CHAPTER - 5
HUMAN DEVELOPMENT IN THE TRIBAL INHABITED DISTRICT KOKRAJHAR

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5.1   Introduction

It is now widely accepted that the conventional measures of well being such as per capita GDP and per capita consumption do not capture the broader concept of human capability. Such measures can't reflect the true picture of the true "Quality of Life." High economic growth do not automatically transfer into the betterment of lives of the people, if the benefit is not accessible to all sections of the society; and it is the case which is going on in most of the developing countries of the world, including India. In India, despite of the significant achievement in terms of economic development, basically since the economic liberalization policy started by the then Narasimha Rao government since 2001, the proportion of the people living below the poverty line did not decrease much. There has been wide spread poverty, low level of educational attainment, vast income gap, unequal opportunities between men and women, suppression of economic, social, cultural and political rights representing "Unhealthy Growth." Even the case is more relevant in case of the state of Assam, in general, and the Tribal inhabited districts of BTAD area, in particular.

Many research studies undertaken by the academicians and scholars revealed that the state of Assam is lagging behind in terms of human development aspect. As published by Assam, HDR, 2003, the HDI rank of Assam was 26 in the country. The aspect of human capabilities is even more aggravated in the tribal inhabited district of Kokrajhar. The HDI rank of Kokrajhar district was 15th in the state as per the same report.

The literacy rate of the state of Assam is too low in comparison to All India average. As per 2011 census data, it was 82.42 and 73.18 percent for All- India average and Assam respectively. In the tribal inhabited district of Kokrajhar, it was

only 66.60 percent. As per 2011 census data, the life expectancy at birth for the state of Assam was only 65 years whereas for all- India it was 69 percent. The per capita income (2011) of Assam, which determines the standard of living of the people, was Rs.37, 250.00 and it was Rs.60, 972.00 for the country in average. There has been a wide spread and chronicle poverty in the state of Assam since independence. As per the 2010 data, estimated by the Planning Commission of India, the people living below the poverty line was 36 percent and 33 percent respectively for the state of Assam and India in average.

So, the basic objective of the present chapter is to systematic inquiry into the present state of the "Human Development Aspect" in the tribal inhabited district of Kokrajhar in the state of Assam.

5.2   A Brief Profile of Kokrajhar District in Assam
5.2.1   Area and Location

The tribal inhabited district of Kokrajhar can be described as the gateway for other states of the country while entering to North East Region. Both road and rail routes touches the district Kokrajhar at Srirampur before they enter other districts in the state of Assam and other North East states. Data reveals that the Kokrajhar district has a total area of 3296 Sq. km. (Rural: 3279.68 Sq. Km and Urban: 16.32 Sq. Km). As per the 2011 census data, total population of the district was 887,142; male and female population being 452,905 and 434,237 respectively. The district of Kokrajhar is located on the river bank of Mighty Brahmaputra in Assam. The district lies roughly between 89.46' E to 90.38' E longitudes and 26.19" N to 26.54" N latitudes. The district is bounded on the north by the Himalayan kingdom of Bhutan; and by Dhubri district on the south, Chirang and Bongaigaon district in the east and West Bengal to the west.

5.2.2   Administrative Division

Till 1956, the tribal inhabited district of Kokrajhar was a part of the then undivided Goalpara district. In 1957, Kokrajhar sub-division was created by carving out northern part of the sub-division of Dhubri and some parts of the sub-division of

Goalpara. Geographical area of the then Kokrajhar sub-division was 4065 (km^2); and the sub-division covered five tracts of the then popularly known Eastern Dooars consisting of Bijni, Sidli, Chirang, Ripu and Guma. On the day of 1st July, 1983, it was up-gradated to district status as Kokrajhar district; and the area was extended to the river Sonkosh in the west from the river Manas in the east. In 1989, when there was a further reorganization, about 40 percent of the geographical area of Kokrajhar district, area from Bijni and Sidli revenue circle was curved out and included in the new district of Bongaigaon. Further, some 20 villages from Naikgaon Panchayat under the Chapar Revenue Circle were merged with the district Kokrajhar. The present Geographical area of the district Kokrajhar which covers three sub-divisions, namely, Kokrajhar, Gossaigaon and Porbotjhora is estimated at 3,196.22 (km^2).

5.2.3 Population

The colorful Bodo community comprises the majority in Kokrajhar district. The district also has a sizeable Rajbangsi and Santhali population. As per 2011 census data, the percentage of SC and ST population in the district was 3.33 percent and 31.41 percent respectively. The total population of the district during 2001 was 905,764 with a decadal growth of 15 percent for the period 1991-2001, which is lower than the state and national average. As per 2011 census data, total population of the district increased to 887,142. The growth rate of population in the district during 2001-2011 was 15.21 percent which is lower than the state average of 17.07 percent. As per 2011 census data, 6.19 percent population in the district lives in urban areas, which is much lower than the state average of 14.9 percent. There are altogether four towns in the district. The density of population in the district was 269 which are lower than the state average of 398 (Census 2011). In terms of religion, altogether 65.6 percent population is constituted by the Hindus, 20.36 percent by the Muslims, 13.72 percent by the Christian and negligible proportion of the total population of the district belongs to other religions. Demographic pattern of the tribal inhabited district of Kokrajhar is unique in nature.

5.2.4 Sex ratio

The overall sex ratio in the district during 2011 was 959 against the state average of 958. Religion wise, sex ratio of the Christian community was better (960) than that of the Muslims (949) and the Hindu community (938) in the district.

5.2.5 Literacy Rate

As published by census data 2011, literacy rate of the Kokrajhar district was 65.22 percent which is lower than that of the state average of 72.19. Female literacy of 59.27 percent of the district was also far below the male literacy of 71.89 percent. Religion wise literacy rate as reflected from the census data 2011; the literacy rate of Hindus (56.1 percent) was better than that of the Muslims (40.7 percent) and Christians (44.4 percent) community. Gender discrepancy in literacy was more reflected in the district. The female literacy rates of Muslims (32.6 percent) found to be much lower than the Christian (37.2 percent) and the Hindus (46.3 percent). Literacy rate of the tribal inhabited district Kokrajhar has remained low which in turn affected formation of human capital in the district.

5.2.6 Workforce

As reflected by the census data 2011, the strength of workforce in the district at present is about 38.45 percent. This proportion is almost same to the state average of 38.36 percent. However, marginalization of workforce in the district (9.92 percent) is smaller than the state average of Assam (10.52 percent). Religion wise data reflects that Muslims has larger proportion of non-workers than other two major communities. Moreover, relatively smaller proportion of cultivators and larger proportion of agricultural labor among the rural Muslim community reflect that possession of cultivable land in the community is limited.

5.2.7 Education and Health

As per data published by the District Statistical Hand Book 2018-2019, the district has 1511 primary educational institutions, 289 middle schools, 77 high schools and 14 higher secondary schools. However, the pattern of enrolment at different levels

of education indicates that the district has much higher potential for enrollment of students than the state average. Statistical data indicates that each primary school in the district accommodates 94 students against the state average of 116 students, each middle schools accommodates 130 students while the state average is 171 and each high schools accommodates 113 students against the state average of 133 students. However, performance of students in final school examination under state education board is not satisfactory in the district. The pass percentage in the district during 2016 was just 50.20 percent (ranked 21st among the 33 district in the state) compared to the state average of 53.5 percent; even the percentage gone down from 2015 pass percentage of 52.49. The district has two hospitals (most of the districts in the state has one), 10 PHCs, 7 dispensaries, 160 sub-centers, diagnostic centre 11 and 383 pharmacy. There are also two private hospitals in the district. Hospital bed per lakh population in this district is 42, which is much higher than the state average of 27 per lakh population.

5.2.8   Human Development Index

Kokrajhar is one of the poor performing districts in terms of development, i.e. in the three basic dimensions of human development, that is, 'a long and healthy life, knowledge and decent standard of living'. As per Assam Human Development Report 2014, HDI value of the district was 0.519 (20th rank), which is below the state average of 0.557. In terms of income, education and health, the district occupies 22nd, 18th and 14th places respectively in district rankings. The Human Poverty Index calculated in 2011 indicates that 31.9 percent of population in the district lives under poverty and placed in 21st rank in the state. In terms of Gender Related Development Index (GDI), the district is placed 10th position in the state and the index 0.869 was lower than the state average of 0.875 (Assam Human Development Report, 2014).

5.2.9   Natural Resource Base

The district is situated in a humid sub-tropical climate, which is the characteristic of the lower Brahmaputra Valley of Assam. There is high rainfall and humidity. The district also has the largest concentration of forest in the state. The soil

in the district is fertile and suitable for paddy cultivation. The main source of irrigation in the district is the water that flows along the rivers, natural dongs and available canals. Rain water flows down from the hill tracts of Bhutan along the foothills and reserve forests of the district.   Many rivers originating from Bhutan Hills and tributaries of the river Brahmaputra has been contributing to the agriculture as a source of irrigation; and among the rivers which flows along the district are river Tipkai, Sonkosh, Gourang and Champabati are important. The soil throughout the district is composed of sand and clay in varying proportion ranging from pure sand in the riverbed to soft clay in different parts. The rocks found in the district are all sedimentary type. In the southernmost part of district there are two small hills that are composed of metamorphic rocks. Forest is one of the most prominent features of Kokrajhar district. The present estimated area under reserved forests is roughly 1,719 sq. km. Though records show that about 55 percent of the total geographical area under reserved forest, the actual position has dwindled to some extent due to relentless felling of trees by unscrupulous elements and encroachment of reserved forest which form a serious concern for the district.

5.2.10   Gross District Domestic Product

The Gross State Domestic Product (GSDP) of Assam for the financial year 2016-17 at current prices and constant (2011-12 prices) was 254478 crore and 202656 crore respectively. The Gross District Domestic Product (GDDP) of Kokrajhar was smaller than some of the districts in the state; GDDP for the financial year 2016-17 at current and constant (2011-12 prices) was 651176 lakh and 552281 lakh respectively. The Per Capita GSDP of the state at current and constant prices was Rs. 75898 and Rs. 60442 respectively. The Per Capita GDDP of Kokrajhar at current prices was Rs. 61662; and contrary to this, the figure at constant prices was Rs. 53, 715. This indicates that the Per Capita income of the tribal inhabited district of Kokrajhar was much lower than the state average of Assam and all-India average. Agricultural activity and productivity in the district involves great concern of nutrition and food security unless effective policy is planned and executed by the authority.

5.2.11 Agriculture

. In Kokrajhar district, 27.1 percent of geographical area is put into agriculture use; the figure for the state as a whole is 35.6 percent. It is found that about 59.7 percent cropped area in this district is sown more than once, which is more than the state average of 43.6 percent. Moreover, net cropped areas of the district (54.6 percent) are under HYV seeds which are greater than the overall net cropped areas in the state (47.5 percent). Consumption of fertilizer per hectare in this district (45.6 kg) is also found to be more than the state average of (41.6 kg). However, it has been observed that the agricultural production has declined considerably in recent times.

5.2.12 Industries

The state of Assam is industrially backward state; and the position of Kokrajhar district in industrial scenario of the state is insignificant. The district has 27 registered factories and about 4 small scale units and 22 nos. of micro firms (1.8 percent of the state total). The district has five handloom training centers, four weavers' extension services units and three handloom production centers. The handloom production unit covers 1055 number of villages in the district; and a total of 59,579 Nos. of weavers are engaged. The handloom sector which has high potentiality in the district necessitates a proper initiative by the government.

5.3   Sample Households

According to 2011 census data, the BTAD area has 4 districts, 10 sub-division, 12 towns, 25 Development Blocks and 3066 villages with a total population of 31, 51,047. The present study (primary survey) covers the tribal inhabited district of Kokrajhar in BTAD. As per 2011 census data, the district has 3 subdivisions, 9 Revenue Circles, 11 CD Blocks (5 main blocks and 6 part blocks) which comprises 1068 villages including 15 uninhabited villages; and a total population of 887,142.

As analyzed details in chapter-1 about the methodology employed in the present study, primary data were collected during 2017-2018 from 375 households; from five Blocks, namely Kokrajhar Block, Dotma Block, Kachugaon Block, Gossaigaon Block and Hatidura Block has been considered for current study in the

district. The surveyed households are distributed over 15 villages spread over the district; considering three (3) villages from each Block. The surveyed 375 households had a total of 2005 family members of which 1014 persons of male and 990 persons of female. Survey data indicates that out of 375 sample households considered for the present study; caste wise percentage of sample households are represented by ST (51 percent), SC (4 percent), OBC (19 percent), General (2 percent) and others including minority community (24 percent).

5.4   Population, Family Size and Sex Ratio of Sample Villages

As per census data 2011, the Kokrajhar district has a total population of 887,142 which accounts for 2.84 percent of the total population of the state. The density of population of the tribal inhabited district of Kokrajhar is 269 persons per square kilometer which is lower than the average density for the state 398. The decadal variation in population (2001-2011) in the district of Kokrajhar is (15.21) which are lower than the state of (17.07).

