact that the education is the most minimal supporters of poverty, deprivation rates are still high in the vicinity of 17 per cent, and 29 per cent of individuals in these four nations are poor and live in a household where nobody finished five years of education. The reports say that in regards to 34 per cent of the poor in Pakistan, 25 per cent in India and 15 per cent in Nepal live in a household where at least one child are not going to school. It is detectable that in Bangladesh just nine per cent of the population live in the poor household with children not going to school (Alkire and Santos 2010). The adjoining investigation of MPI made in 2013 after the investigation of 2010. The MPI 2013 course 104 nations, which are home to 5.4 billion, individuals by utilising 2010 population data. In 2013, 1.6 billion individuals were living in multidimensional destitution and over 30 per cent of individuals living in these nations. Of these 1.6 billion of individuals, 51 per cent lives in South Asia, and 21 per cent in Sub-Saharan Africa. Study uncovers the most MPI destitute individuals around 72 per cent lives in middle-income nations. The national poverty level demonstrates that out of 104 nations MPI by their MPI values. Beginning with the poorest nations the 'Bottom Billion' as per national poverty line in 30 nations and around 66 per cent of the poorest billion individuals live in lower-middle income nations, and 34 per cent live in low-income nations. As indicated by the sub-national poverty levels the last billion live in 265 sub-national regions crosswise over 44 nations (counting 30 distinguished in the before breakdown of national poverty levels). Of the poorest billion, 62 per cent live in lower middle-income nations, and 38 per cent live in low-income nations. With individual poverty profiles, the poorest billion individuals disperse crosswise over 100 nations. Where the 60 per cent of the last billion live in lower-middle-income nations, and 31 per cent live in low-income nations. More than nine per cent live in upper middle nations, and further, 41,000 of the poorest billion individuals live in high-income nations, for example, Croatia, Estonia, United Arab Emirates (UAE), Trinidad and Tobago and the Czech Republic. The report additionally

discusses the nations that were not homes to any poorest billion individuals and those were four out of 104 nations to be specific Belarus, Hungary, Slovenia and Slovakia. Regarding geographic regions, South Asia drives the world in poverty lodging in the vicinity of 52, and 62 per cent of the bottom billion and the greater part of the rest live in Sub-Saharan Africa, which is home to 33-39 per cent of the poorest billion individuals on the planet. In 2013, the study found that of 22 nations changes have investigated in MPI poverty after some time, where 18 nations lessened poverty fundamentally. The report says the most 'top performing' nations decreased multidimensional poverty as quickly as and quicker than they lessened income poverty. Nepal, Rwanda and Bangladesh had the biggest reduction in MPI poverty, trailed by Ghana, Tanzania, Cambodia and Bolivia. The rate of destitute individuals in Nepal dropped from 64.7 per cent to 44 per cent in the vicinity of 2006 and 2011, 4.1 per cent focuses every year. Also, in Rwanda, MPI poverty fell by 3.4 per cent focuses every year during 2005-10 and in Bangladesh, the focuses are 3.2 per cent every year from 2004-07. The picture of India says another story. In 1999-06, the MPI poverty fell speedier than income poverty however rate that was short of what 33 per cent of the speed its poorer neighbours Nepal and Bangladesh accomplished all the more as of late. Nepal, Rwanda, Bolivia, India and Colombia demonstrated factually critical changes in every one of the indicators. Nepal did best in regions by enhancing, for example, nutrition, child mortality, power, enhanced flooring and resources while Rwanda demonstrated the greatest change in sanitation and water. Furthermore, Bangladesh improved in sanitation and school participation (Alkire et.al 2013).

1.2.1 MULTIDIMENSIONAL POVERTY: INDIAN SCENARIO

In India, chronic poverty concentrate in Center and East of the nation, however inside that, outrageous poverty gathered in remote regions. The reports say that Delhi has a multidimensional poverty index (MPI) proportionate to Iraq which positions 45 while Bihar's' MPI is like Guinea's the eighth poorest nation in the positioning.

The headcount, in Delhi and Kerala 14 per cent and 16 per cent of the population are MPI poor, separately, while in Jharkhand 77 per cent of the population are MPI and in Bihar 81 per cent (Alkire & Santos 2010).

Here India's Sub-national variations explained by using the data of bottom state's those having high MPI poverty values and decomposition in terms of deprivations in all three dimensions namely education, health, and standard of living by state, caste and regions i.e. Urban and Rural.

Table:1.1- Composition of MPI by State (India)

State	MPI Value	MPI Rank Out of 22 states	H (Multidimensional Headcount) (Proportion of Poor)	A (Average Deprivation Share) (Average Intensity of Deprivation)	Population (Millions) 2007
Orissa	0.345	16	0.640	0.540	40.7
Chhattisgarh	0.387	19	0.719	0.539	23.9
Madhya Pradesh	0.389	20	0.695	0.560	70.0
Jharkhand	0.463	21	0.770	0.602	30.5
Bihar	0.499	22	0.814	0.613	95.0
India	0.299		0.554	0.535	1,164.7

(Source: Alkire & Santos, 2010; Alkire, Roche & Seth, 2013).

Table: 1.2 – Proportion of poor people and deprived in three dimensions

State	The proportion of people who are poor and deprived in ...									
	Education		Health		Standard of living					
	Schooling	Child Enrolment	Mortality	Nutrition	Electricity	Sanitation	Drinking Water	Floor	Cooking Fuel	Assets
Orissa	0.23	0.19	0.24	0.45	0.43	0.62	0.20	0.51	0.63	0.49
Chhattisgarh	0.21	0.29	0.31	0.52	0.24	0.69	0.22	0.64	0.70	0.48
Madhya Pradesh	0.22	0.32	0.31	0.50	0.25	0.65	0.31	0.57	0.67	0.52
Jharkhand	0.26	0.45	0.30	0.56	0.55	0.73	0.42	0.63	0.76	0.55
Bihar	0.35	0.52	0.35	0.61	0.65	0.74	0.04	0.70	0.79	0.57
India	0.18	0.25	0.23	0.39	0.29	0.49	0.12	0.40	0.52	0.38

(Source: Alkire & Santos, 2010).

Table 1.3- Per centage Attributable to Deprivation

State	Per centage Attributes to Deprivation		
	Education	Health	Standard of Living
Orissa	20.3	33.3	46.4
Chhattisgarh	21.6	35.8	42.5
Madhya Pradesh	22.9	34.7	42.4
Jharkhand	25.3	31.0	43.7
Bihar	29.0	32.0	39.0
India	24.0	34.7	41.3

(Source: Alkire & Santos, 2010).

Table 1.4 – Composition of MPI by Social Groups in India

Social Groups	MPI Value	MPI Rank	H (Multidimensional Headcount) (proportion of poor)	A (Average Deprivation Share) (Av. Intensity of deprivation)	Sample population share (Percentage)	Contribution to aggregate MPI (Percentage)
ST	0.482	4	0.814	0.592	9.2	15.1
SC	0.361	3	0.658	0.548	21.6	26.5
OBC	0.305	2	0.583	0.523	43.0	44.5
None of Above	0.157	1	0.333	0.472	26.1	13.9
India	0.295		0.555	0.531	100	100

(Source: Alkire & Santos, 2010; Alkire, Roche & Seth, 2013).

Table 1.5 – Proportion of people poor and deprived by Social Groups

Social Groups	The proportion of people who are poor and deprived in ...									
	Education		Health		Standard of living					
	Schooling	Child Enrolment	Mortality	Nutrition	Electricity	Sanitation	Drinking Water	Floor	Cooking Fuel	Assets
ST	0.35	0.37	0.32	0.58	0.47	0.79	0.32	0.71	0.80	0.67
SC	0.23	0.28	0.28	0.47	0.37	0.60	0.13	0.50	0.63	0.49
OBC	0.16	0.25	0.25	0.40	0.29	0.54	0.13	0.41	0.55	0.39
None of Above	0.06	0.12	0.13	0.24	0.14	0.27	0.07	0.21	0.30	0.19
India	0.17	0.24	0.23	0.39	0.28	0.50	0.13	0.40	0.53	0.38

(Source: Alkire & Santos, 2010).

Table 1.6- Per cent Attributable to Deprivation by Social Groups

Caste	Per centage attributes to deprivation		
	Education	Health	Standard of Living
ST	25.2	31.4	43.4
SC	23.5	34.5	42.0
OBC	22.5	35.6	43.4
None of above	19.1	39.6	43.4
India	22.7	35.2	42.0

(Source: Alkire & Santos, 2010).

Table 1.7: India Decomposition of the Least Poor and Poorest Social Groups by Region

Least Poor & Poorest Caste by Region	MPI Value	MPI Rank	H (proportion of poor)	A (Av. Intensity of Deprivation)
None Urban	0.052	1	0.122	0.425
ST Urban	0.202	2	0.393	0.513
None Rural	0.235	3	0.489	0.480
ST Rural	0.510	4	0.856	0.596

(Source: Alkire & Santos, 2010).

Table 1.8: Proportion of people poorest social groups and deprived by region

Least Poor and Poorest social groups (ST) by Region	Proportion of people who are poor and deprived in ...									
	Education		Health		Standard of living					
	Schooling	Child Enrolment	Mortality	Nutrition	Electricity	Sanitation	Drinking Water	Floor	Cooking Fuel	Assets
None Urban	0.02	0.06	0.06	0.09	0.01	0.07	0.02	0.03	0.06	0.06
ST Urban	0.14	0.19	0.16	0.28	0.10	0.34	0.08	0.21	0.32	0.27
None Rural	0.09	0.17	0.19	0.35	0.23	0.41	0.11	0.35	0.47	0.28
ST Rural	0.38	0.39	0.34	0.62	0.51	0.84	0.35	0.76	0.85	0.71

(Source: Alkire & Santos, 2010).

Table 1.9: Per cent attributable to deprivation of poor and poorest social groups by region

Least poor and poorest social groups (ST) by region	Per centage attributes to deprivation		
	Education	Health	Standard of Living
None Urban	26.1	47.4	26.5
ST Urban	27.4	36.2	36.4
None Rural	18.0	38.4	43.6
ST Rural	25.1	31.3	43.7

(Source: Alkire & Santos, 2010).

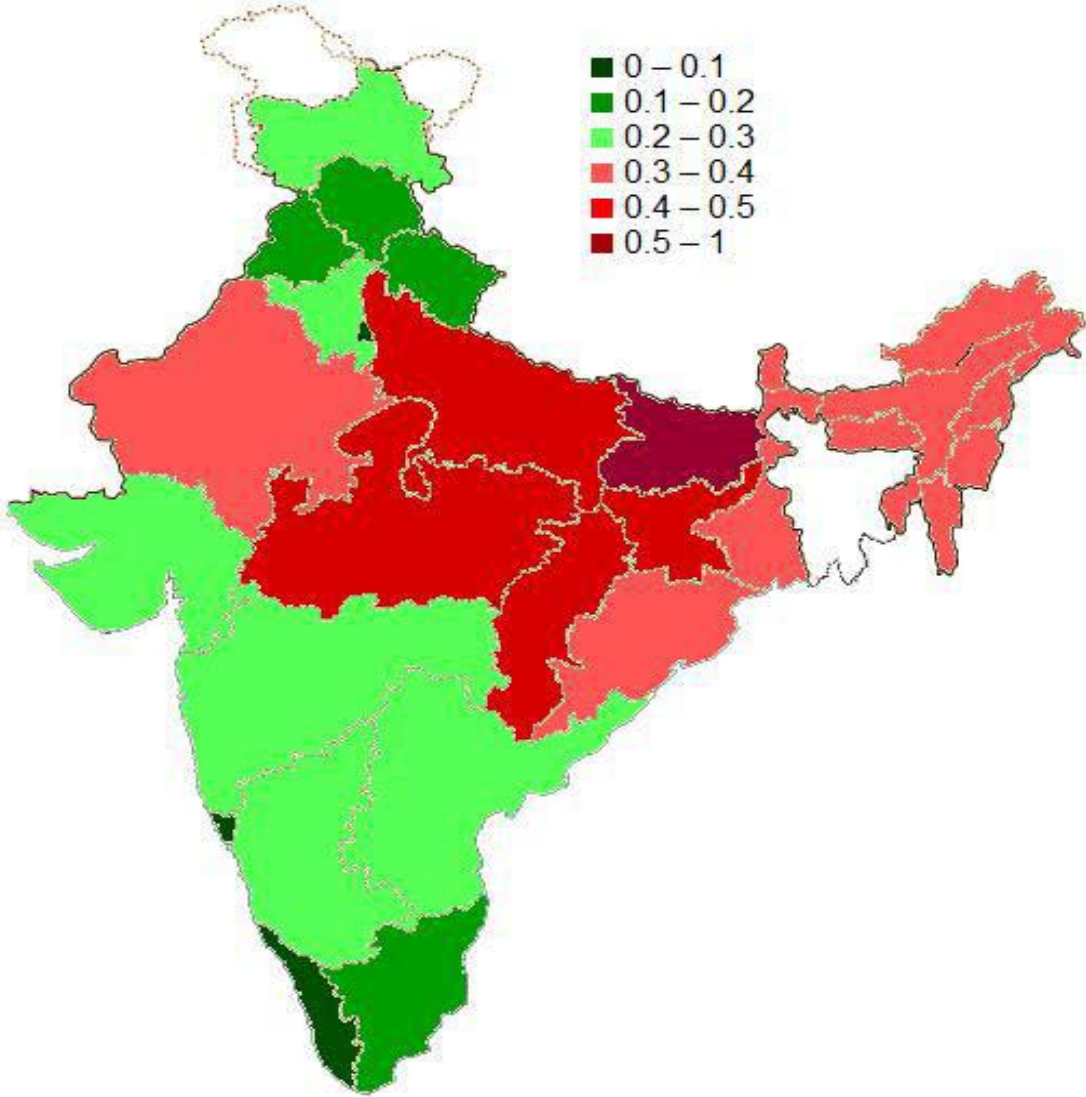
Table 1.10: Multidimensional Poverty across Sub-National regions

Region	Per centage of Population	MPI $H \times A$	Incidence of poverty H (Multidimensional Headcount)	Av. Intensity across the poor A (Average Deprivation Share)	per cent of population vulnerable to poverty	per cent of population in severe poverty
UP	16.3	0.369	68.1	54.2	14.8	39.3
Orissa	3.7	0.339	63.2	53.6	15.7	34.3
Chhattisgarh	2.3	0.367	69.7	52.6	13.3	37.6
Jharkhand	2.7	0.441	78.8	58.9	11.9	51.0
Bihar	8.0	0.479	79.3	60.3	10.2	53.5

[Source: Oxford Poverty & Human Development Initiative (OPHI), 2011].

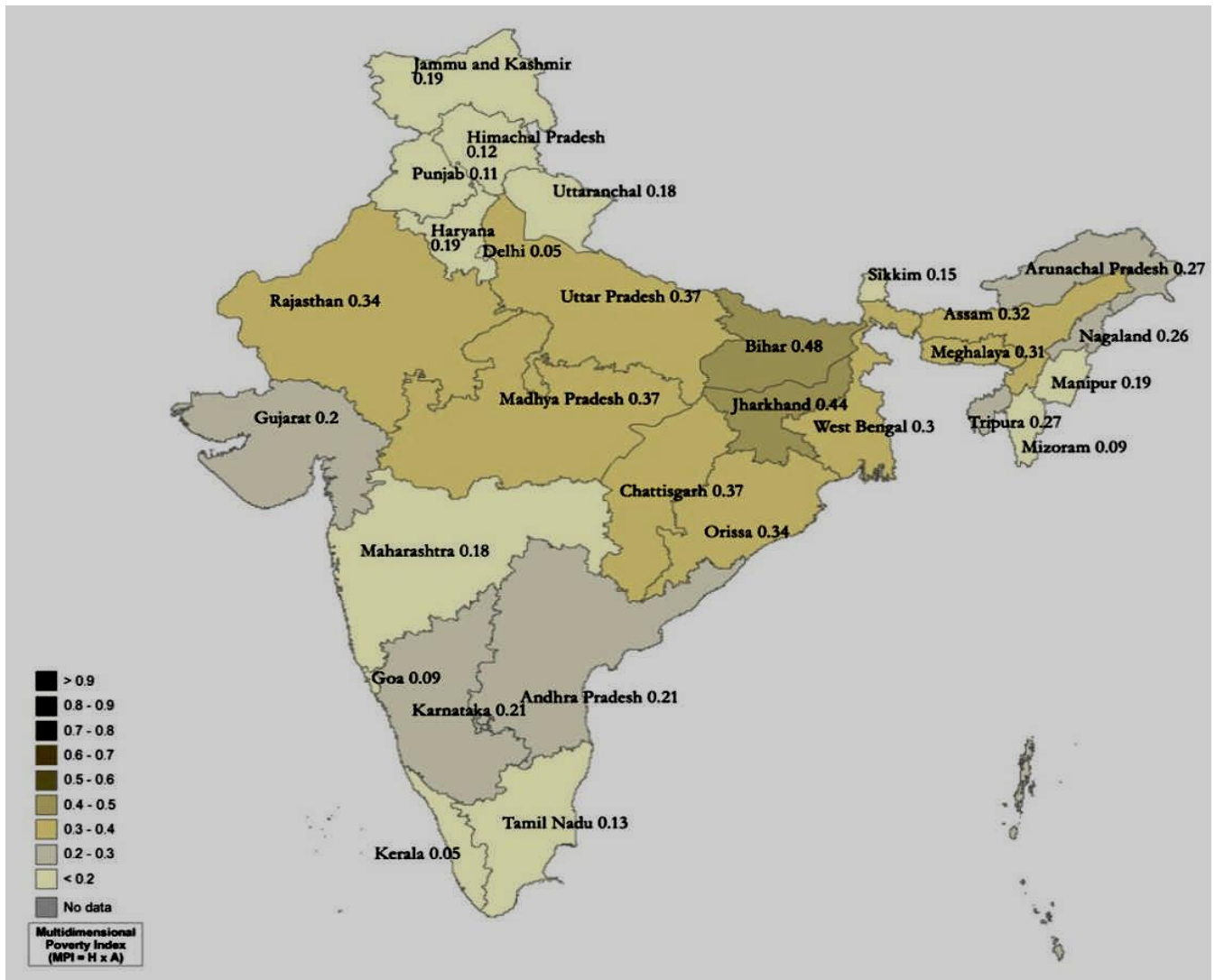
The MPI report 2013, studied the trends by social groups and household characteristics. Here it uncovered that some poor groups for e.g. individuals in rural areas, the Scheduled Tribes or Scheduled Castes or households whose head had just one to five years of education encountered a solid reduction in poverty. However, the greater part of the poorest groups, for example, Scheduled Tribe, Muslims, female-headed households, and families whose head had no education saw a slower reduction in poverty. In the meantime, the poorest of poor people, the profoundly poor, as measured by more stringent deprivation criteria had decreased from 26.4 per cent of the population in 1999 to 19.3 per cent in 2006. The report commented it as a delighting pattern since it demonstrates the reduction is overall poverty in India brought to a great extent by decreasing the rate of the population who are really dejected. This said there is as yet far to go as almost a fifth of Indian's population more than 200 million individuals were still profoundly poor in 2006, and millions more remained intensely poor.

Map 1.2 MULTIDIMENSIONAL POVERTY INDEX (MPI) IN INDIA



(Source: UNDP, 2010).

Map 1.3: MULTIDIMENSIONAL POVERTY INDEX (MPI) AT SUB-NATIONAL LEVEL



“The boundaries and names were shown, and the designations used on this map do not imply official endorsement or acceptance by OPHI or the University of Oxford. This map is intended for illustrative purpose only.”

MPI report 2013 studied the slower advance for the poorest groups or the poverty reduction in India in 1999-2006 revealed that multidimensional poverty in India fell speedier than income poverty. The review utilises the NFHS datasets for 1999 and 2006, and adjusted MPI and figured it by utilising a similar strategy for worldwide MPI yet marginally different indicators. From 1999 to 2006 the MPI poverty in India fell by 16 per cent from 0.300 to 0.251 and was essentially a result of a factually huge reduction in

the rate of individuals (H) and the lessening in the intensity of poverty (A) was smaller, yet at the same time measurably noteworthy. The critical decreases got in all the ten indicators, and the greatest upgrades guaranteed through access to power/electricity, housing condition, and access to safe drinking water, and enhanced sanitation as opposed to in education and health indicators. The MPI poverty trends by state demonstrate that poverty reduction generally changed across 25 states, with 17 states accomplishing statistically huge decreases in MPI poverty and its frequency. Bihar, Madhya Pradesh, Rajasthan, Uttar Pradesh and West Bengal in which over 60 per cent of the population were poor in 1999, all indicated moderately little reduction. Conversely, four less-poor South Indian States Andhra Pradesh, Karnataka, Kerala and Tamil Nadu lessened the rate of poor individuals by over 13 per cent focuses each in absolute term. The report revealed the poor state able to control and reduced multidimensional poverty the minimum. The income poverty reduced is more than rich states, highlighting the need to measure and analyse both sorts of poverty (Alkire et.al 2013).

1.3 MIGRATION: A COPING OR SURVIVAL STRATEGY

The chronically poor frequently live in remote rural areas, where physical disconnection most often goes with the social exclusion. RRAs are spatial poverty traps that incorporate regions rich in natural resources, for example, forests, and also low-efficiency areas, for example, drought-prone and hilly zones. Although diverse types of remote rural areas experience the ill effects of the various combinations of the problem, they do share the basic element of being on the edges of political needs. Along these lines, justify consideration as a different geological classification. RRAs experience the ill effects of governance, market and endowment disappointment that makes them spatial poverty traps and experience the ill effects of commonly strengthening logjams of burden, which oblige creates both non-farm and farm employment openings. All social, political and monetary exchanges control by the local elites and weight against poor people. Furthermore, frequently, the general population living in remote rural areas left with a choice to look for some kind of employment outside the village (Kwak & Smith 2011; Dashingkar 2010). There is a great extent of the connection between

migration, remoteness and chronic poverty in India, where developing levels of inequality and uneven growth have brought about larger segments of the general population avoided or adversely incorporated. A large portion of these poor individuals has a place with remote rural areas and are chronically poor. Accordingly, they routinely migrate for work to smooth utilisation, reimburse debts and put resources into health and agriculture (*ibid*). The official statistics demonstrate bring down levels of mobility among the Scheduled Caste (SC) and Scheduled Tribes (ST) and poor people. Dubey et.al (2006) contended from the analysis of the 1999-2000 rounds of the NSS that people from SC and ST and those with little and no education are less inclined to migrate to urban areas. Conversely, the study village of remote rural areas shows high out-migration among these categories. The author says in her study that a growing number of the village showing the high migration rates among chronically poor groups. Different empirical studies came up with the common findings the poorest regions have a major road connectivity constraints, where the rainfall is inconsistent and unevenly distributed, the irrigation system is inadequate, and the vast majority of the half of this forest of these locales degrade and restricted with employment opportunities in the regions. In particular, the agriculture does not make enough employment and about every single young men and woman in poor families migrate. Just the old and weak are 'left-behind' (Dashingkar 2010). Numerous poor family migrate as a group or send family member part away in light of vulnerability or a strategy to oversee chance and reduce helplessness. In another word, it reacts to the hazard and vulnerability of the poor individuals. The general tendency found in the poorer streams, frequently comprised of the whole, households migrating because of a couple of factors, for example, the vulnerability to subsist because of rotting the supportability of the agro-resources base or obligation or absence of food security. In the stream, those are somewhat poor; their household members may scatter. However, some member will stay put to care for the land, animals, etc. (Waddington 2003). Here the author talks about the put behinds or left behinds, but unable to explain the reasons that clearly answer whether the slightly less poor are the chronically poor or else they are the transient poor who stays in the sending village. Waddington (2003) said that a household arranges and prepare to migrate with family or as a single family member. Additionally, says that a family sorts

out to migrate some of its parts as a system to differentiate sources of income and lessen risk through beating hindrances to credit and capital. This may result conceivably through remittances that substituting for missing markets and in this way, giving a form of social protection (*ibid*). From instances further explanations can given by the definition of Lee (1966) that author cited in her paper that “Migration is supposedly led to one way people movement from less endowed areas to well-endowed prosperous areas through ‘push’ created by poverty and lack of work and ‘pull’ created by better wages in the destinations” (Dashingkar & Start 2003). Moreover, the study group Society for Promoting Rural Education and Development (SPREAD) tried to define migration as a moving group of people from one place to another. It has a watertight link with the avenues of income available at the destination. The migration can be ‘permanent’ or ‘semi-permanent’. Sometimes migration is voluntary, but many times people forced to migrate because they do not have any other choices. The ‘involuntary’ migration indicates extreme economic and regularly social hardships, and endeavour for the most part via landless or land- poor, untalented and ignorant poor labourers. Here poor don't have any decision about the place or work that they embrace. Moreover, the labour migration is a part of the semi-permanent migration that also called seasonal migration (SPREAD 2008-09). The study cited the definition of Dr S N Tripathy “Labour migration is a form of a labour mobility towards districts or state or outside where industry and employment are expanding. In other words, migration may be an incedent of the flow of the people over shorter or longer distance from one origin to a destination either for temporary or permanent settlement” (*ibid*). Severely poor have a couple of natural, physical or financial related resources and are intensely subject to their human and social capital to survive or potentially enhance their livelihood position and meeting capital. It is through the use of their human capital in the labour market as troublesome as their low levels of education and reliance over their inadequately paid, high drudgery, unpredictable casual employment. Their social networks regularly base on relations with family and neighbours, those are comparatively poor and can help with survival yet not with ‘escape’ from poverty. The great extent of India's extreme poor originates from social groups – ST, SC or women that show the part of social exclusion that plays in closing off anyway to enhance their position (Mehta & Shah 2003).

Presently the response to the topic of who migrates, the author additionally added by saying the migrant population dominated by the Scheduled Caste, Scheduled Tribe, and OBC, and include the landless and land-poor, those owning minimal measure of advantages, skills or education (Smita 2008). The work of Chant (1992) says that a significant part of the migration has attempted by truly poor and resourceless groups who are typically Schedule Caste and Tribes. He included that some of them have now entered exceptional high-return migration streams where they would have earned at home. In any case, for some other lower caste groups, migration has remained a low-return adapting on account of the previously established inclinations against them and their inability to put resources into more compensation sorts of migratory labourers (Dashingkar and Start 2003). The author says the seasonal distress migration is turning into the last adapting procedure in the shaky existences of the rural poor. It has demonstrated as an inter-generational phenomenon, and it is basic to run over fourth and even fifth generation migrants in numerous sectors (Smita 2008). Along these lines, migration may give an 'escape route' from extreme poverty. In any case, the extremely poor are then to the least extent liable to have the capacity to exploit enhancing their employments through circular or long-term migration (Mehta and Shah 2003). To attest it fewer reviews on migration from Jharkhand, that has highlighted by various researchers, particularly on the migration and trafficking on account of the elevated amounts of mobility among the tribal population. Furthermore, another investigation of Dayal and Karan (2003) who examined 12 villages in Jharkhand, utilising household reviews and Participatory Rural Appraisal (PRA) techniques found that 33 per cent of the household had no less than one member migrating. Here the short migration was higher among poorer groups, including more than 80 per cent of the landless and 88 per cent of the illiterates. Advance, the review found that migration among SCs and STs was about double the rate (15 per cent of household) of upper caste (eight per cent) and (three per cent) of OBCs. The review additionally highlighted the current developing pattern of the large-scale migration of tribal young girls for household work to the capital city of New Delhi from the eastern tribal belt of Jharkhand and West Bengal. It has found that livelihood enhancement is a result of the reasons that people and the household proceed with it as a livelihood procedure and gap it into two contemplations,

which are need or decision. Once in a while, it acted like being a complexity amongst survival and decision or amongst survival and accumulation. The decision alludes to wilful and proactive reasons enhancing. For instance searching out seasonal wage income opportunities, setting out to look for some kind of employment in remote areas, educating children to enhance their prospects of landing non-agricultural jobs, sparing cash to put resources into non-farm businesses, for example, trading, utilizing cash earned off the farm to purchase manures or capital hardware for the farm venture. The most imperative determinants of broadening are seasonality a characteristic component of rural livelihood. The recurrent levels of effectively inferred via seasonality apply as much to the landless rural families that rely on upon agrarian labour market for survival, concerning farm families. Economically, seasonality implies labour time i.e. income that can earn every day or week worked shift amid the year in both the on-farm and off-farm labour market. On-farm returns shift by looking at times of peak labour, for example, cultivation and harvesting required all together accomplishing farm yields with periods when little can went up against the farm. The paper highlighted that in conjuring farm household model, seasonality makes changes in occupation happen as labour time change from lower to higher return. Because of the commonality of risk and market disappointment in the rural economies of low-income developing nations, utilisation smoothing is a genuine trouble for the households. Additionally, made more intense the closer the household is to uncovered survival occupation conditions, the higher the dangers connected to the uneven income sources on which it depends (Ellis 2000). Seasonal and circular migration of labour for employment has turned out to be a standout amongst the toughest parts of the livelihood strategies of individuals live in rural areas (Dashingkar and Start 2003). The review uncovered the regular picture of the seasonal migration in their research and said the seasonal migration has for some time been practice for enhancing livelihood in rural regions. This exercises with some male individuals from the family taking in the village for part of the year to search for paid work. This happens because of the absence of livelihood choices after the harvest of the monsoon crop (*Kharif*) in most rain-fed parts of the country, which brings about obligation and food security. The circumstance compels the whole family to leave home looking for work to survive. The diligent drought season and environment debasement

have prompted the development of this pattern. Study likewise pointed the other critical perspectives, which says there are additional numbers of pull factors other than push elements for distress migration. This incorporates the high seasonal interest for manual work in agriculturally rich areas and labour intensive industry (Smita 2008). The review caught the basic phenomenon of seasonal migration cycle, which begins from the loans by the contractual labour workers to the poor families in the village amid the lean post-monsoon months. As an end-result of which families promise their labour for the coming season. The migration starts around October-November with migrant families spending the following six to eight months at work destinations and afterwards coming back to their village before the following monsoon. Once the rains are over, they again plan to leave their village. This cycle is normal of the lives of countless the poorest rural families in many parts of India. The author gave two purposes behind this labour mobility. Initially, as a result of the concealed rhythms of the economic exercises of the year i.e. peak period rotating with slack periods. Second, as a result of the outside character of production, this makes it essential for work to stop with the onset of the monsoon (*ibid*). Migration is not simply to the poor during times of emergency for survival and adapting, however, has progressively turned into an aggregate alternative for poor people and non-poor alike.

Seasonal migration has for quite some time been a part of the livelihood of poor individuals across over India. Presently perceives as a piece of the ordinary employment system of poor people and occurs during times of crisis or distress. As referred to in the review, the National Commission on Rural Labour (NCRL), most seasonal migrants employ in cultivation and plantation, brick kilns, quarries, construction sites and fish processing. NCRL puts the numbers of circular migrants in rural areas alone around 10 million (counting approximately 4.5 million inter-state migrants and 6 million inter-state migrants). Advance, countless migrants work in urban told manufacturing, construction, services or transport, employed as casual labourers, head-loaders, rickshaw puller and peddlers (Dashingkar and Start 2003). Adding to this review additionally clarified as the migration and it topographies which discuss the frequency of migrant labour that is high in industrial sectors. For example, brick making, salt making, sugarcane harvesting,

stone quarrying, construction, fisheries, plantation and rice mills. The agriculturally rich areas likewise pull in most migrant labourers for sowing, harvesting and other related operations. While the migration for industrial work frequently reaches out for long stretches of between six to eight months once, a year and the migration for agricultural work are short-duration and occur a few times each year. The review discusses the basic phenomenon that happens around the 'sending' and 'receiving' areas. It underpins distress migration be a reality in all states, albeit variedly. The trends of migration are in some state/regions draw in labour, while other sends it. Besides, here the agriculturally and industrially developed states are well on the way to be net receiving states for migrant labour. While the less developed states are the net sending areas. There is substantial migration taking within states, from one district to another (Smita 2008).

The possibility of migration as a coping strategy is picking up acknowledgement and agreed as a survival and livelihood strategies and not only a reaction to crises. Migration and remittances from it have both positive and negative impacts on the welfare of the rural household and communities, contingent upon the kind of household/community. The effect likewise changes with time where at the outset, migration may deprive the household and rural economy of labour. Nevertheless, in the longer term, remittances may put once again into enhancing profitability and making resources and household incomes (Dashingkar and Start 2003). Migration and household stay connected through the 'co-protection'. Whereby household all in all, or individual from the household, may support at first or early development and give protection against short lived income shocks. The migrant receives remittances, as a byproduct of the migrant giving equal protection against unanticipated income shocks at home once they settle abroad. The author likewise watched the young migrants from rural areas have started to disregard conventional commitments to support their elderly guardians. Particularly on by chance that they don't plan to come back to their local village, don't expect any sizable legacy and have no complementary protection duty with them. In this condition, rural particularly elderly individuals presented to the danger of remaining without support (Waddington 2003). However, the author concurs with the reality by saying the

migration is the imperative coping strategy in poor areas. Moreover, its results depend intensely on the general economic advancement and extension for occupational diversification in the more extensive region. To get greater clarity author studied the migration in both dry and forested area and found that it is an essential piece of livelihood strategy in both the region. In any case, the early conditions (monetary and social capital) and to the results are ideal in a dry land partner to the forest area. Progressively, migration returns have advanced interests in groundwater in dry land areas however unsustainable. In any case, such option is less accessible to the poor in the forest – based regions, in any event mostly on account of the issue of inadequately characterised land rights and entitlements. The author has plainly highlighted the results of the two regions that how vital the migration is adding to each of them. He additionally supported it as a successful poverty- reduction strategy just when it consolidates with option financial roads in the growing industrial and tertiary sectors. He deduced it by saying that unless endeavours make to build up the home economy, out-migration from drought-prone regions may just move destitution from rural to urban or from dry land to forest climatically better-invested regions (Mehta and Shah 2003). Conversely, Waddington (2003) discusses the adverse effect of the migration on the poor individuals, families or locale as it might build the weakness particularly when households wind up noticeably subject to remittances incomes that outcome from unsteady or untrustworthy employment. The uneven dispersion of the migrant's results may bring about migration again due to the agricultural and industrial transition and the adjustments in the relations of production, and in addition patterns of ownership for assets. All things considered, the author additionally accords with its positive effect of the remittances that can profit the poor straightforwardly through going straight into their pockets. The author likewise discussed the indirect effect of the remittances on the poor as by making occupations and work in sending areas, for instance, building booms and so forth that relies on upon both what amount dispatched the specific circumstance, what settlements spend on, and the time of analysis. Diverse research calls attention to that those poorer migrant dispatch a greater amount of their aggregate pay than the wealthy do, however this decay as income increment. The focus is given to the reality the remittances expand household income, co-insurance household, and migrant, and can likewise enhance the societal

position of the migrant and his/her household in the sending area. The review says that where remittances add to a livelihood strategy restrict to the collective. Furthermore, clarified it by saying that where there is a coping strategy, remittances might be essential for the household to address fundamental issues and keep individuals alive. Other than the coping strategy, the aggregate strategy is one where remittances empower migrants to get (by enhancing their credit rating or substituting for capital market), loan or spare cash, by empowering the household to lift themselves altogether over the poverty line. This research focuses to the remittances spend on different goods, for example, houses, wedding, customs, and family relationship systems, agricultural and other technology, health clinics, schools and health care (Waddington 2003). The seasonal migration is an imperative livelihood strategy embraced by the chronically poor to adapt to their helpless conditions. Nevertheless, not at all like SC, ST or OBC, 'seasonal migrants' are likewise not perceived as a classification to address in the nation's development planning. Notwithstanding they originate from the poorest segments of the general population and speak to the major and developing phenomenon of labour mobility driven by a livelihood fall in rural areas (Smita 2008).

1.3.1 MIGRATION AND 'LEFT BEHINDS'

The term 'Left-Behind' was first presented in an International Workshop on the "Effect of migration on the left-behinds in Asia", which was held in Hanoi, Vietnam on tenth to eleventh of March, 2005. The conference set up contextual investigations identified with the effect of contemporary migration on the left-behinds in Asian nations such as Bangladesh, India, Indonesia, Japan, Laos, the Philippines, Thailand, and Vietnam. The term is new in academic circles and was coined to refer to those "People who were closely related with migrants, but who did not, or chose not to, move" (Toyota, Yeoh & Nguyen 2007; Huifen 2006: 2). This workshop acclaimed a new trend in migration studies by demonstrating a keen interest in the 'left-behinds'. A new knowledge of the relationship between the migration and the 'left-behinds' has been developed through examining the impact of the migration on them. This has, in turn, complicated the understanding of migration and created a chapter for the left-behinds within the migration history (*ibid*).

From the prior literature, we came to know the migration is a focal livelihood strategy for some poor households. That encourages or obliged by relations inside and between the relation of households, community, state and market. Kothari (2003) says the frame and degree of transmitting different capitals inside and between these institutions shape the aftermath of migration for poverty and the degree to which people and groups can adopt migration as a livelihood strategy. The author plainly referred here about the reasons a few moves out and some stay back at their place, which may rely on upon the social, cultural, economic and political exclusions. This unable poor to move and the individuals who pick not to move additionally as a result of the social ties, which tie them to their home place, physical mobility, gender and age and these later left behind despite the fact that in the environment described by out-migration. The nonappearance of specific sorts of social capital, for example, social connection and information about different places and systems or contacts with imminent workers may likewise confine the degree to which migration is a choice accessible to the poor households. Further, the level as well and control over human, social, cultural, political, economic and environmental capital describes the extent of exclusion from or incorporation in, the procedure of migration. Aside from the different capitals, gender likewise assumes an imperative part in controlling a person to choose migration. The work of Chant (1992) refer to clarify the gender relations and migration which demonstrates that migration is affected by arranging beneficial and regenerative labour inside the household i.e. poor dynamics, decision-making and gender orientation divisions in rural and urban labour markets. A significant part of the talks on sexual orientation and movement have expected that ladies remain behind (Dashingkar and Start 2003). The separating impact of supposed 'obstacles' to migration implies the qualities of the individuals who migrate are particular or specific with, for instance, age, gender, education, and ethnicity. It could state the cultural capital where gender is a critical viewpoint that chooses who will move. This relies on upon the gender division of labour inside and outside the family, which shapes the gendered example of migration in any given setting. Additionally, this assumes an imperative part in moulding the employment opportunities, reproductive obligations, care of elderly and disabled (Kothari 2003). Distinctive reviews express that many couples occasionally migrate for

work, regularly abandoning young children and the other older adults. A few mothers obliged from migrating in light of the fact that they widowed or don't have individuals they can leave their children with. In this manner, the review discusses the potential migrant labourer who obliges others to remain behind and take care of their children, land, house or animals. In another word, a household may wish to have a few individuals stay put to ensure homesteads and different resources, for example, domesticated animals or livestock. Also, the reasons found for put behinds/stay-behinds are more of gendered, for example, for recently obtained domesticated animals that are to take care of by a ladies/spouse by stayed back or leaving children might be unsafe and additionally to take care of young children. Despite the fact that without option types of employment parents might be compelled to bring their children with them when they migrate. Once in a while, it was additionally evident that family that stays behind, and that does not have enough activities for enough or reasonable livelihood, is subject to remittances or potentially alternate resources, for example, livestock, and the social relations and connection systems (Waddington 2003). The general population who messed up in the migratory procedures as migrants themselves and their choice to remain are probably going to be basic in household migration related decision making. Also, a few people effectively stay put, and there are numerous among the poor the individuals who have stayed or been left behind in a domain where others have moved as it is their state of poverty, through the particularities of their exclusion, which confines relocation as an option. The vulnerability of the 'left-behinds' can join by the expulsion of quick support from those on whom they already needy and on whom they stay dependent yet are at more serious risk. Thus, the individuals who remain behind frequently remain poor unless they may, through receipt of remittances or new employment opportunities accessible at home to move out of poverty (Kothari 2003). In spite of the financial advantages of migration as far as remittances as talked by Waddington (2003) might be a pivotal type of protection for a household that occupied with migration. Since, the relatives that stay behind might be subject to their male or agnate relatives for security and for support, for example, credit. Those additionally have negative impacts of out-migration on the individuals who remain behind might be monetarily and socially intense. The individuals who left behind in a family where

others have moved may turn out to be further vulnerable through the absence of customary and adequate remittances and different types of support from those on whom they were dependent in different ways yet who have since moved away (Waddington 2003; Kothari 2003). The review additionally discussed the 'left-behind' among the non-migrating groups of the sending areas that their weakness may increment as they turn out to be further underestimated and dislocated from their prompt condition which is changing economically and socially as other migrate. For instance, there might be an expansion in wealth and resource differentials as some household benefits through accepting and contributing remittances (Kothari 2003).

1.3.2 IMPACT OF MALE OUT-MIGRATION ON 'LEFT-BEHINDS'

Women are the most underprivileged and doubly affected by the development or increased inequality within the rural societies because first as the member of the rural poor and then as women. For many people in the rural areas, the only alternative is to seek a living outside the village. Where the 'push' variables are much more powerful, and the guarantee of a decent life in the cities. The vast majority of the migrants are male, married, have more education, and originated from self-employed or non-agrarian household; maybe rural workers migrate to other rural areas, where there is a popularity or high demand for labour. For the most part, the village from they come have regular attributes, for example, shortages, low fertility, skewed distribution of and the great extent of landless labour. The 'Male Only' movement has been a conventional element of internal migration in India from regions where local employment opportunities are rare to put with more prominent opportunities. Moreover, the women remain at home, as there are many confirmations in the oral convention and people folk songs than in sociologies writing of the anguish and deprivations of the women of such families whose men have gone to gain a living in the city (Jetley 1987).

Male only migration, abandoning families at the place of origin, is a most grounded type of migration in numerous Asian Countries and this type of relocation has wide aftermaths on 'left-behinds' families particularly on women. Aside from the financial effect on the area of origin, migration additionally has an extraordinary impact

on the status of 'left-behind' spouses or women in the family. The review says the absence of overall spouse status of women enhances as they have more prominent access to cash which they can spend as they wish. They have the opportunity of movement; they can take free choices about the education of their children and treatment on the off chance that they fall sick. In a similar line of the, however, the author clarified it by the women's autonomy where he is concurring the reality, the new parts may expand expert. women who stay in the sending village or group where their spouses are far away are more independent and having decision-making authority (Yokibu 2010; Roy & Nangia 2005). In any case, it likewise remarked on by an author from the independence and more prominent decision-making made by men's absence. However, may support by substitute specialist from various sources, for example, another community member, or diverse male figures or relatives. In extended families, another relative may have an eminent impact without the migrant spouse. This will probably happen in societies where women not generally given much flexibility or freedom to move. Aside from more prominent autonomy for women in general a valuable result, there have likewise reported a few negative effects on men's labour migration on the women who stay behind where without their male partner they are in charge of both their own particular and their male partners' assignments, obligations, and roles (Yokibu 2010). In any case, the absence of spouse makes the life of a wife much troublesome as because of expanded workload, feeling of isolation, encounters of a certain measure of emotional stress. Moreover, aside from expanded obligation, visit contemplations about the security of migrants spouse added to the mental worry of the 'left-behinds' wives. Subsequently, included duties of overseeing family, children, and money related matters, tension about the well-being of spouse and self, and the issues related with the disengagement, altogether make a state of worry among the 'left-behind'. Adding to it the social variables, for example, disturbance of social ties and family life that happen amid transient moves, particularly in destitution and emergency, additionally expands the dangers of reproductive morbidity as migrants find new partners (Roy & Nangia 2005). The study highlighted that for the females in the family, work is not a privilege but a traditional hardship. Where living in a congested, dreary and ill-ventilated dwelling place with no amenities and facilities, these women spent most of their lives in finding

food, fuel for cooking and fodder for cattle. They have few material possessions, and only a few buy made by the families in the previous year. The study says there may be because of some social obligation and basic needs they may force to incur expenditure far beyond their earning power, for which they have got into debt. Therefore, during the first years of migration, the males are hardly in a position to help the family. In addition, women assume the added responsibility. The authors cited an inferred remarks of the study that a lifetime of loneliness and struggle for bare survival by these women interpreted with short visits by their husbands when the much important decision taken in their day-to-day life. Moreover, the wives cope with the problem related to children, another member of the family, financial breakdowns and complications on employers, neighbours, relations, etc. (Jetley 1987). They experience the ill effects of the health decline. The physical wellbeing, as the increment in a workload, has its toll on the strength of the women and reproductive health, since sexual contacts of spouses at the place of destinations may make their wives vulnerable against Sexually Transmitted Infections (STIs). In addition, the social prosperity influenced women's' reliance on the others goes up when spouses are away. Likewise, the mental anxiety increases as the obligations and nerves are probably going to increment without spouses (Roy & Nangia 2005). The women in a household with a single male earner depend more vigorously than others on social relations outside their families to continue going ahead without their male partner. These depend on great connections kept with their relatives. Additionally the confirmation of breakdown in conventional family commitments where they move far from the extended family bringing about the passionate nucleation of the family and also decreasing effective security for the elderly guardians and prompting genuine mental health problems (Waddington 2003). Here the reviewer found the lack of literature that talks about the implication both in terms of advantages and problems arise because of the male out-migration on the health in terms of its accessibility, services, local upliftment. In addition, public entitlements of the family members who stay behind at the origin place.

B] STATEMENT OF THE PROBLEM

The whole literature review clearly draws a picture of the area that needs or have prospects to be studied. It has found that the chronic poor is important to a group which needs special attention by considering and understanding their problems and solving it through understanding their need instead of homogenising poor as a single group. Because of chronic poor and poverty, carry many aspects such as durational, severity, and multidimensionality, and it becomes more important when the ‘left-behinds’ belong to such group.

So the study based on literature review keen to fill up the gap by studying the relationship between the chronic poverty, migration and both implication on the health of the ‘left-behinds’. This study will be carried out with the hope that the result obtained from it will generate an answer to the questions that arise in debates on how the migration and multiple deprivations affect the ‘left-behinds’ and on their healthcare accessibility, affordability, availability and acceptability when they stay back at their place of origin in the Ranchi district of Jharkhand. In addition, it is hoping that the findings from the research will serve as a reminder to policymakers to take consideration of the health problems of the ‘left-behinds’ those are chronically poor when drafting rules, regulations, and policies on migration.

CONCEPTUALISATION AND METHODOLOGY

2.1 CONCEPTUALISATION OF THE RESEARCH PROBLEM

Many kinds of literature used the terminology 'Left-Behinds' to explain the people who do not migrate and stay in their original place or else can be said as the un-migrant of migrated households who stay back at their origin place. The authors such as Clare Waddington, (2003); Smita (2008); Francisca M. Antman; Ramesh Adhikari et.al (2012); Report of Save the Children: Srilanka; Sujata Ganguly (2002); Archana K. Roy and Praveen Nangia (2001) used this terminology in their literature. Most of the literature based on the study of the migration of South-East Asia, West Bengal and Bihar where they studied about women, children and elderly people of the migrated family who stays back at their origin places. The other popular terminology that also has used to define this is 'stay-puts' used in the literature by Clare Waddington (2003) and Uma Kothari (2003).

2.1.1 CONCEPTUAL DEFINITION OF 'LEFT-BEHINDS'

The 'Left-Behinds' are the vulnerable groups or an individual from the migrating households or areas who stays back at their place due to the social, cultural, economic, political and geographical exclusions which cease poor to move out of poverty, even though in the out-migration characterised environment. The poverty-related capitals and its main characteristics such as the level of access and control decide the intensity of exclusion and exclusion from/in the development process of the people and places including the livelihood activities such as migration. It can say that these are the major 'pulling down factors' towards the way of development of an individual or a group in opting migration as a basic survival or a livelihood strategy. Apart from systemic, structural and individual reasons the other basic reasons, which hinder others who may stay behind. This includes domestic responsibilities, and familial obligation, illness and disability in health, age, education skills and absence of social capitals with networks and relationships reflect the experiences of exclusion of the individuals. In another word, 'moving out' or 'staying back' for livelihood deeply set in specific economic and social-relational contexts.

The multiple deprivations and its relation with the 'left-behinds' can understand better in terms of owning poverty-related capitals and being excluded from it. In the other word, their ownership, or accessibility is the shaping up factors that decide migration as a major livelihood strategy of the poorest group of people. The social capital is an important poverty-related capital that gained through the good networking, contacts, and affiliations from certain groups; religious groups, etc. and through some community-based organisations. The person or groups those deprived excluded in the form of social participation or isolations, community life, rules, and norms. That is most important to get advantages by commuting or migrating in the destination area for proper works and monetary benefits. The other important identity related cultural capital such as ethnicity, caste, tribe, religion, gender and the human capitals such as education, knowledge, language and skills are pivotal to get into the race of the development. Many parts of the country face this as each has a long history of getting slow down mainstreaming in the so-called development features of some particular groups and, or the nations. In addition, here injustice, social patterns of representation and communication, cultural devaluation disadvantages, and structural inequalities are the forms of exclusion. Apart from human capitals, the life stage such as elderly, children, disability, ill health, household size, and structure is the another important dimension. And depriving or getting excluded here is in the form of the disadvantage of certain groups through social and cultural representation and limited access to economic opportunities and social services. The geographical capital such as remote rural, urban, natural environment and frail lands and related deprivation is known as spatial deprivation is present in the form of unequal distribution of resources and services. Economic capital always prioritised to define poverty, and it is important with the other capitals to get rid- off the poverty. The economic capital in terms of assets such as ownership of property and productive capital like land and cattle, savings and resources are the important capital necessary for the daily life. Depriving or exclusion here is in the form of exploitation example labour, marginalisation, deprivation, unequal distribution of resources and assets. Last but not the least the most important poverty-related capital is the political capitals that are necessary for having a say in the community. It depicts through the decision-making, participation, and patronage. In

addition, the deprived of the political capitals could be in the form of denied participation in political life, victimisation by elite groups and mediators in accessing government advantages. The bearing or absences of various forms of capital discussed above are both the drivers and results of processes of exclusion and discrimination. These determine people get out of the poverty and get into it and decide who will migrate or stay behind.

The multidimensional poverty or multiple deprivations carry the intergenerational aspects as it passes generation to generation. In addition, due to the durational aspect added into it, this poverty is said to be chronic. According to the various study, not everyone but those who suffer several forms of disadvantages and unfair treatments simultaneously is most likely to be chronically poor.

The multiple disadvantages or chronic poverty of the 'left-behinds' is blocking them to escape from poverty through their access to the opportunities and resources. This literally forces them into marginal, exploitative, unsustainable livelihoods that allow survival but further undermine well-being in the longer term. In such conditions, the well-being unequally divided within household, groups, and community. The combinations of multiple factors such as structural factors like labour and product market, ethnicity, race, caste, gender, religion, tribes, class, disability, refugee status and geographic locations; life cycle factors like widowhood, household composition, being young or elderly and the idiosyncratic factors like natural disaster, ill health, damage and robbery altogether creates and uphold the poverty of some while gaining others to chance to avoid or escape poverty. So, the multidimensional poverty is the 'pulling down' factors that don't let the poor to get out from it and makes the situation more vulnerable for the 'left-behinds' those can portray as poorest of the poor. The multiple deprivations are reasons, consequences as well as the maintainers of the poverty.

Migration is opting as a livelihood strategy or a survival strategy by the poor for the economic reasons. Moreover, especially the short-duration seasonal out-migration opted by the chronic poor as a survival strategy. The official data of NSS (National Sample Survey – 64th round/ 2007-08) based on the migration clearly shows that around 28.5 per cent of the total populations are migrants; it includes both men and women

where there is a predominance of female migration due to the reasons of Indian exogamous marriages. According to Srivastava R. (2012) the re-tabulation of the National Sample Survey (NSS, 2007-08) without marriage-related migration shows around 59.1 per cent migrants whereas around 40.9 per cent are female. Further looking into the proportion of employment oriented migration the male forms about 49.55 per cent and female forms only about 5.1 per cent. It has been obvious that while excluding marriage related migration, internal migration in India is comparatively more of employment oriented, male oriented and of long distances, and to substantiate this male migration data based on Census, 2001 is higher in inter-district and interstate with 26.7 per cent and 21.1 per cent respectively in comparison to the female proportion which is 23 per cent in inter-district and 10.1 per cent in the inter-state. The migrants characterised by the economic and social diversity traversing socio-economic variables as caste, landholdings size, age, education, sex, family size and composition, activity, consumption levels and more. The NCRL Report, 1991 characterised the seasonal migrants. According to the study, the labourers and farmers with little or no land have the highest inclination to migrate as short term or seasonal labourers. In addition, in terms of education, it is highest between both the educated and the least or uneducated, while there is the highest prevalence of illiterates among the seasonal migrants. Although the differences between the social groups or caste groups are not significant, the ST and SC migrants are more often involved in the short-term migration (NSS 2001 cited by Srivastava R. 2012). Since migration requires a minimum amount of resources and networks, people without these or with the less possession of resources are less likely to migrate. So the general pattern and the characteristics of seasonally migrant labour that who belongs to the most poorer groups and deprived sections of society such as SC, ST and OBC having low-level education, less land and from the remote rural areas more likely to engage in casual work. Migrants from the ST group are especially involved in short-term migration. Around 18.6 per cent of such migrants were short duration compared with only six per cent of long-term migrants. Similarly, SC also has a higher proportion of short duration migrants. It has found that the seasonal or short-term migrants migrate alone like a male only, female only or often in a unit of the family like husbands, wife and children. And each part of them excluding infants takes part and

contributes to the family subsistence in one way or the other as a part of the economy of the household during the migration. The prime working ages of the seasonal migrants are about 15 to 45 years or can say that falls in the young age group. Half of the migrant population were in the age group of 15-29 years, and more proportions fall in the age group of 30 to 44 years. The human capital of these migrants is found to nil, or negligible with around 52 per cent those were either illiterate or dropouts. The main reasons were they belong the poorest background and economically the vulnerable groups of working population. In addition, the period for which they are away from their source places estimated by NSS for nearly 12.24 million people stayed away from their UPR (Usual Place of Residence) for work/ seeking work for a period that was between two and six months. So going with the general pattern of short-term migration or seasonal migration the study of NSS 64th Round, clearly shows an increase in short-duration out-migration. It estimated that 15.2 million short-duration out-migrants, of whom 12.9 million (85.1 per cent) were male, and 13.9 million (71 per cent) were rural out-migrants. Overall out-migration rate was 1.33 whereas 1.72 for rural and 0.4 for urban areas. The study clearly states that most migrants were from rural areas and more than 2/3rd migrated to urban areas, mainly to the more distant urban destinations. Around 36.4 per cent of the out-migrants went to urban areas in the other states whereas around 45.1 per cent went to other state and around 22.1 per cent went to urban areas in other districts. Talking about the inter-state migration that is more among the males (47.9 per cent) compared with females (27.5 per cent). It could be due to the labour market availability as it predominated by male-oriented labour market as the out-migrants constituted 36.2 per cent of those employed in the construction industry, followed by agriculture with 20.4 per cent and manufacturing with 15.9 per cent and the other major industries were trade and transport. The economic status measured below in terms of per capita consumption quintiles that show the short-duration migrants are predominated in the lower quintiles just as long-term out-migrants predominant in the higher quintiles. According to the NSS data, the per centage of short-duration out-migrants in the lowest two quintiles was about 54 per cent, whereas 57 per cent of the long-term migrants were in the highest two quintiles.

In the same line of thoughts, the state level pattern of short duration migration shows that in various contexts the seasonal and short-duration out-migration is high, probably determined by uneven development within states, across states and sectors. The different study shows the male out-migration is highly reported in Bihar and Jharkhand, followed by Gujarat (high-income state), Madhya Pradesh, and West Bengal (middle-income states). The high rate of female out-migration reported is in Gujarat followed by Madhya Pradesh, Chhattisgarh, Andhra Pradesh and Maharashtra. Whereas, the NSS 2007-08 data shows that in the state of Bihar and Jharkhand, the female short-duration out-migration of the female is low. In Bihar out of total 30 male and female per thousand, 57 are male, and only one is female whereas in Jharkhand total male and female per thousand 46 are male and only six are female migrants. If we see the number in all India level the male short-duration out-migrants are, 28 and female is about five per thousands.

Substantiating this with the pilot study conducted by the researcher in a village of Gumla district of Jharkhand shows the similar pattern as studied by the NSS 64th Round, 2007-08. It was clearly obvious the village consists of seven hamlets having around 50 to 60 households each predominated with ST population, follows the pattern of high seasonal out-migration where almost 90-95 per cent of male short-duration out-migration takes place from each household. Migrants usually out-migrate for six months in the work site and six months in their home place for *Kharif* or monsoon agriculture. There is inter-state migration where migrants usually migrate to the urban areas such as Kerala, Bangalore, Delhi, Tripura, Varanasi and Tamil Nadu. The migration is inter-generational in the pilot village. They work as casual labours usually indulge in the brick-kilns, gardening and in the construction work. The people who stay back in the village are mostly children, women, and elderly people. Moreover, the major reason that stated by them are mostly the familial obligations and taking care of the households affairs and to the elders, and the market-driven labour markets that restricted for young males. They bring remittances of around 30,000 to 40,000 once in a year while they visit their origin place. There are few households where both male and female out-migrate only in the joint families having other members to take care of other households affairs.

As most of the families in the village is nuclear, so women, children, and elders stay behind. This clearly shows the general pattern in terms of seasonal or short-duration migration in the country predominated with male out-migration. It falls under the younger age group having with low human capitals in terms of education and related skills. They belong to the poorer groups of people deprived of the spatial advantages and usually opt for casual labour works in the long distance destination especially to the urban areas of other states or interstate. So due to the restricted or lack of official data on the 'left-behinds' of the rural areas and based on data analysis can assume the people who stay back at their source place are mostly women, children and the elderly those who restricted to out- migrate for diverse social and economic reasons that have discussed above.

The effect of out-migration on origin areas and in the migrant households is multiple. The direct contribution of the out-migration is through the income of migrants workers that depend on the migrants' economic situation and the nature of migration, and could also lead to the savings and accumulations. If we talk about the chronic poor migrant's several empirical studies proved that pattern of migration they opt is the seasonal or short-term migration. In addition, it is due to close relation to the diverse economic and social endowed capitals of the migrants. The major effects of migration on origin areas occur through changes in the labour market, income and changed patterns of investments and expenditures. To trace these economic changes the remittances or savings play an important role in bringing financial resources to the migrant's households and to the source areas. The NSS survey on migration and consumption and employment/unemployment helps to get at least some evidence of remittances brought in by the migrants. It estimated that in 1992-93, 89 per cent of permanent out-migrants sent remittances. Several empirical studies show that most of the seasonal migrants remit or bring home savings. NSS 64th Round provides an estimation of the frequency of remittances, and its use clearly shows that in regional disaggregation of remittances by the internal migrants is seems higher in some of the poorer and heavily out-migrating states such as Bihar, Uttar Pradesh (UP), and Orissa. The proportions of all rural households receiving remittances in respective States are

about 18.6 per cent in Bihar, 16.3 per cent in UP and 14.6 per cent in Orissa. The use of remittances is various, and they usually distribute to address a hierarchy of needs. The NSS 64th Round provides information on the use of remittances. This was for all the households including rural and urban, the highest proportion of household reported expenditure on food with about 75 per cent, followed by essential consumptions about 45.1 per cent, health around 37.4 per cent, on education 31 per cent households and on household durable related expenditures around 20.1 per cent households. Apart from these the other expenditures of these remittances are on debt servicing of about 10.2 per cent, improvement in housing around 8.7 per cent households, savings/ investment about 6.4 per cent and the expenditures on working capital which is about 1.1 per cent households. According to the study, the lowest deciles households usually expense on the food and followed by the other consumptions and education. Apart from the use of remittances, the impact of migration on the 'left-behind' women and children are quite substantial. The analysis of the 2007-08 NSS data shows that out-migration increases the likelihood of women's participation in the workforce in the migrant households. But given in the setup of patriarchic society, they may have to cope up with several problems. It more worsened because of the uncertainty of timing and magnitude of the remittances on which the unstable household economy eventually depends. Apart from the economic point of view, the absence of male makes the life of women much difficult. This is due to increased workload, feeling of isolation, and experience of a certain amount of emotional stress. Moreover, apart from increased responsibility, frequent thoughts about the safety of migrant husbands added to the mental stress of the 'left-behinds' wives. Male only outmigration, leaving their families behind is a main form of migration and has a wide implication on 'left-behinds' families especially on women and children. Thus, the impact of migration on the women can double arrayed, but the ambit of women's autonomy is at stake because of the strong influence of patriarchy. And in turn, forces women and children from poor household labouring household to engage in the labour market under the adverse situations. However, due to the lack of data on the impact of migration on the seasonal migrants' household and the 'left-behinds' seems difficult to be generalising the findings, as it has a differential impact on individual household members and intra-households relations. Migration may

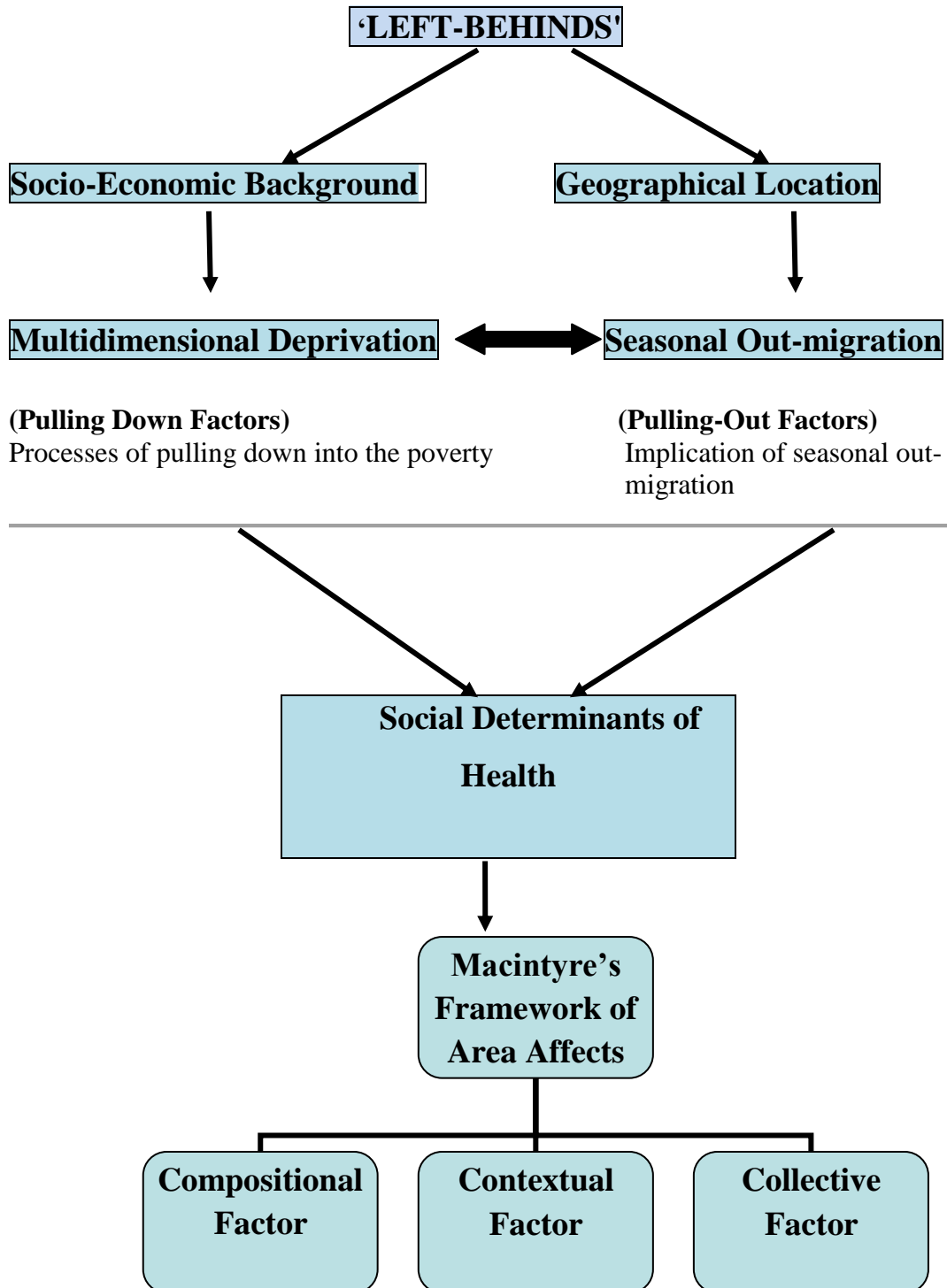
have varied intra-households impacts either when one member of family migrates alone, or even when family members migrate together seasonally in the line of multiple factors set in the social structure.

The impact of migration on the 'left-behinds' in various empirical studies is clear in terms of use of remittances to upgrade their well-beings, women's autonomy, and the cultural transitions. Therefore, the researchers' keen interest in studying the impact of seasonal out- migration on the 'left-behinds' in terms of their health problems that they confront during staying back at their source areas and exploring the other related issue within this. Considering this is important as it is eventually leading towards the well-being of the people for which they struggle or make efforts. The researcher conceptualised the health problems of 'left-behinds' through two ways, by focusing assuming inequalities or variations based on the 'location' or 'area' or 'place'. For explaining the geographical variation in health, researcher adopted the Macintyre's Framework that explains the 'Area or Places effects' on the particular population that are going to study. This framework used to capture combines individual and socioeconomic factors in explaining the variation within a given population. The variations in health through this framework is going to explain through three important factors namely 'Compositional factors' that draws attention on the characteristics of individuals concentrated in particular place. The 'Contextual factors' that describe it through the opportunities and structures in the local physical and social environment which include infrastructure inputs, access to amenities and the power dynamics of communities. And the 'Collective factors' that describes as the shared norms, tradition, values and interests, and is added as an anthropological perspective to the socio-economic, psychological and epidemiological perspective. And second through understanding the impact of seasonal out-migration on the 'left-behinds' women, children and elderly having multiple deprivations, through realising the relationship between the 'Pulling-down' factors i.e. Multidimensional Deprivation and the 'Pulling-Out' factors i.e. Seasonal migration opted as a survival strategy, of the poverty. And understanding the two factors with underlying stress and strain in-between these is important to achieve the well-being status of the 'left-behinds' in the areas, focusing on the direct or indirect effects on the

social determinants of health. Or, can said the factors that produced health such as healthy living conditions (Safe drinking water, sanitation), accessing health care services (general healthcare treatments, Immunization, Institutional Delivery etc.), nutrition or food adequacy, health education/ awareness and information, income and consumption pattern, education, affordability to the health care services and through the health illnesses or morbidity.

Before moving towards the area aspects, the term peri-urban area needs to be understood as a concept. The peri-urban areas are defined by the structure resulting from the process of peri-urbanisation. It relates to those processes of dispersive urban growth that create intercrossed landscapes of fragmented urban and rural characteristics. It is the landscape interface between town and rural areas, also as the rural-urban transition zone where urban and rural uses to mix and often clash. The concept of peri-urban emerged due to the limitations in the dichotomy between rural and urban. The dichotomy of 'urban' and 'rural' is based on its definition. The 'urban' definitions are based on the demographic components (i.e. increasing population size and density), economic sectoral component (i.e. primarily non-agricultural labour force) and on the socio-psychological component (i.e. consciousness of what it means to be urban that refers to values, attitudes, and behaviors) that are seen to be the characteristics of urban as opposed to rural dwellers. The concept of peri-urban also defines by the 'proximity to the city' where the 'place' is proximate to the city. This is essentially important and instrumental to a comprehensive understanding of peri-urban, but it is incidental to a primary understanding of peri-urban (Jaquinta & Drescher 2000).

DESIGN OF CONCEPTUAL FRAMEWORK



Altogether the study is keen to look at the relationship between the ‘left-Behinds’ and multiple deprivations, seasonal out-migration, place effects, and its variations. And thus, the outcomes in different areas such as rural and peri-urban areas or villages and population (‘left-behinds’ of the migrants family those opt for seasonal migration and based on inter-state based economy, non-migrants based on the village economy, and the non-migrants those are commuters those are based on peri-urban economy) to understand the health problems.

Here the study mainly focuses on the ‘left-behind’ women, children and elderly from the tribal-dominated population. They are residing in the area i.e. rural village and peri-urban area of the chronically poor district of Jharkhand. That comes under India’s chronic poverty square and between the bottom two states in terms of multi- dimensional poverty index.

2.2] RESEARCH DESIGN

2.2. A) Research Question:

- What are the health problems of ‘left-behinds’ that arise in the presence of both the forces namely multidimensional poverty i.e. ‘pulling-down factors’ and seasonal out-migration i.e. ‘pulling out factors’ on the social determinants of health?
- What are the variations in the health status of the ‘left-behinds’ in the location?

2.2. B) Objectives of the Study

- a) To explore the processes of ‘pulling down factors’ i.e. the multiple deprivations among the ‘left- behinds’ in the area/location.
- b) To study the potential implications both the positive and negative consequences (‘pulling out’) of the seasonal out-migration on the social determinants of health.

- c) To study the socio-economic and geographic location variations (predominately the Scheduled Tribes) and its effects on the health determinants of the 'left-behinds'.

The study design was formulated as per the established objectives using a range of strategies and methods. The study was imparted in two phases. The first phase included a baseline survey of the selected samples within the sample area. Keeping with the complications of research in mind, the second phase is the in-depth exploration of the issues in the sample area derived from the survey. A systematic analysis of documentary sources and secondary materials forms an important component for providing the background and contextual understanding.

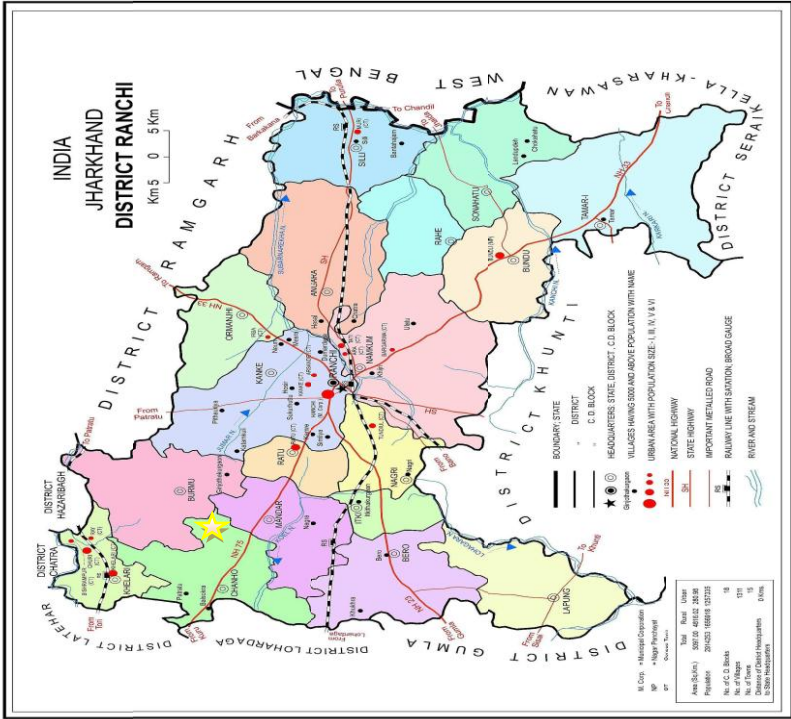
2.2.1 THE RESEARCH SETTING: AREA PROFILE

Ranchi is the capital city of Jharkhand state and located in the Southern part of the Chotanagpur plateau forms the eastern edge of the Deccan plateau. It located at 23° 21' N to 85° 20' E/ 23° 35' N to 85° 33' E. The Ranchi district has hilly topography and surrounded by dense forests. The total area covered by Ranchi Municipal is around 175.12 Sq. Km. and the average elevation of the city is 651 m above the sea level. The district named "Ranchi" in the year 1899 from the Lohardaga, after the name of the small village now comprised within the present headquarters of the district. Ranchi divides into two sub-division and 14 administrative blocks. Ranchi sub-division further divided into 11 blocks namely Angara, Bero, Burmu, Chanho, Kanke, Lapung, Mandar, Namkum, Ormanjhi, Ratu, and Silli. The sub-division Bundu is comprised of three blocks namely Bundu, Sonahatu, and Tamar. (Online: http://en.wikipedia.org/wiki/Ranchi_district; Singh S 2006; Dayal & Singh 2008). The total number of gram panchayats is 298, and the revenue villages in the district are around 1300. There is one sub-divisional hospital, 14 Community Health Centre (CHC), two referral hospitals, 26 Primary Health Centres (PHC), 329 Health Sub-Centres (HSC) and 2137 Anganwadi centres (AWC) in the district.

The total population of the Ranchi district according to Census 2001 is about 1807243. The district is the most urbanised district of the state Jharkhand. More than 30 per cent of its population lives in urban areas. While, about 22.24 per cent lives in the

urban areas in the state, despite the fact many of its blocks in the district have Cent per cent rural population. The total proportion of the rural population is around 64.9 per cent. The ST population in the district is much higher than the state average of around 53.4 per cent. However, the SC population is below national as well as state average in all the blocks with around five per cent (Town and Village Dictionary, Census Handbook 2001).

