# Chapter 3

# Methodology and Collection of Data

## 3.1 Introduction:

A study of the "Gender Disparity in Education and Economic Development in Assam (An Analysis of Baksa and Kokrajhar Districts)" has been presented in four chapters namely, chapter 4, chapter 5, chapter 6 and chapter 7. In chapter 4, interstate gender disparity in education in India with special reference to Assam has been analysed. In chapter 5, impact of gender disparity in education on economic development in India, Assam and in Bodoland Territorial Area District (BTAD) has been investigated. In chapter 6, gender disparity in education in Baksa and Kokrajhar districts has been examined, and in chapter 7, reasons of gender disparity in education and means to reduce the gap in Assam with special reference to Baksa and Kokrajhar districts have been examined and discussed respectively.

## 3.2 Interstate Gender Disparity in Education in India with Special Reference to Assam:

In chapter 4, interstate gender disparity in education in India with special reference to Assam has been discussed. To study the interstate gender disparity in education in India with special reference to Assam, firstly, gender disparity in education in India, secondly, reasons of variation in gender disparity in education in India, thirdly, gender disparity in education in Assam and lastly, reasons of variation in gender disparity in education in Assam have been discussed.

In the discussion of gender disparity in education in India, gender disparities in Literacy Rate[1] , Lower Primary level (classes I to V), Upper Primary level ( classes VI to VIII), Secondary level (classes IX and X), Higher Secondary level (classes XI and XII), Higher Education (18 to 23 years), Never Attended (who have never

[1] Total number of literates seven years and above expressed as a percentage to the total number of population seven and above.

attended educational institution) Rate [2], Attended Before (who have attended educational institution before) Rate [3], Illiteracy Rate [4] and Education for all Development Index (EDI) and Gender Equality in Education Index (GEEI) have been examined. In the discussion of gender disparity in education in Assam, gender disparities in Literacy Rate (LR), Lower Primary level (LP), Upper Primary level (UP), Secondary level, Never Attended (NA) Rate, Attended Before (AB) Rate, Illiteracy Rate (ILR) and EDI have been examined.

In all the above analysis, secondary data only have been used. Secondary data have been collected from Government of India, Census Reports of 1991, 2001, 2011; www.dise.in; Government of India-Ministry of Human Resource Development, All India Survey on Higher Education Reports of 2010-11, 2011-12, 2012-13, 2013-14, 2014-15, retrieved from aishe.nic.in/aishe/viewDocument.action?documentId=125, aishe.nic.in/aishe/viewDocument.action?documentId=162, aishe.nic.in/aishe/viewDocument.action?documentId=194, aishe.nic.in/aishe/viewDocument.action?documentId=196, aishe.ni c.in/aishe/viewDocument.action?documentId=206; Reserve Bank of India (2013), Annual Report of the Reserve Bank of India 2013; Government of India, Per Capita Net State Domestic Product at Current Prices, Table 1.8, retrieved from http://data.gov.in/node/89866/download; Government of India, Number and percentage of population below poverty line by states-2011-2012 based on Tendulkar Methodology, retrieved from https://data.gov.in/catalog/below-poverty-line-india.in; Government of Assam, Office of the Sarva Shiksha Abhiyan, Guwahati, office record; Government of Assam, Office of the Rashtriya Madhyamik Shiksha Abhiyan, Guwahati, office record; Indicus Analytics, 2014, Poverty Grid: Assam, livemint, retrieved from www.livemint.com/Opinion/r0wWgeyhHBWfdKIfciWmTP/Spatial-poverty-in-Assam.html; Government of India, District wise GDP and growth rate based at current price (2004-05) for 2009-10 Assam, retrieved from https://data.gov.in/catalog/district-wise-gdp-and-growth-rate-current-price 2004-05.

[2] Total number of NA seven years and above expressed as a percentage to the total number of population seven and above.

[3] Total number of AB seven years and above expressed as a percentage to the total number of population seven and above.

[4] Total number of illiterates seven years and above expressed as a percentage to the total number of population seven and above.