Size of the population of a region has a link with various indicators of human development. Overpopulation is associated with negative environmental and economic outcomes ranging from the impacts of over-farming, deforestation, water pollution and global warming. In a 'capital poor' and technologically backward state like Assam, growth of population reduces output by lowering the per capita availability of capital which ultimately affect the standard of living index of the people in the society.

5.4.1   Average Family Size

A large family size has certain negative impact in the society. Large family size leads to low or poor levels of education, income, health, welfare and economic status. A smaller family size represents for better levels of education, incomes, health and economic life, and each child receives more parental attention and educational advantages, which generally raise her self-esteem. Children in small families tend to have higher school and personal achievement levels than the children of larger families; and thus affect human development indicators in the society.

**Table 5.1   Population, Family Size and Sex Ratio in Sample Village**

Village/ Block/District	Sample Household	Population			Average Family Size	Sex Ratio
		Person	Male	Female		
Haloadol	25	115	59	56	5	949
Ghoramara	25	160	79	81	6	1025
Dholmara	25	154	75	79	6	1053
Kokrajhar	**75**	**429**	**213**	**216**	**6**	**1014**
Gossainichina	25	143	71	72	6	1014
Singimari	25	126	65	61	5	938
Boragari	25	119	62	57	5	919
Dotma	**75**	**388**	**198**	**190**	**5**	**960**
Gangia	25	156	79	77	6	975
1No Sekadani	25	143	73	70	6	959
Kumtola	25	108	53	55	4	1038
Kachugaon	**75**	**407**	**205**	**202**	**5**	**985**
Habrubil	25	113	56	57	5	1017
Kartimari	25	132	71	61	5	859
Tulshibil	25	130	66	64	5	970
Gossaigaon	**75**	**375**	**193**	**182**	**5**	**943**
Pokalagi	25	126	62	64	5	1032
Srirampur No.1	25	150	77	72	6	935
Mechpara	25	130	66	64	5	970
Hatidura	**75**	**406**	**205**	**200**	**5**	**976**
Kokrajhar District	**375**	**2005**	**1014**	**990**	**5**	**976**

Source: Primary Survey

In the present context in which government is having family planning program, size of the average family member has important implications for human development aspect. Table 5.1 indicates that the average family size in the sample villages is ranges from four (4) to six (6). Ghoramara, Dholmara in Kokrajhar Block; Gangia, 1 No Sekadani in Kachugaon Block and Srirampur No. 1 in Hatidura Block have average family size of six (6). Out of fifteen (15) sample villages, Kumtola in Kachugaon Block represent single village having smallest average family size of four (4). Primary survey data shows that except Kokrajhar Block, all the four Blocks has average family size of five (5). In the present study, size of the average family represent

irrespective of nuclear, joint and extended type of family. The average family size of sample blocks in the district is depicted in Fig. 5.1.

Fig. 5.1   Average Family Size of Sample Blocks
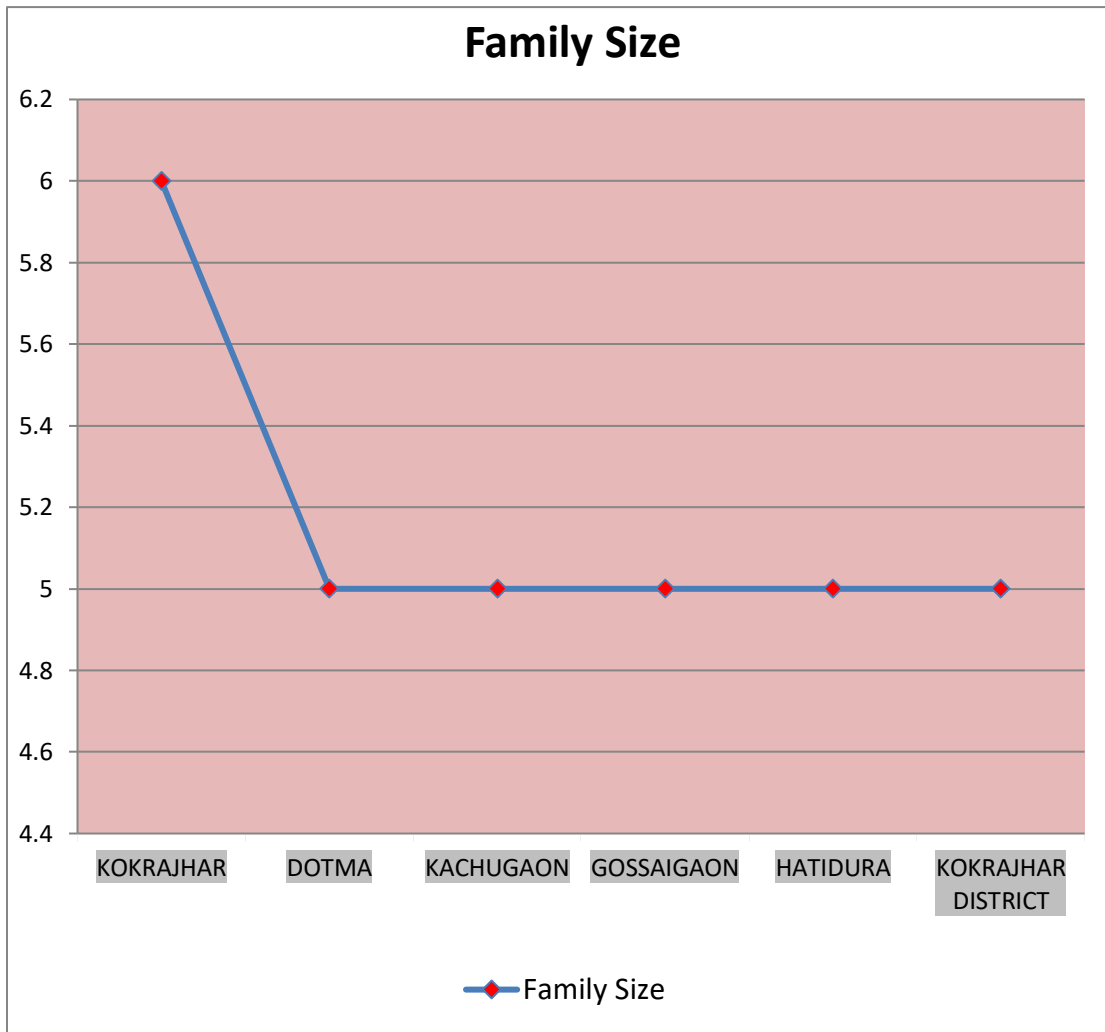
Unlike other districts of Assam, the average family size in the tribal inhabited district of Kokrajhar did not vary significantly across the sample villages. Lack of educational awareness which acts as a barrier in the implementation of family planning/welfare program has contributed to this aspects. Given the limited resource base, this aspect has contributed to low level of human development in the study area.

5.4.2 Sex Ratio of Sample Villages in Kokrajhar District

The sex ratio is defined as the number of women per one thousand men. Sex ratio represents a good indicator about the social status of women that exist in the society. Sex ratio of a region involves economic and human capability implications as it is related to gender equity aspect in the society. Sex ratio in Assam was fond to be adverse during 2oth century, and it has improved significantly in recent decades only. Census data 2011 revealed that there were 958 women for every 1000 men in the State, compared to 943 per 1,000 for the country. It is worthwhile to mention that the sex ratio in the age group 0-6 years in the state of Assam is more equitable in comparison to all-India which has positive future implications. Improvement of sex ratio in Assam has come by the time when the overall sex ratio in the country has been declining; and this represent extremely positive development for the state of Assam. As estimated by the census data 2011, sex ratio of the tribal inhabited district was 959, higher by one woman for every 1000 male population of the state average.

Fig.5.2   Sex Ratio in Sample Blocks
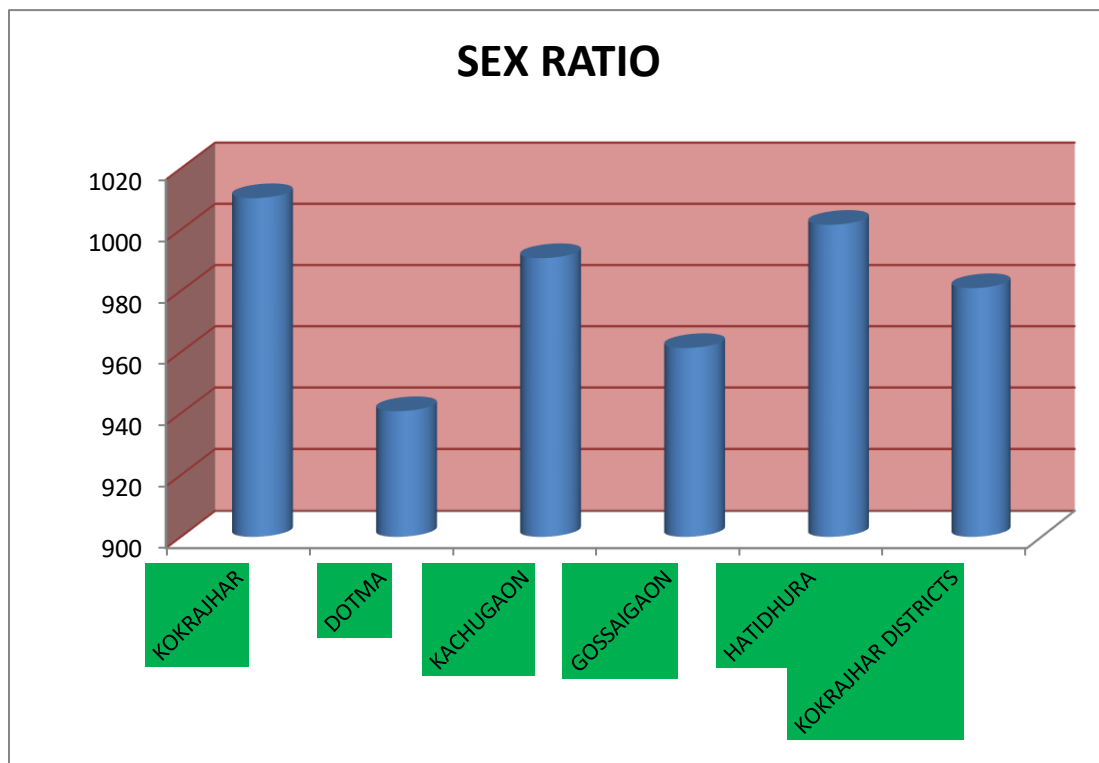
Source: Calculated based on Primary Data

As shown in Table. 5.1, survey data indicates that the average sex ratio of tribal inhabited district of Kokrajhar is 976 which show better sex ratio than 2011 census data. It is noteworthy to mention that Ghoramara (1025), Dholmara (1053) in Kokrajhar Block; Habrubil (1017) in Gossaigaon Block and Pokalagi (1032) in Hatidura block have favorable sex ratio in which number of female is higher than male population. Survey data shows that Kokrajhar, Kachugaon, Hatidura, Dotma and Gossaigaon has sex ratio in descending order, represented by (1014), (985), (978), (960) and (943) females per thousand male population respectively. Survey data reveals that there are vast inter block differences of sex ratio in the study area. Blok wise sex ratio in the study area is depicted in the Fig. 5.2.

5.5   Age Composition of Sample Villages

The age composition of population has a important bearing and implications on the socio-economic life in the society; and it has undergone a considerable change during the period 1971-2011 in the state of Assam including tribal inhabited district of Kokrajhar. Fertility rate in the state during the period 1971-2011 has declined; and this aspect is revealed by the fact that the proportion of the age group of population with 0-14 years has decreased from 46.9 percent to 40.2 percent during the period. However, there was an increase in the proportion of women population in the age group of 15-49 years from the figure 43.4 percent in 1971 to 49 percent in 2011 revealing the possibility of high birth rate in the state.

Table 5.1 shows the age distribution of population in the study area based on primary survey. Primary data indicates that on average age category below 6 years, 7-14 years, 15-59 years and above 60 years are represented by 10 percent, 14 percent, 63 percent and 12 percent respectively in the tribal inhabited district of Kokrajhar.