Map 2.1: Ranchi District Profile (Jharkhand).



[Source: Village/Town wise Primary Census Abstract 2011, Jharkhand]

Table 2.1: Jharkhand Health Status and District 2012-13; Rural-Urban Differences

State	Jharkhand			Rural			Urban		
	Person	Male	Female	Person	Male	Female	Person	Male	Female
Crude Death Rate (CDR)	5.7	6.1	5.3	6	6.4	5.7	4.8	5.3	4.3
Infant Mortality Rate (IMR)	36	36	37	40	40	41	22	21	23
Under Five Mortality Rate (U5MR)	51	49	52	57	56	58	29	27	31
Neo-natal Mortality Rate	23	–	–	26	–	–	14	–	–
Post Neo-natal Mortality Rate	13	–	–	14	–	–	8	–	–

District	Ranchi			Rural			Urban		
	Person	Male	Female	Person	Male	Female	Person	Male	Female
Crude Death Rate (CDR)	6.2	6.9	5.5	6.4	6.9	5.9	5.9	6.8	4.9
Infant Mortality Rate (IMR)	30	30	30	35	34	36	21	23	18
Under Five Mortality Rate (U5MR)	44	44	44	50	48	52	32	36	28
Neo-natal Mortality Rate	21	–	–	26	–	–	13	–	–
Post Neo-natal Mortality Rate	9	–	–	9	–	–	8	–	–

[Source: Annual Health Survey (AHS) 2012-13, Factsheet]

cultivators including both main and marginal workers contribute highest in this block with 32,858 in number where male constitute 18,815 and female 14,043 of the total population. And the agricultural labourers are 16,860 where the male is 8,610 and female 8,250 in number. The number of the non-workers also constitute of a large proportion that is about 69,445 in total where 31,682 are males, and 37,763 are females according to the Census 2011. In terms of the basic infrastructure the data taken from the survey done by the Dayal & Singh, 2008 shows the per centage of villages having paved road in the block is 23.2 per cent almost same with both Ranchi city with 24.6 per cent and the state average i.e. 21.2 per cent. The village having power supply is about 26.1 per cent higher than both Ranchi city i.e. 16.1 per cent and the state average i.e. about 15.6 per cent. There is no sub-divisional and Community Health Centre (CHC) in the Mandar block. There are one referral hospitals. The number of Primary Health Centre (PHC) is one and Health Sub-Centre are about 14. The number of Anganwadi centres is 171 comprised of 143 large AWC and 23 small AWC. The number of MPW in the block is seven, and the AWW is about 167. The VHSNC is 69 in the block. The total number of sahiya is 106. The primary schools in the area are around 56, and the numbers of secondary schools are 36. The total BPL population in the block is 55865. (DHAP: BHAP 2012-13).

2.2.2 PHASE 1: THE BASELINE SURVEY

2.2.2A OBJECTIVE AND RATIONALE OF THE BASELINE SURVEY

The first phase of the research study is comprised a concise baseline survey of four villages of Mandar block. The broad aim of the survey was to gain familiarity with the region and provide first-hand exposure to the village organisation, people, their culture and way of life. More specifically, the survey aimed at generating an overview of the economic and social composition of the villages in terms of caste, occupational status, land ownership patterns, agricultural production, livestock and other resources of families. The survey specifically focused on establishing the incidence and patterns of out-migration from the region. Moreover, the baseline data provided the background

information against which the explorations of the in-depth study could be carried out. The baseline survey was further useful in conducting the in-depth study in Phase II.

2.2.2B SAMPLE PROCEDURE

The study is focused on the health problems of the 'Left-Behinds' women, men, children and elderly from the tribal-dominated population residing in the chronically poor areas. To serve this purpose a sample frame of four villages from one of the tribal dominated district was chosen. Following procedure was adopted for sampling.

2.2.2C SELECTION OF THE STATE

The field study was conducted in the State of Jharkhand as it is one of the bottom state placed at 21st place out of 22 states ranked according to the MPI. It falls under the poverty square of the country. The square poverty areas fall under the contiguous forest area that cutting down across the Eastern Maharashtra, Southern Madhya Pradesh, Eastern Gujarat, Jharkhand, Chhattisgarh, Orissa and all the Empowered Action Groups (EAG) States, and the large pockets of chronic poverty within states such as Tamil Nadu (Jayaraman & Srivastava 2003). It comprised predominantly of the marginalised group of population i.e. tribal with around 26.3 per cent which is high in comparison to all India average i.e. 8.2 per cent and with 11.8 per cent of SC population which less the national average i.e. 16.2 per cent. Jharkhand is among the bottom five State Human Development Index only above, Madhya Pradesh, Chhattisgarh, Bihar and Orissa and holds 15th position respectively. Three-fourths of Jharkhand's population lives in a rural area which includes 95 per cent of the schedule tribes and 91 per cent of Scheduled Caste. The States 28 per cent population comprise of the Schedule Tribes being home to 31 Schedule Tribes served as one of the reason for selection of this state to undertake the study. The State secured the second lowest position in India State Hunger Index 2008, 16th Rank which shows that the State has an extremely alarming hunger situation. The State has also exhibited high IMR, MMR and Under five mortality rate, child and maternal anaemia, and under-nutrition when compared to the other states enlisted in the report. According to Census 2011, Basic infrastructure and sanitation facilities remain limited within Jharkhand especially among rural areas, worst for the ST households.

2.2.2D SELECTION OF THE DISTRICT

Jharkhand has a total of 24 districts, classified into five administrative divisions. The district that is selected for exploring the health status of the 'left-behinds' is Ranchi district. Therefore, the information related to the economy specifically the migration trends were taken into consideration to opt the district. The economy of the Ranchi district mainly depends on cultivation or related work. More than 51 per cent of the total workers are engaged in the primary sector. The data based on the survey of 2008 around nine per cent of the households in the district have reported as at least one migration from their family. Migration in the district is mostly seasonal in nature because of the employment opportunities, during the agriculturally lean season. About 75.27 per cent of the migrants migrate for the short periods. Migrants of the Ranchi district mostly prefer to migrate outside the state, which is about 53.02 per cent whereas only about 26.48 per cent and 20.50 per cent of them migrate within the district and state respectively. The people of the villages of this district suffer from the multiple deprivations. Only one-third of the households have electricity with about 34.97 per cent, and less than one-fourth of the houses with pucca walls and only a little more than one-tenth of 11.88 per cent have toilets in their house. About one-third of the population is still illiterate, with two-fifth of the women remaining are still illiterate. Only about 37 per cent of the households have ration cards, and 30 per cent of the households avail the Public Distribution System (PDS) facility despite the high-level poverty. The villagers of the district deprive of health, drinking water, electricity, rural connectivity, toilets, and sanitation facilities; despite it, they do not set priority in their list of expectations because of their more constricting to their survival needs (Dayal & Singh 2008). The status of basic amenities in the district such as the households of the main source of drinking water is from the uncovered-well, hand pump and tap water treated sources are about 38.32 per cent, 30.10 per cent, and 15.24 per cent respectively of the villages.

Apart from above all the information related to the Ranchi district, most important selection criteria behind was the researcher's well acquaintance with the setup, culture, language and area. Therefore, the Ranchi district was purposively selected among all the districts of Jharkhand.

2.2.2E SELECTION OF THE BLOCKS

There are 18 administrative blocks in Ranchi district. The area which zeroed down for the study was Mandar block. It is predominately a rural area with the total area of 238.24 Sq.km. And around 22,811 of the total number of households inhabited in 69 villages within 19 Gram Panchayats. It was selected on the ground of convenience for the researcher and keeping in view the distance from the capital city and the block headquarters to vary the rural area falling into the distance of around 15-30 km and peri-urban villages with 5-10 km from the block headquarters.

2.2.2F SELECTION OF THE VILLAGE

The 69 villages were stratified in terms of three criteria relevant for the final selection of the villages: a) Proportion of the scheduled tribe population b) Distance from the block administrative unit c) Accessibility to the health facilities. The distance from a town is considered a determining variable for rate and type of migration patterns that evolve in a region. Therefore, we group all the four villages into two groups in terms of distance from the Ranchi headquarter and also from Mandar headquarter. This formed a two category namely rural and peri-urban villages

Study Area	Proximity from Ranchi HQ	Proximity from Mandar HQ	No. of Villages
Rural	50-60 km	25-30 Km	2
Peri-urban	30-40 km	0-10 Km	2

The villages were further selected by dividing it into sub-health centres and non-sub health centres villages. The researcher has decided to take two from each unit. Based on the above-mentioned criteria four villages were purposively selected to see the implication of distance and administration on the health determinants of the study population. Selecting the villages was conducted by the grounded theory. Therefore, village namely Bobro (Sarwa Panchayat), Deuri Alias Dongatoli (Mandro Panchayat), Murma (Murma Panchayat) and Katchancho (Mandar Panchayat) located at 30 km, 25

km, eight km and two km from the Mandar block headquarters respectively were purposively picked out (see Map 2.2 for reference).

2.2.2G TOOLS FOR DATA COLLECTION

A mixed method was adopted for data collection. Separate tools were administered for the collection of qualitative and quantitative data for the study. The tools were made in the local language (Hindi) and interviews were conducted in Hindi and tape recorded. The primary data was collected through a field survey conducted in the selected villages namely Bobro, Deuri Alias Dongatoli, Murma and Katchancho of Ranchi district in Jharkhand. And the secondary data for the study was collected from the concerned department.

For the quantitative data, the primary data's were collected through the prepared questionnaires. A semi-structured interview schedule, village information schedule, and discussions along with the Participatory Rural Appraisal (PRA) were the three primary tools of data collection in Baseline Survey (see Appendix).

The 'semi-structured Interview schedule' was administered to all household in the 4fourvillages. The aim was to do a house listing and to seek baseline information through questions with both structured and open-ended response categories. Information on some selected socio-economic indicators like land ownership, cultivation, agriculture production and its sufficiency, credit access, and utilisation, market access was sought, and an attempt was made to gather data on rate and pattern of out-migration from the village.

'Village Information Schedule' was developed to make a profile of each study village on the basis of information on irrigation facility, agricultural financial institutions, land use pattern, amenities, government schemes being implemented in the village, important organisation/ institutions in the village, etc.

'Discussions & PRA' were planned and conducted with the varied groups such as PRI members, ANM, Sahiya and Anganwadi workers; to gather information on agricultural

practices, proximity, and mobility to the important institutions, village history, transitions in livelihood, development issues, to ascertain the penetration of the market, etc.

The details of this are given along with secondary sources were used for Phase II.

2.2.2H PROCESS OF DATA COLLECTION

These four selected villages were scattered all over the Mandar block. The researcher started the data collection from the remotest village that is about 25-30 km away from the Mandar Block HQ and moved systemically to the other Panchayats' village in the direction towards the nearer proximate. The last village to be surveyed was Katchancho (2 km distant from the Block HQ). Informal discussion with the people assembled at the Akhra¹, Sahiyas (ASHA) and Anganwadi workers at the Anganwadi centre and so on would provide her with a lot of general information on the villages and development issues pertaining to that region. Invariably the researcher met some residents of the village those scheduled to survey, or sometimes to Village Headman/ Pradhan/ Mukhiya, ward members, school teachers, sahiyas and Anganwadi Sevika, etc. They would take the researcher to the village and generally introduce her.

The researcher usually had to stay for a week in each village to administer the semi-structured interview schedule on all households. This stay provided her innumerable occasions to have discussions with different groups of villagers, meet the village headman, village committee members, school teachers and sometimes the local officials. These interviews yielded data on the village information schedule and also provided insights, which were used in designing the second phase of the study. Besides this we took formal appointments with various government health officials like Block Programme Managers (BPM), PHC staff, etc. and we conducted interviews with them related to the problems in the Blocks and program being implemented there. The Baseline Survey took three months to complete.

¹ Akhra: A place of gathering for organizing community programme.

2.2.3 PHASE II: THE IN-DEPTH STUDY

To study the complex interrelationships between the primal macro structural aspects and the micro-social world of ‘left-behinds’ lives, work and health, the second phase of the research necessitated a qualitative study. This research focuses on complex relational aspects of social life as they effects ‘left-behinds’, and also the migrants and their family’s perceptions of their life, status, experience, and situation. Since the researcher wished to look at the correlatives of health and wellbeing, she required an intensive qualitative data to understand the changes that have occurred over time in the villages’ vis-à-vis the agriculture, economic activities and the other livelihood activities. The researcher also needed to study the forces of migration, modernization such as market and their influence and the developmental process and their implication for villagers and especially the ‘Left-Behinds’ lives.

The study thus required the detailed gathering of data on context, events, and experience to generate an in-depth understanding of the developments under study. It was therefore decided to conduct an intensive study of four villages, which would produce detailed authentic data in the difficult areas chosen for exploration. Due to the depth and complexity of the data to be collected, several visits to the study sites were done. The study also adopted the multiple tools for the data collection. The in-depth study is more important in addressing the complex connections, because of the authentic, rich and comprehensive data, even though study covers a limited sample.

The informed consent was taken prior to the initiation of data collection for primary as well as secondary data. All the household corresponded to participate in the study were included in the study. The oral/ verbal consent was sought from the key informants and for conducting participatory observations after briefing on the purpose and the requirement of the study and its data by maintaining their anonymity.

2.2.3A SELECTION OF THE HOUSEHOLDS AND RESPONDENTS

Community stakeholder such as Village Headman, Ward members, Gram Pradhan and Mukhiya, Sahiya, ICDS workers and School teachers were looked up before starting the study for identification and recruitment of potential participants. At this stage, the sample

size and selection criteria were kept flexible. The selected villages have a majority of the tribal population and few with the mix population. The households in these villages are primarily based on the subsistence agriculture.

A sample of 72 households (18 households from each of the village i.e. four villages) was selected keeping in mind the time constraint. A selected villages had about 100-150 households settled in hamlets according to the ethnic and religious population. The widespread hamlets, undulating terrain and harvest period and long duration to commuting from the base to study area limited my daily interactions with the respondents. Being a single researcher with a limited time, in order to ensure maximum coverage to the field reality ‘quota sampling techniques’ under non-probability sampling methods’ was deployed to select the households for study. While including 72 households from all the four villages, 32 households were selected from the migrants’ households² i.e. eight households from each village; 20 households were selected from the non-migrants households³ i.e. five from each village and 20 households from the commuters’ households⁴ i.e. five from each village were selected as per the convenience of the investigator. The household data were collected to have a broader understanding of the situation experienced as an individual family and as a community in large and use both the aggregated as well as disaggregated data.

The three bifurcated strategy was used to study Phase II. First, a detailed survey of all the households in both the villages using a household interview schedule was used. For this, the researcher decided to cover all households in four selected villages through the household interview schedule in order to develop a detailed household profile. Second, staying, observing and interacting with the villagers and documenting their lives

² **Migrant Households:** A households containing any person who has been away from their household who has been abroad during all of the last three months.

³ **Non-Migrant Households:** *A household who’s any of the family members have not opted for moving out or migrated during the last ten years for the economic activity and those who are based on the village economy. The household may contain other family members, such as uncles or brothers, who migrate.*

⁴ **Commuters Households:** A households who’s any of the family members or non-migrants those have not opted for moving out or migrated during the last ten years but commute to the peri-urban areas for the economic activity in a regular basis.

intensely in a qualitative way. For this component which is more intensive study, a sub-universe of the 'left-behinds' women and elderly respondents were identified from each village. The identification was done on the basis of several criteria such as land ownership, caste, and migration status of the household, the headship of household, age, seniority in the household and his/her relationship with migrant, Duration and period of migration and lastly his/her role as a primary or supportive worker. And thirdly, visiting the PHC, Sub-Centre and other health facilities, meeting with the health professionals both the upper and the lower ranks working at the Mandar block referral hospital. For the third component, the researcher purposively selected the key informants and interviews were carried out, and secondary data was collected. All these were going on simultaneously.

2.2.3B TOOLS FOR DATA COLLECTION

The study demanded a collecting of detailed data using a number of methods to fulfil its composite objectives. Given the variety of data that is required for the study, several tools as per the requirements were taken out. Several methods were combined and utilised here to generate the required data:

1. Semi-structured interview schedule
2. Semi-structured in-depth interview schedule
3. Interview Guide
4. Key Informants Interview Guide
5. Group Discussion on important issues
6. Participatory Rural Appraisal (PRA) Methods
7. Observations
8. Case studies/reports
9. Government field survey reports

A] PRIMARY DATA COLLECTION TOOLS

i) INTERVIEWS:

Interviews allow the investigators to understand the meanings through the peoples' personal experiences of their everyday activities and in-depth interviews as a data collection method extensively relied by the researchers to generate data, which may get overshadowed in more structured methods of data collection. Here the investigator used the technique of semi-structured interviews with all the households in the selected villages. This method held as most useful tools allowing generating quantifiable data set on one hand, and at the same time, it encourages respondents to speak their mind from their perspective.

A 'semi-structured interview schedule' was used by the investigator covering the socio-economic profile of the household, questions related to land ownership and its utilisation, agriculture production and income, the process of migration and concerned issues to generate the data on all the household in the selected villages. (See the Appendix I&II for reference).

Another 'semi-structured in-depth interview schedule' for the 'left-behind' women and elderly was administered to all household. Adult women from the migrants' who are being either the primary or supportive workers of their household were selected as respondents for this schedule. And the elderly members (both women and men aged above 50 years) of the migrants' household were also selected for this in-depth interview schedule. Through this schedule, the investigators covered information pertaining to work pattern, sexual and familial division of labour pertaining to agricultural, animal husbandry and domestic tasks. Health and illness of family members and linked issues like perceived illness, utilisation, access, decision making and support related to health care services were covered.

In-depth interviews in the inherited pattern of oral history method with the use of an 'interview guide' were conducted with the sub-population of women i.e. women of migrants and non-migrants households of different duration of migration of their husband and sons. The interview guide also covered the issues to household food

production and distribution patterns; migration and its impact on women's work participation and family dynamics; women's work and its time distribution; women's mobility and access; women's autonomy and decision-making.

Based on these interviews 'case study/reports' of selected 'left-behinds' women and elderly were made. Through the case studies, a detailed study was made to understand the linkages between their labours, power relations, hold on resources, role in decision-making. The focus was on understanding the status of the 'left-behind' women and elderly, their role, problems, and changes in them with their own perceptions with the probes in related issues by the investigator.

Key informants were also interviewed using the 'interview guide'. The selected key respondents were interviewed using the semi-set of issues and were conducted with the panchayat members, block administrative officials, school teachers, ICDS workers, RMPs, Village Forest Committee (VFC) members, Sahiya, ANM. An interview guide was having some pre-defined questioned. However, the order of the question was kept flexible, even some of it was asked that were not enlisted earlier. The questions pertaining the issues like migration, livelihood opportunities, agricultural practices and the changes, infrastructure, governments provisionings such as PDS, Mid-Day Meal (MDM), MNREGA, health services, credit facility, transportation, forest or commons, and markets (See the Appendix III for reference).

ii) PARTICIPATORY RURAL APPRAISAL (PRA):

The PRA tools were adopted to gain information through involving the key respondents on the settlement establishment of the village, social groups and resources with the village. Various methods were used to the PRA tools.

'Village Social Mapping' was used by the investigator to regenerate information on the village layout, infrastructure, population, social stratification, migrants' households, non-migrants' households and commuters households, basic amenities and facilities. Market mapping was adopted to regenerate the data on the local markets availability and

its accessibility throughout the year with the flow of goods between the village and market.

The 'Seasonal calendar' was used to investigate the seasonal variation that affects the income generation activities, the decision of works between men and women, food availability, consumption pattern, production, procurement, expenditure and trade as per the agriculture or crop calendar. This also helped in getting the information on the months with more works, more income, and more food along with the leisure period with some recreational ceremonies. And on the other hand, also let information on a period with less work, less income, and related shortages.

'Mobility Mapping' was used by the investigator to understand the movement pattern of the different sections of the community; important institutions of the village; ascertain the problems, if any, in travelling the distance; placement of services and facilities.

'Life History/ Timeline' was adopted to identify the sequence of the significance of events and changes over time in respect of agriculture, food availability, and composition, trade, migration, and health; coping strategies and understanding the past interventions.

iii) GROUP DISCUSSIONS:

This was carried by the investigators with the different groups such as women of reproductive age groups, elderly people and adolescents girls groups for the group's discussions on the perceptions based queries on some sensitive issues. This was adopted by the investigators to avoid the misconceptions and lent them better to the groups rather than individual interviewing. It was done whenever naturally a small group of people gathered; the informal discussion was started without making any specific efforts on making artificial groups. But the concern was taken by the investigator to ensure that these discussions are held with the variety of groups constituting people from different economic class and caste groups, different age groups and both the sexes (See the Appendix I & III for reference).

iv) OBSERVATIONS:

Interviews and other tools of data collection brought up were integrated with the observations. The researcher adopted this to learn about the behaviours and meanings that are difficult to be expressed or verbalised and noticeably gathered. Researcher implies this by a systematic noting and recording of events, behaviours, processes and the objects in the social settings of the study areas. In the early stages of inquiry it was done without any strict observational checklist, but after early analysis, the more focused observation was done. For focused observations, the researcher developed the checklists that were appropriate and context sensitive to analyse theme in detail, to address the holistic description of events, behaviours, processes and so on (See Appendix IV for reference).

The usage of multiple tools, a field diary, daily notes, continuous updates and consolidation of data was done by the investigator for the reasonable and reliable collection of data.

B] SECONDARY SOURCE OF DATA

i) DOCUMENTARY RESEARCH:

The valuable information came from the review and analysis of records and gazetteers. The relevant secondary data was collected from the panchayat office, block office, village schools and ICDS. Other than this the government survey reports such as Census Reports, DLHS Reports, NFHS Reports, NSSO Reports and HDR Reports were also used to gather information for the analysis.

2.2.3C PROCESS OF DATA COLLECTION

The researcher began the data collection for Phase II in the year 2015. Living and collecting data from the Bobro, Deuri Alias Dongatoli, Murma and Katchancho villages took a total about seven months. The data were collected from January to May and June to December 2015.

The village was identified with the help of the Block Program Manager (BPM), Block Training Team (BTT) and Sahiya (ASHA) in the monthly Block health meeting at the Additional PHC Mandar. The meetings were arranged by the help of the sahiya in the respective study villages. The initial efforts were to establish a rapport with the villagers, get to know them and also explained the purpose of the study to the people. The researcher first conducted the detailed household schedule and key respondent schedule in all the four villages. Despite going house to house, the researcher took to interview using the PRA methods which help her to get more familiar with the villagers at one place, especially all the female members of the villages. It not only helps to establish a rapport with the villagers but also gave them an opportunity to obtain an answer for the curiosity they had about the researcher and her work. During the social mapping in PRA, the researcher identified the migrants, non-migrants and the commuter households and asked to informed them about the study with the help of the influential people of the villages those are presented in the village meeting during the social mapping tasks.

Data was collected directly from the 72 households with a semi-structured interview schedule. Since the focus was 'left-behinds' health problems, investigator decided to interview women of reproductive age groups, adolescents girls and elderly from the all four villages. The married women aged 20 or female head of the households usually from the migrants' households were identified to be respondents. They were identified because of their overall role as responsible adult members of the household and their functioning as major workers for the households. Care was taken to include both the younger and older women with and without children. Initially, the interviews were informal and unstructured where the respondents were given full freedom to speak. The purpose was to get a more comprehensive picture of their life. 72 interviews were done from both the remote rural and peri-urban villages including 32 interviews from the 'left-behinds' households, 20 interviews from the non-migrant households and 20 interviews from the commuter households were done. Each interview was conducted in the several settings. The interview yielded case studies of the women and oral migration history through the elders in the village. While conducting these interviews, the researcher, simultaneously having free flowing interviews and informal conversations

with the several other men, women, girls and boys of the village. In brief, she simply followed the everyday lives, struggles, hard work and resilience of the village people.

All the interviews were done either in Hindi or Nagpuri and were later translated into English.

2.2.3D DATA PROCESSING AND ANALYSIS

At the field level, qualitative data was recorded through note-taking and audio recording. Qualitative data recording and analysis overlapped considerably. Key-informants and in-depth interviews were constructed using the pre-tested interview guides. All through the period of data collection, in-depth qualitative data were analysed simultaneously.

The daily field notes and field recordings were continuously updated, consolidated and analysed by comparing the audio recordings to identify the gaps and errors, and also matched with other sources, such as the case of documents and observations notes to triangulate the information. A Record-Book was developed for each data collection techniques such as In-depth Interviews, Focus Group Discussions (FGD), Key-Informants and Observations.

Data regarding the socio-demographic information were directly coded with respect to pre-defined categories. Similar data were used for the ranking and scoring done by the people themselves through the PRA methods and later analysed by using flow diagrams and spreadsheets. Numerical and categorised data were subsequently coded to an excel spreadsheet for appropriate statistical analysis. The statistical analysis was done using the Microsoft Excel sheet by applying appropriate test, mean, per centage and proportions.

The response to the open-ended questions regarding perceptions was summarised, and where possible recorded word to word. The audio recording files were transcribed verbatim in English. The quality of translation provided during the interviews and groups discussions was ensured by the researcher verifying the translation of Hindi and Nagpuri to English in the transcriptions.

The information was analysed using the narrative techniques, and find the patterns to build the understanding of the participant's interpretations of their perceptions. The analysis involved the separation of broad themes relating to the study objectives, subject matters, and concern of the participants and then synthesising the data relating to these issues by marking relevant key statements, words, and opinions.

2.2.3E ETHICAL CONSIDERATION

Ethical approval was taken from the Institutional Ethics Review Board (IERB), Jawaharlal Nehru University, New Delhi.

The researcher took permission and introduced herself before conducting interviews to the respondent at the field. The informed consent was taken from the respondent before recording the data both in writings and audio recording. At the village level, the respondent allows the researcher to use the recording device for recording the data. After the permission only she used the recording device so that he/she may not get offended.

2.2.3F LIMITATIONS OF THE STUDY

Although the research has been conducted according to its design, there were some unavoidable limitations. Being a single researcher, with limited means and time constraints, it is very difficult to conduct the study with the large sample size and conducted only on a small size of the population. The study sites and villages were purposively selected to fulfil the study criteria. Therefore, the results cannot be generalised in the larger tribal populations and areas that located in a completely different geographical area with a different setup.

Identification of the migrant, non-migrant and commuter household were bit difficult as per the fixed operational definition or criteria, as they are sometimes overlapping with each other. The migrant households are also found to be the commuter during the break year from migration. And the 'left-behinds' respondents are also found to be the commuter sometime. However, the researcher followed the time frame i.e. years of practice or indulgence in particular migration practices, to differentiate between the three types of households.

The recording of the assets seemed to be very difficult. The accurate data on landholding was slightly a difficult task. The reason was the landholdings of the households in the study area have individual land ownership, but the arrangement was based on the mutual consent and was made on a verbal basis. The land division among the siblings or among members of two generations is not done with the full-fledged paperwork, in fact, was done in the front of village panchayat and village headman (*pahan*). Therefore, no households could present the official documents to state the accurate land ownership rights and measurements that they actually owned. In the revenue departments also the land records are not updated, so, the researcher had to rely on whatever information the men of the household could provide on the size of land owned by the household. Researcher finds difficulty while interviewing the female head households because they could not be able to tell the landholding size of the household. According to the geographical location of the study area i.e. upland, medium land and low land, the ownership of land also depends on it. None of the households had a pure variety of land but having two or more mixture of land types. It totally depends on its undulating lands form. The household has been categorised on the basis of landholding size, used as a proxy for the economic status of the households.

The researcher to obtain the village beneficiary programs and the community involvement in Village Educations Committees (VEC), ICDS Centre, PDS, mortality and morbidity data, has found that the data were hardly updated, no meetings report writings and register were missing records for months.

To classified the households on the basis of economic status, the data on income were obtained. It was assumed that the primary income generation activity would be agriculture because at the ground level the households depend on multiple sources of income generation. However, it was found that agriculture produce was used differently by the different households like some trade the produce at a certain period and some sale as and when required. However, a large number of households found to depends on non-agriculture sources for income generation such as remittances. It has found that some households don't want to report some income from the activity such as making and selling local rice beer and whisky made of manual, as it was illegal and stigma in the

society. So this part of the income was hidden from the household reportings. Besides household could not mention aggregated annual income they make, in fact, the migrant households can only remember their aggregated annual remittances. Whereas, the commuter households can only figure out the cash income on a monthly basis and not on the annual basis. Therefore, the economic condition of the households was categorised on the basis of primary source of income during a different season. However, this is rough indicators of the economic conditions of the households.

The data pertaining to the income, expenditures, consumptions, health care, morbidities, marker dependence and food sources and availability were collected for past six months to one year. Only mortality and maternal and child health of the health indicators were queried for past five years from the date of interview. The respondents faced difficulty in reporting exact details on consumption, expenditure, food availability and sources, credit, health expenditure, etc. for a year. The researcher acknowledges that the responses might be influenced by recall biases.

The researcher finds difficulty in presenting data for consumptions. Though the diverse dietary intake was reported by the households not on a regular basis, as some of them were taken on a daily basis, but there were many that consumed some days of the week or some days of months. To obtain a good overview, the researcher focused on the day as well as weekly dietary intakes. However, the data do not give a precise picture of the dietary pattern throughout the year. However, the data give a rough idea of the total food items consumed during a specific season.

2.2.3G CHALLENGES FACED DURING CONDUCTING THE STUDY

The selected study area especially the remote villages is a conflict prone area, and some communal infringements had happened a recent year. It was difficult to conduct the study by residing at the study location. Therefore, the researcher was based at Ranchi town, in Ranchi district. She had to commute daily covering a one-way distance of 60-65 Km daily. There is no regular public or private transports available that could be taken on time to reach the study villages. However, only one remote village that has a railway station in 5 Km distance from the village. But the timing of returning could be

odd for the researcher in the evening to leave the place on time. So researcher needs to make her own conveyance arrangements to reach the sites on time and return back early before the dusk. Daily commuting was time and money consuming.

The first phase of data collection was done during the months of January to May. This was the lean agriculture period when the people especially men migrate to their destination and only villages are left with the women, children, elderly and those are ill. During this phase, only village level study has been conducted with the key respondents of the villages. The second phase of the data collection began in the first week of June to December. This is the busiest months due to peak agricultural season. Though the migrants are back to the villages and the researcher could find the presence of both the woman and men in the households, it was difficult to meet the respondents for the data collection, who often leave early for field and come back in the late evening. Often interviews were conducted in the fields where the respondents would be doing their winnowing, harvesting their paddy in the backyard, even in their leisure time in the evening preparing for their household chores. The researcher found that the lengthy questionnaires and probing often made the respondents restless since the interview was costing them time which they could invest in their work.

For the security issues, as per the health officials and the villagers, all interviews, field visit, meeting with the villagers were only conducted during the day time before the late evening. And the field area was to be left latest by 4 o'clock in the afternoon so that to reach the block headquarter area to continue for the next half journey towards Ranchi. During her stay in the study area, Naxal Bandh (strike) were frequent and the local festivals with long weeks festivities that hampered the survey as having to postpone the meeting frequently and rescheduling it is a big pain. During these days transport services remained disrupted, as an outcome some man-days were lost creating barriers in data collection.

As an outsider conducting research raised several difficulties due to frequent commuter between block and village and regular meetings with the block and health officials. People use to ask questions frequently, mistrust and probing on her background, residence, occupation, the purpose of the study and also about how the data would be

utilised. Initially, it was difficult to carry the research work, but gradually rapport building, daily visits and frequent interactions with the stakeholders in the study villages eased out the tension. Later on, after few regular visits, possible cooperation was received from the people. Altogether the data collection was difficult, but interesting experiences made up good memories with beautiful scenic views around the study villages and their villagers.

SOCIO-HISTORIC CONTEXT OF CHOTANAGPUR REGION

The chapter aims at captivating key aspects of historical change in social ecology and the political-economic and social life of the people in Chotanagpur region from pre-colonial to colonial times in order to understand the changing socio-historic context of migrants and their family members and their location within the context. Following a broad political economy approach, this chapter attempts a reconstruction of the pre-capitalist past of Chotanagpur peasant society, with a focus on studying between environment, population, social structure, and culture. A key concern is understanding the traditional position of the peasants of Chotanagpur and their locations within the social structure. This chapter also traces the history of migration in the region.

This chapter is divided into four sections. The first describes the geographical locations and the natural settings of the Chotanagpur. The second section attempts a study of the people of the Chotanagpur by examining the tribal ethnicity and their conflict and integration in the colonial period. This is further divided into the subsections that explain the agrarian relations and development of peasant systems in the colonial period. The third sections examined the ecological basis of the subsistence economy and its distinctive features by looking at the forest economy in the early colonial Chotanagpur and the land use pattern in the subsistence economy during the early colonial period. The fourth and final section examines the impact of the colonial rule's the breakdown of agro-ecological subsistence and the beginning of out-migration by looking upon the subsection on forest restriction under the colonial rule, an extension of cropland under the colonial rule and examining the out-migration history of Chotanagpur region.

I. CHOTANAGPUR: GEOGRAPHICAL LOCATION AND NATURAL FEATURES

Chotanagpur is a long undulating range of slopes that possess the southern quarter of the area of Bihar, which is presently under the recently framed state Jharkhand. The aggregate zone is 44,000 Sq. miles and was stretched into the regions of Hazaribagh, Ranchi, Palamu, Manbhum and Singhbhum which is currently East and West Singhbhum, and the royal conditions of Kharsawan and Saraikela. An extraordinary level averaging 2000 ft. in stature is at the focal point of the locale, with edges running out similar to Bengal. Parasnath, the most noteworthy highest mountain of Chotanagpur, lies on the eastern boundary of Ranchi. The entire Chotanagpur and the reaching slopes States was known as "Jharkhand" or the 'forest tract' by the Aryans in old circumstances and to later Muhammedan's trespassers in the medieval period. The name demonstrates the entire Chotanagpur as one tremendous forest comprising principally Sal (shorea robusta) trees secured with upper blended forest. The Jharkhand has a very ancient historic base, which comprised the entire Chotanagpur plateau and emerged as a distinct geographical region (Damodaran 1995; Singh P. K. 2008).

The history of the administrative areas in Chotanagpur may be divided into four periods. The first period (1780-83) Ramgarh hill tract, was an administrated area of nearly 1800 Sq. miles at Ramgarh was changed to South West Frontier Agency (1833-1854), and for the first time, this area came to know as 'Non-Regulation Province' rather than a district. In the third period (1854-1912), the South West Frontier Agency was abolished Chotanagpur Division (later to be known as Chotanagpur division) was created, and a Commissioner was appointed. He worked directly with the Lieutenant Governor of Bengal. Similarly, in response to the 'Santhal Rebellion' of 1855, the Santhal Parganas district was created as 'Non-Regulation District' to be administered by the officer under the Lieutenant Governor of Bengal. The Memorandum of 'Chotanagpur Sanjukta Sangh' rightly says that historically, both Chotanagpur Division and the District of Santhal Parganas in 1854, under the direct administration of then Lieutenant Governor of Bengal and had no connection with Bihar or the companies authorities in Patna (Chotanagpur Sanjukta Sangh:1954a:6 as cited by Singh 2008). The

Royal Proclamation declared at the time of Delhi Coronation Darbar held at December 1911, granted separate status from Bengal to Bihar, Chotanagpur, and Orissa where the three areas were distinctly mentioned (Singh P. K. 2008).

Figure 3.1: CHOTANAGPUR



[Source: V. Damodaran (2006)]

Chotanagpur was linked with Bihar and Orissa in 1912 for administration purpose. The fourth period in the Jharkhand region concerned the years from 1912 to 1954. The formation of separate states of Bihar and Orissa in 1912 took away large areas from Chotanagpur Division and attached them to Orissa (Gangpur and Bonai) and Central Provinces (Jashpur, Sarguja, Udaipur, Korea and Changbhakar) (Sharma 1993:13). The map of Chotanagpur Division prepared by Colonel H.L Thrillier, the Surveyor General

of India, in January 1877, had included the districts of Lohardaga, Hazaribagh, Manbhum and Singhbhum (today's East and West Singhbhum districts) and the tributary states of Changbhakar, Korea, Sarguja, Jashpur, Udaipur, Gangpur, and Bonai. According to the Memorandum, the Chutianagpur Division was created in 1854 and renamed as Chotanagpur Division, which continues today only in name, with its territorial jurisdiction reduced from time to time to suit the political interest of ruling groups (Singh P. K. 2008).

II. THE PEOPLE OF CHOTANAGPUR: TRIBAL ETHNICITY AND THEIR CONFLICT AND INTEGRATION IN COLONIAL PERIOD

Many tribes inhabit in the region of Jharkhand, and they have their distinct territorial extent in the Chotanagpur region. The major tribes are the Santhal, Munda, Oraon, Ho, Bhumij, Kharia, Chero, Kharwar, Paharia and so on. The Santhal tribes are distributed in the districts of Hazaribagh, Dhanbad and Santhal Parganas. These tribes are also found in the adjacent states of West Bengal and Orissa. Nearly about half of the total Santhal tribe population lives in Jharkhand. The Munda and Oraon tribes are in significant strength in Ranchi, Gumla and Lohardaga areas. The Ho tribes live in the Singhbhum District. The less numerous tribes are spread over the other parts of the Chotanagpur region (Singh 2008: 36).

The redistribution of the region started as early as the pre-colonial period. This period was adhered with a variety of tribes of various numerical strength, belonging to different racial, ethnic and cultural background with different occupations and having a different level of economic attainments. All these tribes entered the Chotanagpur region. According to S.C. Roy (1912), the process of movement of different tribes was done before their proper settlement in the Chotanagpur region. In which the Santhal tribes came with Munda tribes and said to be got separated at Omedanda, the meeting place of Ranchi, Palamu and Hazaribagh districts. Moving towards the East, they entered to the Manbhum District and Dhalbhum district in Singhbhum district. It is said that the Oraon tribes came much later than the Santhal tribes. The Munda tribes came from the North West and settled down in the western part of Ranchi. The Ho tribes settled down in

Kolhan of Singhbhum districts. The Bhumij settled down in the Southern district of Manbhum district and Dhalbhum sub-division of Singhbhum district. These different tribal groups were settled down in their specific territories and maintained their own cultural and ethnic identity. But the evidence suggests as cited by the Schmit (1980), that the region acquired a definite tribal character only after the 10th Century AD. The Chotanagpur region received general waves of tribal migrants from different directions (Singh 2008).

A. IN-MIGRATION OF NON-TRIBALS IN CHOTANAGPUR

The Chotanagpur and Santhal Parganas plateau have witnessed significant migration flows over a fairly long historical period. Jharkhand (particularly the Chotanagpur region) had experienced a considerable influx of the non-tribals in the region. The percolation of non-tribes into the region, resulted in the substantial change in the distribution pattern of these indigenous populations. The immigration of non-tribals to the Chotanagpur region dates back to the pre-colonial period at the time of state formation under the rule of the Hinduised tribal king. These kings used to pay tribute to the Subedars of Bihar before the British Rule. Roy (1912) said that in the course of time Brahmins, Courtiers, servants who mostly came from Bihar and Central Provinces, attended the court of the King testified it. The King against the services they rendered granted them numbers of villages. Some Mohammedans such as *Julaha* also appeared to have found their way into the Chotanagpur region. Thus, the non-tribal population spread in its own way, over the region during the pre-colonial period (Singh 2008; Thapar & Siddiqui 1979; Damodaran 2006). The Chotanagpur region witnessed a continuous increase in population since the year 1872 when the first Census was conducted.

Table 3.1: Chotanagpur – Trend of Immigration (1881-1951) Per centage Share of Total Immigrants.

Year	Total No. of Immigrants	Population to Total Population	North Bihar	Adjacent Provinces	Other Provinces	Outside India
1881	143759	4.56	65.02	28.07	6.15	0.10
1891	132358	3.33	60.00	32.01	7.06	0.26
1901	133441	2.72	53.02	42.09	3.06	3.06
1911	191279	3.41	45.06	51.04	2.06	0.41
1921	235286	4.16	44.04	48.04	7.07	0.97
1931	254435	4.96	35.06	54.09	7.09	1.05
1951	506757	5.93	37.07	39.05	10.56	12.07

(Source: Compiled from Place of Birth Date of Census of Bengal, Bihar and Orissa 1901-1951 as cited by Singh 2008).

Corbridge (1988:19) attested that during the initial period (1872), the Chotanagpur region accounted for only 14 per cent of the population of Bihar. A sustained influx of people into the Jharkhand region of Chotanagpur plateau was started from the last decade of the 19th century. So the per centage share of the migrants from North Bihar alone rose from about 10 per cent in 1881 to nearly 40 per cent in 1951 in Manbhum i.e. a large part of which became merged with present day Dhanbad. Ranchi again had received more than 60 per cent of in-migrants from the North Bihar alone in 1881, which continuously declined over the following decades (Maharatna and Chikte 2004). The 1951 Census recorded around 85 lakhs person in this region and average density became 323 person per mile. Nevertheless, the rate of increase population was so high that in 1951, the average density of population in this region became half of that of Bihar. The region accounted for over a fifth (21 per cent) of the population of the entire province in 1951 (Singh, 2008). The Census also shows that the people had migrated in Jharkhand region from such a widespread places as Punjab, Bombay and Rajputana Agency too, with an increase in its per centage share of five per cent to 16 per cent between 1881 and 1951 (Bandhopadhyay 1999:22).

Table 3.2: In-Migration into Santhal Parganas and Chotanagpur 1891-1971.

Year	Immigration
1891	96,000
1901	1,79,000
1911	2,93,000
1921	3,07,000
1931	3,07,000
1941	NA
1951	4,80,000
1961	10,73,920
1971	14,29,805

(Source: Weiner 1978 cited by Maharatna and Chikte 2004).

During 1931-41 there was slow down in the coal industry in the wake of the Great Depression of the 1930s, but Second World War stimulated the mining industry, fuelling a ‘perpetual’ immigration into the Chotanagpur region (Bandhopdhyay 1999).

Table 3.3: In-Migration into Jharkhand, 1981.

Total no. of Immigrants	Immigrants coming from			Other Asian countries/ Outside India
	North Bihar	Adjacent States*	Other States	
16,281,03 (100)	90,95,25 (55.9)	57,52,98 (35.3)	10,02,40 (6.2)	4,30,40 (2.6)

*Includes Madhya Pradesh, Orissa, Uttar Pradesh and West Bengal.

[Source: Calculated from Census of India 1981, series -4, Bihar, Part V A and B, Migration Tables – D-1 cited by (Maharatna and Chikte 2004)].

All these clearly show that there has been a continuous and considerable non-tribal influx into the Jharkhand region over a fairly period before pre-independence. The long-term rising trend in an absolute number of in-migrants into Jharkhand has continued in the post-independence period too. However, it is remarkable that an overwhelming share of this immigration flow has continued to be comprised by the migrants from North Bihar and four adjoining states. And Dhanbad district alone – a belt

of mining accounted for more than one-third of the total immigrants of Jharkhand, according to the 1981 Census information. The newly introduced process of industrialisation in the second half of 19th century in the Chotanagpur region and consequent inflow of non-tribal people, as mentioned above, deprived many local tribals of the natural resources on which they substantially dependent (Maharatna and Chikte 2004).

B. CHOTANAGPUR: AGRARIAN RELATIONS IN COLONIAL PERIOD

Thapar & Siddiqui (1979) clearly stated the pre-colonial and colonial situation in the Chotanagpur region by remarking the three major phases of historical change apart from the migration and settlements. They said that the first phase remained ambiguous and was associated with the Asura sites. There was a linguistic indication that has left by the oraoon presence, but its historical identification is uncertain. The second change was brought in the Nagvansi dynasty which, with its parallels adjacent regions, ended the isolation of Chotanagpur. And the third phase, introduced the Mughal association as well as the emphasis on wider Pan-Indian connections and the land state linkages. It was very clear that the meshing of land grant continuum with the local cultures had led to an exploitation of agriculture on an extensive scale even before contact with the Mughal Kingdom. When the Chotanagpur region became the part of colonial society, this exploitation increased in response to a structurally changing economy.

The Chotanagpur region has undergone a series of changes over the years, and the oppression can be evident through the ages and in several stages, broadly into two phases, pre-independence phase, and the post-independence phase. In 1765 as part of the grant of Diwani rights over Bihar, Bengal, and Orissa the colonial administration Chotanagpur region came under the British rule. After the series of military expeditions, tribal chiefs were obligated to pay fixed revenue to the East India Company. The company handed over the charges and rights of *rai-yats* and peasants to the *Zamindars* that were accepted in 1793 through the permanent settlement i.e. the owners of the land are only *Zamindars*. They were appointed as the special category to manage the estates and hence the Permanent Settlement Act was introduced for two reasons. Firstly, after

getting Diwani in 1765, the East India Company developed tremendous courage and greediness, and as a result, exploitation increased to its extreme point. The perseverance idea of victimisation could be estimated through the great famine that took place during 1770, where around one-third peasants died in Bengal. And more than half people died in Bhagalpur. Whereas in the forest tract, the impact of the famine was ten times more where all the persons died or ran away. The Rajmahal area was worst affected due to a continuous flow of military from Calcutta. However, the Company did not feel or was got at to lower the rent and maintained the revenue collections even after the great famine. Even they taxed additional amount that survived or stayed over there and forcefully maintained the balance. Secondly, as Bengal and Orissa were the agricultural areas, the Company decided to make the base to propagate other parts of the country. Hence, with the enforcement of the Permanent Settlement Act in 1793, the agrarian structure started changing. The colonial policy and imposition of this act gave an impact on their economic and social situation. And as a result, the lift of the agricultural labourer became much painful (Singh 2008).

Notwithstanding, the Kol Rebellion of 1830 was the peak of the period change of the accompanying seventy years of expanding intrusions by an 'outcasts' brought about developing turmoil. The colonial rulers acknowledged the lifestyle of the indigenous tenants of Chotanagpur in the 1830s as ahead of schedule, is as a rule extremely undermined by the entrance of a Hindu proprietor and cash loaning community. In thought, to that, the colonial company upheld and fortified the tenants by colonial law. With regards to far-reaching rebellion and dissent by the tribes, the executives were considered these thoughts important, and huge endeavours were made to make Chotanagpur a non-control region of Bengal. And furthermore, one where colonial organisations would work remembering the diverse character and issues of the area (Damodaran 2006).

The second wave of immigrants provided the base of the present day community or a group structure in Chotangapur region. As cited by Singh (1979), the Census data from 1901 to 1931 gives an insight into the group elements and an idea of the diversification of the activities and the increasing role of many communities by looking at the caste

categories. Generally, there were higher castes, agricultural and pastoral castes, trading and industrial castes, aboriginals or Adivasis, Hinduized Semi-Adivasis, and Muslims. The 1931 Census data shows a fairly large number of peasants belonging to the agricultural castes as Kurmi (6.2 per cent) and Koerie (1.5 per cent); such pastoral castes as Goala (4.7 per cent) those came in search of pastures and the Chamara (leatherworkers, 1.9 per cent) who followed them. The higher castes, the Brahmin (0.6 per cent), the Rajputs (1.5 per cent) and the 'intermediate' castes such as the Kayastha (0.7 per cent) though are in smaller size, but controlled the power. The per centage of the working caste to the total population was very high in the two 'exposed' districts of Hazaribagh (55.3 per cent) and Palamu (54.4 per cent) followed by Ranchi (49.2 per cent) while Singhbhum being the most primitive that accounted for only 21.2 per cent.

The settlement pattern emerged with the creation of two types of villages. First, were villages of hamlets inhabited entirely by members of one caste or lineage, while the other was multi-ethnic ones. Over the year there was the similarity of physical characteristics, the incidence of inter-ethnic marriages and genetical convergence suggests a considerable measure of miscegenation not only between the Dravidian and Mundari speaking tribes in some areas but also between the tribes and the Backward Caste, and Tribes and Backward Muslims in some villages in Chotanagpur. There was also the other form of interaction where the Tribes, Scheduled Castes, and Peasants shared the basics of material culture, economy, life-cycle ceremonies, and festivals. The entering communities also introduced new crops techniques of cultivation, agricultural implements, the concept of seasons (*nakshatras*), etc. that contributed to the growth of self-sufficient villages in since pre-colonial times (Singh K. S. 1979).

C. DEVELOPMENT OF PEASANT SYSTEM IN CHOTANAGPUR

The transformation of the tribes into peasants were aided by the three main factors. First, there was the growth of the population which could no longer subsist in forests and through swidden agriculture and is capable of maintaining the only smaller population. Second, the peasant caste immigrants introduced new agricultural technologies and third, the colonial system reserved the forests for commercial exploitation and forced

them to turn to agriculture. In Chotanagpur, almost all tribes have become settled farmers, though a few minor tribes still practice slash-and-burn cultivation (Singh K. S. 1979:76).

In 'peasantizing' the tribal community the role of the non-tribal peasant groups (including the functional castes) in generating an agricultural surplus for tribal states are noteworthy. It is said that the tribes lacked the technology to generate the surplus and therefore, peasant castes from the plains were invited by the tribal chiefs to settle and cultivate the land. Indeed, the communal land was divided into three major categories. Firstly, the land for this peasantry brought in by the tribal chiefs (*rajas*), secondly, the land for the Chiefs (*manjhiba*) and third, the land for the tribal community (*Khuntkatti* and *Bhuinhari*). A social and agrarian hierarchy emerged with upper strata, recognised by the imperial power as landlords (*Zamindars* of the autonomous types) and a lower one consisting of tribal solidarity and yeomanry (Singh K. S.1979: 69).

The British rule promoted the development of the feudal relationship in agriculture and the colonial formation of the tribal economy. Hence, the tribal communities were drawn into the vortex of the new policy, ending their isolation. And the tribal chiefs, recognised as *Zamindars* (feudatory chiefs) came under the policy of protection of the 'ancient families' under the law of the British rulers. There was a regular imposition of cash rent, excise, tax and other levies by a permanent administration. The increased political presence and the establishment of 'law and order' helped a larger inflow of non-tribal communities. And the consequence was that the gap between the tribal chief and its people widened and alienation from one another became complete with the imposition of the Bengal concept of *Zamindar-Raiyat* relationship. Agrarian differentiation stimulated as tribal chief at the village and *tappa* (cluster of villages) levels became *Zamindars*, and as an outcome the secular (*Munda*) and spiritual (*Pahan*) functionaries of the village community came into opposition because as a new class of money-lenders, tribal in composition, appeared in the scene (Singh K. S. 1979:70).

Monetization in the agrarian system developed with the introduction of the new system of taxation and commutation of feudal dues and services into rent. And to meet the demand for money a new class of non-tribal middlemen, the *diku* (aliens/outside) emerged in the society. As a result, the communal land system broken-down. However, only 600 communal villages have survived in Ranchi. In the end, the tribes were divided into three main categories. Firstly, a stagnant body of peasants in the 'privileged and occupancy' categories. Secondly, a growing mass of small farmers and landless labourers and thirdly, an emerging industrial proletariat (*ibid*).

After 1859, the agrarian laws that were framed in the wake of the peasant uprising, sought to protect the interest of the peasants with the larger landholdings i.e. the upper strata, the Ghatwalas, Munda, and Manki also known as the *Khutkattidars* and *Bhuinhar*, those were also supported by the missionaries. Later, the Chotanagpur Tenancy Act of 1908 recognised them as 'privileged' tenants. As a result, the incidence of rent was low; abolition of praedial conditions and forced labour and payment of rent in kind had commuted. But the small landholding peasantry had been left untouched under the Act. As the number of sharecroppers and landless labourers was small and many small holdings peasants had emigrated to tea plantations, the number is smaller, and as a result, they had been ignored by them. The number would have been much higher if it had remained the incidence of proletarianization, that occurred outside the Chotanagpur agrarian system. The accessibility of a large cultivable area and the presence of a comparatively small population in Chotanagpur are two characteristics of the agrarian structure. Among the groups holding less than eight hectares of agricultural land, the scheduled castes stand at the bottom, just before the scheduled tribes and the rest of the groups. There is a larger per centage of middle peasant holdings about 10 hectares of land and above among the tribes (such as Nagbansi, Munda, Chero and Kharwar) than the Scheduled Castes and the residuary groups, but the other tribes are poor. The per centage of sharecroppers among the scheduled castes are higher than among the residuary groups and the tribes. Indeed, the overall conditions of the scheduled castes are much worse than that of the Tribes, because the latter have at least have some measures of legislative protection over a period (Singh K. S. 1979:77).

III. ECOLOGICAL BASIS OF SUBSISTENCE ECONOMY AND ITS DISTINCTIVE FEATURES

Against the historical background of the evolution of the Chotanagpur region, its people and the peasantry system, we now move on to discussing the unique economy and specific plateau production strategy of the Chotanagpur region which evolved over a period of time.

A. FOREST ECONOMY IN THE EARLY COLONIAL CHOTANAGPUR

The original forests in the Chotanagpur were spread out more than 1000 Sq miles, particularly, in the region of Hazaribagh, Palamu, and Ranchi. In the whole of the Gangetic tract, the Ranchi region was one range where the *sal* (*Shorea robusta*) trees were prevalent with the best quality in the valleys. In the valley, particularly in the shielded condition, alternate trees are seen (*Terminalia tormentors*), *gambhar*, *kind* and *simal* are discovered separated from *sal*. The *mahua* trees (*Bassia lotifolia*) was extremely normal and urgent to the nearby economy of the Chotanagpur locale. Individuals use to develop better natural product bearing trees like *jamun* (*Eugenia jambolana*), *Karanj* (*Ponamia glabra*), *Tetar* (*Tamarindus indica*), *Bael* (*Aegle marmegos*), *Jackfruit* (*Artocarpus integrifolia*), *Pipal* (*Ficus religiosa*) and *Ber* (*Ficus Benglensis*) in their backyard and town premises. Numerous scientists, for example, Slacke and Valentine Ball, expressed in their examination work about the significance and the reliance of the tribes on the forest. Regardless of timber trees, there were numerous different forest organic products yielding bushes and reasonable important nourishment that is utilised as supplementations amid the sustenance deficiencies. The author referred to that as indicated by the Slacke's review, sufficient products of the soil from different types of trees and bushes were utilised as sustenances. For example, 21 types of seeds assortment, Fruits of 45 uncultivated trees, leaves of 34 trees that were utilised as vegetables and palatable foundations of around 18 species (Damodaran 1995:132).

The several of the Adivasis were heavily dependent on the forest products, and most of them had good technical knowledge of their forests. For example, many forest

inhabitants like *Keriah*s of the Jolhari hills those are not settled agriculturists completely relied on the forest for a supply of forest non-timber products such as fruits, leaves and roots. They supplemented this by trading, forests products such as honey, lac, sal seeds and leaves and tussar cocoons with rice procured from the lowland agricultural communities. The Ho tribes of Singhbhum, who were essentially forest tribes, had names for all the common plants, like the Mundas, those were well knowledgeable about the edible properties of plants. For the native people, the forest environment and related in-depth knowledge of it have of vital importance (*ibid*).

In the Adivasi majority Chotanagpur, many wild fruits and roots formed part of the daily diet. But it cannot be misconceived as the famine foods to be eaten in times of starvations. Although, it may be true that, some foods were eaten mostly during the time of shortages (i.e. in between May to July). However, many others are regularly collected and eaten throughout the year. The most important food resources of the Adivasis were the *mahua* trees. It was discovered that not only the fruits but the fleshy corollas constituted staple articles of dietary intakes for the poor of the region for several months of the year. According to Walter Hamilton cited by the Damodaran, 1995, the convenient substitute for grain is flowers, as it would keep when dried and powdered for a whole year. People also used it for making infusions, however, by the 1820s the British administrative officials intruded this infusion process against illicit distillation under the regulation. The other fruits sources formed another important article of their diet and were a very wholesome food and here it is included *Piar* (*Buchanania latifolia*), *Aam* (*Mangifera indica*), varieties of *Ber* (*Zizphus jujuba*), *Ber* (*Ficus benglensis*) and *Pipal* (*Ficus religiosa*), and *Jamun* (*Eugenia jambolana*), Water chestnuts (*Singhara*) were eaten during the scarcity. In addition, a food items were gathered as the basic energy source, especially during times of seasonal hunger are like several grass species, roots of certain shrubs and trees [for example, *bengo aloe* (*Discorea*), *moolum puddo* (*Nelumbium speciosum*), *kesur* (*Scripus kysoor*) and *tikur* (Wild arrow root)], some wild bulbs and the leaves of other plants. These were useful nutrients and were extensively used throughout the Chotanagpur. Apart from the foods, there were several plants that were used by the Adivasis for their medicinal properties. Adivasis are also dependent on

forest for the other wild food sources including fish. The other important local diets were water chestnuts (*singhara*), freshwater snails and small sluggish fish that were caught by dragging on shore. It was found in some abundance in the river and often were caught by elaborate methods like by eating traps or simply stunned and then collected. The another important source of food was hunting that said to be increased at the time of scarcity to secure the basic food intake (Damodaran 1995; Dasgupta 2009).

It can be said that the local food strategies helped to create the nutrient favoured environments to live in by minimising the risk of drought. The skill of the people to gather wild foods, hunting and their knowledge of forest foods with the optimal usage, helps them to protect them during the time of food scarcity. Thus, it could be said that providing food is the most important role of the forest and the tribal areas were less susceptible to famines because of this dependency. There was no reporting on any major food shortages, a time of recurring famines during the pre and early colonial period in the Chotanagpur region (*ibid*).

Other than these needs, the Adivasis are also dependent on the forest for the woods and fuelwoods. The people are practising the ancient customs *patras* or small scrub jungles of *sal* saplings for the optimal usage, where forests were reserved for the periodical supply of wood requirements of the village communities for their domestic, agricultural buildings. The forest was a prime source of fodder, in the form of grass and leaves for the animal husbandry. It provides the grazing lands for the large herds of cattle and buffaloes owned by the tribal people. It is important to stress that this dependence was institutionalised through a variety of cultural and religious mechanisms which enabled the forest-dwellers to reproduce their existence. The area cultivated by different families under shifting cultivation adhered to boundaries established and respected traditions. The Adivasis are also dependent on forest for their livelihood like selling of non-timber forest produce like bamboo, *kath*, fuelwood, *tendu* leaves, a variety of nuts are an important source of income. Therefore, it could be construed that the forests were deeply overlapped with both the material and the cultural life of the Chotanagpur region (Damodaran 1995; Dasgupta 2009; Guha 2012).

B. LAND USE PATTERN IN THE SUBSISTENCE ECONOMY: EARLY COLONIAL CHOTANAGPUR

Many environmentalists said that the pre-colonial use of the forest was termed 'conservation of prudence' that is 'responsible' for the existence of 'cultural tradition of responsibility' at the level of the community. It was said that when the enterprising cultivators made their new home near to the spring water with the regular supply of spring water for the purpose of drinking and cooking, and next needs was a land for rice cultivation. In such a way, the hunting and pastoral way of life of most of the tribal communities, over the centuries, had adopted to the inevitable complex agricultural village communities of a later stage.

The Chotanagpur, in the early 19th century, was protected by the densely forested hill ranges and rivers. Many diverse ethnic communities inhabited here. The land quality was mixed as it was fertile and productive in some places and stony and barren in others. People's economy was characterised by the mutuality between the forest and settled cultivation. The Adivasis village consisted of a certain area capable of immediate cultivation with the considerable forest area that they claimed for control. During the appropriation period by the British, the establishments on the plough cultivation with some amount of prevalence of the artificial irrigation among the people of Chotanagpur region. Although, people are also practising the various forms of shifting cultivations too. In the environment comprised of hilly and forested terrain, with hot and dry climate with the low rainfall in most of the time in the years, a variety of agricultural techniques had found to developed over the ages (Singh 1985). In the pre-colonial period, the land settlement patterns, its utilisation, and agricultural practices had developed. In few months of monsoon with the heavy rainfall in the plateau region created run-offs and the periodic flooding of the larger rivers. It washed away the topsoil from the ridges and deposited it at the bottom of the valleys with the rich alluvial deposits of banks. Therefore, there were great differences in the depth and character of the soil. It is ranging from the rich alluvial soil at the valley bottom which is currently termed as *Doin* to the poor quality, dry, gravelly soil at the top of the ridges currently termed as *tand* and *chaura*. As indeed throughout the Chotanagpur region, people typically tended to

occupy the tops of the ridges, and this is done to ensure the optimal utilisation of the arable space. However, both the ridges and valleys were utilised for the agricultural purpose, but the soil at the bottom was more fertile (Dasgupta 2009). The settled farming included the use of various strategies. Also, extensively there are two classes of the arable grounds, that is, *Doin* and *Tand*. The *doin* lands were with terraced marshes on which just rice was developed, though, the *tand* terrains were uplands which produce the coarse rice and different rabi crops. The upper terraces, or uplands, known as *tand/gora/bakai*, are related to light-finished soils. The rice lands were additionally classified by the quality impacted by the soil texture with its moisture storage limit, together with water-table depth, there are two types of lands. Firstly, the *doin or bera*, having the lowlands, with all the more intensely finished soils, i.e. sandy clay soil. This land type comprises of the prolific agrarian land situated at the base of the valleys and in the depressions, which was utilised for the winter rice and for the linseeds, pulses, and barley grain. In *doin* lands, the aggregation of excessive surface spillover combined with a high water table causes flooding that could keep the land submerged after the monsoon time frame until as late as February. Aside from the rain water, it was likewise flooded by the reservoirs, streams, and springs so the *doin* was protected from dry season yet could be harmed by heavy rain. These lowlands were additionally richer since the top soil of the ridges was washed downward on them, and they likewise held the dampness longer. In *doin* lowlands, rice was normally transplanted. Another rice terrains are the middle or medium land, have marginally more intensely textured soils (e.g., loamy sands, and sandy topsoils) than the uplands and known as *chaura* or *baad*, i.e. the second quality rice lands. On these grounds, paddy was typically sown (broadcast) when the rain started in June and subsequently, an all around circulated and heavy rain was expected to guarantee a decent yield. In the medium-uplands, medium duration rice assortments are developed, while, drop down the top arrangement in the medium land where soil dampness is accessible for the more drawn out period. These lands were additionally divided locally as *longar* or *nali*, which included better quality barren wasteland on the slopes. The *longar* land included both the long, limit piece of lowland lying between the seats of highlands. The yields in the *longar* lands were the same as that of the *doin* or *bera* in a decent year yet could break down in a dry year. Also, the

third sort is the upper terraces, or uplands, known as *tand* or *gora* or *bakai*, are related to light-finished soils. The water accessibility outside the rainy season (counting pre and post-monsoon periods) are especially fundamental for development in the uplands and medium land. Together with the settled development, a type of semi-permanent cultivation differently known as *gora* cultivation stayed notwithstanding amid the nineteenth century. Usually, every Tribe had the privilege to clear the forest for this kind of development. Clearances then would occasionally be surrendered for crisp clearings in the forest. This is essentially the moving or shifting cultivation and was fundamentally rehearsed in the south of the Singhbhum area, especially in the *pirs* of Saranda, Latua and Rela, which were precipitous and vigorously forested. Clearances found near the towns, the *bari* or *baki* (estate terrains), were manured and developed and could yield two harvests a year, i.e. conventional minor millets (finger millets, *kodo*, *gondli*) and the mustards, however those arranged at a separation were known as the *gora* lands and were generally developed with more strong products, for example, coarse millets and oilseeds, however once in a while these were additionally utilized for rice development i.e. *gora* rice. Here the Tribal individuals' practice was to fell the trees in the timberland, consume the felled produce and blend with the ashes and after that cultivate the zone (Dasgupta 2009; Damodaran 1995; Banik et al. 2004). As Ball (1880), made it additionally clarified that, more often than not the main yield of millet or pulses was sown. While the exposed trunks were all the while standing, yet these were determined to burn at the roots and the ashes in the accompanying hot season to additionally enhance the soil. However, in spite of the change by consuming the litter and blending the powder with the soil, the territory appeared to be corrupted after some time and inside 10 years cultivators needed to move away to the another spot. These uplands were additionally utilised for the fields, and it has seen that the best uplands yielded a yearly product however second rated lands were fit for cultivation just once in four to five years (Ball, 1880).

In any case, even in the mid-nineteenth century, given the level of agrarian innovation accessible to the Adivasis, the abundant land accessible and a low populace, shifting cultivation (in spite of the others convictions that does not involve a persistent clearing

of new forest regions rather took after the accompanying cycle two years of cropping was trailed by twelve to fifteen years of rest) was sustainable economic activity, supplemented as it was by depends on forest produce (Dasgupta 2009).

IV. COLONIAL RULE'S IMPACT: BREAKDOWN OF AGRO-ECOLOGICAL SUBSISTENCE AND THE BEGINNING OF OUT-MIGRATION

It was earlier discussed about that how in the old time the forests of the Chotanagpur had been left untouched, and the area was populated by 33 unique Tribes contained Mundas, Oraons, Santhali, and Ho. However, sadly, they were not to stay undisturbed for a long period. The floods of the outcasts i.e. Hindus and Muslims immigrants in the medieval period had as of now observed the progressive distance of tribal terrains and the development of another proprietor and cash loaning class occurred in the Chotanagpur district. Later this procedure was prompted drastically with the approach of the British. After the passage of the colonial rulers, the proprietors and the cash moneylenders were then ready to reinforce their position by utilising the new establishments of the frontier state, especially the police and the courts, to confiscate the Adivasi community lastly to oust them from their own particular lands (Damodaran 2006).

The Colonial rulers essentially influenced the occupation pattern of the Chotanagpur individuals, especially the integral parts of the forest and settled cultivation in their economy. The people could clear the forest expansion for cultivation and graze their cattle under the supervision of the Mundas and Mankis, the headman of the village and the *pir* separately. Undoubtedly, the Adivasis in the Chotanagpur area typically delighted in the standard access to all the forests deliver preceding the British extensions.

A. FOREST RESTRICTION UNDER COLONIAL RULE IN CHOTANAGPUR

In the prior period, the Pre-colonial state declared their rights to unique control over tax collection or *dalkati* on just certain monetarily significant results of the time, for example, tussar cocoons. In any case, neither the forest nor the trees were thought to be the property of the indigenous lords/kings or their subordinates. Thus, while requesting

tributes from the forest Adivasi subjects once in a while interceded in agricultural production choices. In spite of the fact that the colonial rulers had appropriated certain products of the forest, in any case, all around, the forest tenants delighted in free access to the forest. They could take all the forest produce they required for their residential purposes from the public forest with no hindrance. From few bits of evidence available, it creates the impression that the forest inhabitants appreciated a level of flexibility in the utilisation and administration of the forest they possessed and they built up their own system, social and religious, to manage the utilisation of the forest (Munshi 2012).

This was change under the mid-colonial time frame under the British, when the administration left on a strategy of direct intercession in nearby agrarian practices, especially in its endeavours to replace shifting cultivation with the settled farming. They didn't care for individuals moving from place to place, just like the instance of shifting cultivators. They needed tribal groups to settle down and end up noticeably settled cultivators as it is simpler to control and regulate individuals who were in one place by keeping up records on them. In East India, the locale under forest started to recoil as a major aspect of the procedure of imperialism. The British enabled local *zamindars* (landowners) to tax and control nearby communities to clear forest for cultivation. Along these lines, forest misfortune encouraged the making of villages which then became plainly subject to the gathering of income/ revenue. As the procedure of colonialism propelled, natural resources came to be progressively commodified, and, in serving the necessities of the domain, started to stream out the subcontinent. To some degree essentially, the British rulers encountered an asset crunch, and the broad extraction of new species couldn't be managed uncertainly. The possibility of a reducing asset base and a requirement for abundant crude materials on which to grow the realm probably been behind the colonial drive to oversee and control forest resources all the more adequately. This business goal was, in any case, camouflaged by simply say-so of ecological concerns. It was over the most recent two many years of the nineteenth century that outlining and holding bits of the forest for the selective utilisation of the legislature was taken up genuinely. To accomplish this point would require the arrangement of Forest Department in 1864. Further to the capacity of this association

viably, required the enactment that reduced the yet unhindered access of the rustic occupants to the forest. Ten years after the British had first issued the reminder that controlled the movement of forest inhabitants, the Forest Act of 1865 was presented. This Act enabled the administration to proper any land secured with trees, in any case, the warning must be affected, if existing privileges of people and groups were not infringed (Mohapatra and Konwar 1997; Gadgil & Guha 1992). The underlying demonstration was supplanted by a more comprehensive bit of enactment, in the Indian Forest Act of 1878, that was worried about the expelling the uncertainty about 'irrefutably the exclusive right of the state'. The need to safeguard the forest was again persuaded by the interest for the timber at the time. The appearance of the railroads made a gigantically extended interest for fuel and timber for railway sleepers. There was additionally developing an interest in the timber of these forest in the timber stores of Calcutta for the utilisation of building purposes. An expansive amount additionally went to the Sundarbans for boat building, and the dry shafts were traded to the coalfields and alternate parts of Bengal and Bihar. Along these lines, while forest turned out to be progressively limited for the local individuals, they were popularised on a huge scale in light of a legitimate concern for empowering managed timber production (Dasgupta 2009). The new demonstration was assigned to encourage strict state control over the forest resources, and as unmistakably, 'annexationists' in nature. Gadgil and Guha (1992) comments the vast scale extension of Indian forests by the British Governed state constituted a basic defining moment, politically, socially and biologically. Politically, in light of the fact that the monopolistic claim to the forest spoke to another extension of state power and mediation, with a relating abridgement of local people rights. Socially, in that conventional examples of resources utilise were upset by the limitations to local access. Also, environmentally, as the forest was experiencing a procedure of commodification, which would change their tendency. As per the 1878 Forest Act, three sorts of forest were to be assigned, that is, Reserved Forest, Protected Forest, and Village Forest. The Reserved Forests were seen as the most economically profitable and tractable to managed misuse. General state control of held forest was endeavoured, which included either the surrender or transferral of different claims and rights, albeit every so often, restricted get to was conceded. Legitimately challenging the reservation

of forest existed, however, villagers had little involvement with lawful methods, and uneducated villagers were frequently uninformed that an overview and outline was in process (Proffenberger et.al 1998). The Protected Forests were likewise state controlled, yet some concession was without a doubt, contingent to the reservation of commercial trees species when they ended up noticeably significant. These forest could likewise be shut to fuelwood gathering and grazing, at whatever point it was seen as important to do as such. As timber interest for realm expanded, it was found that the constrained control the state had allowed itself to be deficient, accordingly many secured forest were re-assigned as saved forest. The demonstration likewise accommodated the third assignment of forests, the Village forests. However, these were not practised by the pioneer government over the vast majority of India (Gadgil & Guha 1992). The pioneer way to deal with the ranger service was reinforced on the premise of the Government of India's forest policy issued on nineteenth October 1894 and took after the above-assigned forest with an expansion of Private Forests. While the two forests i.e. Village and Private forest groups, the entrance for the village communities proceeded with much as some time recently, in the protected forests, and particularly in the reserved forest, the privilege of the local peasants to graze their animals, to ascertain harvests, to fell trees, to gather nectar, *mahua*, *kusum* leaves and *sabai* grass went under the strict control of the colonial state. The forest office handled the administration of reserved and protected forests, while the village forests were directed by the district administration. The village headman was allocated with the administrative duty of the village forests under the deputy commissioner (Dasgupta 2009).

Despite the fact that the Land Acquisition Act of 1894, denied of tribal terrains to non-tribals, the state could secure access to village lands in light of the fact that the modern advancement or industrial development would serve a public purpose. As referred by Dasgupta (2009), between 1915-1925, around 1 lakhs sections of the Tribal land was utilised to open up mines, create lodging offices and for the development of streets and rail tracks. Such land exchanges were once in a while fair for the tribals. Consequently, of land, the financial remuneration, when allowed was infrequently

sufficient, and the tribes, unused to a cash economy, would trick away with the pay they got and in this way sink into landlessness.

B. EXTENSION OF CROPLAND UNDER COLONIAL RULE

The huge extension in the cultivation was seen amid the colonial rule. The augmentation of agrarian lands was in addition achieved both through the recovery of new land and through the development of wastelands. A procedure of development likewise happened through the expansion in the medium upland, i.e., through the change of uplands into the rice lands. And furthermore, with the expansion of the populace, a great deal a greater amount of the upland, i.e., the *tand* or *gora* land, was left into second quality rice land or *Chaura*. The correct rate of increment is difficult to assess, however plainly an enduring change of the *tand* or uplands into the medium or *chaura* lands happened all through the nineteenth and twentieth hundreds of years. For instance, in Singhbhum of the Chotanagpur district, the zone of rice terrains under the cultivation expanded from 82,427 sections of land in 1867 to 1,94,738.9 sections of land in 1897 (Craeen 1898 as cited by Dasgupta 2009). Of this, the aggregate increment in the *Doin* or *Chura* lands was evaluated at 136.3 per cent, while the gross increment, including the *tand* or uplands, came to 307.3 per cent. Along these lines, it was found that the territory under *doin* and *chaura* cultivation has multiplied since the settlement of 1867. In the vicinity of 1897 and 1920, a revisional overview was held, which says that there was a further increment of 29 per cent in the zone under the cultivation. It was evaluated that rice lands had expanded by 13.6 per cent and uplands by 50 per cent. The explanations for the gigantic increment in development croplands were numerous. The principal one is as the British government clarified it somewhat as far as the more prominent stagnation of the tribals with the foundations of British rule and halfway as far as its 'civilising' impact. Nonetheless, alternate causes that the legislature highlighted incorporated the formation of substantial forests reserved by the government forests department, the protection of unreserved forests by the Deputy Commissioner, additionally reasons are the development of railways in the district that got the bigger convergence of an outcasts into the locale and no less essentially, the spread of essential education (Dasgupta 2009).