For India, Gender Parity Indexes (GPIs)[5] of total LR for the period 1991-2011, enrolment or gross enrolment ratio (GER)[6] in LP and UP for 2003-2004 to 2014-2015, GER in Secondary for 2010-2011 to 2014-2015, GER in Higher Secondary level (HS) for 2010-2011 to 2014-2015, GER in Higher Education (HE) for 2010-2011 to 2012-2013, Net Enrolment Ratio (NER)[7] in LP and UP for 2013-2014 to 2014-2015, NER in Secondary and HS for 2012-2013 to 2014-2015 and Gender Gaps (GGs)[8] of dropout rate (DOR)[9] in LP for 2007-2008 to 2013-2014, DOR in UP for 2010-2011 to 2013-2014, DOR in Secondary and HS for 2012-2013 to 2013-2014, NA Rate, AB Rate and ILR for 2011 have been calculated. Further, to examine the extent of gender disparity in education in India and in the States and Union Territories (UTs) of India, GEEI for 2014 and EDI for 2013-2014 and 2014-2015 have been calculated respectively.

EDI values have been calculated for the States and Union Territories (UTs) of India following the method developed by the UNESCO. The procedure of the calculation of EDI has been mentioned in chapter 1.

Following the method of calculation of GEEI by the Beyond Access Project, GEEI for India has been calculated for India for the year 2014. The definition and components of GEEI have been mentioned in chapter 1. For the calculation of GEEI, the Beyond Access Project developed values for the indicators based on the following assessment:

[5] GPI is a socio-economic index usually designed to measure the differences in an outcome that men and women achieve. It is calculated as the quotient of female achievement by male achievement of an outcome. A GPI equal to one indicates parity between females and males. A value less than one indicate disparity in favour of males and a value greater than one indicates disparity in favour of females.

[6] GER is the total enrolment in a specific level of education, regardless of age, expressed as a percentage of the eligible official school age population corresponding to the same level of education in a given school year.

[7] NER is the enrollment of the official age group for a given level of education expressed as a percentage of the corresponding population.

[8] GG is a disproportionate difference or disparity between the sexes. It is calculated as the male achievement over female achievement of an outcome. A GG equal to zero indicates parity between females and males. A positive value indicates disparity where male performance is higher than females and a negative value indicates male performance lower than females.

[9] DOR (by grade) is the proportion of pupils from a cohort enrolled in a given grade at a given school year who are no longer enrolled in the following school year.

**Table 3.1**
**Range for Assigning Values to the Indicators for the Calculation of GEEI**

| Score | Net girls' primary attendance | Girls' primary survival rate | Girls' secondary NER | GDI |
|---|---|---|---|---|
| *1* | *2* | *3* | *4* | *5* |
| 5 | 90% & above | 90% & above | 60% & above | 0.800 & above |
| 4 | 80-89% | 80-89% | 50-59% | 0.700-0.799 |
| 3 | 70-79% | 70-79% | 40-49% | 0.600-0.699 |
| 2 | 60-69% | 60-69% | 30-39% | 0.500-0.599 |
| 1 | 59% & below | 59% & below | 21% & below | Below 0.499 |

Where,

5=Excellent conditions

4=Very good conditions

3=Good conditions

2=Poor conditions

GEEI=Sum of weighted row scores divided by 4, where weights of net girls' primary attendance =1.25, girls' survival rate=2.5 and GDI=2.5

Gender Disparity in education across India has been found to be different. Reasons behind the interstate variation in gender disparity in education in India have been examined by using a model in the form of:

$$Y_i = \beta_0 X_{1i}^{\beta 1} X_{2i}^{\beta 2} \ldots\ldots\ldots\ldots X_{ni}^{\beta n} € \text{ ---------- (1)}$$

$$\log(Y_i) = \log\beta_0 + \beta_1 \log X_{1i} + \beta_2 \log X_{2i} + \ldots\ldots\ldots\ldots + \beta_n \log X_{ni} + \log €$$

where, € is the random disturbance term.

To find out the reasons behind the interstate variation in gender disparity in education in India the independent variables that have been used are percentage of Scheduled Caste (SC) and Scheduled Tribe (ST) population, percentage of people living below the poverty line, Per Capita Net State Domestic Product (PCNSDP)[10] and population size of the States and UTs for the year 2011 and the dependent variable that has been used is Gender Parity Index (GPI) of LR of the States and UTs for the year 2011.

[10] PCNSDP is the country's net domestic product that accounts for population.