5.5.1   Population below Six Years

In the present context in which government is having family planning program, age composition of the population in the society has important implications for human development aspect. Table 5.2 represents age wise population distribution in sample

Table 5.2   Age wise Population Distribution of Sample Villages in Kokrajhar District

Village/ Block/District	Persons	Below 6 Years			7 Years to 14 Years			15 Years to 59 Years			Above 60 Years		
		P	M	F	P	M	F	P	M	F	P	M	F
Haloadol	115	8	6	2	21	13	8	80	39	41	6	3	3
Ghoramara	160	16	7	9	35	16	19	84	42	42	25	12	13
Dholmara	154	23	12	11	19	5	14	96	48	48	16	9	7
Kokrajhar Block	**429**	**47** (11)	**25** (6)	**22** (5)	**75** (17)	**34** (8)	**41** (9)	**260** (61)	**129** (30)	**131** (31)	**47** (11)	**24** (6)	**23** (5)
Gossainichina	143	16	9	7	21	12	9	76	35	41	21	9	12
Singimari	126	16	9	7	22	11	11	75	39	36	13	6	7
Boragiri	119	10	7	3	5	2	3	93	51	42	11	6	5
Dotma Block	**388**	**43** (11)	**25** (7)	**17** (4)	**49** (13)	**26** (7)	**23** (6)	**247** (64)	**127** (33)	**120** (31)	**49** (13)	**21** (6)	**28** (7)
Gangia	156	25	11	14	11	5	6	107	56	51	13	8	5
1No Sekadani	143	14	9	5	6	5	1	99	46	53	24	13	11
Kumtola	108	10	5	5	17	8	9	69	35	34	11	4	7
Kachugaon Block	**407**	**49** (12)	**25** (6)	**24** (6)	**34** (8)	**18** (4)	**16** (4)	**275** (68)	**137** (34)	**138** (34)	**48** (12)	**25** (6)	**23** (6)
Habrubil	113	11	7	4	20	9	11	75	35	40	7	4	3
Kartimari	132	14	10	4	18	11	7	85	41	44	14	9	5
Tulshibil	130	14	4	10	21	14	7	74	38	36	21	10	11
Gossaigaon Block	**375**	**39** (11)	**21** (6)	**18** (4)	**59** (16)	**34** (9)	**25** (7)	**234** (62)	**114** (30)	**120** (32)	**42** (11)	**23** (6)	**19** (5)

Pokalagi	126	9	3	6	28	13	15	80	41	39	8	3	5
Sirampur No.1	150	15	7	8	17	11	6	93	47	46	28	12	16
Mechpara	130	8	1	7	20	12	8	87	47	40	14	6	8
Hatidhura Block	**406**	**32 (8)**	**11 (3)**	**21 (5)**	**65 (16)**	**36 (9)**	**29 (7)**	**260 (64)**	**135 (33)**	**125 (31)**	**50 (12)**	**21 (5)**	**29 (7)**
Kokrajhar District	**2005**	**209 (10)**	**107 (5)**	**102 (5)**	**281 (14)**	**147 (7)**	**134 (7)**	**1273 (63)**	**640 (32)**	**633 (31)**	**232 (12)**	**114 (6)**	**118 (6)**

Source: Primary Survey

Note: Figure in parenthesis represent average percentage

Fig.5.3   Size of Population below 6 Years in Sample Blocks
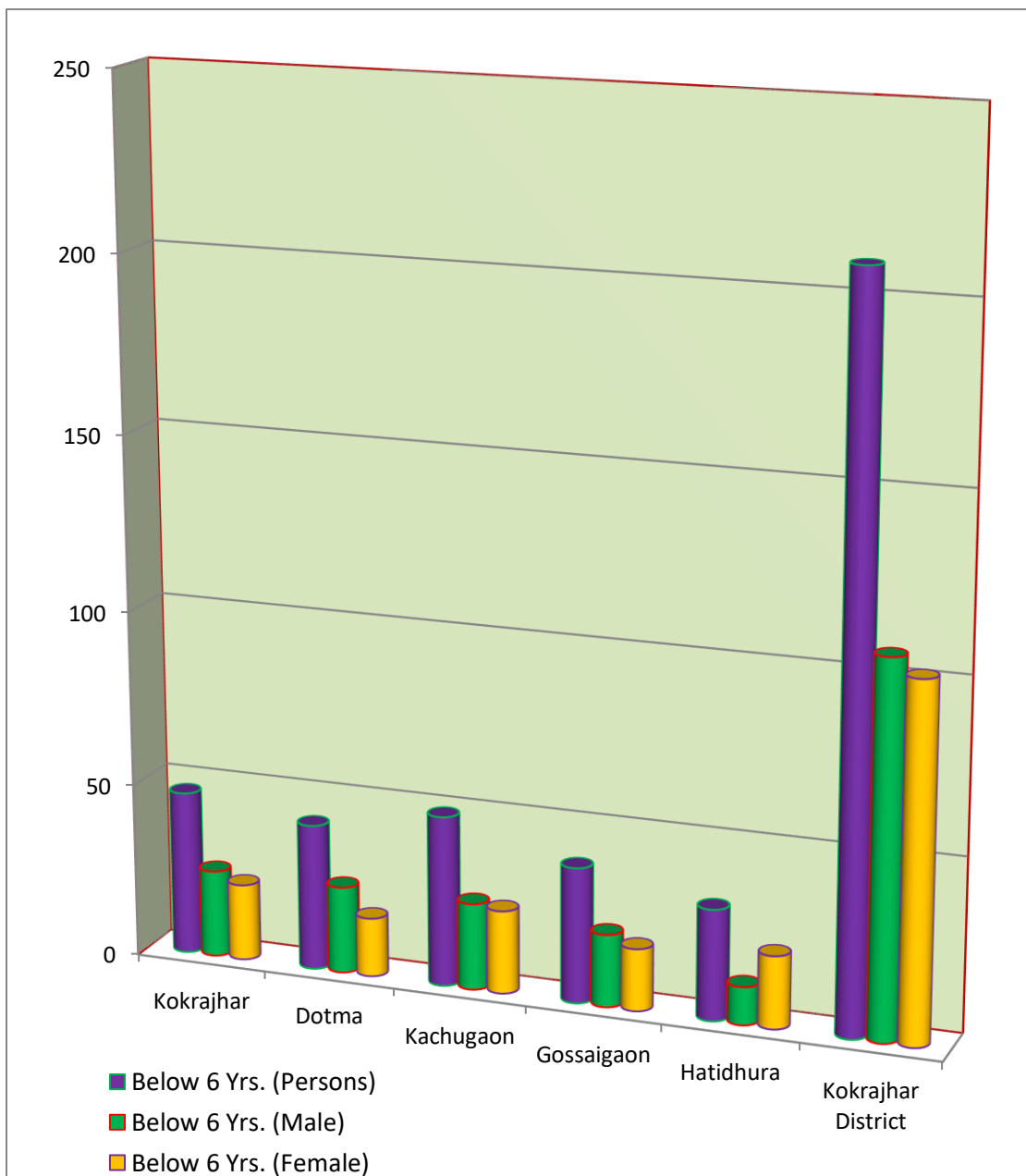
villages. Survey data indicates that the below 6 years average population in the district is given by 10 percent; highest in Kachugaon Block (12 percent) and lowest in Hatidura Block (8 percent). Below 6 years population in Kokrajhar Block, Dotma Block and Gossaigaon Block is given by 11 percent (for all the 3 Blocks). Table 5.2

shows that the boys and girls population percentage in the district is represented by equal average percentage of (5 percent); Block wise, Kokrajhar Block is represented by (6 percent) and (5 percent), Dotma Block (7 percent) and (4 percent), Kachugaon Block (6 percent), Gossaigaon Block (6 percent) and (4 percent) and Hatidura Block (3 percent) and (5 percent) respectively for boys and girls. It is noteworthy that among the five (5) Blocks, the percentage of girls' population is higher than boys' counterpart in Hatidura Block; in all other Blocks Kokrajhar Block, Dotma Block, Kachugaon Block and Gossaigaon Block percentage of boys is greater than girls' population. Average male population of below 6 years is greater than female counterparts except Hatidura Block; male 3 percent and female 5 percent on average. Village wise, all sample villages in Hatidura - Pokalagi, Mechpara and Srirampur No.1 and Tulshibil in Gossaigaon Block; Ghoramara in Kokrajhar Block has higher average female population than males under the category of below 6 years age of population. In all other ten (10) sample villages in the district, the percentage of boys population is higher than girls population. Population distribution of below 6 years in sample Blocks is shown in Fig. 5.3.

5.5.2 Economically Active Population (15-59 Years)

Population distribution in a society has great economic implications. Population representing age group of 15-59 years is considered as economically active population in the economy. Primarily, productivity of output and the growth of the economy depend on this section of the population in the society. Primary data shows that on average, 63 percent of the total population represents the age group from 15 to 59 years in the district. Kachugaon Block has the highest percentage given by 68 percent; followed by Hatidura Block (64 percent), Dotma Block (63 percent), Gossaigaon Block (62 percent) and Kokrajhar Block (61 percent).

Among the five Blocks in the study area, Dotma and Hatidura Blocks have greater male percentage of the economically active population group than female counterpart; male and female percentage being (33 percent) and (31 percent) respectively in both Dotma and Hatidura Block. Kokrajhar Block, Kachugaon

Fig.5.4   Economically Active Population (15 to 59 Years) in Sample Blocks
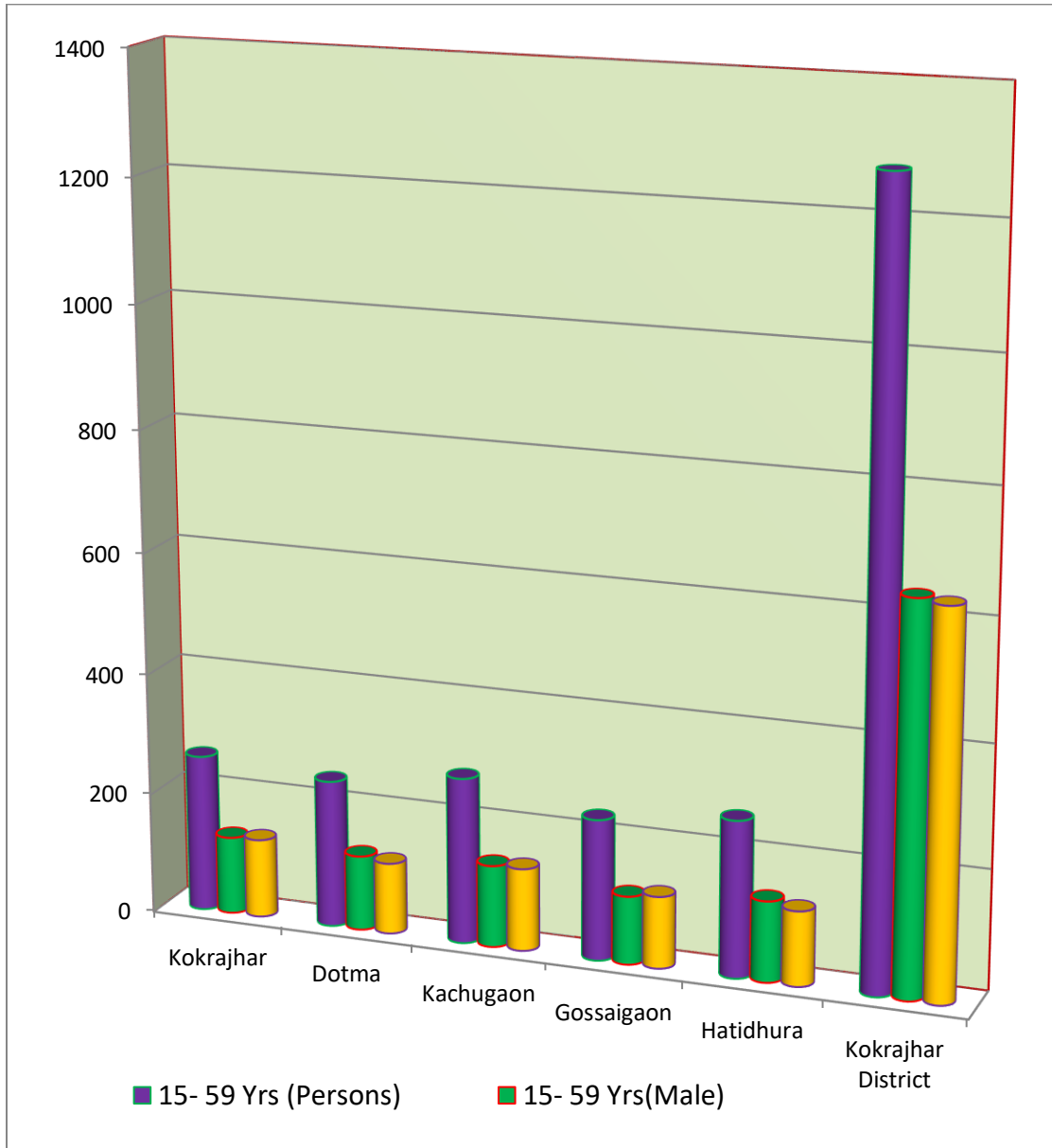
respectively in both Dotma and Hatidura Block. Kokrajhar Block, Kachugaon Block and Gossaigaon Blocks have smaller percentage of male than female in this category of age distribution. The percentage of male and female population are represented by (30 percent) and (31 percent) in Kokrajhar Block and (30 percent) and (32 percent) respectively in Gossaigaon Block. The Kachugaon Block has equal percentage of both

male and female population under the category of 15-59 years of age; the percentage being (34 percent). Survey data also reveals that the average percentage of male and female population in the district under the category of 15-59 years of age is given by (32 percent) and (31 percent) respectively. Fig. 5.4 shows the Block wise distribution of economically active population group in the study area.