The adjustments in the land use were joined by the adjustments in the cropping pattern too. Rice had moved toward becoming by a wide margin an essential product in the area before the finish of the nineteenth century. The net cropping region under the rice was more than four times that the various sustenance crops joined. Hence, this expanded reliance on a single crop made the agrarian economy more helpless against yield failure. Furthermore, it is additionally the situation that the expanding degree of cultivation and the strengthening of the procedure of cultivation was not going down by new irrigation projects that had progressed toward becoming basics in perspective of the inclination to change over the uplands into rice lands. The farming creation in the Chotangapur likewise stayed indeterminate under the colonial rule, and the area became noticeably inclined to drought and starvations at whatever point the rains failed. It was very familiar that even an incomplete disappointment of rainfall influenced farming conditions, while the absence of it spread over an of the fact that the fare was few in amount, it was more beneficial since the few cultivators are ignorant of the degree of the ascent in costs to offer. Nonetheless, in light of limitations on selling the place that is known for the Adivasi individuals, the grain dealers were unwilling to propel grain notwithstanding for a month or two on the security of the standing product (Dasgupta 2009).

The aftermath of the agrarian emergency escalated with limited access to forests drives to the villagers to move outside the region looking for their new occupation for their survival. This affected them to pick the out-migration, and this pattern of displacement ended up plainly observable towards the end of the nineteenth century.

C. OUT-MIGRATION HISTORY OF CHOTANAGPUR REGION

Migration was not another phenomenon for the diverse people and communities who lived in the Chotanagpur. The vast majority of the tribal individuals of the locale had a background marked by migration. It might be the consequences of the changes of the early colonial period frame that the Adivasis get into the migration, for example, that the Santhals from the Hazaribagh to the *Damin-i-koh* in the Santhal Parganas, a procedure which was begun in the mid-nineteenth century. Numerous illustrations like there was

additionally impressive seasonal migration of the *dhangar* (worker) of Chotanagpur to the Bengal Districts during the winter month as early as 1827 where these individuals discovered work in the Indigo factories, in the winter harvesting of the rice crop in Bengal and in the commission works in Calcutta (Hunter 1886 as cited by Dasgupta 2009). In the course of the nineteenth century, in any case, the nature of migration changed and the hired worker and seasonal farm workers specialists were quickly changed into some portion of the International force. This is soon back off after the completion of the worldwide slave trade that has seen a shortage of work in the island states of Mauritius, British Guiana, Trinidad and even Australia that was refilled through employing contracted work from India during the 1850s. The Chotanagpur tribals came to shape a sizable extent of those taken under the agreement. From the 1850s, be that as it may, their extent started to wind up plainly littler and before the end of the nineteenth century, Chotanagpur Adivasis were at no time in the future systematically enlisted for this. In the meantime, during the 1860s, another interest for the tribal work showed up from an alternative source the tea industry in Assam and in the Duars on Bengal-Bhutan border (Maharatna and Chikte 2004). Migration was the aftereffect of the twofold edged colonial policy of land distance and labour enlistment. Colonial business people created a plantation in Assam and Bengal and in this manner, the Tribals were recruited. In this manner in 1981, 10.5 per cent of the aggregate populace in the territory relocated to different locales (Census: 1901 referred to by Singh and Jha 2016). Starting from the nineteenth century, the Tribals of Jharkhand are known to have been migrating mostly to parts of Bengal and to the tea gardens of Assam. The tribal outmigration was accounted for to be the order of 3, 33,000 in 1891 and this expanded to 9, 47,000 in 1921. As detailed by Tinker (1974), Chotanagpur was soon, directed with coolie recruiters whose workers were eager to make instalments of Rs. 70 to Rs. 90 for each head. In the period of 1870 and 1900 around 700,000 to 750,000 enlisted people for the tea industry, those went to Assam, of whom around 250,000 were from Chotanagpur (Dasgupta 2009). Verifiably, particularly since the late nineteenth century, Bihar emerges to have been the biggest sender of emigrants as announced in Census of India 1951. There were solid signs that the larger part of these *Biharis* displaced people were tribals from the Chotanagpur district (Maharatna and Chikte 2004).

Notwithstanding social and communal limitations against portability and pressure to remain inside the structure of village instead of to migration, the push components or financial impulses were motivators for the Adivasis to move from the locale. There could be the many push and pull factors behind this, yet the most punctual reason was translated by the Detlef Schewerin, where he underscored the part of the institutional elements inside the Chotanagpur to clarify resettlement from the district amid the most recent many years of the nineteenth century. As per him, the ascent of landlordism in Chotanagpur under the British rule conflicted with the predominant custom of mutual possession in the Adivasi association. Furthermore, the other related conditions of the obligation of the Adivasi lower class, the infringement of their properties by the landowner and expanding weakness of their occupancies, through the leads towards the little horticultural extension in the Chotanagpur Division in the nineteenth century. This additionally influenced the utilisation of the lands of the Adivasi working class that were changed over low yielding uplands into higher yielding rice lands and subsequently the per capita accessibility of sustenance grains declined. Nonetheless, in spite of the expansion in the cropland, there was little headway in the farming strategies and its continuation of rain dependence by and large emerge the state of trouble and starvation, and unavailability to the credits from outsiders actuated them to leave their homes to search for employment somewhere else, are the prime reasons that encouraged the mass migration from the Chotanagpur (Dasgupta 2009).

Other than the agrarian reasons, there are also many other interrelated causes that compelled them to move out from their village community. The newly introduced process of industrialisation in the latter half of 19th century in this region and consequent inflows of non-tribal people, as mentioned above, deprived many local Tribals of the natural resources on which they were substantially dependent. They were thus somewhat obliged due to increase pressure of unemployment and poverty to migrate for livelihood to Assam and the other neighbouring states. Alienation of tribals from their homelands as well as from their traditional land rights along with mounting influx of non-tribals immigrants into Jharkhand's tribal areas are the reason often held responsible for the large-scale tribal exodus that has been taking place from this region over a long historical

span. Combined with such 'push factors' for tribal emigration were some 'pull forces' like 'preference' of employers, particularly of tea planters of Assam and Bengal, for tribal migrant workers from the Jharkhand region because of their industriousness and easy acclimatisation in tea gardens (Maharatna and Chikte 2004). The degree of movement from this region expanded as the years passed. In the vicinity of 1880 and 1921, countless Adivasis and semi Adivasis migrated from this area essentially to work in the two noteworthy streams, one coordinated to the tea garden of Assam as specified before and another to the coal mines of Jharia. There was a local and ethnic specialisation in movement inside Jharkhand. The semi-Adivasis and landless stations of Manbhum and Hazaribag generally moved to the coal fields of Jharia while the Tribes like Oraon, Munda, Kharia, Ho and Bhumij of Ranchi, Singhbhum were observed to relocate to both the coalfields and in addition tea gardens. The volume of movement to these zones relied on upon the financial state of the enlisting district of this region (Deogharia 2012).

In the post-independence period, industrialisation and urbanisation processes in Chotanagpur continued and became even more intense, thereby maintaining and perhaps emphasising the historical forces for tribal emigration from the region. Maharatna and Chikte (2004) comment that ironically, they did not find any reason for not continuing the historical pattern of Adivasis vulnerability and their compulsive need for out-migrating to be relevant after independence. Instead, the post-development process has continued to be followed by acute tribal deprivation and distress, and it is often supposed to stress the relative vulnerability and related forced movements in this Chotanagpur region. For example, with various development projects launched in Jharkhand, some of 30 lakhs people were displaced during 1951-95, and it is dismaying that with 90 per cent of them are from Adivasi community. However, the historical pull forces for Tribal out-migration to tea gardens and factories in adjacent states are well known to have declined over time, especially after independence (Maharatna and Chikte 2004).

Table 3.4: Volume of Migration, (erstwhile) Bihar, 1961-1991.

Year	In-Migrants	Out-Migrants (Per centage of Males)	Net Migrants (2)-(3)	Share of Net Migrants Total to natural population (per cent)
1951	11001 (51.0)	1516100 (69.2)	-1505099	-25.99
1961	1097041 (43.5)	2042685 (63.8)	-945644	-19.95
1971	1176408 (38.1)	2201399 (61.6)	-1024991	-17.87
1981	1330920 (33.9)	2536882 (56.6)	-1205962	-16.96
1991	1236209 (25.7)	3147295 (53.3)	-1911086	-21.64

Notes: @ Emigrants are exclusive of Muslim exodus and immigrants are reduced by Muslim exodus. Total natural population - Census enumeration population + out-migrant -In-migrants. Source: Ram and Singh (1994), 'Compelled from the Census of India, State Profile, 1991 as cited by (Maharatna and Chikte 2004).

As compiled by the author, the table provides Census information on total migration flows in (erstwhile) Bihar during 1961-91. As can be seen, migration flows and mobility of population have been dominant features of erstwhile Bihar region's demography. Therefore, since independence, Bihar continues to be a 'sending region' on a net basis. However, it is worth noting that there has been a somewhat steady decline in the proportion of net outmigration from the early 1950s to 1970s (witnessed a severe drought and famine situation in the state).

Maharatna and Chikte (2004) discovered that the extent of outmigration from the former Bihar has generally been proportionately greater among males than females, which seems suggestive of a relative dominance of economic, i.e., male-selective migration for taking advantage of outside employment opportunities, with the family staying back home. However, it has been noticed that the sex-composition of out-migration was becoming increasingly balanced over the past several decades. Moreover, since then there was such a growing trend of family migration may well be consistent with an ongoing process of development associated displacement (presumably mostly of Tribal households of Jharkhand region). This is clarified that the tribes of Chotanagpur have a long history of migration and the earliest reasons were to a great extent of pull factors of financial opportunities in the tea gardens and industrial facilities and it was a huge piece of adult and youthful migrants' development (with some male bias). However, after large-scale tribal displacement that accelerated during the post-

independence period, the out-migration increasingly took the shape of more forced family migration.

Over the last several decades, with the drying up of demand for Adivasi migrant labour outside the Jharkhand, stressing of tribal displacement and hence disruption in livelihood pattern, their growing (relative) inaccessibility to modern amenities, health, and education, they seem to be experiencing relatively large mortality disadvantages. Moreover, this manifest clearly in slower declines (or even sometimes increases) in mortality levels of the tribal population in Jharkhand. (Maharatna and Chikte 2004).

Based on the above discussions it can be concluded that the Chotanagpur region has undergone a series of changes since its evolution. The region has been getting affected by the influx of the outsiders or can be said the non-tribal population since the pre-colonial period continued till the post-colonial period. The above literature clearly pointed out the scenario that the tribal people have been disturbed time to time with the outsiders and ultimately exploited every period with various systems or strategies either related to land or forests. The disturbance of the region's subsistence economy led them to the poverty with the landlessness and forced them to out-migrate for their livelihood. Therefore, it is clear that the Chotanagpur region, where currently the Ranchi district is situated had a history of poverty that gradually gets into a low with the multiple incidents of exploitations such as forest restriction under colonial rule, Land Acquisition Act, and displacements from the lands during the post-independence industrialisation period. Thus, can be said that the poverty in the region is chronic as it is continued since colonial to the post-colonial period depriving the tribal inhabitants of the lands, forests, and livelihood that leads to the degradation of the other factors relevant to the prosperous life. Grounded in these understanding the next chapter will deal with the contemporary contextual situation of the Mandar ock of the Ranchi district and the study villages.

CONTEXUAL FACTORS: SOCIO-ECONOMIC & GEOGRAPHIC LOCATION VARIATIONS

Preceding chapter clearly brings the historical picture of the initiation of the deprivation in the state. The pre-colonial, as well as colonial period and policies, were largely responsible for the ecological shifts and its implications for the economy and people of the Chotanagpur region that are currently placed in the Ranchi district.

Based on the backdrop of socio-historical information, here the study will focus on the findings of the four surveyed villages of Mandar blocks of the Ranchi district, to get an overview of the current situation of the study areas. The socioeconomic contextual understanding of social and physical opportunities in the study villages is the main thrust of this chapter.

The chapter is divided into two broad sections and with its sub-sections. The first and second section is in the context of the area the demographic profile of the Mandar block of the Ranchi district and the four study villages namely Bobro, Deuri Alias Dongatoli, Katchancho, and Murma. Rest four sections are of the socioeconomic profile of the surveyed villages. In the third section, it is about the contemporary status of the agricultural land in the study villages of the Mandar block. In the fourth section, further discussed the village profile of the study area with the basic amenities, infrastructures, housing pattern and the accessibility of the facilities. Moreover, the fifth section discussed the agricultural pattern in the baseline villages by further divided into the traditional and contemporary agriculture and the important crops. The final section is about the migration, covering the information on out-migrant, non-migrant and the commuter households in the baseline villages.

This chapter is to profile some of the key characteristics and opportunities of/in the study area in order to provide the backdrop for the in-depth study of the four villages of the Mandar block of Ranchi district.

I. THE CONTEXT: MANDAR BLOCK OF RANCHI DISTRICT

Ranchi district is one of the twenty-four districts of Jharkhand state in eastern India. Ranchi city, the capital of Jharkhand state is the district headquarters. It was established as a district in 1899. It is situated in the total geographical area of 5,097 Sq.km with the total rural area of around 4,816.02 Sq.km and of the 280.98 Sq. km urban area. In order to develop the contextual understanding of the Mandar block one of the administrative blocks of the district, the demographic profile of the district, as a whole is very much important. Therefore, in this section will deal with the Census data of 2011, to get a whole scenario of the Ranchi district by studying the demographic data.

According to the 2011 Census, the total households are 569,444 consists of 326,235 total rural households and around 243,209 the urban households. The demography of the Ranchi district can be explained by the total population, according to the Census 2011 that is around 2,914,253 comprised of 1,656,918 rural and 1,257,335 of the urban population. The total male population is around 1,494,937 (51.29 per cent), where, 840,528 (56.22 per cent) is rural and 654,409 (43.77 per cent) is urban and the total female population that is around 1,419,316 (48.70 per cent) comprised of 816,390 (57.51 per cent) rural and 602,926 (42.48 per cent) urban population. The district is predominated by the Scheduled Tribes population with around 35.75 per cent of the total population where 75.80 per cent is rural, and around 24.20 per cent is the urban population. The Scheduled Tribe's population is comprised of 49.82 per cent of male and 36.73 per cent of the female population. Where around 76.01 per cent male and around 75.58 per cent female are from the rural population and rest 23.98 per cent male, and 24.41 per cent female is urban population. The situation of scheduled caste population is less in comparison to the schedule tribe population, which is comprised of only 5.24 per cent of the total population where they almost segregated with approximately 10 per cent differences in the rural i.e. 55.09 per cent and urban 44.90 per cent population. The literate population in the Ranchi district is about 65.58 per cent that includes 57.54 per cent of the rural population and around 76.18 per cent of the urban population. Among the literates, the male literacy is far higher, i.e. 72.59 per cent to around 66.67 per cent rural and almost 80.20 per cent of the urban male population, against the female literacy rate which is only 5.82 per cent comprised of 48.15 per cent rural and around 71.82 per

cent urban population. It is evident that the literacy rate in the urban population is much higher than the rural population in the entire sphere.

The workers' data from the Census 2011 of Ranchi district shows that the total working population comprising of both the main workers and the marginal workers is around 39.21 per cent of the total population, whereas, the non-workers population is around 60.78 per cent. It is evident that the dependency number of the population is much more on the small percentage of the working population. In the working population, the percentage of the male workers are around 65.09 per cent and only 34.90 per cent is the female workers. The data show that mostly the male workers are divided into rural, i.e. 58.52 per cent and around 41.47 per cent are urban populations. However, there is a huge difference in the female workers' population data, which shows that around 79.17 per cent female workers are from the rural population, and only around 20.84 per cent of the female workers are from the urban population. The total percentage of the main workers are around 66.16 per cent consists of 73.25 per cent of males where the rural male population is around 51.41 per cent and around 48.58 per cent of the urban population. The female main workers are around 26.74 per cent comprised of 70.41 per cent of the rural population and around 29.58 per cent of the urban female population. Under the main workers, the percentage of the cultivators in the district is around 27.50 per cent comprised of 97.28 per cent rural population and only around 2.71 per cent of the urban population. Here the number of male cultivators is higher, i.e. 65.20 per cent, in comparison to the female cultivators, i.e. 34.80 per cent. The number of the agricultural labourers is only around 13.73 per cent comprised of around 92.39 per cent of the rural population and only 7.60 per cent of the urban population. The percentage of the male agricultural labourers are around 58.61 per cent, and the female is around 41.38 per cent of the total agricultural labourer's population. However, the percentage of the household industry workers are minimal with around 3.13 per cent comprised of 54.14 per cent of the rural population and around 45.85 per cent of the urban population. Here also the percentage of the urban household industry, female workers are less in comparison to the rural female i.e. 68.14 as well as the rural male, i.e. 47.61 per cent and the urban population, i.e. 52.38 per cent. The other workers under the category of the main workers are around 55.64 per cent of the total working

population. Moreover, here the major difference in the male and female population that is around 81.13 per cent of the male population against the minimal per centage of the female workforce, i.e. 18.86 per cent. Another category is the marginal workers that constitute around 51.13 per cent of the total working population consist of 83.78 per cent of the rural population and only around 16.21 per cent of the urban population of the total marginal working population. Under the marginal worker's category, the number of the cultivators consist around 28.31 per cent consist of 45.16 per cent of the male and around 54.83 per cent of the female population. Here also, the category is dominated by the rural population, i.e. around 96.95 per cent of the rural population against the minimal per centage, i.e. 3.04 per cent of the urban population. The household industry workers under the marginal workers are minimal, i.e. around 3.83 per cent comprised of 76.60 per cent of the rural population and around 23.39 per cent of the urban population. The rural population is higher for both the rural male and female i.e. 70.14 per cent and 81.07. The per centage of the other workers are around 25.54 per cent where the rural population is comprised of 51.08 per cent, and the urban population is around 48.91 per cent. Here, the male population is higher than the female population, i.e. around 63.05 per cent and the 36.96 per cent.

II. MANDAR BLOCK: A BASELINE SURVEY OF FOUR VILLAGES

The above data of Ranchi district profile clearly shows the demographic difference of the population considering the core elements of rural and urban and the male and female proportions.

Moving further into the details of the Mandar block profile. Here in this section, we will see the demographic profile at the block level that will help us to understand the population as a whole. The total geographic area of the Mandar block is around 238.24 Sq.km where the whole area falls under the rural area and with no urban sphere. There are around 19 Panchayats, 69 Revenue villages and around seven markets or haat in the Mandar block.

Table 4.1: Total Geographical area of Block/ Village

Block/Village		Total Geographical area (Ha)	Per centage
Mandar (TOTAL)		23823.52	100
1	Bobro	178	0.74
2	Deuri Alias Dongatoli	151	0.64
3	Katchancho	275	1.15
4	Murma	269	1.12

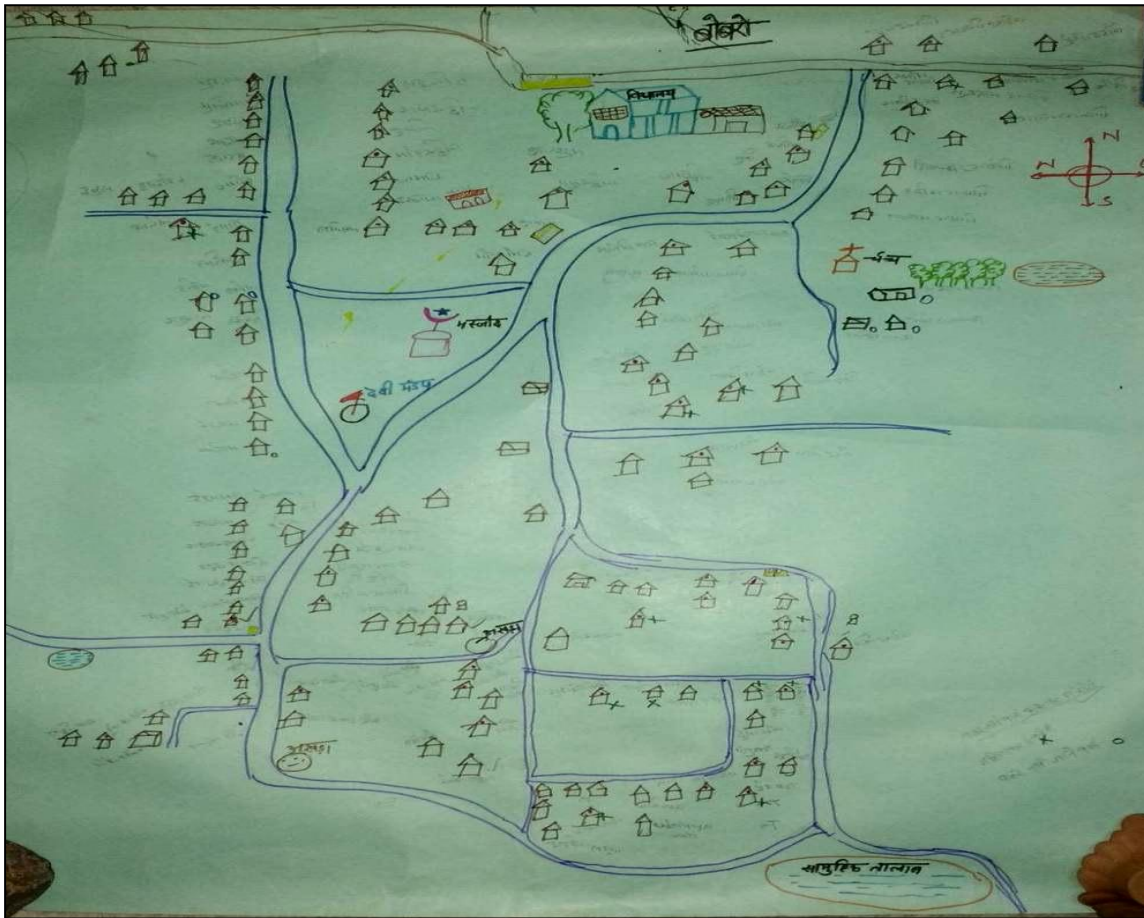
(Source: Census 2011)

The geographical area of the four surveyed villages constitutes altogether around 3.65 per cent, i.e. 873 (Ha) of the total Mandar block. The Katchancho and Murma have the largest geographical area in comparison to the remotest village i.e. Bobro and Deuri Alias Dongatoli.

According to the Census 2011, the total number of the households in the Mandar block is around 22811 which about four per cent of the total households in the Ranchi District. This block is predominantly the rural area where there is no existence of the urban region. The literates in the block are around 57.32 per cent of the total population. Moreover, here the male literate population constitutes around 57 per cent, and female literates are about 43 per cent of the total literate population. The proportion of the illiterates in the block is around 42.67 per cent of the total population where the illiterate males are about 42.12 per cent, and around 57.87 per cent are female illiterates.

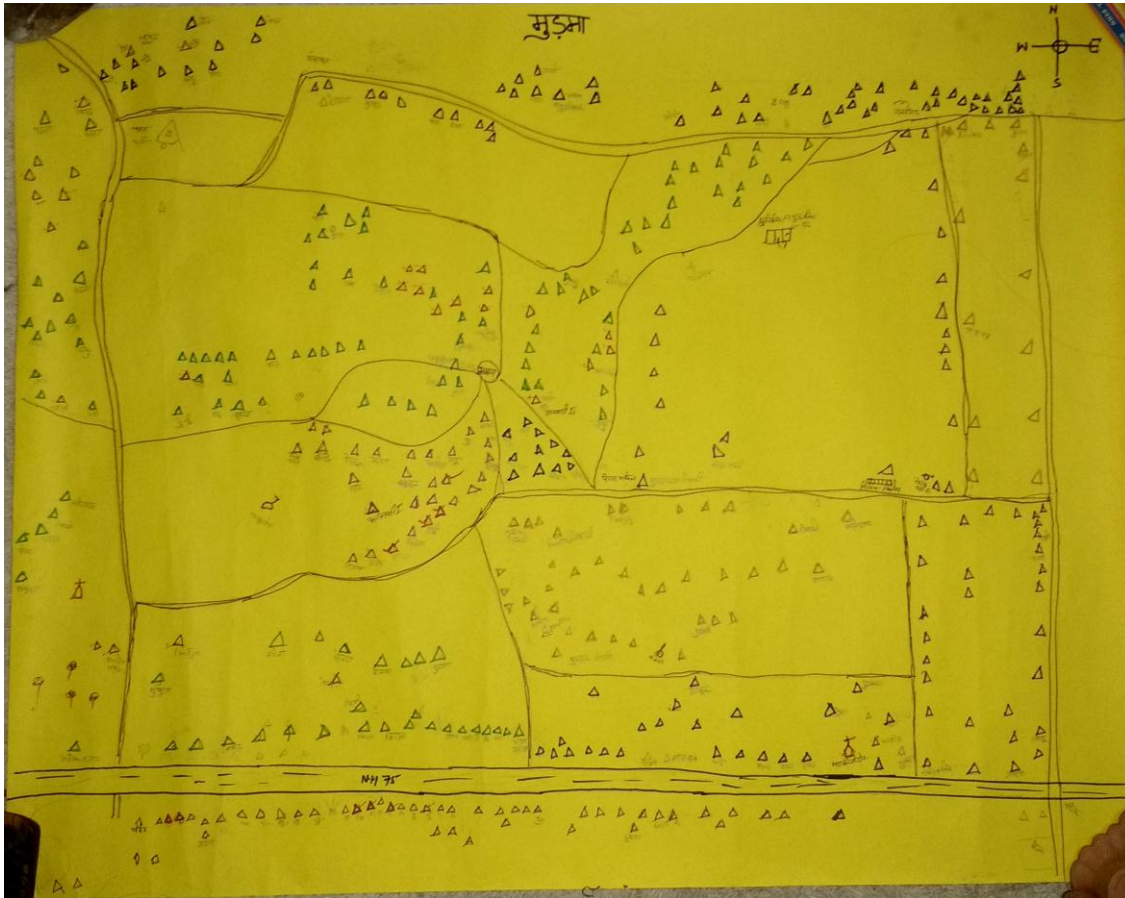
SOCIAL MAPPING OF THE STUDY VILLAGES

Village Social Map 4.1: Bobro (Mandar)



(Source: Primary Data)

Village Social Map 4.4: Murma (Mandar)



(Source: Primary Data)

TABLE 4.2: Total number of households

BLOCK/VILLAGE		Total Households
Mandar Block Total		22811
1	Bobro	207
2	Deuri Alias Dongatoli	85
3	Katchancho	558
4	Murma	462

(Source: Primary Data)

The total numbers of the households of the four surveyed villages are about 1312 that constitutes around 5.75 per cent of the total households of the Mandar block. The two villages nearby to the Mandar block headquarters namely Katchancho and Murma have the larger number of the households, i.e. 2.44 per cent and 2.02 per cent in comparison to the two remote villages i.e. Bobro and Deuri Alias Dongatoli that constitutes 0.90 per cent and 0.37 per cent.

The proportion of the total population of the block is around 4.41 per cent, i.e. 128585 of the total population in the district. The male population is about 50.65 per cent where the female population constitutes around the rest of the 49.34 per cent.

Table 4.3: Total number of village population

BLOCK/VILLAGE		Total Population of Village	Total Male Population of Village	Total Female Population of Village
Sl. No.	Mandar (TOTAL)	128585	65134	63451
1	Bobro	1111	558	553
2	Deuri Alias Dongatoli	548	272	276
3	Katchancho	3074	1531	1543
4	Murma	2670	1364	1306

(Source: Census 2011)

The four surveyed villages constitute around 5.75 per cent (in number 7403) of the total Mandar population. Where the villages form the population proportion of 0.86 per cent in Bobro, 0.42 per cent in Deuri Alias Dongatoli, 2.03 per cent in Katchancho and 2.07 per cent in Murma village. The male population of the four villages is around 5.71 per

cent, whereas the female population forms around 5.79 per cent of the total Mandar population. The total proportion of the SC population in the Mandar block is only about 1.28 per cent comprised of 51.97 per cent of the male and around 48.02 per cent of the female scheduled caste populations.

Table 4.4: Total Schedule Caste Population

Village Name		Total Scheduled Castes Population of Village	Total Scheduled Castes Male Population of Village	Total Scheduled Castes Female Population of Village
Mandar (TOTAL)		1649	857	792
1	Bobro	0	0	0
2	Deuri Alias Dongatoli	0	0	0
3	Katchancho	38	24	14
4	Murma	22	13	9

(Source: Census, 2011)

It has found that there is no scheduled caste population in the two remotest villages namely Bobro and Deuri Alias Dongatoli and the other two villages namely Katchancho and Murma altogether constitutes around 0.03 per cent of the total Mandar block SC population. Moreover, it is comprised of 4.31 per cent of males and around 3.07 per cent of the female SC population.

The region predominantly consists of a Scheduled Tribe population, which constitutes around 60 per cent of the total population where the male population consists of 49.94 per cent and female constitutes about 50.05 per cent.

Table 4.5: Total Scheduled Tribes Population

Village Name	Total Scheduled Tribes Population of Village	Total Scheduled Tribes Male Population of Village	Total Scheduled Tribes Female Population of Village
Mandar (TOTAL)	77143	38531	38612
Bobro	483	231	252
Deuri Alias Dongatoli	533	265	268
Katchancho	2356	1149	1207
Murma	1389	694	695

(Source: Census 2011)

The four surveyed villages altogether constitute the per centage of the total scheduled tribes are around 6.17 per cent, which is 4761 in number in the Mandar block. The total proportion of the ST male population is around 6.07 per cent and 6.27 per cent female population of the total ST population of the Mandar block.

The Mandar block is comprised of the Sarnas, Christian, Muslims and Hindu religions. According to the NFHS II 1998-99 data, the proportion of the population based on the religion shows that the highest proportion in the Mandar block is a Sarna religion with around 39.4 per cent. The Muslims around 28.3 per cent, Christian's population that is around 11.3 per cent and at the end, then follow it with the Hindu population.

Table 4.6: Per cent Distribution of Household by Religion groups in Mandar Block

Religion	Mandar Block (Per centage)
Hindu	19.1
Muslims	28.3
Christians	11.3
Sarnas	39.4

(Sources: NFHS – 1998-99)

Following the same trend, the Bobro village has predominantly the three higher proportions of the religious population groups, namely the Sarna, Christian, and Muslims. The Deuri Alias Dongatoli is dominated by the Sarna religion followed by the Christian population. There are no other religion populations in this village.

Nevertheless, in the Murma and Katchancho village, there are Sarna, Christians and Hindu religious groups and no Muslims population.

The data on the 'working population' shows that the total population of the Mandar block is around 46 per cent of the total population of the Ranchi district, where the male population is about 56.56 per cent and 43.43 per cent of the female population. Under the category of the working population, the proportion of the main working population is about 51.78 per cent that comprised of 63.19 per cent of the male and 36.80 per cent of the female main working population. The cultivators under the class of the main workers' population are around 61.60 per cent where the male population is about 63.24 and 36.75 per cent of the females. The proportions of the female cultivators are less in comparison to the male cultivators. In the other allied activities, also the proportion of the total population is around 21.37 per cent. In the section, the male population those are in the population category of the other allied activities are around 56.83 and 43.16 are the female population. The proportion of the workers under the main household industry is about 3.21 per cent of the total main workers' population comprised of 65.61 per cent male and 34.38 per cent of the female population. Lastly, under the main worker's category is the workers belong to the other main worker population that constitutes are 13.80 per cent where the male population is 72.25 more than the female population, i.e. 27.76 per cent. The other category of the workers' population is the marginal workers, and the proportion of this category is about 48.22 per cent of the total working population. Under the marginal workers, the proportion of the cultivators is about 49.07 per cent where the male population constitutes around 49.19 per cent and about 50.80 per cent of the female population. The proportion of the other marginal allied worker population is about 36.16 per cent. Moreover, the workers belonging to the household industry category are very minimal, i.e. 4.10 per cent of the total marginal working population. In addition, the per centage of the others marginal population is only 10.65 per cent comprised of 60.17 per cent of the male and around 39.82 per cent of the female population. The worker's populations those falls under the category of the marginal workers (3 to 6 months) are about 36.63 per cent where the male population constitutes around 50.90 per cent and around 49.09 per cent of the female population. The marginal cultivator under this category constitutes around 50.84

per cent comprised of 50.46 per cent and around 49.53 per cent of the female population. The population under the marginal allied activities is around 33.45 per cent where the per centage of the female population is slightly more than the male population, i.e. 51.37 per cent in comparison to the male, i.e. 48.62 per cent. The proportion of the workers belongs to the marginal household industry, and the other activities are very minimal, i.e. 3.71 per cent and the 11.96 per cent for the latter. The other category of the working population is the marginal workers (0-3 months). The proportion of the marginal workers under this class is around 11.59 per cent. Where the cultivators under the section are, around 43.47 per cent. It comprised of 44.48 per cent and about 55.51 per cent of the female population. The marginal workers' population under the enumeration of the marginal allied worker population is about 44.72 per cent, and it is comprised of 44.53 per cent of the male population and around 55.46 per cent of the female population. The proportion of the marginal household industry and the others marginal worker category is very less i.e. 5.26 per cent and 6.54 per cent. It is evident that the proportion of the female population is much higher with around 52 per cent than the male proportion, which is around 48 per cent of the total marginal other activity. Moreover, the per centage of the non-workers in the Mandar block is around 54 per cent of the total population, which is comprised of 45.62 per cent of males and around 54.37 per cent of the female population. Therefore, the data show that the non-working population proportion is slightly higher than the working population that means that the dependency is higher in the worker population.

III. CONTEMPORARY STATUS OF AGRICULTURE LAND IN MANDAR BLOCK

Apart from the demographic understanding, the quantitative information about the structure of agriculture in the block is also very crucial. To understand a block and its villages the collected basic data are the main source of information on the basic characteristics of operational holdings such as land use and cropping patterns, irrigation status, tenancy particulars and the terms of leasing. The related data will help in drawing a picture of important aspects of the agricultural economy for all the operational holdings of the people in the Mandar block and its four surveyed villages.

The total forest area of the Ranchi district is around 9.65 per cent of the total Jharkhand's forest coverage area. Moreover, the total forest coverage, including very dense, moderately dense and open forest constitutes around 24.36 per cent of the total geographical area and forms 8.25 per cent of the total forest cover in comparison to the Total Jharkhand's forest coverage area.

Table 4.7: The Total Forest Area of the Ranchi District

District	Geographical Area (Sq. Km)	Forest Cover				Per cent
		Very Dense	Moderately Dense	Open Forest	Total Forest	
Ranchi	7698	148	687	1040	1875	24.36
Jharkhand (Total)	79714	2544	9137	11035	22716	28.50

(Source: FSI 2003)

Out of the total geographic area of the Mandar block, the proportion of the forest area is around 6.62 per cent. The four-surveyed village of the block constitutes a minimal coverage of 22.06 Hectares, i.e. 1.39 per cent of the total Mandar blocks forest coverage. The two villages namely Bobro and Murma do not have any forest area in their periphery and the only Deuri Alias Dongatoli village and Katchancho has the forest coverage of around 1.39 per cent in the Mandar block.

Table 4.8: Total Forest Area of the Block/ Villages of Mandar Block

Block/ Village Name		Forest Area (in Hectares)
Mandar (TOTAL)		1577.856
1	Bobro	0
2	Deuri Alias Dongatoli	20.88
3	Katchancho	1.18
4	Murma	0

(Source: Census 2011)

Other than Forest Area of the Mandar block, the other areas that are uncultivable and not use for the agricultural purposes serve the large part of the geographic land area. The data show that the total areas under the non-agricultural uses of the four surveyed

villages are around 100.39 (ha) i.e. 4.39 per cent of the total Mandar block non-agricultural used land. The land area under the barren and uncultivable land area, only Murma has such land area, and it constitutes around 1.06 per cent of the total land in the Mandar block of under the category.

Table 4.9: Total land area under Non-Agricultural Uses, Barren & Un-Cultivable Land, Land under Miscellaneous Tree Crops, etc. Area, Culturable Waste Land Area and Fallows Land other than Current Fallows Area of the Block/ Villages

Village Name	Area under Non-Agricultural Uses (in Hectares)	Barren & Uncultivable Land Area (in Hectares)	Permanent Pastures and Other Grazing Land Area (in Hectares)	Land Under Miscellaneous Tree Crops etc. Area (in Hectares)	Culturable Waste Land Area (in Hectares)	Fallows Land other than Current Fallows Area (in Hectares)
Mandar (TOTAL)	2282.52	1895.33	538.65	262.31	1969.52	2453.47
1 Bobro	31.2	0	0	0	92.58	0.78
2 Deuri Alias Dongatoli	28.27	0	0	0	2.48	14.33
3 Katchancho	36.14	0	0	0	18.22	23.77
4 Murma	4.78	20.12	0	161.14	9.53	0

(Source: Census 2011)

The status of the permanent pastures and the other grazing land area is around 538.65 (ha) in the Mandar block, but there are no such land areas available in any of the four villages. The Murma village only contributes the land under the miscellaneous tree crops, etc. area of the four surveyed villages and it constitutes around 61.19 per cent of the total of Mandar block. The culturable wasteland area under the four villages constitutes around 122.81 (ha) i.e. 6.23 per cent of the total Mandar block. Moreover, the fallow land other than the current area under these four-surveyed villages altogether forms around 38.88 (ha) i.e. 1.58 per cent of the total land of the Mandar blocks.

The land uses of the Mandar block villages are very crucial to understand the agricultural economy of the area. In the survey of the four villages, it has found that the net area was sown are around 378.35 (ha) which constitutes around 8.13 per cent of the total net sown area of the Mandar block. The total land sown in the Bobro village is around 27.84 per cent, Deuri Alias Dongatoli is around 42.75 per cent, Katchancho is around 69.49 per cent, and Murma sowed land area is around 27.29 per cent of their respective village's total geographical land. The total un-irrigated land area of the four

villages is around 354.46 (ha) which constitutes around 3.95 per cent of the total land under the Mandar block.

Table 4.10: The total Net Sown area, Un-irrigated land, Area irrigated by different sources in the Block/Villages

Village Name	Net Area Sown (in Hectares)	Total Unirrigated Land Area (in Hectares)	Area Irrigated by Source (in Hectares)	Canals Area (in Hectares)	Wells/ Tube Wells Area (in Hectares)	Tanks/Lakes Area (in Hectares)	Waterfall Area (in Hectares)	Other Source (specify) Area (in Hectares)
Mandar (TOTAL)	4650.93	8946.72	948.17	0	518.53	318.75	1.18	107.71
1 Bobro	49.56	35.28	14.28	0	8.16	6.12	0	0
2 Deuri Alias Dongatoli	64.26	54.65	9.62	0	4	3.62	2	0
3 Katchancho	191.1	191.1	0	0	0	0	0	0
4 Murma	73.43	73.43	0	0	0	0	0	0

(Source: Census 2011)

The area irrigated by the sources is around 23.9 (ha) which forms around 2.52 per cent of the total irrigated land under Mandar block. Whereas, the two villages namely Katchancho and Murma does not have any irrigated land by the sources. The area irrigated by the wells/ tube wells contributed by the two villages namely Bobro and Deuri Alias Dongatoli together formed around 12.16 (ha) i.e. 2.34 per cent of the total Mandar block. The land area irrigated by the tanks/ lakes is around 9.74 (ha) which constitutes around 7.26 per cent of the total Mandar land area under this category. Only Deuri Alias Dongatoli has a land area irrigated by the river water, and it forms around 169.49 per cent of the total land area irrigated by the river water in the Mandar block. Apart from above, cited irrigation sources, there is no other facility through which the land under the four surveyed village area uses for the irrigation purpose.

IV. LAND HOLDING PATTERN: RANCHI DISTRICT AND MANDAR BLOCK

The land holding pattern in the Ranchi district is different for the different farmers. The highest proportion is of the marginal farmers having landholding of fewer than one hectares is around 55.62 per cent. Whereas the small farmers with a landholdings of one hectares to less than two ha is around 16.35 per cent, followed by medium farmers with the landholdings of two ha to less than four ha is 14.93 per cent, and the proportion of the large farmers with the landholding of four ha to less than 10 ha is around 10.62 per cent. It has found that the proportion of the extra large farmers with the landholding of more than 10 ha is very minimal and it is around 2.48 in the district.

Table 4.11: Landholding pattern of Ranchi District

CLASS OF FARMER	NUMBER	PERCENTAGE
Marginal farmers, Holding less than 1 ha	135751	55.62
Small farmers, holding 1 ha to less than 2 ha	39914	16.35
Medium farmers, holding 2 ha to less than 4 ha	36444	14.93
Large Farmers, holding 4 ha to less than 10 ha	25958	10.62
Extra large farmers, holding more than 10 ha	6063	2.48

(Source: NABARD, Ranchi cited in <http://atmaranchi.org/srep/chapter3.pdf>).

Following the same pattern, the different categories of the farm household, according to the land holding in the Mandar block show the number of the farmers with the land holdings of less or up to one hectare is larger i.e. 5486 in comparison to the other farmers' category. Whereas, the farmer household with a size of landholding 1.1 - 2 ha is only 250, followed by the increase in the number of the farm size between 2.1 – 5 ha is around 1680. The number of the household is higher in the landholding category of 5-10 ha which is about 380, and it is more than the second landholding category i.e. 1.1 to 2 ha. The number of the landholding category falls under the farm size of more than 10 ha is only 24 in the Mandar block.

Table 4.12: Different Categories of Farm Household in Mandar block.

Sl. No.	Class & Size of Farm	Mandar
1	Marginal farmers, 0 - 1 ha	5486
2	Small farmers, 1.1 - 2 ha	250
3	Medium farmers, 2.1 - 5 ha	1680
4	Large Farmers, 5.1 - 10 ha	380
5	Extra large farmers, More than 10 ha	24

[1 Ha = 2.47 Acres]

(Source: NABARD, Ranchi cited in <http://atmaranchi.org/srep/chapter3.pdf>).

Table 4.13: Number and Area of householding by Size group in Mandar

Sl. No.	Size of Holding (in ha.)	Individual Holdings		Joint Holdings		Sub-Total (Individual+ Joint)		Institutional Holdings		Total Holdings	
		Number	Area	Number	Area	Number	Area	Number	Area	Number	Area
(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)	(9)	(10)	(11)	(12)
1	MARGINAL	7175 (75.23) [62.73]	2124 (72.44) [15.5]	2362 (24.77) [56.85]	807 (27.52) [13.64]	9537 (100) [61.16]	2931 (99.97) [14.94]	0 (0) [0]	0 (0) [0]	9537 (100) [61.16]	2932 (100) [14.94]
2	SMALL	1709 (73.03) [14.94]	1777 (73.01) [12.97]	631 (26.97) [15.19]	657 (26.99) [11.1]	2340 (100) [15.01]	2434 (100) [12.41]	0 (0) [0]	0 (0) [0]	2340 (100) [15.01]	2434 (100) [12.41]
3	SEMI MEDIUM	1505 (67.98) [13.16]	3805 (67.73) [27.77]	709 (32.02) [17.06]	1813 (32.27) [30.64]	2214 (100) [14.2]	5618 (100) [28.63]	0 (0) [0]	0 (0) [0]	2214 (100) [14.2]	5618 (100) [28.63]
4	MEDIUM	952 (69.64) [8.32]	4980 (69.31) [36.34]	415 (30.36) [9.99]	2205 (30.69) [37.26]	1367 (100) [8.77]	7185 (100) [36.62]	0 (0) [0]	0 (0) [0]	1367 (100) [8.77]	7185 (100) [36.62]
5	LARGE	97 (71.85) [0.85]	1016 (69.97) [7.41]	38 (28.15) [0.91]	436 (30.03) [7.37]	135 (100) [0.87]	1452 (100) [7.4]	0 (0) [0]	0 (0) [0]	135 (100) [0.87]	1452 (100) [7.4]
6	ALL CLASSES	11438 (73.35) [100]	13703 (69.84) [100]	4155 (26.65) [100]	5918 (30.16) [100]	15593 (100) [100]	19621 (100) [100]	0 (0) [0]	0 (0) [0]	15593 (100) [100]	19621 (100) [100]

Note: Total May not Tally Due to Rounding off; Figures in Square Brackets are per centages to All Classes; Figures in Brackets are Relating to their Respective Totals
(Sources: Agriculture Census Data, 2011)

V. VILLAGE PROFILE: BASIC AMENITIES, INFRASTRUCTURE, HOUSING PATTERN AND ACCESSIBILITY

The study area is divided into the two categories as mentioned earlier in the methodology chapter, i.e. remote rural and peri-urban villages to get a clear picture of the variations based on the geographic locations and the related socio-economy of these villages. According to the distance (proximity) from the Mandar block, the distant villages namely Bobro and Deuri Alias Dongatoli are categorised under the remote rural study villages, whereas the proximate villages namely Katchancho and Murma were placed into the peri-urban village category.

A. BASIC AMENITIES & INFRASTRUCTURES

The four surveyed villages also reflect on the infrastructural development of the Mandar block through the availability of the basic amenities and the facilities or services such as the status of the drinking water facility, electricity or power supply and the roads, etc. Even the availability of the schools and the banking services in the locality shows the varied picture.

Table 4.14: Distribution of the villages according to the distance of available Services and Amenities in the study villages

Panchayat	Village	Remote Village		Peri-Urban Village	
		Sarwa	Mandro	Murma	Mandar
		Bobro	Deuri Alias Dongatoli	Murma	Katchancho
Availability of Services and amenities in Distance (Km)	District HQ	60 Km (Ranchi) on road/ 42 Km by train	55 Km (Ranchi)	38 km (Ranchi)	32 Km (Ranchi)
	Block HQ	30 Km (Mandar)	25Km (Mandar)	8 Km (Mandar)	2 Km (Mandar)
	Police Station	3 Km (Narkopi)	10 Km (Narkopi)	6 Km (Mesal)	1 Km (Mandar)
	Primary School	0 Km	0 Km (In Village)	0 Km (In Village)	2 Km (Mandar)
	Middle School	0 Km	1.5 Km (Silagain)	5 Km (Murma)	2 Km (Mandar)

	High School	3 Km (Bajra); 12 Km (Nawatand)	10 Km (Chanho)	5 Km (Murma)	1 Km (Mandar)
	Intermediate College	12 Km (Nawatand)	10 Km (Chanho)	4 Km Belangi/Pandra; 2 Km (Brambe)	3-4 km (Mandar)
	College	42 Km (Ranchi)/ 15 Km (Chanho)	10 Km (Chanho)	6 Km Mandar, 22 km (Ranchi)	3-4 (Mandar)
	Hospital	3 Km (Narkopi)	10 Km (Chanho)	6 Km (Murma)	1 Km (Mandar)
	M&CWC	30 Km (Mandar)	26 Km (Mandar)	6 Km (Murma)	2 Km (Mandar)
	Add.PHC/PHC	30 Km (Mandar)	26 Km (Mandar)	6 Km (Murma)	2 Km (Mandar)
	Sub-Health Centre	2 Km (Chigri)	6 Km (Mandro)	1 Km (Sursa)	2 Km (Mandar)
	NRC/FPC	30 Km (Mandar)	26 Km (Mandar)	6 Km (Murma)	2 Km (Mandar)
	Post Office	15 Km (Tangerbasli)	1.5 Km (Silagain)	0 Km (Murma)	1 Km (Mandar)
	Bank	15 Km (Tangerbasli)	10 Km (Chanho)	0 Km (Murma)	2 Km (Mandar)
	Veterinary Services	3 Km (Narkopi)	10 Km (Chanho)	6 Km (Chund)	1 Km (Mandar)
Shops	Grocer/ General Merchant	0 Km (In Village)	1.5 Km (Silagain)	0 Km (In Village)	1.5 Km (Mandar)
	Utensils & Other HH Items	3 Km (Narkopi)	1.5 Km (Silagain)	2 Km (Murma)	1.5 Km (Mandar)
	Clothing	3 Km (Narkopi)	10 Km (Chanho)	6 Km (Murma)	1.5 Km (Mandar)
	Tailoring	3 Km (Narkopi)	1.5 Km (Silagain)	0 Km (In Village)	1.5 Km (Mandar)

	Haircut	0 Km (In Village)	1.5 Km (Silagain)	0 Km (In Village)	1.5 Km (Mandar)
	Medicine	3 Km (Narkopi)	1.5 Km (Silagain)	2 Km (Murma)	1.5 Km (Mandar)
	Govt. Fair Price Shop	6 Km (Sarwa)	1.5 Km (Chigri)	8 Km (Hutar/Bijupada)	0 Km (In Village)
	Weekly Market	3 Km (Bajra); 3 Km (Narkopi)	1.5 Km (Silagain)	8 Km (Hutar/Bijupada); 2 Km (Brambe); 5 Km (Makhmandro)	1.5 Km (Mandar); 0 Km (In Village)
Small Industrial Establishment	Rice/Flour/Oil press Mills	0 Km (In Village); 3 Km (Narkopi)	1.5 Km (Silagain)	1 Km (Murma)	1 Km (Mandar)
	Others	Dairy Cooperative (Personal)- 0 Km	NA	NA	NA
Electricity, Water & Transport	Electricity	Village Electrified in 2010-11; Irregular Supply; Metered but not paid once	Village electrified- 1998; Irregular; Metered Bt not pay regularly (1200/- per annum)	Village Electrification- 1990-92; Regular; Metered & paid around 110/- per month	Village Electrified - 1994-96; Regular; Metered & paid around 105/- per month
	Drinking Water	Handpump - 4 (3 Commons, 1 Personal); Well-5 (4 Commons, 1 Personal); Pond -2 (1 personal, 1-Commons)	Handpump - 5 (3 Dysfunctional); Well - 7 (1 Personal); Pond - 1	Handpump -3; Well -1 ; Pond - ; Supply water - beside Roads (*Ribbon Development)	Handpump - 10 (4 Dysfunctional); Well -1 (Persoanl) ; Pond - 3
	Transport	Auto-rickshaw, Train; PCC road inside village; motorable roads	Auto-rickshaw; PCC road inside village; motorable roads	Auto rickshaw, Bus; PCC road inside village; motorable roads connected to NH75	Auto rickshaw, Bus; PCC road inside village; motorable roads Connected to NH75

(Source: Primary Data)

The remote rural village i.e. Bobro village comes under the Sarwa panchayat, and the distance of this from the Ranchi district headquarter is about 60 km by road and 42 km by train. The distance of this from the block headquarter Mandar is about 30 Km from the village. The other remote village Deuri Alias Dongatoli's comes under the Mandro panchayat. Moreover, the distance from the Ranchi headquarter is about 55 Km, and the Mandar block headquarter is about 25 km.

The peri-urban village Murma comes under the Murma panchayat, and the distance of the village from the Ranchi district headquarter is about 38 km, and the block headquarter is only about 8 km from the village. The other peri-urban village, namely Katchancho comes under the Mandar panchayat, and the distance of the village from the Ranchi district headquarter is about 32 km, and from the block headquarter is only about two km.

All the rural and peri-urban villages are well connected by a pucca road to the state capital and to the block headquarter.

The basic amenities of the four villages were surveyed to understand the situation of the area and its available facilities to get the developmental idea of these areas.

i) Educational Institutions/Schools: The data on the schools in the vicinity reflects that there are no government pre-primary schools in the Mandar block. Out of four surveyed villages, only Murma village has one private pre-primary school. All total there are five private pre-primary schools in the Mandar block. The nearest pre-primary schools in all the four villages are the private in nature that is around 5-10 km distant from the villages. Only in Katchancho village, this facility is available within the five km. There are no government primary schools in all the three villages except the Bobro village. Nevertheless, there are two private primary schools available in Katchancho village, and the rest of the three villages do not have any private primary schools. In such case, only Bobro have the nearest private primary schools at the distance of less than five km from the village.

The status of the government middle school is also the same. It is only available in the two villages namely Katchancho and Murma. There are two government middle schools in the Katchancho village, and one is available in the Murma village. Rest two

villages do not have any government as well as private middle schools. In such case, the nearest facility available from the village Deuri Alias Dongatoli is within 1.5 km in Silagain, whereas, it is about five km from the Murma village and around two km from the Katchancho village. The government secondary school is only available in the Murma village, whereas the other three villages do not have any Govt. secondary school in their vicinity. There are no private secondary schools in the locality and not even in the Murma village. The nearest government secondary school is present in the three villages namely Bobro, Mandar and Katchancho are less than five km away, and only Deuri Alias Dongatoli village distance is more than 5- 10 km from the village. The status of senior government secondary is also similar where it is only available in the Murma village, whereas the other three villages do not have this facility in their vicinity. There are no private senior secondary schools in the surveyed villages. The nearest facility is unavailable in all the two villages namely Bobro, Deuri Alias Dongatoli except the Murma and Katchancho village and it is present at the distance of more than 10 km except the Katchancho and Murma village where the distance is about 3-4 km from the village.

Apart from the schoolings facility, there is no government as well as private colleges in the surveyed villages. However, the nearest government college is available in the Sosai village. Only Mandar has its college in the Mandar headquarter within the distance of 5-10 km, whereas the Murma and Katchancho village, the facility is available at the distance of less than five km. Whereas, the remotest villages Bobro either has to go to Ranchi covering around 42 Km or 15 km to Chanho. The Deuri Alias Dongatoli avail this by covering the distance of around 10 km in Chanho.

ii) Health Institutions: The status of the health facility infrastructure was also surveyed under these four villages. The data show that there are no Community Health Centres (CHC) in any of the surveyed villages. The facility is available in more than 10 km away from these villages. There are no Primary Health Centres (PHC) in any of the four villages except the facility available within the distance of less than five km in Katchancho and Murma village. Whereas, the rest of the remote village has to avail this service by covering more than 30-26 km distance from the village. The sub-health

centres, MCHWC and T.B centre, is available only in the Katchancho and Murma village within one and two km. Moreover, the remote villages do not have any of this facility because Bobro village sub-centres, which are around 2 km is dysfunctional and Deuri Alias Dongatoli people go to Mandro around 6 km. The Centre was recruited with the one doctor in MCHWC, one doctor in T.B clinics along with the two T.B para-medical staff. There is one allopathic hospital with one doctor and one para-medical staff. However, the rest of the other village has to avail these services at the distance of more than 10 km from the respective villages. There is an only one alternative medical hospital with one doctor and one staff, and for this service, the other villages have to cover around more than 10 km to get access to it. There is one dispensary in the Katchancho village with one doctor and one para-staff. There are no veterinary hospitals near the four surveyed villages, and it is available at the distance of more than 10 km from the villages. There are no mobile health clinics available in any of the villages. The three villages namely Bobro, Deuri Alias Dongatoli and Katchancho have to avail it from the distance of more than 10 km away from the village, and only Murma have this facility within the distance of 5-10 km. In Katchancho village there is family welfare committee available, rest three villages do not have this facility. They have one doctor along with a para-medical staff for this committee. There is two Non-government facilities, a medical practitioner with the other degree (not MBBS), and two medicine shops of this non-governmental medical facility are available in the Murma village.

iii) Drinking Water Facility: It has found that under the drinking water facility there is no tap water treated with any of the four villages. There are no covered wells as well instead of having uncovered well in all the four surveyed villages. The status of this source is that it doesn't function throughout the year in all the three villages except in the Murma village where it is also in the condition of functioning during the summer months (April-September). The hand pump is available in all the four villages for the drinking water purpose, and it is functioning throughout the year, including during the summer months (April-September) except in the Murma village. There is no tube wells or borehole in any of the study villages. Moreover, found that there are no springs in any of the villages instead there is one river South Koel in the village, namely Deuri Alias

Dongatoli and in Bobro village and the rest of the two study village have no such water sources. However, these water bodies do not function throughout the year, especially during the summer months (April-September). It has found that there is a pond in all the three villages except the Murma village. Nevertheless, it is not functioning throughout the year, especially during the summer season.

iv) Drainage System: The other facility that shows the living conditions of any village is through the drainage system of any village. It has found that there is no closed drainage in any of the surveyed villages as well as there is not even the facility of the open drainage system. So as a result, all the drain water is discharged directly into the potholes and the depressions. It is most evident during the rainy season. Any of the four villages are not covered under the total sanitation campaign. Therefore, there is no community toilet complex (including nor excluding bathroom) for the public. It has also found that there are no facilities available for the rural production centres or sanitary hardware availability near the village in all the three villages except Katchancho village.

Other than the basic amenities the other services important for the daily uses of general village dwellers to make life easier is also coming under the indicator of the development.

v) Post Office: The facilities like the availability of the Post Office lacks in the two of the study villages namely Bobro and Deuri Alias Dongatoli except for the Katchancho and Murma village. So the distance of these services is almost more than 15 Km from the Bobro village and about 10 Km from the Deuri Alias Dongatoli village. There is no post and telegraph office in the three villages except in the Katchancho village, and it is about less than five km away from the Murma village, 5-10 km away from the Deuri Alias Dongatoli and more than 10 km from the Bobro village. The mobile phone coverage is available in all the four study villages.

vi) Road Facility: The national highway NH 75 is available in only the two villages namely Katchancho and Murma village and the rest of the two villages i.e. Bobro and Deuri Alias Dongatoli has to cover more than 10 km to get in touch with the national

highway. The state highway passes only through the Murma village. The major district roads are available only in the two villages namely Katchancho and Murma village.

The black topped (*Pucca*) road is available in all the four surveyed villages, and there are gravel (*Kutchha*) roads within the villages. The water-bounded macadam is present in all the four villages. These are all weather roads. There are footpaths in all the villages.

vii) Transport Facility: The status of the public or private transport is not well in the study areas. It has found that there are no public bus services in the three villages namely Bobro, Deuri Alias Dongatoli and Katchancho except the Bobro village. In addition, in such condition, the people have to access it from more than 10 km distance. Moreover, there are private bus services available in only the two villages namely Murma and Katchancho village. There is no railway station in the village except the Bobro village where the distance of the railway is less than five km, and the rest of the village have to cover more than 10 km distance to avail these services. However, it has found that every village has the facility of the auto-rickshaw or the modified auto-rickshaws. There is the availability of tractors in all the four villages and cart is driven by the animals is only available in the Murma village.

viii) Banking Facility: It has found that there are no banking services available in the four surveyed villages. There are no ATM services nearby to the villages, and only Murma village has access to the nearest ATM at the distance of 5-10 km. There are no commercial banks, the two villages namely Bobro and Katchancho have this service at more than 10 km distance and the Deuri Alias Dongatoli, and Murma has to cover the distance of 5-10 km. There are no agricultural credit societies available in any of the study villages and have to cover the distance of more than 10 km from the respective villages. Moreover, it has found that there are no Self-help groups (SHGs) available in any of the study villages where they can access the micro-credits for the financial needs.

ix) Public Distribution System (PDS): Other important village services like Public distribution service shops/ fair price shops is very crucial elements for any village. It has found that there are no PDS shops in the study villages and the facility is available

within 5-10 km of the Bobro and Deuri Alias Dongatoli whereas the Katchancho and Murma have to cover less than 5 km distance.

x) Market Facility: The availability of the *Mandis*/ regular market is not available in the four surveyed villages. It is available in more than 10 km distance away from all the three villages except the Murma village that has this facility within less than 5-10 km distance. The weekly haat (local market) for the shopping is not available in any of the villages, and the villagers of Bobro have to go Bajra around three km or Narkopi around three km distant. Whereas, the Deuri Alias Dongatoli avail this within 1.5 km. The peri-urban villages Katchancho have to avail from Brambe i.e. two km or eight km away Hutar/ Bijupada or from five Km Makhmandro village. The Murma village avails it from Mandar which is 1.5 Km from the village. There is no agricultural marketing society in any of the study villages except the Murma where it is available within 5-10 km. The rest has to cover more than 10 km distance to avail this service.

xi) Health services: The health services to any of the villages are very important indicators to measure the coverage of the health issues of the locality. It has found that the nutritional centres–ICDS are not available in any of the four surveyed villages and they avail this at less than five km distance from the respective villages. The Anganwadi centres are available in almost all the study villages. There is the availability of health functionaries like Sahiya (ASHA), an Anganwadi worker with one the Sevika or Anganwadi Assistant in every study villages.

xii) Other Facilities: There is an assembly polling station in the four surveyed villages. However, there is no Birth and Death registration office in the Bobro and Deuri Alias Dongatoli village, whereas the Katchancho and Murma have it. To avail this service the distance is less than five km from the Bobro village and within 5-10 km from the Deuri Alias Dongatoli.

xiii) Electricity: The power supply for the domestic as well as for the agricultural use is available in all the villages, but the condition of the power supply is not in a good phase. Because, there is no power supply for the commercial in all the three villages, except in the Murma village. The power supply for commercial purpose is available for 10 hours

per day throughout the year in the Murma village. It is including the summer season (April-September) and in the winter season (October-March).

From the above-given data, it is clear that the proximity of the services is much more feasible in the peri-urban villages in comparison to the remotest villages. However, in the remote village, Bobro is much more privileged due to the proximity to the village centre 'Narkopi' where there is a ribbon development due to the establishment of the railway station. Nevertheless, the other remote village i.e. Deuri Alias is very much underprivileged in terms of the availability and accessibility of the services and amenities.

It has found that all the four villages are equipped with many schemes like community development schemes, MNREGA, Indira Awas, Ration Card Distribution schemes and public distribution schemes. There are many socioeconomic and developmental organisations like Anganwadi Centre, Middle school and Health Centre, which are working to improve the status among the villagers. However, the only Anganwadi centre is available in every village, and the centre is opened according to the village population. There is two AWC in the Bobro village, Katchancho, and Murma based at two hamlets, each except at Deuri Alias Dongatoli where there is one AWC in the village.

Both the remote rural and peri-urban villages primarily indulge in the agricultural activities for the livelihood. Mostly villagers used to grow paddy as their main crop, they have less irrigated land, and the farmers do irrigation through wells and ponds. Apart from the self-owned land, there are proportions of operated land under-tenant cultivation, but as usual, the tenancy is more prevalent among the landless households. The majority of the households are engaged in agriculture, though some of the households are also engaged in non-farm activities. It has been observed that both in the remote and peri-urban villages it is less diversified in towards animal husbandry or livestock. It has been told by the respondents of all most all the four villages that the number of the livestock has been decreasing over the last several years and reason told were due to the non-availability of fodder and manpower to look after them. Also, added

information that the villagers are not growing fodder for the last several years due to the impact of the severe drought in the areas. Even the Deuri Alias Dongatoli that has a forest area does not show much inclination towards the animal husbandry.

B. HOUSING CONDITION

The study villages housing conditions depict the developmental status of any area. It has found that in the remote rural areas the proportions of the good houses are less i.e. 8.2 per cent in Deuri Alias Dongatoli and 37 per cent in the Bobro village, in comparison to the peri-urban villages i.e. 40.8 per cent and 46.4 per cent in Katchancho and Murma village. However, the dilapidated households are less in every four villages, but the condition of the houses is only livable. It is more in Deuri Alias Dongatoli with the highest proportion of around 85.9 per cent, and others are around between 50 per cent. Most the households are residence type, and the residence-cum-other use houses are minimal in the peri-urban villages, and there are no houses under this category in the remote rural villages.

Table 4.15: Distribution according to the Household Conditions of the Study Villages

Area Name	Number of households with condition of Census House as											
	Total				Residence				Residence-cum-other use			
	Total	Good	Livable	Dilapidated	Total	Good	Livable	Dilapidated	Total	Good	Livable	Dilapidated
Deuri Alias Dongatoli	100	8.2	85.9	5.9	90.6	8.2	76.5	5.9	9.4	0	9.4	0
Bobro	100	37	51.9	11.1	99.5	37	51.4	11.1	0.5	0	0.5	0
Katchancho	100	40.8	56.6	2.6	95.4	38.6	54.4	2.4	4.6	2.2	2.2	0.2
Murma	100	46.4	50.6	3	98.3	44.7	50.6	3	1.7	1.7	0	0

(Source: Census 2011)

It has found that in the remote villages the proportion of the handmade tile roof of the houses is highest with around 77.6 per cent and 87.5 per cent in Deuri Alias Dongatoli and Bobro. In addition, the peri-urban houses hold the proportion of the around 63.7 per cent and 58.3 per cent in the Katchancho and Murma village. The proportion of the concrete roof of the house is highest in the Katchancho village with around 23.1 per cent and lowest in the Bobro village with around 1.4 per cent. Therefore, it is clear with the data that the concrete roofs of the houses are higher in the peri-urban villages than the remote rural villages. The asbestos roof is trending the all the villages. However, the high proportion is present in the Murma village with around 14 per cent and lowest in the Deuri Alias Dongatoli with around 1.2 per cent. The roof with the grass or thatched or bamboo is founded minimal in these villages. It is present only in the Katchancho village with around 0.4 per cent and in Murma around 1.1 per cent, and the rest of the village does not have any such houses.

Table 4.16: Distribution according to the Material of the Roof of the house of the study villages

Area Name	Rural/Urban	Material of Roof								
		Grass/Thatch/Bamboo/Wood/Mud etc.	Plastic/Polythene	Handmade Tiles	Machinemade Tiles	Burnt Brick	Stone/Slate	G.I./Metal/Asbestos sheets	Concrete	Any other material
Deuri Alias Dongatoli	Rural	0	0	77.6	14.1	0	0	1.2	7.1	0
Bobro	Rural	0	0	87.5	0	0	0	11.1	1.4	0
Katchancho	Rural	0.4	0	63.7	0.7	0	0.4	11.7	23.1	0
Murma	Rural	1.1	0	58.3	2.6	3.8	4.7	14	15.5	0

(Source: Census 2011)

According to the data, another criterion to identify the housing condition is the material of the wall in the house. It has found that mostly the house walls are made of the mud or un-burn bricks and burnt brick. The highest proportions of the houses in the

remote rural areas are of mud with the proportion of around 90.3 per cent in Bobro and 87.1 per cent in the Katchancho village. Moreover, the proportion in the peri-urban is low in comparison to the remote villages i.e. 61.2 per cent of Katchancho and 48.5 per cent houses in Murma. Only 0.5 per cent houses in Katchancho village are, of concrete and rest other is made up of burnt bricks which are highest in the peri-urban villages and minimal in the remotest villages.

Table 4.17: Distribution according to the material of wall of the houses in the study area

Area Name	Material of Wall									
	Grass/ Thatch/ Bamboo etc.	Plastic/ Polythene	Mud/ Unburnt brick	Wood	Stone not packed with mortar	Stone packed with mortar	G.I./ Metal/ Asbestos sheets	Burnt brick	Concrete	Any other material
Deuri Alias Dongatoli	0	0	87.1	0	0	3.5	0	9.4	0	0
Bobro	0	0	90.3	0	0	0	0	9.7	0	0
Katchancho	0.2	0	61.2	0	0.2	0.7	0	37.2	0.5	0
Murma	19.8	0	48.5	0	0.2	0	0	31.5	0	0

(Source: Census 2011)

The housing materials of the floor in the houses are of mud in almost all the villages of the study villages. However, the remote villages are higher around 90 per cent, whereas the peri-urban has only 60 to 70 per cent houses with mud flooring. The cement flooring is higher in the Katchancho village with around 29.9 per cent and the lowest in the remote village Deuri Alias Dongatoli with around 3.5 per cent.

Table 4.18: Distribution according to the material of floor of the houses in the study villages

Area Name	Material of Floor						
	Mud	Wood/ Bamboo	Burnt Brick	Stone	Cement	Mosaic/ Floor tiles	Any other material
Deuri Alias Dongatoli	96.5	0	0	0	3.5	0	0
Bobro	91.7	0	0	0	8.3	0	0
Katchancho	63.7	0	5.7	0.4	29.9	0.4	0
Murma	78.3	0	2.1	0	19.6	0	0

(Source: Census 2011)

The number of dwelling rooms in the study villages can understand the living condition, and according to the data, it shows that in both the remote and peri-urban villages the proportions of the two rooms are around 30-40 per cent. It shows the similarity in almost all the villages. There are also houses with no exclusive rooms in the Deuri Alias Dongatoli and in Katchancho village with around 2.4 per cent and 2.7 per cent. The great variation could be seen in the Katchancho village where the highest proportion of the six rooms, dwelling with around 13.9 per cent is also present.

Table 4.19: Distribution according to the number of dwelling rooms of the study village

Area Name	Number of Dwelling Rooms						
	No exclusive room	One room	Two rooms	Three rooms	Four rooms	Five rooms	Six rooms and above
Deuri Alias Dongatoli	2.4	5.9	38.8	21.2	23.5	2.4	5.9
Bobro	0	25.5	38.9	15.7	14.8	1.9	3.2
Katchancho	2.7	9.5	30.2	15.8	19.2	8.6	13.9
Murma	0	4.7	37.7	29.4	17.2	6.6	4.5

(Source: Census 2011)

The household size in the study villages varies from one to more than nine in a house. The highest proportion is found in the household, the size of 6 to 8 members. The highest proportion is of Bobro with around 42.6 per cent, followed by the around 30 to

40 per cent in other three villages. The proportion is then followed by the 5, 4 and 3 which in between around 10 to 20 per cent. It has found that the proportion of more than nine household size is in Deuri Alias Dongatoli with around 22.4 per cent.

Table 4.20: Distribution according to the Household size in the study villages

Area Name	Household size						
	1	2	3	4	5	6-8	9+
Deuri Alias Dongatoli	3.5	7.1	2.4	16.5	11.8	36.5	22.4
Bobro	2.8	8.8	10.2	10.6	17.6	42.6	7.4
Katchancho	2.6	7.5	10.3	18.7	18.7	33.2	9.2
Murma	1.1	3.2	7.4	18.5	23.4	38.5	7.9

(Source: Census 2011)

In both the remote villages and the urban villages, the houses are owned fully by the dwellers. Only in the peri-urban villages, the houses are found rented which is highest in the Katchancho village. This may be due to the ribbon development and proximity to the Mandar block headquarters.

Table 4.21: Distribution according to the ownership status of the Household in the study villages

Area Name	Ownership status		
	Owned	Rented	Any others
Deuri Alias Dongatoli	100	0	0
Bobro	100	0	0
Katchancho	81.7	13.4	4.9
Murma	93.4	1.5	5.1

(Source: Census 2011)

According to the data, the proportion of the married couple in the households is one in the almost both the remote and peri-urban villages. The number of the two couple in a house is highest in the Deuri Alias Dongatoli.

Table 4.22: Distribution according to the Married couple in the households in the study villages

Area Name	Married couple					
	None	1	2	3	4	5+
Deuri Alias Dongatoli	7.1	51.8	22.4	14.1	4.7	0
Bobro	9.3	75.9	13	1.9	0	0
Katchancho	17.8	65.2	12.6	4	0.4	0
Murma	6	74.9	14.3	4	0.6	0.2

(Source: Census 2011)

It has found that only 2.2 per cent of the household has the tap water from the related sources, whereas all the other villages belong to the remote as well as peri-urban villages uses the uncovered well and the hand pumps.

Table 4.23: Distribution according to the Main sources of drinking water in the study villages

Area Name	Main Source of Drinking Water									
	Tap water from treated source	Tap water from un-treated source	Cove red well	Un-cover ed well	Ha nd pu mp	Tube well/ Boreh ole	Spri ng	River/ Canal	Tank/ Pond/ Lake	Other sources
Deuri Alias Dongatoli	0	4.7	2.4	69.4	23.5	0	0	0	0	0
Bobro	0	0	0.5	29.2	70.4	0	0	0	0	0
Katchancho	2.2	0.9	8.1	46.5	40.7	1.6	0	0	0	0
Murma	0	0	1.9	30.4	67.7	0	0	0	0	0

(Source: Census 2011)

The household proportion in the remote villages has to go far away for fetching the drinking water, and the proportions are highest in the Deuri Alias Dongatoli with around

70.6 per cent. It has found that the water sources within the premises are highest in the peri-urban villages that are around 19-20 per cent. In addition, the water sources near premises are mostly present in the remote village Bobro followed by the Murma village. It can be said that the drinking water location in both remote and peri-urban villages are almost similar.

Table 4.24: Distribution according to the Location of drinking water sources in the study villages

Area Name	Location of drinking water source		
	Within premises	Near premises	Away
Deuri Alias Dongatoli	4.7	24.7	70.6
Bobro	8.8	58.8	32.4
Katchancho	20.1	21.8	58.1
Murma	19.1	53.4	27.4

(Source: Census 2011)

The household data says that the main source of the lighting in both remote and peri-urban villages is electricity. The highest proportion of the connected electricity is in the Deuri Alias Dongatoli. Moreover, the highest proportion of lighting through kerosene is in the Bobro village. It has found that almost every villages both remote and the peri-urban villages are still dependent on the kerosene oil though there is electricity in the household. It has found that the usage of the electricity is very minimal and only for lightning one or two bulb and recharging the mobile if any. It cannot be used for higher voltage requirements tasks.