India is a multi religious country where people of different religion live. Religion may also be a factor of interstate variation in gender disparity in education in India. The impacts of different religions on gender disparity in education in India has been examined by using the same model mentioned above (equation 1). To examine the impacts of different religions on gender disparity in education in India, percentages of Hindus, Muslims, Christians, Sikhs, Buddhists, Jains and Other Persuasions population of the States and UTs for the year 2011 have been used as independent variables and the dependent variable used is GPI of LR of the States and UTs for year 2011.

To examine the extent of gender disparity in education across Assam and for a comparative study amongst the districts, GPIs of literacy rate for 1971 to 2011, GER in LP and UP for 2005-2006 to 2014-2015, GER in Secondary for 2011-2012 to 2014-2015, NER in Secondary for 2012-2013 to 2015-2016 and GGs in DOR in LP and UP for 2005-2006 to 2014-2015, DOR in class IX and X for 2011-2012 to 2014-2015 and NA Rate, AB Rate and ILR in 2011 have been calculated. EDI values for the districts of Assam for 2012-2013 and 2013-2014 have also been calculated to examine the extent of and for a comparative study of gender disparity in education across Assam.

For Assam, reasons behind the variation in gender disparity in education have been analysed by using the same model stated above (equation 1). Percentage of SC and ST, percentage of poverty, Per Capita Gross Domestic Product (GDPPC)[11], population size and percentage of rural population of the districts for the year 2011 have been used as independent variables and GPI of LR has been used as dependent variable to find out the reasons behind the variation in gender disparity in education across Assam.

Religion may also be a factor of variation in gender disparity in education in Assam. To analyze the impacts of different religions on gender disparity in education across Assam, the same model (equation 1) stated above has been adopted. Percentages of Hindu, Muslims, Christians, Sikhs, Jains, Other Persuasions population of the districts in 2011 have been used as independent variables and GPI

[11] GDPPC is a measure of a country's economic output that accounts for population. It divides the country's gross domestic product by its total population. It, therefore, measures the country's standard of living.

of LR has been used as dependent variable to analyse the impacts of different religions on gender disparity in education across Assam.

## 3.3 Impact of Gender Disparity in Education on Economic Development in Assam and in Bodoland Territorial Area District (BTAD):

In chapter 5, impact of gender disparity in education on economic development in India in general and Assam and BTAD in particular has been discussed. Firstly, impact of gender disparity in education on economic development in India, secondly, impact of gender disparity in education on economic development in Assam and finally, impact of gender disparity in education on economic development in BTAD have been discussed.

In the discussion of impact of gender disparity in education on economic development in India, impacts of gender disparities in LR, LP, UP, Secondary, HS and HE on economic development have been examined. To examine the impact of gender disparity in education on economic development in Assam, impacts of gender disparities in LR, LP, UP and Secondary on economic development have been analysed. For BTAD, impact of gender disparity in education on economic development has been discussed by analysing the impacts of gender disparities in LR, LP, UP and Secondary on economic development.

In the development process, developing countries like India aim to reduce Total Fertility Rate (TFR)[12], Infant Mortality Rate (IMR)[13], Birth Rate (BR)[14], Death Rate (DR)[15] and increase Sex Ratio (SR)[16], Life Expectancy at Birth (LEB)[17], Net State Domestic Product (NSDP)[18], Per Capita Net State Domestic Product (PCNSDP)

[12] TFR represents the number of children that would be born to a woman if she were to live to the end of her child bearing years and bear children in accordance with current age specific fertility rates.
[13] IMR is the number of infants dying before reaching one year of age, per 1000 live births.
[14] BR is the total number of live births per 1000 of a population.
[15] DR is the total number of deaths (from all causes) per 1000 of a population.
[16] SR is the number of women per 1000 men.
[17] LEB reflects the average number of years a new born baby is expected to survive under the current schedule of mortality. It is a proxy measure for several dimensions like adequate nutrition, good health, education and other valued achievements.
[18] NSDP or the net domestic product is the GDP minus depreciation.

or Average Per Capita Income (APCI)[19], Gross Domestic Product (GDP)[20], Gross Domestic Product Per Capita (GDPPC), Educational Development Index (EI)[21], Mean Years of Schooling (MYS)[22], Living Standard Index (LSI)[23], Health Index (HI)[24] and Human Development Index (HDI)[25] .