5.6 Caste wise Population Distribution

The state of Assam is uniquely diverse in terms of its demography. The demographic pattern of a region has significant implications in making diverse choices in life. Effective understanding and critical analysis of the differential development outcomes is required; and this aspect has an important linkage with human capability. In Assam, there are about 26 scheduled tribes (STs) and 22 scheduled castes (SCs) which account 12.44 percent of ST and 7.15 percent of SC population. The population structure in the state also diverse; as per census data 2011, 17 out of 27 districts in the state have been identified as religious minority concentrated blocks in the state. This demographic diversity has a bearing on myriad socio-cultural-political implications which need to be observed carefully while formulating plan and policies for development.

Caste wise distribution of population in the present study area is represented by the Table 5.3. Survey data shows that at the village level, six villages, namely Haloadol, Gossainichina, Boragari, Gangia, 1 No. Sekadani and Kumtola represent 100 percent ST population. OBC population is represented by Dholmara (36 percent), Tulshibil (40 percent), Habrubil (12 percent), Kartimari (60 percent), Srirampur No.1 (64 percent) and Mechpara (80 percent) respectively. While considering SC category, sizable households is found in Kartimari (20 percent) and Srirampur No.1 (36 percent) respectively. The percentage of general category (other than Muslims) population is very much insignificant in the sample villages; the percentage being (16 percent) in the village Dholmara and (8 percent) in Kartimari. Survey data indicates that Ghoramara, Singimari and Pokalagi are the three villages in which (100 percent) households are represented by minority community (Muslims).

**Table 5.3   Caste Wise Percentage of Population in Sample Villages**

Village/ Block / District	No. of Household	ST		SC		OBC		GEN		OTHERS	
		No.	%	No.	%	No.	%	No.	%	No.	%
Haloadol	25	25	100	0	0	0	0	0	0	0	0
Ghoramara	25	0	0	0	0	0	0	0	0	25	8
Dholmara	25	11	44	0	0	9	36	4	16	1	0
Kokrajhar	**75**	**36**	**48**	**0**	**0**	**9**	**12**	**4**	**5**	**26**	**35**
Gossainichina	25	25	100	0	0	0	0	0	0	0	0
Singimari	25	0	0	0	0	0	0	0	0	25	0
Boragari	25	25	100	0	0	0	0	0	0	0	0
Dotma	**75**	**50**	**67**	**0**	**0**	**0**	**0**	**0**	**0**	**25**	**33**
Gangia	25	25	100	0	0	0	0	0	0	0	**0**
1No Sekadani	25	25	100	0	0	0	0	0	0	0	0
Kumtola	25	25	100	0	0	0	0	0	0	0	0
Kachugaon	**75**	**75**	**100**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**
Habrubil	25	17	68	0	0	3	12	0	0	5	20
Kartimari	25	2	8	5	20	15	60	2	8	1	4
Tulshibil	25	10	40	0	0	10	40	0	0	5	20
Gossaigaon	**75**	**29**	**39**	**5**	**7**	**28**	**37**	**2**	**3**	**11**	**15**
Pokalagi	25	0	0	0	0	0	0	0	0	25	100
SirampurNo.1	25	0	0	9	36	16	64	0	0	0	0
Mechpara	25	0	0	0	0	20	80	0	0	5	20
Hatidura	**75**	**0**	**0**	**9**	**12**	**36**	**48**	**0**	**0**	**30**	**40**
Kokrajhar District	**375**	**190**	**51**	**14**	**4**	**73**	**19**	**6**	**2**	**92**	**24**

Source: Primary Survey

At Block level, survey data reveals that the percentage of ST population is represented by Kokrajhar (48 percent), Dotma (67 percent), Kachugaon (100 percent), and Gossaigaon (39 percent). SC population is represented by Gossaigaon (7 percent) and Hatidura (12 percent). OBC category population constituted by Kokrajhar (12 percent), Gossaigaon (37 percent) and Hatidura (48 percent); and General category

population is represented by Dotma (33 percent), Gossaigaon (15 percent) and Hatidura (40 percent) respectively. The district on average constitute ST, SC, OBC, General and Minority community by (51 percent), (4 percent), (19 percent), (2 percent) and (24 percent) respectively. Caste wise percentage of population in sample Block is diagrammatically represented in Fig. 5.5.

Fig. 5.5   Caste Wise Percentage of Population in Sample Blocks
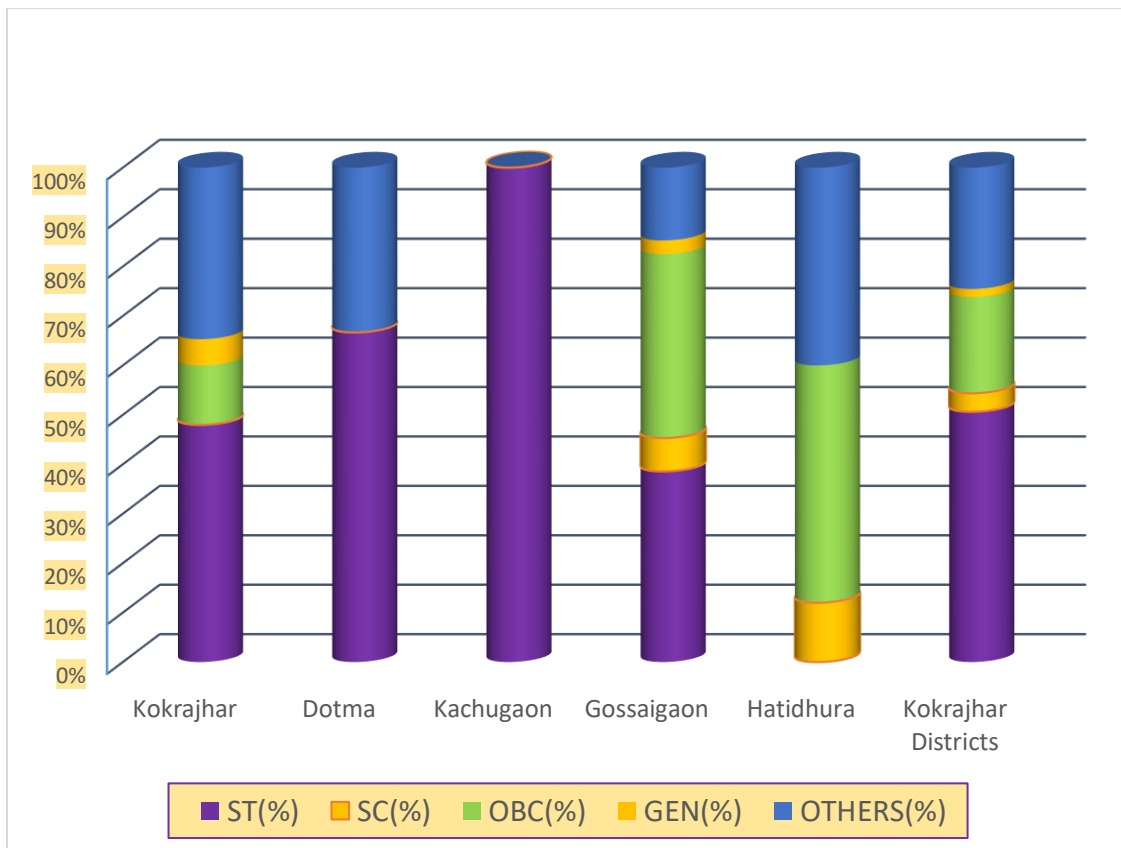
Source: Calculated based on Primary Data

5.7   Education and Literacy

Education represents one of the fundamental dimensions of human development. Education plays a crucial role in the process of enlarging diverse choices and opportunities by the people in the society. Right to education represents one of the fundamental rights of human being which helps in acquiring knowledge, ideas which

provide access and mobility to the people. An educated person by acquiring knowledge can contribute towards the formation of meaningful community life.

Table 5.4 Literacy Rate in Sample Villages

Village / Block/ BDistrict	No. of Population			Literacy Rate					
	P	M	F	L (P)	L (%)	M (P)	M (%)	F (P)	F (%)
Haloadol	115	59	56	107	93	57	97	50	89
Ghoramara	160	79	81	97	61	46	58	51	63
Dholmara	154	75	79	123	80	61	81	62	79
Kokrajhar	**429**	**213**	**216**	**327**	**76**	**164**	**77**	**163**	**75**
Gossainichina	143	71	72	108	76	52	73	56	78
Singimari	126	65	61	97	77	49	75	48	79
Boragiri	119	62	57	92	77	56	90	36	63
Dotma	**388**	**198**	**190**	**297**	**77**	**157**	**79**	**140**	**74**
Gangia	156	79	77	104	67	57	72	47	61
1No Sekadani	143	73	70	108	76	60	82	48	69
Kumtola	108	53	55	56	52	33	62	23	42
Kachugaon	**407**	**205**	**202**	**268**	**66**	**150**	**73**	**118**	**59**
Habrubil	113	56	57	103	91	50	89	53	93
Kartimari	132	71	61	96	73	56	79	40	66
Tulshibil	130	66	64	91	70	50	76	41	64
Gossaigaon	**375**	**193**	**182**	**290**	**78**	**156**	**81**	**134**	**74**
Pokalagi	126	62	64	106	84	52	84	53	83
Srirampur No.1	150	77	72	113	76	61	79	52	72
Mechpara	130	66	64	108	83	58	88	50	78
Hatidura	**406**	**205**	**200**	**328**	**81**	**171**	**83**	**155**	**78**
Kokrajhar Districts	**2005**	**1014**	**990**	**1510**	**76**	**798**	**79**	**710**	**72**

Source: Primary Survey

Note: P= Persons   M= Male   F= Female

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Acquiring knowledge by the individuals represents one of the important indicators of human development. Literacy and educational attainment by the individuals determines the quality of life of a person which in turn depends upon provisioning and governance of educational system. Equitable distribution and an effective educational provisioning, by enhancing educational attainments enlarges choices of the people in the society.

An effective analysis of educational attainment and its provisioning is crucial in the framework of human development. Assam HDR, 2014 reveals that among 6-16 years of age children; 6.45 percent were out of school, 28 percent never been enrolled, about three-fourth children dropped out and some percentage of the children who have not given up formally, do not attend the school either.

Assam Human Development Report, 2014 also shows the most striking feature of high incidence of school drop- out rate; and the case is even true for educationally advanced districts in the state. The report also revealed high drop-out rate in border areas of the state where 8 out of 10 students leave without completing of schools and the case is true in case of hills area of the state. It has also been observed that girls population have higher proportion of non-enrollment in comparison to boys counterpart.

There is a growing divide between the public and private schools; there has been a trend that parents send their children to private schools or institutions in the state. Regularity of classes, better care taken of the students, regularity of teachers while taking the classes, better infrastructure-both academic and non-academic are the important reasons as informed by the parents for the ongoing trend of students movement towards private school in the state.

National Statistical Office (NSO), Assam holds the fifth position in the country with a literacy rate of 85.9 percent. The tribal inhabited district of Kokrajhar is educationally backward. As per 2011 census data, average literacy rate of Assam and Kokrajhar was 73.18 and 65.22 respectively which shows a vast gap between the literacy rate of Kokrajhar and state average of Assam.

Table 5.4 shows village and block wise literacy rate in the study area. Survey data indicates that the average literacy rate of tribal inhabited district of Kokrajhar is 76.0 percent which is much lower than the state average of Assam 85.9 percent as recently announced by the National Statistical Office (NSO). Survey data also reveals inequality between male and female; male and female literacy rate being 79 and 72 percent respectively.

At Block level, Hatidura is at the top with 81 percent and Kachugaon at the bottom with only 66 percent literacy rate. Gossaigaon, Dotma and Kokrajhar represent 2nd, 3rd and 4th position with 78 percent, 77 percent and 76 percent respectively. Male and female literacy percentage is represented by Kokrajhar (Male: 77 and Female: 75) percent; Dotma (Male: 79 and Female: 74) percent; Kachugaon (Male: 73 and Female: 59) percent; Gossaigaon (Male: 81 and Female: 74) percent; and Hatidura (Male: 83 and Female: 78) percent. It is noteworthy that in the sample Blocks, the male-female literacy gap is highest in Kachugaon Block; male and female literacy rate being (73 percent) and (59 percent) respectively, representing a gap of (14 percent). The survey data shows a gap between highest and lowest male literacy with 10 percent; and the gap is even more in case of female literacy with 19 percent gap between highest and lowest percentage which form a serious concern for the tribal inhabited district of Kokrajhar.