Table 4.25: Distribution according to the main source of lighting in the study villages

Area Name	Rural/ Urban	Main Source of Lighting					
		Electricity	Kerosene	Solar energy	Other oil	Any other	No lighting
Deuri Alias Dongatoli	Rural	83.5	15.3	1.2	0	0	0
Bobro	Rural	41.2	58.8	0	0	0	0
Katchancho	Rural	77.3	22	0	0	0.5	0.2
Murma	Rural	60.2	39.8	0	0	0	0

(Source: Census 2011)

The study revealed that the households having the toilet facility in the remote villages are very low, whereas the peri-urban villages have the highest proportion of this facility. In the peri-urban villages, the highest proportion of the good latrine connected to the sewers or the other systems is available in the Katchancho village.

Table 4.26: Distribution according to the households having latrine facility in the study villages

Area Name	Number of households having latrine facility within the premises	Flush/pour flush latrine connected to			Pit latrine		Night soil disposed into open drain	Service Latrine	
		Piped sewer system	Septic tank	Other system	With slab/ventilated improved pit	Without slab/open pit		Night soil removed by human	Night soil serviced by animal
Deuri Alias Dongatoli	3.5	1.2	1.2	1.2	0	0	0	0	0
Bobro	5.1	0.5	4.6	0	0	0	0	0	0
Katchancho	47.6	0.4	39.7	3.1	4.2	0.2	0	0	0
Murma	15.3	0	8.7	4.5	2.1	0	0	0	0

(Source: Census 2011)

According to the data, the number of the household with no latrine facility within the premises are highest in almost all the villages both remote and peri-urban villages. But the proportion is low in the Katchancho village. There are no public toilets have been reported, and almost every village has to go for the open defecations. The proportion having the bathing facility within the premises is higher only in the Katchancho village. In addition, the proportion of no bathing facility is higher in almost all the villages.

Table 4.27: Distribution according to the Households not having a latrine facility in the study villages

Area Name	Number of households not having a latrine facility within the premises	Alternative sources		Number of households having a bathing facility within the premises		
		Public latrine	Open	Yes		No
				Bathroom	Enclosure without roof	
Deuri Alias Dongatoli	96.5	0	96.5	2.4	2.4	95.3
Bobro	94.9	0	94.9	1.4	3.2	95.4
Katchancho	52.4	0	52.4	30.2	17.6	52.2
Murma	84.7	0	84.7	7.2	13.6	79.1

(Source: Census 2011)

There is no closed drainage for the waste water outlet in any of the village except the Bobro and Katchancho village. However, the open drainage is available in Bobro village around 81.9 per cent, whereas it is lowest in the Deuri Alias Dongatoli. The proportion of the no drainage facility is the problem of both the remote as well as peri-urban villages except the Bobro remote village.

Table 4.28: Distribution according to the wastewater outlet drainage system of the study villages

Area Name	Waste water outlet connected to		
	Closed drainage	Open drainage	No drainage
Deuri Alias Dongatoli	0	1.2	98.8
Bobro	4.6	81.9	13.4
Katchancho	2.2	15.4	82.4
Murma	0.2	45.1	54.7

(Source: Census 2011)

The data revealed that the study villages both remote and peri-urban villages are using firewood for cooking purpose. It is highest in Deuri Alias Dongatoli with around 95.3 per cent, followed by the Murma village with around 83.4 per cent, and then followed by the Bobro and Katchancho village with around 60.2 per cent and 68.7 per cent. The other fuel is crop residual which is highly used in Bobro by around 33.8 per cent, followed by Katchancho village with around 14.1 per cent. It has found that cow dung is used only in the remote villages.

Table 4.29: Distribution according to the type of fuel used for cooking in the study villages

Area Name	Type of Fuel used for Cooking									
	Fire-wood	Crop residue	Cow dung cake	Coal, Lignite, Charcoal	Kerosene	LPG/PNG	Electricity	Bio gas	Any other	No cooking
Deuri Alias Dongatoli	95.3	3.5	1.2	0	0	0	0	0	0	0
Bobro	60.2	33.8	6	0	0	0	0	0	0	0
Katchancho	68.7	14.1	0.5	6.2	0	10.3	0	0	0.2	0
Murma	83.4	8.7	0	2.3	0	3	0.2	0	2.3	0

(Source: Census 2011)

The study revealed that the kitchen facility that is having cooking space inside the house is higher in all the remote and peri-urban villages around 80 to 99 per cent. Nevertheless, the proportion of the kitchen inside the house is mostly present in the Bobro, and Katchancho village belongs to both the remote as well as peri-urban villages. The proportion is very low in the Deuri Alias Dongatoli village with around 4.7 per cent. The proportion of the houses that do not have the separate kitchen inside, the cooking space is higher in the Deuri Alias Dongatoli with around 94.1 per cent followed by the Murma village. The kitchen facility outside the house space is about approximately one per cent, whereas the house proportion does not have a kitchen, even in the outside cooking space is higher in the Murma village with around 13 per cent, followed by nine per cent in the Katchancho village.

Table 4.30: Distribution according to the Kitchen facility of the study villages

Area Name	Kitchen facility							
	Total	Cooking inside the house:	Has Kitchen	Does not have kitchen	Cooking outside the house:	Has Kitchen	Does not have kitchen	No Cooking
Deuri Alias Dongatoli	100	98.8	4.7	94.1	1.2	1.2	0	0
Bobro	100	99.5	73.6	25.9	0.5	0	0.5	0
Katchancho	100	89.7	66.5	23.3	10.3	1.3	9	0
Murma	100	85.1	37	48.1	14.9	1.9	13	0

(Source: Census 2011)

The household availing the banking services are higher in the remote village i.e. Deuri Alias Dongatoli with around 67.1 per cent. It is followed by the Katchancho village with around 67 per cent, and then 47.7 per cent in Murma village and 31.5 per cent in Bobro village.

Table 4.31: Distribution according to the household availing banking services in the study villages

Area Name	Total number of households availing banking services
Deuri Alias Dongatoli	67.1
Bobro	31.5
Katchancho	67
Murma	47.7

(Source: Census 2011)

It has found in the data that the user of the mobile is high in both the remote and peri-urban villages. The peri-urban villages namely Katchancho is around 56.4 per cent, and Murma is having a similar proportion of around 56.8 per cent. However, the proportion of the remote villages namely Deuri Alias Dongatoli and Bobro is around 49.4 per cent and 35.2 per cent respectively. The proportion of the two wheelers in the peri-urban is higher in comparison to the remote villages. However, the usage of the bicycle is higher in the remote villages, and the proportion is higher in the Deuri Alias Dongatoli with around 81.2 per cent, followed by the Bobro i.e. around 71.8 per cent. Whereas, the peri-urban villages has the proportion of around 60 to 64 per cent. The houses with the television are higher in the peri-urban village Katchancho is around 43.8 per cent and rests other villages have only 11 to 17 per cent houses. For the entertainment purpose, the houses still have the radio or transistors, and it is higher in the Deuri Alias Dongatoli and in the Murma village with around 40 to 45 per cent.

Table 4.32: Distribution according to the availability of assets in the households of the study villages

Area Name	Availability of assets											
	Radio/Transistor	Television	Computer/Laptop		Telephone/Mobile Phone			Bicycle	Scooter/Motorcycle/Moped	Car/Jeep/Van	Households with TV, Computer/Laptop, Telephone/mobile phone and Scooter/Car	None of the assets specified in col. 10 to 19
			With Internet	Without Internet	Landline only	Mobile only	Both					
Deuri Alias Dongatoli	45.9	11.8	1.2	1.2	0	49.4	1.2	81.2	2.4	1.2	2.4	5.9
Bobro	25	10.2	0	0	0	35.2	0.5	71.8	9.3	0.5	0	22.2
Katchancho	14.3	43.8	1.3	1.3	3.5	56.4	0.7	61.2	22.2	3.7	1.3	14.1
Murma	41.9	17.4	0.2	3	0	56.8	1.7	63.4	14.9	3.6	0.6	15.7

(Source: Census 2011)

According to the data, the household type of structure of the houses in the study villages shows that the proportion of the permanent household is higher in the peri-urban villages with around 38.6 per cent and 31.7 per cent in the Katchancho and Murma villages. The houses in this category are low in the Bobro village with around 9.7 per cent. The proportion of the houses having semi-permanent households is almost high in every study villages where the highest proportion is in the Bobro village, followed by Deuri alias Dongatoli, Murma and then Katchancho village.

Table 4.33: Distribution according to the Household by types of structure of the houses in the study villages

Area Name	Households by Type of Structure of Census Houses					
	Permanent	Semi-Permanent	Total Temporary	Serviceable	Non-Serviceable	Unclassifiable
Deuri Alias Dongatoli	12.9	87.1	0	0	0	0
Bobro	9.7	90.3	0	0	0	0
Katchancho	38.6	61	0.4	0.4	0	0
Murma	31.7	67.2	1.1	1.1	0	0

(Source: Census 2011)

After getting the whole picture of the socioeconomic context of the four survey villages, it has found that the basic amenities and the available services are not up to the standard. The Villages have to cover long distances to fulfil the daily requirements. Therefore, it is very much evident that the services and facilities in the four surveyed villages are very poor. Based on this information the researcher will discuss the agriculture pattern of these survey villages of the Mandar block to gain an understanding of the agriculture economy of the study villages to enhance greater clarity about the baseline village's economy.

V. AGRICULTURE PATTERN IN THE BASELINE VILLAGES

In the previous chapter, it has been discovered that due to structural changes and the socio-environmental changes there is some displacement of traditional technology in the agriculture in the Ranchi district. Therefore, this section will try to find out the agriculture pattern of the four surveyed villages to understand the agriculture economy of the particular village dwellers.

A. TRADITIONAL AND CONTEMPRORY AGRICULTURE IN THE STUDY VILLAGES

It has observed that in all the four study villages' people still practices the traditional agriculture by usage of the simple equipment that used for the cultivation. In all the four

surveyed villages people uses the cattle-drawn implements, including wooden single furrow ploughs with the iron ploughshares, harrows and levellers that all were made locally. It has found that the clods were broken with a wooden mallet and crops harvested with a sickle and threshed by the cattle walking over them. In all, the study villages, the winnowing undertaken with a bamboo basket locally known as *soop* and husking carried out with the use of a foot-operated wooden price pounder known as *dhenki*. Some people still use the bullock cart made of wood and bamboo for the transportation, which almost replaced by the tractors in many villages. It has found that the irrigation facility in all the four study villages is almost very rare. It is due to the expensiveness of the wells, building in the area. These are not particularly common and were primarily buildup for the drinking and bathing water and not for the irrigation purpose. In well the main systems used for drawing water were either a bucket on a rope or a *latha* (log) which consisted of a long wooden lever pivoted two posts and weighted at the end a metal pail was attached to the other end and it could be drawn down to collect and lift water out of the well.

Table 4.34: Typical Crops and Productivity Levels of Different Land Types in Mandar Block

Land Type	Yield (Hectares)	Main Crops
Doin 1	1.9	Aghani Paddy (harvested in December)
Doin 2	1.9	Aghani Paddy (harvested in December)
Doin 3	1.5	kartika Paddy (Harvested in November)
Doin 4	0.9	Bhadoi Paddy (harvested in October)
Tanr 1	0.8	Gora paddy, pulses, millets and oilseeds
Tanr 2	0.4	Gora paddy, pulses, millets and oilseeds
Tanr 3	0.2	Gora paddy, pulses, millets and oilseeds

(Source: Reid, 1912 As cited by Jewitt S, 2014:25)

* These figures have been converted from the original data, which quoted in maund. Although the value of the maund varies across India from between 25 and 90 lb (roughly 10-40 kg) in the Jharkhand, 1 maund is roughly equal to 40 kg.

It has discovered that the irrigation was limited to the tribe (Oraon) household with wells on their uplands or fields close to streams and natural depressions; cultivation is restricted exclusively to the *kharif* (monsoon) season i.e. June to November. The staple food crop in the area is rice. The best paddy has traditionally grown on relatively wet

and fertile terraced lowlands (*doin*) which are further divided into four elevations related categories with different harvesting times and productivity levels. It has been told that earlier the *doin* lands were cultivated annually and manure every second or third year. However, since a few years back the farmers of the Mandar area, used to plant different varieties of paddy in their field each year and alternate transplanting with broadcasting that helps them to alleviate the mono-cropping nature of *doin* paddy cultivation. As discussed in the earlier chapter the quality of land that was drier and of poorer quality uplands are known as *tand* and have traditionally been planted with *gora* (upland) paddy in rotation with the other crops. It has been observed that in the remote areas where there is no proper facility of irrigation, the *tand* land was left fallow once in every two or three years. The most *tand* in the area has traditionally been cultivated in a four-year rotation consisting of *madua* millet, *gora* paddy, *urad* pulse and coarse millet called *gondli* that grows even in the poorest fertile land. By the end of the rotation, the soil has been usually friable and ready for ploughing and manuring for the next crop cycle. Many tribal households who could afford the time and labour to dig wells on their uplands saw growing irrigated *Rabi* vegetables or made nurseries for paddy seedlings for the transplantations on to the *doin* land. It has also observed that many of the households, especially the tribal households also owned a plot or a *bari* or homestead land which they could survive closely and cultivate intensively. Such land was commonly enclosed and planted with kitchen vegetables such as guards, okra, beans, potatoes, maize, tomatoes, and aborigines. Apart from the hardy crop cultivation, such as *bodi*, *arhar*, lentil, *kurthi* and oilseeds on the more moisture-retaining *tand* or garden vegetables on intensively managed *bari* land, and it was said that the *rabi* crops had been earlier not that important until recently. The reason behind less irrigated cultivable lands in the Mandar blocks villages are said to be due to the water logging of the lowlands, the dryness of the uplands and difficulties in digging wells in an area with hard base rock and the low water table. Other than these stated problems, the fragmentation of land due to rapid population compelled the farmers to learn the new method of cultivation, to improve their uplands by the use of manure, and to make good crops in their lowlands by means of irrigation.

Over time, as told by the elderly people of the four surveyed villages, the landholdings became more fragmented, and household survival strategies became more tenuous, that lead to a decline in the individual as well as joint landholding sizes. Moreover, widespread forest decline in the state, as elsewhere, has reduced the availability of many forest-based subsistence items. As a result, therefore many forced to diversify their economic activities. In addition, the farmers indulge in agriculture as their primary livelihood were started cultivating the field more tenuously. Therefore, very little agricultural land remains uncultivated during the *kharif* season and the broadcasting of *doin* paddy had replaced by the transplantation method. More changes have occurred on the usage of the uplands, many of which are now far more intensively farmed than before. It has told, that the upland fallows common in remote villages like Bobro and Deuri Alias Dongatoli a century ago have all but disappeared as dwellers used annual manure and increasingly chemical fertilisers applications to enable these lands to be cultivated at least once in a year. The annual upland cultivation has a long history; a shift to yearly manuring has caused a decline of traditional four-year rotation. According to the below table prepared by the Reid (1912), Hallet (1917) and Sinha (1976) clearly depicted the crop rotation in the Mandar areas.

Table 4.35: Traditional Four-Year Crop Rotation

	Main Kharif Crop	Inter Crop	Late-Kharif Pulses (If residual moisture available)
Year 1	Marua Millet (<i>Eleusine Corocana</i>)	Bodi pulses (<i>Vigna catiang</i>)	
Year 2	Gora paddy	Arhar Millet	
Year 3	Urad Pulse (<i>Phaseolous roxburghii</i>)		pulses including lentils gram and kurthi (<i>Dolichos biflorus</i>); oilseeds including mustard, linseed and <i>surguja</i> (<i>Guizota abyssinica</i>)
Year 4	Gondali millet (<i>Panicum milaire</i>)		Kurthi and <i>Surguja</i>

[Sources: Reid (1912), Hallet (1917) and Sinha (1976) As cited by Jewitt S, 2014:26]

In time, most of the good quality irrigated *tand*, and basic land came to be planted with wheat, potatoes, sweet potatoes, tomatoes, peas, beans, okra, maize, aborigines, gourds, pumpkins, radish, onions, chilli, and garlic, etc. in the villages of the Mandar block. It has been observed that the best fields are now usually planted with improved varieties of

wheat and vegetables with the good supervision and heavily fertilised with farmyard manure, compost, and increasing chemical fertiliser. The local village farmers of the study villages responded to demand by both the local and distant urban centres including Kolkata for the winter vegetables. It has been very recently that there is dry season vegetable growing owes much to the fact that it can be both profitable and high yielding. The resource-poor farmers such as the Muslims community of the Bobro village and the marginal holding farmers of the four surveyed villages also carried this out, as it requires less land and is more labour intensive than the capital intensive. In the surveyed villages, it has found that the irrigated *rabi* cultivation focusing on high yielding and commercially valuable vegetables like potatoes has been such a widespread intensification strategy in this area. Such cropping pattern not only benefitted to the owner-cultivators but also to the agricultural labourers by getting an option of growing labour intensive Rabi crops to compensate for paddy shortfalls.

It has found that the agriculture is practised as both the traditional with the modernity of the technology in the four surveyed villages. The tractors are rarely feasible due to the small size of the plots and limited capital of most farmers, so bullock carts are still the primary means of transportation of bulky goods. Sickles are still driven, the pump set is now commonly used for irrigating *rabi* crops, many wells still have the traditional lotus systems in the study villages.

B. IMPORTANT CROPS OF THE BASELINE VILLAGES

In all the four surveyed villages it was evident that the agroecological knowledge is practised along with the modern agricultural methods and the local labourers are not losing the work as consequences of mechanisation. The people adopted the agriculture intensification, and it was not associated with either the landlessness or biodiversity loss. Therefore, a crop grown a century ago are still grown contemporary and that many of the intercropping systems remain the same.

Apart from the intensified rice and wheat cultivation, people in the area also inclined towards the cash crop cultivation. It is possible due to the awareness that had created since a 60's. The villagers experimented with the commercially valuable

vegetables such as potatoes, tomatoes, seasonal vegetables such as pea, cauliflower, cabbage, etc. alongside with the kitchen vegetables for their own uses. Moreover, it has been observed that in the recent time, most of the village good quality of irrigated *tand* and *bari* land is planted with wheat, potatoes, sweet potatoes, tomatoes, pea, varieties of beans, okra, maize, aubergine, variety of gourds, pumpkins, radishes, onions, chilli, garlic, and pulses. As told by the villagers, the best fields are usually planted with the improved varieties of wheat and vegetables that are well supervised and heavily fertilised with farmyard manure, compost, and increasingly chemical fertilisers.

Before moving into the crop seasonality and the information on the important crop grown in the baseline village, an overview of the infrastructure, implements, and institutions available in the Mandar block are very crucial to understand the current situation of the cropping or cultivation ability of the study area.

Table 4.36: Infrastructure, Implements, and Institutions in the Mandar Block.

Sl. No.	Infrastructure, Implements and Institutions	No.
1	Tractors	76
2	Tubewells (Non)	94
3	water saving irrigation implements - drip, sprinkler	9
4	Other implements	276
5	Diesel operated Tube wells (per cent)	NA
6	Per cent of villages connected with roads	30
7	Flow of institutional credit to agriculture (per cent)	17
8	No. of Kisan credit card issued till March 2007 or similar date	NA
9	Extension of KGK/KVK or similar extension School	NA
10	Institution that runs K (G/VK)	NA
11	Govt. Input supply centre	3
12	Ag. Produce Market: Regulated or others	4
13	Farm Produce storage facility (No. and Size/ Qty.)	NA

[Source: (Information with respect to above particular may be a specific year, say 2006-07, the difference in the reference year for an item may be mentioned explicitly in the row) as cited by <http://atmaranchi.org/srep/chapter3.pdf>].

Table 4.37: Important crops grown and crop seasonality of the Baseline villages of Mandar Block

Sl. No	Crops				Time Grown	Months when they occur			Remarks
	Grains	Vegetables	Pulses	Oil Seeds		Sowing	Harvesting	Marketing	
1.	Paddy, Ragi/ Madua, Wheat, Jau	Chili, Ginger, Capsicum, Cauliflower, Pigeon pea, Corriander, Ridge Gourd, Radish, aubergines, okra, pea, French beans, oal, arbi, tomato, onion, Sakhin, Groundnut	Masoor, Urad, Arhar	NA	March-June	June	Wheat, 2nd or 3rd crop of vegetables in March	March	* Very small production of the vegetables, basically for the own consumptions
2	Paddy, Ragi/ Marua, Maize	Cauliflower, Cabbage, Tomato, Aubergine, Groundnuts, Ginger, Bottle gourd, pumpkin, okra, radish, sweet potato, sakhin, toti, cucumber, potato, chilli, pigeon pea, coriander, ridge gourd, oal, beans (seam),	Masoor, Urad, Arhar, Kurthi,	Tissi, Mustard,	June-July	June and July	NA	NA	
3	Paddy, Ragi/ Marua, Maize	Cauliflower, Cabbage, Tomato, Aubergine, Groundnuts, Ginger, Bottle gourd, pumpkin, okra, radish, sweet potato, sakhin, toti,	Masoor, Urad, Arhar, Kurthi,	Tissi, Mustard,	August-September	NA	Cauliflower, cabbage, and Maize in August	August	

		cucumber, potato, chilli, pigeon pea, coriander, ridge gourd, oal, beans (seam),							
4	Paddy, Ragi/ Marua, Wheat, Maize	Cauliflower, Cabbage, Tomato, Aubergine, Groundnuts, Ginger, Bottle gourd, pumpkin, okra, radish, sweet potato, sakhin, toti, cucumber, potato, chilli, pigeon pea, coriander, ridge gourd, oal, beans (seam), Sugar cane, Spinach, Capsicum	Masoor, Urad, Arhar, Kurthi,	Tissi, Mustard,	October - November	Wheat – November	Vegetables and maize – November	November	* Vegetables are for the commercial purposes
5	Paddy, Ragi/ Madua, Wheat	Cauliflower, Cabbage, Tomato, Aubergine, Groundnuts, Ginger, Bottle gourd, pumpkin, okra, radish, sweet potato, sakhin, toti, cucumber, potato, chilli, pigeon pea, coriander, ridge gourd, oal, beans (seam), Sugarcane, Spinach, Capsicum	Masoor, Urad, Arhar, Kurthi,	Tissi, Mustard,	December- January	NA	Paddy and Ragi – December	NA	* For self-consumption

(Source: Primary Data)

If we see this agriculture trend in the larger aspect that is in the district and at the block level, then the data show that the important crops of the region are paddy, wheat, maize, pulses, oilseeds, and vegetables.

Table 4.38: Season wise crop was sown (ha) 2008 in Ranchi District.

Crops	Kharif	Rabi	Zaid	Total
Paddy	252923	NA	NA	252923
Maize	6199	7	NA	6206
Pulses	38914	5857	NA	44771
Oilseeds	4722	4234	NA	8956
Vegetables	6022	16626	5164	27812
Wheat	NA	4953	NA	4953
Total	308780	31677	5164	345621

(Source: DAO, Ranchi as cited in <http://atmaranchi.org/srep/chapter3.pdf>)

Table 4.39: Area under Vegetable crops in Ranchi District (Acres) 2006.

	Crops	Area (Acres)
Vegetables	Potato	5892
	Onion	2137
	Peas	2017.56
	Ginger	2733
	Tomato	1893.86
	Cauliflower	2762
	Cabbage	1952
	Others	9500
Spices	Coriander	43.25
	Ginger	83.85
	Garlic	317.81
	Chili	101.69

[Source: Gene Campaign (RKVY) as cited in <http://atmaranchi.org/srep/chapter3.pdf>]

In the Ranchi district, the paddy is the main crop that is grown majorly in a larger land area during the *kharif* season, and it is followed by the pulses, maize, vegetables and oilseed crop. In the *rabi* season vegetables are grown majorly in the largest land area, and it is followed by the pulses and wheat. During summer season known as *zaid*, only vegetables are grown in the field but not at the larger scale. In vegetables, pea and tomatoes are the large crops that are sown in the large area in acres, and it is followed by the several *rabi* cash crops such as potatoes, cauliflower, onion, cabbage, and others.

Other than these vegetables, garlic is sown in a greater quantity followed by chilli, ginger, and coriander.

Indeed, these clearly show that the agriculture is in good condition in comparison to the other districts of the Jharkhand. Nevertheless, the concern here is that in the presence of fair agriculture opportunity why there is the existence of out-migration in the district and especially in the Mandar block. In the next section will explore the information on the migration in the Mandar block that will help in understanding the scenario of the out-migration in the baseline villages.

VI. MIGRATION: BASELINE VILLAGES

Table 4.40: Total Migrants Households in the Baseline Villages of Mandar Block.

BLOCK/VILLAGE		Total Households	Total Out-Migrant Households	Total Commuters Households	Total Non-Migrant Households
Mandar Block Total		22811			
1	Bobro	207	46 (22 %)	25 (12 %)	130 (65 %)
2	Deuri Alias Dongatoli	85	53 (62 %)	8.5 (10 %)	23.5 (28 %)
3	Katchancho	558	111.6 (20 %)	167.4 (30 %)	279 (50 %)
4	Murma	462	101.64 (22 %)	147.84 (32 %)	212.52 (46 %)
5	Total HH	1312 (100 %)	312.24 (23.79 %)	348.74 (26.58 %)	645.02 (49.63 %)

(Source: Primary Data)

It has found that in the four surveyed villages the highest out-migrant households is in the Deuri Alias Dongatoli with around 62 per cent of the total households. Whereas, the other three villages namely Bobro have around 22 per cent, 22 per cent in the Murma and around 20 per cent in the Katchancho village. It can be said that the households of out-migrants are higher in the tribal dominated villages and remotest villages i.e. Deuri Alias Dongatoli followed by the Bobro. The other two are peri-urban villages that have a less proportion of the out-migrant households. Altogether around 23.79 per cent are of out-migrant households in the study area.

The commuters' households are around 26.58 per cent of the total households in the four study areas. Where, the remote villages constitute around 12 per cent and 10 per cent in Bobro and Deuri Alias Dongatoli, respectively. Whereas, the proportion of the peri-urban is slightly higher with around 30 per cent and 32 per cent in Katchancho and Murma village. The reason behind is because of the distance of the town or block headquarters that have the availability of jobs/ employments, where people commute daily for work and return back in the evening.

The non-migrant households in the surveyed villages are around 49.63 per cent. It is evident that the proportion is around 65 per cent and 28 per cent in the remote villages of Bobro and Deuri Alias Dongatoli, respectively. In the peri-urban villages, the proportion is around 50 per cent and 46 per cent, in Katchancho and Murma village. The main reason behind observed behind opting for staying back and never or not migrating depending upon the landholding patterns of the households. It has found that large and medium landholdings households are mostly non-migrants and the households with marginal and medium landholdings households opt for the seasonal out-migration. Whereas, the landless or marginal farmers are the commuters in the surveyed villages.

It has found that with the considerable increase and improvements in means of communication, transports, literacy among the labour forces and increased level of information and awareness, migrants have begun to go as far as South and Northeast. Secondly, migration was definitely of a temporary nature in the earlier periods. Single male migrants were more likely to return to their native village. Despite these changes, the pattern of migration still male dominant and semi-permanent. Thus, increasing reliance on the migration or the remittances system, agriculture and for the village members (primarily women, children and the elderly) who are the left behind to operate in the local village family system, it constitutes the major theme of this research study that will be dealt in the forthcoming chapters.

COMPOSITIONAL FACTORS: MIGRANT, NON-MIGRANT AND COMMUTER HOUSEHOLDS

In the previous chapters IV, we mostly studied the contextual factors and its related variables to understand the broader social and physical opportunities in a study area, such as availability and access to services, etc. where the aggregate study population forms the part of the local people. The association between the place and the individual characteristics or profile is an important part that helps in understanding the relationship that directly affects the aggregated socioeconomic profile of the population.

Therefore, this chapter will mostly deal with the compositional variable that is related to socio-demographic characteristics of individuals living in a certain place, i.e. in the study area. For example, the compositional factors of the area's population are important in projecting the background of the study populations, and thus, their status of the health determinants in terms of health care and needs. The chapter will examine the several major variables of the migrant, non-migrant and commuter households, and study the basic characteristics, family structure and composition, household types, economy, assets, income, budget composition, food security, migration, food accessibility, provisioning and health profile of the study populations.

According to researcher Curtis & Jones (1998), the compositional effects arise from the varying distribution of types of people whose individual characteristics influence their well-being. They also explained that similar types or characteristics of people would have similar experiences like deprivation or health experiences, no matter where they live. So, based on these understanding this chapter will focus on understanding the compositional factors of the study population, to find out the similarities and differences between the households and the aggregated effects of collective attributes of populations. Though the household survey data presented below are drawn from data collected through observation, in-depth interviews, discussions, and conversations with informants to portray the conditions of the migrants, non-migrants and the commuters households people in the study villages.

I. BASIC CHARACTERISTICS OF THE MIGRANT, NON-MIGRANT & COMMUTER HOUSEHOLDS

1. HOUSEHOLD TYPES IN THE STUDY VILLAGES

In the study villages, the total numbers of the studied households are 72. The total migrant households are 32. And it is comprised of around 27 male and five female-headed households. The numbers of the non-migrant households are around 20 where all the households are the male-headed houses with around 20 male respondents. The number of the commuter households that were taken for the study is around 20, and all of the households are the male-headed households. Therefore, the total male-headed households in the study villages are around 67 and only five households are the female-headed households. The reasons behinds such difference are, the study villages are completely following the family culture where the male is the head of the family. However, the two households are headed by the females, due to the situation that they are widows and do not have any elderly or adult males in the households that could succeed their male head afterwards.

Table 5.1.1: Sex wise distribution of Head of the Households & types of Households

Head of the Households (Sex-Wise)				
Sl. No.	Types of HH	Male	Female	Total HH
1	Migrant HH	27	5	32
2	Non-Migrant HH	20	0	20
3	Commuter HH	20	0	20
4	Total HH	67	5	72

(Source: Primary Data)

In the study area, according to the age wise distribution of the households' respondents both the male and female i.e. taken a spouse in the study, are found to be mostly in the age groups of 20-30 years, i.e. around 50 per cent. Where the male respondents are mostly from the age group of 25-30 years, i.e. around eight and females

are from 20-25 years, i.e. 12 in numbers. It is followed by the age groups of 30-40 years where the female respondents are around seven and males is around six. The next age groups are followed by 40-50 years, where the numbers of the male respondents are higher in comparison to the female respondents i.e. six and two. No respondents are found to be in the age groups of 50-55 years, whereas, the above 55 also there are the least number of the respondents were founded. The highest numbers of the male respondent are reported from the age group of 25-30 years and female from the age groups of 20-25 years. The least number of the respondents are from the age groups of 15-20 years for the female and almost no one for the male respondent. Therefore, it can be said from the below data that the age groups of the respondents are mostly between the age groups of 20-50 years, which fall into the groups of the productive groups of people. Moreover, these are the age group of the people those forms the category of migrant, non-migrant and the commuter groups of the study areas.

Table 5.1.2: Age-wise distribution of households' respondents in study villages

Households Respondents (Age Wise)					
Sl. No.	Age Group (In years)	Male Respondent	Female Respondent	Total Average number of the respondent	Total Average proportion of the respondent (in per centage)
1	15-20	0	1	1	2
2	20-25	6	12	18	50
3	25-30	8	4	12	33
4	30-35	4	6	10	27
5	35-40	6	7	13	36
6	40-45	6	2	8	22
7	45-50	3	1	4	11
8	50-55	0	0	0	0
9	55-60	1	2	3	8
10	60-65	2	1	3	8

(Source: Primary Data)

2. CASTE, TRIBES & RELIGION

The proportion of the households, according to the caste and tribes in the study area is higher for the scheduled tribes of around 72.22 per cent in the study area. It is comprised of the around 75 per cent of the migrant households, around 60 per cent of the non-migrant households and around 60 per cent of the commuter households. The most of the tribes are Oraon tribes with the surname of *Minz*, *Tirkey*, *Bara*, *Oraon*, *Lohra*, *Khalkho*, *Toppo*, *Lakra*, *Kujur*, *Mahli* and *Ekka* are found in this study area. It is followed by the other backward castes i.e. predominantly by the 'Julaha' or 'Chik' groups of people from the 'Muslim' background and the 'Kurmi' (*Mahto*) in the study area by around 19.44 per cent. It is comprised of around 18.75 per cent of the migrant households, around 40 per cent of the non-migrant households and around 40 per cent of the commuter households. Mostly the surnames 'Ansari' is found in the study area.

Next, is followed by the scheduled castes category where the total proportion of the households is around 8.34 per cent, and it is comprised of around 6.25 per cent of the migrant households in the study area, whereas, no households are found in this category from the non-migrant and the commuters households. Under this category, the surnames ‘*Bhuiya*’ were found. In the study area, no other general category of the caste category has found in any types of the households.

Table 5.2.1: Proportion of the HH according to the Caste & Tribe

Sl. No.	Proportion of the HH according to the Caste & Tribe (In Per centage)				
	Caste/Tribe	Migrant HH	Non-Migrant HH	Commuter HH	Total HH
1	ST	75	60	60	72.22
2	SC	6.25	0	0	8.34
3	OBC	18.75	40	40	19.44
4	General	0	0	0	0

(Source: Primary Data)

The households of the respondents according to the religions are higher for the ‘Sarna’ religion with around 40 per cent of the total households. The tribal groups of the people in the study area follow this religion. This group is comprised of around 50 per cent of the migrant households, around 50 per cent of the non-migrant households and around 40 per cent of the commuter households in the study area. It is followed by the Christian religion with around 30 per cent of the total households, comprised of around 25 per cent of the migrant households, around 40 per cent of the non-migrant households and around 30 per cent of the commuter households in the study area. The tribal community people of the study area, mostly follow this religion. The third group is the Muslim religion, followed by around 30 per cent of the total households that have studied in the study villages. It is comprised of around 20 per cent of the commuter households, around 18.75 per cent of the migrant households and around 10 per cent of the non-migrant households. It has found that the Hindu religion is followed by around 2 per cent of the total households in the study area where around 6.25 per cent are of the

migrant households. No other households' types are found to be in the Hindu religious groups in the study area. Other than the above four religions, no other religion had found in the study area. It is evident that the migrant household mostly follows the Sarna religion followed by the Christian, Muslims, and Hindu. However, the proportions of the 'Sarna and Christian' religions are higher in the non-migrant and the commuter households, in comparison to the migrant households in the study area

Table 5.2.2: Proportion of the HH according to the Religion

Sl. No.	Proportion of the HH according to the Religion (In Per centage)				
	Religion	Migrant HH	Non-Migrant HH	Commuter HH	Total HH
1	Sarna	50	50	40	40
2	Christian	25	40	30	30
3	Muslim	18.75	10	20	30
4	Hindu	6.25	0	0	2
5	Others	0	0	0	0

(Source: Primary Data)

3. LANGUAGES

According to the languages that are spoken by the respondents in the study area are mostly Hindi, Sadri, Kurukh, and Khorta. Sadri and Kurukh are the regional dialects of the Ranchi districts. The 'Kurukh' is the 'Oraon' tribal language, whereas, 'Sadri' is the regional and local dialects mostly spoken in the Chotanagpur area by all the locals. In the study area, around Cent per cent of the households are found to be speaking Hindi and Sadri language. However, around 66.66 per cent of the total households use to speak 'Kurukh' in the study area, comprised of around 75 per cent households of the migrant households, around 60 per cent of the non-migrants and around 60 per cent of the commuter households. The 'Kortha' language is spoken by only 2.77 per cent of the total households that comprised of around 6.25 per cent of the migrant households in the study villages.

Table 5.3.1: Proportion of the Households distribution according to the Languages Spoken

Sl. No.	Proportion of the HH according to the Language Spoken (in Per centage)				
	Language	Migrant HH	Non-Migrant HH	Commuter HH	Total HH
1	Hindi	100	100	100	100
2	Sadri	100	100	100	100
3	Kurukh	75	60	60	66.66
4	Khortha	6.25	0	0	2.77

(Source: Primary Data)

4. OTHER DETAILS: IDENTITY CARDS/ PROVISIONING CARDS AVAILABLE IN THE HOUSEHOLD

It has found that the average proportions of the households' respondents with Voter ID cards are almost cent per cent of the studied villages. The ration cards are available to the total households of around 39 per cent of the households comprised of around 62 per cent of the migrant households, around 20 per cent of the non-migrant households and around 20 per cent of the commuter households. However, the UID or Aadhar Card is available to almost cent per cent in the non-migrant, and the commuter households and around 60 per cent of the migrant households have been reported. The availability of the Aadhar cards in the total households is around 47.78 per cent in the study villages. It has been reported that around 40 per cent of the migrant households have the job cards and it forms around 17.78 per cent of the total households that have any other ID or provisioning cards.

Table 5.4.1: Average Proportion of the Household's Respondents with ID/ provisioning Cards (in per cent)

Sl. No.	Name of the Cards	Average Proportion of the Household's Respondents with ID/ provisioning Cards (in per cent)			
		Migrant Household	Non-Migrant Household	Commuter Household	Total proportion of the Household
1	Ration Card	62	20	20	39
2	Voter ID Card	100	100	100	100
3	Aadhar Card	60	100	100	47.78
4	Any other: Job Card	40	0	0	17.78

(Source: Primary Data)

5. HEARTH TYPES

In the study area, it has found that around 61.11 per cent of the households, including all types of the households', i.e. migrant, non-migrant and commuter households are the separate household. The separate households are the type of household where they have their own hearth with kitchen space, and they stay in separate households with an individual family or in other words the 'nuclear' family. The category under the total households is comprised of around 56.25 per cent of the migrant households, around 70 per cent of the non-migrant households and around 60 per cent of the commuter households. However, the joint households in the study area are around 38.89 per cent of the total households, and it is comprised of around 43.75 per cent migrant households, around 30 per cent of the non-migrant households and around 40 per cent of the commuter households. The joint families in the study area are mostly comprised of the family members those do not marry and the old parents of the family. It has also found that in case there are more than one married couple of stays at one house then they have a different hearth of for the each couple inside the house. In the study area, the households usually separate their hearth soon after the marriage. They do not use the common kitchen and household expenditures together except for the agricultural investments.

Table 5.5.1: Proportion of the HH according to the Hearth Type

Sl. No.	Proportion of the HH according to the Hearth Type				
	Hearth Type	Migrant HH	Non-Migrant HH	Commuter HH	Total HH
1	Joint HH	43.75	30	40	38.89
2	Separate HH	56.25	70	60	61.11

(Source: Primary Data)

According to the households, details comprising of the information about the living arrangements and facilities around the households are given in the above data. It has found that the average number of the rooms in the migrant households and the non-migrant are three. The average three rooms in the study area are usually comprised of one store room, one-bed rooms and one veranda with the inside kitchen in a corner. Whereas, the commuter household has average rooms around two in number. This is also having one room along with the veranda. The veranda is found to be importantly used as a dormitory of the house where they adjust their storages, kitchen, and livings. There is around 13.89 per cent of the total households having the toilet facility in the study villages. The toilets are mostly built on the premises within walking distance of the houses. Under the toilet facility available households, around 30 per cent households are of the non-migrant households, around 20 per cent are of the commuter households, and around 6.25 per cent are of the migrant households. The rest of the household is not having the toilet facility in their households and found to be opting for the open defecations. The toilets in the remote villages do not have a running water supply. However, they have to arrange water from the nearby water facilities from the households. The toilets that found in these villages are mostly made on temporary basis attached to the bathroom without the ceilings. In the study area, it has found that around then there is no separate kitchen is found in the villages and only around 11.12 per cent of the households had reported the separate kitchen in the households. It is comprised of around 40 per cent of the non-migrant households, around 31.25 per cent of the migrant households and no households had been reported under the commuter households in the study area. The villages in the study area have been electrified since 2010. Therefore, it

has found that around cent per cent of the non-migrant and the commuter households are found to have electricity in their households, whereas, around 75 per cent are reported from the migrant households in the study area. This altogether forms around 88.89 per cent of the households having electricity in the study area. However, it has found that the supply of the electricity in all the houses are below the average due to the low voltage supply. The respondents had stated that the electricity is of their no use. The households use the electricity for the minimal uses, i.e. for lightening up only one or two bulbs; supply is less than four hours a day and only can charge their one or two mobile a day. It has also been reported that they do not use the electricity at night and have to depend on the kerosene lamps or '*Dhibri*' locally used small lamps by the villagers. Therefore, the dependency on the electricity is very less or almost no in the study villages.

It has found that the households with the separate cattle shed in the study villages are around 11.12 per cent of the total households. It is comprised of around 30 per cent of the non-migrant households and around 6.25 per cent of the migrant households. No households from the commuter households have been reported for having separate cattle shed in the study area. The proportion of the households having their own separate drinking water facility is around 2.78 per cent of the total households, and it is comprised of around 6.25 per cent of the migrant households, whereas, non-migrant and the commuter household do not have any households with this facility.

Table 5.5.2: Proportion of Household with the House Details

Proportion of Household with House Details							
Sl. No.	HH Types	Average No. of Rooms	Toilets (HH in per centage)	Separate Kitchen (HH in per centage)	Electricity (HH in per centage)	Separate Cattle shed (HH in per centage)	Own Drinking Water Facility (HH in per centage)
1	Migrant HH	3	6.25	31.25	75	6.25	6.25
2	Non-Migrant HH	3	30	40	100	30	0
3	Commuter HH	2	20	0	100	0	0
4	Total (HH in per centage)	N.A	13.89	11.12	88.89	11.12	2.78

(Source: Primary Data)

II. HOUSEHOLD, FAMILY STRUCTURE & COMPOSITION

1. NUMBER OF MEMBERS IN HOUSEHOLD

In the study area, it has found that the average number of the family members resides in the households are around four members (minimum) and around eight members (maximum) in the migrant households. The non-migrant households had reported that the average minimum numbers of the family members of the non-migrant households are four and the maximum amount of the members are six in the households. The commuter households had reported the minimum number of the average number of the members are four and the maximum number are eleven, as reported by respondents in the study area.

Table 5.6.1: Average Number of the Family Members in the Households

Average Number of the Members of a Households				
Sl. No.	Number of the Members	Migrant HH	Non-Migrant HH	Commuter HH
1	Minimum	4	4	4
2	Maximum	8	6	11

(Source: Primary Data)

2. DESCRIPTION OF LIVING ARRANGEMENTS

It has found the study area that the average number of the rooms and distribution of the family members into rooms is very crucial to understand the space availability of per person in the households. According to the data, the average number of rooms of the migrant households is three and the average number of the members of the household resides around six members. The non-migrant had reported that the average number of the rooms are four and the average number of the members resides are around five in the households. The commuter households have the average number of the rooms of two in their households with the average family members of around seven in the households.

Table 5.6.2: Average Number of Rooms and Distribution of Family Members into Rooms/ Space available

Sl. No.	HH Types	Average No. of Rooms	Average Number of the Members of a Households
1	Migrant HH	3	6
2	Non-Migrant HH	4	5
3	Commuter HH	2	7

(Source: Primary Data)

According to the house types, it has found that there are only around 6.25 per cent of the migrant households have the *pucca*/concrete households in the study area. However, the proportion is higher among the non-migrant households with around 10 per cent. No households from the commuter households have been reported under this

category. The households with the *pucca*, finishing with the asbestos roofs are found in the non-migrant households with around 30 per cent of the households, around 20 per cent of the commuter households and no households from the migrant households. The proportions of the *semi-pucca* house with asbestos roofs are almost similar for the households of non-migrants and the commuter households with around 30 per cent households from each. However, around 6.25 per cent of the households have been reported under this category from the migrant households. The highest proportion of the house type had been reported by the migrant households under the *kutchra* (brick and mud) with tiled roofs in the study area. However, the around 30 per cent is reported for from the non-migrants and 30 per cent of the commuter households in the study area. The *kutchra* house with asbestos roofs has been reported only from the commuter households in the study area, whereas, no households are found from the migrant and the non-migrant households. There is no *kutchra* house types with hay roofs are found in the study area.

Table 5.6.3: Average Proportion of the Households (In Per centage)

Average Proportion of the Households (In Per centage)				
Sl. No.	House Types	Migrant HH	Non-Migrant HH	Commuter HH
1	<i>Pucca</i> House	6.25	10	0
2	<i>Pucca</i> House with Asbestos Roof	0	30	20
3	<i>Semi-Pucca</i> House with Asbestos Roof	6.25	30	30
4	<i>Kutchra</i> House with Tiled Roof	87.5	30	30
5	<i>Kutchra</i> House with Asbestos Roof	0	0	20

(Source: Primary Data)

3. HOUSEHOLD COMPOSITION

According to the study, it has found that the average number of the members of the households, according to the sex distributions, are three males in the migrant households whereas, the average number of the female is around 2.5. In the non-migrant households, the average number of the males is 4.66, and the females have the average number of 2.47 in the non-migrant households. The average number of the males in the commuter

households is three, and for the females, it is 4.34. It is evident to the average number of the male, and the female is not much different.

Table 5.6.4: Average Number of the Members of the Household (Sex-Wise Distribution)

Average Number of members in the HH (Sex-Wise Distribution)			
Sl. No.	Household Type	Male	Female
1	Migrant HH	3	2.5
2	Non-Migrant HH	4.66	2.47
3	Commuter HH	3	4.34

(Source: Primary Data)

Table 5.6.5: Age Wise Distribution of the Household Members (In Average)

Age Wise Distribution of the Household Members								
Sl. No.	Age Groups	Migrant HH		Non- Migrants HH		Commuter HH		Total (Per centage)
		Male	Female	Male	Female	Male	Female	
1	0-6 months	1	0	0	0	1	0	0.53
2	6-12 months	4	0	0	3	6	0	6.98
3	1-5 yrs	9	9	3	0	0	1	11.82
4	5-10 yrs	5	8	2	0	3	1	10.21
5	10-15 yrs	10	4	3	2	3	2	12.9
6	15-20 yrs	14	8	0	2	1	1	13.97
7	20-25 yrs	7	8	0	0	0	3	9.67
8	25-30 yrs	3	2	1	0	2	0	4.3
9	30-35 yrs	3	4	0	2	0	0	2.15
10	35-40 yrs	4	4	2	0	0	5	5.91
11	40-45 yrs	4	2	1	2	2	1	6.45
12	45-50 yrs	1	0	0	0	0	0	0.53
13	50-55 yrs	0	4	0	0	0	0	2.15
14	55-60 yrs	2	4	0	0	0	0	3.22
15	60-65 yrs	1	2	0	0	0	0	1.61
16	65-70 yrs	0	2	0	0	0	0	1.07
17	70-75 yrs	2	1	0	0	0	0	1.61
18	75-80 yrs	0	0	0	0	0	0	0.53

19	80-85 yrs	1	0	0	0	0	0	0.53
20	85-90 yrs	2	2	0	0	0	0	2.15
21	90-95 yrs	0	0	1	0	0	1	1.07
22	95-100 yrs	1	1	0	0	0	0	1.07

(Source: Primary Data)

Table 5.6.6: Proportion of the population according to the age groups

Sl. No.	Age Groups	Population (Per centage)
1	0-12 months	7.51
2	1-20 years	48.9
3	20-35 years	16.05
4	35-60 years	18.26
5	60-85 years	4.82
6	85-100 years	4.29

(Source: Primary Data)

According to the study area, the age wise distribution of the household members clearly depicts that the proportion of the non-working (economically productive) age groups is higher in the study villages. The proportion of the children of Under Five age group is around 19.33 per cent of the total population. The age group between the 1-20 years shows the higher proportion of the population in the study villages i.e. around 48.9 per cent of the total population. The highest proportion is found to be at the age of 15-20 years. The group of the youth that is almost ready to be in the livelihood markets. The age group of 1-15 years forms the larger proportion of the household population in the study villages. The age group of youths of 20 -35 years, in the study villages those are engaged in the productive markets are around 16.05 per cent in the study villages. The other adult groups between the age groups of 35- 60 years are around 18.26 per cent of the total population that has been studied in the area. It has found that the aged groups of the population in the study village area aged between 60 -85 years are around 4.82 per cent. However, only 4.29 per cent has been reported to be in the age group of above 85 years in the study villages. It has been reported that the young and infants of the age groups of 0-12 months, form around 7.51 per cent of the total population in the study

villages. Therefore, it is evident that the young population (including child population) is higher in each household, whereas, the working population or aged groups are very less in the study villages.

Table 5.6.7: Average Number of Members according to the Literacy Status

Average Number of Members according to the Literacy Status				
Sl. No	Household Type	Sex	Literate	Illiterate
1	Migrant HH	Male	42	20
		Female	22	28
2	Non-Migrant HH	Male	11	1
		Female	7	2
3	Commuter HH	Male	10	1
		Female	10	4

(Source: Primary Data)

According to the literacy data, it has found that the average numbers of the members of the households with the literacy status are higher for the literates in the households. It is because the children in the households of the study area are having the good proportion of the literates. In the migrant households around 42 members had reported to be literates whereas, 20 males are illiterates in the households. The female had reported being literates are about 22 in numbers, whereas, around 28 are found to be illiterates. It is evident that the more illiterates are female in comparison to the males in the households. In the literacy status, the illiterates are more from the age groups of above 25 and more. It has found the younger ones are mostly dropouts after sixth or seventh standard. The illiterates are the group of first generation peoples those who do not get an opportunity to continue their studies. In the non-migrant households, the number of the males in the literate groups is 11 whereas the female number is seven. However, the number of male illiterates is one and female are two. Here also evident that the female is less literate than the male in the non-migrant households in the study area. The commuter households reported that the number of the male and the female is the same with around ten members of the households; whereas the illiterate male is one and the female are four. However, the number seems to be equal in the commuter households, but the difference could be seen from the illiterate numbers, which is higher among the females than the males.

III. HOUSEHOLD ECONOMY

1. LAND OWNERSHIP

Table 5.7.1: Average proportion of landholding by types of Households

Sl. No.	Types of HH	Average Landholdings (Dismil/Acres)
1	Migrants HH	> 2.62 Acres
2	Non-Migrants HH	> 6 Acres
3	Commuters HH	> 4.7 Acres

[Jharkhand Area Units: 1 Ha = 2.47 Acre; 1 Acre = 4046.94 Sq metre; 1 Dismil = 40.46 Sq metre; 1 Katha = 66.89 Sq metre; 1 Dur = 10 Sq metre]

(Source: Primary Data)

Non-Migrants Households:

Based on the village topography, the agricultural landholding patterns are mostly *tand* (uplands) in comparison to the other two types, i.e. *doin* (lowlands) and *chaura* (medium lands). Therefore, the landholding pattern is also similar in the respondent households. It has found that in most of the non-migrant households the average landholding is around six acres, i.e. medium farmers and it has been divided among the members of the family or each separated hearth of the households equally. Most of the lands are divided verbally and not legally among the family members. There are families where they are still working together in same landholdings with the two generations on the demarcation of the land done verbally. The distribution of the agricultural lands is divided into the three land types among each of the members based on the ratio of the particular households landholding pattern in an equal manner.

“The total land holding is 17-18 Acres. According to the measurement scale, 100 Dismil is equal to 1 Acres. The land is not divided legally, but it has been done verbally. The whole land is agricultural land comprised of both Tand and Doin. Around 10 Acres are uplands (Tand), 6.5 Acres are low lands (Doin) and rest 1.5 acres are the medium lands (Chaura)”.

(Respondent 1; Category: Non-Migrant; Village: Bobro)

It has found that the average landholding of the non-migrant households is much better than migrant and the commuters households, both in terms of size and the irrigation facilities. All the respondents mainly focus on the agriculture as the primary occupation. They tend to practice it throughout the season and do agriculture in all the three agricultural seasons, i.e. *Kharif* (May-October), *Rabi* (October-April) and *Zaid* (October-May). They mostly focus on cultivating cash crops, especially the vegetable cultivations in the *kharif* seasons. Apart from the cash crops, they mostly grow paddy for the self-consumptions throughout the year as a food security.

After the cultivation, people leave the *doin* (low lands) fields fallow for one season and do cultivation in the rest of the uplands and medium lands. They could not be able to cultivate it twice a year because of the lack of irrigation facility in the fields. It has found that in the remote villages the fields are irrigated by the wells. The problem is that the well is insufficient to irrigate such a large field due to the less number of wells in comparison to the fields to be irrigated is much larger. Therefore, people have to manage with cultivating the less number of fields, though they have enough lands, to meet the needs of the available amount of water in the irrigation wells.

It has found that not every household in the remote villages has wells for the irrigation. Therefore, to deal with this crisis, people usually borrowed the water from the neighbour's wells based in the nearby fields. The completely mutual give and takes based on the common understanding that prevails around the village is that they can access only after the permission of the well's owner and they are only granted after the owner is done with their field irrigation. As it has very much evidence fewer, the few households in the remote villages were, acquainted with the very low irrigation facilities in comparison to the cultivated landholdings. Therefore, it has found that there is very less or almost no cultivation is being done in the un-irrigated lands. Agriculture is being done for the six months, i.e. in the *kharif* season and it has been left fallow for the month of January soon after the wheat harvest.

In the remote village where there is a river, facing the same problem related to the irrigation of the fields because of the proportion of the land holdings beside the river

is sporadic and less. Therefore, it is not possible for individual households to get many benefits out of the water usage for the field irrigations.

“We use the river water for the irrigation, but only possible the adjacent fields and have 1 well in the upland field. We use the vilious pump for water irrigation”.

(Respondent 34; Category: Non-Migrant; Village: Deuri Alias Dongatoli)

However, there also some non-migrant households with less than 80 dismil landholding that reported that they do not cultivate paddy due to the lack of the *doins* (low lands) and as a result, they have to depend on the market for the purchasing of the rice or paddy throughout the year.

“It has not yet divided between the brothers, but I do farming on around 1 to 1.5 Acres of lands. Mostly the land types under my share are uplands and not the low lands”.

“The fields are fallow after the month of January soon after the wheat harvesting. We have very few lowlands, so we do not cultivate paddy. Moreover, because of this, we have to buy Rice from the market”.

(Respondent 16; Category: Non-Migrant; Village: Bobro)

There are many non-migrant families, those who shared that in earlier days due to low income from the agriculture, they started planning to move out from the village for opting other livelihood activities. However, later on, they have started focusing on the cash crop cultivations in the *Kharif* season and henceforth, it gradually over the years started giving profits from the agriculture with the good earnings. They said that it is at least able to cover all the agricultural expenses. Hence, this was one of the major reasons behind them to stop and opt for not to move out from the village. It has also found that there were few non-migrant households, those tended to go for the daily wages earned to the nearby cities, but since last few years around 6-7 years, they stop migrating outside the village and doing agriculture especially, in the *Kharif* season focusing on the cash crop cultivations. There are also some non-migrant households, which never migrated

outside their village for the last many generations and primarily focused on the agriculture especially the vegetable cultivation for the cash crops.

“Earlier the profit from the agriculture was very small. Most of the times we have to face the loss in the crops like potato and Pea. Moreover, due to this I sometimes felt like opting for the migration, but back, I years back, I started growing cash crops in larger areas. Now it turned to be good earnings for us and at least cover up all the expenses”.

(Respondent 16; Category: Non-Migrant; Village: Bobro)

“Earlier days I also went for the daily wage earners. Nevertheless, many years around 6-7 years have passed since I had left migrating for the jobs. We do agriculture during the monsoon seasons and not in the summer seasons”.

(Respondent 21; Category: Non-Migrant; Village: Katchanho)

“We have never migrated for the livelihood outside the village. My parents have never migrated and mostly focused on the agriculture. They precisely focused more on the cultivation and its income. This was the main reason that nobody tried to opt for migration”.

(Respondent 34; Category: Non-Migrant; Village: Deuri Alias Dongatoli)

Migrants Households

The average landholdings of the migrant households of the study villages are approximately less than two Acres i.e. marginal farmers. However, it is actually the undivided (legally) land ownership. The divided land ownership, i.e. mostly in a verbal manner comes around 10- 55 dismil of the individual family. The general trends of the land ownership among the migrants’ families, in fact, in the entire study area is that the lands were not divided legally rather done in a verbal manner. Families have a different hearth in a household, and they practice agriculture in their part of the land. There are also such families, those who work altogether and divide their produce equally among each other. According to them, it was as a coping mechanism against the low land ownership of an individual after the land division. There are many households where there is no division since two-three generations in such households, many of them are

working on the lands of their relatives to those who do not practice agriculture because of their absence in the villages. The absenteeism of such families is mostly due to their permanent migration for their jobs in government or the private sectors outside the village. The families mostly owned the upland (*tand*) land types in the study villages. The proportion division is about 75 per cent of upland and rest 25 per cent is of lowland (*doin*) and medium land (*chaura*).

“The land is not divided between me and my father and brothers. Only the hearth was divided between us. We all together do farming and divided the share at the end”.

(Respondent 57; Category: Migrant; Village: Murma)

“We have both the land types, i.e. upland and lowland proportionately, but the uplands are more in numbers, i.e. 25 per cent and rest 75 per cent are upland (tand)”.

(Respondent 3; Category: Migrant; Village: Bobro)

It has found that the according to them the landholding size of the migrant family is very low in comparison to the other types of households in the study villages. In addition, the low land (*doin*) is very less to grow enough paddies for the annual food security. Therefore, they cultivate lesser amount of crops that is insufficient for the good amount of produce that can be used throughout the year. It can be said that due to less proportion of lowlands (*doins*) to the individual landholdings they grow the lesser amount of the paddy. This is not only the situation regarding the cereal crops and its production, but it also happens to the other crops such as vegetables due to the low quality of lands along with the lack of irrigation facilities in the land types that leads to low production of the yields. Even if the households, those are having, enough landholdings stated that the actual areas that are cultivated are about less than 29 per cent of the total landholding. The major reason behind it was the lack of irrigation facilities in the lands.

“The total landholding before the division was 4.5 Acres that got divided among my 7 brothers. Now the individual landholdings come around less than 1 acre i.e. 64 dismil in my share. Most of the land types are (Tand) upland. Only 2-3 fields are (doin) lowland,

and because of this, we do not grow much paddy. The quality of the land is also not fertile enough to grow good crops”.

(Respondent: 14, Category: Migrant; Village: Bobro)

Commuter Households:

The average proportion of the landholding of the commuters landholdings is around less than 4.7 acres, i.e. small farmers. It has evidence that the commuter’s households are mostly indulged for three months in the agriculture period, i.e. *Kharif* season, and leave their land fallow for the rest of the year. The reasons behind such practices are that they do not have enough capital to conduct the agriculture as their only livelihood. Apart from the capital they do not have irrigated lands because of that they only able to cultivate very few proportion of the land that can be irrigated with some means. Here they grow some cash crops that do not require many capital investments such as maize, groundnuts, chilly, etc. so that they can sell the surplus in the local markets that utilised after their own consumption. Commuter’s households are mostly the subsistent farmers for the food security and rest the cash income is earned through the daily wages from commuting to the nearby cities like block headquarters. Families with the small numbers of family members are seen commuting daily, but the big families with the larger number of family members divide themselves into inside work, i.e. agriculture and outside works, i.e. daily wage earners and that’s how they use to manage both cash as well as cultivation during the agriculture period. The reason that was mentioned behind this was as most of the commuter families do have access to any kind of government entitlements such as PDS or any types of pensions. In the study villages, it is very much evident that in such large commuter’s family the unmarried youths are struggling more for the survival. Thus, they opt for commuting to the nearby cities.

“We have a larger number of family members that helped us to divide into two groups during the agriculture period, where 4-5 members go to their work in the Ranchi city, and the rest of the family members stay back and work in the agricultural fields. This is how we take care about the inside and outside works. The main reason behind this is that we have no access to the social assistance and any government social supports such as pensions, PDS. We are unmarried and have to work hard to earn our livelihood”.

(Respondent: 69, Category: Commuter; Village: Murma)

2. SHARECROPPING

Non-Migrant Households

In the study villages, the non-migrants families or the households are very much into the leasing-in and leasing-out their lands. The households, those are having enough lands, but unable to do the cultivation due to the lack of manpower, time and capital to utilise the whole patch of agricultural fields; then they tend to leased-out the lands to their relatives or the trustworthy families. With the trustworthiness, they mean to the needy and the dedicated farmers, those have the clear idea of sharecropping (*Sajha/ adhbatiiyya*) ethics.

The non-migrants households also preferred to leased-in lands for the agriculture from the households of the relatives. They mostly go for the people those who are not staying in the village in fact settled outside with some or the other reasons for a long time especially for the public or the private jobs. It was evident that the lands preferred for the leased-in are mostly the uplands (*tand*) for the purpose of the cash crops especially vegetable cultivations. In general, the land proportions that were leased-in by the households are seen to be around at an average of 50 dismil, and the leasing amount is unfixed. The leasing amount depends on person to person, and it varies according to the relationship or bonding between the landowner and the person who takes lands in a lease. For example, the same amount which is around 50 dismil is seen to be taken at Rs. 4000-5000/- and Rs. 1500-2000. The leasing payments are made annually or once in a year soon after the harvesting in cash and in the rare case of the crops too.

“(...The amount or charges for the leased lands are about Rs. 1500-2000 annually for the landholding of around 50 Dismil. I mostly took lands from the person those are not able to do farming or those who don't stay in the village and conduct the farming. Moreover, this year I took land from those who do not stay in the village)”

(Respondent 16; Category: Non-Migrant; Village: Bobro)

“We do lease in the lands for the agriculture purposes from the villagers, those have enough lands or do not have time or money to invest in the agricultural works in their field. The leasing-in of the land area of 50 Dismil that costs around Rs. 4000-5000/-.”

(Respondent 51; Category: Non-Migrant; Village: Katchancho)

According to the respondents, it has also found that the most the households are into the leased-in business because of the low landholdings that are not enough for the paddy cultivation and also they have the enough working hands in their households. The households with such criteria have the best chances to get the lands for the sharecropping purpose by the landowners every year. Because the landowners also make sure that, they get their shares from the cultivation. In the case of weather uncertainty like the irregular monsoon that is important for the irrigation in the un-irrigated lands, they do not give their lands for the sharecropping.

“...This year we do not get any lands in lease due to irregular monsoon”.

(Respondent 24; Category: Non-Migrant; Village: Deuri Alias Dongatoli)

Migrant Households:

It has found that the migrants' household very much in the practice of the sharecropping and the leasing In and Out of the agricultural lands in the villages. The reason for doing this is mostly to deal with the financial crisis. They see it as a coping mechanism during any kind of financial crunch. Most of the households leased in or out the land for the immediate cash money that required for the education fees for the students at the households, then for the health emergencies and for the ceremonies like marriages. Apart from the cash money, there are also some households, those who leased out their lands due to the lack of workforce in their households to do the agriculture in the entire lands. In the sharecropping arrangements the landowners bear only the single expenditures, i.e. either the seeds costs or the manure costs and the rest such as labour costs, ploughing charges, manures expenses, etc. are done by the people who leased-in the lands.

The households usually leased out their lands to the families those don't have enough land for the cultivation but have capitals and able to pay them cash amounts immediately as well as has had enough manpower of the households. In another way, it can be said that the households, those who are leasing out their lands are due to the various reasons such as having abundant landholdings, low working force at the households, and absenteeism during the agricultural period. The migrant households not only leased out their land, but they also leased in the lands from the migrant families of the villages during the *Kharif* season after they return from the destined areas. It has found that this practice is not confined within their family member, in fact, they look for the families those who are capable enough to pay them on time. Because of this reason, many migrant families find difficulty in leasing-in lands due to the whole cultivation investments required for the sharecropping. However, there are also few households that do not do any kind of such sharecropping and leasing in and out practices, but in the case of any such financial crisis, they opt to go for lending their lands to their own siblings or relatives due to the trust issues.

The repayments of the amounts from the leased in or leased out lands are usually repaid within three to four years in the form of full repayments or in instalments. No such cases have been found which says that they ever sold their agricultural lands. The leasing land transactions are usually done in the form of cash, but the sharecropping is repaid both in terms of cash and in terms of the produces. It has found that in the sharecropping transactions, people share their crops with the owner of the lands based on the individual's investments both in terms of capital and efforts into the agriculture. For example, produce is being divided equally when the crops are cultivated in the un-irrigated land parts (i.e. based on the monsoon water) such as paddy and *ragi*. However, in the case of the irrigated cash crops such as vegetables and wheat that requires proper irrigation, have to share in one-fourth ratio of the total production to the owner and the renter. The lands can be taken back after the full repayment that usually takes 3-4 years. It is not always that the households with few landholdings opt for the leasing in option. In fact, it has clearly stated that in some cases, families do it for helping or supporting the needy families, those have the immediate need of the cash money. This can be sensed as showing the solidarity among the villagers.

“We do approach to the people and request them for the help against the field. It is not that they have no lands, but they take it to help us”.

(Respondent: 15, Category: Migrant; Village: Bobro)

Commuters Households

It has found that the leasing-in lands are very much in practice in the commuters' households. No households found that are leasing-out their lands, but most of them leased-in the lands for the agriculture. Every year they get the lands from the villagers, but it is not mandatory that the households will get the lands in a lease every year.

“We take lease land for the cultivation. But it is not mandatory because it is not fixed that, every year we will get the land”.

(Respondent: 48, Category: Commuter; Village: Katchancho)

3. AGRICULTURE LABOR & IT'S RATE

a) Agriculture Labour Rate:

It has found that the remote villages that are predominated by the Adivasi community have their own labour rate in the village. The decision of the labour fixed rate is made within the village in the gram sabha comprised of the village tribal headman, *pahan*, and the *Mukhiya* along with the villagers. The tribal community only follows this decision, and it is not followed by the other community, people like *Julaha* (Muslims), other backward castes like *Gope & Mahto* (Hindu), etc. resides in the village. Non-tribal community people have their own rate for the same work that is usually higher than the tribal community's rate. Before the agricultural season, they annually fixed the rate unanimously in favoured of the village dwellers. Basically, the objective behind fixing this is by the Adivasi community is to help each other by making and giving the genuine rate so that each and every household can get their work done without facing any kind of financial and manpower problems. The basic motive is to help the community members in this important time instead of making earnings out of it. Adivasi community people have the belief of working as a community where people help each other in their field like sowing and harvesting, and the other day they had to return the favour mandatorily

in kind. This helps everyone to complete the field agriculture work on time. In agriculture, the timeframe is very crucial for the tasks such as sowing of seedlings that required 1-2 days within which it has to be done without a delay. This is a time when the farmers have to complete the seedling sowing tasks with the help of the entire family members and if needed by the hired labour from within the village itself. This is the time when people are ready to pay the maximum rate for the hired labour for the completion of the tasks. People usually hired labour for the seedlings sowing of the paddy and vegetables. Therefore, they united and went to work in each other's field so that every household in the tribal community can be equally benefited out of this and no one must leave behind despite the financial and workforce crisis and bounded timeframe.

In one of the remote villages with the mixed population, the Muslims community tries to pay a high rate to complete their work earlier. In addition, so many people go to their field first because of the high rate and the less work as they have small landholdings. It can be said that it is kind of temptation for the labours. The tribal community only follows this decision, and it is not followed by the other community, people like *Julaha* (Muslims), other backward castes like *Gope & Mahto* (Hindus), etc. resides in the village. Non-tribal community people have their own rate for the same work that is usually higher than the tribal community's rate.

b) Hiring Agricultural Labors:

The average rate that found to be fixed for the year was Rs. 120 -200 per day for the male and Rs. 70-100 per day for the female in the remote villages. In one remote village predominated by the tribal population, the labour rate is much lesser than the other villages i.e. Rs. 80 per day for male and Rs. 60 per day for the female. A working day for the women is being calculated by the two halves a day, and each half day work is for Rs. 30. The labour charge for the ploughing is high, i.e. Rs. 200 per day, for the male. In the village, if the tribal community people go to work for the non-tribal people's field then they will get their rate, which is higher than us i.e. 150 for male 100 for females and if they come to work in our field, then they will ask or have to pay according to their rate. At the ploughing time, people pay the higher wage rate for the male labour along with the bottles of liquor. This is the general practice among the tribal community.

It has found that the non-migrants families of the rural villages of the study areas are engaged in the agriculture practised in the larger land holdings. They do it to a larger extent in their maximum landholdings. Therefore, according to the respondents, the maximum numbers of the labours hired for the cultivation are around 10-20 labours during a peak agricultural period and it can be reduced to less than two also in the lean period. It can be said that the number of labour is directly proportional to the number of work that's to be done in the field. However, there are also some households, those who do not hire a labour because of the enough family members to support this work of the household. The general trend in the hiring of the labour is based on the work distribution according to the gender, and these are like for the ploughing male labour and for the other work such as sowing and weeding female labour are preferred. The gender division of the work is done based on the physical labour requirement and the abilities that see the male work much laborious in comparison to the female jobs according to the villagers.

The labours are hired for at least seven days in a week for around 4-5 weeks per peak agriculture season. The average maximum expenditures for the labour hiring that were told by the respondents are Rs. 2000-4000 per day that comes around more than one lakh during the *kharif* season for the vegetable cultivations. The average minimum expenditure of Rs. 500-600 per day were also reported by the respondents by the farmers, those who do not hire labour in a large number because of the multiple reasons such as practising cultivation in small landholdings and having enough working hands in their own households.

c) Wage Agricultural Labors:

In the study areas, it has found that the migrant and commuter households are usually involved in the agricultural labour activities for the livelihoods within their village despite their own agriculture engagements. According to them, due to the peak agricultural season, they usually prefer to work in their own village because of the work availability as agri-labor instead of commuting to the other nearby places. They get wages around Rs. 110 per day for male and Rs. 60 per half a day for the females. They get jobs easily because in any form the agricultural works require at least 4-5 hired

labour for the days of 1-2 days to complete the sowing of seedlings of the vegetable crops on time. In the village as reported by them, they usually get work for 3-4 days in a week and total they get work for around 96 days in the whole six months. The agriculture labour jobs are mostly available during the sowing and harvesting period of the crops such as paddy, cash crops, and the *rabi* crops, i.e. wheat. During the peak season, not only the elder members of the family get involved in the agriculture labour work, but the teenager and youths of the family join them. This is the time when they get work around the village, and they can easily be engaged after their schoolings and other household chores. Respondent said that it is like a part time pocket money job for them to earn for their immediate requisites. It has also found that there are some households with enough members those who work on a daily basis as an agri-labor to ensure the entire week earnings. Such big families divide their family members for the in-house agricultural work and the daily agri-labor work parallelly. The difference in the labour rate among the male and female is practised everywhere. The reason stated behind this difference is the gender division of labour between male and female. They said that the male has to work hard with spades for the digging and levelling the soil in the field that requires many physical strengths. Whereas, females are hired mostly for the weeding and sorting of potatoes, plucking peas and other vegetables for the entire day, and this is seen to be less hectic work in comparison to the male works.

People opting for the daily agri-laborers jobs are seen to be working in the village as well as outside the village whenever or wherever they get some off days from their own fields. This helps them to earn some money in between their own field works. This helps them to earn cash for the daily basic requirements.

Other than the peak agriculture season, the respondent stated that the man days or job days are not fixed or could be said that the job availability as agricultural labour is very uncertain in the village. They cannot fully rely on this job option throughout the year. During the agricultural season, they get work almost in all the five days a week, whereas it is difficult to get at least a day job in the lean period.

IV. ASSETS

Table 5.8.1: Proportion of the households having an asset

Assets	Non-migrant HH (20) in Per centage/ No. of HH	Migrant HH (32) in Per centage/No. Of HH	Commuter HH (20) in Per centage/ No. of HH	Total no. HH in Per centage (72)
T.V	30% (6)	0 %	30 % (6)	16.67
Radio	0 %	0 %	0 %	0
Mobile phone	100 % (20)	81.25 % (26)	100 % (20)	91.67
Gas Stove (LPG)	30 % (6)	6.25 % (2)	30 % (6)	19.45
Kerosene cooking stove	0 %	0 %	0 %	0
Electricity connector	30 % (6)	0 %	0 %	8.34
Solar Energy Connection	0 %	0 %	0 %	0
Bicycle	60 % (12)	100 % (32)	60 % (12)	60.67
Scooter/Motorcycle	30 % (6)	0 %	30 % (6)	16.67
Steel cupboard	30 % (6)	6.25 % (2)	60 % (12)	27.78
Wooden bed, chair, table, etc.	30 % (6)	62.5 % (20)	30 % (6)	34.34
Fan	30 % (6)	0 %	30 % (6)	16.67
Mixer/Iron	30 % (6)	0 %	0 %	8.34
Water pump/ motor/Villious pump	100 % (20)	62.5 % (20)	100 % (20)	83.34
Big wall clock	30 % (6)	25 % (8)	0 %	19.45
Farm Equipment	60 % (12)	50 % (16)	60 % (12)	55.56
Any Other (DTH cable)	30 % (6)	0 %	0 %	8.34

(Source: Primary Data)

In the study villages, it has found that around 91.67 per cent of the households own at least one mobile phone where around 81.25 per cent of the total migrant households and Cent per cent of the non-migrants and commuter households have their own mobile phones.