To discuss the impact of gender disparity in education on economic development in India, Assam and BTAD secondary data have been used. Secondary data have been collected from the Government of India, Census Report, 2011; UNDP (2015), Ranking of Indian States in the World according to 2015 Human DevelopmentReport, retrieved from www.livemint.com/Politics/3KhGMVXGx XcGYBRMsmDCFO/Why-Kerala-islike-Maldives-and-Uttar-Pradesh-Pakistan.html; Government of India, Human Development Index and its Components by States, 1999-00 and 2007-08, retrieved from https://data.gov.in/catalog/human-development-index-and-its-components-states; Government of Assam, Statistical Handbook Assam 2014; Government of India, Census Report, 2011; Government of India, Office of the Registrar General, Census of India, State wise literacy rate in 2001 and 2011 and State wise gap in literacy rate of males and females in 2001 and 2011, retrieved from mospi.nic.in/sites/default/files/reports_and_publication/statistical_publication/social_ statistics/WM16Chapter3;data.worldbank.org, Government of India, Ministry of Health and Family Welfare (2011), Demographic and Health status indicators (1951-2011), ENVIS Centre on Population and Environment, retrieved from

[19] APCI is the average per capita income. Per capita income of a country is the total income divided by total number of population of the country.

[20] GDP is the broadest quantitative measure of a nation's total economic activity. More specifically, GDP represents the monetary value of all goods and services produced within a nation's geographic borders over a specified period of time.

[21] EI is a sub index of Human Development Index

[22] MYS indicates the average number of completed years of education of a country's population. It typically excludes years spent repeating individual grades. MYS is estimated for population aged 25 years and older, which is also the indicator used in the calculation of the HDI by UNDP. It replaced the literacy rate as a indicator under the education dimension in HDI in 2010.

[23] LSI is a sub index of HDI.

[24] HI is a sub index of HDI.

[25] HDI is a composite of three basic indicators of human development-longevity, knowledge and standard of living. Longevity is measured by life expectancy at birth; knowledge (or educational attainment) by a combination of adult literacy (two-third weight) and combined primary, secondary and tertiary enrolment ratios(one-third weight); and standard of living is measured by real GDP per capita (purchasing power parity, in dollars). The value of the index viz., HDI and the indices of its components viz., Health Index(HI), Education Index(EI) and Living Standard Index(LSI) in it range from 0 to 1. Score 1 is the highest possible theoretical score of the HDI in general and of all the indices of its components.

iipsenvis.nic.in/Database/Health_4119.aspx; Gender Composition, Sex Ratio of India and Madhya Pradesh 1901-2011, retrieved from censusindia.gov.in/2011-prov-results/data_files/mp/06GenderComposi tion.pdf; www.dise.in; Government of India, Office of the Registrar General and Census Commissioner of India, Abridged Life Tables, 2010-2014, P.5, retrieved from https://en.wikipedia.org/wiki/List_of_India_states_by_life_expectancy_at_birth; Government of India, SRS Statistical Report (2013), Infant Mortality Rate (per 100 live births), National Institute for Transforming India, retrieved from niti.gov.in/content/infant-mortality-rate-imr-1000-live-births; Government of India, Ministry of Statistics and Programme Implementation (2015), India states by GDP per capita, retrieved from statisticstimes.com/economy/gdp-capita-of-indian-states.php; Government of India, Office of the Registrar General and Census Commissioner, SRS Statistical Report 2013, retrieved from www.censusindia.gov.in/vital_statistics/SRSReports-2013.html; Government of India - Ministry of Human Resource Development, All India Survey on Higher Education Reports of 2010-11, 2012-13, 2014-15, retrieved from aishe.nic.in/aishe/viewDocument.action?documentId=125, aishe.nic.in/aishe/viewDocument.action?documentId=194, aishe.nic.in/aishe/viewDocument.action?documentId=206; Government of Assam and UNDP, Assam Human Development Report, 2014; Government of Assam, Statistical Handbook Assam of the years 1973, 1988, 2004, 2010, 2011, 2012, 2013, 2014; Thakur, A.K. and Kumar, D. (2009), Regional Development and levels of living in India, Deep and Deep Publications Pvt. Ltd., F-159, Rajouri Garden, New Delhi-110027; Das, M. (2007), Problems and Prospects of Ericulture in Assam with special reference to Barpeta District, Ph.D. thesis submitted to the Department of Economics, North Eastern Hill University, Shillong, Meghalaya, India; Ministry of Health and Family Welfare (2006), Report of the Technical group on Population Projections - Projected levels of expectation of life at birth in India and Major states 2001-2025, retrieved from cbhidghs.nic.in/Writeraddata/mainlinkFile/File1131.pdf; Government of Assam, Office of the Sarva Shiksha Abhiyan, Guwahati, officice record; Government of Assam, Office of the Rashtriya Maidhyamik Shiksha Abhiyan, Guwahati, office record.