While looking at village wise literacy rate, Haloadol, Habrubil and Pokalagi represent 1st, 2nd and 3rd position with 93 percent, 91 percent and 84 percent respectively; and from the bottom Kumtola, Ghoramara and Gangia represent 1st, 2nd and 3rd position with 52 percent, 61percent and 67 percent respectively showing a vast gap between highest and lowest percentage being 41 percent. Survey data shows that Haloadol, Boragari and Habrubil represent 1st, 2nd and 3rd position with 97 percent, 90 percent and 89 percent of male literacy rate respectively. From the bottom, Ghoramara, Kumtola and Gangia represent 1st, 2nd and 3rd position with 58 percent, 62 percent and 72 percent respectively, indicating a gap of 25 percent between highest and lowest male literacy rate in the district. In case of female literacy, survey data reveals that from the top Habrubil, Haloadol and Pokalagi represents 1st, 2nd and 3rd

Fig.5.6 Block wise Literacy Rate in Sample Blocks
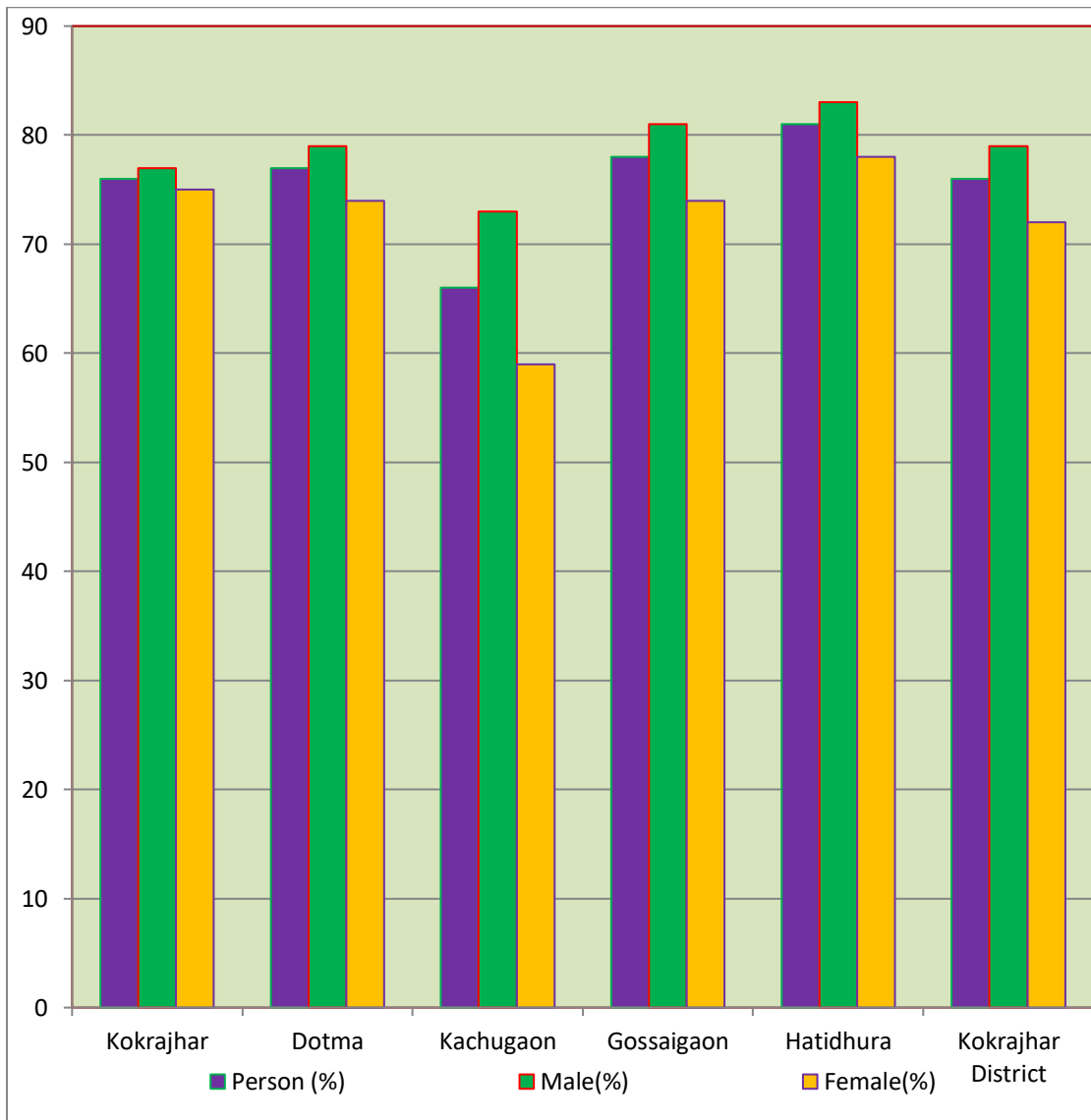
position with 93 percent, 89 percent and 83 percent respectively; from the bottom Kumtola, Gangia; and Boragari and Ghoramara jointly represent 1st, 2nd and 3rd position with 42 percent, 61percent and 63 percent respectively showing a gap of 51 percent between highest and lowest female literacy rate which reveals a great concern for policy implications. In the present study area of Kokrajhar district, as a whole, the literacy percentage on average is given by 76 percent; male and female literacy rate

being 79 percent and 72 percent respectively; indicating a gap of 7 percent between the male and female literacy rate in the district. Block wise Literacy Rate in the study area is diagrammatically depicted in the Fig. 5.6.

Above analysis indicates that the tribal inhabited district of Kokrajhar is backward in terms of educational attainment. Literacy percentage of the district is far below the state average of Assam. There is uneven distribution of educational opportunities in the study area; and also wide gap between the male and female literacy rate. Educational infrastructure, both physical as well as academic is poor; high dropout rate prevails. All these stated aspect reveals that a proper policy formulation and its implementation is required for providing educational opportunities to all sections of the society; including both male and female population in this tribal inhabited district of Kokrajhar.

5.8   Human Development Index (HDI)

The state of Assam is lagging behind most the states of the country in terms of human development aspect; and the condition is even more worsening in the tribal inhabited district of Kokrajhar. In present study, to evaluate various aspects of human capabilities in the district, a primary survey was made during 2017 – 2018 by employing the methodology as stated above. Table 5.5 represents block wise and village wise HDI and dimensional index in the study area. The survey report indicates that out of five (5) numbers of blocks in the district, performance of the Gossaigaon Block with HDI value (0.532) is better than other Blocks; and Kachugaon Block (0.480) represents worst performer in terms of human development indicators. The study reveals that average dimensional index of health and income in the Gossaigaon Block are comparatively higher than other Blocks in the district indicating that the condition of health care facilities and standard of living of the people in the Block is better than other Blocks. Education index of the Block is also comparatively higher; next to Kokrajhar Block indicating that educational achievement (MYS and EYS) is higher in the Block. Better health care facility, proper educational provision and

higher income and employment opportunity prevails in the Gossaigaon Block in comparison to other sample Blocks in the district. Survey data reveals that the

Table 5.5   HDI and Dimensional Index of Sample Villages

Village/Block/ District	Dimensional Index			HDI	Rank
	Health	Education	Income		
Haloadol	0.522	0.766	0.485	0.578	
Ghoramara	0.494	0.575	0.392	0.480	
Dholmara	0.506	0.641	0.312	0.465	
Kokrajhar Block	**0.507**	**0.660**	**0.396**	**0.508**	**2nd**
Gossainichina	0.498	0.730	0.351	0.502	
Singimari	0.502	0.573	0.318	0.449	
Boragiri	0.527	0.624	0.410	0.511	
Dotma Block	**0.509**	**0.642**	**0.359**	**0.487**	**4th**
Gangia	0.479	0.617	0.342	0.465	
1No Sekadani	0.528	0.668	0.404	0.521	
Kumtola	0.497	0.508	0.375	0.454	
Kachugaon Block	**0.501**	**0.597**	**0.373**	**0.480**	**5th**
Habrubil	0.568	0.792	0.587	0.641	
Kartimari	0.480	0.555	0.344	0.449	
Tulshibil	0.517	0.619	0.412	0.507	
Gossaigaon Block	**0.522**	**0.655**	**0.447**	**0.532**	**1st**
Pokalagi	0.468	0.581	0.313	0.439	
Sirampur No.1	0.511	0.688	0.471	0.549	
Mechpara	0.465	0.610	0.384	0.477	
Hatidhura Block	**0.481**	**0.626**	**0.389**	**0.488**	**3rd**
Kokrajhar District	**0.504**	**0.636**	**0.392**	**0.499**	

  Source: Primary Survey Data

dimensional index value of health, education and income in Kachugaon Block are not encouraging. Health index represents 2nd position from the bottom among the Blocks indicating a low level of health status and health care facilities in the Block. Other health related facilities like sanitation facilities, bathroom facilities are also very much poor in the Block. The Block also represents lowest dimensional index of education among the sample Blocks, representing low level of educational attainment by the

people in the Block; educational infrastructure, both academic and non-academic are at the very low level. Dimensional index of income also represents lowest among the sample Block; revealing a low standard of living of the people. Study reveals low opportunity of income and employment in Kachugaon Block.

Survey data indicates that Gossaigaon, Kokrajhar, Hatidura, Dotma and Kachugaon Block ranked 1st, 2nd, 3rd, 4th and 5th respectively. The present study estimated the average HDI value of the district at (0.499) which is much lower than the state average of (0.557) as given by Assam Human Development Report, 2014. However, HDI value of estimated by present study represents rural areas only. HDI of Gossaigaon Block (0.532) and Kokrajhar Block (0.508) are higher than district average; and HDI of Hatidura Block (0.488), Dotma Block (0.487) and Kachugaon Block (0.480) represents below average of the district. While considering health dimension, Gossaigaon Block ranked 1st with (0.522) and Hatidura Block raked 5th with (0.481). In case of Education Index, Kokrajhar Block ranked 1st with (0.660) and Kachugaon Block placed at the bottom with (0.597). Considering income index, Gossaigaon Block represents top position with (0.447) and Dotma Block at the bottom with (0.359). As per survey data, the Kokrajhar district in average, out of three HDI dimensions, performance in income dimension is poorest (0.392); educational index given by (0.636), followed by health index (0.504).

It is also observed that, overall human development is driven by the achievements in educational dimension in the districts and the state; and the primary data also reveals the same aspect. The standard of living of the people in the tribal inhabited district of Kokrajhar is a serious concern; income index of the district as per survey data is too low (0.393) representing below halfway to reach the goalpost. Survey data reveals that the HDI largely vary across the sample Block; the gap between the highest HDI (0.532) attained by Gossaigaon Block and lowest HDI (0.480) attained by Kachugaon Block is given by (0.052). The Gossaigaon Block which attained 1st rank is better performed in terms of health, education and income dimensions than other Blocks in the district. Basically, performance of the village Habrubil has contributed much; and it attained highest value in all the three

dimensions among the sample villages. From the survey data it has been observed that the facility of health services and education are availed by the villagers; and most of the households in the village are employed in govt. job. Performance of the other two villages is more or less same with other sample villages considered for the study. On the other hand, the Kachugaon Block which is ranked bottom; health dimension in the Block which represents health status is very poor (0.501); the village Gangia has lowest with (0.479) value. Education index of village Kumtola in the Block is very low (0.508). Income index of the Block which indicates standard of living is the lowest in the district (0.373); village Gangia and Kumtola with (0.342) and (0.375) respectively. From the survey data it has been observed that the facility of health services is very much poor; and the Block is confronted with high incidence of unemployment. The HDI and dimensional index of health, education and income of sample Block are represented in the Fig. 5.7. Fig. 5.8 gives diagrammatic representation of the HDI of sample Block in the district.