The migrant households bought the mobile phones by their petty savings done from their daily wage earnings to be in contact with their family residing in the origin place. They said that, as they have to migrate outside their village for more than 5-6 months in search of the livelihood. In that condition, they miss their family naturally. However, because of this device, they regularly are in contact with their family members and the villagers for knowing the current situations in and around the village. The regular use of the mobile phones made it possible for them to be connected easily without depending on any postal services or the visitors at the destination area. This helps them to address any major problems through discussing over phone calls. This helps them to get rid of the worries of home-related thoughts by contacting them in every two-three days in a week. According to them this helps them to concentrate more on their work, gave the feeling of safe and relaxed for the family sitting away from the hometown. This helps them to get lessen the loneliness at the destination area. Apart from the family connectedness, the mobile usage is also important for their professions. As said by the migrants, it helps them to get connected with the recruiters or *Sardar* (contractors) sometimes directly to the jobs. The recruiters contact them easily and inform them about the jobs. According to them, they can disseminate the job-related information to their friends, relatives and those who are in the needs of the work.

Then comes to the villious pump for the water irrigation is owned by almost 83.34 per cent of the total households were cent per cent non-migrants and the commuters households have this asset. However, around 62.5 per cent of the total migrant's households own this for the agricultural purpose. According to them, the purchasing of the villious pump is on their top priority list. Therefore, they save money and invest first in this asset. Almost 60.67 per cent of the households have bicycles were cent per cent of the migrant households reported to have at least one, and around 60 per cent of the non-migrant and commuter households own a bicycle. In most of the households with the government school going girl children, have more than one bicycle because they got it under the Jharkhand government's bicycle distribution scheme. It has found that around 55.56 per cent of the households have farm tools/equipment (traditional)*.

Almost every household keep the tools for the land or tillage preparation, intercultural operational, harvesting, and post-harvesting tools or equipment in their houses. They have also shared and borrows these among them to help each other.

Table 5.8.2*: List of Farm Tools/ Equipment/ Implements (Traditional)

Sl. No.	List of Farm Tools/ Implements/Equipments				
I	Tillage and Bed/ land Preparation Tools		II	Intercultural Operation Tools	
	1	Wooden Plough		1	Spade
	2	Yoke		2	Harrow
	3	Hammer Wooden		3	<i>Khilna</i>
	4	Leveller		4	Hoe
	5	Pick Axe		5	Hand Hoe
III	Harvesting		IV	Postharvest Bamboo Pin	
	1	Scythe		1	Wooden Pin
	2	Sharp blade fitted to wooden handle		2	Threshing Pole
	3	Big sickle		3	Basket
	4	Small Axe <i>makudi</i>		4	<i>Suhaga</i> (Leveller)
	5	Plough		5	Winnower
		6		Large Sieve	
		7		Threshing floor	
		8		Sack (Bag)	
		9	Hand Mill		

(Source: Primary data)

The non-migrants and the commuter’s households (around 30 per cent each) mostly own the other assets such as bed/cots, cupboards, clock, TV, fan, Scooter/motorcycle, etc. Moreover, the only around 6.25 per cent of the migrant households own these assets and rest around 94 per cent households do not own any of the other assets.

It has found that every type of household’s prime motive behind keeping the livestock is for the self-consumptions. Other than this usage, next they opt for the selling purpose. According to the above primary data, it is very much evident that the households are not much inclined towards the income from the livestock. The data clearly show that household in the study villages around 72 per cent households is keen to keep avian such as chickens and then around 50 per cent households are found to be

having goats. In the study area only 16.67 per cent, households have cows, and only 6.25 per cent of the migrant households have buffaloes and else almost no buffaloes were found to be kept by the people. However, around 25 per cent of the households have oxen. It can be said that an average number of the livestock is also very minimal which is about 2-4 in numbers, and it can be said that the small number of the livestock are not totally used for the selling purpose instead the prime purpose of keeping the livestock is for the self-consumptions especially during the ceremonies, festivals, and gatherings. The data clearly show that the migrant households keep mostly the chickens and goats as a livestock and the rest of the animals such as oxen, cow, buffaloes are the least in a number of their households. According to them, they keep the livestock, mostly for the self-consumption purpose, but they also admitted that they used to sell them during the needs of the immediate cash income. It is an asset for them, and they sell the chickens, ducks or goats in their nearby markets get the best price. They never sell it to the villagers because of the same reason. After knowing the importance of the livestock, they do not keep the livestock in a larger manner due to the various reasons. Around 16.67 per cent of the total households do not keep or own any types of livestock in the study area. In which around 25 per cent households are of the migrant households, and around 20 per cent are in the commuter household category. The utmost reasons that were told by the respondents for not keep any or owning below than the average are due to the lack of money to invest more into its purchasing. The migrant household is seen to keep the number of chickens and goats because of the reasons that it grows quickly within a few months and it can be used early in comparison to the other livestock for different purposes. The migrant families in the study area do not own the cattle in a larger number due to its expensiveness. For them, purchasing cattle are like big investments. However, the households are seen to keep the oxen because of its agriculture ploughing purpose. There are very few of the households, have the other cattle like cow and buffalo for the milking purpose. The other major reason for not keeping much cattle told was the lack of living space as they do not have separate cattle shed. Small livestock is easy to manage without requiring a larger space that is very difficult in the case of a cow, ox or buffalo. Other than the monetary reasons, many households' types such as migrants and the commuters' households do not spend much

on the livestock due to the lack of enough members at their home to take care of the cattle, chicken, and goats. Adding to this the migrants' families is also very much uncertain about their stays in the village because of the migration and the commuters' status. Therefore, they almost avoid keeping the livestock in a larger number though they know its financial importance.

Table 5.8.3: Proportion of households having livestock and the average number of the particular livestock

Livestock	The proportion of HH having Livestock according to the household types						
	Non-Migrant HH	Average no. of Livestock	Migrant HH	Average no. of Livestock	Commuter HH	Average no. of Livestock	Total Proportion of HH
Chickens	100 % (20)	2	68.75 % (22)	4	50 % (10)	2	72.23 %
Duck	0 % (0)	0	0.00 % (0)	0	20 % (4)	2	5.56 %
Goats	50 % (10)	3	68.75 % (22)	3	20 % (4)	1	50 per cent
Cow	20 % (4)	3	12.% (4)	2	20 % (4)	1	16.67 %
Oxen	20 % (4)	3	12.5 % (4)	2	50 % (10)	2	25 %
Buffaloes	0 % (0)	0	6.25 % (2)	2	0 % (0)	0	2.78 %
Do not keep any	0 % (0)	N.A	25 % (8)	N.A	20 % (4)	N.A	16.67 %

(Source: Primary Data)

It has been reported by a few households that the ownership of these assets is mostly the sole one, but it has also found that some of them keep the livestock in the sharing basis. Especially the migrant households are founded to get into such practices. The major reasons for the selling of the livestock are for the immediate cash needs of the daily requirements such as children's educational fees, health emergencies, etc. They earn around Rs. 200-300 per chicken and around Rs. 3500-4000 from the goat. They sell the goats only after it gains the appropriate weight of around 10-12 kg., so, that they get a fair price for their livestock.

V. HOUSEHOLD INCOME

Table 5.9.1: Average annual income of the households with the different income sources in study villages

Types of Households	Average Total Annual Income (INR)	Average Annual Income from different Income source (INR)			
		Agriculture	Remittance	Daily Wage	Agri-labor
Non-Migrant HH	70,000-2 Lac	40,000-2 Lac	NA	20,000-25,000	NA
Migrant HH	30,000-40,000	16,000-18,000	20,000-30,000	NA	6,000-7,000
Commuter HH	40,000-50,000	NA	NA	50,000-51,000	NA

(Source: Primary Data)

It has found that the migrant household falls into the bottom rank of the annual average income i.e. around Rs. 30,000-40,000 with the various income sources. If we ranked the contribution of the different income sources than for the migrant households, the contribution is higher from the remittances followed by the agriculture and then by the agriculture labour work which is about Rs.20,000-30,000, Rs.16,000-18,000 and Rs. 6,000-7,000 respectively. The commuters households come in the second bottom place with the average annual income of Rs. 40,000-50,000. It has found that the commuter household income is very dependent on the daily wages did by commuting on a daily basis. The non-migrants are at the top in comparison to the other two household's types with the average annual income of Rs. 70,000-2 Lac and the highest contribution is the agriculture with about Rs. 40,000- 2 Lac in an average succeeded by the daily wage earnings of an average income of Rs. 20,000-25,000 annually. It can say that the migrant households, though involved in more than two sources of income, yet facing the minimal average annual income in comparison to the other two categories i.e. non-migrant and commuters households. The income from the agriculture is the income from the selling of the cash crops i.e. seasonal vegetables. In the study area, the land type is upland

(*Tand*) and because if this most of the households are inclined towards the vegetable cultivation in the *Kharif* and *Rabi* season. The big farmers, mostly belong to the non-migrant households tend to be involved in a larger manner and earns a good income. The migrant households are found to be in the subsistent agriculture by focusing on the paddy cultivations to secure the annual cereals that can be used throughout the year. However, they also involved in the cash crop cultivation to utilise their uplands as well as good earnings from the vegetable cultivations in the *Kharif* season. The migrant household is found to indulge in a smaller manner by cultivating in a smaller proportion of the landholdings and with the lesser investments. It has also said that the migrant families do not have enough family members to do labour in both the field of vegetables as well as the paddy fields. Moreover, because of lack of finance, they were unable to do in a larger manner despite the awareness of its profit and returns. The commuter households do agriculture only for the subsistent like any other households. Their focus is on the twelve-month security of the paddy. Along with this, the other reasons that they do not have much income from the agriculture are due to the not so good quality of landholding in comparison to the migrants and non-migrants categories of the households. Secondly, they are found to be in the skilled job like mason or the daily wage labour with high payment in comparison to the agri-labor job within the villages. This made them involve and focuses more on the daily earnings from commuting to the cities, instead of investing more on the cash crop cultivation. It has found that in every household with more than one family, i.e. separate kitchen in a single house, money was pooled for the agriculture purpose every year. Apart from this, they also pooled fund for the house ceremonies such as marriages, death ceremony.

VI. HOUSEHOLD BUDGET COMPOSITION

The three types of households did the highest expenditures on the different expenditure heads on the scale of 1 to 16. Based on the priority lists the migrants and non-migrant households have ranked first to the agriculture expenditures, i.e. purchasing of seeds and followed by the purchasing of fertilisers. However, the commuter households have ranked the food grains expenditures on their top list of expenses. The expenses related to the utilities such as grocery, toiletries, etc. are the ranked third of the migrant and non-

migrant households, whereas commuter households kept it in the second rank followed by the expenses of vegetables. According to the respondents, the grocery related expenditure is their weekly expenses. About 99 per cent of the households of all the categories tend to spend money on the purchase of the grocery items like cooking oil, spices, pulses, utilities or toiletries on a weekly basis. They spent around Rs.300-500 every week. They go to the weekly market called to be *haat* in their nearby localities. Then in the fourth and fifth rank, the migrant households have put the loan repayments and the purchasing of the food grains respectively. Whereas, the non-migrant put education related expenses on the fourth and followed by the expenses of recreation or festivals on the fifth rank. The commuter had kept the seeds purchasing expenditures on the fifth rank followed by the fertiliser expenses. According to the commuters, they practice agriculture for their subsistence farming. They are the small farmers with the small landholdings that could secure only food for few months. Their major focus is on the daily wage earnings where they invest almost around 7-8 months of commuting daily. Therefore, they ranked it in the fifth and sixth on their ranking list. The non-migrants households put vegetables and livestock purchasing related expenses on the sixth and seventh ranking whereas; migrants placed education in the sixth ranking followed by the vegetables related expenses. The migrant and non-migrant households tend to do vegetable cultivations both commercial as well as in their homestead lands at least for their daily consumptions. The commuters said, in the early days they use to practice less agriculture, therefore, do not grow many vegetables, and because of that they have to spend much in comparison to the other two household types, i.e. migrant and non-migrant households. In the eight ranks, the migrant households ranked migration related expenditure that is to be used during the migration towards the destination area, whereas, non-migrants and commuters households ranked it at the bottom because they do not migrate. The transport related expenditures are ranked third by the commuter because of the reason of their daily expenditure on commuting whereas the migrant and non-migrant had put it on the ninth and eleventh ranks respectively. The medical care expenditures are at the bottom ranks where the migrant puts it on the thirteenth rank, non-migrant puts it on the tenth and commuters on the eleventh. According to the respondents, they tend to approach the private clinics and quacks for

the medical care. The migrants and commuters also rank the expenses on the alcohols on tenth whereas the non-migrants put it on the fifteenth rank. The expense of the purchaser of the farm implements are not done on a regular basis. Therefore almost all the category put it on the bottom rank like migrants ranked it in the fourteenth, non-migrants ranked it on twelve ranks and commuters on the thirteenth.

Table 5.10.1: Highest expenditure wise ranking of expenditure heads by the types of households

Sl. No.	Expenditure Heads	Highest Expenditures Ranked by Types of Households (Out of 1-16)		
		Migrants	Non-Migrants	Commuters
1	Food Grains	5	12	1
2	Vegetables	7	6	4
3	Utilities (Grocery & toiletries)	3	3	2
4	Education	6	4	9
5	Savings	16	13	15
6	Rent	12	9	8
7	Loan Repayments	4	8	7
8	Purchase of seeds	1	1	5
9	Purchase of fertilisers	2	2	6
10	Purchase of livestock	14	7	10
11	Purchase of Agriculture implements	15	12	13
12	Migration	8	16	16
13	Recreation	11	5	12
14	Alcohol	10	15	10
15	Medical care	13	10	11
16	Transport	9	11	3

(Source: Primary Data)

Table 5.10.2: Expenditure breakthrough in Range (INR) / (Annual) of different expenditure heads according to the household types

Sl. No	Expenditure Breakthrough in Range (INR)			
	Expenditure Heads	Migrants Households	Non-Migrants Households	Commuters Households
		Expenditures (Annual)		
1	Food Grains	32,000-4,000	NA	30,000-2100
2	Utilities (Grocery & toiletries)	24,000-8000	30,000-24,000	24,000-14,000
3	Education	25,000-1,800 to free of cost	12,000-1,000	5000-1200
4	Agriculture	99,000-3000	2.5 Lac - 60,000	1,10,000-16,000
5	Migration	2,000-1000	NA	NA
6	Recreation/ Festivals	5,000-1,200	5,000-2,000	10,000-2000
7	Medical care	5,000-500	50,000-500	5000-500
8	Transport	7,000-300	NA	17,500-8000
9	Miscellaneous	15,000-5000	20,000-10,000	10,000-5000
10	TOTAL	1,19,000-27,000	3,16,000-62,000	90,000-47,000

(Source: Primary Data)

According to the above data, it is evident that the ranking is done according to the different household priority expenditures. It has found that the total annual expenditures of the migrant households are ranges from Rs.1,19,000-27,000. However, the total annual expenditure of non-migrant households are Rs.3,16,000-62,000 and commuter's households are between Rs. 90,000-47,000. It can be said that the lower range of the expenditure is very low of the migrant households in comparison to the other two i.e. non-migrants and the commuter's households. In the breakthrough of the expenditure, it is evident that non-migrants do not spend money on the purchasing of the food grains whereas, the migrant households reported the range of expenses of Rs.32,000-4000 and commuter expenses range from Rs.30,000-2100. The household usually purchases the food grains to secure the rest 4-6 months that were not fulfilled by the agricultural productions. The upper range of the expenditure is almost similar, i.e. Rs.32,000 and Rs. 30,000 for the migrants and the commuter households, but the lower range has a wide

difference i.e. Rs. 4000 and Rs. 2100. This may be due to the commuter households have the BPL cards and access to the PDS services that help them in curbing the expenditure on the food grains. In the next expenditures heads that are utilities (groceries & toiletries), the lower range of the expenditures of the migrant households is very less i.e. Rs.8000 in comparison to the other two types of household i.e. Rs.14,000 for the commuter and Rs. 24,000 for the non-migrants households. The upper limit is similar for the migrants and the commuter whereas the migrant spend more than the other two i.e. Rs.30,000. It has found that the expenditures for the education of the children are highest among the non-migrant with the upper limit of Rs.12,000 for less than three students at the house. However, the migrant households reported the higher expenditures of about Rs.25,000 for more than four students at the house. The medium range of the education expenditures is about Rs.5000 in every type of the households. It has found that every household type prioritises the educational expenditures and they send their children to the nearby private schools as well as the public schools. The commuter and the migrant households try to send their children to the public schools for their free of cost education and later try to continue their education by sending to the private schools or colleges. The agriculture expenditures are the highest expenses of any of the households. The upper limit of the migrant, non-migrant and the commuter are about Rs. 2.5 Lac, Rs. 1.1 Lac and Rs. 99,000. The lower limit has much difference of Rs. 3000 of the migrant households, Rs. 16,000 of the commuter and Rs. 60,000 of the non-migrant households. The migrant households are at the lowest rank in terms of the agriculture expenditures because of the main reasons of the affordability. Though agriculture is, the primary occupations for all the three households' categories, but especially the migrant and the commuters spend less in comparison to non-migrants due to the lack of finance. The other expenditure head is migration expenses that were used to travelling to the destination areas. The non-migrant and the commuters' households do not spend on this expenditure heads. However, the migrant households spend in the range of around Rs.2000 to Rs.1000. The other important expenditure done by almost all the households are in the recreation or the festivals related expenses. The high ranges of these expenses are Rs.10,000 by the commuter households preceded by Rs.5000 by the migrant and non-migrant households. The lower ranges of the expenditures are about Rs.1200 of the

migrant households that are lesser than the other two categories with the expenses of around Rs. 2000 in the both non-migrant and the commuters' households. On the medical care head expenditure, the upper limit of the expenses reported by the migrant and the commuter households is Rs. 5000 whereas, it goes up to Rs.50,000 to the non-migrant households. However, the lower range of the expenses is almost similar to all categories of the households i.e. Rs. 500. It has been reported that they prefer to go to the private clinics to their nearby places. The transport expenditure head was reported higher expenses by the commuters' households with the upper range of Rs.17,500 preceded by the migrant households' i.e. Rs. 7000. However, the lower ranges of the expenditure under the head of transport expense are about Rs.300 from the migrant household and Rs.8,000 from the commuters' households. It can be said that as the commuters have to spend much in comparison to the other two due to the commuting status. In the miscellaneous head of expenditures, the non-migrants household is found to be in the higher expenditure lists, i.e. Rs.20,000 followed by the migrant households, i.e. Rs.15,000 and Rs. 10,000 by the commuters' households. Whereas, the lower range is about Rs. 10,000 for the non-migrant and Rs. 5000 of the migrant and the commuter. So the above data are clearly showing that the migrant households are the lowest spender in the expenditure heads.

VII. FOOD SECURITY

1. FOOD SECURITY OF THE HOUSEHOLDS

Table 5.11.1: Average food security (in months) according to the Households types

Remote Rural Villages	Average Food Security of Cereals		Av. Food Security of Oilseeds	Av. Food Security of Pulses	Av. Food Security of Vegetables
	Paddy	Wheat*			
Non-Migrants Households	11-12 months	8-10 months	8-10 months	7-8 months	7-8 months
Migrants Households	7-8 months	>6 months	3-4 months	4-5 months	4-5 months
Commuters Households	6-7 months	3-4 months	>1month	3-4 months	3-4 months

(Source: Primary Data)

Non-Migrant Households: In the study villages, it has found that the non-migrants households are in a much better position in terms of food security in comparison to the other household type i.e. migrants and the commuter households. The average food security of the cereals, i.e. paddy is almost for 11 to 12 months for the last one year. According to the non-migrant respondents, the paddy food sufficiency is almost for throughout the year along with the surpluses. The households with the larger land holdings and full-time investments in the agriculture were found to be in the situations of securing food, especially cereals such as rice and wheat, for the entire years without arranging from the markets. They try hard not to depend on the market purchasing at least for the cereals. If we compare the production of the cereals between the rice and wheat, the production is higher of paddy than the wheat. However, the consumption of wheat* consumptions is lesser than rice, and this could be the reasons that the wheat retains for throughout the year.

Around 90 per cent of the non-migrant households reported that they have the paddy productions in the surpluses. According to them, the surpluses are very uncertain

because the agriculture is very dependent on the climate and weather. If the climate and weather are favourable to the agriculture, then it directly influences the good production of the yields. However, last one year the households have the minimal surpluses, and the households used that for the selling purposes. The main reason stated behind the selling of the cereal surpluses was fair to the fulfilment of the immediate needs of the cash money. According to the respondents, they usually do not opt for the cereal's selling unless and until the situation is worse and it was defined by the time when they need cash money for the agricultural inputs such as seeds, labour costs, etc. or the other payments such as children's educational fees.

Migrant Households: According to the respondents the average food security of the cereals food are around 7-8 months. The rest of the months the people use to arrange the rice from the market by purchasing and depend on the PDS shops. It has found that around 65 per cent of the migrant respondents do not have any BPL/ APL cards due to this they do not have access to the PDS rations facilities. The 35 per cent households with the BPL/APL cards able to manage the rest 4-5 months of food scarcity from the both PDS shops as well as the local markets. The households, those who completely dependent on the market for the rest of the period are usually made purchases from the earnings that have been done from the migrations or with the daily wages earned in between the agriculture period. It has been found that the food scarcity generally starts from the month of August to December until the paddy gets harvested.

Commuter Households: The commuter's households are having the least food security of around 6-7 months in throughout the year. The major reason behind this is that the commuter are not fully dependent on the agriculture and around 75 per cent of them commute daily for the livelihoods. They have, the less agricultural lands, i.e. low land for paddy, due to this they do not cultivate in a larger manner with a number of yields that retains only the half of the year. Rest 5-6 months they completely depend on the purchasing from the market and the PDS shops. It has found that the commuter's households in the study areas apart from the paddy crops cultivate no other food crops.

2. FOOD SCARCITY PERIOD AND HUNGER

Table 5.11.2: Food Scarcity faced by the Average Households throughout the year (in months) in study villages