To analyse the impact of gender disparity in education on economic development in India, Assam and BTAD, regression has been used. The regression models followed for the purpose are

$Y=\alpha+\beta X+€$ ------- (2)

$Y=AX^{\beta}€$ ------- (3)

Where in both the equations Y is the dependent variable, X is the independent variable and € is the error term. Though the equation (3) is non-linear, it has been linearised by logarithmic transformation. In majority of the test of the relations equation (2) has been used.

For India, firstly, impacts of Literacy Rate Gap (LRG) on HDI, EI, TFR, BR, DR, SR, IMR, LE and GDPPC have been examined. Secondly, impacts of Gender Gap (GG) of GER or GPI of GER, GG of NER and GG of DOR in LP on TFR, BR, DR, IMR, LEB, GDPPC or NSDPC, HDI, EI and SR have been examined. Thirdly, in UP, impacts of GG of GER or GPI of GER, GG of NER and GG of DOR in UP on TFR, BR, DR, IMR, LEB, GDPPC or NSDPC, HDI, EI and SR have been found out. Fourthly, in Secondary, impacts of GG of GER, GG of NER and GG of DOR in Secondary on TFR, BR, DR, IMR, LEB, GDPPC or NSDPC, HDI and SR have been examined. Fifthly, in HS, impacts of GG of GER, GG of NER and GG of DOR on TFR, BR, DR, IMR, LEB, NSDPC, HDI and SR have been found out. Finally, for India, in HE, impacts of GG of GER in HE on TFR, BR, DR, IMR, LEB, NSDPC, HDI and SR have been investigated.

In Assam, first of all, impacts of LRG on TFR, BR, DR, IMR, NSDP, PCNSDP, SR, HDI and EI have been examined. To show the impact of LRG on LEB indirectly, impact of DR on LE has also been found out. Secondly, in LP also, impacts of GG of GER and GG of DOR on TFR, BR, DR, IMR, NSDP, PCNSDP and HDI have been investigated. Thirdly, in UP, impacts of GG of GER and GG of DOR in UP on TFR, BR, DR, IMR, NSDP, PCNSDP and HDI have been found out. Finally, in Secondary, impacts of GG of Secondary GER and GG of Secondary DOR on HDI have been examined.

In BTAD, impacts of GG of LR, GG of DOR in LP, GG of GER and DOR in UP, GG of GER and DOR in Secondary on HI, EI, LSI, BR, DR, SR, MYS and APCI have been examined.

## 3.4 A Comparative Analysis of Gender Disparity in Education in Baksa and Kokrajhar Districts:

In chapter 6 a comparative analysis of gender disparity in education in Baksa and Kokrajhar districts has been made. To compare the gender disparity in education in Baksa and Kokrajhar districts, firstly, gender disparity in LR, secondly, gender disparity in ILR, thirdly, gender disparity in NA Rate, fourthly, gender disparity in AB Rate, sixthly, gender disparity in LP, seventhly, gender disparity in UP, eighthly, gender disparity in Secondary and finally, reasons of gender disparity in LR have been compared. In LP, UP and Secondary, gender disparities in GER and DOR in the districts have been compared. In most of the above comparisons, comparison has also been made with the State (Assam).