Fig. 5.7 Dimensional Index of Sample Blocks in the District
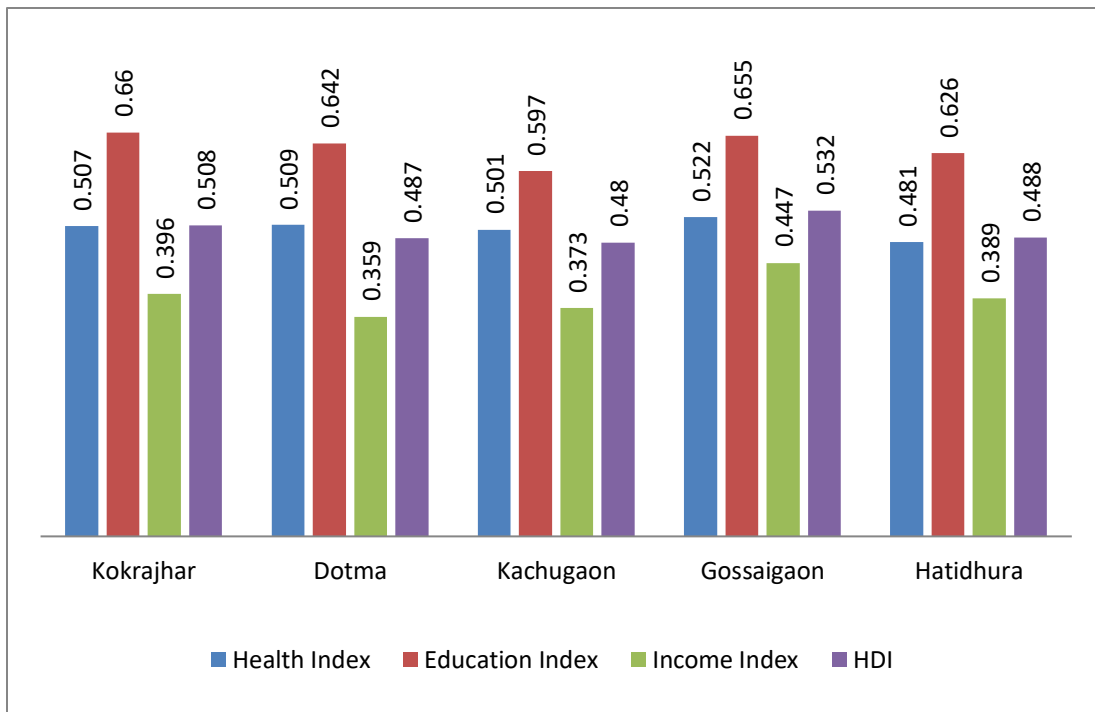
Source: Calculated based on Primary Data

**Fig. 5.8   Human Development Index of Sample Blocks in the District**
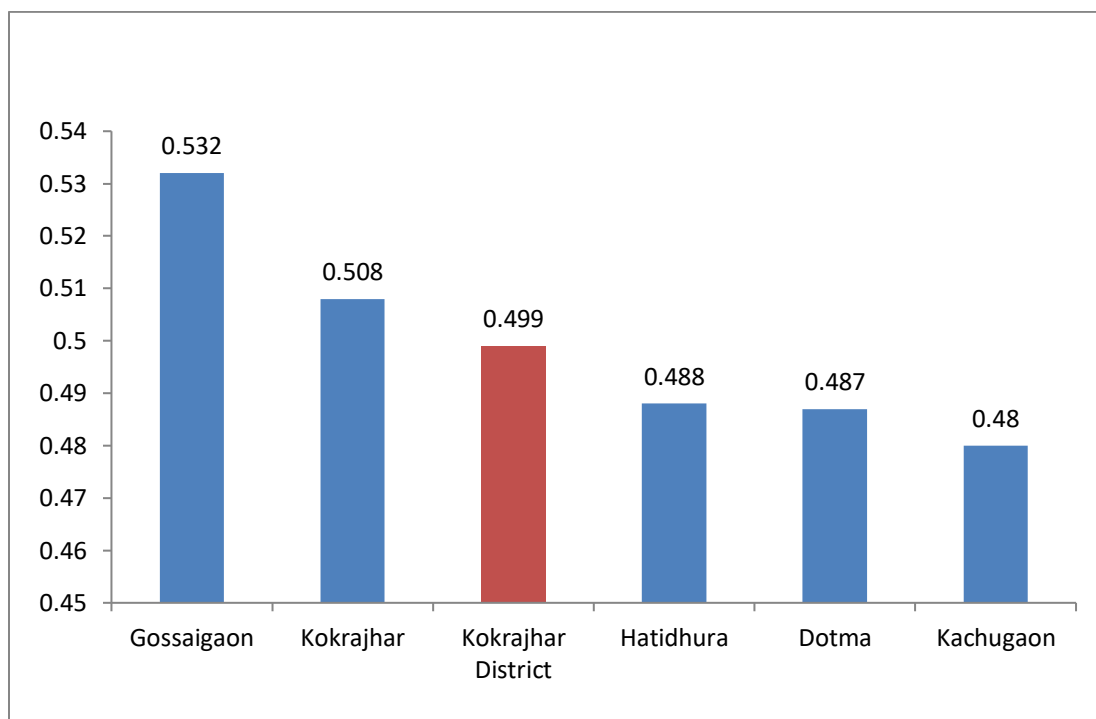
Source: Calculated based on Primary Data

Fig. 5.9 shows health index of sample Block in the district based on primary data. The data reveals that the average dimensional health index of sample Block is represented by (0.504). Three (3) Blocks have the value higher than district average; Gossaigaon (0.522), Dotma (0.509) and Kokrajhar (0.507). Two (2) Blocks have the value lower than district average, namely Kachugaon (0.501) and Hatidura (0.481). Health index of sample Blocks reveals inter Block differences; lowest value attained by Hatidura Block (0.481) and highest value by Gossaigaon Block (0.522) represents a gap of (0.041) between the highest and lowest dimensional index. It is noteworthy that the dimensional health index (0.504) of present study based on primary data for Kokrajhar district is lower than the figure published by AHDR, 2014; the report assigned health index of the district (0.539).
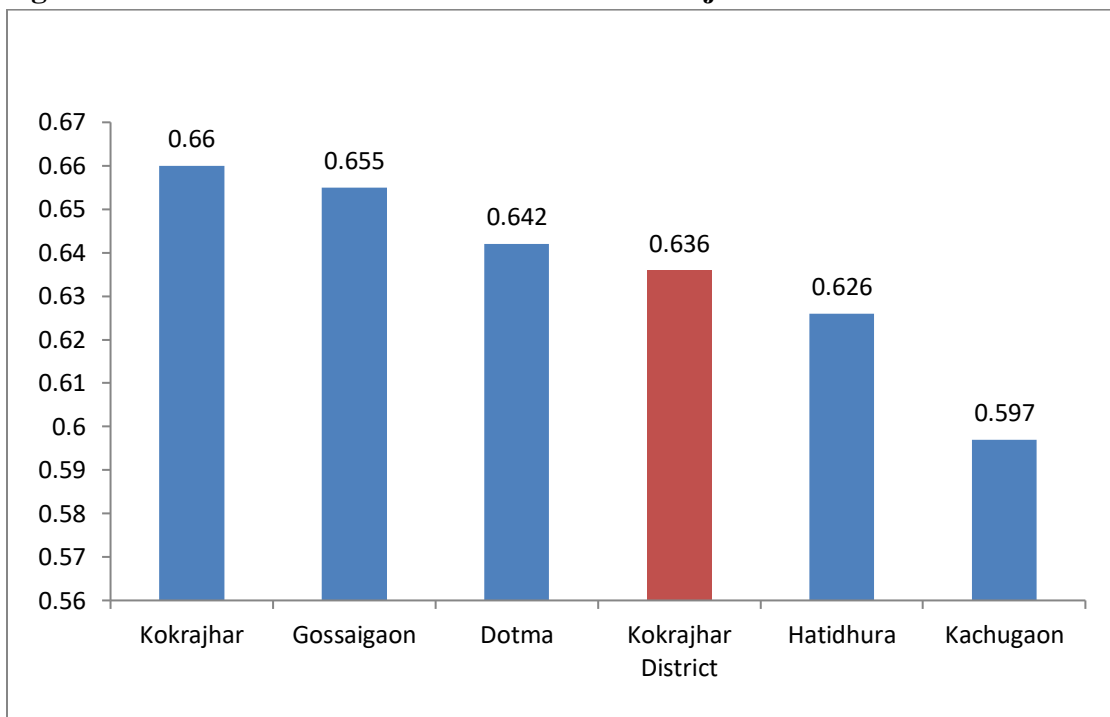
Education index of sample Blocks in Kokrajhar district, based on primary data is shown by the Fig. 5.10. The data reveals that the average dimensional education index is represented by (0.636). Three (3) Blocks have the value higher than district

Fig. 5.9   Health Index in the District of Kokrajhar at Block Level
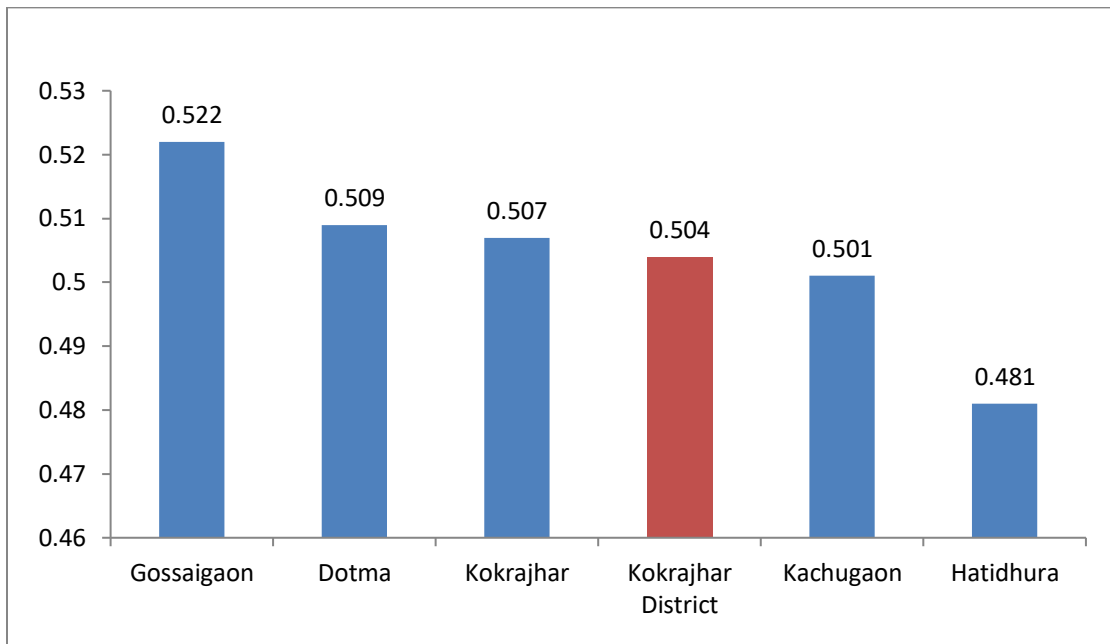
Fig. 5.10   Education Index in the District of Kokrajhar at Block Level

average; Kokrajhar (0.660), Gossaigaon (0.655) and Dotma (0.642). Two (2) Blocks have the value lower than district average, namely Hatidura (0.626) and Kachugaon (0.597). Education index of sample Blocks reveals inter Block differences; lowest value attained by Dotma (0.642) and highest value by Kokrajhar (0.660) represents a gap of (0.063). Dimensional education index (0.636) of present study based on primary data for Kokrajhar district is marginally lower than the figure published by AHDR, 2014; the report assigned education index of the district (0.645). The study reveals that the district has attained in terms of education better way than other two dimensions, health and income index.

Fig. 5.11 shows income index of sample Blocks in the study area. The data reveals that the average dimensional income index is represented by (0.392). Two (2) Blocks have the value higher than district average; Gossaigaon (0.447) and Kokrajhar (0.396). Three (3) Blocks have the value lower than district average, namely Hatidura (0.389), Kachugaon (0.373) and Dotma (0.359). Income index of sample Blocks reveals inter Block differences; lowest value attained by Dotma Block (0.359) and highest value by Gossaigaon Block (0.447); indicating a gap of (0.088). Dimensional

Fig. 5.11 Income Index in the District of Kokrajhar at Block Level
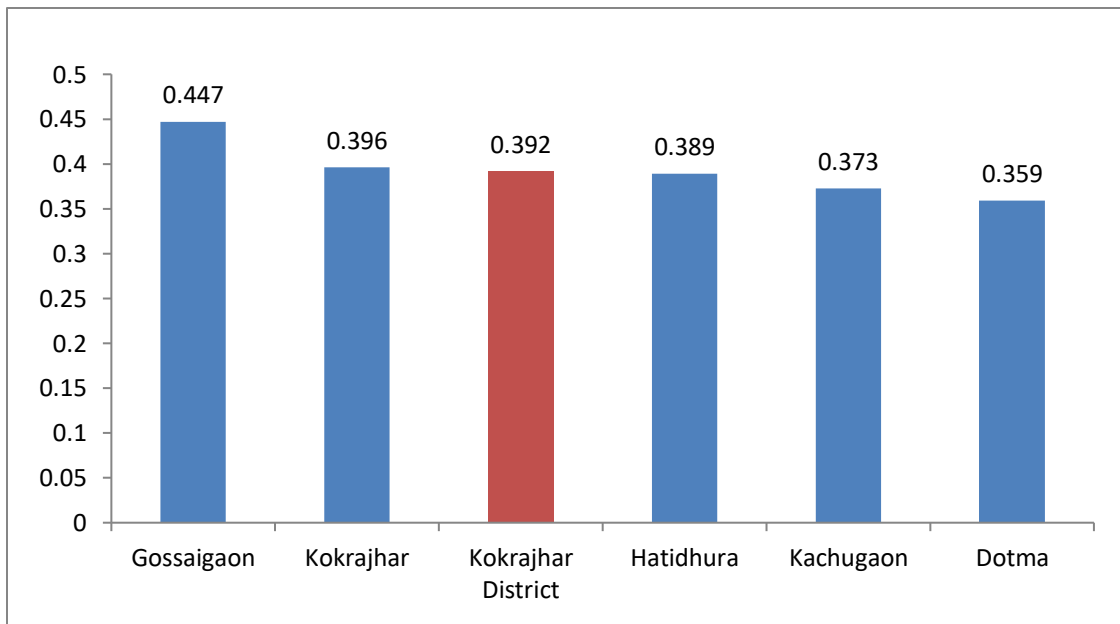
Source: Own calculation based on primary data

income index (0.392) of present study based on primary data for Kokrajhar district is lower than the figure published by AHDR, 2014; the report assigned income index of the district (0.402). Income index based on primary data reveals that the performance of the district is very poor than other two dimensions, health and education dimension.