Types of HH	Jan	Feb	March	April	May	June	July	Aug	Sep	Oct	Nov	Dec	Cereals:
Non-Migrants					~~~~~	~~~~~	////						Low
													High
Migrants							====	====	====	====			Pulses & Vegetables:
		~~~~~	~~~~~	~~~~~	~~~~~	~~~~~	~~~~~	~~~~~	~~~~~	~~~~~	~~~~~	~~~~~	Low
Commuters		////	////	////	~~~~~	~~~~~	////	////	////	////			High
								====	====	====	====	====	

(Source: Primary Data)

According to the data, it has found that the major proportion of the household types, i.e. Migrants and the commuter, face the long food scarcity in comparison to the non-migrant households of the study villages. The migrant households had to deal with the cereals food scarcity for around 4-6 months in a year where the higher scarcity is in the month of September to December. The low scarcity tends to start from the month of July–August that continues until the harvesting period. The migrant households face vegetables and pulse scarcity mostly in the month of May-June that already starts from the month of February in a slow manner and continue up to the month of August (*kharif* i.e. sowing period). Likewise, the same trends are evident with the commuter households. However, the scarcity period seems to be a few months longer in this category household. The reason behind this founded was the commuters households do not completely dependent on the agriculture. They are the small farmers practising agriculture in a small patch of lands only to secure cereals for self-consumptions. It has found that the daily wage earnings done from commuting to the nearby places managed the commuters’ major part of the food scarcity. The migrant households are found to be in a better stage with facing least period scarcity, i.e. one month. There are families,



those who are able to secure cereals almost for throughout the year. In this category of households, families fall in the medium to big farmers in the areas practising their agriculture in large land holdings and with the conviction of the main occupation. Apart from the cereals, the households have to face the scarcity of pulses and vegetables, mostly in the month of May-June. This is the month when they do not get this food item, and it completely vanishes from the daily food plates of the people. The migrant households somehow try to grow vegetables in their homestead lands for the daily consumption, but the other two categories faced the scarcity for the longer period of time i.e. February to August in a low manner.

### **3. HUNGER COPING MECHANISM**

The households do not have the absolute hunger in the scarcity period. However, they do manage, by decreasing the quality and a number of the foods in their daily food intake. The respondent stated that the food scarcity period is the time when they have a low amount of the food articles left and with almost no money as savings. Nevertheless, as said by them, they try to grow their own vegetables in their backyards for their daily consumptions to avoid purchasing of the vegetables as far as possible. Many households also manage cereals, especially rice from borrowing it from their neighbours on credit that they tend to return within a day or a week. People reported that during the severe scarcity during the month of May-June, they manage it by eating watery rice (*paani bhaat*) with some dry & green leafy vegetables in the small amount during the lunch time and add rice with the little amount of pulses (*arhar* or lentils) or dry leafy vegetables cooked with rice starch called *jhor tiyyan* at the dinner time. However, no household have been reported of sleeping empty stomach. Many households in the study villages skip the vegetable intake during the scarcity period. They said that it doesn't affect them much because the food habit of the villagers is taking the least amount of vegetables in their food plates in a daily diet. It has also reported that some of them sell their paddy to arrange cash money to buy the other daily cooking items such as cooking oil, vegetables or pulses in case of emergency. Apart from these all, in the worst situation, they move out from the village of the daily wages for a day and arrange foods by purchasing from the market. Many households also stated that they cut the extra

expenditures on food items like cooking oils, meats, egg, etc. and pulses that cost higher. It has been found that they never compromised with the cooking quantity of the rice in the individual food plates, but control the expenses of the other complimentary food items. Many migrant households reported that this time they used the remittances. Along with this, they also go for the daily agricultural labourers work in the village where they get some days lunch at the workplace provided by the owner. They only have to arrange the foods for the rest of the family members, especially the children those who stay at home. According to them, if the family size is small then they do not trouble much and somehow able to manage the foods by working inside the village. However, if the family size is big, then bit too difficult for them to arrange it easily, and they have to commute 1-2 days in between the week in search of cash income by leaving their own field cultivation.

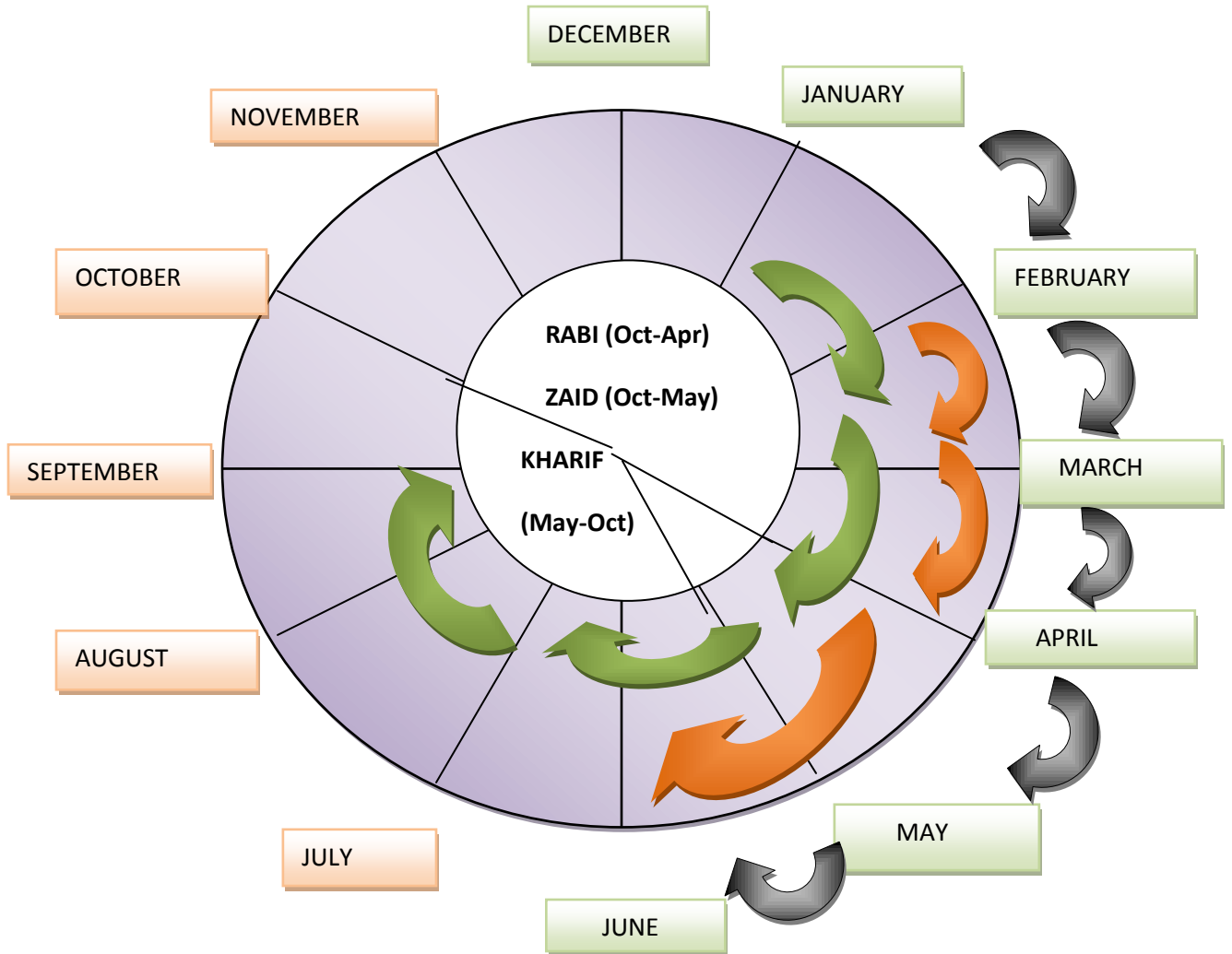
## **VIII. MIGRATION**

### **1. MIGRATION CYCLE:**




In the study areas, the general trends of the seasonal migration cycle are of the six months. It has found that the more than 80 per cent of the migrant respondents are migrating for almost six months from the month of January to June. Around less than 20 per cent of the migrants are found to be leaving the village for less than six months, which is usually 4-5 months and sometimes it is 3-4 months too. There are small proportions i.e. less than five per cent of the migrant households that reported to be staying in the destinations for more than six months that is from the month of January to September. They are the migrants, those who are first time migrants or re-started their migration after a long gap. These households have found to be the enough members in their households to at least take care of the agriculture and the family. According to the migrants, their stays in the destination area are usually dependent on the work availability on the work sites. In the brick kiln or the construction sites, if there is good weather with no early monsoon then the work is available almost for the six months. However, many times, they have to return to the village because of the early rain seasons, and they get the only job for 4-5 months and sometimes 3-4 months too. Other than these reasons, many households do not have enough members to complete the

cultivation of *rabi* crop, i.e. wheat, therefore they stay back until the February months and then leave their village. Whereas they do not grow wheat in a larger area, therefore, they do not stay in the village until its harvesting. The *rabi* crop is harvested by the family members those who stay back in the family and in the village.

**Figure no. 5.1** **MIGRATION CYCLE**



(Source: Primary Data)

	>80 Per cents of the Migrants migrates for 6 months (January-June)
	<20 Per cents of the Migrants migrate for less than 6 months (February- May/ June)
	<5 Per cents of the Migrants migrate for more than 9 months (February-September)

## 2. REASONS FOR MIGRATION

According to the migrants, the reason that was told for leaving the village for migration is almost similar to the most of the households. The most cited reason was that almost cited by the cent per cent migrant households in the remote rural villages are the less proportion of the lowlands (*doin*) for the paddy cultivations. The other reasons that influence the migrations are the lack of irrigation facilities due to those migrant households are not able to cultivate or utilise a large proportion of their land during the other seasons apart from the *khariif* season. The un-irrigated land type restricts their agricultural practice for more than six months. This leads them towards no work during half of the year. Apart from the agriculture, they do not have any other livelihood opportunities available in or nearby villages. This may lead to trapping them into the vicious poverty cycle that leads them to low income and forced them to take debt. These altogether forced them to leave the village to cope up with the vulnerability for the survival. The migrant households altogether have all the above reasons that forced them to migrate from the village. Other than these, the other reasons told by them are a shortage of lands that cited by around 62 per cent of the migrant households. These are the household, that is mostly the nuclear family and after the divisions of the lands (verbally) do not have, many agricultural lands left with them to perform the crop cultivations. These reasons are further accompanied with the other previously cited reasons that forms the vicious cycle. The other reasons for migration are around 25 per cent of the migrants told that they wanted to experience the city life. These are the migrant groups, those are youths the age groups of 18-25 years, that are keen to explore the city life other than poverty issues. They wanted to earn for the betterment of their lifestyles. Therefore, they soon after their schoolings, that most of them dropouts and incomplete their studies, left the village in search of the best opportunity in the other cities.

Table 5.12.1: Reasons for leaving the village by the Migrants in the study villages

Sl. No.	REASONS FOR MIGRATION	PROPORTION OF HH	Sl. No.	REASONS FOR MIGRATION	PROPORTION OF HH
1.	No Land	0	6.	Poverty, Low Income, Debt Burden	100
2.	Shortage of Land	62	7.	Experiencing City Life	25
3.	Less number of Lowlands for the Paddy cultivation	100	8.	Higher Education, therefore, Inward job Aspiration	0
4.	Lack of Irrigation Facility	100	9.	Non-availability of job, according to qualifications	0
5.	No Work or Employment	100			

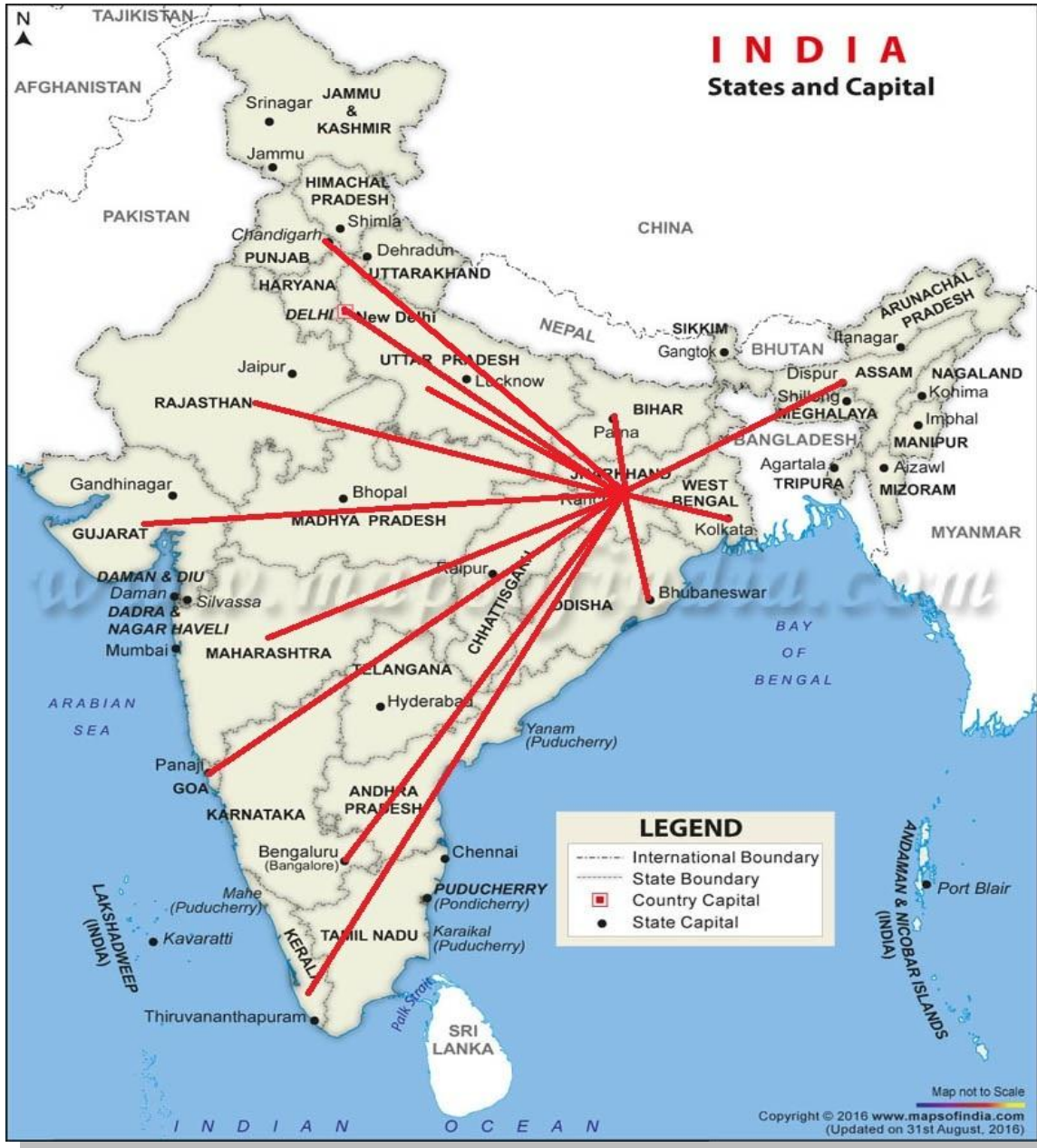
(Source: Primary Data)

The migration trend in this study villages is that the people those are youngsters usually prefer to move out from the village in search of the better job opportunity, but it has soon been avoided with the age groups those are married and have a family. The more the family members they are efficient to perform the agriculture and need not move out of the village as they focused on the profit from the agriculture itself.

### 3. SEASONAL OUT-MIGRATION FLOW

It has been found that the seasonal out-migration flows of the remotest rural areas are mostly towards the different states, especially for working in the brick kiln, construction sites or the gardens. Some also reported working in the factories of the different states. The nearest flow of the migration is the Bihar's Gaya or Patna, Banaras in Uttar Pradesh and Nearby Kolkata in West Bengal and Orissa. The distant places to migrate are towards the other states like Assam, Bangalore, Gujarat, Punjab, Goa, Kerala and Maharashtra.

Map 5.1: Seasonal Out-Migration Flow from the study villages



(Source: Primary Data)

Table 5.12.2: Proportion of average members migrants in the households

Number of Migrants in HH	Total Per centage of HH
At least 1 Member	44.44
At least 2 Members	33.34
More than 3 members	23.22

(Source: Primary Data)

It has found that in the study villages the average proportion of the members migrates from the migrant households, those who are currently practising the migrations are as follows: Around 44.44 per cent of the households from where at least one members migrate. Around 33.34 per cent of the migrant households reported to be contained at least two members as migrants, and around 23.22 per cent of the households have at least three or more than three members as migrants. Various reasons influence the number of members to migrate among which the major reasons are the size of the family and the compositions of the age groups in the households. In the study area, the general characteristics of the migrant households based on the number of the migrant members can be seen as the factors that decide the numbers on the household level. The households with more than eight members of the age groups of more than 17 to 18 years, married couples with or without children with the age groups of less than 4-5 years are found to be in the category of three or more than three migrant members. In the second category i.e. members at least with two migrants are the households, those are basically in the household, size of 4-5 members, where most of them are married couples with or without the children with the age group of fewer than 4-5 years and have elders members especially their parents to look after the houses. In the category the members with at least one migrant are the households where mostly the household size are 4-5 members, having members of the age groups of less than 18 years, mostly school going children, elderly members and women especially wives to look after the households.

In the study area, it has found that the almost 98 per cent of the households have members those have migrated over the past 25 years. According to them, they all are the second or third generation of the migrants at their households. The women respondent said that they have been into migration since their childhood as they use to migrate with their parents. After the marriage, they continued it with their husbands. This livelihood practice is not new to them. The male members reported that they have been practising this since their teenage at the age of 17 or 18 years. Earlier they use to move at the very early age along with their parents. However, they started working outside their village after the age of 18 only.

Based on the migration history of the household, which says almost every migrant household have the migration history of more than 20 to 25 years, the households with the elderly members are the 'return migrant'. The reasons behind the 'return migration' are old age, familial problems, ceremonies, health issues, problems in the workplace and other opportunities, etc. It has found that the male migrants after the age of 50-55 years stop migrating outside their village. The reason that told is the ageing factors that restrict them to do hard physical works at the brick kiln or construction sites. According to them, all the casual works, they required enough physical strength, which is impossible at the age of above 50 years and this, stop them from getting enough work in the destination area. Therefore, they return and do not migrate anymore. During the staying back period, they usually opt the other livelihood options such as agri-labor work inside the village or commute to the nearby places for some other daily wage options. The female stops migrating not because of the ageing factors instead they have to stop migrating because of their familial obligations. The most cited reasons were under this was the schooling of their children at the origin place. Secondly, the health issues of the migrants or any of the family members of the origin villages are the other reason that stops a migrant to migrate and find a job staying in the village itself. Thirdly, most cited reasons are the migrant's problems faced in the workplace related to the living facilities such as overcrowded rooms for livings, no drinking water facility, no or the distant toilet facility and no health care facility that makes their life difficult for the migrants at the destination, especially at the brick kiln sites.



Apart from this, the general trend is over 2-3 years there are household's that were reported in 'return migrants', but it is not permanent. After staying back in the village for at least a year or two, they again get back to migration. Until the period, they used to commute to their nearby cities. They do this because of the familial requirements such health issues, any family members' marriages or building houses, etc. Soon after the accomplishment of the familial responsibilities, they migrate. The reason behind this is they cannot afford to commute daily in the families with big sizes and uncertainties of the jobs while commuting that led them to earn lesser in comparison to the migration in the destination areas where they at least get 30-day jobs for at least 4-5 months.

*"I have also worked for daily wages too, but I used to commute to the Ranchi city in the amount of Rs. 70 per day. I had opted this when there was a huge crisis of money in our home and had to look after a big family with lots of members. I was working as a construction labours. This I did only for one year to cope up with the crises. I don't take my wife along with me as she takes care of the household work and children".*

(Respondent 2, Village: Bobro)

*"I returned back to the village after two years because I was not feeling good working there and started feeling sad about it. I really like doing agricultural works in my village, and I was always getting worried about my health issues that in such case who will send me back to my place and upon whom I will be dependent on. I was missing my family there. I have to migrate again because I have left with no other options."*

(Respondent 24, Village: Deuri Alias Dongatoli)

#### 4. REMITTANCES

Table 5.12.3: Frequency of Remittances sent during the migration period

<b>Frequency of Remittances Sent during the migration period</b>	
<b>Frequency</b>	<b>Proportion of Household (per cent)</b>
Overall Send money on a regular basis	80
Once	10
Twice	20
Every Month	50
Do not Send	20

(Source: Primary Data)

It has found that the remittances are sent by around 80 per cent of the migrant households in the study area. Under which, the proportion of the households that send at least once, throughout the migration period is around 10 per cent. The amounts that they reported to send to their households are about Rs. 8000-10,000. The proportions of the households that remit twice in the migration period are around 20 per cent. The amounts that are told be sent by the migrants are around Rs. 5000-6000 each time. The frequency of money is not fixed, but it is usually sent after the demands from the households. They reported that during the money were demanded by the family members through the phone calls and the migrant immediately responds to the requirements. The proportion of the households that send the remittances regularly every month is around 50 per cent. The average amounts that are told by the migrants to be sent are around Rs. 1000-5000. There is also around 20 per cent of the migrant households, those do not send any remittance to the households and bring money at the end while the returning time. These are the household with the early or the first time migration and the households that do not migrate to the many distant cities or the states. They do not earn much in comparison to the other migrants, those who migrate to the big cities or metropolitan cities with good wage rates.

Table 5.12.4: Proportion of the Households received gift apart from money

<b>Households received gift apart from money</b>	<b>Proportion of HH (per cent)</b>
Gifts	20
No Gifts	80

(Source: Primary Data)

It has been reported that around 20 per cent of the migrants bring gifts while returning from the destination areas for their children, family members, and wife. As gifts, they mostly bring clothes. However, around 80 per cent of the households told that they do not receive any gifts apart from the money as remittances.

Table 5.12.5: Proportion of the households according to the Receipt of Remittances

<b>Receipt of Remittances</b>		
<b>Sl. No.</b>	<b>Mode of sending Remittances</b>	<b>Proportion of HH (per cent)</b>
1	Wife's Bank Account	20
2	Agents	10
3	Both (Wife's account & Agents)	10
4	Neighbours' or Friends' Bank Accounts	10
5	Both (Neighbors' Bank Accounts & Agents)	30
6	Bring at the end of the Migration Period	20

(Source: Primary Data)

The modes of the sending remittances are different for the different households in the study villages. Around 20 per cent of the households have reported that the remittances are sent to the bank accounts of the wife. The migrants, mostly those who send it on a monthly basis send it to the wife's names account. They inform their wives after depositing the money and detailed the monetary amount that is withdrawn. They also explain the expenditures that to be done in the households through the mobile phone calls. Around 10 per cent of the migrant household told that they send or remit money with the help of the 'Sardar' or agents. It has been told that the agents visit the village

very frequently almost within every 15 or 20 days a month. They send the money to them during their visits. The agents are the people those belong to their own or the nearby villages those who recognise their family members. In the case of the old aged 'left-behinds' members, the agents are told to explain the amount to be spent on the particular activities in details. It has been reported that the agents they themselves help them by giving money from their own pocket in case they do not have money. Later they take a commission for it during their paid time. It has found that around 10 per cent of the migrant households send through both the medium using wife's bank account and through agents. The migrant households also receive the remittances from the money deposited in the neighbour's or friend's bank accounts. This usually happens to the family or households that do not have any bank accounts of their own. The migrant chooses to take help from the neighbour or friends those are much more trustworthy to them. Around 30 per cent of the migrant households uses both the mode, i.e. using neighbour's or friend's bank account and through agents. According to the respondents, they prefer to send the money in between the migration period because they feel unsafe to keep the money in the working sites and bringing a huge amount of money along with them from such distance is risky and makes them worry. Other than these they believe that if they bring the bulk amount, then it won't be utilised or spend appropriately in the productive activities, in fact, it might be spent on unnecessary expenditures that could be out of control.

*“Many people use to bring the bulk amount while they return back to the village, but I don't prefer this because I don't feel it's safe to bring this bulk amount. And I also believe that the money in bulk amount might get finished soon on unproductive work.”*

(Respondent 10, Village: Bobro)

There are also migrant households that do not send any remittances in between the migration period, and these are around 20 per cent of the total migrant households. They told that they bring their remittances at the end of the migration while returning to the village from the destination area.

## IX. FOOD ACCESSIBILITY

In the study area, all the 72 households comprising of migrants, non-migrants and commuters' households have been reported to take three meals a day. There are no households that have been reported to take less than three meals a day in the study village.

In the remote village study areas, the food consumption pattern of the people is almost found to be similar to each other. There is hardly much difference in between the different types of households, i.e. between the migrants, non-migrants and the commuters' households in the last one year. The households take the different foods such as grains, tubers, vegetables, pulses, milk or milk products, oil or fats (*ghee*), fruits and animal proteins in a different frequency in the different seasons such as *Kharif* (May-Oct), *Rabi* (Oct-Apr) and *Zaid* (Oct-May).

It has been reported that the consumption of the grains is almost taken on a daily basis by all the three types of the households throughout the year. However, the intake slightly differs from each type of households, according to the seasons. On the *kharif* season, though the intake of rice is daily, after the June month, the stock of the grains is starting to decrease. In addition, from the month of July, the households have to maintain it from the different sources such as buying it from the market or stocks from the PDS. The intake quantity of the grains, especially the paddy for each person in each household has never been reported to decrease up to the October month. However, in the *rabi* season (Nov-April) they reduce the grains intake quantity in each person of the households. This was the most crucial period when they said that they were left with no food stocks referring to the grains as well as with no money. Therefore, they manage it by reducing the quantity of the food. They use to take all the three meals a day, but with a lesser amount in their food plates. Apart from the rice, they take wheat, especially for making *chappatis*/ bread very rare or occasionally. The general food habit in the study area is that people do not take bread/*chappatis* daily. However, if they take then the quantity of it is very less or can be said that only one meal a day and it almost being stopped during the month of November-December to January.

The intake of tubers referring to potatoes and onion is almost throughout all the seasons. The households stocked it for the whole year that they use it daily. The use of the onion and potatoes is every day, but in the lesser quantity usually to accompany it with the rice or *chappatis*. In the month of May and June, the households were reported to skip taking tubers because of its scarcity. The intake of the vegetables in the study area also depends according to the seasons. On the *kharif* season, mostly in the sowing period, the households do not get many vegetables at their home. Few households, especially the non-migrants and the migrant households prefer to grow it in their homestead lands only for their own consumption. However, they are not able to get the vegetable throughout the season. The vegetable intake reduced, becomes rare or sometimes no in the food plates during the month of May to June. This time they usually prefer to buy it from the market occasionally. Likewise, the respondents of the study area also do the pulses intake daily, but in a smaller quantity. Either, they take pulses (*daal*) or the vegetables at a time but do not take both in one meal. On the *Kharif* season, they usually do not have enough money to purchase both vegetables and the pulses especially in the month of May to August, as they invest all their money into the agriculture. Therefore they take only rice with water i.e. only carbohydrates in their food plates. The intake of milk or the milk products is completely absent from the food plates in the study area throughout the year. The people do not have the habit of taking milk or milk products in their foods. Only one or two households with an infant where the lactating mother was unable to produce enough milk are reported to have cow milk. It has found that not taking milk in the food habits is the cultural prejudices of the tribal community in the study villages. Other than the community beliefs, the non-tribal's households are also not been reported to take milk or milk produce in their daily food intake. However, there was one small local dairy cooperative (private) in Bobro village (remote village) that they use to collect the milk and sell it to the other cooperatives, but people do not buy it for their foods. The food items that are oil or fat (*ghee*) intake in the households of the remote villages are reported to be very minimal in terms of quantity. No households were reported to be using ghee in their food habit, whereas; the usage of the oil is only done for the vegetables cooking. They do not use it for any other dishes not even in the *daal*. During the month of sowing until harvesting, they use the vegetable

oils optimally during the festivals once or twice. The households are reported to intake fruits mostly the locals and seasonal ones. It is not that they have to purchase it especially; rather they have it whenever they get around their villages. The intakes of animal proteins by the study population are very occasionally during the whole year. They mostly take it during the festivals. It has been reported that the migrant households take meats once or twice in a week for the first month soon after they return from the destinations area. However, soon after that one month (July or August) the meat intake almost reduce or change the occasional preference.

The other food items in the food plates all depend on the availability of the foods and money in the households. Therefore, the households do manage the foods through stocking the food grains in the different season differently. It has found that the migrant households maintained the food grains are preferring to the paddy or rice during the sowing period, i.e. May-October months by purchasing it from the market. Around 70 per cent of the migrant households reported that they bi-monthly and around 30 per cent households said that they purchase it on a monthly basis. During the harvesting season, the almost every migrant households are purchasing grains once in a week. However, almost all respondents told that they do not have to purchase the grains in the post-harvesting period. The non-migrants had reported that they do not have to purchase the grains in any of the seasons. Whereas, the commuters' households reported that in the sowing seasons, they do purchase both monthly and bi-monthly. During the harvesting season, the commuter households have to purchase on a daily basis and in the post-harvesting season, none of the commuter households had been reported to purchase the grains in the study villages.

The households in the study areas are getting foods from the different food sources during the different food seasons. The migrant households responded that during the sowing season, i.e. May-October months and the harvesting season, i.e. October – April the food source and availability is almost similar. According to the migrant household, the staple foods such as rice, wheat, and pulses have arranged most of the time or can be said very often from the markets. The other food sources are fulfilled from the Mid Day Meal in the schools where the students from the households get their

one time meal i.e. the lunch from the schools itself. This is available to the children very often except the school holidays during the sowing seasons. Other than these sources households, those have ration cards get the grains from the PDS for most of the time but not very often. Around 32 per cent migrants households in the study have ration cards. Apart from the staple foods, the other food items such as vegetables are availed most of the time for the self-grown vegetables from their homestead lands and sometimes they purchased it from the markets. The migrant households sometimes get animal protein from their own livestock and sometimes purchased it from the markets too. However, they never purchased fruit from the market, but they get seasonal fruits from the commons for the consumptions. It has found that the migrant's family gets the processed foods or can be said the packaged food such as chips or *kurkure*, etc. are bought from them are very rare from the market. However, the non-migrant households get their staple foods, especially the grains are available are often self-grown and never have to purchase from the market. Whereas, most of the time they have to buy the pulses from the market. However, they have enough food grains sufficiency for throughout the year, but the households with the ration cards, i.e. around 20 per cent, do access the rice from the PDS as well along with the one time meal for their students' children from during their schooling period. The other food sources for the other food items such as vegetables, animal proteins, fruits and processed have the similar food sources for all the three types of households in the study villages during the sowing and harvesting seasons. Whereas, in the post-harvesting season, i.e. *Zaid* (August-April/May) it has found that all the three households never buy staple foods from the market and use the self-grown stock. Along with the self -grown grains around 39 per cent of the total studied, households, including migrants, commuters, and non-migrants households, also sometimes use the PDS provisions for the food stocks. The other food items such as vegetables are often availed from their self-grown products as well as sometimes from the market. The animal proteins are availed from the market are, very often, but also sometimes get it from their own livestock. It has found that around 10 per cent of the commuter households have ration cards and therefore they get the staple food is arranged from the PDS shops during the *kharif* and *rabi* seasons. However, the other food items are mostly availed from the markets or either self-grown products.



The time when the households had to face the lack of the food availability within the last one year, the households made the common compromises. The migrant households reported that during the sowing season around 25 per cent of the total migrant households have chosen to eat less proportion of the foods than usual. Whereas, around 75 per cent of the total migrant households were reported to continue this phenomenon during the harvesting season too. It has found that only 10 per cent of the migrant households have reported being sleep without food in the past year for only one or two days during the sowing season. The non-migrants households have reported that there are no households that are found to be in the category where they have faced any food grain scarcity throughout the whole seasons. It has found that around 50 per cent of the total commuter households ate less proportion of the foods during the sowing period, whereas around more than 60 per cent of the total commuters households are found to continue this during the harvesting seasons too. It can be said that around 25 per cent of the total households, including migrants, non-migrants, and commuters, ate less proportion of the foods to manage the crisis situation, whereas, around 50 per cent of the total households are seen to continue this phenomenon during the harvesting seasons too. There are not single non-migrants families in the study villages that have been reported to manage the grains crises through managing by any of these ways. There are no families or households found that used the other ways, such as eating fewer meals, slept without any foods or had no food for the whole day.

Further , the different households ranked the steps taken to avoid the suffering from the lack of food during the certain period of the year are as follows:

Table 5.13.1: Steps taken by the household types to avoid suffering from lack of food during certain period of the year

Sl. No.	STEPS	MIGRAN T HH	NON- MIGRAN T HH	COMMUTE R HH
		RANKING (1-10)		
1	Reduction in Diet Meal	1	1	1
2	Reduction in expenses other than food, education, health	8	7	7
3	Move out to work in other areas	4	10	8
4	Sale of Assets (land, Livestock, Agricultural Implements)	9	4	4
5	Borrow grains	3	3	3
6	Mortgage (land, livestock, Agricultural implements)	5	5	6
7	Loan	6	6	5
8	Depend on gathering	7	8	9
9	Use dried food items	2	2	2
10	Other	10	9	10

(Source: Primary Data)

According to the migrant households, ranking for the steps taken to avoid the food scarcity, they first prefer to make a reduction in the diet of the meals. The households, mostly take these steps during the monsoon seasons until the winter season for the month of June to December. The other two households too, i.e. non-migrant and the commuter households preferred this, where they also ranked this in their first steps for the survival. The reduction does not mean that they skip the three times meals rather the households do reduce their intake quantity and the quality of the food items in the meals. The second-ranked steps by the migrant households are the use of dried food items*. This is also the most common steps almost taken by all the three types of households in the study village. It has found that the tribal community has the food preserving culture by drying the green leafy vegetables that found locally. The households reported that

they use to dry all the green leafy vegetables, pulses, and flesh foods and were commonly taken as meals consisted of rice and dried food items. Pulses are reported to be taken in their meals, but not consumed on a daily basis. This is also ranked by both the other households, i.e. non-migrants and the commuter households as secondly preferred steps. The third-ranked steps that almost all the three types of households in the study area had ranked are borrowing grains. All the households practice the borrowing grains during the scarcity period in the remote study villages. It has been reported that during the emergency they mostly borrowed the grains from the neighbours and friends in their village. It has been found that they usually repay the borrowed the grains within few days or a week. They either go for the wage works in the village or do commute and earn the wages and immediately repay them back. The fourth steps preferred by the migrant households are moving out of the village for work. The migrant households soon after the completion of the agricultural seasons, i.e. sowing and harvesting, leave the village for their livelihood. Therefore, this is one of the most preferred steps by the migrant households for avoiding the food scarcity. In the meanwhile, during their stay in the village, they too prefer to commute for a day or two, at least one or two members of the family in the nearby places to earn wages to avoid few day grains scarcity. According to the non-migrant and the commuter households, the fourth-ranked steps are the sale of assets (land, livestock, agricultural Implements). Here, they usually sell their livestock, but never sell their lands or the agricultural implements. Whereas, the migrant households ranked it in their bottom list nine out of ten. Rather, the migrant households and non-migrant household both prefer to go for the mortgaging option before selling their livestock. They ranked it in their fifth steps in which they usually mortgage lands. They never mortgage their livestock or the farming implements. In the next steps, i.e. ranking the sixth steps are taking loans. The migrant and non-migrant household both the category has put it in the sixth ranking where they prefer to take loans from their friends and relatives. No households have been reported to take loans from the moneylenders or the loans with the interest rate charges. The commuter households have a slightly different ranking, where they ranked loan in fifth and then mortgaging in the sixth steps. They reported that they first go for asking the loans from their friends or relatives, then go for the mortgaging step. In the seventh

steps, both the non-migrant and the commuter households have put the reduction in expenses other than food, education, health. It has found that none of the households reported that they cut the expenditure on the education of their children at least up to their high schools and their never compromised the expenses of the health. The reason behind was that health is an uncontrollable expenditure that they are unable to avoid. During the crisis period, it has been reported that they request the school authority to agree with the late fee payments for their children. Moreover, they ask the time rebate of 2-4 months and try to pay soon after the harvesting season. The mutual understanding between the local school authority and the villagers are practising the very common phenomenon of giving permission of late fee payments.

*“In such condition, we try hard not to break the schooling of our children. We all, parents together request the school administration to at least give some rebates during this scarcity period and try to convince them to take it after the harvesting period. Stop children education in such difficult situation is never our option and not even thinks of doing it in any case. Being parents, we never decide to stop our children’s education. However, after the schooling of 6th to 7th standards children they themselves understand the situation of their households and dropouts from their schools and studies. If we have the facilities in the public school, then we do not have to worry and invest a lot of money to send our children to the private schools.”*

(Respondent 26, 27 & 28; Village: Deuri Alias Dongatoli)

Whereas, the coping strategy reported were different regarding the schooling of the children in the commuter households. It has found that they stop sending their children to the schools for at least 3-4 days until the money are arranged for the school fees.

*“We also manage the financial crisis by not sending our children to their schools for at least 3-4 days till the money got arranged for the fees.”*

(Respondent 17, Village: Bobro)

*“Due to the low financial status many times we take steps that we do not want to take. Apart from cutting off the expenses on foods and its quality, we have also stopped*

*sending our children to the schools during the worst financial situations and could not able to pay their monthly school fees. Though my children are going to the public schools and the fees are too cheap, but still, we are unable to take care of their other school related expenses.”*

(Respondent 68; village: Murma)

The dependence on the gathering is not being practised much by the villagers of the study area. In case, few households of the Deuri Alias Dongatoli that are having a forest area chose to collect NTFP for some time.

Table 5.13.2: * Indigenous Foods consumed as a dried food by the local community in the study area

Indigenous Foods Consumed by the Local Community				
Grains	Green Leafy Vegetables	Pulses	Millet	Flesh foods
RICE: HYV called Lalhat/lalat	<i>Beng (Centella asiatica), Kudrum (Hibiscus cannabinus), Hirmichiya (Enhydra fluctuans), Bathua (Chenopodium album), Phutkal (Ficua geniculata), Chakod (cassia tora), Chiniya (Brassica campensis pekinensis), Bhaji (Amaranthus viridis), Gandhari (Amaranthus spinosus), Lal bhaji (Amaranthus gangeticus), Saru (Colocasia anti-quorum), karmi (Ipomea reptaus), Khapra (Trianthema monogyna), kanda leaves (Ipomea hatata)</i>	<i>Khesari daal (Lathyrus sativus), Barbatti (Vigna catjang)</i>	<i>Madua (Eleusine coracana)</i>	Snail and fresh water mussel and <i>singhi</i> fish ( <i>Saccobranchus fossils</i> )
Indigenous Rice Varieties ( <i>Oryza sativa</i> ) like <i>Gopal bhog, Manipuria, Gundui, Jheeli</i>				

(Source: Primary Data)

## X. PROVISIONS

Table 5.14.1: Average proportion of the Households with the beneficiary under the Government Schemes

Sl. No.	Name of the Schemes	Average Proportion of the Household (in per cent)			
		Migrant Household (n=32) [per cent]	Non-Migrant Household (n=20) [per cent]	Commuter Household (n=20) [per cent]	Total proportion of the Household (n=72) [per cent]
1	BPL Card Holder	10.24 [32]	4 [20]	2 [10]	15.84 [22]
2	APL Card Holder	14.08 [44]	0 [0]	2 [10]	15.84 [22]
3	Yellow Ration Card	19.84 [62]	4 [20]	4 [20]	28.08 [39]
4	MNREGA	10.24 [32]	0 [0]	0 [0]	10.08 [14]
5	Widow Pension	1.92 [6]	0 [0]	0 [0]	1.44 [2]
6	Old Age Pension	1.92 [6]	0 [0]	0 [0]	1.44 [2]
7	Indira Awas Yojana (IAY)	3.84 [12]	0 [0]	0 [0]	3.6 [5]
8	Mid Day Meal (MDM)	9.92 [31]	0 [0]	2 [10]	11.52 [16]
9	Pradhan Mantri Ujjwala Yojana	1.92 [6]	0 [0]	0 [0]	1.44 [2]
10	Kisan Credit Card (KCC)	0 [0]	2 [10]	0 [0]	1.44 [2]

(Source: Primary Data)

In the study villages, the average proportion of the households with the beneficiary of any government schemes shows the provisioning status of the study villages. There is around 22 per cent of the total households that have been found to be the BPL cardholders in the study area comprised of around 32 per cent of the total migrant households, around 20 per cent of the total non-migrant households and around 10 per cent of the total commuter households. Many households had reported having their names in the recent BPL lists but did not get the BPL cards yet. The APL cardholders in

the study area are around 22 per cent of the total studied population in the remote rural villages. The total is comprised of around 44 per cent of the total migrant households and around 10 per cent of the total commuter households. No households with APL card from the non-migrants households have been reported in the study area. The total yellow ration card holder is around 39 per cent of the total studied population, and it is comprised of around 62 per cent of the households of the total migrant families, around 20 per cent families of the total non-migrant households and around 20 per cent commuters households from the total commuters households. It has found that almost all the 62 per cent households comprised of any of the cards either BPL or APL availed the PDS services. In the study area, the total households that have been reported to work under the MNREGA are around 14 per cent, and it is comprised of around 32 per cent of the total migrant households. Rest no other households, i.e. non-migrant and the commuters have reported working under the MNREGA program. In the study villages, there is around two per cent of the total households, that avails the widow pension, and all of them are reported from the migrant households that are around six per cent of the total migrant households. Non-migrant and commuter households do not have any households that are the beneficiary of the widow pension. Similarly, around two per cent of the households have been reported to avail the old age pension holder from the total households of the study population. These are all from the migrant households that comprised of around six per cent of the total migrant households. Around 12 per cent of the total migrant households have been reported to avail the Indira Awas Yojana schemes, and altogether around five per cent of the total households avail these schemes in the study villages. The total households of around 16 per cent in the study area had reported getting the midday meals (MDM) services to the children where around 31 per cents are migrant households and around 10 per cent are of commuter households. The non-migrant households do not avail this because their children are not studying in the government public schools, but they send them to the private schools. Around six per cent of the total migrant households are being reported to avail the Pradhan Mantri Ujjwala Yojana under which they got the one cylinder gas stove at the subsidised rate. It is also comprised of around two per cent of the total studied households. Similarly, In the Kisan Credit Card (KCC) schemes around six per cent of the total migrant

households comprised the total households of around two per cent of the study population.

The commodities that are availed under the PDS services are around 30 Kg. of rice and 2.5 litres of kerosene oil for the BPL cardholders and around 10 Kg. Rice and 1-1.5 litres Kerosene for the APL cardholders are being distributed among the villagers. Almost all the yellow ration cardholders go to their nearby Panchayat PDS shops once in a month. In the commodities apart from the rice and kerosene, no other commodities such as wheat, sugars, etc. have been reported. According to the respondents, the provisioning is to be done on a monthly basis, but they reported that in the study villages, the provisioning is very irregular with one or two-month gap. In one of the panchayats of the remote villages, it has been reported that the provisioning is done only for the six months and the rest of the months they are not given any of the commodities, not even in arrears to settle down the poor households ascribed provisioning. According to the APL cardholders, the process of getting the commodities is very painful and hectic, as they have to wait for a longer period and have to face extreme chaos to get 10 kg of rice and 1-1.5 litre of kerosene.

*“We do have the BPL card and get rice around 10 Kg per month that is very less for us in quantity wise. Along with the rice, they also provide 1.5 litres of kerosene oil. We have a yellow card, so we only get 10 kg unlike the red cardholders those who get around 30 kg/month. Collecting the ration from the PDS shop is very difficult for the women, and it becomes more difficult for the women with the small kids. My father is too old to go there. Therefore, my wife does it. The day of distribution, she has to struggle in the major crowd and many times unable to acquire the prescribed quantity of the ration for the home.”*

(Respondent: 33; Village: Deuri Alias Dongatoli)

Under the scheme of Indira Awas Yojana (IAY), it has been reported that the households were given the amount of the house constructions. The amount that has been sanctioned by the government grants are around Rs. 35,000 only to the enlisted BPL households. They told that they have sanctioned for making one veranda type room, and the total construction expenditures were around Rs. 48,000. The individual households



for the completion of the house added the additional amount. It has found that, in the study villages, there are many households that have not completed the house and it remained unfinished due to the insufficient amount for the complete construction. Other than these, one case also reported that they had paid a bribe to avail the Indira Awas along with one well in their homestead land.

On the Kisan Credit Cards (KCC), it has been reported that taking a loan amount of Rs. 10,000 with the upper limits of Rs. 50,000 for the agriculture purposes.

In both the Old Age pension and the Widow pension, the households had reported availing around Rs. 300 each on a monthly basis. They collect it from their nearby post offices.

Under the MNREGA schemes, the households of the study areas had been reported that they were very much involved in the activities such, was digging well, etc. They were satisfied with the works under this, but later due to the untimely and sometimes no payments led them to leave this work and left it for the migration options. The respondent is still raging to talk about the MNREGA because they did not get their payments for their work.

*“I have been cheated by the MNREGA schemes as I was not paid after working for a very long. I have raged against this MNREGA scheme. Sue to no payments after working so long here. And due to this, I have to lease out many of my lands and later have to migrate to earn the cash income.”*

(Respondent: 12; Village: Bobro)

## XI. HEALTH PROFILE

Table 5.15.1: Proportion of the households where any member suffering from any type of illness in the past 6 – 12 months

Sl. No.	Family Member	Average Proportion of the Households (in Per cent)			
		Migrant Household	Non-Migrant Household	Commuter Household	Total Households
1	Family Head (Male)	25	10	0	14
2	Family Head (Female)	44	20	20	30
3	Children	56	20	20	36
4	Father (Old Aged)	25	0	0	11
5	Mother (Old Aged)	31	0	0	14
6	Others	25	0	10	14

(Sources: Primary Data)

The average proportions of the total households where the male family head are suffering from any type of illness in the past 6-12 months are about 14 per cent of the total studied population in the rural areas. It is comprised of around 25 per cent households of the total migrant households and around 10 per cent households of the total non-migrants households. However, no households were reported to any male head members to be ill in last six months. The female member head of the family was reported to be ill in the last 6-12 months in the study area are around 30 per cent households of the total studied households. Whereas the migrant households comprised of the 44 per cent of the total migrant households, around 20 per cent are both from the total commuter households and non-migrants households each. It has been reported that around 56 per cent of the migrant households where the children are suffering from the illness, and around 20 per cent households from the non-migrant and the commuter households each. Altogether, the total households around 36 per cent had reported the child's illness at the households. Around 11 per cent total households reported to that father (old aged) are suffering from the illness and it is comprised of the around 25 per cent migrant households out of the total migrant households. Whereas, none households from the non-migrant and commuter households reported that. Likewise, the mother's illness had been reported by the around 31 per cent of the total migrant households that

form around the 14 per cent of the households out of the total studied households. No other households, i.e. non-migrant and the commuter households have been reported the mother's illness in last 6-12 months in the study area. It has found that around 14 per cent of the total households reported the illness of other than the above relationships, i.e. mostly the siblings or brother and sister-in-laws. The migrant households that reported the other member illness at the households are around 25 per cent of the total migrant households and around 10 per cent households from the total commuter households. It can be said that the higher proportion of the members at home that has been reported by the total households is the female head of the family and the children of the households. Whereas, the migrant households reported that mostly the women (both female head and the old aged) and the children (both male and female) are mostly found to be ill at the households of the study areas.

## 1. MORBIDITY PROFILE OF THE HOUSEHOLDS

Table 5.15.2: Proportion of the Households where any members suffering from Different Illness

Sl. No.	Types of Illness	Average Proportion of the Households (In Per cent)			
		Migrant Household	Non-Migrant Household	Commuter Household	Total Households
1	Minor Illness	75	30	10	44
2	Major Illness	43	0	10	22
3	Chronic Illness	6	10	20	11
4	Accidents	0	0	10	2
5	Women related Health Problems	12	10	0	8
6	Occupation Related Health Problems	50	0	0	22

(Source: Primary Data)

In the study villages, it has found that the households of around 44 per cent of the total households reported that the family members are suffering from the minor illnesses. In the minor illness section the respondent, they themselves categorised the disease based on their perception. However, in the minor illness, they mean with the diseases such as a cough & cold, flu, viral fever, headache, eye infections, etc. Around 75 per cent of the

migrant households had reported being suffering from the minor illness in last six months. The 30 per cent of the total non-migrant households and around 10 per cent of the households from the total commuter household members are suffering from the minor illnesses. In the major illness category, they had put the disease such as malaria, diarrhoea, jaundice, sunstrokes, etc. that takes longer time for the recovery and get much severe to make the patient into the long bed rests. In this category, around 43 per cent of the total migrant households and around 10 per cent of the total commuter households have been reported to be suffering from the major illnesses. Whereas, no members have been reported in this category from the non-migrant households. Altogether around 22 per cent of the households are reported under this category of the illness. The respondents categorised the chronic illnesses by their understanding that the disease from which they are suffering from much longer time and have to take medicines on a regular basis. They put the diseases such as diabetes, anemia, weakness, migraine, heart disease, etc. Under this category around 20 per cent households from the commuter households had reported the members to be suffering from the chronic diseases, followed by the non-migrant households of around 20 per cent of the total non-migrants households and around six per cent households reported from the total migrant households. The accidents such as fractures, slip discs, etc. are reported by the households of around 10 per cent of the commuter households that form about two per cent of the total households where the members are suffering from some sort of accidents. Around 12 per cent of the migrant households and around 10 per cent of the non-migrants households had reported that their members are suffering from the women-related health issues such as menstrual problems, ovary infections, etc. This altogether forms around eight per cent of the total households those female members are suffering from the women related health problems. Under the category of the occupational health, they tried to categorise it according to the illness that may cause due to the heavy drudgery work's nature and the conditions. Based on this perception, the respondents put the diseases such as body pain like joints, waist, neck, shoulders, headaches, etc. that causes mostly due to carrying heavy loads in the heads for more than 7-8 hours a day. According to this categorization, around 50 per cent of the total migrant households had reported being suffering from this illness, whereas, no other households had reported the

members of the household to be suffering from the acute body pain. Therefore, around 22 per cent of the total households fall under the category of the occupational health disease. Based on the primary data, it is very much evident that in the study villages, mostly the members of the household are suffering from the minor illnesses followed by the major and occupational health related illnesses.

Table 5.15.3: Proportion of the households with the sufferings of the members according to the duration of Illness

Sl. No.	Duration of Illness	Average Proportion of the Households (In Per cent)			
		Migrant Household	Non-Migrant Household	Commuter Household	Total Households
1	< 7 days	87	20	10	47
2	10-15 days	25	0	10	13
3	15 - 30 days	12	0	0	5
4	> 1 months	12	0	0	5
5	1-6 months	12	10	20	5
6	> 1 years	0	10	10	5

(Source: Primary Data)

According to the above data, it is evident that around 87 per cent of the total migrant households had reported that the duration of illness of their family members is less than seven days. Around 20 per cent of the non-migrant households and around 10 per cent of the commuter households had reported suffering for less than the seven days. The usual days of the illness reported by the households are around 2-3 days for the minor illnesses and around 4-5 days of the severe fevers told by the respondents. Altogether around 47 per cent of the total households had reported suffering for less than the seven days in the study area. In the duration of 10-15 days of illness, around 25 per cent households reported under the migrant households and around 10 per cent of the commuter households. No households have been reported under non-migrant households in this duration. Around 13 per cent households have been reported within 10-15 days of illness under the total studied households. On the illness duration of 15-30 days, around 12 per cent of the migrant households have been reported. No other households have been reported to be in this duration. Altogether, around five per cent of the total households

are reported to be in this duration of illness. There is 12 per cent of the migrant households that have been reported that the members fall ill for the duration of less than one month and the total households reported to fall under the duration of less than 1 month are five per cent of the total households. In the illness duration of 1 to 6 months, commuter households reported are around 20 per cent, migrant households are around 12 per cent households, and non-migrants households are around 10 per cent. The total households that reported the sickness duration of their family members within 1 to 6 months are five per cent of the total households. There is around five per cent of the households that had reported the sickness duration of less than a year is around five per cent of the total households. The commuter households fall under this section with around 10 per cent and non-migrant households with around 10 per cent households. No migrant households have been reported to fall under the sickness duration of less than a year in the remote rural villages. It is evident that the higher proportions of households fall sick are for less than seven days in past six months, followed by the duration of 10-15 days.

## 2. TREATMENT-SEEKING BEHAVIOUR OF THE HOUSEHOLDS

Table 5.15.4: Number of the Households seek treatments for the Illness

Sl. No.	Treatment	Number of the Households			
		Migrant Household	Non-Migrant Household	Commuter Household	Total Households
1	Yes	32	20	20	72
2	No	0	0	0	0

(Source: Primary Data)

It has found that almost cent per cent of all the households, i.e. migrant, non-migrants and the commuter households had taken the treatments for their illness. No households had reported that they ignored or refused to take treatment for the illness due to some or the other reasons. It has found that the simple reasons stated was that they are not at the stage to afford their sickness because the health has the direct impact on their livings. It deteriorates their family backbones completely with the financial, physical and emotional drainage in the households.

*“We are scared of getting ill because if we get any major illness, then we will not leave with any other options other than dying.*

(Respondent: 57; Village: Murma)

*“We try to treat the illness as early as possible because we cannot afford to get ill.”*

(Respondent: 32; Village: Deuri Alias Dongatoli)

Table 5.15.5: Proportion of the household first source of treatment for the Illness

Sl. No.	First Source of Treatment	Average Proportion of the Households (in Per cent)			
		Migrant Household	Non-Migrant Household	Commuter Household	Total Households
1	Quacks	18	10	30	19
2	Private Clinics/ Hospitals	87	20	30	52
3	Government Hospitals	12	30	10	16
4	Traditional Healers	37	10	0	19
5	Spiritual Healers	2	0	10	8
6	Others	0	0	0	0

(Source: Primary Data)

According to the respondents, the proportion of the households, their first source of the treatment for the illness are different for each respondent, and it is based on the area specific also. It has found that around 52 per cent of the total households approaches private clinics or the hospitals as their first source of the treatment during these illnesses. Where, around 87 per cent were reported by the migrant households, around 30 per cent households are from the commuter families, and around 20 per cent families are from the non-migrant households. The next source, i.e. approaching quacks is being reported by around 19 per cent of the total households where, around 30 per cent of the families are from the commuter households, around 18 per cent families are from the migrant households, and around 10 per cent are from the non-migrant households. The next source of the treatment reported are the traditional healers of the areas. The total households that had been reported to approach the traditional healers are around 19 per cent households. Where around 37 per cent families are from the migrant households and around 10 per cent families are from the non-migrant households. No households have been reported to approach the traditional healers from the commuter families. The

next source of the treatments approached as the first sources are the local quacks by the total households i.e. around 19 per cent families. The migrant households, those approaches the quacks are around 18 per cent of the families, around 30 per cent of the families are from the commuter households, and around 10 per cent families are from the non-migrant households. It has found that around 16 per cent of the total families are reported to approach government hospitals as the first source of the treatments. Where, around 30 per cent families are from the non-migrant households, around 12 per cent families are from the migrant households and around 10 per cent families are from the commuter households. It has found that families also go to the spiritual healers of the area as the first source of treatment. It is around eight per cent of the families of the total households were around two per cent families are from the migrant households and rest no other families had been reported to go to the spiritual healers in the remote rural areas.

The reasons behind choosing these sources as their first source of the treatments during their illness are different for the different households. According to the respondents, the reasons behinds choosing the private clinics as their first choice for seeking the treatments are its proximity to the villages. The two remote villages i.e. Bobro and Deuri Alias Dongatoli, both are very much distant from the block headquarters, and the nearest market place that is having the private clinics are around 2-3 Km distant from the village. The Bobro village people usually go to the 'Narkopi', and Deuri Alias Dongatoli people go to the 'Silagain' or 'Chanho' private clinics run by the private doctors. The accesses to the private clinics are much easier in comparison to the government/ public health centres. Whereas, the peri-urban villages, namely Katchancho and Murma village, although situated in the proximate distance from the Mandar PHC, but still found to be choosing to opt the private clinics because of the immediate response from the private clinic doctors.

The fewer households in comparison to the private clinics have approached the government hospitals for the treatments. The reasons stated by them are that though they are aware of the facilities of the health care in the government hospitals for the best treatment at free of costs are the most important facility that can be availed for the



poorest households. However, they cannot be able to access it after knowing all its advantage due to the block headquarters distance from the study villages. The frictional costs, i.e. the actual distance to reach the block headquarter hospitals, two-way transportation costs and entire days miscellaneous expenses other than the medicines along with the time spent, are all together is too high. According to the respondents, though the government hospitals can save their doctor's examination fees that are free of cost, the other expenditures for them are very high. There are other problems too taking the prescribed medicines from the government hospitals are that the medicines are free, but it has been provided for only one course of treatment. Another time they again have to follow the same process to get the few courses of medicines, and that is too hectic and costly for them to do. The respondent stated that they could not the government prescribed medicines from the nearby private pharmacy and in the case of emergency; they could get the medicines due to unavailability of it. Therefore, the respondent reported that they prefer to go to the nearby private clinics to save the money, time and energy where they can get the treatment and medicines easily from the private pharmacy near to the villages. The other most cited reasons by the respondents for choosing the private clinics are that they get treatments in the credit too. During the health emergency, they use to get the firsthand treatments from the private doctors, and they allow them to pay the fees later. Apart from this, they also said that they call the doctors at their house during the emergency and they charged the examination fees as well as the medicines the same for the first as well as for the second time treatment.

*“Even if we want to go to the public hospitals for the minor illnesses then also we can’t afford to do so because of the distance of the ‘Mandar Public Hospitals’. The fare of the auto-rickshaw is about Rs. 50 per person from one side. It is equally from both by roads or by trains. We are not able to afford the auto-rickshaw fare till the ‘Chanho’ market, i.e. the nearest market from the Bobro village. Moreover, the other expenses like the medicines and different charges of the clinical tests are additional. So altogether, though the treatments are free of costs, then also it turned more expensive for us. We stay in the remote village of the ‘Mandar block’ and got alienated from many of the government facilities.”*

(Respondents: 3; Village: Bobro)

Other than the private and government hospitals, people in the study villages are also found to be choosing the local quacks as their first source of treatment of the illnesses. The reasons behind choosing this source are mostly for the minor illnesses such as a cough & cold, flu, and fever. It has found that the local quacks are easy to access because they visit their village almost every day on their motorbikes. Mostly in the Deuri Alias Village, people seek the local quack. People trust them with knowing the facts that they are not the experts of the treatments for the major illnesses. However, they can at least cure the minor illnesses with fewer money expenditures. They are the face that is very much familiar to every village dweller and has a good rapport built up with the villagers. According to the respondents, they have the emotional side of choosing the quacks too. As cited by the respondents the local quacks understand the financial problems of the households and do the treatments in the credits whenever they have financial problems. They do not ask the fees immediately, and the people need to repay them later, soon after they arrange the money from their wages or selling or mortgaging their assets. Respondents reported that the quacks never use to remind about the fee payment repeatedly and that's what makes them be more obliged towards the payments. Other than these, they can call him anytime in the village whenever they face the health emergencies via one telephone call to their home. The easy accessibility is the main reasons that compel the villagers to approach first hand to the local quacks, knowing the facts that they are not the health experts of the major illnesses.

It has found that villagers approach the traditional healers which usually known locally as '*Guni*' or '*Vaid*' as their first source of treatments. However, they go to them for the specific illnesses such as jaundice, typhoid, *Githiya rog* (joint pains) and women's health related problems like (*mahwari*, *safed shtraw*) menstrual problems, etc. They trust the Ayurvedic medicines more than the allopathic medicines for these illnesses. According to the respondents, they approach the traditional healers for the diseases that take a longer time to be cured and therefore needs long treatments. This source helps them to get the effective treatments in lesser expenditures on the particular illness. There are families that choose to the spiritual healers for their first choice for the treatments are very rare in the study villages. It has found that the people reported from

the tribal community approach their 'pahan' or 'ojhas' i.e. priests within or the nearby villages and the Muslim community approaches the 'Molana' i.e. priests for the treatment of the long time sickness for the immediate cure. It is the common practice done almost all the households. According to the many households, they go to this source of treatment lastly, when they do not find any other way of curing the illnesses. They stated that the main reasons are the mental peace that allows them to get courage when they almost get hopeless of the sickness. Along with the other sources, they also go to spiritual healers' source during the time of no recovery. This is because of believing in and trusts in their respective religions that led them do offer the anti-evil prayers for the quick recovery of the illnesses.

*"We do not have public health services in the closer proximity of the village, and this is really difficult for us to get access to the free health treatment facilities. When someone gets severely ill, then after some extent we just leave him or her up to gods will because we feel helpless at that time. Then move towards the offering prayers from the Molana (priests) in the village for the quick recovery. My financial situation is worse because I could not be able to take my daughter for the better treatments to the good doctors and hospitals. I am taking her to small private clinics and unable to invest more for her quick recovery."*

(Respondent 18; Village: Bobro)

Therefore, it can be said that the villagers seek the different sources, according to the types of the illnesses and the severity of the illness of their family members. This influence the villagers approach the particular sources of the treatments based on their affordability, accessibility, availability and acceptability in/of the households.

### 3. HEALTHCARE EXPENDITURES OF THE HOUSEHOLDS

Table 5.15.6: Proportion of the household according to the Cost of the Treatments

Sl. No.	Total Cost of Treatments	Average Proportion of the Households (In Per cent)			
		Migrant Household	Non-Migrant Household	Commuter Household	Total Households
1	< Rs. 500	37	10	0	19
2	< Rs.1000	18	10	20	16
3	< Rs. 1500	18	0	0	8
4	< Rs. 2000	6	0	10	5
5	< Rs. 5000	6	0	0	2
6	> Rs. 5000	18	10	10	13
7	> Rs. 50,000	6	10	0	5

(Source: Primary Data)

The cost of the treatment incurred by the households for the treatment of the illness of the family members in the past 6-12 months is between the range of Rs. 200 to Rs. 70,000 in the study villages. The highest proportion of the households reported being spent less than Rs. 500 in the treatments are around 19 per cent of the total households. Where, around 37 per cent of the families are from the migrant households, around 10 per cent families are from the non-migrant households and no families under the category of less than Rs.500 were reported by the commuter households. The usual costs spent on being around Rs.200-300 and Rs.300-500 in the treatments of the minor illnesses in the private clinics. In the range of treatment, costs of less than Rs.1000 are found to be reported in around 16 per cent of the total households where, around 20 per cent of the commuter families, around 18 per cent of the migrant households and around 10 per cent of the non-migrant households had been reported. The highest expenditures made by the households in the past six months were around 13 per cent of the total households where the migrant households have around 18 per cent of the families, around 10 per cent of the non-migrant families and around 10 per cent commuter families in this range of expenditures. However, around eight per cent of the families of

the total households have reported spending around less than Rs.1500 where around 18 per cent of the families of the total migrant households is reported in this range of expenses. In the range of expenses of around less than Rs.2000 are reported by the families of the migrant households are around six per cent, and around 10 per cent are reported from the commuter households. Altogether around five per cent of the total households in this range of expenditures on the health treatments. It has found that around two per cent the families had reported spending around less than Rs.5000 where, the migrant families are reported around 18 per cent households, rest non-migrant, and the commuter households, both reported by the 10 per cent of the households.

Table 5.15.7: Proportion of the household according to the Expenses

Sl. No.	Expenses	Average Proportion of the Households (in Per cent)			
		Migrant Household	Non-Migrant Household	Commuter Household	Total Households
1	Borrowed	12	0	0	5
2	Self	37	20	20	30
3	Both	50	10	10	27

(Source: Primary Data)

According to the respondents, around 27 per cent of the families of the total households are reported to spend the expenses by both borrowing the money from their friends and relatives and by the self. The migrant families around 50 per cent of the total migrant households had reported arranging the expenses from both the sources, whereas, the non-migrant and the commuter households reported families are around 10 per cent. It has found that around 12 per cent of the families of the total migrant households borrowed the money for the treatments and rested no other households had been reported under this category. The total families that had been reported for borrowing the treatment money are around five per cent of the households. In the self-category where the households put their own earned money for the treatments are being reported by the 30 per cent of the families out of the total households. Where around 37 per cent of the families are from the total migrant households and around 20 per cent families from the

non-migrant households and around 20 per cent families are from the commuter households.

Table 5.15.8: Proportion of the households where lost the wages due to the earning member's illness in last 6-12 months

Sl. No.	Types of Household	Average Proportion of the Households (in per centage)
1	Migrant Household	50
2	Non-Migrant Household	10
3	Commuter Household	20
4	Proportion of the Total Households	30

(Source: Primary Data)

It has found that the around 30 per cent of the total households, including the migrant, non-migrant and the commuter families have reported to be lost the wages due to the earning members' illnesses of the family in past 6 to 12 months in the study villages. The average proportion of the migrant households of around 50 per cent is reported to lose their wages due to the sickness of the earning members of the family. Around 20 per cent of the families had reported this from the commuter households, and around 10 per cent families from the non-migrant households reported to have lost the wages due to the earning member sickness. The most of the earning member is the males of the households that are being reported to be the breadwinner of the households in the study area. The usual loss of the man-days reported for the minor illnesses are less than a week, i.e. seven days, for the major illnesses are between 10-15 days, and some of them reported more than 30 days. It has found that there are the cases of the illness that made the breadwinner be bedridden for more than 2-3 years in the past 3-4 years back.

According to the respondents, the illnesses of the breadwinner of the households have an adverse and direct impact on the families. It has been reported that the households have to directly face the wage losses along with the treatment expenditures that almost deteriorate the backbone of the families.

*“My husband got ill for 15 days. It was the most difficult time we have faced. All the money we have earned was gone in his treatment, and we have to face extreme money crisis.”*

(Respondent 9; Village: Bobro)

*“It was very difficult for the family members to cope up with the situation when I caught the illness. I have stopped migrating outside the village for two long years due to the Epilepsy illness. This definitely creates a problem for the family as it decreases the amount of income. Though I use to commute daily in the capital city, it won’t help to get that much earning as we get to earn through migration.”*

(Respondent 14; Village: Bobro)

*“I have been ill for a week this year. It was a loss in terms of man-days and wages. I was in bed for 7 days and have lost the wages of around Rs. 200 per day, and all total loss was about Rs. 1400 per week. This was a big loss, financial loss for us. Moreover, have to spend money on the treatments and medicines. In addition, all total loss comes around Rs. 3000-4000. This has really shaken up our financial conditions.”*

(Respondent 18; Village: Bobro)

#### **4. HEALTH STATUS OF THE HOUSEHOLDS**

Table 5.15.9: Number of the Households faced any mortality in past 1 year

Sl. No.	Mortality	Number of the Households		
		Migrant Household (32)	Non-Migrant Household (20)	Commuter Household (20)
1	Under 5	1	0	1
2	Still Birth	0	0	0
3	Youth	0	0	0
4	Adult	0	0	0
5	Old aged	1	0	0

(Source: Primary Data)

It has found that in the remote rural villages there are only cases reported of Under Five mortality in the study area. There were no cases reported related to the stillbirth, youths, and adult mortality. Whereas, there is one case of old age mortality reported from the migrant households in the past one year in the study area.

#### 4.1 MOTHER & CHILD HEALTH STATUS OF THE HOUSEHOLDS

Table 5.15.10: Mother and Child Health reports according to the Number of Households in Past 5 Years

Sl. No.	Number of households report on MCH (In the past 5 Years)		
	Mother & Child Health Care		Total Number of Household (72); Total Respondents (24)
1	Child Birth	Institutional Deliveries	12
		Home Deliveries	8
		Both	4
2	Immunization	Complete	22
		Incomplete	4
3	IYCF	Breastfeeding	8
		Within an Hour	12
		After two-Three Hours	2
		After Two-Three Days	5
		After one or more than one month	0
		Powder/Cow Milk Feeding	6
		Breastfeeding up to years	3 years
	Complementary Foods	Giving complementary food to their child	No
		Age-Group of the child for the first time complementary feeding	6-7 months
		Special complementary food prepared	No
		Frequency of Child Feed in a Day	3-4 times

(Source: Primary Data)

In the study villages, the childbirth practices in the past five years have shown the drastic changes in terms of the increase in the practice of institutional child deliveries.



However, around 12 mothers from each household gave birth in the past five years had reported going for the institutional deliveries in the study villages. The trend of institutional deliveries was rising up in last 2-3 years. The major reason for choosing for the institutional deliveries as stated by the respondents was the information regarding the child deliveries in the hospitals are safer, and secondly, the most motivating factors are the government incentives of Rs.1600 to the mothers delivering a child. Around eight mothers reported that they opted for the home deliveries. The reasons behind this choice were that they feel healthier to deliver their child at home, and secondly, stated by almost of them are that they did not become aware of the institutional delivery system of the hospitals. According to them, the costs of reaching the hospitals are too high that they had skipped the thoughts of going to the hospitals for the child deliveries. Around four mothers had reported that they had opted both the ways of child delivery. In the earlier child delivery were done at home because most of them stated that they do not have the awareness and the information regarding the child delivery in the hospitals. However, their current pregnancy that took place in the past 2-3 years is the institutional delivery at the Block situated government hospitals. The motivational factors behind this were the mothers' incentives provided by the government.

The mothers had reported that immunisation is being done in almost all of their children at the village by the ANMs in the Anganwadi Centres (AWC). Around 22 mothers reported that they had completed their child's immunisation. Whereas, around four mothers reported that they did not give or completed their child's immunisation due to the earlier prejudices i.e. Muslims religions people's rejections of the immunisation of the children. However, nowadays they are accepting the immunisation of their children after building the trusts on the government as well as on the health functionaries of the village. Moreover, they ready to immunise their children now. Other than this, the other reasons stated are the negligent behaviour of the mother and the family members due to which they had missed out or forget to complete their child's immunisations.

*“My two of the elder children were not getting immunised because earlier days we do not believe in immunising our kids due to religious (Muslims) sentiments. But nowadays*

*we have started trusting the importance of immunisation and rest of all the three children was getting immunised.”*

(Respondent 17; Village: Bobro)

The infant and young child feeding (IYCF) behaviours have been reported by the lactating mothers having a child of Under Five age groups. It has been reported that around eight mothers are breastfeeding their infants and the young child in the study area. 12 mothers reported that they had breastfed their newborn child within an hour of their birth. Two mothers reported that her child was breastfed after two-three hours of the birth. The stated reason was the cleaning of both mother and child takes time. Therefore they feed their baby only after 2-3 hours. Five mothers reported that they fed newborn after 2-3 days of their birth. The reasons stated was the ritual that has been followed under which the newborn child is allowed to do breastfeeding only after the child's bathing. As the child is bathed after 2-3 days after the birth, therefore then only they are allowed to have their first breast milk. Whereas, no mother had reported feeding their child first milk later, then one or more months in the study villages. Six mothers in the study villages reported that they feed their child with powder or the cow milk instead of the breast milk. The reason stated behind this practice was that they are not healthy enough to feed their infants and children below the six months and more due to low or no production of the breast milk. They said that they had to feed their newborn with her breast milk within an hour of their birth, but later they are unable to produce enough breast milk to feed their infant or young ones. They are not satisfied with the fact that they have to opt for this choice because they find this costly and unmanageable as they cannot get powdered milk or cow milk every day and there are times when they had skipped feeding them milk due to the same reasons. The mothers reported that they continue their child with the breastfeeding up to the three years and some agree to continue it until the age of four years.

*“I am breastfeeding my children and never feed her bottle milk. I fed them the breast milk just after an hour after their birth. I fed them until the age of four years. My daughter is two years and will continue feeding her until the age of four. I also feed her cow milk, but only when I am out for work and unable to return back early. However, it*

*was not in the case of my son because at that time I went to the destination area along with my husband. During the migration period, my son was too young to leave alone. Therefore, we also take one of my small brothers-in-law with us and there he takes care of my son. Moreover, I came back in between to breastfeeding my son.”*

(Respondent 9; Village: Bobro)

*“I fed all my children the bottle powder milk. My newborn child also does not drink my breast milk. I have fed my child with the breast milk after an hour of the birth. I feed milk to my children for the two years. I let them drink 6 to 7 times a day and sometimes more than that also.”*

(Respondents 17; Village: Deuri Alias Dongatoli)

The mothers do not give any special complementary food to their young child of the age group of 6 to 23 months in the study villages. It has found that households with no younger children have been reported to give complementary food to their young children. In the study villages, the mothers are start-feeding foods other than their breast milk or milk at the age of 6-7 months. However, they feed them foods, but no special complementary food has been reported to prepare by the mother in the study villages. They stated that they feed the is children the same food that has been prepared for the entire family members. They feed them with the same food that all the other adults take in the households. The frequency of the child feeding in a day was around three-four times a day as reported by the mothers.

*“In addition, for the complementary food for the infants, we usually do not cook any special food for them instead gives whatever we cook for ourselves. We take two meals until evening, so I feed her twice during my meal and in between the breast milk. She also has some biscuits and toasts whenever she feels hungry.”*

(Respondent 69; Village: Murma)

However, in one of the study villages i.e. Deuri Alias Dongatoli, few mothers reported about the fortified packaged food provision under the ICDS in the AWC of the village. They stated that this was provided to the pregnant and the lactating mothers. They also said that they had been told to prepare it for the complementary foods to feed

their young ones in their households. Nevertheless, they hardly use it regularly; instead, cook this for once in a while to feed their children.

Table 5.15.11: Number of Households where children suffered earlier or been suffering from the Child Diseases

Sl. No.	Number of households where children suffered earlier or been suffering from the Child Diseases	
	Acute Child Diseases	Total Number of Household with young & infants
1	Acute Diarrhea	6
2	Acute Respiratory Diseases (Pneumonia)	10

(Source: Primary Data)

It has been reported by the mothers of the infants and young children in the study area that their child had suffered earlier or is suffering from the acute child diseases at the age of below six months. Around six mothers had reported that their child had once suffered from acute diarrhoea during their six months of the age. Around 10 households had reported that the children below the age of six months had been hit by the Pneumonia. This is a very common disease among the infants found in the study area where the child had suffered from the acute respiratory disease. They stated that they took their infants to the private clinics for the treatments.

It is observed that there are no major differences in the mothers and child care services utilisation and health care among the migrant, non-migrant and commuter households in the study area of both the rural and the peri-urban villages that could be highlighted on. Apart from the non-migrant and the commuter families, the migrant families also seem to be utilising the institutional deliveries in the absence of the male members at their home during the migration period. The reason was stated that the presence of the sahiya and the availability of the transports along with the mothers' incentives that made them opt for the institutional delivery like the other households.

Based on the above household information on migrant, non-migrant and commuter households, individual characteristics of the study population, it can be concluded that the socio-economic condition of the migrant and the commuter is not as good as the non-

migrant households in the study area. The non-migrants are slightly in a better position in terms of land holdings, living standard, and other human capital. Whereas, the condition of the migrant households is better in terms of land holdings in comparison to the commuter households, but due to several other demographic variables such as family sizes, dependency on subsistent farming, and to fulfill the cash requirements for the child's education or agriculture, etc. are forced to opt for the migration as the livelihood options.

Based on these background understandings, the further study in the next chapter will help us to understand the health problems of the study population in terms of their perception of existing morbidity and the health seeking behaviours in the study villages.

## **COLLECTIVE FACTORS: INTERPRETING ‘LEFT-BEHINDS’ HEALTH EXPERIENCES**

The previous chapters were detailed in the socio-economic profile of the area and the individual households that have direct relations in influencing the social determinants of health. The inequalities in health do not only depend on the contextual and compositional variables, but the collective factors are the third most important components that have equal impacts. Therefore, proceeding further the chapter will try to explore the collective variables related to the ‘left-behinds’ health, by understanding the underlying relation of an ‘area’ and ‘individual’ level characteristics along with the locales socio-cultural beliefs and its impact on the individuals’ accessibility to the existing health care facilities.

This section looks at the perceptions and experiences of the ‘left-behinds’ general health condition. A holistic view of women, men, elderly and children’s illnesses and health are trying to focus on better understanding of their health by including their perception of illness and the health care seeking behaviours. The chapter is divided into two broad sections. The first section investigates into the experiences, definitions, and explanations of ‘left-behinds’ illnesses, pains, and sufferings and their perceptions of causation. Continuing by the migrant family member’s descriptions, the questions primarily concentrating on their illness and ill-being. The second section will be focusing on the assessment of their health care seeking behaviours and the sources of health care providers they approach for the treatments.

### **1. COMMUNITY’S SELF PERCEPTION AND ASSESSMENTS OF ILLNESS & ILL-HEALTH**

The illness status of the people depends upon the demographic indicators like life expectancy at birth, nutritional intakes, living conditions and mortality. Therefore, to assess the health status of the people the state of illness is seen as an important parameter.

The study area that is predominated by the Oraon tribal population lives along with the other non-tribal community, such as Muslims, has their own culture and understanding of the illness and consequently, they have their discrete explanations of health and illness. On asking about their understanding of health and illness, it has revealed that a person is conceived as healthy if she or he can perform as per the age and gender role. They said that the physical appearance of the body is the utmost indicator that implies health a good or bad. The major criterion is the presence of the fever that often cited as an example that indicates towards worst health. The other symptoms cited were the ‘weakness of the body’ that indicates ill health. It has revealed that according to peoples’ perception, the present condition (good/bad) of the body is healthy and it is nothing more than that.

*“My health is good as I had not gotten a fever since last year. Apart from the fever, I did not have any minor illness”.*

(Respondent 63, Migrants; Village: Katchancho)

Therefore, it can say that according to the people’s perceptions the presence of any pain or misery in the form of any bodily symptoms is termed as illness or disease and the mere absence of it in the form of fever or pain is considered as ill health. Thus, the concept of health to the studied population refers only to the physical health that is visible to them and can affect their daily life hindering them from going out for the jobs. The groups of the villagers during the FGDs explained their ways of identifying the ill people in the community or the village, and it has primarily based on the physical appearances. The illness was described by the people as the bad health when the person starts looking dull, weak and gloomy, decreases appetite, dizziness, inability to move and speak, sunken, pale, dry and dark circled eyes, and seems infliction in the different parts of the body. Other than the adult, the symptoms of the children ill health have also described as a lack of appetite, decline interest in playing, drowsiness, the high temperature of the body and frequent crying. Apart from the symptoms the physical characteristics are also symbolised as the illnesses to the people sick body, rashly body, pouched belly and narrowing down buttocks, etc. Therefore, it is evident that the physical appearances and characteristics altogether used in the explanations of the concept of illness and the ill health by the people of the study area.

The morbidity defined as illness, pain, and sufferings had a greater influence on the results of sound lives. It has the direct impact on the outcome of healthy livings along with the direct impact on the socio-economic lives of the people through the accessibility and affordability of the health services. Altogether, it has a direct impact on the people's health care seeking behaviour along with the socio-cultural factors that are influencing the choices of the health care providers and treatments.

In local articulation, the word *Bimari* used for describing illnesses like fever, malaria, jaundice tuberculosis, etc. In conformity with the perception of illness and its symptoms, it has been reported primarily in two categories i.e. *Badd bimari* (major illness) and *chott bimari* (minor illness). It has observed that the categorization was majorly depending upon the length, severity, and expenditure of disease along with the break in their patterned daily working days (by the operational impairment) of the people. Therefore, the health problems with their (women, men, children and elderly) own illness perceptions have referred and defined are as follows:

a) **Minor Illness:** The illnesses that are less severe, mild in pain, and can cure in short or with the fewest expenditures and does not interfere with work by disrupting the regular daily working routines. Therefore, with the continuation of it for the shorter duration of less than a week with the low amount of expenditure on its treatment causes less or no uneasiness in the routine life of the people. The category comprised of those health issues that were frequently experienced but do not disturb their daily patterned working life of the family or the households.

Almost 90 per cent of the study households reported some minor health problems in the past six to twelve months. The prevalence of the communicable diseases such as a cough & cold and fever had a higher incidence across the age, gender, and the study villages. Other reported morbidities under this category are those health problems that are difficult for the people to specify the illness and loosely termed as 'common illness' such as a headache, abdominal pain, weakness, joints and knee pain, nausea, vomiting, dysentery, body aches, scabies, skin infections, etc. These illnesses are signifying the frequent occurrence of such health problems in the population that has a mild but important impact on the day-to-day lives that cannot ignore.



**b) Major Illness:** According to the people major illnesses are those health problems that continued for a long period normally perceived as more than a week or more than ten days, meant with substantial expenditure and disrupted the routine working of the individual for the longer period. People associate major illnesses with the serious condition that takes a longer time to cure is painful and affects the daily working routine or individuals' economic output. People reported illnesses under the category of non-communicable and chronic diseases are diabetes, tuberculosis (TB), respiratory problems, heart problem, arthritis, abdominal problem, mental disorder, eye disease, cataract, etc. Along with the other illnesses such as surgery, accidents and injuries, whooping cough, sepsis and the other problems. The illness such as a cough, cold and fever, as well as sepsis or infections in wound did mention in the major illness category of the people as they stayed for longer periods and led to a reasonable expenditure on its treatment. In the study villages, the people have undergone minor and major surgeries related to the eye, appendix and kidney stones and arthritis and respiratory health problems are being on the top as these had entailed a good amount of expenditure for its treatment.

## **1.1. MORBIDITY PROFILE OF THE STUDY POPULATION**

### **(Women/Men/Children/ & Elderly):**

The people of the study villages had referred to some mild, severe, and recurrent health problems that they suffered throughout their life span. Even though some of the ailments are common in the study population, women, children and elderly experienced longer and more severe occurrences. The common illnesses indicate that the women, children and elderly experienced everlasting condition of ill health. The self-reported and perceived ailments of the study population and its causations are as follows:

### **A) WOMEN HEALTH PROBLEMS**

i) **Body Pain:** Body pain is the most reported ailments among the study population, especially among the women of both adult and elderly. The women of all types of households, i.e. migrant, non-migrant and commuter households attribute it to the enormous, laborious and hazardous work they perform in their daily life. The study

revealed that women suffer from a host of pains in the different parts of the body because of their daily routine work both in the households and farm.

In the study area, the women indulged mainly in the agricultural activities, and they found to be fully occupied and overburdened with the threefold responsibility of farm, home and livestock management since their teenage.

### **Case Study 1: Rural Women work Experiences with throughout the Day/Year**

*Sabita Khalkho* (Name changed), aged 35 years, is the sole caretaker of the family who manages both inside and outside work of the households. Her husband, *Jagan Khalkho* (named changed), aged 38 years, is a migrant, who stays in the village for few months i.e. mostly during the months of *Kharif* season. She has four children, two daughters, and two sons. All of them go to the nearby *Uttkramit Vidhyalaya* government schools within the village. One of the elder sons is studying in the private school nearby village. The elder daughter has dropped out her schooling after completing her primary education.

Every day she gets up at the five in the morning or crack of dawn. Her day begins by going to the toilets to the faraway field for the toilets. After returning, she starts cleaning the whole house by mopping the floors clean, and then collects the refuse, and dumps it in the pit (store for manure, compost) near the house. Soon after, it is time for her to let off her cattle mostly the goats and oxen for herding with one of the hired herders of the village. She puts containers of water on the way for the cattle for their drink. After that, she cleans the room in which the cattle are kept by collecting all the dung and scattered silage in a basket and throws into the pit. Then she feeds the avian (hens, cocks, and ducks) by scattering grain in the courtyard. The daily upkeep of these avian is important, as they have a prominent place in their social feasts and rituals along with the economic support during the immediate cash management. She likes cleaning up of the house in every one or two days in the kitchen area, *chulha* (hearth) and floors of the house with a solution of cow dung mixed with water. She thinks that this is the only way to get rid of the dust that accumulates in the kitchen and the house. It takes around 2-3 hours to complete the whole cleaning process. Every day she fetches water from the nearest source of water that is *chapapkal* (hand pump) constructed by the

government some years back. The hand pumps, however, need periodic repairs, the village *ward parishad* (PRI members) makes sure to get a plumber. When the hand pump water dries up in the summer, she has to depend on one of her neighbours' well. She also replenishes the store of water for purposes other than drinking i.e. cleaning, washing, etc. and then washes the dirty dishes kept away after dinner the night before. She waters the plants that planted in their courtyard by using stored drinking water left over from the previous day. Soon after that, she gets into the kitchen that has placed in one corner of the veranda without any exhausts, fueling her *chulha* (hearth) with the dried leaves to prepare the meals by the time children are ready to leave for their schools. She spends around six hours in the kitchen every day. She feels some relaxation as she gets her helping hands from her elder daughter ever since she dropped out of her school. Her daughter takes over the responsibility of cooking in the mornings so that she can work on their backyard garden behind their house where they are growing vegetables. She said that during the summer season, the garden has to water daily, sometimes even twice a day, which is just an extra additional job to the fields' work that begins by the end of the April or Starting of the May months.

In the month of February-April, she got up early along with her daughter to finish her housework and leaves the house to collect dry leaves and twigs for fuel wood. She said that they wanted to collect as much of it as possible before noon, to avoid the afternoon sun. In the month April end or the first week of May (approximately), they start involving themselves in the field preparation work for the cultivation period. They start transferring the manure from the compost pit to the fields. She apprehended that sometimes it rains heavily in the month of April, therefore, try to transfer all the dried manure from the pit to the field before the rains. The weight of the basket is 6-7 kg of compost that she carried one time from her house to the field, which is around more than 1-2 km away. She continued it until the evening and tries to finish the manure work before the rain starts. She somehow feels pressured during to his work, because it is a labor-intensive job that needs to be finished on time. The actual work on the fields starts after the celebration of *Sarhul Parab*. The field is prepared before sowing, the only task that does not require women here, because they are not allowed doing ploughing the land. Therefore, her husband who returns after 5-6 months from the destination area

does this. She then involved in the preparation of the field by removing the weeds and shrubs that have taken root all over it. The field work engages her for almost 4-5 hours daily in complete sitting and bending down position. She participates in almost in all the field work associated with agriculture, from the time of sowing the grains to the process of transplanting and harvesting the crops. She had to carry out the activity of transplanting of saplings of paddy into the water-filled earth. After that, her task is to ensure that grass and other weeds do not baffle the growth of paddy. The harvesting of vegetables and corns grown on the upland gets started in the September/ October. Eventually, by the month of November, the time of paddy harvesting that has grown in the *doin* land begins. The task of threshing and cleaning along with the cutting of the paddy is the strenuous job. The collected hay brought to use in the various ways like making of long ropes to make pouches to store the paddy and kept aside as a regular fodder for the cattle throughout the year. She calculated the total working hours of the field work during the peak agricultural season is around 7-8 hours a day.

The four-five months (January, February, March, April, and May) are the non-agricultural months during which she undertakes activities such as daily wage earnings (2-3 days in a week) by commuting to the nearby cities in the construction sites and performing the households works apart from the daily routine domestic cooking jobs. She goes for the daily wage earnings, only during the requirement of the cash income for buying grocery from the weekly *haat* (market), or when she needs to arrange the school fees of the children, in the absence of her husband. When she stays at home, then undertakes activities such as repair of the house, pressing oil from *sarson* (mustard seeds) by taking in the oil mill nearby villages, collecting fuelwood from the nearby green patches, visiting relatives and fixing betrothals and marriages. It is during these months that green/ leafy vegetables are grown, collected, dried and stored for the consumption in the months characterised by heavy work in the fields. Despite, it looks like a break from the fields, but characterised by all the other works that are important for the survival of any house. Thus, work and the rest are relative terms, in that rest about work in the field characterises work outside the home as well as the house. However, these are also the months, when she prepares and equip herself like any other villagers, for the monsoon and months of laborious work in the field.

It has found that most of the women get involved in the household chores between the age group of 8-10 years, and they start doing agricultural work and the cattle and animal care activities between the age group of 12-15 years. They stated that in the childhood, they use to work with same farm equipment that designed for the adult who is larger and stronger.

*“I learned the kitchen work at the very early age, as my mother asked me to help her in cooking because both my parents are working in the brick kiln and I have to be with my younger sister at the Gaya (Bihar) (destination area) as far as I remember”.*

(Respondent: Women 45 years, Migrants HH; Village: Bobro)

*“I asked my 12-year daughter to help me with the kitchen chores, especially in cooking and preparing meals. Now she is capable of grinding ‘masala’ in the ‘sil-lodha’ (stone grinder used manually in static sitting posture), boiling rice, cooking ‘Tiyyan’ (vegetables) and ‘daal’. She can cook three times meals for the family during my absence. My other younger daughter aged seven years too helps me in the kitchen with the simple tasks like cleaning of utensils, washing rice & vegetables and sometimes cutting the vegetables. My son, who is nine years, sometimes helps me in fetching water and other odd jobs”.*

(Respondent: Women 35 years, Migrants HH; Village: Katchancho)

During that time, the body pain starts as minor aches and pain, but later it increases in episodes. The cause of the body pain stated by the women of the study area are multiple types of heavy and strenuous work in the farm, brick kiln or construction sites, and households are the direct causes of the whole body pain and other musculoskeletal health problems.

*“In the childhood days, I use to love being in the kitchen. All the cooking and the household chores require a static sitting posture. Never felt exhausted”.*

(Respondent: Women 20 years, Migrants HH; Village: Deuri Alias Dongatoli)

*“Initially the low back pain in the body was very mild. I felt it during grinding ‘masala’ that I use to ignore every time. However, later I realised the pain has increased gradually and sometimes it is difficult for me to perform even sweeping the courtyard. Maybe it is the sign of ageing”.*

(Respondent: Women 40 years, Migrants HH; Village: Bobro)

It has observed that different types of households as well as agricultural operations also require sitting, standing or bending for long periods. Such tiresome and time-consuming work combined with nutritional deprivations that begin in the early childhood and worsened by repetitive pregnancies. The lack of food, rest, early and repetitive pregnancies and years of lactation altogether grievously affected the women by chronic pain in her early life. Therefore, it can say that the structural pattern and the types of work along with the nutritional deprivation put forward a profile of ‘body pain’ morbidity in the people but that to more in women.

ii) **Neck and Shoulder pain**: Almost half of the women have reported the neck and shoulder pain as other ailments that they usually suffer from. The pain in the neck and shoulder directly related to lifting loads on the head and carrying heavy loads on their shoulders. It has observed that there is no such activity in the farming other than ploughing, where women are not involved. The women working in the fields have to perform all the farm activities. It includes preparation of land for the cultivation, sowing and transplanting of saplings, watering the plants and weeding. Almost two or three rounds in each farm, fertiliser application and pesticides spraying, harvesting their own as well the neighbours’ fields following the ‘*maddait*’⁵ system of the village, threshing the harvested paddy crops and processing and storage of the yielding. All these activities

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⁵ *Maddait System*: Women practice this during the ‘*Ropany*’ (transplanting the saplings) time. Women follow the system esp. the aadivasi communities, where they are suppose to go to each other’s field for transplanting the saplings without charging the wages. Everyone has to work in each other’s field as repaying labors in a mandatory manner.

require lifting, forceful action and carrying heavy loads in the head and their back and shoulders that ultimately cause pain in neck, shoulder and shoulder joints.

*“During the sowing period, the paddy saplings uprooting and transplanting were performed almost for around 7-8 hours, which starts from the morning till the evening. Throughout the process, we have to be in the bending posture and perform the activities manually with both the hands. It is the period when we face severe pain in our neck due to the continuous bending for long hours”.*

[Respondent: Women (35 years); Migrant HH; Village: Murma]

*“We both (men & women) have to carry loads of manures for the field preparation before the agriculture work starts and later have to carry the seedlings from the nursery areas to the fields for the transplantation. I have to do the manure-carrying job alone because at that time my husband did not return from the destination area. However, I get company during the transplanting time where I use to carry it in the heads, whereas husband use to carry on his shoulders. The work in the field is a hectic job that requires good body strength to carry the loads to the many distant fields”.*