To compare the gender disparity in education in Baksa and Kokrajhar districts, secondary data upon male and female literates; male and female literates in rural areas; male and female literates in urban areas; male and female literates among SC, ST and Other categories; male and female literates in different religious groups; male and female illiterates; male and female illiterates in rural areas; male and female illiterates in urban areas; male and female illiterates among SC, ST and Others categories; male and female illiterates in different religious groups; male and female population; male and female population in rural areas; male and female population in urban areas; male and female population among SC, ST and Others categories; male and female population in different religious groups; males and females who have attended before and never attended educational institution; males and females in rural and urban areas who have attended before and never attended educational institution; males and females who have attended before and never attended educational institution among SC, ST and Others categories and overall male and female GER and DOR in LP, UP and Secondary have been collected from the Government of India, Census Report, 2011; Government of Assam, Statistical Handbook Assam, 2014; www.dise.in; Government of Assam, Rashtriya Madyamik Shiksha Abhiyan, Guwahati, official record and Government of Assam, Sarva Shiksha Abhiyan, Guwahati, official record. For the comparison of gender disparity in literacy rate of the two districts, primary data have been collected. The procedure of collection of the primary data has been shown in the following section.

First of all gender disparity in LR of the districts and the State has been compared. To compare the gender disparity in LR of the districts and the State, firstly, gender disparity in overall LR in the blocks of the districts, secondly, gender disparity in LR in rural and urban areas of the blocks of the districts, thirdly, gender disparity in LR of SC, ST and Other categories in the districts and the State and thereafter religion wise gender disparity in LR in the districts and the State have been examined and compared by calculating the GPI of LR values.

Secondly, in comparing the gender disparity in ILR of the districts and the State, gender disparity in total ILR, rural-urban wise ILR, caste-wise ILR and religion-wise ILR of the districts and the State (according to the age groups 6-14, 15-19, 20-24, 25-29, 30-34, 35-59, 60 and above, age not stated, all ages above six years) have been examined and compared by calculating GG of ILR values.

Thirdly, gender disparities in NA Rate and AB Rate have been examined. In comparing the gender disparities in NA Rate and AB Rate, gender disparities in overall NA Rate and AB Rate, gender disparities in NA Rate and AB Rate in rural and urban areas and gender disparities in NA Rate and AB Rate of SC, ST and Others categories of the districts and the State (according to the age groups 6-14, 15-19, 20-24, 25-29, 30-34, 35-59, 60 and above, age not stated, all ages above six years) have been examined and compared by calculating GG of NA Rate values and AB Rate values.

To compare the gender disparities in LP, UP and Secondary, GPI in overall GER and GG in overall DOR in the three levels of the districts and the State have been compared.

Finally, reasons of gender disparity in LR in the districts have been compared using the primary data.

## 3.5 Reasons of Gender Disparity in Education and Means to Reduce the Gap in Assam with Special Reference to Baksa and Kokrajhar Districts:

In Assam, as will be shown in chapter 4, female LR remained lower than male LR throughout the period 1991-2011 in all the districts of Assam and the gender

disparity in LR was highest in Baksa district and fourth highest in Kokrajhar district in 2011. Female NA Rate surpassed male NA Rate in the age groups viz., from 7-14, 15-19, 20-24, 25-29, 30-34, 35-59, 60 and above (60+) and Age Not Stated (ANS), in the State as a whole and in most of its districts including Baksa and Kokrajhar districts, according to the 2011 Census Report of India. Further, in the two districts and in the State as a whole, gender disparity in NA Rate increased with the higher age groups viz., from the age group 7-14 up to the age group 60+. Therefore, the investigator considered it important to find out the reasons of many females being illiterates resulting in gender disparity in LR in Assam with special reference to the two districts.

In chapter 7, firstly, reasons of gender disparity in LR and thereafter means to reduce the gap in Assam with special reference to Baksa and Kokrajhar districts have been examined and discussed respectively. To find out the reasons of gender disparity in the LR, household income, performance of household chores, society's attitude, distance of learning place, parental education and knowledge of relevance of literacy, adult literacy or lifelong learning have been examined.

To find out the reasons of gender disparity in education and the means to reduce the gap in Assam with special reference to Baksa and Kokrajhar districts, primary data were collected from the two districts. First of all from the two districts, three Community Development (CD) Blocks in each district were selected. In each district the block that had the highest gender disparity in LR (with lowest GPI of LR), the block that had the average gender disparity in LR (with average GPI of LR) and the block that had the lowest gender disparity in LR (with highest GPI of LR) were selected. First village of each block of the districts had the highest gender disparity in LR (with lowest GPI of LR), the second village in the blocks of the districts had the average gender disparity in LR (with average GPI of LR) in the districts and the third village in the blocks of the districts had the lowest gender disparity in LR (with highest GPI of LR). From each of the selected villages, five per cent of the households was surveyed. The total number of households for the survey was 221. As the sampling was purposive in nature, only those households, where gender disparity in LR had been found viz., where female LR lag behind male LR were selected for the interview. Illiterate female and head of the household if necessary were

interviewed. Simple percentages have been calculated from the collected data. The procedure of the selection of the sample was based on the Census of India, 2011. Field survey was conducted in the period July, 2016 to January, 2017. The sample design has been shown in the following Table 3.2.