Survey data reveals that the dimensions of human development vary across the sample villages in the study area. Primary survey data indicates that attainment gap of the sample villages is higher in the case of income and education dimensions. Here, an attempt is made to analyze dimensional achievement by the sample villages in the present study area.

Fig. 5.12   Health Index in the District of Kokrajhar at Village Level

Dimensional Index of Health

Village	Index
Habrubil	0.568
1No Sekadani	0.528
Boragiri	0.527
Haloadol	0.522
Tulshibil	0.517
Sirampur No.1	0.511
Dholmara	0.506
Kokrajhar District	0.504
Singimari	0.502
Gossainichina	0.498
Kumtola	0.497
Ghoramara	0.494
Kartimari	0.48
Gangia	0.479
Pokalagi	0.468
Mechpara	0.465
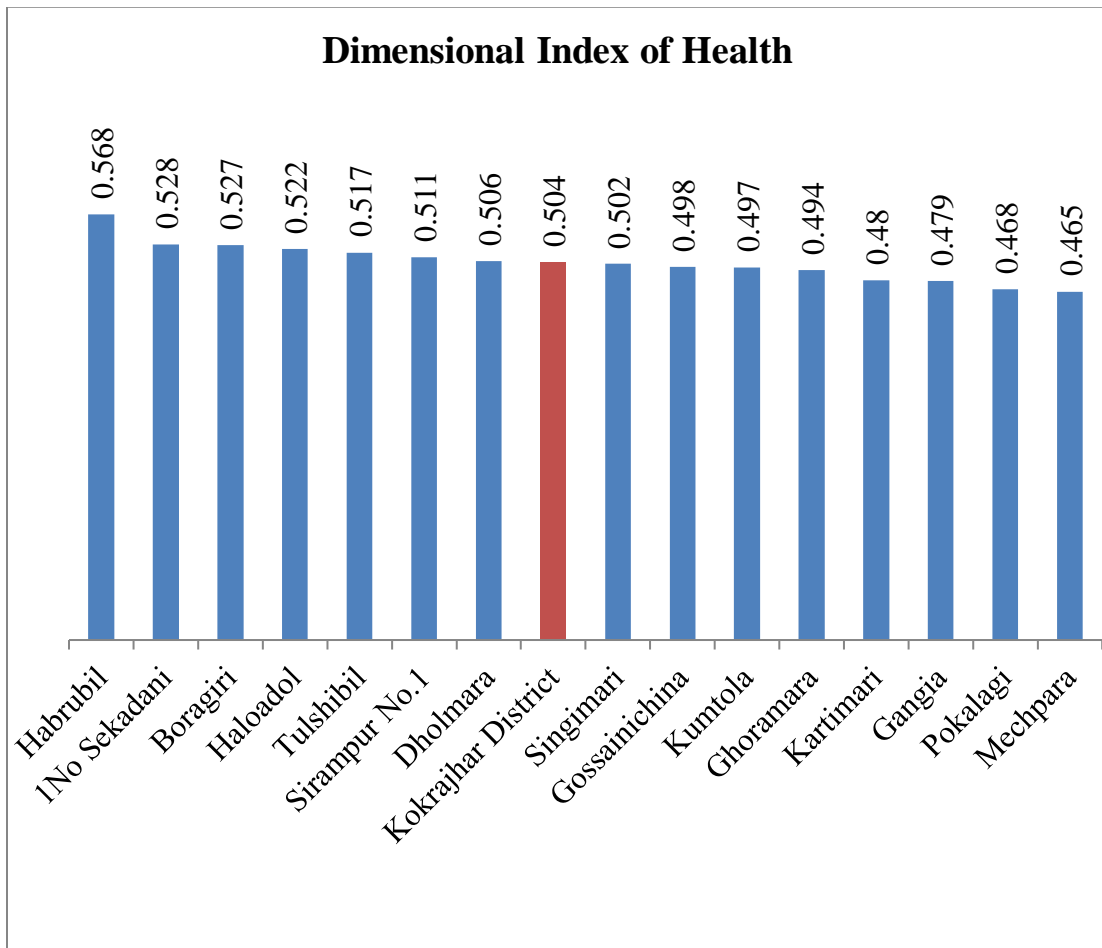
Source: Estimated based on primary data

Fig. 5.12 shows the health index in Kokrajhar district at village level. The Fig. indicates that the average health index of Kokrajhar district is given by (0.504). Out of 15 sample villages considered for current study, seven (7) sample villages have higher than average value; and eight (8) villages have attained lower than average value. The highest health index (0.568) attained by the village Habrubil of Gossaigaon Block and the lowest value (0.465) attained by Mechpara in Hatidura Block represents a large gap of (0.103).

Fig. 5.13 shows the education index in Kokrajhar district at village level. The Fig. reveals that the average education index of Kokrajhar district is given by (0.636). Out of 15 sample villages considered for current study, six (6) sample villages have attained higher than average value; and nine (9) villages have attained lower than average value. The highest education index (0.792) attained by the village Habrubil of Gossaigaon Block and the lowest value (0.508) attained by the village Kumtola in Kachugaon Block; represents a large gap of (0.284).

Fig. 5.13   Education Index in the District of Kokrajhar at Village Level
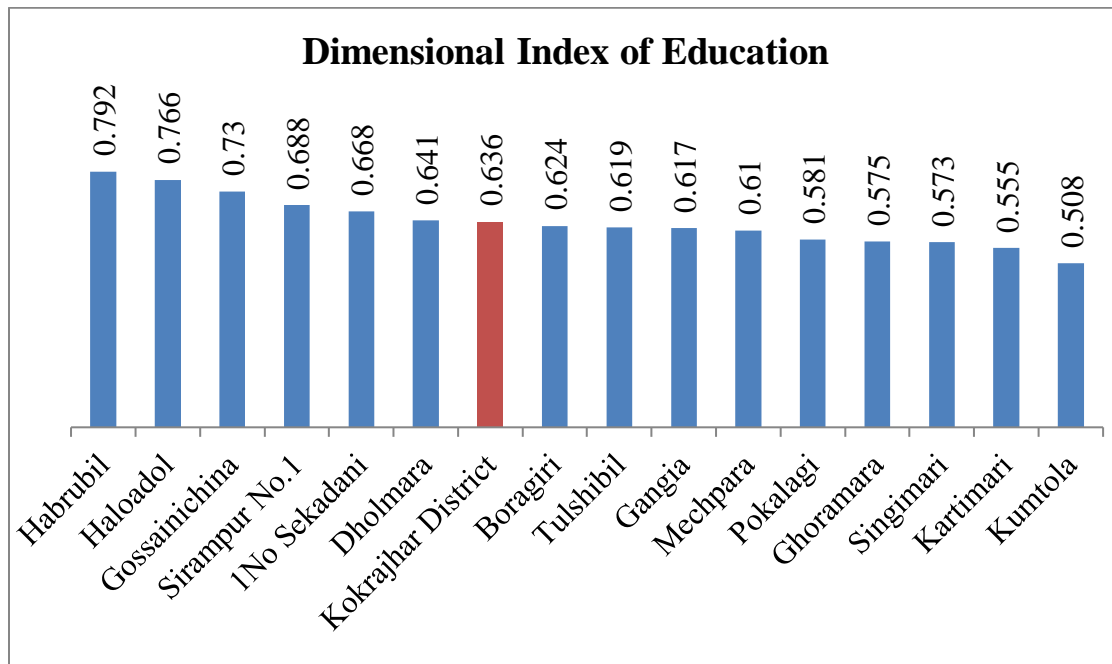
Source: Estimated based on primary data

Fig. 5.14   Income Index in the District of Kokrajhar at Village Level

Dimensional Index of Income

Village	Value
Habrubil	0.587
Haloadol	0.485
Sirampur No.1	0.471
Tulshibil	0.412
Boragiri	0.41
1No Sekadani	0.404
Ghoramara	0.392
Kokrajhar District	0.392
Mechpara	0.384
Kumtola	0.375
Gossainichina	0.351
Kartimari	0.344
Gangia	0.342
Singimari	0.318
Pokalagi	0.313
Dholmara	0.312

Source: Estimated based on primary data

Fig. 5.14 shows the income index in Kokrajhar district at village level. Dimensional income index of Kokrajhar district is given by (0.392). Out of 15 sample villages considered for current study, seven (7) sample villages have higher than average value, and eight (8) villages have attained lower than average value. The highest income index (0.587) is attained by the village Habrubil of Gossaigaon Block and the lowest value (0.313) is attained Dholmara in Kokrajhar Block; representing a large gap of (0.274).

Fig. 5.15   HDI of Sample Villages in Kokrajhar District

HDI

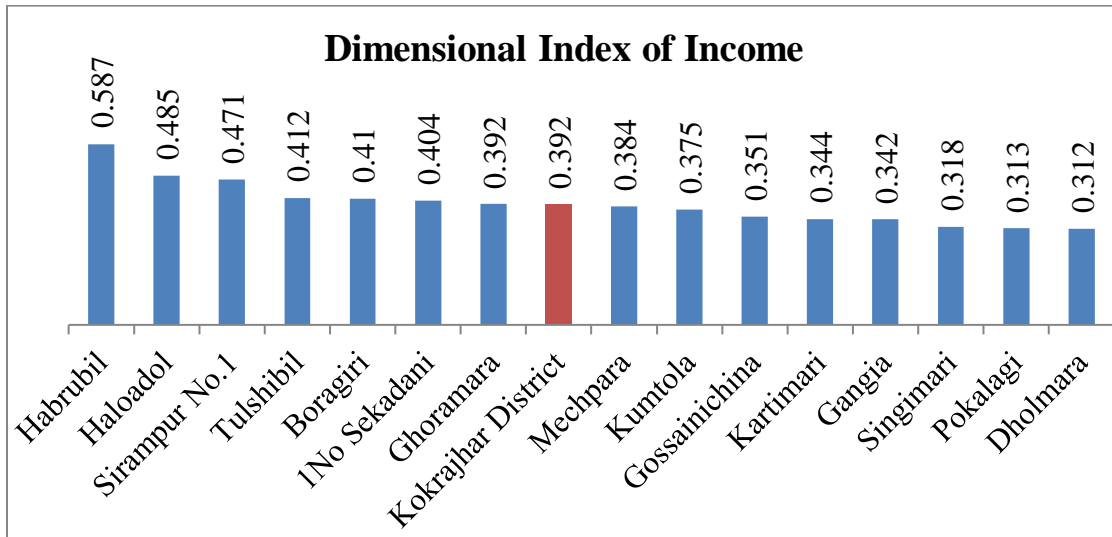| Village	Value
Habrubil	0.641
Haloadol	0.578
Sirampur No.1	0.549
1No Sekadani	0.521
Boragiri	0.511
Tulshibil	0.507
Gossainichina	0.502
Kokrajhar…	0.499
Ghoramara	0.48
Mechpara	0.477
Dholmara	0.465
Gangia	0.465
Kumtola	0.454
Singimari	0.449
Kartimari	0.449
Pokalagi	0.439
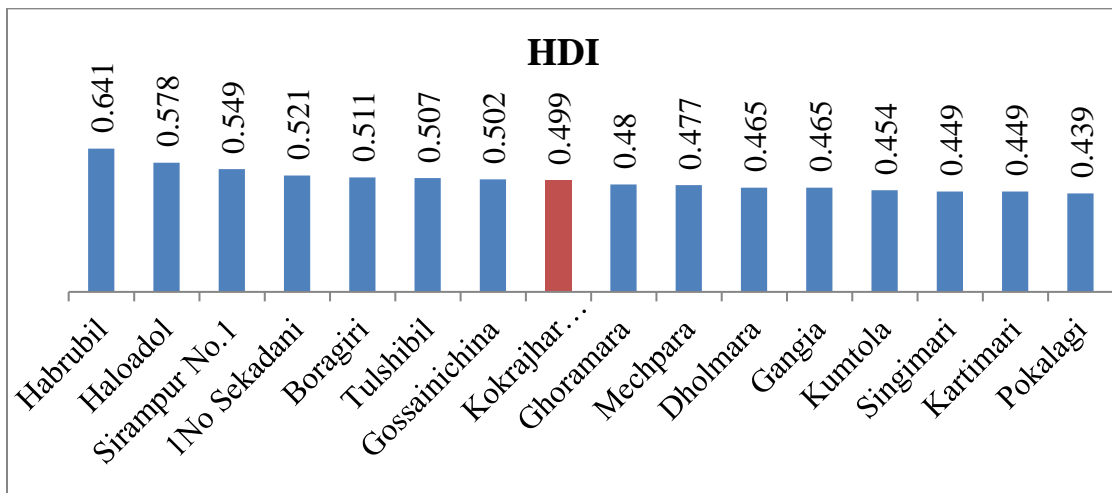
Source: Estimated based on primary data

Fig. 5.15 shows the HDI value in Kokrajhar district at village level. Survey data indicates that the average HDI of Kokrajhar district is given by (0.499). Out of 15 sample villages considered for current study, seven (7) sample villages have higher than average HDI value; and eight (8) villages have attained lower than average HDI value. The highest HDI value (0.641) is attained by the village Habrubil of Gossaigaon Block and the lowest value (0.439) is attained by the Pokalagi in Hatidura Block; representing a large gap of (0.202).