[Respondent: Women (44 years); Migrant HH; Village: Murma]

Other than the farming, activities the few women of the migrant households also have the background of the return migrant. Some of them also practice the daily wage labourer jobs during the lean agricultural period. They are usually working the construction sites and have a background of carrying heavy loads of bricks while working in the brick kiln and cement in their heads. Therefore, they have the usual complaints about having the neck and the shoulder pains. Other than, the occupational reasons the women jobs at home like sweeping, carrying water and fuel woods, livestock care and some repetitive tasks by bending and sitting in the agricultural activities is very frequent that they do. The static relaxation during repetitive tasks is also related to shoulder pain.

*“When I was working in the brick kiln, we have to carry heavy loads of bricks on our head and have to carry from one location to the other. In the evening, our shoulder and*

*necks hurt like hell. I have not migrated anymore, but there is always a continuous mild pain”.*

[Respondent: Women (44 years); Migrant HH; Village: Deuri Alias Dongatoli]

*“At the construction site, I have to carry heavy loads of construction materials (mix of liquid cement, stone chips, and the sands, a sack of sands). Sometimes we have to carry these loads in height through the stairs on our head. Carrying the heavy loads requires much concentration, energy, and strength for sustaining it for more than eight hours/day”.*

[Respondent: Women (38 years); Migrant HH; Village: Katchancho]

iii) **Upper Arms, Elbows & Wrists Pain**: Women reported the pain in the upper arms and elbows, but the majority of them have described the pain in their wrists. Most of the household chores and the field work associated with the women, where the hands and limbs are the most active organs while working thus overwork by these organs lead to pain. While bearing load on the head for the support to the loaded material, due to the static position of the hands the onset of the tiredness in the upper arm muscles and pain thereby is unavoidable. Lifting head load, therefore, is another cause of pain in the upper arms. In activities, the movement of the wrist is more repetitive (such as winnowing, weeding, rolling of *chappatis*, sweeping, cleaning the floors and walls with the mix of cow dung and water, etc.) requires much energy and knowledge to be associated with discomfort or disability in the wrist. High-risk jobs, for example, sweeping and cow dung house maintenance, requires long time engagements with repeatedly forcing the body parts at the extreme reaches of movements with the wrist turned, stretched and pushed in a static posture is one of the causative activities of pain in the wrist.

*“For the ‘karma parab’ preparation, we have to clean and do all kinds of maintenance of our house. The cleaning, mopping and sweeping the floors and walls with the mix of water, mud and cow dung is the prime responsibility of the women of the house. We follow the traditional patterns of wall paintings (appears in semi-circle lines) with the mix of cow dung, limestone powder, and water. Painting the wall is a very tiring job by*



*flexing our hands to the maximum reach in a semi-circle manner on the walls, and it requires almost a week to get it finished”.*

[Respondent: Women (33 years); Migrant HH; Village: Deuri Alias Dongatoli]

iv) **Palms and Fingers Pain**: Very few women, especially the elderly women reported about the pain in their palms and fingers. They stated that the static tasks of gripping like working with a sickle, sorting and peeling vegetables in the farm during harvesting season, weeding, etc. are the cause of tingling sensation and numbness in the palms and their fingers.

*“I am widowed, and I survive doing labour works in other fields within the village. Because of my old age, the only work that is assigned to the fields during the harvesting season is plucking and sorting of vegetables such as pea, okras, and tomatoes, etcetera. I have to perform the task for ‘do bela’ (Two halves of the day) and at the end of the day my palms and fingers are almost getting numb”.*

[Respondent: Women (65 years); Migrant HH; Village: Bobro]

v) **Upper and Low Back Pain**: A large segment of women respondents reported pain in the low back, whereas less reporting was done for the pain in the chest region. These are another source of pain. Back pain affects both young and old, but the pains differ in the intensity. It has observed that the older woman complains about the severe pain constantly, while the younger women described the painful growth with the increase in work intensity. They described that the pain in the lower back restricts their mobility and interferes with the normal functioning. The reason could be the lifting of head loads, and it is kind of static job where the muscles of neck and spines are under continuous compression. Carrying the headloads may lead to the severe pain in the lower back of the body. The pain in the lower back is the most significant health problems due to continuation bending of the lumbar spine in a bowing posture while doing tasks like cutting crops, collecting dry leaves for fuel wood, sweeping and lifting cow dung. The incidence of back pain is higher at the lower part of the back carry the weight of the upper body, adding any other weights that carried in the back by twisting and bending more than the upper back.

*“I have been suffering from lower back pain for a long time, but it increases during the peak agriculture period. The pain is that severe that I have to take a day’s rest between the hectic time schedules. The taking rest usually interrupt our works as we do not have enough members to perform the agricultural tasks on time”.*

[Respondent: Women (55 years); Migrant HH; Village: Bobro]

*“My back pain is so severe that it makes me drained out. I could hardly stand up, and when I try to do that, then my whole body gets shivered”.*

[Respondent: Women (45 years); Migrant HH; Village: Murma]

It is observed that though the back pain and other such pains are not considered as a ‘threatening state’, they are experienced as little hurdles, which may cause difficulties in the performances of daily tasks and responsibilities.

vi) **Joint Pain:** Chronic joint pains are predominant health problems that have been reported by the women in the study area. Chronic joint pains include numerous symptoms and are associated in some way or the other with particular kinds of work activity such as bending postures. Women use to describe its symptoms by describing pain in ‘knees’, ‘elbows’ and ‘hands’. It has observed that the women of all the ages, starting as early as 28 years suffered from the joint pains. The lack of nutrition and rest compounded by repeated pregnancies and year of lactation ensures that the ‘joint pain’ afflicts women in her early age. The condition seems to be worse with age, disabling women above the age of forty. The most reported joints are the knee, back, hips, shoulder, arms, and wrists.

*“I am almost mid-aged women and started suffering from the multiple joint pains. The multiple pains in the joints may be due to long hours in the field since I got married”.*

[Respondent: Women (65 years); Migrant HH; Village: Bobro]

*“Six years back I started having severe pains in my joints. It started hurting like flames. Every morning my body is stiff. Nowadays I am unable to perform the strenuous work both in the field and at home”.*

[Respondent: Women (50 years); Migrant HH; Village: Deuri Alias Dongatoli]

*“My knees are so badly affected by ‘pain’ that I have got severe pain and swellings in my legs. I find difficulty in walking. I have to keep sitting while performing the household chores. Even though the day I carry only small utensils filled with water from the hand pump, but still feels too much burdened. The works take so much longer time to finish each task than usual, and that tires me out. However, my bones just cannot take it anymore because it feels like tearing me off”.*

[Respondent: Women (65 years); Migrant HH; Village: Deuri Alias Dongatoli]

The pain worsens during the peak agricultural period when village women often work up to more than 18 hours. They identified field labour of long duration when they suffered the extreme pain. On the *Kharif* season when it rains heavily, the workload of the women increases with the exceptionally heavy and long workload of hoeing, weeding, and sowing, etc. that cause utmost physical exhaustion and stress. The heavy working in the field is the time when women work in the field from sunrise until the sunset. As a repercussion of heavy unavoidable work, the food is usually less during this season. It has found during this season women are more prone to the infections and sickness.

Vii) **Weakness**: ‘*Kamzori*’ or weakness is the second most strongly felt and reported health problems of women of the study village. The weakness of the body is a common term used by the people to explain any bodily dysfunction and sense of tiredness.

*“During the Kharif season the workload pressure increases and at that time I felt tired and almost drained out. I feel so much weary that sometimes I do not even like to stand up. My knees and legs become so weak that the whole body starts shivering. The physical weakness makes me feels feverish, and the headaches bother me persistently*

*with the terrible pains. I drag myself in the morning because I do not feel like getting up and wishing that I could just take rest for the whole day”.*

[Respondent: Women (50 years); Migrant HH; Village: Deuri Alias Dongatoli]

It has observed that women of the study area routinely complain about the constant weakness or feeling drained out. Few of them said that they also experience amnesia and fainting. This feeling multiplied with the fever and headache as complained by the women during the unstoppable long hour work on the hot sunny day. The combination of all the three feelings, i.e. fever, constant headache, and tiredness was all the results of the laborious menial tasks. They reported the cause of this condition are the backbreaking tasks, in particular, weeding, winnowing and harvesting the crops or a long walk in the fields and carrying loads of hay, manures and fuel wood.

*“Being a woman, we have to lead a life up taking the responsibility of the household work by doing a tremendous amount of work. Since childhood, I have lived a life of near starvation and deprivation of foods, and nowadays there are months when we have to comprise with the quantity and quality of foods. However, the burden of the laborious tasks remains the same. Today I can feel that my body becomes too weak and I think I have no blood in it. Last week when I was weeding the grass in the field due to hot afternoon, I fainted there only. Other village women had carried me back to home”.*

[Respondent: Women (45 years); Migrant HH; Village: Bobro]

Many women further associated their weakness as an outcome of the frequent childbearing and poor diet by patronising the term “*Khoon ki Kami*”.

*“I have become weak, and my body had almost withered. I know there is no blood in my body now due to the childbearing, poor diet, and endless work. However, this is the life where some are blessed with good health unlike me”.*

[Respondent: Women (50 years); Migrant HH; Village: Bobro]

According to the women, they felt that many pregnancy-related problems were deep rooted in their general poor health that they experience more as ‘weakness’ during the pregnancies and repetitive conceptions following the inadequate diet and laborious tasks. As the case of *Rubina Khatun* (name changed) capably illustrates:

**Case Study 2: Rural Woman experiences of ‘Physical Weakness.’**

*Rubina Khatun* (name changed) is a physically weak looking 30 years old woman. They are one of the poorest families in the Bobro village. *Ammruddin Ansari* (name changed) her husband owns just five dismil of land where he works as during the *kharif* season. He is primarily a daily wage earner working in the construction sites, which will bring some money in the house. *Rubina* got married at the age of 18 years, and subsequently for five years, she continuously delivered a child each year. She reported that she has no major health problems, but feels very weak and suffers from severe pain in her back and the whole body. She is aware that her poor health is a result of continuous five conceptions, poor diet and a life full of drudgery. She complained that even after working so hard there is always something missing to fulfil the requirements.

She reported that all her childbirth followed with low birth weight and pneumonia and the weakness starts creeps her body. “As results, now during this childbirth, I could not be able to produce my breast milk to feed my newborn child. I feed her the powder and sometimes the cow/buffalo's milk. Because they are poorest among the other families, they could not afford to buy cow/buffalo so that it could help my child as well as to me for getting the milk regularly and regain some strength. Now I felt like my body is so weak that I always feel sick and cannot even finish my daily household chores properly. However, these problems are common in the childbearing mother. My family and I called it ‘*Chhot-mott bimari*’ small problems and suggested to take a rest and some medical care during severity”.

As a researcher, I can say the reason behind this was the prevalence of anaemia in the study area. It is evident that the women face is pale, eyes, nails, and skin is doing dull due to the low haemoglobin levels. The majority of the women in the study area appears to be undernourished, thin, dull hairs and having less body fat. The undernourishment among the women could be due to the food insecurity that prevails in the area, which leads to the scarcity of food and poor diet even in pregnancy and lactation. Moreover, the physical stress and lactating children can usually worsen the condition of weakness

in women. Therefore, it can say that the impoverished woman, in particular, suffers from ill health and malnutrition more than the men do.

## **B) ELDERLY HEALTH PROBLEMS**

It is revealed from the field that the majority of elderly people lives in absolute poverty. The elderly population, both men, and women suffer from the accumulative effects of a year of deprivations, entering the old age in a poor state of health especially women, and without having any savings or the material assets.

In the study villages, more elderly people suffer the loss of eyesight, loss of hearing and dental problems, weakness, sleeplessness and sleepiness, immobility, blood pressure related problems, the stiffness of joints and elbows, constipation, dysentery, pain in the lower back of the body, chronic headache.

*“I am fluctuating between feeling fine one week and feeling sick the next. I usually experience headaches, leg, feet and joint pains, a chronic cough, shivers, ulcers, toothaches, severe neck and shoulder pain and nausea may be due to unspecified blood pressure”.*

(73 Years old Respondent; Village: Bobro)

As a researcher, I can say that these problems occurred due to food habits, climatic conditions, and ageing factors. Ageing is a natural and unavoidable event of human life. Other than these, malnutrition is the most common health problems among the elderly, especially in the elderly women. It could be the worsening condition that had gradually started since their childhood. Also, they become more vulnerable and bodily weak due to the anaemic body. They also reported the communicable diseases such as tuberculosis and malaria. They seem to be very prone to such diseases due to the poor diet with the nutritional deficiency.

*“For me, food is a problem because I live alone as my son and daughter-in-law migrate to the other big cities. I am entirely dependent on the little that was available from the PDS and vegetables only that is available in my backyard garden. I could only manage two meals a day plus breakfast of ‘chivda’ (rice flakes) with water in the morning. I have*

*to face particular hardship in getting food during the lean season when there is no or less amount of rice and vegetable available to eat”.*

(73 years Old Respondent, Village: Katchancho)

The elderly men and women of the study villages have also reported that they also participate in the daily household chores to contribute to the household tasks. Men are seen to be taking care of the herds and cattle, collecting fodders and dry leaves of the fuel wood. Women and men both use to look after the small child of their families in the absence of the child’s parents. Women do work in the kitchen and cleaning. They expected to perform the household tasks as long as they are mobile and not bedridden. Physical work at the old age makes them stressed and drudge them to perform.

*“I have to keep doing these hard works throughout the day. However, I feel much tired, but household work and family need us as working hands. Staying at home without contributing seems a bit awkward for me. Therefore, the work has to do. If I will not help my family, then who else will do it?”*

(75 years Old Male Respondent, Village: Katchancho)

*“I have experiences of physical weakness, low backaches, leg pain, poor appetite, and irritability due to the old age. I feel bad that I am old and unable to walk like before. When I was young and energetic, I use to do my entire work without any difficulty. Now, due to sickness and ageing, face difficulties walking long distances, washing clothes, cooking and face difficulties when digging and sweeping the house. I feel difficulty in squatting for latrine and washing thoroughly”.*

(75 years old female respondent; Village: Deuri Alias Dongatoli)

There are some households where it has found that the elderly men still do lots of strenuous jobs like rickshaw pulling in the Ranchi city for the daily earnings. They reported the physical, economic and psychological problems. Altogether, it ultimately affects their health only because with such laborious work they were earning very low income, that does not make them consume healthy food and in the city because of this job they do not get that respect in the society. Therefore, overall the older adults also stressed due to their inability to earn their livelihood with gain the respect of their family and the society.

*“I am working as a daily wage earner entirely at the subsistence level to earn a living so that I can buy food for my family. During work, I use to eat one meal at the working site and another in the evening directly after returning to my room. When I have sufficient money, I buy a two-time meal (foods) while working. A few months back, I was suffering from the severe stomachache due to gastric pain and a slight headache”.*

(71 Years Old Male Respondent; Village: Murma)

It has observed that most older adults experience some chronic condition and being in such conditions can endanger them to the fragility. In the case of the slightest blow, such as cold, flu or fever, can easily stress their already frail systems and chances of being infected become higher for them.

*“I am very prone to fever when there is any change in the environment like when the rainy season comes I caught the flu, in winter I got a fever and severe body pain, etc. A cough and cold and dysentery are very much frequent illness in slight changes in weather”.*

(65 years male respondents; village: Murma)

*“My father and mother both are bedridden for one year. As you can see that, I am also not young enough to take care of them. My house is full of older adults. It becomes difficult when any of us get ill. The situation becomes very problematic to handle it alone. Because who will take us for the treatment?”*

(70 years male respondents; Village: Bobro)

The poverty worsens the health condition of rural aged populations of the study village. Because they are unable to access the required health care services, medication and nutrition along with no family members to take care of them in the absence of the adults who migrate for the livelihood.



### **C) ADOLESCENT HEALTH PROBLEMS**

The adolescent is the age of transition from childhood to the adulthood occurs during puberty period that is characterised by major biological changes like physical growth, sexual maturation, and psychosocial development. In the study area, the age groups of 10 years to 19 years were observed and interviewed to acquaint information on their perceived health problems. In general/common health problems, the female adolescent population's major concerns are the pregnancy-related health issues, whereas, the male adolescent population in rural areas is more reporting are about the dental disease, as well as skin infections, rashes, and dermatitis.

Female adolescents are more vulnerable and face more health problems in comparison to the male adolescents in general. During this phase of growth, the girls experience menstruation and its related problems for the first time. The menstruation problems further marked by the feeling of anxiety and eagerness to know about this natural process of the body. It has observed that the girls in the families with financial difficulties and impoverishments, they at this age are more likely to be ignored if having any age specific health issues.

The majority of the girls in the study area had reported one or the other problems related to their menstrual cycle. They described several symptoms that take place during their menstruation periods. The commonest problems faced by the adolescent girls are the painful periods or about the menstrual cramps, that is more or less starts at the time of menstruation. These symptoms typically last less than three days, but some of the reporting is also of more than five days. The pain is usually in the lower abdomen. In the clinical terms, this is known as Dysmenorrheal problems. More than half of the girl respondent had reported one or the other symptoms of a premenstrual syndrome like irregular menses, irritations, malaise, headache, chest pain, abdominal bloating, constipation, tightness in the chest and white discharge.

*“At the time of my menstrual period, there is so much cramp in my abdomen, and the back pain hurts so hard that I feel like dying. My appetite has automatically decreased and does not like eating frequently. In the second day of the menstruation, the pain increases that I feel nausea and vomiting. My legs get swellings, and there is irritability*

*in the whole body. The swellings in the legs make me so tired and giddy that I just wanted to take rest for the whole day without moving anywhere”.*

(Respondent: Female, 16 years old; Village: Katchancho)

Other than the menstrual problems, they also complained about the problems of hair fall, weakness, acne, fever, cough, dental problems, scabies, symptoms include itching, visible lice on the scalp and lice eggs (nits) on the hair shafts and body aches. Apart from these problems, because of the poor diet or food intake, they are easily infected by the diseases, namely, malaria, anaemia, hookworm infestation and blood loss through menstruation.

*“I stay alone with my younger siblings as both my parents migrate to the brick kiln of the other cities. I sometimes cry with the pains that cause due to cramping in the abdomen. I do not say this because I do not want to bother anyone with this little problem. I keep silent and continue my household chores. I cannot take rest or sleep because I am the only one who has to take care of my siblings in the absence of my parents”.*

(Respondent: Female, 15 years old; Village: Deuri Alias Dongatoli)

The major reasons for the high prevalence of Reproductive Tract Infection (RTIs) could be the poor menstrual hygiene that significantly contributes to the female morbidity. Few respondents also reported the symptoms of the RTIs and the cause they highlighted were because of the usage of the clothes during their menstrual period. In the study area, the girls told that they are not supposed to discuss the menses publicly. They are imposed with the ‘dos’ and ‘don’t’. They never discussed the hygiene-related practices by the elder women folks in their homes. It has found that most of the adolescent girls in the study village used rags and old clothes during their menstruation and asked to dry in the less visible places.

*“I use old cloth during my period as menstrual absorbent. I wash the clothes piece with soap after use and keep it in some secret places until the next menstrual period”.*

(Respondent: Female, 16 years old; Village: Murma)

*“I do not have a bath and change the menstrual clothes frequently because it needs some privacy. However, as you see we have to go to the ponds and well for bathing and have no toilets and bathrooms”.*

(Respondent: Female, 17 years old; Village: Murma)

It has observed that the menstrual hygiene is very poor among the adolescent girls in the study area. The reason that figure was the lack of information, privacy for washing, changing or cleaning since more than half of the respondents do not have the toilets and bathrooms and have to go in the open space.

Adding to these health problems, girls reported this as main reasons for the absenteeism from school. The girl's health problems disturb their daily routine and affect them due to prolonged bed rest, missed social events/ activities or commitments, sound sleep and decrease their appetites.

#### **D) MATERNAL HEALTH PROBLEMS**

The mothers of reproductive age groups in the study area have its own set of symptoms to identify morbidities that commonly occur in them during pregnancy. According to the mothers, the common maternal morbidities are malaria, diarrhoea, loose motion (*Jhaara*), pain in the stomach and lower abdomen, *safed pradar* (white discharge from genitals), swelling of legs, *pichli* (bleeding and weakness), itching in the genital area, pain in hand and feet, menstruation problem, dislocation of babies in the womb (*bachha khiskna*) and miscarriages. Apart from this specific symptom the larger responded about the physical weakness and lack of appetite. After a probing, it has found that women of reproductive age and elderly unable to identify specific maternal morbidities immediately. Symptoms like loss of appetite, weakness and high temperature are identified as fever, whereas, loose motion, vomiting and nausea are declared as diarrhoea by them. It has observed that women usually suffer the ailment quietly and most of the time do not even report in their houses to their family. The reason that they have mentioned in this was as they do not consider any symptoms important to be reported, for instance, swelling of feet and hands. They do not find it as a serious sign of maternal morbidity.

*“I think every woman goes through this. Even I during my pregnancy had a leg and hand swelling, but this is common to the pregnant women. Therefore, I did not consider as a serious problem or as a symptom of ailments.”*

[Baijanti Kujur (Name changed), Mother, Murma Village]

Health functionaries like Sahiya, ANM and Anganwadi Sevika of the both remote villages and peri-urban villages reported that there had been several changes over time about the health seeking behaviour for ANC among the mothers in their villages. The level of acceptability of modern health facilities and treatment has increased compared to earlier times in the mothers, including the community. Women go for the institutional deliveries due to the fund provision maternal benefit schemes, i.e. Janani Suraksha Yojana (JSY). The mother reported that they knew about the entitlements from the government for the institutional deliveries and the amount they received are around Rs. 1000. In response to whether they had any knowledge of the exact entitled amount, it has found that majority of women do not have any knowledge and they are mostly illiterates. Only a few mothers, those are literates found to have some idea about the entitled amount and told that it is around Rs. 1400 but they received only Rs. 800-1000. However, it has found that mother struggles to get their fund immediately and have to pay the commission to the Sahiya for her assistance during the delivery from taking to the PHC till the receiving of the amount. Apart from the institutional deliveries, the other facilities such as ANC services and Iron Folic Acid (IFA) supplements are accessed but irregularly by the mothers belonging to the peri-urban villages those are nearby to the PHC. While, the mothers from the remote villages are reported to go for any ANC only once or twice, and the mother of the migrant families do not even go for once. The reason stated by the mother belonging from the migrant family was due to lack of the male or any responsible adult male in the family who can accompany them to reach the PHC during the pregnancy.

*“ I am six months pregnant. I am physically weak (Kamzor) and can hardly walk properly, but my husband had left for another state in search of employment, and therefore, have to do lots of work at my home. I have to look after my kids and the livestock, collect dry leaves for the kitchen fuels. Moreover, if in between any of my*

*children or family members were falling ill, has to travel at least 30 Km to visit the PHC. In such condition, I cannot be able to think of going for any ANC check-up even if I like to consult it with the doctor during some illness due to pregnancy. Yes, if my husband stays would have helped me to visit the PHC for accessing any ANC facilities. Honestly, I cannot think of doing it alone without my husband.”*

[Sabita Orain (name changed), 22 years, Mother, Deuri Alias Dongatoli]

## **E) CHILD HEALTH PROBLEMS**

The childhood period is the most important phase of human's life that is known for accelerated growth and development. According to several studies, this human physical growth takes place around 40 per cent, and about 80 per cent of the mental development occurs. This age group is most affected by various common and easily treatable illnesses. Therefore, any adverse impacts during this period may result in severe limitations in their physical and intellectual development.

The child health-related information was acquired from the mothers, women and the village health functionaries with the group discussions by posing queries related to the health problems regarding the general morbidity and sufferings in the study area.

During the focus group discussion, the iterative data reported related to the health problems are the children of Under five age groups starting from the low birth weights to the general or common illnesses. The children of Under five age groups constitute approximately 19 per cent of the total population of the study area and are a most vulnerable section of the society that suffers from the highest morbidity.

*i) **Low Birth Weight:*** Majority of mothers, raised a concern for the low birth weight of the newborn child as a health problem. Some of them believe that smaller than average or very small newborns did not grow well and are very prone to any types of the illnesses. In the subjective assessment of the size of the baby at birth used as a proxy for birth weight by the women and mothers in the study area because of the reason that they could not be able to recall or done the weighing of their baby at the time of child's birth. Based on the appearances and weighing by carrying, mothers categorised the birth weight of less than 2.5 Kg, with the indication of 'small' or 'very small'. Size at birth

was reported by recalling it for their every childbirth, regardless of whether or not they are weighed at their birth.

*“I gave birth to all of my three children at home. I did not weight them after their birth. However, I remember that the last two of my child was too small in size and looked very weak”.*

(Respondent: Mother 35 years; Migrant HH; Deuri Alias Dongatoli)

It has found that the mothers from both the remote rural and peri-urban villages reported half of the children born were smaller and felt a light weight in comparison to their age. There are no major differences between the migrant, non-migrant and commuter household's mothers' experiences. However, non-migrant households mothers' found to be in a better situation in comparison to the Migrant and Commuters Households' mothers. The stated reason was the indulgence of the drudgery in both household chores and outside the field or daily wage labour during their pregnancy.

*“During my first pregnancy, I migrated with my husband. I use to work in the brick kiln up to four-five months of my pregnancy. Later I stayed there and helped with the household chores to support my husband in the destination area. I delivered my baby in the Gaya (Bihar) brick kiln areas in the local public hospital. My child was below the average weight and was too small and thin”.*

(Respondent: Mother, 25 years; Migrant HH; Bobro)

*“I was the sole person to take on the whole household chores during my pregnancy because we are a nuclear family. I have to look after both inside the house and outside work of the fields. My husband returns only in the evening and in between me also some days work as the wage labour during my pregnancy period. I delivered a child in seven months, and the child was very small”.*

(Respondent: Mother, 26 years; Commuter HH; Katchancho)

It is evident that the women or the mothers from the commuter households' accompanied or involved in the daily wage earnings by contributing in their household economy. Whereas, the women of the migrant households also moved out with their husbands up to their first or second pregnancy to the destination area for livelihood. Also, many mothers of the study area had almost no support from the family due to the

decline in the joint family system. During their pregnancy, they continue with their work without taking rest and good food. Therefore, women stated that the incidence of the low child birth weight is slightly higher in the migrant and commuter households' mothers than the non-migrant household mothers'.

Mothers reported many difficulties and challenges related to low birth weight babies based on their experiences and perceptions. The general perception among the mothers and women of the study area is that low or underweight infants inherently at higher risks of diseases, *Kamzori* or malnutrition and death in childhood because of their very small body which is already compromised. They face the biggest challenge to make the infants survived and overcame the low weight into the average weight of the infants of the same age. The common difficulties of the mothers in the study villages reported was related to the scarcity of the resources or basic commodity needs of daily living.

***Food Shortages:*** In the previous chapter, already explained the food security status of the study area. It is evident that the food security is less than a year for many migrants and the commuter households and it is primarily related to the cereals food security. Therefore, it can be said that the mothers of the infants, especially the low birth weight newborns, have direct effects of food scarcity on the nutrition of both the mother and the child. Some mothers who had more than two-three children reported having low production of milk, which is inadequate for the newborn baby.

*“ I have never faced the problem of low milk production with my first two children, but this time it is like very much difficult to produce milk from the first day of her birth”.*

(Respondent: 27 years, Mother; Bobro)

*“I know my baby needs much milk to grow and I too need to eat an adequate amount of food to breastfeed my baby properly. However, this is not easy to get adequate amounts of food all the time”.*

(Respondent: 33 years, Mother; Deuri Alias Dongatoli)

**Money/Finance scarcity:** Other than food scarcity, mothers and women also reported the problems related to the money scarcity to take care of low birth weight infants. They said that the care of the infants not only requires special attention and full-time care but also with both the money and adequate foods. The special care of the infant's demands caused work interruptions, preventing the mother from participating in the other households or outside activities, leading to further loss of the household income as well as income generating activities.

*“I am an agri-wage labour. My family is also dependent on my wages. However, after my premature child’s birth, I could not be able to go outside for the work, not even for a few hours I can leave him alone, which is hampering my earnings and creating shortages of money for my school children fees”.*

(Respondent: 35 years, Mother; Murma)

**Special Care Demands:** In the study area, the general perception of the mother and women for low birth weight infants demands much more special care, in comparison to the other normal born infants. They reported that the child usually cries a lot and the growth is very slow or almost stagnant for a much longer period. It has found that the introduction of the mixed food is usually done earlier in low birth weight and premature babies in the study area. The most common reason stated was the continuous crying of babies and their slow growth. According to the mothers, the continuous crying of infants is seen as a sign of poor care or hunger. They perceived as an indication that child is hungry and the breast milk is not enough for them. Therefore, they gave solid foods along with the breast milk to the crying babies for their quick recovery from slow growth and hunger. It is believed that the mixed foods for such infants are practised as a coping mechanism by the mothers of the low birth weight or premature infants’ mothers.

*“She was crying day and night continuously. No one could sleep in the family for a week. Then I found a solution to make her sleep by giving her porridge whenever she cries. I realised that once I started giving her this food she can sleep. I think now she gets adequate diet including my breast milk”.*

(Respondent: 21 years, Mother; Katchancho)



The low birth weight child's problem is seen not only as the vulnerability of the slow growth of the infants but also seen as the child in the high-risk zone of the illnesses during the six months of the child's growing phase.

**ii) Puni or /Undernutrition/ Malnutrition:** In the study area respondents, especially mothers identify the child's under-nutrition by the physical appearance and behaviour. The mothers reported under-nutrition as the child health problems and used the term '*Puni*' to define the illness and its symptoms. According to the mothers and caregivers the illness '*Puni*', matches moderate malnutrition. Most of the mothers believe that it is extremely common in early childhood and many times the symptoms of the mild and moderate malnutrition is unidentified. It has found that the mothers of normally nourished and mild to moderately undernourished children wrongly classified as a healthy child by the mothers as well as by the community. However, the respondents described the symptoms of '*Puni*' in their child as becoming very thin or resulted in the swelling of the body and a big stomach. Also, symptoms of having big and wide eyelids, weakness, wanting to lay down in cool places, having no energy, having loss of appetite, frequented watery diarrhoea, loss of weight, retarded growth, thin hair, pale skin and eyes, and sadness. The symptoms also included the child not being able to walk properly and prefers to crawl for longer periods. Mothers reported that identifying the illness in the early stage is difficult because they get confused with the other underlying illness such as diarrhoea, malaria, falling ill frequently, worms and loss of appetite especially where the child is well fed but failed to grow.

*"Physical structure is slightly different from the other child, as they have big belly pouching outwards".*

(Respondent: Female, 21 years, Murma)

*"There is two years old girl child in the village, who is not able to walk and feels lighter while holding her. Healthy child of her age seems strong and heavy in body weight".*

(Respondent: Female, 25 years, Bobro)

*"My one and half years old child look like seven months of age due to weakness".*

(Respondent: Mother, 33 years, Deuri Alias Dongatoli)

*“My son does not eat properly, remains irritated and frequently get ill. Many times do not take food on time and could not able to digest and vomit the food. I think there is some deficiency in the body”.*

(Respondent: Mother, 30 years, Bobro)

*“I noticed that my daughter starts becoming thinner and avoid eating the proper amount of food. When she got diarrhoea, she stops drinking my breast milk.”*

(Respondent: Mother, 21 years, Bobro)

It has observed that the mild and moderate under-nutrition remained invisible, busy family mothers, as well as family and health workers too, are not able to recognise until the child health deteriorates to severe levels with some medical infestations. Moreover, there was no perceived urgency to seek health care for the under-nutrition in the mild to moderate stages, since mothers and other family members could not be able to differentiate between its severity of nutrition status.

However, it has found that they are concerned and aware of the adversity of under-nutrition in their child’s life. Moreover, almost all mothers interviewed in the study area is believed that it could be treated with the best home efforts by improving the nutritional status by providing good quality of food.

**iii) Common Morbidity:** People felt that the children fell sick more often than older children and the common morbidities are fever, respiratory infections, stomach ache and headache. After probing further stated others morbidity like dental and skin problem and added the presence of diseases such as worm infestation, lack of blood and frequented stomatitis. Respondents felt that children, both girls and boys fell ill with the same frequency and there is no such difference based on the gender. According to the people, some diseases such as skin problems, fever, water-borne diseases such as diarrhoea, dysentery, cold & cough; jaundice, blurred eye, stomach ache and worm infestations are commonly found morbidities in the children of all age groups.

Table 6.1: Monthwise Distribution of Morbidity Among Under five age group Children

Morbidity condition/ Months	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec	Disease Prevalence Ranking
ARI	**** *	***	**	*	*	*	*	*	**	*	**	****	1
Diarrhoeal Disease	**	*	*	**	***	***	** **	***	***	*	**	**	2
Skin Infection	*	*	*	*	**	***	**	***	**	**	**	***	3
Fever	****	**	*	*	**	***	**	***	*	**	***	***	4
Worm Infestation	*	*	*		*	*	*	*			*	*	5
Measles					*			*					8
Chicken Pox			*				*	*					7
Infective Hepatitis						*	*	*					9
Injuries	*		*					*		*			8
Poisoning				*	*						*		10
Miscellaneous	*	*				*	*	*		*		*	6
Prevalence (Month-wise)	**** *	*	*	*	***	***	** *	*** *	**	*	**	** **	

(Source: Primary Data)

However, they are much concerned about the morbidity of the under-five age groups because of their proneness and vulnerability towards the diseases. It has found that respondents reported respiratory infection commonly Pneumonia prevalence in the first ranking in the study area. They stated that the morbid condition is higher in the month of December to February and rest all of the months it is present in the very negligible manner. The diarrhoeal diseases such as dysentery and loose motion are ranked by the respondent at the second place in term of prevalence. They reported that it occurs throughout the year, but the prevalence is higher during the month of May to September, and it is at peak during the rainy season, i.e. in the month of June to August. The third most disease among the child of under five is the skin infections. It has reported that the

skin infections occur throughout the year, but the occurrence is high in the summer season during the month of May- June, monsoon season during July-August and in the winter season in the months of November-December. It can be said that the occurrence is mostly during the transition phase of the different seasons. The fourth morbidity stated was the common fever, and it found to occur throughout the year. However, the occurrences are high in the month of June-August and November-January. People cited worm infestation as the fifth most occurred morbidity in under five age group children. The sixth most morbidities occur the miscellaneous morbidities category that carries lots of illnesses related to the malnutrition. These are morbidities like *Puni* (the child loses weight, and the stomach bulges out), *Rang Baad* (Where the reddish coloration in the skin of the entire body), *Pilia* (jaundice), *Larsut* (Upper part of the tongue stuck and could not function properly), *Murfatna* (Nonunion of skull fontanelles of infants) and Boils, etc. Other morbidities are like measles, chicken pox, hepatitis, injuries, poisonings are found to be occurring very rare conditions, and its prevalence is very low in the study area. Maybe this is the reason that the community did not perceive these morbidities as a serious disease.

Respondents classified the common illnesses based on the weather season wise occurrences and the symptoms of the diseases such as the temperature identifying through the palm and body contacts.

Table 6.2: Common Illnesses among Children

Sl. No.	Summer Season	Rainy Season	Winter Season
1	Measles	Diarrhoea	Pneumonia
2	Skin Problems	Boils	Malaria
3	<i>Loo</i> (Sun/Heat Stroke)	Malaria	Cough & Cold
4	<i>Rang Baad</i>	Loose motion	Fever
5	Mouth Ulcer	<i>Pilia</i> (Jaundice)	<i>Murfatna</i>
6	Headache	Fever	Malnourishment
7	<i>Larsut</i>	Malnourishment	<i>Larsut</i>
8	Malnourishment	<i>Murfatna</i>	<i>Naskhichana</i>

(Source: Primary Data)

The mothers and women's group reported that the child common illnesses categorised according to them into three different seasons, namely summer, rainy and winter in the study area. In the summer season, the most reported morbidities are measles, skin infections, sunstroke, mouth ulcer, headache, *rangbaad* and *larsut*. In the rainy season, the children are most affected by the illnesses by diarrhoea, boils, malaria, loose motion or dysentery, jaundice, viral fever and *murfatna*. In the winter season, the respondents had reported morbidity like Pneumonia, cough and cold, *larsut* and *naskhichana*. They stated that it is not that the particular illnesses occurred on the specific season, in fact, some of them like fever, malnutrition, *murfatna*, *larsut*, jaundice, etc. can happen in any season or can be said that present throughout the year.

The respondent stated that, they sought for the health care for the children in case of observing any of the symptoms like fever, shivering, loose motion and vomiting, fever and body becomes yellowish, body covered with pimples, severe headache and constantly cry, discharge from nose and eyes, body becomes reddish in colour and child unable to suckle, the child's lack appetite and start losing weight and high body temperature.

## **2. DEALING WITH ILLNESS & HEALTH PROBLEMS: PEOPLE'S APPROACHES TO TREATMENT AND CARE**

This section of the chapter study people's effort to access the various sources of treatments to rejuvenate their health. To analyse it the focus is on the different questions to acquire the information on the local peoples' beliefs and practices that they do adopt for their treatments, the conditions that improve chances for better health and facts that threaten them do achieve it and things or factors that constitutes 'good health' to them. The whole section is based on the qualitative information. The first section focuses on the health and illness concept of the 'left-behinds' population of the study area. Second, will discuss the different sources of health care services and providers they approach for the treatment. The third section will discuss the study populations, health care seeking behaviours and the reasons behind their choices.

## 2.1 HEALTH & ILLNESS CONCEPT

Health and illness are conceptualised differently by different cultures. The etiological world of the villagers broadly dichotomized the natural and supernatural causes of illness and another form of suffering of life. The illness or disease related belief of the study folks are described as good and bad, right and wrong, links to natural and supernatural powers, which are religious and magical in nature. All this belief to guide their attitude and health seeking behaviour in the presence of different sources of health care service providers based on traditional and religious health care system along with the inflow of the contrasting modern concept of health care system.

They classified the sources of misfortunes and illnesses into *najari /nad* (adversity) and *bimari* (illness). The supernatural power is manifested in *najari/nad* or adversity. These are traced to spirit possession- spirit (*bonga*), benevolent god or goddesses, evil eye (*najar-gujar*) and spells cast by *Bhagat/Bhagtain (totka)*. The supernatural beliefs about illness are classified as *karma*, sin, the effect of evil eyes, demons, evil spirits and religious events, etc. As a result, especially cholera, smallpox, diarrhoea, *pechis* (blood dysentery), or sudden death are attributed to supernatural forces. The supernatural belief of adversity is juxtaposed to the natural beliefs about illness among the folks of the study area. The origin of natural beliefs includes the physical and natural factors, like effects of the different season - hot, cold, sunray, food pattern, addiction, etc., and the described symptoms like stomach ache, boils, pain, swelling, cough, fever, Tuberculosis, malaria, etc. Even though the aetiology of the health of the villagers is broadly dichotomized at the level of natural and supernatural beliefs of illness, they are unable to demarcate strictly between the illnesses and another form of sufferings of life.

Therefore, it is evident that people are advent to believe and practice the health care systems of Western medical services in the presence of dominant belief of the traditional ways of health care systems. Altogether, both gave a new way to new hybrid ideologies, knowledge, ideas and discourses and practices. In the harmoniousness with the multiple notions and beliefs about the causation of illness, a variety of healing systems or practitioners has existed in the locality in the study area. These specialists with completely different beliefs and methods of treatments provide cures for different

types of ailments. Thus, treatment is seen as a matter for negotiation either by traditional healers or by today modern medicine practitioners (Bisht, 2004)

However, the majority of people recur to the entire cast of health practitioners, depending on the nature, type, and severity of the illness.

## **2.2 SOURCES OF HEALTHCARE SERVICES**

In the study villages of Mandar Block, a large number of healthcare providers' lives. It is ranging from specialised modern/biomedicine healthcare facilities with the trained physicians qualified in western medicine in the traditional practitioners believing in the traditional health care system. The community possesses to both the formal and informal health care system that is an integral part of their society.

The source of treatment choices of the people depends on the type of illness, its symptoms, and severity. The various reported sources that are available within the vicinity of the study populations for their treatments are the *Bhagat / Bhagtains / Guni* (traditional and spiritual healers using herbal and spell chanters), Government healthcare institutions such as Addl. Primary Health Centres (PHC), Sub-Health Centres including community-based health care centres (Anganwadi centres) for the mother and child health care. Private healthcare clinics/ hospitals, including allopathic or homoeopathic treatments, Untrained informal Rural Medical Practitioners (RMPs) / *Daktars/ Jhola Daktars*; Untrained pharmacists, other sectors' health personnel of Christian missionaries and medicine stores (pharmacies).

In the answers to the question asked about what they do when their family members get ill, the majority of them responded that they took them to the doctors nearby to their villages. Further probing revealed the pluralistic care or approaching different healthcare sources depending on the severity, symptom, and types of illness. The reported sources of healthcare providers exist in the study are described below:

### **i) Providers of first health-seeking Contact**

- a) *Bhagat/ Bhagtain/ Guni/ Ojha* (Traditional & Spiritual Healers)
- b) Local Quacks/ RMPs/ *Daktar/Jhola Daktar*
- c) Private Allopathic Clinics
- d) Homeopathic Institutions

- e) Pharmacies (Medicine Stores)
- f) Other Health care providers/ Health professionals
- g) Home remedies
- h) Spiritual Care

In the study villages, it has found that, the community's first contact for the treatment is 'traditional healers' (a heterogeneous category that includes tribal medicine providers, bone setters, herbalists, traditional birth attendants or *dai*, and faith healers) those are referred as *Bhagat/ Bhagtain/ Guni/ Ojha* by the local people. The people reported that the traditional healer in their locality is usually preferred to seek herbal and *magico-religious* treatment of illness. It has found that they mostly go to them for the treatment of the illnesses, those are acute in nature as well as taking a longer period to be cured. They have faith in the herbal medicines, seeking treatments for the particular diseases like jaundice, piles, menstrual problems such as white discharge, cramps in the abdomen, loose motions, vomiting, sunstrokes and headaches. They are well represented on the remote and tribal dominated villages and appreciated by for their low costs as the payments can be done later or in the form of a kind, i.e. gifts or local produce; there is a chance of the delayed payment and their consistent availability during the time of medical emergencies. Other than the treatment costs the trust of the people towards them is stated by the respondents. The reason was that the individuals' shared the same cultural values and able to communicate more freely with them than the health care providers of the government or private hospitals. Respondents reported that they are aware of the facts that the traditional healers do not have any medical training. Despite this fact, they are found to believe in their spiritual skills that have passed on from their ancestors or the spiritual teachers and try to be treated from them for the range of illnesses like mental health problems, infections, deformities in spine and joints and common cough & cold.

In the study area, especially in the remotest villages, the role of it is evident that the role of the 'RMPs/ Quacks/ Daktar/Jhola Daktar' is very significant. Though people have an awareness about the professional qualification, despite that they approach them during their minor illnesses. The majority of the people in the study villages are seeking their



health care services and approach them for the treatments of fever, diarrhoea, cough & cold, accidental cases, joint pains, minor surgeries, seasonal diseases, back pain, heart pain, headaches, swelling of glands and breathing problems. They reported that they have been given some consultations and medicines, especially the allopathic medicines in the form of tablets and sometimes injections too. These *daktars* are seen as an outsider with little known about training, but they dealt with the allopathic drugs in treatment with more specifics of the thermometer, stethoscope, etc. in diagnosis, this tablets and injections, capsule, tonics, etc. are popularly provided medicines by them. Quacks have been approached by both the villagers in the remote and peri-urban villages for their lower price of the treatment fees. People told that the *daktars* visited the villages in every alternatives day and charged around Rs. 50 to 100 for each consultation. The overall expenses come around Rs. 500 including the medicine charges in the minor illnesses. If the illness severity is high, then they provide the medicine and consult with the credit and have to repay him back as per the individuals' availability of money. According to the peoples' perception, RMPs connect them emotionally and understand their financial problems that make them more comfortable. Overall, choosing them for the first contact treatment providers as stated by the people are RMPs easy accessibility, familiarity with the local people by face and name, available round the clock and provide affordable services are the major reasons behind this.

The rural people seek treatment from the 'private clinic providers' for many conditions in both the remote rural and the peri-urban villages. They go to the private clinics for the newborn or child illnesses, malaria, tuberculosis and women's health related problems. In response to the steps taken by the mother for the children serious and life-threatening ailments, it has reported that they approached the private allopathic doctors and clinics. There are also many reporting related to malaria, treatment of the adults as the major and severe illness perspective. The people also reported that they sought treatment for the minor illnesses too, like scabies, cold & cough, wounds, etc. from the private allopathic doctors. It is evident that the mothers from the study villages have more trust on the private allopathic clinics for every illness related to their children and they go and consult with the private doctors for their quick treatment and recovery. It has found that in every four villages, the location of the private clinics is convenient

for the people, (as it is situated within the 3-5 km proximity). Moreover, it is very much practical that the people seek treatments from the clinics located closer to their residents despite the fees/charges for the consultation are higher for them. The various stated reasons for choosing the private clinics are the providers proximity, cost convenience as it does not count the frictional cost (Time, money and exhaustion), the reputation of the doctors and clinics that assure them to spend money on the particular clinic, trust for the perceived 'recovery' and lack of the faith in the public sector.

It has found that there are heterogeneous mixes of health care providers where some are professionally trained but the majority are unqualified doctors. In the study area, there are the clinics of the 'paramedical workers' (e.g. pharmacists, nurses and compounders), referred as '*chotta daktar*' and people sought treatment from them for the minor illnesses. It has reported that they are the employees of the government or some private clinics and provide the treatments for the patients' for-a-fee. It is evident that these '*chota daktar*' usually practice their treatment in nearby town. Therefore, it has reported mostly from the peri-urban study villages.

People stated that the private sector provides them with the multiplicity of the option for health care seeking from the qualified doctors. It has observed that because people perceived the private clinics as the best source of the healthcare treatments. The women prefer it more due to the familiarity and faith in the doctor and their good warmhearted behaviours help to build the trust for them. More than one woman in the remote villages proximate to town (Narkopi) named the certain doctors repeatedly as the skilful and decent ones whom they approached both for general illnesses and for women's related health problems. It has found that men complained more than women about the high fees, business orientation of doctors and the malpractices, although they prefer to go to the private clinics.

The 'homoeopathic Institutions' are also seen for seeking health treatments in the study area of Mandar blocks. It has found that these clinics are mainly available in the peri-urban villages. The people responded that they sought treatment in the homoeopathic clinics mainly for the young child illness, particularly for milder illnesses. They said that the reason behind choosing this healthcare service system, especially, for smaller

children is the taste of the pills. They liked the fact that the sweet taste helps children to ingest the medicine easily. They believe that this medicine is much suitable during the mild and minor illnesses, especially for infants and young children. They also believed that the homoeopathic medicine is more suitable during the mild, minor illnesses for infants and children.

It has evidence that people bought medicines from the 'local medical stores', i.e., usually based on the nearby markets, for the minor illness like cold, cough, loose motion, fever, and headache, etc. It has also found that the people in the study villages seek treatment for fever, dysentery, stomachs, scabies and wounds. They go to the pharmacies or medical stores and often ask for the medicine by describing their medical conditions or symptoms or their family members. People responded that sometimes they do not visit the private clinics repeatedly despite they go to the allopathic practitioners and take medicines by showing a prescription that might give to them earlier related to the previous illness episodes. In both the cases, they have to spend money only on the cost of medicines and offered free consultations by the pharmacists. Therefore, they see this health care seeking method more feasible because of the proximity and the availability as this is open until late at night.

People reported that they also seek first contact treatment from the other health care providers such as other allopathic sources of the Christian missionaries' hospitals. Mostly they go to the pregnancy and delivery issues. It has reported only from the peri-urban village, having this hospital nearby.

In the study village, people also sought treatments from the 'anganwadi centres' mostly the children's immunisation vaccines, and some government provided staple fortified food to the children's in a regular manner. Villagers told that they ask medicines from the Sahiyya (ASHA) and the ANMs for their minor illness like cold, cough and scabies free of cost. However, people do rely on them partially because of the unavailability of the medicines that hamper these centres to deliver the health services regularly.

People responded that their first response to an illness is 'self-medication'. It has found that men are more likely to buy medicines such as paracetamol or disprine whereas the women are more likely to depend on the home remedies, which usually involve herbal

medicines mostly used to the mild and non-serious illnesses like scabies, skin rashes, cold, cough, etc. However, the knowledge of the home remedies is confined mostly to the adult members of the community. It has found that few Respondent uses remedies for some serious illnesses too, like dysentery, jaundice, typhoid and measles. However, they said that they use it regularly only after consulting the knowledgeable person/ elders. It has evidence that the home remedies are usually used to treat the most common illness in the community. Mothers in the study area disclosed that they use the home remedies to cure their children especially diarrhoea. There is a belief in the community that the home remedy is the best treatments for particular diseases such as the illnesses like measles and jaundice. Apart from these illnesses, the morbidity like under-nutrition is not considered as the disease by the mothers. Thus, most of them stated that they did not consult traditional healers or visit hospitals if the child was only skinny. The majority of the mothers reported that they do the treatment of their child on the advice of their in-laws or the elderly members reside in their village. People stated that they believed that for these diseases modern medicine would not work and even aggregate these illnesses. However, the use of home remedies has been seen to be a decline, and the reason is that there were only a few elderly individuals who knew about these herbal medicines.

Apart from the various healthcare-seeking practices, people also believe in the God and the Goddesses in the study area. It has found that a person's intake religious holy water, *tabij* (spell chanted threads) offered by the religious places, for the sake of seeking treatments for the several illnesses. This practice is found particularly for the serious and long-term illnesses. People visit the religious places such as temple, churches and mosques/ shrines to be cured as early as possible.

## **ii) Providers of second health-seeking Contact**

i) **Government Allopathic Institutions:** It has revealed that in the study villages' people stated that they visit the government hospitals only for the treatment of the serious and acute illnesses like severe injuries, diarrhoea and malaria but not for the child's under-nutrition related morbidities. The respondents of remote rural villages

stated that the government hospitals are often located in the highly populated areas and often at a distance of the village. The people of the peri-urban villages stated that they the preferences by choosing the government hospitals are mostly during the nighttime because the private clinics are unavailable at this time in the area. They said that there are some private clinics open at night, but they are too expensive. Therefore, they admitted that they are inclined to prefer the government health services due to the financial crisis and the only healthcare services for which they are limited with are the immunisation process at the PHCs. Therefore, it can say that the public healthcare services are yet to perceive pro-poor by the village healthcare consumers despite the fact that it is much cheaper than the private clinics and meant for the poor people. People reported that though the consultation charges are free of cost in the Addl. PHCs, they faced problem to find the medicines and tests that have been prescribed by the doctors, which is mostly available in the outside private sources. The most iterating complaints from the villagers are. First, people have to spend a heavy amount of the transport to reach the addl. PHC based at block headquarters. Secondly, hospital's expenses are too high due to the outside purchasing of medicines and tests that exceed the cost of medicines. The frictional cost of the illness exceeds extremely high with out of pocket expenses to avail the public healthcare services.

However, other than these there are also several reasons that disinclined them to utilise the public healthcare services. These are like the faraway distances to avoid higher expenditures of money, time and harassments reach the hospitals. Accompanying the fact of the apathy of the hospital staffs in the government institutions, the too long waiting time, the inconvenience of the opening and closing times of some of them leads them to avoid taking the pain to approach the government hospitals for the illness treatments for the certain diseases. Meanwhile, they approach the pharmacies for the drug diseases that they believed to treat only by the allopathic medicines.

It is evident that both the doctors and villagers easily intermixed modern medicines with the other types of healing practices and thus, even today in the study villages the plurality of medical systems are in use and practised by the local people.

### **2.3 PLURALISTIC HEALTHCARE-SEEKING BEHAVIORS: REASONS FOR THE CHOICE**

It is confirmed with the above sections, that the pluralistic health care seeking is common practice in the study area. People choose different health care providers, according to the types, i.e. minor or major illness, the severity of the diseases, i.e. serious illness with lots of suffering and serious illness with less suffering; Acute or chronic illness with the amount of pain or symptoms. The choices also vary according to the different criteria like gender, age, curability, and affordability.

The types of illness make the health care seeking choices. It has found that a majority of people in the study area has reported about the communicable diseases that affect them in their daily life and deprived them of both good health and the economy. Therefore, this section will discuss keeping the traditional and spiritual healers/healthcare providers as their first contact.

People reported that they approach the traditional healing systems for the various minor illnesses and communicable diseases to be cured by the traditional healers. They said that the knowledge of how to treat some diseases such as malaria, jaundice, scabies, measles, epilepsy and some symptoms like vomiting, etc. by using herbal medicines. It has found that first, they contact the traditional healers to confirm the presence of disease by explaining the symptoms. Their first approach the traditional healers before starting the treatments instead of going for the modern medical tests to confirm the presence of the particular disease. It is believed that they can detect it by the symptoms and the theory that is connected to 'hot' and 'cold' types of food and environmental exposures to the following as the consequences of illness. Accordingly, they are provided with the herbal medicines to treat the particular disease. After taking the herbal medicines, the patient usually waits for a week to obtain its results and accordingly they approach or consult the allopathic treatments.

Few diseases like scabies and Jaundice are believed to treated only by the herbal medicines in the study area. There is no differences were observed in the villages of remote rural and the peri-urban villages. On more probing, it has been told that the modern medicine doctors can also treat the particular disease with the allopathic medicines. However, it is also believed various diseases related behaviours such as do's

and don't during the particular disease. For example, in the case of smallpox, the use of the non-vegetarian foods is prohibited, as it will resort the disease. People stated that they usually seek herbal treatments for several reasons, for e.g. In the Jaundice illness, they believe that the allopathic treatment by the bio-medical doctors and the use of the injections can easily suppress the illness and then there is a chance of its recurrence in the future, and this could be more miserable. The other major reason stated for seeking the herbal medicine care as per the study population is the cheap amount of treatment fees because sometimes the traditional healer does not take money or can make delayed payment for the treatment. The study population strongly trusts these health care treatments for the cure of the disease permanently by the use of the herbal medicines.

### **Case 3: Cannot rely only on Single Healers**

My child was suffering from the fever, and his eyes were getting prominent. I realised that she was seriously ill and took him to the *vaid*, After giving her the herbal medicines for two days continuously that given by the *vaid*, no improvement was seen in her health. So, I took her to the allopathic doctors in the missionary hospitals nearby to the village. The doctor gave her an injection and some tablets, but still, it shows no change in her ill health and found my child unconscious most of the time with the heavy doses of the allopathic medicines. I went back to the *vaid* and continued his treatment of the sixth day. The next night my daughter became very critical and had to call the local quacks for the emergency treatments. He charged high fees, including the night charge and somehow control the situation. Next day early morning we took our daughter to Ranchi for the treatment, and she is being saved. In the whole process, we have lost lots of our money on her treatments along with eight days of jobs. And now she also seems very weak and needs to be taken care all the time.

[Suraj Kujur (name changed), 30 years, Commuter HH, Katchancho]

Other than the herbal medicine procured by the traditional healers, people had also reported some disease like measles, and its treatment-related faiths. They believed that only spiritual or ritual based discourse would be effective for its remedy, along with some restrictions on some movement and control in their dietary intake of the patient.

Here also they have the same belief underlining the seeking behaviours for not choosing the allopathic medicines or the treatments that it will suppress the disease from inside the body and not let it out, that ultimately could turn into major bodily pain for the sick people. Other than the herbal medicines, this method of treatments takes special care and attention regarding the food intake pattern. People reported that, for this reason, foods like *murhi* (popped up rice), some pulses like *kurthi*, *khesari* or *urad* and sour food items like green mango curry, *handia* (rice beer), amda fruit, etc. are prescribed to help the rashes to erupt out of the body to relieve the bodily pain of the sick people. Moreover, they also take some home remedies for such illnesses.

It has observed that some symptoms and illness like vomiting is seen as the occurrence of the bad effect of the evil eye. Respondent described it by an example of the child because this is who the most vulnerable groups that may suffer immediately. They describe it with few incidences like if someone gazes child while s/he eating and soon after if they develop the illness like vomiting, then they attributed it as the deeds of the evil eye (*najari*). For this, they seek treatment from the traditional healers whom they believed to treat them with the spell of some chant and absorb the toxin and spit it out from the sick person's body. Thus, the whole pattern of the traditional healthcare services is based on the belief system of the local people based on the herbal as well as spiritual healthcare treatments.

It is already discussed that the first contact for the acute with severe painful diseases are always the biomedicine or the allopathic medicines are opted by the major proportion of the study population. However, mixing the concepts of different treatments and services and providers can also lead towards the path to pluralistic health care seeking behaviour. For example, there is certainly believed in the community of the study villages that if the illness is unable or take a longer period to be cured after seeking treatment from the allopathic doctors, and then mechanically they attribute its causes to the anger of the ancestors or the spirits. In such situations, they approach the traditional healers or spiritual healers and then continue again with the allopathic medicines, with the faith that the medicine will affect after the blessings or intervention of the traditional healers. People also reported that they also switch the vice-versa, like for the illnesses such as scabies, cough, etc., and people first consult with the elderly with the herbal



medicine knowledge, and if they do not relieve, then they switch to seek the allopathic treatment.

#### **Case 4: Child Health and Health Care Accessibility**

After 15 days of my son's birth, all of sudden he started having health issues. My son's body was burning with the heat. We immediately took him to *vaid* to get confirmed and consult for his fever. He gave a medicine made up of herbs and advised us to give it for three days continuously. However, I noticed that there was no relief for the child and showing no improvement in his health. We took him to the Private clinics in Chanho, 10 km distance from our village to see a doctor for the treatment. However, could not able to meet the doctor as he was not in his clinic. We returned to the village from there without any treatment. After few days when my child was a month old, then he got ill and started vomiting. We got scared and took him to Mandar block headquarter, and this time we can consult with the doctor. He suggested taking my son to Ranchi for the treatment, as he finds him in a critical situation. Before that, he gave an injection, but my son's health was completely deteriorating. We do not take him to Ranchi because that time we do not have that much of money for the conveyances. We take some medicines prescribed by the doctors from the private pharmacies. Later we took him to the *vaid* again. A few days later we took him to the doctor again at Mandar Hospital, and with the help of the doctor and his medicine, my son was cured.

[Mariam Kujur (name changed), 27 years, Migrant HH, Deuri Alias Dongatoli]

Apart from the traditional, modern and spiritual healthcare providers with the distinct belief systems, sometimes people perform spiritual care in the mosque, churches, and temples to speed up the recovery of the sick people. The respondent stated that this is mostly done during the illness that took a long time to be cured and yet not been cured even after consulting the doctors in both private and public hospitals several times. The other most told the reasons that influence their health care seeking choices are the fear of surgery or injections, where the patient hesitate to undergo any minor surgery, and if the disease is not that grievous, then they tend to change the allopathic

treatment with the herbal medicine. According to the people, this is less costly and less threatening to the sick people.

The most important determinants of the treatment seeking behaviour that may influence the health care seeking of the people are the availability, accessibility, affordability and acceptability. In the modern healthcare services, as discussed earlier, only a small proportion of the people accessed the government health facilities. Other than this, the duration of illness is also important in influencing the health care seeking for the treatment. People said that when they unmet with the expectations from the allopathic medicine, they change the treatment from that in the spiritual and the other sources. People believe that seeking medical treatment without consulting the traditional healers is undesirable. Therefore, they consult it first with them to confirm the absence of any evil eye or spirit involvement.

#### **Case study 5: Faith on Traditional Healers**

My daughter was suffering from Puni disease after the birth. She became very skinny and used to cry constantly. Once, I found her unable to suck my breast milk and gradually lack her appetite. I immediately understood that she is suffering from the *Puni* disease. I go to the *vaid* first instead of the doctors because I know they do not have the medicine for this morbidity. The *vaid* gave me medicine made up of mixed of ghee and local *jadi-booti* (herbs) and advised me to apply and massage with it in her whole body. By using the herbal medicine given by the *vaid*, my daughter gradually gets cured within three days.

I fully trust *vaid* for such child morbidity, and I like his good behaviour too. I rely on him because of his minimum costs of treatment which is a great relief for us. Approaching doctors for such illness means lots of expenditure, and they do not always have medicine for all such problems.

[Sukhmani Orain (name changed), 22 years, Migrant HH, Bobro]

Therefore, it can say that people change the source of treatment for several reasons. First, if the illness or disease, is not cured by the initial source of the treatment. Secondly, due to the severity of the illness, which is seen to tempt people to change the

health care providers source or system to the other. Before getting into the severity or seriousness of the illness or the disease, the people's perception of severity is the basic factors that need to be understood. The respondent stated that the illness severity lets them decide for the treatment-seeking pattern for the particular illness. It is observed that for the single illness the people have approached multiple sources. The type and the variations in the illness, moreover with the cultural influences, the treatment is sought from the different health care sources. It can be said that the present community of the study area is changing at a certain level with their concept of health and illness and the cultural values play an important impact on building the perceptions of illness among the people at the present situation. Cultural change in the outside world interacted during the seasonal out-migrations since a long time, nonetheless bringing about some change in the concept and view of health care seeking practices of the study population. The study population and area also revealed that the treatment tryouts and mistakes often influence the choice of the source or the treatment system, even when people are uncertain about the causes of the illness. Therefore, it can be concluded that the existence and utilisation of different types of healthcare services both biomedicines and traditional are the fundamentals of the medical pluralism that is being practised by the people of the study villages.

## **HEALTH PROBLEMS OF ‘LEFT-BEHINDS’: A DISCUSSION**

We return now to the underlying issues and questions raised at the beginning of the study to or “intending to” provide some answers to issues of ‘left-behinds’ health problems and work in a subsistence economy of a degraded ecosystem where male out-migration has, in general, provided only appearances of economic compensation. We then consider their implications for ‘left-behinds’ women, men, elderly and children’s health. The discussion is organised into six broad sections. The first section discusses upon the Chotanagpur’s socio-economy by understanding the historical takes on region’s chronic poverty. The second section discusses the ‘Pulling-Down’ factors and its Processes of multidimensional deprivation. The third part, try to understand the ‘Pulling-Out’ factors and the seasonal out-migration and its effects on the migrant household. The fourth section will focus on the continuation of the effects of seasonal out-migration and effects on ‘Left-Behinds’ and the implications of seasonal out-migration through analysing the work burdens on the ‘left-behinds’ women and elderly. The fifth section is all about the health problems of the ‘left-behinds’ and access to the health care services and systems. And at the end, the sixth section discusses the linkages between the multidimensional poverty, seasonal out-migration and health of the ‘left-behinds’ to draw a conclusion of the study.

### **1. Historical Roots of Chronic Poverty: Chotanagpur Region**

Chotanagapur region where the Ranchi district is currently situated at has faced a lot of experiences of transformations from the subsistence economy established on the close connection between the ecology and geography of plateaus and mountains, and on the other hand, peasant economy based on the activities of agricultural cultivation, animal husbandry and their reproduction. All together transformed the region into a state of socio-economic decline manifold with the social exploitations of its people, especially the tribal, ethnic groups of the Chotanagpur region.

The historical structural study that was dealt in Chapter III revealed this broad pattern of change characterised by socio-economic exploitation, ecological devastation, declining pesantisation and Out-migration of the area and its people.

Historically, the tribes of the region were lived as the owner of the lands and establishing their systems of landholding without any interruption. However, they did not stay undisturbed for long, as in 'pre-colonial period', it has witnessed a lot of influx of the outsiders from the different regions. The non-tribal population spread in its way, over the area during the pre-colonial period at the time of the state formation under the rule of the Hinduised tribal king. The land exploitations had started back from the pre-colonial period. However, during the Mughals regime the regional "*jagirdars*" the non-tribes emerged during the *nagbansi* dynasty for collecting the revenue, began controlling almost all of the tribe's lands and collected pre-decided revenue on behalf of the Mughal emperors.

During the 'colonial period', when the British regime started controlling the territories, the '*jagirdars*' began to serve the new Lord and their exploitative commercial interests. The history is evident that the colonial administration was more exploitative and demanded the sizable revenues to the tribal people and that turned the middleman and '*jagirdars*' into far more oppressive. Later intermediaries take tribal's land into their possessions and let them work their land for free. In the end, the tribes were divided into three broad categories of peasants in the 'privileged and occupancy', small farmers and landless labourers and emerging industrial proletariat. After 1859, the agrarian laws that were framed in the wake of the peasant uprising sought to protect the interest of the farmers with the large landholdings. Later, the Chotanagpur Tenancy Act of 1908 recognised them as 'privileged' tenants. But the small landholding peasantry had been left untouched under the Act. The number of sharecroppers and landless labourers was little, and many small holding peasants had emigrated to tea plantations.

The colonial regime not only deteriorated the land ownership of the local people but also destructed the access of the forest economy of the region. The forests were the central core of the tribal economy, as maintainer of crop production, animals and preservers of the basic needs of food, shelter and water. In the mid-colonial time, the British administration left on a strategy of direct intercession in nearby agrarian practices, especially in its endeavours to replace shifting cultivation with the settled farming. The colonialism propelled the progressive commodification of the natural

resources, and, in serving the necessities of the domain, started to stream out the subcontinent. However, the introduction of the dubious policy of so-called ecological concern, ten years after the British had first issued the reminder that controlled the movement of forest inhabitants, the Forest Act of 1865 was presented. As per the 1878 Forest Act, three sorts of forest were to be assigned, that is, Reserved Forest, Protected Forest, and Village Forest that turned out to be progressively limited for the local individuals. Despite the fact that the Land Acquisition Act of 1894, denied of tribal terrains to non-tribals, the state could secure access to village lands because the modern advancement or industrial development would serve a public purpose. Between 1915-1925, major sections of land of tribal land were utilised to open up mines, create lodging offices and for the development of streets and railway tracks. Such land exchanges were once in a while fair for the tribals. Consequently, of land, the financial remuneration, when allowed was infrequently sufficient, and the tribes, unused to a cash economy, would trick away with the pay they got and in this way sink into landlessness.

The vast extension of the cultivation was seen amid the colonial rule. The augmentation of agrarian lands was also achieved both through the recovery of new land and through the development of wastelands. Rice had moved toward becoming by a wide margin an essential product in the area before the end of the nineteenth century. The expanded reliance on a single crop made the agrarian economy more helpless against yield failure. The farming creation in the Chotangapur likewise stayed indeterminate under the colonial rule, and the area became noticeably inclined to drought and starvations at whatever point the rains failed. However, the destruction of natural forests and land ownership rights, has a fatal effect on the ecology and the land, through the overexploitation for the production and soil degradation. The aftermath of the agrarian emergency escalated with limited access to forest drives to the villagers to move outside the region looking for their new occupation for their survival. Agricultural depletion affected them to pick the out-migration, and this pattern of displacement ended up plainly observable towards the end of the nineteenth century. The newly introduced process of industrialisation in the second half of the nineteenth century in the

Chotanagpur region and resulting in-flow of non-tribal people deprived many local tribal people of the natural resources on which they substantially dependent.

In the 'post-independence period', industrialisation and urbanisation processes in Chotanagpur continued and became even more intense, thereby maintaining and perhaps emphasising the historical forces for tribal emigration from the region. There was a continuation of the historical pattern of Adivasis vulnerability and their compulsive need for out-migrating to be relevant after independence. Instead, the post-development process has continued to be followed by acute tribal deprivation and distress, and it is often supposed to stress the relative vulnerability and related forced movements in this Chotanagpur region.

The present day shape of the poverty and inequality is overruling resulted from the history of the area. The Chotanagpur's history of people's oppression, land exploitations and forced out-migration created a strong foundation for the upholding of poverty in the region. The ousting from the land and influx controls of different regimes in different periods had left the legacy of unequal distribution of wealth, low human capitals, inferior living conditions for the poor majority in the Chotanagpur region.

## **2. 'Pulling-Down' Factors: Processes of Multidimensional Deprivation**

The poverty in the region is chronic as it has been continued since colonial to the post-colonial period depriving the tribal inhabitants of the lands, forests, and livelihood that leads to the degradation of the other factors relevant to the prosperous life.

The four villages of the Mandar block were studied to understand the multidimensional poverty and its process that 'pulls-down' the households towards the exclusion from the multiple poverty-related capitals in the present context. The study villages namely Bobro, Deuri Alias Dongatoli, Katchancho and Murma are the part of Mandar Block of Ranchi District. The remote rural villages namely Bobro and Deuri Alias Dongatoli are 25-30 km distant, whereas Peri-urban villages namely Katchancho and Murma are within 2-8 Km from the Mandar block headquarter. All the four villages are from the four different panchayats. The study villages are predominated by the Scheduled Tribes

followed by other backwards caste and then scheduled castes. The area is highly comprised of Sarna religion, followed by the Christianity, Muslim and Hindu religion.

Poor people hardly define their poverty only regarding income, in fact, they also consider all the relevant capitals such as social, human, Identity and culture related, geographical, political and environmental capitals that are required for their life. Therefore, to measure the poverty process, including the economic measures, i.e. money metric, the other poverty-related capitals relevant to the people's basic needs as well as with the additional needs were also analysed to understand and acquire the accurate picture of the presence and processes of the multiple deprivations.

**Economic Capital:** The physical capital, either ‘*productive*’ or ‘*fixed*’ assets, such as land ownership (that can be rented or sold), is relevant variables to understand the status of the study population.

The landholding pattern of the village households is the same as the block level that shows the larger picture. Households with the land holding sizes are predominately the marginal farmers, followed by the medium farmers and the small farmers in the study villages. Most of the migrant households fall under the category of the marginal farmers with average landholdings of 2 acres of land ownership. The size of the landholdings is less than the other two household types, i.e. Non-Migrant and the commuters households. The situation is way more worst as the actual landholding of the migrant family comes around 10-55 dismil per household, where they perform their agriculture. The reason behind this was that the general trends of the land ownership among the migrants’ families, in fact, in the entire study area is that the lands were not divided legally rather done verbally. Families have a different hearth/kitchen in a household, and they practice agriculture in their part of the land. Other than the landholding ownership, the pattern of the type of land is also a major problem that the households have to face in the study villages. According to the topography, the families mostly owned the upland (*tand*) land types in the study villages. The proportion division is about 75 per cent of upland and rest 25 per cent is of lowland (*doin*) and medium land (*chaura*). Based on the above land proportion, the migrant families too, have the similar land distribution among the family members. According to the data that discussed in



Chapter V, the sound quality, i.e. lowlands (*doin*) according to the people are found to be with the non-migrant, then followed with the migrant and lastly with the commuter households. The households in the area have mostly the un-irrigated land. The availability of the irrigation is inadequate and incapable of irrigating the required agricultural land. Therefore, the utilisation of the upland and medium land is very minimal among the migrant and commuter households and made them depend only on the monsoon crop, i.e. *Kharif*. The condition of the non-migrant households is way better than the other two, at least they have the sufficient irrigated land, where they practice at least two-time agriculture annually.

The sharecropping was relied on by the commuters households to deal with the land criticality. They leased in the lowlands for the paddy cultivations, at least to secure the cereal foods for the year. Unlike the commuter households, migrant households prefer the leasing-out of lands to deal with the cash crunch during the monsoon crop cultivation. Whereas, the situation of the non-migrant is different from the both the migrant and commuter households because they prefer both the leasing in and out of the land. The reason was the utilisation of the whole patch of land, as they have enough landholdings, but lack the manpower and money to perform the agriculture. The purpose behind the sharecropping is different for the various types of households. Here, the majority of migrant households seems difficult as they leased out their lands and only perform the agriculture in less than around 29 per cent of their entire landholdings. The 'material assets' of the village households found to be similar among the migrant and the commuter households. All the households have at least villious pump (run with kerosene) in their houses for the irrigation purpose. Agricultural equipment is the top most prioritised assets for which majority of all the types of households save and invest their money. Other than the agricultural tools and equipment, the majority of the migrants and households invest in the mobile phone to be in touch with their family while they are away for their work. Telecommunications made them feel safe and less worried for their families, those are left in their home village. The migrant and commuters households do not have any vehicle apart from the bicycle in the study villages. Whereas, a few of the non-migrant households were found to be in the better

situation because they have two-wheelers and also some have four wheelers too. In the study area, people are not found to be indulged in any animal husbandry activities. They don't even decide to keep livestock for the economic purpose. Therefore, the majority of the migrant households keep the avian and goats in few numbers, as they do not find much time and members to take care of the livestock. Thus, the reliance of the study households on the income from the livestock is very low, but not entirely negligible, despite the self-consumptions. Therefore, the migrant and commuter households of the study villages are deprived of the assets and the productive capitals with the low or no ownership of it in comparison to the non-migrants households.

The income, expenditure or consumption pattern gives the insight of the study household's economy.

Under the *income pattern*, the migrant households average annual income (specifically cash income) is around Rs. 30,000-40,000, excluding the income in kind, i.e. cereals for work. The annual income of the migrant households is lower than the non-migrant and commuter households. Though they involved in more than two sources of income, i.e. agriculture and remittances, yet facing the minimum average annual income in comparison to the other two household categories. In the migrant households, the source's contribution is higher from the remittances followed by the agriculture and then by the agriculture labour work. The migrant households are indulged in the agricultural sector by cultivating in a smaller proportion of the landholdings and with the minor investments. The reason behind is the migrant families do not have enough family members to work in both the vegetable fields as well as the paddy fields. Moreover, because of the lack of finance, they were unable to do agriculture more largely despite the awareness of its profit and returns.

The *consumption pattern* of the migrant households discussed in Chapter V draws the household budget that depicts towards the larger investments of their income in the agriculture. The pattern of agriculture investment is a priority for all household categories. After the agriculture expenditures, next, the consumptions is followed by the food grains, grocery purchasing and thirdly, in the education. The spending on the children's education is higher than the other two household categories. The medical

expenditures are almost similar, i.e. 5000-500 (annually) for the migrant, non-migrant and the commuter households in the study area. The overall annual cost of the migrant households is around Rs.1,19,000-27,000. The income and expenditure pattern in the study area of the migrant households is in cumulative deficit. The annual cost is higher than the annual cash income, and this is the reason that they never experience the revenue surplus, and gradually intruded in the money deprivation.

**Alternative Poverty Measures:** Apart from metric money measures, the *basic needs measures* such as shelter and foods, and the alternative measures such as family size and compositions are the other significant determinants to study the well-being status of the survey area and the study population.

The migrant families live in the livable 'housing condition' in the *kutchha* walls with tiled roofs. The majority of migrant families live in the separate hearth, and less proportion of the households are in the joint hearth. The facilities around the shelter of the migrant households are inferior. The average number of the rooms in the migrant households and the non-migrant are three. The average three rooms in the study area are usually comprised of one store room, one-bed rooms and one veranda with the inside kitchen in a corner. The veranda is found to be importantly used as a dormitory of the house where they adjust their storages, kitchen, and livings. The majority of the household is not having the toilet facility in their households and found to be opting for the open defecations. All the households except few migrant households are connected to the electricity. However, the power supply in the villages is below the average due to the low voltages. The household electricity usage is very minimal, i.e. for lightening up only one or two bulbs and the supply is less than 4 hours a day and only can charge their one or two mobile phone a day. People do not use the electricity at night and have to depend on the kerosene lamps or '*Dhibri*' locally used small lamps by the villagers. Therefore, the dependency on the power is very less or almost no in the study villages. The majority of the migrant households do not have the separate cattle shed and therefore either they do not keep much cattle or arrange a space inside the house veranda. The very few migrant households have their drinking water facility, while the majority of the households have to depend on the public hand pumps. The condition of

the shelter is the determinants of the development of any area. The migrant households are deprived of the better housing facilities with a lack of drinking water facilities, no separate kitchen and cattle shed altogether depicts towards the low standard of living conditions of the study areas.

Apart from the housing conditions, the *household structure, size and composition* are important indicators to decide the standard of living condition. The average number of the family members resides in the households are around four members (minimum) and around eight members (maximum) in the migrant and the non-migrant households. Whereas the minimum number of the average number of the commuter households members are four and the maximum number are eleven. The average number of the rooms against the mean number of the family members is too high, and this makes the house overcrowded and forced them to live with the severe condition. The young population (including child population) is greater in each household, whereas, the workforce or age groups are very less in the study villages. The age wise distribution of the household members depicts that the proportion of the non-working (No direct involvement in the economic production) age groups is higher than the working age groups and therefore, the economic dependency on the single earner is greater in all the three categories of the households. The household family size and composition altogether directly related to the living conditions and the dependency ratio regarding the income contributions in the households.

The 'food accessibility' of the households is very crucial in the study area. The food accessibility is considered by dealing with the important related indicators such as food security, food scarcity period and hunger and its coping mechanism.

The average food security of the cereals food of the migrant households is around 7-8 months. The rest of the month the migrant families use to arrange the rice from the market by purchasing and depend on the PDS shops. The majority of the migrant households do not have any BPL/ APL cards and thus denied them from accessing the PDS rations facilities. Only a minimal proportion of the households with the BPL/APL cards able to manage the rest 4-5 months of food scarcity from the both PDS shops as well as the local markets. The households, those who entirely dependent

on the market for the rest of the period are usually made purchases from the remittances or with the daily wages earned in between the agriculture period. In the study villages, the food scarcity starts from the month of August to December until the paddy gets harvested. Whereas, the non-migrant households do not have to face the cereal food shortage as they have the food security of throughout the year. Unlike the migrant and non-migrant households, the commuter household has the least food security for only 6-7 months in a year. The main reason behind this was there a small dependency on the agriculture as a livelihood due to the lack of lowlands that are used for the paddy cultivation. They cultivate paddy only for securing cereals food in a subsistent manner. Rest 5-6 months they manage it from the market and the PDS shops. Therefore, the condition of the migrant household food security is in pathetic condition, with the food security of fewer than six months along with no access to the PDS services due to the lack of any APL/BPL cards.

The food scarcity period is longer in the major proportion of the household types, i.e. Migrants and the commuters, in comparison to the non-migrants households of the study villages. The migrant households had to deal with the cereals food scarcity for around 4-6 months in a year where the higher scarcity is in the month of September to December. The low scarcity tends to start from the month of July – August that continues until the harvesting period. The migrant households face vegetables and pulse scarcity mostly in the month of May-June that already starts from the month of February slowly and continue up to the month of August (*Kharif* i.e. sowing period). Apart from the cereals, the households have to face the scarcity of pulses and vegetables, mostly in the month of May-June. The summer period is the month when they do not get this food item, and it completely vanishes from the daily food plates. And it is the time people left with a moderate amount of food articles and with no money or savings for the food purchasing.

In the presence of food scarcity, the households' in the study area do not face the absolute hunger. In fact, they do have their hunger managements. First, they try to manage it at the household level, and it starts from the home by decreasing the quality and the quantity of their food intake. Secondly, they borrowed foods, specifically, rice from their neighbourhoods. Third, in the worst situation during the severe scarcity, i.e.

mostly in the month of May-June, manage through having only the rice with water (*paani bhaat*) and rice with starch (*maad bhaat*) along with some dry leafy vegetables in the small quantity. However, there is no absolute hunger means no households tend to sleep empty stomach in the study villages. The majority of the migrant households use their remittances to deal with the food scarcity conditions. The remittances alone are incapable of dealing with the situations. Therefore, migrant family members also opt for the daily agricultural labourers work within their village periphery. The family size here also seems important, as the severity is lower among the smaller family size households, whereas, the larger size family find difficulty in food arrangements and they opt for commuting for a day or two days a week in search of cash income leaving behind their field works. Therefore, the migrant families find difficulties in the food accessibility under the low food security and having no proper safety nets such as access to the PDS rations. They have to deal with the hunger coping mechanism to cope up with the food scarcity period that denied them to have food surpluses and push them towards the destitutions.

**Human Capital:** The human capital is comprised of the relevant determinants, that is health and education. The labour power is the essential components of the most survival strategies applied by the people while lacking the material and productive assets.

The health status of the study population is better understood regarding their health profile. The proportion of the male (head) those were suffering from any types of illness in the past 6 to 12 months is lower than the per centage of the female (head) of the family. The proportion of children of the households, those are ill is way too high in comparison to the all the family members. The per centage of elderly members, both male and female are similar as the male and female (head) of the family. Therefore, mostly the women (both female head and the old aged) and the children (both male and female) are mostly found to be ill at the households of the study areas. According to the morbidity profile, the majority of the family members are suffering from the minor illnesses followed by the major and occupational health related illnesses. The highest proportions of households fall sick are for less than seven days in past six months, followed by the duration of 10-15 days. The maximum proportion of the households

spent less than Rs. 500 in the treatments for the minor illnesses, but there are also families, those are within the range of cost of treatments category of between Rs. 10,000-5,000 in the past 6 months. The treatment cost is more or less same for the non-migrant and commuter households, whereas the proportions of the treatment cost are much higher in comparison to other two categories. In the study area, people arrange the money for the health expenses from both the sources, i.e. borrowing the money from their friends and relatives and arrange by the self. The illnesses of the breadwinner of the households have an adverse and direct impact on the family's economy. In the study areas, half of the proportion of the migrant households had directly faced the wage losses due to the illness of the earning members of the family. The Monterey loss led them severely drain the households' resources and almost deteriorate the backbone of the families. Therefore, the migrants household's health status is both crucial and seems much riskier. As they have to face the serious dread illness with the household, that removes the individuals from the labour pool, and it can quickly push a household into destitutions.

The education and literacy are another valuable human capital. The literacy is valued in every study villages, both remote and peri-urban villages. Though in the migrant households the majority of the head members, both male and female are illiterate, they believe in the importance of the literacy. Therefore, they send their children to their schools in both the private and public, whichever is available to them based on their affordability and feasibility. The migrant family recognises that literacy would help them to manage their lives better and in a smoother manner. As they believe that their illiteracy has limited the ability of the individuals to secure employment, difficulty in following instructions and advantages of the government services or access to credit. So, the migrant households are found to make their third most prioritised investments in their annual expenditures. But, the reality is also that they can spend up to the 8th standard of their children's schooling. Despite parents significant sacrifices, including cutting down the food rationing expenses and selling their productive assets, like livestock, as the majority of the children drop out of the high school. Therefore, the investment in education is seen as the most important exit of poverty, and it is hindered

due to lack of money are identified as the principal problem of the migrant households in the study areas.

**Identity & Culture related Capital:** The cultural identity of the people is established through the shared history or culture that they share together with pride and passion. This helps them in the building the social bonding that stabilises their community and relief the psychological stresses of poverty that prevails among them. People maintained their cultural identity through rituals, celebrations, and festivals, and through the participations in these events (D. Narayan, 2000, p.35).

The migrant households of the study villages are predominated with the *Oraon* tribal population. It is followed by the other backwards castes i.e. predominantly by the ‘*Julaha*’ or ‘*Chik*’ groups of people from the ‘Muslim’ background and the ‘*Kurmi*’ (*Mahto*) in the study area. The majority of the tribal migrant households is animist, i.e. nature worshippers, known as *Sarna* religion. The local festivals of them are *Sarhul* and *Jatra* during summer, *karma* and *Jitiya* during monsoon and *katni parab* and *Her Puna* during the winter season. Some of the tribal households have converted to the Christianity, so they also celebrate Christmas and Good Friday too. Every village has a meeting place known as ‘*Akhra*’ where they do, meetings to discuss all their welfare issues and conduct cultural programmes. In the study villages, the migrant households always participate in their rituals and festivals. It has found that the third most prioritised expenditures are on the recreation and festivals that take place annually. They spend around Rs. 5000- 1200 annually. Even if they lack money, they take credit to perform the ceremonies, rituals and hosting their guests in the festivals. For many migrant households, social solidarity is one of the most significant assets available to them. They are willing to make considerable sacrifices and readily disinvest themselves of a wide extent of physical assets to ensure these social bondings. According to them, they are keen to maintain the solidarity as this provides them with emotional and physical security. They spend their largest expenditures on such ceremonies. The ample spending is a way to gain prestige and to reinforce ties to the community, which in turn will make it easier to obtain assistance in case of need. Hence, the ceremonial expenditure may be seen as investments to build social assets and decrease vulnerability. Therefore, the



migrant households are found to be culturally strong and able to help each other during their crisis. However, they are unable to take them out from the poverty, as they all are poor and cannot support each other beyond their capacity.