**Table 3.2**
**Sample Design for Field Survey**

| District | No. of CD Blocks | Name of Block | No. & Name of Villages and reason behind selection | No. of House-olds as per Census, 2011 | Sample House-holds (5%) |
|---|---|---|---|---|---|
| Baksa (had the highest gender inequality in LR with GPI of LR =0.79) | Block 1 | Nagrijuli (had the highest gender inequality in LR, 0.76 GPI of LR) | Vill. 1 : No.2 Kuchungjuli (had the highest gender inequality in LR, 0.51 GPI of LR) | 48 | 2 |
| | | | Vill. 2: Kumbhijhar (had average gender inequality in LR, 0.72 GPI of LR) | 333 | 17 |
| | | | Vill. 3: Batabari (had the lowest gender inequality in LR, 0.93 GPI of LR) | 81 | 4 |
| | Block 2 | Baska had average gender inequality in LR, 0.80 GPI of LR) | Vill. 1: Dumunibagan (had the highest gender inequality in LR, 0.59 GPI of LR) | 1413 | 71 |
| | | | Vill. 2: Bangnabari (had average gender inequality in LR, 0.77 GPI of LR) | 93 | 5 |
| | | | Vill. 3: Bhehari (had the lowest gender inequality in LR, 0.94 GPI of LR) | 199 | 10 |
| | Block 3 | Barama (one of the blocks that had the lowest gender inequality | Vill. 1: Dangarmakha (had the highest gender inequality in LR, 0.73 GPI of LR) | 205 | 10 |
| | | | Vill. 2: Gelpajhar (had average gender inequality in LR, 0.81 GPI of LR) | 277 | 14 |

| | | | | | |
|---|---|---|---|---|---|
| | | in LR, 0.84 GPI of LR) | Vill. 3: Kharuajan (had the lowest gender inequality in LR, 0.89 GPI of LR) | 448 | 22 |
| Sub Total | | | | | 155 |
| Kokrajhar (had a comparat-ively lower gender disparity in LR than Baksa with GPI of LR =0.81) | Block 1 | Kachug-aon (had the highest gender inequality in LR, 0.78 GPI of LR) | Vill. 1: Thaigirguri (had the highest gender inequality in LR, 0.51 GPI of LR) | 60 | 3 |
| | | | Vill. 2: Hatigarh (had average gender inequality in LR, 0.75 GPI of LR) | 441 | 22 |
| | | | Vill. 3: Gokulkhata (had the lowest gender inequality in LR, 0.99 GPI of LR) | 114 | 6 |
| | Block 2 | Gossaig-aon (had average gender inequality in LR, 0.82 GPI of LR) | Vill. 1: Fulkumari (had the highest gender inequality in LR, 0.39 GPI of LR) | 16 | 1 |
| | | | Vill. 2: Mokrambil (had average gender inequality in LR, 0.69 GPI LR) | 362 | 18 |
| | | | Vill. 3: Daimaguri Pt-II (had the lowest gender inequality in LR, 0.97 GPI of LR) | 33 | 2 |
| | Block 3 | Debitola (had the lowest gender inequality in LR, 0.85 GPI of LR) | Vill. 1: Bengdoba (had the highest gender inequality in LR, 0.25 GPI of LR) | 44 | 2 |
| | | | Vill. 2: Sisti Pt-III (had average gender inequality in LR, 0.63 GPI of LR) | 53 | 3 |
| | | | Vill. 3: Debarttor Khopati Pt-II (had the lowest gender inequality in LR, 0.99 GPI of LR) | 183 | 9 |
| Sub Total | | | | | 66 |
| Grand Total | | | | | 221 |

**Source:** Government of India, *Census Report, 2011*.
**Note:** Vill. represents village.