**Social Capital:** The Social Capital is broadly referred to the benefits of membership within the social network that enables the poor people to access the additional resources via social connections to meet the everyday needs (D. Narayan, 2000, p. 44). The migrant households from the tribal community emphasise the importance of kinship networks for the daily survival as well as for crisis management during the food scarcity, health emergencies, financial crises, unemployment, etc., which help them to protect them in the event of such crises by supporting them during the times of need. People reciprocate this support either in kind or cash. Friends, neighbours, kins and extended family are seen as a social safety net that helps them in sustaining their livelihood, hunger and food security. The migrant households found to approach their relatives and friends during the time of crises with whom they share their problems and enjoy a reciprocal relation. The individuals help them with small loans, both regarding cash and foods, i.e. cereals, to cover the cost of food grains, medicines, treatment fees and transport to hospitals or clinics, and also provide small amounts of foodstuffs in instances of terrible necessity. In the study villages, the tribal community helps each other by following the one wage rate with the unanimous decisions taken by the tribal village committee or *gram sabha* headed by the headman, *pahan* and the villagers. The wage rate among the tribal community is kept according to the affordability and feasibility of all households within the village community. The fixed wage by the community helps them to equally participate in the agricultural activities and make them capable of hiring the labour to finish their agricultural tasks on time. The tribal migrant households, also advantaged with the tribal-local traditional system of helping each other's households during the peak *Kharif* agricultural period, i.e. *Maddait System*. Here men contribute by ploughing the fields in low wage rates. The women help with transplanting the saplings (*ropany*) and are supposed to go to each other's field for transplanting the saplings without charging or with minimal wages. Everyone has to work in each other's field as repaying labours in a mandatory manner. Not only during

the agricultural time, but they also practice this during the building of a house or any general constructions to help each other with the contribution of their labour. Therefore, the migrant households are found to have a good social capital that provides a social safety net for their survival and defence to meet daily basic and alternative needs but rarely by itself lifts them out of poverty.

**Geographical Capital:** The geographical capital can be referred as the combination of location-specific factors such as agroecology, infrastructure, institutions or organisations and the political inclusions of the area (Bird et.al, 2010). The study villages are as discussed earlier is divided into two categories according to the proximity of the central locations, i.e. the block headquarter and the district capital, where it is assumed to have all the basic facilities available including government as well as the private services.

The agro-ecological characteristics are the important location-specific factors that determine the exploitations of the resources and its implications on the peoples' livings. According to the geographic area of the study villages, the proportion of the forest area is very minimum out of the total forest area of the Mandar block. The forest coverage is present in one of the remotest village, i.e. in Deuri Alias Dongatoli and another is available in one peri-urban village. Rest two villages do not have any forest coverage in their periphery. The villages the forest coverage does not depend much on their forest for their livelihood, but they only relied on their fuelwoods and the construction purposes especially for building their houses and community building. The usage of the forest products, especially the timber was allowed to use by the permission of the village forest committee of the village. Other than the forest area, the uncultivated, or land that doesn't use for the agricultural purpose serve the large part of the geographic land area of around four per cent of the total Mandar block. There are no pasture land areas available in any of the four villages, and this may be the reasons why people do inclined towards keeping the cattle for the economic purpose. The culturable wastelands and fallow lands are also present, although in a very small proportion. The agricultural land is used for the cultivation in the study area is between 27-24 per cent out of the total lands. Only Katchancho, the peri-urban village used it around 69 per cent. The peri-urban than villages do not have any irrigated land and irrigation sources. However, the

situation of all the villages is very similar. The villages those have the irrigation sources such as well, ponds, etc. are also insufficient to irrigate large cultivable fields. There are no natural irrigation sources available in the study area, except the one remote rural village which is also unable to support the farming of the larger number of the village households. The land types according to the area's topography, is mostly the uplands and medium lands and with the less proportion of the lowland. The agriculture totally depends on the monsoon. Therefore, people of both the remote rural and peri-urban villages, in the absence of paddy lands and lacking the irrigation facilities for the available upland and medium lands, make them struggle for the better livelihood opportunities based on the agriculture. Meanwhile, the absence of forest accessibility and other land usage doesn't create any other livelihood options for the people.

The village's proximity from the locations having all the public and private facilities is an important indicator of the village's well accessibility of basic amenities and infrastructural development. The remote rural villages of the study area are situated at the distance of around 55- 60 km from the district headquarter and around 25-30 Km from the block headquarter. The distance of the peri-urban villages from the district headquarters is around 32-38 Km, and around 2-8 Km from the block headquarter. All the rural and peri-urban villages are well connected by a *pucca* road to the state capital, and the block headquarter.

The basic amenities of the four villages were surveyed to understand the situation of the area and its available facilities to get the developmental idea of these areas. The remote rural villages are underdeveloped with the absence of the good public and private educational institutions such as schools, college, etc. in the closer proximity of their village. However, there are lots of private primary schools, but they find it difficult to send their children after their primary schooling. People have to send to the farthest places with the longer distances to continue further study. Whereas, the peri-urban villages are little fortunate in availing the schooling facility, as there are lots of private and missionary schools in their close vicinity. For higher education also there is one intermediary college. Therefore, the remote villages find difficulty in continuing the study of their children after the primary schooling in comparison to the peri-urban

villages. The health institutions and infrastructure are in a critical condition. The remote rural villages are in the much-disadvantaged situation in comparison to the peri-urban villages, as they do not have any PHC and CHC around the closer proximity. The people have to cover around 30-32 km to access the public health services. However, they find the private healthcare services located within the 10 km distance from the villages. Whereas, peri-urban are way more privileged regarding the health institutions services and infrastructures, due to the availability of public, private and the missionary hospitals facilities. The safe drinking water facilities are almost similar in all the study villages except varies according to the time of availability in the summer season. There is the lack of proper drinking sources with the lack of tap water connections and the bad condition of the hand pumps that need a repairing for a long time. The drainage system is the best indicators of the living standard of any village. The drainage system is not so well in all the study villages, and that's how it the potholes and depressions hold the water during and after the rainy season. Other than the basic amenities the other services essential for the daily uses of village dwellers to make life easier is also coming under the indicator of the development. The proximity of the services such as post office, banking, transport, market, PDS, road, electricity and health services is much more feasible in the peri-urban villages in comparison to the remotest villages. However, in the remote village, Bobro is much more privileged due to the proximity to the village centre 'Narkopi' where there is a ribbon development due to the establishment of the railway station. Nevertheless, the other remote village i.e. Deuri Alias is very much underprivileged regarding the availability and accessibility of the services and amenities. All the four villages are equipped with many schemes like community development schemes, MNREGA, Indira Awas, Ration Card Distribution schemes and public distribution schemes. There are many socioeconomic and developmental organisations like Anganwadi Centre, Middle school and Health Centre, which are working to improve the status among the villagers. However, the only Anganwadi centre is available in every village, and the centre is opened according to the village population. There is two AWC in the Bobro village, Katchancho, and Murma based at two hamlets, each except at Deuri Alias Dongatoli where there is one AWC in the village. Therefore, due to the lack of essential amenities and services, the condition of the remote rural

villages is more unmanageable than the peri-urban villages. The remote village's people are hindered from the better service and infrastructure accessibility to avail the better living opportunities with better economic diversity and growth. The dependency on agriculture and the few accumulation possibilities due to low demands and market connectivity with the high risk of investments altogether make them less privileged than the people those resides in the peri-urban villages.

**Political Capital:** The political capital refers to the ability of the community to access public resources or impact the rules and regulations that affect the day to day functioning of the individuals or a group. In another way, it can be said that the political capital can affect the decisions of the community and the ability to bring in the resources from outside. The basis of the social capital is in the organisations, voice, power and connections, and capacity to influence the resources distributions (Jacob et.al, 2011; Fey et.al, 2006; Bauman & Sinha, 2001). In the study area, both the remote and peri-urban villages, the social capital among the village is in the desirable condition that leads towards the good network of connections among the individuals and the organisations in the community. The migrant households seek help for the migrating to the destination area, as well as the 'left-behinds' members of the family, rely on the friends and neighbours while staying back at the origin area. Due to the good networking and connections, they support each other in every crisis. Despite good connections, people lack organisation in both the remote and peri-urban villages. The tribal people have the firm organisation that keep the community together and maintain the solidarity by taking unanimous decisions related to their day to day activities, such as fixing labour rates, etc. The Panchayati Raj Institutions (PRIs) of members are active in the villages, but hardly any meetings organised in the village. The PRI members of the peri-urban villages due to the proximity to the block able to garner the resources for the community. Whereas, the people from the remote villages left out from bringing the resources on first hand. In the village decision making the people voice their demands in both the remote and peri-urban villages, but the degree varies due to the organisation levels of the particular region. Among all the types of households, the migrant households seem to be less inclusive in the decision-making process, because of their absence for more than six

months in the village. The difference is wider between the men and the women in the inclusiveness on decision making for the village politics. The women are hardly seen to be raising their voice, while some of them are active in disguised. The local decision maker is mostly the village PRI members of the villages. In the remote villages, the PRI members can favour the opportunity according to their bias. But in the larger context, the traditional village headman has a say in the community. The remote villages are mostly ignored by the local officials such as health, block administrations for the regular visits due to their long distances to reach the place. Thus, the political capital of the remote rural villages is lower than the peri-urban villages in the presence of a weak community organisation that unable to bring the adequate resources from the government.

As the discussion has made clear that the poverty-related capitals, i.e. Economic Capital, Social Capital, Identity and culture related, Human Capital, Basic Needs measures, Geographical capital and political capital, are gradually declining and does not have the ability to draw out the migrant families and households from the poverty.

### **3. 'Pulling-Out' Factors: Seasonal Out-migration and Migrant Households**

A sharp decline in the cultivation and agricultural production as consequences of the traditional farming strategies with the over-dependence on the monsoon farming and the unavailability to the credits from the outsiders, by and large, emerge the state of trouble and starvation. Overall phenomenon prompted the people to leave their homes to search for employment outside their origin place and motivated for the mass migration. The low agricultural productivity made the local economies unsustainable in a complete manner and declining the capacities for labour absorption, leading the people's out-migration from the area. The local dwellers have felt the real 'push' pressures even as they grew increasingly attracted and 'pulled' by the city life. The migration has weaned away young male, youths and married couples from the villages. And because of the growing requirements for cash not only for the sustenance but for the multiple new ranges of consumption needs like their children's education, health, wage labour incomes and goods and services products, etc. that came to be regarded as a necessity.

The study villages confirmed the similar pattern of agricultural productivity decline (with the low agro-ecological depletion and extensive monocropping of paddy) - related migration in the Mandar block of the Ranchi district. Beside this, it also revealed that migration takes place across all the ethnic and caste groups, such as *Oraon* and *Julaha*, etc. and majorly in the marginal land holdings category. The migrants are usually illiterate or neo-literates or studied not more than the middle schools and found to work at the small level jobs such as casual labourers jobs in the unorganised sectors of the urban economy. The migrants tend to migrate to the distant destinations from the regional to near to far away destination, such as the nearest flow of the migration is the Bihar's Gaya or Patna, Banaras in Uttar Pradesh and Nearby Kolkata in West Bengal and Orissa. The distant places to migrate are towards the other states like Assam, Bangalore, Gujarat, Punjab, Goa, Kerala and Maharashtra. More of the migrant spouse without children or with the very young children take their families with them. The migration duration of the study sample is mostly the short term or can say the seasonal out-migration types that ranged from 4-6 months. Remittances amounts were regularly sent by the migrants to the families in case they left their family behind in the origin area. The money sent varied widely, the amount for, for example, there are fewer proportions of the migrant households those received remittances for at least once in a year, and the average remit amount are Rs. 8000-10,000. The proportions of the households that remit twice in the migration period are double than the remitters those send once annually, and the amounts are between Rs. 5000-6000. The frequency of money is not fixed, but it is usually sent after the demands from the households. They reported that during the money were requested by the family members through the phone calls and the migrant immediately responds to the requirements. The half proportion of the migrant households are found to send the remittances regularly every month, and the amounts that are told are around Rs. 1000-5000. There is also some proportion of the migrant households, and those do not send any remittance to the households and bring money at the end while the returning time. These are the household with the early or the first time migration and the households that do not migrate to the many distant cities or the states. They do not earn much in comparison to the other migrants, those who migrate to large cities or metropolitan cities with real

wage rates. However, the subsistence agriculture is still in practice. Agriculture remains important because of the cultural values of the peasantry and also due to the absence of other livelihood alternatives. Seasonal out-migration exists as a key strategy adopted by peasant household to cope with changing situations. Today it is just more than the survival strategy and preferred as the most viable occupational option of large members of the families. Though Migration is opted by many doesn't make fruitful for all the migrants with the desired occupations, incomes and durations. The baseline villages study revealed that the migrant remittances are the unreliable and usually unsecured basis of meeting livelihood needs of the households. Therefore, the answers to the questions of whether the migrant's incomes were providing any investments for enhancing agricultural production do not emerge for the majority of the households. Though, the migration livelihood option is perceived as vital but is an unstable and doubtful choice for most of the migrants except few lucky and privileged. The seasonal out-migrations has caused the little difference to the village economy and households with the remittance economy as it has brought relative prosperity to only a handful of the households in the study villages. According to the study, the majority of the migrants earn wages that are not the family earnings but enabling only small amounts as the remittances to be sent back to support family subsistence. Therefore, the study villages display a pattern of seasonal out-migration that provides supplementary cash.

The present reality of the study village's economy is, therefore, the combination of subsistence, remittances and the wage labour work and, both the subsistence production and wage earnings are important livelihood strategy. Inadequate incomes and production, which necessitate diversified livelihoods that combine the farming with wage labour are the biggest reality of today. Also increasingly evident to the villagers that there are further diversified options such as an exchange of services, produce commodities for sale and setting up small businesses along with the agriculture based livelihood. Therefore, it is evident that in the study villages, the migration livelihood option alone ineffectual to be the sole factor to 'pull-out' the migrant households out of the poverty.



#### 4. 'Left-Behinds' Work Burden: Implications of Seasonal Out-migration

Agriculture is the primary occupation of all the types of households, i.e. Migrants, Non-Migrants and commuters Households, that indicating its broad socio-cultural if lesser economic, significance. Villagers continue to maintain the conventional pattern of agricultural production and local sale and exchange of agriculture produce as the basis of livelihood. The migration households sustain themselves on a combination of agriculture and migration based remittances, whereas, the non-migrants households sustained specifically through the agriculture and commuters households through the combination of agriculture and wage labour. The production of the use value in the agricultural and domestic domain is always to be in great demands because of its extreme importance to all the households.

Women in all the migrants, non-migrant and the commuter households continue to hold the major responsibility for the traditional or conventional tasks and activities. The findings revealed as discussed in Chapter VI, that in the presence of male out-migration the women's agriculture and other households tasks are very laborious, drudgery and time-consuming. Furthermore, the multiple and different type of work and tasks that are allocated to women involve lots of physical movements and positions that cause great physical strain and exhaustion to women. The experience of this becomes harsh during the peak agricultural seasons, i.e., during *Kharif*, *Rabi* and *Zaid* seasons. It is observed that the so-called typical male tasks in the field are never performed exclusively by men, in fact, women almost of all the age groups have always provided considerable, highly laborious and cumbersome 'backing' to men as they ploughed, sowed, threshed and level the fields. In the field, the women's task is sowing, separation of saplings and transplanting and along with the preparations of the threshing floors and carrying heavy weights of the collected produce from the field to the threshing floors.

A clear difference exists in the gender division of labour in the persistence of patriarchal control over female labour in between migrants, non-migrants and commuters households. In the migrant households, women's labour intensified due to the absence of the male members of the family. It is evident that the women have to perform

all the male tasks except the ploughing and do them alone or a combination of help from hired, family or reciprocal labour (*maddait*). However, in the migrants and commuters households, men and women both continued performing their traditional tasks, but women are seen to work under the male supervision. The *maddait* system or reciprocal labour arrangements in agriculture, as well as any village community, work required women labour that is repaid in labour in the inability to pay cash. Women of all the age groups and status, i.e. old, single, widowed women and poor migrant wives, find themselves under the strain of such compulsions.

Other than agricultural labour, women are engaged in the market-related activities like selling and buying of household items, groceries, etc. despite the gendered based traditionally assigned tasks for the men in the community. Though, the women feel uncomfortable to visit the market to perform the selling of the agriculture produces, but still uptake these tasks in the absence of the male member of the family. Women go to the weekly *haat* to arrange all the grocery of their households. Further, the women continue to be culturally assigned to the domestic tasks along with the involvement of multiple responsibilities of nourishment, maintenance and caring of the family members, from the young to the elderly. Culturally, women are assigned to carrying head loads of water, cleaning vessels, cleaning and re-dunging the floors and childcare. Cooking and feeding their family members consists of several ample tasks of fuelwood and dry leave collections, and food processing and preparing twice or thrice a day is the actual efforts behind the cooking of meals. Men are culturally refrained from doing the household domains related tasks. Thus, they minimally participate in such tasks only because of the required circumstances. Women, elderly and young members of the family member's labour is considered as family labour, and it is unpaid, underrated, and undervalued labour, but is important for the migration of the male member of the family as it helps at least partially in sustaining the households. The women and elderly of the migrant households are the strong support of the migrant households, and it is evident that because of the remittances the economic status of the households has changed, but given the small earnings of most migrants, the direct benefits to the 'left-behinds' women and elderly people are very insignificant. As, the discussion has marked that the 'left-

behinds' elderly, specifically, the women are indeed focal, but also highly overburdened and exploited performer in the agricultural production processes. It is evident that since, remittances are less, women to sustain their households and themselves, have to intensify their work in subsistence agriculture and also the agricultural labour work. Women labour is unenumerated or underrated, for example, the wage labour rate of the women are around Rs. 60-80 per day in comparison to the men, whose labour rate starts from Rs. 110-200 per day in the study villages. Therefore, it is evident that the migrant households' women and elderly contributions are given least economic value for their additional burden due to the absence of the male out-migration, however, despite all these facts, women today are more responsible for their family survivals.

### **5. Health Problems: 'Left-Behinds' & Access To Healthcare Services**

Based on the above discussion, it is evident that there are stress and strains between the high 'pulling-down' towards the multidimensional poverty and the low level of 'pulling-out' effects, i.e., seasonal out-migration related income and its additional implications on the daily life of the study population. In short, both the 'pulling-out' and 'Pulling-down' factors have an impact on the health accessibility, affordability, availability and acceptability of the 'left-behinds' members of the migrant households.

The people of the study villages had referred to some mild, severe, and recurrent health problems that they suffered throughout their life span. Even though, some of the ailments are common in the study population, women, children and old experienced longer and more severe occurrences. Indicates that the women, children and old experienced everlasting condition of ill health. As discussed in Chapter VI, the morbidity profile is the best way to understand the health status of any people or groups.

According to the women's self-reported morbidities based on the suffering or pains and its severity, the majority of them have the morbidities related to the occupational disease, their working conditions and its pattern. It is evident that women in the study villages have the musculoskeletal problems related to body, wrist, hands, knees, joints and leg pains due to the over-burdened of the three-folded responsibility of farm, home and livestock care. The sufferings and pains worsen during the peak season

of the agricultural period when women often work up to more than 18 hours. The body pain is accompanied with the physical weakness that is usually indicated as '*kamzori*' by the women of the study village. It is the second most strongly felt and reported health problems of women of the study village. The reported cause of this condition is the backbreaking tasks in the fields and carrying heavy loads. It is evident that the women face is pale, eyes, nails, and skin is doing dull due to the low haemoglobin levels. The majority of the women in the study area appears to be undernourished, thin, dull hairs and having less body fat. The reason could be due to the food insecurity that prevails in the area, which leads to the scarcity of food and poor diet even in pregnancy and lactation. Moreover, the physical stress and lactating children can usually worsen the condition of weakness in women. Therefore, it can say that the poor woman, in particular, suffers from ill health and malnutrition more than the men do.

The majority of older adults live in absolute poverty in the study villages. The older population, both men, and women suffer from the accumulative effects of a year of deprivations, entering the old age in a poor state of health especially women, and without having any savings or the material assets. The elderly men and women of the study villages have also participated in the daily household chores to contribute to the household tasks. Old people are seen to be taking care of the herds and cattle, collecting fodders and dry leaves of the fuel wood. Both older women and men in the migrant households use to look after the small child of their families in the absence of the child's parents. Women are expected to perform the household tasks as long as they are mobile and not bedridden. Physical work at the old age makes them stressed and drudge them to perform. Most older adults suffer the loss of eyesight, loss of hearing and dental problems, weakness, sleeplessness and sleepiness, immobility, blood pressure related problems, the stiffness of joints and elbows, constipation, dysentery, pain in the lower back of the body, chronic headache. It occurs due to food habits, climatic conditions, and ageing factors. Ageing is a natural and unavoidable event of human life. Other than these, malnutrition is the most common health problems among the elderly, especially in the older women. Besides, they become more vulnerable and bodily weak due to the anaemic body. Old men and women are also very prone to communicable diseases such as tuberculosis and malaria due to the poor diet with the nutritional deficiency.

The majority of the adolescent girls in the study area suffers from one or the other problems related to their menstrual cycle. The commonest problems faced by the adolescent girls are the painful periods or about the menstrual cramps, that's more or less starts at the time of menstruation. Other than the menstrual problems, they also complained about the problems of hair fall, weakness, acne, fever, cough, dental problems, scabies, symptoms include itching, visible lice on the scalp and lice eggs (nits) on the hair shafts and body aches. Because of the poor diet or food intake, they are easily infected by the diseases, namely, malaria, anaemia, hookworm infestation and blood loss through menstruation. In general/common health problems, the female adolescent population's major concerns are the pregnancy-related health issues, whereas, the male adolescent population in rural areas is more reporting are about the dental disease, as well as skin infections, rashes, and dermatitis.

The mothers of reproductive age groups listed common maternal morbidities. According to mothers the morbidities are malaria, diarrhoea, loose motion, pain in the stomach and lower abdomen, *safed pradar* (white discharge from genitals), swelling of legs, *pichli* (bleeding and weakness), itching in the genital area, pain in hand and feet, menstruation problem, dislocation of babies in the womb (*bachha khiskna*) and miscarriages. Apart from these specific symptoms, the larger responded about the physical weakness and lack of appetite.

The children of Under five age groups have morbidities starting from the low birth weights to the common illnesses. The Under five children constitute approximately 19 per cent of the total population of the study area and are the most vulnerable section of the society that suffers from the highest morbidity. The various morbidities like low birth weight, *puni* or malnutrition and the common morbidities, such as skin problems, fever, water-borne diseases such as diarrhoea, dysentery, cold & cough; jaundice, blurred eye, stomach ache and worm infestations, are commonly found morbidities in the Under five as well as in the children of all age groups. The child's common illnesses categorised according to three different seasons. First, the summer season morbidities are measles, skin infections, sunstroke, mouth ulcer, headache, *rangbaad* and *larsut*. Second, in the rainy season, the children are most affected by the illnesses by diarrhoea, boils, malaria, loose motion or dysentery, jaundice, viral fever and *murfatna*. Third, in

the winter season the morbidity like Pneumonia, cough and cold, *larsut* and *naskhichana*. It is not that the particular illnesses occurred on the specific season, in fact, some of them like fever, malnutrition, *murfatana*, *larsut*, jaundice, etc. can happen in any season or can be said that present throughout the year.

People from all the household types, i.e. migrants, non-migrants and commuters are more or less similar. But the migrant's households 'left-behinds' members are affected more in term of severity and duration, in comparison to the other two households. Therefore, it is evident that the most of the illness in all the age groups are directly and indirectly related to the health determinants and causes due to the lack of adequate and proper foods, bad environmental and working conditions such as worst living conditions and the lack of good health care.

### **Sources & Patterns of Health Care Services**

In demand of health care treatments for curing these morbidities, people approach different sources and patterns of health care services in the study villages. By the multiple beliefs and notions about the illness causations, a wide variety of the health practitioners and healing systems have existed in the study area of Mandar block. The community possesses to both the formal and informal health care system that is an integral part of their society. The source of treatment choices of the people depends on the type of illness, its symptoms, and severity.

The community's first contact for the treatment is *traditional healers*; those are referred as *Bhagat/ Bhagtain/ Guni/ Ojha* by the local people. The traditional healer in their locality is usually preferred to seek herbal and *magico-religious* treatment of illness. People approach traditional healers for treating the acute illnesses that take the longer period to get cured. Local people have faith in the herbal medicines, seeking treatments for the particular diseases like jaundice, piles, menstrual problems such as white discharge, cramps in the abdomen, loose motions, vomiting, sunstrokes and headaches. Traditional healers are appreciated by for their low costs as the payments can be made later or in the form of a kind, i.e. gifts or local produce; there is a chance of the delayed payment and their consistent availability during the time of medical emergencies. Other than the treatment costs the trust of the people because of sharing the same cultural values and able to communicate more freely with them than the health

care providers of the government or private hospitals. Despite knowing that traditional healers lack any medical training they are found to believe in their spiritual skills that have passed on from their ancestors or the spiritual teachers and try to be treated from them for the range of illnesses like mental health problems, infections, deformities in spine and joints and frequent cough & cold.

The role of the RMPs/ *Quacks/ Daktar/Jhola Daktar* is very significant among the villagers of the study area. Though people have an awareness about the professional qualification, despite that they approach them during the minor illnesses. The majority of the people in the study villages are seeking their health care services and approach them for the treatments of fever, diarrhoea, cough & cold, accidental cases, joint pains, minor surgeries, seasonal diseases, back pain, heart pain, headaches, swelling of glands and breathing problems. Quacks have been approached by both the villagers in the remote and peri-urban villages for the lower price of the treatment fees. According to the peoples' perception, RMPs connect them emotionally and understand their financial problems that make people more comfortable. Overall, the RMPs easy accessibility, familiarity with the local populations by face and name, available round the clock and affordable services are the primary reasons behind getting chosen by the people for the first contact treatment providers.

The rural people seek treatment from the private clinic providers for many conditions in both the remote rural and the peri-urban villages. People go to the private hospitals for the all their reproductive health problems. The mothers from the study villages have more trust on the private allopathic clinics and consult with the private doctors for their quick treatment and recovery. The various reasons for choosing the private clinics that stated are: first, the provider's proximity. Second, the cost - convenience as it does not count the frictional cost (Time, money and exhaustion). Third, the reputation of the doctors and clinics that assure them to spend money on the particular hospital, fourth, trust for the perceived 'recovery' and fifth, lack of the faith in the public sector.

The government/public hospitals are approached only as the secondary contacts by the people for the treatment of the severe and acute illnesses like severe injuries, diarrhoea and malaria but not for the child's under-nutrition related morbidities. The government

hospitals are often located in the highly populated areas and often at a distance from the village. Therefore, people's preferences by choosing the government hospitals are mostly during the night time because the private clinics are unavailable at this point in the area. Some private clinics open at night, but they are too expensive. People are inclined to prefer the government health services due to the financial crisis and the limited health care services such as for immunisation process at the PHCs. Though, the consultation charges are free of cost in the Addl. PHCs, people, faced problem to find the medicines and tests that have been prescribed by the doctors, which is mostly available in the outside private sources. The most iterating complaints from the villagers are - first, people have to spend a heavy amount of the transport to reach the additional. PHC based at block headquarters. Secondly, hospital's expenses are too high due to the outside purchasing of medicines and tests that exceed the cost of medicines. The frictional cost of the illness exceeds extremely high with out of pocket expenses to avail the public healthcare services. Thus, the public healthcare services are yet to perceive as pro-poor by the village healthcare consumers, despite the fact that it is much cheaper than the private clinics and meant for the poor people.

However, other than these there are also several reasons that disinclined them to utilise the public healthcare services. These are like the faraway distances to avoid higher expenditures of money, time and harassments reach the hospitals. Accompanying the fact, the apathy of the hospital staffs in the government institutions, the too much time waiting time, the inconvenience of the opening and closing periods of some of them leads them to avoid taking the pain to approach the government hospitals for the illness treatments for the specified diseases. Meanwhile, they approach the pharmacies for the drug diseases that they believed to treat only by the allopathic medicines. It is evident that both the doctors and villagers easily intermixed modern medicines with the other types of healing practices and thus, even today in the study villages the plurality of medical systems are in use and practised by the local people.

The pluralistic health care seeking is common practice in the study area. People choose different health care providers, according to the types, i.e. minor or major illness, the severity of the diseases, i.e. serious illness with lots of suffering and severe illness with



less suffering, acute or chronic illness, with the amount of pain or symptoms. The choices also vary according to the different criteria like gender, age, curability, and affordability.

The most important determinants of the treatment seeking behaviour that may influence the health care seeking of the people are the availability, accessibility, affordability and acceptability. In the modern healthcare services, as discussed earlier, only a small proportion of the people accessed the government health facilities. Other than this, the duration of illness is also important in influencing the health care seeking for the treatment. When people unmet with the expectations from the allopathic medicine, they change the treatment from that in the spiritual and the other sources. People believe that seeking medical treatment without consulting the traditional healers is undesirable. Therefore, they consult it first with them to confirm the absence of any evil eye or spirit involvement.

People change the source of treatment for several reasons. First, if, the illness or disease is not cured by the initial source of the treatment. Secondly, due to the severity of the illness, which is seen to tempt people to change the health care providers source or system to the other. The illness severity lets people decide for the treatment-seeking pattern for the particular illness. It is observed that for the single illness the people have approached multiple sources. The type and the variations in the illness, moreover with the cultural influences, the treatment is sought from the different health care sources. Cultural change in the outside world interacted during the seasonal out-migrations since a long time, nonetheless bringing about some change in the concept and view of health care seeking practices of the study population. The study population and area also revealed that the treatment tryouts and mistakes often influence the choice of the source or the treatment system, even when people are uncertain about the causes of the illness. Therefore, it can be concluded that the existence and utilisation of different types of healthcare services both biomedicines and traditional are the fundamentals of the medical pluralism that is being practised by the people of the study villages.

## **6. Linking Multidimensional Poverty, Seasonal Out-Migration and Health: Conclusion**

According to the above discussion, it can be concluded that the multidimensional poverty and the traditional agriculture productions, migration and wage labour work are all interrelated. The poverty-related capital, such as: basic needs (for the standard living), economic capital (for ensuring daily life necessities), human capital (for securing skilled and good jobs), social capital (for good networking), cultural identity (for ensuring the position in the strong organisations), geographical capital (for accessing basic amenities and services) and political capital (for bringing the services and facilities in their living area) is vital for ensuring a person's or and areas prosperity. The lacking of the poverty related capital can be termed as the poverty. The study area population lack the better economic capital in the presence of low human capital and unable to ensure the necessities of the daily life. Though the people are in the better position concerning good social and cultural identity-related capitals, both are limited to the homogenous groups of people (i.e. Similar socio-economic background), which hinder them to utilised and take advantages of their social organisation. The geographical capital of the remote rural villages is way too regressive that they are the most disadvantaged concerning availing all the public and private facilities in the area. It is evident that the frictional cost (i.e. Cost of distance and time) of accessing the facilities is higher than the actual cost of the facilities. Whereas, the peri-urban villages are in little better conditions regarding spatial disadvantages as they are exempted from the additional frictional costs. Overall the political capital of the population is also found to be very moderate, as the remote rural population are seemed to be less organised and have the less voice for making demands to reduce the high spatial disadvantages. And the situation of the peri-urban population found to be in the better position by having the voice and cognizance of their rights, but unfortunately, due to the lack of political will, the area is lagging behind with better facilities. Thus, the lack of poverty related capitals causes the low opportunity of additional livelihood options and leads the study population towards opting the other subsistent. The short term seasonal out-migration is the most preferred livelihood option in the study area to ensure the cash income for the nowadays

prioritised essentials, such as educations, health and market commodities and services. However, it is evident that the seasonal out-migration is only able to ensure the meagre supplementation of cash and could not able to fulfil the inadequacy of the resources and poverty related capitals.

Though, people have the different safety nets to deal with the consequences of the absence of good capitals. The safety nets those utilised by the people are both procured from the government's schemes as well as the social safety nets based on the social capital. The government provided safety nets are the provisioning of the benefits such as BPL, APL and yellow cards, where the majority of the proportions are of the migrant households out of the other two categories of the households, i.e. non-migrants and commuters households. The study revealed as discussed in Chapter V, that people were having their names in the recent BPL lists, but did not get the BPL cards yet. Almost all the 62 per cent households comprised of any of the cards either BPL or APL availed the PDS services. The commodities that are availed under the PDS services are around 30 Kg. of rice and 2.5 litres of kerosene oil for the BPL cardholders and around 10 Kg. Rice and 1- 1.5 litres Kerosene for the APL cardholders are being distributed among the villagers. Almost all the yellow ration cardholders go to their nearby Panchayat PDS shops once in a month. It is evident that the provisioning is to be done on a monthly basis, but it is very irregular with one or two-month gap. Sometimes it is only for the six months and not even given the arrears to settle down the poor households ascribed provisioning. People find the process of getting the commodities is very painful and hectic, as they have to wait for the longer period and have to face extreme chaos to get the meagre amount of rice and kerosene. Likewise, the other provisioning like widow pension, old age pension beneficiary numbers is very small because the majority of the eligible candidates are being ignored due to the lack of the cards. The other benefits such as MNREGA and KCC are availed by the minimum number of the migrant families. Whereas, the Mid-Day Meal (MDM) services are only availed by the migrant and the commuter household's children those who go to the government schools. Other than the government support, people are found to utilised the social safety nets by taking bits of help and supports from their village social

networking. People also do manage with their various coping mechanism during the crises related to foods, money and health by their own.

However, the study marked that the 'pulling-out' factors, both the economic and social, is not strong enough to support the people's to pull out them from their multidimensional disadvantages. However, in the presence of all the multidimensional poverty determinants and its coping mechanisms of both social and economic supports, the 'left-behinds' (women, elderly, children and youths) are found to deal with the health problems in terms of healthcare services accessibility, affordability, availability and acceptability, in the study villages.

The majority of the women, men, elderly and children of the migrant households are compelled to seek combinations of sources of health care services in dealing with their illness. It is evident that the women and elderly, tend to mix the healing system with the clear preference for biomedicine and choose different health care providers, according to the types, i.e. minor or major illness, the severity of the diseases, i.e. serious illness with lots of suffering and grave illness with less suffering; acute or chronic illness with the amount of pain or symptoms. The issue of accessing health care brings up the sharp difference between migrant and non-migrant women and elderly. The members of the migrant households have some option for healthcare at different points in life, particularly older women, as they have members in their family those who take care for when ill. But for the migrant's households, the scenario is not so favourable for the wives, women and elderly as they do not receive a favourable response from their male members those who are away from the village.

Our research findings on the health problems of 'left-behinds' reveal out the importance of securing the poverty-related capitals and enhancing the additional economic support to check the health problems of accessing the health care services. The developmental nature is not only responsible for the illness among the people, but also responsible for the lack of services. A purely techno-centric approach to health planning without considering the most vulnerable groups among the poorest of the poor would only have a sedative effect as it does not touch the roots of the problem. The social sector needs to be strengthened with ensuring the healthcare accessibility, affordability, availability and

with the conviction of acceptability of the community. Strengthening of the healthcare services by considering the importance of all the contextual, compositional and collective factors and as the 'left-behinds' members of the study area point out, planning work with dignity and comfort altogether can lead to their wellbeing.

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# APPENDIX I

## Village Level Data Collection

### I. Key Informants Interview Schedule:

(PRA, Group Discussion & In-depth Interviews)

#### A] Contextual Factors (Area Level Characteristics)

##### ➤ Social structure & Settlement Pattern of the village:

[Tools: Social Mapping]

(Note: To be done with the village key persons, women and men)

##### Key Questions:-

- i) What are the approximate boundaries of the village with regard to social interaction and social services?
- ii) How many households are found in the village and where are they located?
- iii) Is the number of households growing or shrinking?
- iv) What are the social structures and institutions found in the village?
- v) What religious groups are found in the village?
- vi) What ethnic groups are found in the village?
- vii) Which are the female Headed Households and where are they located?
- viii) Which are the Migrant Households and where are they located?

##### ➤ Village Baseline Data

(Note: to be filled by informants, government officials/ sources in the village, block and observations).

##### Identification

(a)	Village		(f)	Total area (sq.kms)	
(b)	Block		(h)	Total area under forest	
(c)	Patwari circle		(i)	Total number of households	
(d)	Panchayat		(j)	Total number of hamlets	
(e)	District		(k)	Total population	

Q.1. Population (from Census or any other government records)

Age Range	Male	Females	Total
0-9			
10-19			
20-29			
30-39			
40-49			
50-59			
60-69			
70+			
All Ranges			

Q.2 Occupation (from any government source)

	Categories	
(a)	Primary Sector	
	(i)	Cultivators
	(ii)	Agricultural Labourer
	(iii)	Mining, Forestry etc.
(b)	Secondary Sector	
	(i)	Household industry
	(ii)	Manufacturing
	(iii)	Construction
(c)	Services Sector	
	(i)	Trade & Commerce
	(ii)	Transport, Storage, etc.
	(iii)	Other services
	All categories	

Q.3 No. of Literates (from any government source)

	Literates	Male	Female	Total
(i)	Literates without educational level			
(ii)	Primary or Junior Basic Level			
(iii)	High School/ Higher Secondary level			
(iv)	University Degree or Postgraduate level			
(v)	Technical and others			
	All categories			

## AGRICULTURE

Q.4 what are the important crops grown in the village?

Q.5 Agriculture Calendar

[Tools: Crops Calendar]

Sl.No	Crops	Time grown	Months when they occur		
			Sowing	Harvesting	Marketing
1.					
2.					

Q.6 Are irrigation facilities available?

		YES/NO			
	If yes, mention the sources:	1.		4.	
		2.		5.	
		3.		6.	
(ii)	If not, mention the reasons:	1.			
		2.			
		3.			
		4.			

Q.7 What is the Agricultural Financial Institutions in the village?

- A. Money Lenders
- B. Co-operative Society
- C. Both
- D. Any other (indigenous saving system)

Q.8 Are the following available in the village?

(i)	Seed Stores	Yes/No
(ii)	Co-operative	Yes/No
(iii)	Fertilizer Depot	Yes/No
If, no where (how far located)		

Q.9 What is usual payment or rental arrangement for tenant farmers or sharecroppers in the village?

- (i) Pay a certain per centage of _____ what per cent _____ crops to the owner

(ii) Fixed money rent _____ Rent per month _____

Q.10 For sharecroppers, does the owner provide seeds and other inputs?

If yes, what inputs? _____

Q.11 How many are following types of agricultural workers paid this community, whether in cash or in kind?

	Common specific type of work	Cash payment (per day, per week or by piece of work)	In kind payment (By operation or by piece of work)
Men			
Women			
Children under 15 years			

Q.12 Price at which crop was sold last year?

	Maximum Price	Minimum Price
Rice		
Wheat		
Mandua		
Barley		
Maize		
Mustard		
Turmeric		
Chilies		
Tomatoes		
Potatoes		
Pulses		
Others		

Q.13 What is a typical wage for non-agricultural wage labour here

_____

Q.14 Note the cost of the following in the local market in this village or in the nearest market for this village.

Rupees per unit of usage	
Rice	
Wheat	
Mandua	
Pulses (a)	
(b)	
(c)	
Oil	
Kerosene	
Milk	
Meat	
Sugar	
Others	

Q.15 What are the important institutions in the village and accessibility to the services and amenities in the village?

- Identification of important organisations/institutions/groups in the village and its importance to the community:

[Tools: Institutional or 'Chapati' or Venn Diagramming]

Key Questions:

- i) Which organisations/institutions/groups are working in or with the community?
- ii) Which institutions/groups do the villagers regard as most important, and why?
- iii) Which groups are addressing household food security and nutrition issues?
- iv) Which organisations work together?
- v) Are there groups which are meant for women or men only?
- vi) Are some particular groups or kind of people excluded from being members of or receiving services from certain institutions?

➤ Accessibility to services and amenities:

A. Administrative, Educational, Medical facilities etc.

Facilities	With in Villa ge	Between 1-3 Km.	Between 3-5 Km.	Between 5-10 Km.	Above 10 Km.	How long does it take to get there	If outside village where
(1)	(2)	(3)	(4)	(5)	(6)	(7)	
<b>(1) Administrative</b>							
i. District Headquarter							
i. Block Headquarter							
i. Tehsil Headquarter							
v. Kanungo Circle Headquarter							
v. Patwari Circle Headquarter							
i. Police Station							
<b>(2) Educational</b>							
(i) Primary School							
(ii) Middle School							
(iii) High School/ Intermediate College							
(iv) College							
<b>(3) Medical</b>							
(i) Hospital							
(ii) Dispensary							
(iii) Maternity & Child Welfare Centre							
(iv) Primary Health Centre							
(v) Sub-Centre							
(vi) NRC							
(vii) Family Planning Centre							
<b>(4) Postal</b>							



(i) Branch Post Office							
(ii) Sub-Post Office							
<b>(5) Bank</b>							
<b>(6) Livestock</b>							
(i) Veterinary Hospital							
(ii) Stockman Centre							
(iii) Artificial Insemination							

### B. Shops

Name of the Shop	No. of Shops	If outside the village, its location in order of preference	
(i) Grocer/ General Merchant		1.	2.
(ii) Tea Shop		1.	2.
(iii) Utensils & other household items		1.	2.
(iv) Clothing		1.	2.
(v) Tailoring		1.	2.
(vi) Haircut		1.	2.
(vii) Medicine		1.	2.
(viii) Government Fair Price Shop		1.	2.
(ix) Weekly market		1.	2.
(x) Others (specify)		1.	2.

### C. Small Industrial Establishments

Name of the Establishment	No. of Establishment	If outside the village, its location in order of preference	
(i) Flour Mills		1.	2.
(ii) Oil Press		1.	2.
(iii) Pottering		1.	2.
(iv) Shoe making		1.	2.
(v) Blacksmith		1.	2.
(vi) Carpentry		1.	2.
(vii) Cottage industry		1.	2.
(viii) Others (specify)		1.	2.

### D. Officials

	Residing in the village	Place of residence (Outside village)	Frequency of visits
1. B.D.O			
2. Patwari			
3. Forest Officer			
4. Talati			
5. Police			
6. Village Chowkidar			
7. Water Tank Chowkidar			
8. Forest Chowkidar			
9. Gram Pradhan			
10. PHC Doctor			
11. LHV			
12. Health Assistant			
13. MPW			
14. ANM			
15. Dais (trained)			
16. Dais (Untrained)			
17. Hakeem/Vaid			
18. RMP			
19. Other Government Officials			

E. Electricity, Water, Transport

Electricity

- (i) Village electrified Yes/No
- (ii) Year in which electrified _____
- (iii) Supply regular/irregular _____
- (iv) Households with metered / unmetered electricity _____

Drinking Water

- (i) Village has piped/ handpump water supply Yes/No
- (ii) Year in which piped/handpump water supplied _____
- (iii) If supply regular/irregular _____
- (iv) Water points in village Number _____  
Location _____
- (v) How many households have piped water supply Yes/No
- (vi) The proportion of households has piped (on tap) water now  
_____

(vii) If no, what is the major source of drinking water

_____   
 Well/Spring/canal/river/stream

(viii) How far is it from village

_____   
 (ix) Time taken to reach there

_____   
 (x) Is water available throughout the year?

Yes _____ No _____

(xi) If no, how long is water available (no. of months) _____

Transport

(i) Approach to the village pucca road/Kuchtha road/pathways

(ii) Distance from pucca road _____

(iii) The village has a bus stop Yes/No

(iv) Distance from the bus stop _____ name of the bus stop

_____   
 (v) Transport available public/private/both

(vi) Frequency of public transport

(vii) Places village is connected by public transport

(viii) Are there times during the year, when the village is cut-off and transport cannot reach the village _____

F. Is some land in this village collectively or communally owned?

(i) Yes _____ No _____

(ii) Area/Dismil _____

(iii) To what use has this land be put to _____

## **B] Collective Efforts (Area Level Perceptions)**

[Note: Group Discussion and In-Depth Interviews with the Key respondents – Old men, women and other key resource persons]

### **1. Village, Health, Region Ecological Degradation, Developmental Activities:**

(i) Historical Profile of the village:

- History of important events that took place in the village and how it has affected them.
  - Climate change, land quality change, forest depletion, quality of soil.

- Has there been any major disease outbreak in the past years?  
[Tools: Timeline]
- (ii) Agricultural cultivation, traditional system that has been destroyed, agricultural production, fuel fodder, water difficulties of subsistence, animal rearing.
- Changes – Problems
  - Enhancement of difficulties
  - Nature and Intensity
- (iii) Was this responsible for male-out migration?
- (iv) Impoverishment of households, wage labour, wages, expenditure.
- (v) Entry of other occupation, government schemes, employment.
- (vi) When did the chain of migration begins?
- (vii) Who were the first to migrate?
- (viii) How? What jobs?
- (ix) Was it linked to ecological degradation, low productivity?
- (x) Push
- (xi) Increase in migration. Why?
- (xii) New generation’s interest in agriculture & urban attractions.

**2. Changes in the village**

- (i) What are the developments in the villages? Since, when they have taken place?
- (ii) What are the development problems of your village?
- (iii) In general, would you say people in this village are economically better off than they were about 10 years back, about the same or worse off? And Why?
- Better off
  - At par
  - Worse off

**3. Transition in Agricultural Practice & Livelihood:**

- (i) Is there any change in cropping pattern, yields and agricultural practices?
- (ii) What is the change in the cropping pattern or crops cultivated by the community?
- (iii) What is the primary reason for such changes?
- (iv) Has there been a change in the technique of cultivation?
- (v) Is any program for technical or financial assistance, operational in the area? If yes, then, since when?
- (vi) What agricultural problems people face?
- (vii) What are the primary economic activities within the village for:

Sl. No.	Economic Activities	Men	Women
i.	Farming		
ii.	Vegetable Cultivation		
iii.	Gathering and selling		

iv.	Trading		
v.	Casual Labour		
vi.	Salaried job		
vii.	Artisan		
viii.	Others		

(viii) Over the last year, the employment opportunity has

_____ (Increased – 1, Decreased – 2, Remain Same – 3)

(ix) What is the reason for such employment opportunity within the village:

(x) What are the primary activities that the household depend for livelihood?

(xi) What have been other diversifications in the livelihood opportunities for the inhabitants over the last five years?

(xii) What are the main foods items cultivated/ gathered/ produced by the community?

Cultivated _____

Gathered _____

Produced _____

(xiii) Where do the inhabitants sell their produce?

Sl. No.	Place	Products	Profit
i)	Local Market		
ii)	Market of the neighboring village		
iii)	Middlemen/ Traders		
iv)	Local Shops		
v)	Cooperatives		
vi)	Public Institutions		
vii)	Self Consumption		

(Rank 1-8 according to the maximum profit they make from different place of sale)

(xiv) What are the problems the inhabitants face in selling their produce in the listed areas?

(xv) What is the change in the cropping pattern or crops cultivated by the community?

(xvi) What is the primary reason for such change?

(xvii) Has there been a change in the technique of cultivation?

(xviii) Is any program for technical or financial assistance, operational in the area?

(xix) Does this village receive any technical assistance/ agricultural cooperatives? Yes/No _____

If yes, then, since when?

- Technical Assistance:
- Agriculture Cooperative:
- Credit:
- Others:

(xx) What agricultural problems people face?

(xxi) In the last five years what changes has been regarding production and marketing of the produce?

- Production:
- Marketing:
- Agricultural products:
- Livestock:
- Forest Products:
- Others:

(Improved – 1; Worsened – 2; Remained Same – 3)

(xxii) What is the different yield/ produce that community can sell in the local market?

(xxiii) What are the different products that the community purchases from the local market?

(xxiv) Does the community have to depend on traders/ middlemen/ cooperatives/ self for the sale of produce?

(xxv) Has there been any change over the years in the business opportunities within these markets?

(xxvi) Have there been any major changes in the livelihood opportunity for the community?

(xxvii) Has there been a diversification in income sources for the community?

(xxviii) Has there been any change in the livestock herd and income through livestock in the community?

(xxix) Has there been a change in yield through livestock over the years? What has been the probable reason for such changes?

(xxx) What are the sources of income during a normal year and dry year?

(xxxi) Is there any change in consumption pattern in both agricultural inputs and items of personal consumption?

#### 4. Migration

(i) Over the years what has been the status of seasonal migration and permanent migration of the people of this community?

(ii) What has been the change in migration of men and women in the other area?

(iii) What has been the impact of migration on the income of people?

(iv) What has been the impact of migration on local livelihood opportunities – agriculture, labour, allied activities?

(v) Mapping Transitions in Migration:

a) Do the village members go to other places outside the village for work?

b) If yes, then for what work:

Sl. No.	Migration for livelihood	Men migrate for	Women migrate for	Both migrate for
i)	Seasonal			
ii)	Temporary/ Commuters			
iii)	Circular			
iv)	Permanent			

c) Where do they go to work?

_____ (Another village – 1, Town – 2, City – 3, All – 4, Others – 5 specify)

d) Does labour migrate to this village for work?

e) In the past five years has there been change in labour migration?

f) What kind of change has taken place in terms of labour migration:

Sl. No.	Migration	Men	Women
i)	Seasonal		
ii)	Temporary/ Commuters		
iii)	Circular		
iv)	Permanent		

(Increased – 1, Decreased – 2, Remained Same – 3)

g) Do people migrate to this village for a job opportunity?

_____ (Yes – 1, No -2)

h) If yes, then for what work opportunities?

i) In the last five years has in-migration for job:

_____ (Increased – 1, Decreased – 2, Remained Same – 3)

## 5. Availability of food

(i) How do people obtain food during normal year and dry year?

- (ii) Does the community face problem of food shortage during any period of the year? How do they cope up with such problems?
- (iii) Has this source of food during dry and normal period changed over the years? How?
- (iv) Has there been a change in diet of people over the years? Since when? How?
- (v) Has there been any changes in the food habit of people over the years? Since when? Why?
- (vi) Transition in Food Sufficiency:
  - a) What is the staple food in this region?
  - b) What proportion of households have two meals a day?

---

(All – 1, Most of the household – 2, Some of the household – 3, Few of the households – 4, None – 5)

- c) In the last five years has the status of food availability in these households:

---

(Improved – 1, Worsened – 2, Remained same – 3, Other – 4)

- d) If the status of food in the household has improved/ worsened/ remained same, then what are the prime reasons for this?

## 6. Health

[Group Discussion: Key Respondents – Health functionaries, Men, Women, Village Head, VHSNC members, PRI members]

- i) Health services/ facilities
- ii) Traditional/ Local village health practice & belief
- iii) Metaphysical belief on health
- iv) Health improvements as a result of change and development
- v) Young female death/ women's death/ illness/ men's death
- vi) Attitudes to death, mortality, illness, daily functioning. View on life, death, health.
- vii) Why do both traditional and modern systems coexist?
- viii) Over the years what has been the status of morbidity/ mortality/ IMR, MMR and Under five mortality in the village?
- ix) Over the years what has been the availability of private health providers in and around the village?
- x) What are the different health care providers' people approaches for different health problems? Which provider does people access more during sickness? Why?



xi) Mapping the transition in health:

a) What are the primary health problems affecting this community?

Children	Age group	Adults	Age group

b) Does the village have a health centre? Yes/No _____

c) How far is the nearest health centre from the village? (In Km/time taken)

- ICDS
- Sub-Centre
- PHC
- CHC
- Hospital

d) What is the quality of service offered by the health centre?

_____

(Good – 1; Average – 2; None – 3)

e) Over the past five years what have been the health status of the community?

_____ (Improved – 1; Worsened – 2; Remained same – 3)

f) What have been the reasons for improved/ worsened/same health status of the community?

g) What are the seasonal diseases that the community suffers from?

[Tool: Seasonal Calendar]

h) Has there been a change in the occurrence of these diseases since a major outbreak (if any) happened in the past? Why?

xii) a) What are the main health problems in your village? You can give up to 5. Please rank them from 1-5 according to the most important or major problems (1) to less important (5).

	Health problems in the village	Who suffers them usually; children, male or female	What type of treatment is sought and where
1			
2			
3			

4			
5			

b) Are any of these problems of increasing prevalence in the village?

Yes _____ No _____

Which ones and Why? .....

**7. Social Characteristics & Social Capital**

- i) Is there any change in social and cultural condition in the village community?
- ii) If yes, then what have been primary changes in the social organization of the village?
- iii) Do the community members support one another at the time of food and financial distress?
- iv) What have been the changes in social arrangements or social support to cope with hunger and financial crisis?
- v) Presently what are the different social arrangements to cope up with food shortage and financial shortage?
- vi) Do a migrant helps others in migrating for the livelihood in your village? If yes, How?
- vii) Is there any Community based organization (CBOs) in your village? If yes, then name it.
- viii) What is the participation level of the villagers in such organizations?
- ix) Did the members participate in any local level trainings or study tours?
- x) What kind of community activities takes place in the village?
- xi) What is the extent of participation of the villagers in the community activities?
- xii) What is the extent of trust in the village people with each other during the crisis situation?
- xiii) How is the cooperation among the people in your village?
- xiv) What is the extent of giving or exchanging gifts in your village?
- xv) What is the extent of financial contribution for community activities in your village?
- xvi) What is the extent of financial contribution to the community based organizations (CBO) in your village?
- xvii) What is the spirit of helping others, especially the poor in your village?
- xviii) What is the extent of settling of conflicts in your village?
- xix) What is the extent of abiding by the norms and bylaws of the people in your village?

- xx) Do women having the confidence to speak in public in your village?  
 xxi) Do men's respect for and consideration of ideas given by women in your village?

## 8. Education

[Note: to be asked from the village key persons, school teachers & other related functionaries]

- i) Does the village have public school? _____ (Yes -1; No - 2)  
 ii) If yes, then what school? _____ (Primary - 1; Secondary -2; Both -3)  
 iii) How far is the village from nearest school?

Primary School _____ Secondary School _____

- iv) What proportions of children from the village attend school?

Sl. No.	Children Attending School	Primary School	Secondary School
i)	All		
ii)	Most of the children		
iii)	Some of the children		
iv)	Few Children		
v)	None		

(Yes - 1; No - 2)

- v) What are the principal reasons for children from the community not attending school?

- Poor quality of school building
- Poor quality of infrastructure (toilets, drinking water facility, classroom utilities such as fans, board, Table and chairs etc.)
- Inadequate number of teachers
- Lack of sanitation
- Distance
- Poverty
- Others (Specify) .....

- vi) In the last five years has the proportion of children attending .....

(Improved - 1; Worsened - 2; Remained same - 3)

## 9. Transition in Living Condition

### A. Housing

- i) What are the housing types for the majority of the households in the village? ..... (Pucca – 1; Semi Pucca -2; Kuchha-3; Thached-4; Others-5)
- ii) In the last five years the quality of household in the community to improve, worsened or remain same? .....

### B. Electricity

- i) What section of the community has electrical service: _____  
(Entire community – 1; Most of the household -2; Some of the household – 3; None – 3)
- ii) Over the last five years the electricity in the community has _____  
(Improved – 1; Worsened – 2; Same -3)
- iii) The supply of electricity is _____  
(Good – 1; Average – 2; Bad – 3; Worse – 4)
- iv) What are the electrical problems with the electric service?
- v) What are the purposes for which electricity is used?  
.....  
(Household lighting – 1; Irrigation – 2; Mill -3; Other -4)

### C. Drinking Water

- i) Household has access to safe drinking water through various water sources:

Sl. No.	Households with access to safe drinking water	Pipe born water	Public Standpipes/ Hand pumps	Water services	Well	Tube Well
i)	Entire Community					
ii)	Most of the community					
iii)	Very Few					
iv)	None					

- ii) Over the years has there been an improvement in access to safe drinking water _____ by the household?  
.....

(Improved -1; Worsened – 2; Remained Same- 3)

iii) If there has been improvement/ worsening/ same water services what are the reasons for the same?

D. Sanitation

i) What proportion of the village has drainage coverage:

..... (Entire village – 1; Most portion of the village– 2; Very few portions – 3; None – 4)

ii) Does the present drainage system prevent flooding or storage of water during rainy season? Yes/ No _____

iii) Over the last five years what has been the condition of drainage facility in the village? _____

(Improved – 1; Worsened – 2; Same-3)

iv) What have been the reasons for improvement/ worsening/ same drainage coverage in the village?

v) What proportion of households have a toilet?

_____ (Entire village – 1; Most portion of the village – 2; Very few portions – 3; None – 4)

vi) Over the last five years has the member of the household using toilet?

_____ (Increased -1; Remained same-2)

vii) What have been the reasons for the improvement/ worsening or same sanitation condition in the village?

E. Connectivity

i) Over the years has there been an improvement in the connectivity of the village to the neighboring area – road, transportation?

ii) What has been the impact of these improvements in livelihood opportunity, income opportunity, migration, education, lifestyle, marketing of the local produce, inflow of different goods – food as well as non food items?

iii) Availability of connecting roads to the market or the other villages:

..... (Paved road -1; Mud road – 2; Mixed paved – 3; Footpath – 4)

iv) Are these all season roads? Yes/ No.....

v) In the last five years has the condition of roads:

..... (Improved – 1; Worsened – 2; Remained same -3)

vi) If improved, has there been an increase in trade of agricultural produce/ forest gatherings? Yes/ No.....

vii) If yes, then there has also been increased in the inflow and outflow of the products in the village within these five years?

Sl. No.	Goods/ Products	Variety	Inflow	Outflow
i)	Coarse Grains			
ii)	Fine Grains			
iii)	Vegetables			
iv)	Fruits			
v)	Animal Products			
vi)	Processed Food			
vii)	Artifacts			
viii)	Durable Goods			

(Increase – 1; Decrease – 2)

viii) What are the main produces that are brought in and what are the produces that go out of village?

- Grains:
- Vegetables:
- Animal Products:
- Livestock:
- Non food items:
- NTFP:
- Others:

#### F. Storage

- i) Are operational storage facilities available to the community for perishable and non- perishable produces?
- ii) If yes, then has there been any impact of these services on the yield and income of the community?

#### G. Transport

i) Does the community have access to public transport? Yes/ No.....

ii) What is the minimum distance to be travelled to reach public transportation?  
.....

iii) Over the last five years what has been the status of public transportation:

Sl. No.	Availability/ Frequency	Improved	Worsened	Remained Same
i)	Every day			
ii)	Some days a week			

	(Market Days)			
iii)	Occasionally			
iv)	Others			

(Yes -1; No -2)

iv) What has been the impact of these improvements in livelihood opportunity, income opportunity, migration, education, lifestyle, marketing of the local produce, inflow of different goods – food as well as non- food items?

**10. Expenditure**

i) What changes has been in the avenues of expenditure by the community?

**11. Credit Facility**

i) Mapping Transition in credit facility:

a) In the last five years has there been an improvement in the availability of credit to the community:

.....  
(Increased -1; Decreased – 2; Remain same – 3)

b) What is the reason for improvement in credit flow in the community:

.....  
.....  
(Improvement in income – 1; Availability in institutional credit – 2; Improvement in employment opportunity – 3; Improvement in social security programs – 4)

c) Has there been change in the sources of credit to the community?

d) What has been an impact of improved/ worsened credit facility to income, food accessibility of the community?

**12. Access to develop a market**

i) What is the different yield/ produce that community can sell in the local market?

ii) What are the different products that the community purchases from the local market?

iii) Does the community have to depend on traders/ middlemen/ cooperatives/ self for the sale of produce?

iv) Has there been any change over the years in the business opportunities within these markets?

v) Mapping Transition in Public Market:

- a) Does the community have access to public market?  
Yes/No_____
- b) What is the distance to the nearest market? _____
- c) When does the market open? _____  
(Daily – 1; Twice a week – 2; Weekly – 3; Others – 4)
- d) Over the last five years the quality of market _____  
(Diversified – 1; Reduced – 2; Remained Same -3)
- e) What is the reason, if the products offered in the market has diversified/ reduced/ remained same?  
_____ Price of goods
- f) Has the price of food grains increased over the period of time?  
(Tool: Timeline)
- g) What is the price of staple food grains in the market?
- h) How does the community cope up with this increase in price to meet the food requirement?

### 13. Access to Forest Resource/ CPR

- i) In the past years/ decades have there been changes in access to forest?
- ii) In the past years have the forest cover/ extent of CPR increased or decreased?
- iii) In the past years what have been the change in usage of CPR?  
Increased/ Decreased?
- iv) Can easily access these natural resources? If no, then what are the difficulties faced in accessing these resources?
- v) Natural Resource –  
a) What portion of the community depends on these resources and for what purpose?

Sl. No.	Resources	Trading	Livestock	Food	Household	Cultivation	Others (Specify)
i)	Forest						
ii)	Common Ground						
iii)	Grazing Land						
iv)	River						
v)	Pond						
vi)	Land						
vii)	Others (Specify)						



(All – 1; Most of the household – 2; Many of the household – 3; Some of the household – 4; None – 5)

b) Over the last five years what has been the community dependence to natural resources:

Sl. No.	Resources	Trading	Livestock	Food	Household	Cultivation	Others (Specify)
i)	Forest						
ii)	Common Ground						
iii)	Grazing Land						
iv)	River						
v)	Pond						
vi)	Land						
vii)	Others (Specify)						

(Improved – 1; Worsened – 2; Remained Same – 3)

c) What has been the primary reason for improvement/ worsening/ same dependence on the natural resources by the households:

- Trading: _____
- Livestock: _____
- Food: _____
- Household: _____
- Cultivation: _____
- Others: _____

#### 14. Price of Goods

- i) Has the price of food grains increased over the period of time?
- ii) What is the price of staple food grains in the market?
- iii) How does the community cope up with the increase in price to meet the food requirement?
- iv) Subsidy and minimum support price
  - Has any subsidy program operational in the area?
  - Has there been an impact of the subsidy program on the yield by the community?
  - Do the farmers get the benefit of the minimum support price?
- v) Fair Price Shops
  - Are operational fairing price shops available in the village?
  - What are the items available at these shops?

- What is the difference in price offered through these shops and the open market?

### 15. Social Security Interventions

- i) Are any government programs for livelihood, food distribution, agricultural subsidy, seed/ fertilizer/ tools distribution, livestock assistance, micro financing and credit operational in the area?
- ii) What is the impact of these programs on the economy of the village? Has it improved the living conditions of the community?
- iii) Are there any difficulties in availing benefits of these programs? If yes, what are they?

## APPENDIX II

### Household Level Data Collection

#### 2. Household Level Interview Schedule: (Semi-structured In-depth interviews)

##### A. HOUSEHOLD SCHEDULE

[Note: To be asked with both Women & Men ]

Village Name _____ Hamlet Name  
_____

Schedule No. _____

#### 1. RESPONDENT/HOUSEHOLD BASIC CHARACTERISTICS

- i) a. Respondent's Name: _____ b.  
Sex/Age _____
- ii) Status of the Respondent in the Family and Household:  
_____
- iii) Name of the Head of the Household: _____
- iv) Household Identification Number, If any: _____
- v) Migrants⁶ Household: _____ Non-Migrant Household:  
_____
- vi) (1) Religion  
a) Sarna _____  
b) Hindu _____  
c) Christian _____  
d) Muslim _____  
e) Buddhist _____  
f) Any other (specify) _____
- (2) Caste _____ Sub-Caste _____
- a) Schedule Tribe _____  
b) Schedule Caste _____  
c) UG _____

⁶ Migrant household definition: a family from which atleast one usual member has left for atleast a period Of 3 months to live outside the family. Migrants who have migrated with their complete family who keep no connection with the village/household and do not enjoy any fruit of land must not be considered for this Study.

d) Other, specify _____

vii) Language: _____

viii) Other Details:

a) Ration Card Yes/No _____ (Specify colour) _____

b) Voter ID Card Yes/No _____

c) Hearth: Separated/ Shared _____

d) Number of rooms in the house _____

e) Toilet _____ (Attached-1, Separate- 2, None – 3)

f) Drainage _____ (Present – 2, Absent – 2)

g) Safe drinking water _____ (Source)

h) Electricity _____ Yes/No

## 2. HOUSEHOLD - FAMILY STRUCTURE AND COMPOSITION

i) Total No. of Members in Household _____

ii) No. of families (separate hearth groups) _____

iii) Head of Household (if any so recognized of overall households) _____

iv) Description of Living Arrangements:

a. No. of Rooms and Distribution of family members into Rooms/ Space available _____

b. No. of chullhas, whether separate kitchens, cooking arrangements, how chullhas organized/function _____

c. House is made of cement, pucca, kutchra, or hay?

d. Does this have a cattle shed? _____

If yes, where?

a. Attached to homestead _____

b. Far from homestead _____

v) HOUSEHOLD COMPOSITION: Members Currently Residing in Household (filled family/hearth group wise to head at the start).

Sl.No	1	2
Name (in order)		
Relationship to Head of the household (Overall head)		
Sex (M/F)		
Age (in completed years)		
Marital status		

(M/UM/Divorced/Separated)			
Education	Illiterate		
	Read & Write		
	Primary		
	Junior high School		
	High School		
	Intermediate		
	Graduate & Above		

vi) Occupation of All Adult Members currently Residing in the Household (Follow above order)

Sl.No.		1	2
Name (in above order)			
Main/ Primary Occupation	Agriculture		
	Agricultural labour		
	Non-Agricultural Labour		
	Animal Husbandry		
	Small petty shop		
	Government shop		
	Government Services		
	Private services		
	Others (specify)		
Income per month (Total)			
Secondary occupation (Mention Clearly)			
Income per month			

Name	Sex	Class	Regular in school or not. Give Reasons

vii) School going children in the household:

### 3. HOUSEHOLD ECONOMY

#### A. Land Ownership

i) Agricultural Land Details:

(in dismil )( 1 Acre = 4046.94 Sq metre; 1 Dismil = 40.46 Sq metre; 1 Katha = 66.89 Sq metre ; 1 Dur = 10 Sq metre ( In Jharkhand)

Sl.No		Irrigated	Non-Irrigated	Total
1	Owned			
2	Cultivated land	Upland (Tand)		
		Medium Land (Chaura)		
		Lowland (Doin)		
3	Land under forest			

ii) Collective Ownership _____ Individual ownership

_____

Both _____ (tick only)

iii) In whose name/names is the collective land? _____

iv) Who has the right to sell this land? _____

v) Has the household leased in or leased out some of the above land. For what purpose?

Name the household to whom land has been leased in or out. Are you related to him/ her? Specify? Is it a migrant household?

	Irrigated	Un-irrigated	Purpose		
			Rental	Share Cropping	Any Other
Land Leased Out					
Land Leased in					
Total					

Other details (Name, relation, whether migrant – to whom land is leased in or out)

vi) How much of this land does this household cultivate? Who are the main family workers and do you hire? Has cultivated land increased, decreased over past year?

Net Area Cultivated	Irrigated		
	Un-irrigated		
Total			
Family Labour, Fully/ mostly Name them , Specify			
Hired labour (Specify no. & period for hired labour) (Season)			
Land Under Cultivation	Increased (by)		
	Reason		
	Decreased (by)		
	Reason		

#### B. Assets

i) Does the house have? Yes/ No. When did you get? Who Bought? Usage- what and when?

	Assets	Yes/No	When bought? Who bought? How	Usage	When
1.	T.V				
2.	Radio				
3.	Mobile phone				
4.	Gas Stove (LPG)				
5.	Kerosene cooking stove				
6.	Electricity connector				
7.	Solar Energy Connection				
8.	Cycle				
9.	Scooter/Motorcycle				
10.	Steel cupboard				
11.	Wooden bed, chair,				

	table, etc.				
12.	Fan				
13.	Mixer/Iron				
14.	Water tank				
15.	Big wall clock				
16.	Farm Equipment				
17.	Any Other				

ii) a. Give details of all other types of immovable /movable property/ assets you hold and whether collectively/ individually:

- 1) Shop
- 2) Equipment (like flourmill, generator etc. specify) _____
- 3) Any Other

b. Livestock Asset

Sl.No.	Livestock	Numbers	Usage	When
1.	Oxen			
2.	Buffaloes			
3.	Cow			
4.	Goat			
5.	Sheep			
6.	Pig			
7.	Avian (Cock/Hen/Ducks/ Pigeon)			
8.	Any Other			

[*Usage: Production-1, Consumption -2, Sale-3, Rent-4, Mortgage-5, All-6, Other-7; When: Some season-1, Whole Year-2, Annualy-3, Never-4]

C. Agriculture

- i) What extent of the land owned is used for agriculture? _____
- ii) Is your land flat/ gentle or sloping? _____
- iii) Usage of land:



Season	Area used for cultivation
Kharif (May to October, Chait to Magh)	
Rabi (October to April, Magh to Bhado)	
Zaid (October to May, Bhado to Chait)	

iv) Crops cultivated:

Season	Crops cultivated
Kharif (May to October, Chait to Magh)	
Rabi (October to April, Magh to Bhado)	
Zaid (October to May, Bhado to Chait)	

v) What do you do with the yield?

Sl. No	Usage	Consume	Sell	Store for Seed	Mortgage	Repay Loan	Wage Payment
	Crop						
<b>1.</b>	<b>Cereal</b>						
i)	Rice						
ii)	Wheat						
iii)	Ragi/Millet						
iv)	Maize						
v)	Other						
<b>2.</b>	<b>Pulses</b>						
i)	Tur						
ii)	Urad						
iii)	Moong						
iv)	Horse Gram						
v)	Other						
<b>3.</b>	<b>Oilseed</b>						
i)	Groundnut						
ii)	Surguja						
iii)	Mustard						

iv)	Til						
v)	Others						
<b>4.</b>	<b>Fruits</b>						
<b>5.</b>	<b>Vegetables</b>						
i)	Potato						
ii)	Tomato						
iii)	Onion						
iv)	Chilli						
v)	Brinjal						
vi)	Others						

(Rank as per the preference of usage)

vi) Is the yield sufficient to ensure availability of food throughout the year?

Year	Kharif (May to October)	Rabi (October to April)	Zaid (October to May)
Cereal			
Pulses			
Vegetable			
Fruits			

(Sufficient -1; Insufficient – 2)

#### D. Household Income

i) Household income per month and/or annual and the various sources from which it comes.

(Fill separate table for each hearth separately)

Sl.No	Sources	Income	
		Per Month	Annually
1	Agricultural product sale		
2	Livestock		
3	Wages		
4	Salary		
5	Pension		
6	Rent of Land		
7	Rent of Building		
8	Remittances		
9	Interest on Lending		
10	Customary/ traditional jobs		
11	Others (specify)		

ii) Are the incomes from various sources and various household members pooled? If yes, how is the monthly expenditure undertaken? Who has the control of the money and who decides expenditure?

If no, does each hearth group keep income separate? Fill separately for all hearths.  
Separate sheet for (i) Collective HH (ii) Each Hearth

iii) Household Budget Composition:

a. What are the various items on which you spend money? What is the adequacy of income?

Sl. No.	Expenditure Head	Expenditure	When (Seasonal/ Annual)	Adequacy of Income
1	Food Grains			
2.	Vegetables			
3.	Utilities (Clothing and other toiletries)			
4.	Education			
5.	Saving			
6.	Rent			
7.	Loan Payment			
8.	Purchase of seeds			
9.	Purchase of Fertilizers			
10.	Purchase of Livestock			
11.	Purchase of Agriculture Implements			
12.	Migration			
13.	Recreation			
14.	Alcohol			
15.	Medical Care			
16.	Transport			
17.	Others (Specify)			

[Expenditure: Yes- 1, No-2; When: Seasonal-1, Annual-2, None-3;



		outside	
1.			
2.			

Reasons for seasonal migration: -

_____

v) Any commuters in the family/household?

Sl. No.	Name	How many months in a year they commute outside	Year when first migrated
1.			
2.			

Reasons for commuting: _____

B) Current Migration Details:

i) Do members from this household migrate for job? Yes/No

ii) Current Migration details of Migrant:

Sl.No.	1	2
Name of Migrant		
Relationship to the Migrant		
Education		
Current Age		
Age at time of first Migration		
Marital status at time of migration		
Is he one time Migrant? First time movers		
Is he repeating Migrant? If repeat, Number of times Multiple movers		
Details of Migration Cycle	1 st Time	Period of Migration
	e	Place
		Job
		Income

		Reason for Return		
	Last T i m e	Period of Migration		
		Place		
		Job		
		Income		
		Reason for Return		
Current Period of Out-Migration				
Present occupation/job/work (specify)				
Income (per month)				
Present place of Residence/where				
Total duration of migration				

iii) Currently Migrant, but are members of the household: occupation when Not Migrant. When the migrant was residing in the village, what was his occupation and how much did he/she earn per month. For how long in the village did s/he work before migrating?

Sl .No.		1	2
	Name		
Primary Occupation	Agriculture		
	Agricultural Labour		
	Non-Agricultural Manual Labour		
	Animal Husbandry		
	Small Petty Shop		
	Government Service (Specify)		
	Private Service (Specify)		
	Others (Specify)		
Income (per month)			
Secondary Occupation			
Income (per month)			
Period of work (occupation) in the village			

iv) What was the main reason for leaving their village? Give reasons for each migrant separately. Tick upto five reasons and then circle the two most important ones.

Sl.No	Reason for Migration	Migrant 1	Migrant 2	Migrant 3	Migrant 4	Migrant 5
1	No Land					
2	Shortage of land					
3	Bad quality of land to cultivate					
4	No work or employment					
5	Poverty, low income, debt burden					
6	Higher education, therefore inward job aspiration					
7	Non-availability of job according to qualification					
8	Aspiration for higher earning, better economic prospects, better employment opportunity					
9	Appointment of job					
10	Job transfer					
11	Dissatisfaction with earlier job, desirable for change					
12	For education					
13	Family tension					
14	Other (specify) i) ii) iii)					

## 5. REMITTANCE: CURRENT MIGRANTS

- i) Frequency of Remittances (If different hearth groups, take from family/hearth concerned)

Sl.No.	1	2
Name of the Migrant		
Even sent money Y/N		
To whom is money mainly sent		
How long after leaving the village did he/she first sent money	Year	
	Month	
	Week	
How long since he/she last sent money	Year	
	Month	
	Week	
How much money he/she has sent in last 12 months		
Frequency of Sending Money	Monthly	
	Quarterly	
	Half Yearly	
	Annually	
	Irregularly	
	Mainly when asked	
Others (specify)		

- ii) Receipt of Remittance

Sl. No		
Who usually receives this money		
What is the usual mode of remittance	Money Order	
	Registered Post	
	Through friends/ relation	
	Others (specify)	



iii) a. Apart from money has he sent/brought goods for the household and its members?  
 If yes, what have been the main items received in past twelve month? (Give for specific migrant)

Yes_____ No_____ (Sl. No. of Migrant_____)

b. Frequency of Migrants visits to the village. When did he last visit?

c. Any Other Information: -----

**6. FOOD ADEQUECY & HUNGER**

1. How many meals does the family take in a day _____

2. During last one year/ 12 month how often the household have consumed the following:

Sl. No.	Season	Kharif	Rabi	Zaid
	Food			
i)	Grain			
ii)	Tubers (Potato, Onion)			
iii)	Vegetable			
iv)	Milk/ Milk Products			
v)	Oil/ Fats (Ghee)			
vi)	Fruits			
vii)	Animal Protein			

(Daily:1; Once a week-2; Once a month- 4; Few Times a month-5; Special Occasion – 6; Never – 7; Rarely- 8)

3. How does the household maintain stock of food grains?

Season	Maintenance of stock
Sowing	

Harvesting	
Post Harvest	

(Purchase daily – 1; Purchase once a week – 2; Purchase Bi-Monthly – 3; Purchase Monthly – 4; Purchase Bi-Annually – 5; Do not purchase – 6)

4. Food Sources during different season:

Sl.No	Sowing season/ Monsoon/ Kharif (May to October)									
1.	Source Food Intake	Self Grow n	Mark et	Forest/ Commo ns	Wag e	PD S	ICD S	Mid Day Mea l	Any Othe r	Al l
i)	Staple Food									
ii)	Vegetables									
iii)	Animal Products									
iv)	Fruits									
v)	Processed Food									
2.	Harvest season/ Winter/ Rabi (October to April)									
i)	Staple Food									
ii)	Vegetables									
iii)	Animal Products									
iv)	Fruits									
v)	Processed Food									
3.	Post Harvest/ Summer/ Zaid : Kharif – Rabi (August –April to May)									
i)	Staple Food									
ii)	Vegetables									
iii)	Animal Products									
iv)	Fruits									
v)	Processed									

	Food									
--	------	--	--	--	--	--	--	--	--	--

(Often – 1; Most of the time – 2; Sometime – 3; Rare – 4, Never – 5)

5. What grains are received in the form of wages and when?

Sl.No.	Season	Grains (Cereal, Pulses)
1.	Sowing	
2.	Harvest	
3.	Post Harvest	

6. Have there been times when the family had to face lack of food availability within last one year? (Food here is in reference to grains).

Sl.No.	Episode	In past one Week	In past one Month	In past one Year	During Sowing	During Harvest	Post Harvest	Other
	Incidence							
i)	Ate fewer meal							
ii)	Ate less portion of food than usual							
iii)	Slept without any food							
iv)	Had no food for whole day							

(Always – 1; Most of the Time – 2; Often – 3; Sometimes – 4; Never – 5)

7. What do you do to avoid suffering from lack of food during certain period of the year?

Sl. No.	Coping Strategy	Adoption (Yes/No)	Rank	When
i)	Reduction in diet, meal			
ii)	Reduction in expenses other than food,			

	education, health			
iii)	Move out to work in other areas			
iv)	Sale of assets (land, livestock, agricultural implements)			
v)	Borrow grains			
vi)	Mortgage (land, livestock, agricultural implements)			
vii)	Loan			
viii)	Depend on gathering			
ix)	Use dried food items			
x)	Others			

[Adoption: Yes – 1, No – 2; Rank: from 1 to 10 as per the priority; Season: Monsoon/ Kharif (May to October – 1, Winter/Rabi (October to April) – 2, Summer/ Zaid: Kharif – Rabi (August –April to May) – 3]

## 7. PROVISIONING

1. Beneficiary of which schemes?

Sl. No.	Commodity Schemes	Wheat		Rice		Sugar		Kerosene	
		Qtt	Price	Qtt	Price	Qtt	Price	Qtt	Price
i)	BPL								
ii)	APL								
iii)	AAAY								
iv)	Others								

2. Do you avail services from the PDS/ Fair price shop? Yes/ No _____

3. What are the commodities availed from the PDS:

.....

4. Whom do you contact in case of improper functioning of the FPS store?

5. Eligibility for benefits from any other governmental schemes?

Sl. No.	Programs	Pension	Subsidy	MSP	Food for work/ MNREG	NTFP	MDM	ICDS	Credit for off farm
	Beneficiary								

					A				activity

(Regular – 1; Sometime – 2; Seasonal – 3; Never – 4)

## 8. HEALTH PROFILE

### A. FAMILY HEALTH PROFILE:

- i) Are there any household members who are currently suffering from any type of illness in past 6-12 month? Did any earning members of your family have been ill/sick and lost wage in the past 6-12 months?

Sl.No.		1	2
(a)	Name of the family member		
(b)	Types of illness		
(c)	Duration		
(d)	Treatment		
(e)	1 st source of treatment		
(f)	Reasons for choosing		
(g)	Nature of treatment provided		
(h)	If referred place of referral		
(i)	Reason for referral		
(j)	You took or not; reason for not		
(k)	Any other treatment sought		
(l)	Reasons for seeking other treatment		
(m)	Result of treatment Satisfaction from it		
(n)	Total cost in illness		
(o)	Expense		

[Treatment: Yes-1, No-2; Expense: Borrowed-1, Self-2, Both-3]

- ii) Of the children born in the house have there been Under five mortality? Yes/No
- iii) In case of child mortality, what has been the cause of death?

Children (Name)	Age	Reason

iv) Has there been any still birth in the household? Yes/No

v) When did you start breast fed to your new born child?

[Within an Hour -1; after two-three Hours -2; after two-three days -3; After one month or more – 4]

a) Do you feed your child with the mother’s first milk/ colostrum?

Yes/No _____. If No, give the reason

_____

b) How long is usually the child breast fed? .....

( Six months – 1; More than six months – 2; Upto one year – 3; upto two years –4; Less than six months -5; Not at all -5)

c) How do you manage to breastfeed your child if you have to go to work?

d) Who take care of the child when you (mother) go for work?

e) At what age the child was started given a complementary food?

f) What did you feed your child as complementary foods?

g) How frequent do you feed your child?

h) Did you know about the child services provided by the Government? Yes/No

vi. Child Health:

a. Has your child got immunization?

b. Has your child ever suffered or been suffering from Acute diarrhea?

c. Has your child ever suffered from Acute respiratory disease?

If yes, then what treatments have you sorted for particular?

.....

vi) Did any wage earner fall sick in last 6 months? Were any wage loss incurred?

Members Name	Sickness	Mandays Lost

vii) Have there been any deaths in the family within last five year? Yes/No

Family Member	Age	Sex	Reason for death

## APPENDIX III

### B. KEY- RESPONDENT INTERVIEW GUIDE

[Note: To be done with the Migrant Wives & Elderly those are 'left-behind']

#### I. WORK, ECONOMIC STATUS/CONTROL & DECISION-MAKING

##### A. Household Economy & Impact of remittance

- 1) When, where and why did your husband migrate?
- 2) What costs were borne by the family to help him migrate?
  - * Amount of money spent
  - * Sources from which money was raised
  - * Loans incurred
  - * Mortgage or solid land, jewelry
  - * Other hardships the family faced
- 3) Does the family today find it worthwhile to have spent money and face hardships to help him migrate? Has the economic situation improved? If yes, how; if no, why not?
- 4) How much does your husband earn?
- 5) How much does he send home and how frequently does he send it? Is this the primary income of the household? Or do you have other sources of household income?
- 6) Were early remittances small? Did you face economic problem in the early years?
- 7) In what form does he usually send remittances? Cash through someone coming to the village, money order, cheque/ bank draft, remittances in kind etc.
- 8) In whose name are these remittances usually sent? What powers of control over them accrue to the recipient?
  - * Male acting head of joint family (e.g. Father, brother, uncle)
  - * Responsible female head (e.g. Mother-in-law)



- 9) Do you receive any remittances in your name?
- 10) Has there been any improvement in the house since your husband started sending remittances?  
 * New Construction  
 * Installation of electricity  
 * Others_____
- 11) Who controls the spending and investments? Who takes decisions related to the management of this remitted amount? On what is this amount spent? Are you satisfied with this arrangement?
- 12) What kind of consumer durables was purchased? How did they affect your domestic workload? In what way are you able to influence purchases?
- 13) Are remittances earmarked by your husband for farming and consumption purposes?
- 14) Do you enjoy considerable freedom on use or spending of the remitted amount (if she receives it)? Do you take advice from anyone on matters related to the handling of money?
- 15) On what items do you spend this amount?  
 * Agriculture and related activities  
 * Child rearing  
 * Food and ration procurement  
 * Health  
 * Education of children  
 * Paying back loans  
 * Any other head
- 16) How great a capital expenditure can you make without consulting your husband?
- 17) Who has control over money raised from other sources as sale of agricultural produce, chicken, goat etc.?
- 18) How is your independent action or initiative related to financial transactions perceived by the community/family?
- 19) Do you manage to do any saving? What are your preferred ways of savings? Have you invested your saving in anything?

20) Have the remittances increased, decreased or remained stagnant overtime?

## II. Impact of Agricultural Activity/ Work

[Note: To be done with the Migrant family members' (Woman/Man/Elderly) those are left-behind]

1. What impact has male migration had on farming?
  - * Tilling land, land left fallow
  - * Decline in produce
  - * Problems related to planning, preparation to field
  - * Sharecropping
  - * Wage labour
2. Is ploughing taken less frequently and on less land?
3. What major work adjustments did you and your family has to make as a consequence of this migration?
4. What are the additional responsibilities related to agriculture you have to undertake in absence of the male migrant?
5. What problems do you face generally and specifically in mobilizing, hiring and supervising labour? Do you receive assistance from relatives or community?
6. Do you take independent decisions related to agriculture and are you encouraged?
  - * Decision to give a piece of land on sharecropping
  - * Decision to employ wage labour
  - * What to sow, purchase of seeds and fertilizers
7. Who oversees the payment in cash or kind for agriculture related work?
8. Do you often go to the market town to the seed and fertilizer depots for agriculture related work?
9. What kind of collaboration in production or investment decisions passes between you and male migrant? Is this collaboration direct, or is it mediated and censored by a resident male? For what decisions do you still continue to depend on your male migrant?

10. Have you visited institutions like:-

- * Post Office
- * Bank
- * Market Town
- * Seed and fertilizer depot
- * Children's school
- * PHC
- * CHC
- * Other Institutions_____

11. When did you visit and with whom?

12. Do you have a bank account in your name? Do you operate it on your own?

### III. HEALTH

[Note: To be done with the Migrant family members' (Woman/ Young Girls/ Mothers/Man/Elderly) those are left-behind]

1. Do you generally healthy/ unhealthy? Do you feel health has been deteriorating? Why?

2. With whom do you talk about your health problem?

3. Do you suffer any specific disease, illnesses? Which have you been most troubled by/ worst illness?

4. (a) What have you done about your illnesses? Treatment (Probe : whether tendency to attend to them/ neglect/ causes of neglect – for which problems they try out home remedies/ go to the doctor).

(b) Specific Illness or Diseased (At various points) (Most troublesome, bedridden, hospitalized etc.)

	Name of the Illness	Describe	When Occurred & Duration	How Handled (Actions)	In Handling Your attitude/ Family	Perception of Causes	Expenditure

					attitude/ Reasons		
i)							
ii)							
iii)							

- c) List the common child illness.
- d) List the common women related illness.
- d) List the common elderly related illness.
- e) List the common young girls and boys related health problems.

5. At what level of severity of the health problem do they go to the doctor? Whom do they go to and why? For which health problems do they only stick to home remedies? Which health problem/ Severity for which they feel the need to take rest/ permitted to rest?

6. What do you believe are the causes of these diseases (probe for types suffered)

7. Have you suffered from any mishaps/injury? When and how?

8. In general are women's illnesses taken lightly by male family members? Why?

9. Who takes decisions about when to seek healthcare services and how much to be spent on it?

10. Do you have enough money to attend to health of children, family members and your own health?

11. Has remittances meant improved monetary conditions – what consequence does this have for their family and their own health?

12. Do they face any problems related to seeking health care because of the absence of their male migrants'?

13. What new services/ improvement in existing services or what kind of health services/ facilities would you like in your village?

**IV. CONTROL OVER RESOURCES AND FAMILY CONFLICT**

[Note: To be done with the Migrant wives' those are left-behind]

1. Do you have money in your household spending every month? From what source? What freedom to spend? What freedom to buy things? Have women always had such freedom?

2. Do you have any separate money for yourself? Do you earn it or is it gifted? By whom? Are you free to spend/ save as you like? Do you have any savings of your own?

3. Have you sold/ pawed any of household/ personal belongings at time of financial distress? What things? When?

4. Do you have enough money for every need? What do you have cut down on/ forgo because of inadequate finances. Are you (constantly) worried about financial problems? Probe whether women's needs are sacrificed.

5. Does health of household members suffer for lack of money? Specifically women's health?

6. Are there any family quarrels over money? What are the quarrels mainly due to in your family? Between husband's/ wife, parents/ children?

**V. Common Property Resource (CPR)**

[Note: To be done with the Migrant family members (Woman/Man/Elderly) those are left-behind]

1. What are the Common Property Resources available in your village?

---

2. Can you access forest or CPR around your village?

---

(Prohibited -1, With Difficulty – 2, easily – 3, Permitted upto some extent – 4)

3. What resources do you access, when and for what purpose?

Sl.	Sowing season/ Monsoon/ Kharif ( Mat to October)
No	

1.	Common Resources	Land			Forest	River	Dam	Pond	Orchard	Fallow Land
		Doi n	Chaur a	Tan r						
	Purpose									
2.	Harvest season/ Winter/ Rabi (October to April)									
	Common Resources	Land			Forest	River	Dam	Pond	Orchard	Fallow Land
		Doi n	Chaur a	Tan r						
	Purpose									
3.	Post Harvest/ Summer/ Zaid: Kharif – Rabi (August – April to May)									
	Common Resources	Land			Forest	River	Dam	Pond	Orchard	Fallow Land
		Doi n	Chaur a	Tan r						
	Purpose									

(Consumption through gathering – 1, Selling – 2, Trading – 3, Cultivation – 4, Grazing – 5, Household Use – 6, Other – 7, None – 8)

## VI. Social Capital

1. Are you the member of any community based organization (CBOs)? Yes/

No _____

If yes, mention it _____

2. Do you have a membership in more than one (CBOs)? Yes/No _____

If yes, name it _____

3. Do you participate in community activities? Yes/ No _____

If yes, what are those activities _____?

4. How much do trust your village people in your crisis situation? _____

(High -1; Moderate -2; Low – 3; Not At All – 4)

5. Do other people in village; cooperate you in your need (Agricultural, migration, financial or health crisis)? Yes/ No

_____

If yes, who are they? _____

(Relatives – 1; People from same Caste group – 2; People from same sub-caste group -3; People from CBOs – 4; Other – 4 (specify).

6. Do you give or exchange gifts with others? Yes/No _____

If yes, when _____

What _____

How frequently _____

7. Do you contribute any financial contribution for community activities in your village?

Yes/No _____

If yes, when, what, how much and how frequent?

_____

8. Do you contribute any financial contribution for any of CBOs? Yes/No

_____

If yes, when, what, how much and how frequent?

_____

9. Have you ever settled down the conflicts in your village? Yes/ No _____

If yes, How many times _____

10. Do you abide by the norms and bylaws of the village? Yes/No _____

If no, what is the reason _____

11. Do women speaks confidently in public in you village? Yes/No _____

If yes, which matter _____

If no, which matter _____

12. Do men's respect and consider the ideas of women in village related matter?

Yes/ No _____

If yes, which matter? _____

**VII. Social Security Interventions**

- i) Are any government programs for livelihood, food distribution, agricultural subsidy, seed/ fertilizer/ tools distribution, livestock assistance, micro financing and credit operational in the area?
- ii) What is the impact of these programs in the economy of your household? Has it improved the living condition of your family?
- iii) Are there any difficulties in availing benefits of these programs? If yes, what are they?

## APPENDIX IV

### **OBSERVATION CHECKLIST**

#### **A. HOME/HOUSE**

1. What is cooked? Typical meal.  
Class- caste differentiation.
2. Intra household food distribution.
3. Eating habits/Nutrition.
4. Attitudes to food  
Beliefs, amount of food, types of food, energy.
5. Family Relations/ Power relations
  - * Male attitudes
  - * Behaviour to women
  - * Incidence of wife abuse. Over what? Why?
  - * Value of women's labour
6. Work

#### **Sites: Observe**

- Men-women's work hours of work & leisure
- Women's postures
- What all do they, women and men actually as transgressions
- Caste labour (observe)  
Type, conditions, remuneration's
- Time management of work
- Subsistence work – How much is needed in migrant and non-migrant households.

#### **B. IN THE VILLAGE**

1. Space in the village where women can socialize, congregate.
2. Is there restricted radius of their movement.
3. Is there restriction on women's interaction with outsiders/ other family members.



4. Higher class/ caste families – do they take pride in the fact that their women do not work in the field?
5. Daily chores – any changes.
6. Daily meals – method of preparations, utensils used – any changes. Staple diet – what is it.
7. Grocery stores – what do they store – bread, biscuits?
8. Kerosene stove, smokeless chulha – technology which can improve working condition for women – why is it not available?
9. Shortage of food – who is prioritized or discriminated.
10. Do women neglect minor ailments, do not attend to their Health problems – until they become serious – is it true.
11. Education of women – women’s own view about their education – do they view it as a route to financial & personal independence or more concerned about “widening one’s horizon”, “increasing ones social work”.
12. What changes do women identify which they think have eased their daily chores (e.g. piped water supply, flour mill)?
13. Are technologies like smokeless chulha, kerosene stove etc. which improve working condition for women valued by men.
14. Despite impetus for change, has village society successfully maintained the traditional roles and position of both men and women?
15. What are the women’s aspirations? Is the cultural ambience of the village supportive of women’s aspiration?
16. Opinion about women working of males/ of females.

### **C. Observe and find out through informal discussion and conversation with various people.**

- i) Anything visually unusual about this village community in its age- sex-caste composition.
- ii) Primarily agricultural or is there any significant non-agricultural enterprise.
- iii) Social stratification of village.
- iv) Condition of roads, pathways inside the village.
- v) Extent of ease of access to other villages/ towns via road etc. and whether it is possible all year round.
- vi) Physical appearance of the village – damage, refuse, cleanliness, distance of the place of ambulation.
- vii) Feelings of the villagers about local political leaders, Jharkhand movements, etc.
- viii) Perceptions about whether people feel that things are getting economically better.
- ix) Whether people seem generally happy in the village or would they leave if they could.
- x) Feelings about security, crime, other problems – their perceptions about problems in the village.

### **D. Find out in each village**

- i) Settlement pattern
- ii) Changes in methods of agricultural production.
- iii) Population changes in the area
- iv) Land legislation history
- v) Information on school system
- vi) Information on Health care system

### **E. Women's participation**

- i) Gram Panchayat
- ii) Social & political affair of the village
- iii) Village level institutions – VHSNC etc.
- iv) Voting

### **F. Health care and Medical services**

1. Private practitioners available – their qualification & background
2. Why they prefer to visit private practitioner and not government health care services.

3. Why they do not use PHC & Sub-centre. Is it because of:-
  - * Location
  - * Long waiting time
  - * Staff not available
  - * Medicines not available
  - * Prescribed medicines, difficult to procure from town
  - * Medicines of available, prescribed and given for few days only, villagers unable to fetch them at such frequency.
4. Why is private doctor more preferred?
5. Besides private allopathic doctor, who are the other practitioners available in the village?
6. What are the general health seeking behavior/ pattern of people? Minor ailments, are they ignored? Resort to home – remedies. Last resort, when condition persists is doctor?
7. In health seeking/ utilization of health care, any particularly group most affected – e.g. Women; women of child bearing age, female child etc.
8. Alcoholism
9. Nature of economic, cultural, social changes in the region.
10. Any other enquiries and questions in field.