The present study reveals that the top village Habrubil is ranked 1st in all the three dimensions of HDI. Health care facility is adequate in the village which has contributed to low level of IMR and other diseases in the village. Opportunity of education of the people in the village is also adequate which has made higher level of educational attainment. Both academic and physical infrastructure is encouraging. Standard of living of the people is also comparatively higher in the village. Survey data shows higher Per-Capita Monthly Income (PCMI) and high Per Capita Monthly Consumption Expenditure (PCMCE). Dimensional index of health of the village Pokalagi which has been ranked last 15th position represents lowest, next to village Mechpara. Health care facility is too poor; people in the village suffer largely from ill-health condition. Drinking water facility, sanitation facility are also too poor. Dimensional index of education also reveals poor performance; the villagers had to be confronted with low level of educational infrastructure and opportunity. Lower level of enrollment and high dropout rate prevails. Low standard of living prevails due to lower PCMI and PCMCE.

Primary survey data reveals large gap across the sample villages in terms of attainment of human capabilities which form a serious concern for the tribal inhabited district of Kokrajhar. The present status of human development and deprivations in the study area necessitates effective and differentiated policy approach by the policy makers and the government. It is worth mentioning that the HDI value (0.499) of the Kokrajhar district based on primary data is even lower than the average HDI value (0.519) of the state of Assam as published by Assam HDR 2014.

5.9 HDI, Standard Deviations and Co-efficient of Variations

In this section, standard deviation and co-efficient of variation in terms of health index, education index, income index and HDI values are estimated and interpreted. An attempt is made to estimate Block wise; and then the district as a whole. The analysis of co-efficient of variation of statistical data is significant as it provide the information about to what extent data points variant from mean value. It shows the extent of variability of data in a sample in relation to the mean value. A small variance of statistical data indicates that the data points tend to be very close to the mean, and to each other and a high variance indicates that the data points are very spread out from the mean, and from one another.

Table 5.6 gives the standard deviation and co-efficient of variation of HDI and dimensional index of health, education and income in the sample Block Kokrajhar.

Table 5.6   HDI, Standard Deviations and Co-efficient of Variations of Sample Villages in Kokrajhar Block

Village/SD/CV	Health Index	Education Index	Income Index	HDI
Haloadol	0.522	0.766	0.485	0.578
Ghoramara	0.494	0.575	0.392	0.480
Dholmara	0.506	0.641	0.312	0.465
Standard Deviations	**0.01**	**0.1**	**0.09**	**0.06**
Co-efficient of Variation (in %)	**2.77**	**14.68**	**21.85**	**12.09**

Source: Own calculation based on Primary Data

From the data, it is seen that co-efficient of variation in the sample Block is highly spread among the different dimensions of human development. Co-efficient of variation of income index (21.85 percent) reveals largest inter village gap in the Kokrajhar Block; highest dimensional index (0.485) attained by the village Haloadol is much higher than the lowest dimensional index (0.312) attained by the village Dholmara; representing a gap of (0.173).

Estimated co-efficient of variation (14.68 percent) also reveals large inter village differences in terms of dimensional index of education; highest value (0.766) attained by Haloadol is much higher than the lowest value attained by Ghoramara (0.575); representing a gap of (0.191). Co-efficient of variation in terms of health dimension (2.77 percent) is comparatively smaller in the sample Block Kokrajhar; highest dimensional index (0.522) attained by Haloadol and lowest value (0.494) attained by Ghoramara represent a gap of (0.028. Co-efficient of variation of HDI (12.09 percent) also reveals large inter village gap; highest HDI (0.578) attained by the village Haloadol is much higher than the lowest HDI (0.465) attained by the village Dholmara; represents a gap of (0.113).

Table 5.7   HDI, Standard Deviations and Co-efficient of Variations of Sample Villages in Dotma Block

Village/SD/CV	Health Index	Education Index	Income Index	HDI
Gossainichina	0.498	0.730	0.351	0.502
Singimari	0.502	0.573	0.318	0.449
Boragari	0.527	0.624	0.410	0.511
Standard Deviation	**0.02**	**0.08**	**0.05**	**0.03**
Co-efficient of Variation (in %)	**3.09**	**12.47**	**12.96**	**6.87**

Source: Own calculation based on Primary Data

Table 5.7 gives the standard deviation and co-efficient of variation of HDI and dimensional index of health, education and income in the sample Block Dotma. Estimated co-efficient of variation in the sample Block reveals that the dimensional index of education, income highly spread among the villages; indicating large gap between the highest and lowest dimensional index; the gap in terms education, income and health is represented by (0.157), (0.092) and (0.029) respectively. The gap between the highest and lowest HDI in the Block is represented by (0.012); CV of HDI being (6.87 percent).

Table 5.8 gives the value of standard deviation and co-efficient of variation of HDI and dimensional index of health, education and income in the sample Block Kachugaon. Estimated co-efficient of variation reveals that the different dimensions of human development largely vary across the villages; the gap between the highest and lowest dimensional index of education, income and health is represented by (0.160), (0.62) and (0.049) respectively. HDI reveals large inter village gap in Kachugaon Block representing a gap of (0.067) between the highest and lowest HDI; CV of HDI being (7.48 percent). Highest variation is observed in the case of education dimension indicated by largest co-efficient of variation (13.68 percent).

Table 5.8   HDI, Standard Deviations and Co-efficient of Variations of Sample Villages in Kachugaon Block

Village/SD/CV	Health Index	Education Index	Income Index	HDI
Gangia	0.479	0.617	0.342	0.465
1No Sakadani	0.528	0.668	0.404	0.521
Kumtola	0.497	0.508	0.375	0.454
Standard Deviation	**0.02**	**0.08**	**0.03**	**0.04**
Co-efficient of Variation (in %)	**4.94**	**13.68**	**8.30**	**7.48**

Source: Own calculation based on Primary Data

Table 5.9 gives the value of standard deviation and co-efficient of variation of HDI and dimensional index of health, education and income in the sample Block Gossaigaon. Co-efficient of variation reveals that the gap between the highest and lowest dimensional index of income, education and health is represented by (0.243), (0.237) and (0.088) respectively. HDI reveals a large gap of (0.192) between the highest and lowest values; CV of HDI being (18.50 percent), highest among the sample Blocks in the district. Highest

variation is observed in the case of income dimension indicated by largest co-efficient of variation (28.00 percent), highest among the Blocks.

Table 5.9   HDI, Standard Deviations and Co-efficient of Variations of Sample Villages in Gossaigaon Block

Village/SD/CV	Health Index	Education Index	Income Index	HDI
Habrubil	0.568	0.792	0.587	0.641
Kartimari	0.480	0.555	0.344	0.449
Tulshibil	0.517	0.619	0.412	0.507
Standard Deviation	**0.04**	**0.12**	**0.13**	**0.10**
Co-efficient of Variation (in %)	**8.47**	**18.71**	**28.00**	**18.50**

Source: Own calculation based on Primary Data

Table 5.10   HDI, Standard Deviations and Co-efficient of Variations of Sample Villages in Hatidura Block

Village/SD/CV	Health Index	Education Index	Income Index	HDI
Pokalagi	0.468	0.581	0.313	0.439
Sirampur No.1	0.511	0.688	0.471	0.549
Mechpara	0.465	0.610	0.384	0.477
Standard Deviation	**0.03**	**0.06**	**0.08**	**0.06**
Co-efficient of Variation (in %)	**5.35**	**8.84**	**20.33**	**11.44**

Source: Own calculation based on Primary Data

Table 5.10 gives the value of standard deviation and co-efficient of variation of HDI and dimensional index of health, education and income in the sample block Hatidura. The estimated co-efficient of variation reveals that the different dimensional index of HDI largely vary across the sample villages in the Block; representing a large gap between the highest and lowest dimensional index of income, education and health; a gap of (0.158), (0.107) and (0.043)

respectively. HDI also represent a large gap of (0.110) between the highest and lowest value; CV of HDI being (11.44 percent).

Table 5.11   HDI, Standard Deviations and Co-efficient of Variations of Sample Block in Kokrajhar District

Village/SD/CV	Health Index	Education Index	Income Index	HDI
Kokrajhar	0.507	0.660	0.396	0.508
Dotma	0.509	0.642	0.359	0.487
Kachugaon	0.501	0.597	0.373	0.480
Gossaigaon	0.522	0.655	0.447	0.532
Hatidura	0.481	0.626	0.389	0.488
Standard Deviation	**0.01**	**0.03**	**0.03**	**0.02**
Co-efficient of Variation (in %)	**2.97**	**4.00**	**8.54**	**4.25**

Source: Own calculation based on Primary Data

Table 5.11 gives the value of standard deviation and co-efficient of variation in the sample Blocks of the tribal inhabited district of Kokrajhar. Table 5.11 indicates that the co-efficient of variation in the sample Blocks spread considerably among the different dimensions of human development. Estimated co-efficient of variation indicates that the dimensional index of income, education and health vary across the sample villages in the Block, representing a gap of (0.088), (0.034) and (0.041) respectively between the highest and lowest dimensional values. HDI also represents a gap of (0.052) between the highest and lowest HDI; CV of HDI being (4.25 percent).

Survey data clearly indicates that there is large gap of dimensional indices of income, education and health in the sample villages across the Blocks in the district of Kokrajhar. HDI figure also shows large differences in the sample villages across the Blocks and the tribal inhabited district of Kokrajhar as a whole. This intra-block and inter-block disparities in the present study area is a great concern for the human developmental aspect.

Table 5.12   HDI, Standard Deviations and Co-efficient of Variations of Sample Villages in Kokrajhar District

Village/District/SD/CV	Dimensional Index			HDI
	Health	Education	Income	
Haloadol	0.522	0.766	0.485	0.578
Ghoramara	0.494	0.575	0.392	0.480
Dholmara	0.506	0.641	0.312	0.465
Gossainichina	0.498	0.730	0.351	0.502
Singimari	0.502	0.573	0.318	0.449
Boragari	0.527	0.624	0.410	0.511
Gangia	0.479	0.617	0.342	0.465
1No Sekadani	0.528	0.668	0.404	0.521
Kumtola	0.497	0.508	0.375	0.454
Habrubil	0.568	0.792	0.587	0.641
Kartimari	0.480	0.555	0.344	0.449
Tulshibil	0.517	0.619	0.412	0.507
Pokalagi	0.468	0.581	0.313	0.439
Srirampur No.1	0.511	0.688	0.471	0.549
Mechpara	0.465	0.610	0.384	0.477
Kokrajhar District	**0.504**	**0.636**	**0.392**	**0.499**
Standard Deviation	**0.03**	**0.08**	**0.07**	**0.06**
Co-efficient of Variation (in percent)	**5.29**	**12.52**	**19.06**	**11.15**

Source: Estimated based on Primary Data

Table 5.12 represent standard deviations and co-efficient of variations of HDI and dimensional index of health, education and income of sample villages in Kokrajhar district. The Table indicates that the co-efficient of variation in the sample villages highly spread across the different dimensions of human development. Co-efficient of variation of dimensional index of income, education and health index is given by (5.29 percent), (12.52 percent) and

(19.06 percent) respectively; representing a large gap of (0.275), (0.284) and (0.103) respectively between the highest and lowest dimensional value. HDI gap between the highest and lowest value is represented by (0.202); CV of HDI being (11.15 percent). The study reveals that large inter village inequity prevails in terms of dimensional value of income, education and health attainment by the people in the district.

5.10 Housing Facilities

The type and housing condition are considered as indicative of living standard of the people. In this modern age too, 43.7 percent dwells in kutcha houses and only smaller proportion of 22.7 percent lives in pucca houses in the state of Assam as revealed by the Assam HDR, 2014. The percentage of the population living in the kutcha houses or otherwise dwelling in miserable condition is of significant proportion in the rural areas of Assam. However, kutcha houses cannot be considered as sole indicative of living condition, as it may be the norm for the people living in hilly areas.

Housing quality is an important indicator of human capabilities and the condition of human health in the society. Table 5.10 shows the housing pattern of the people in tribal inhabited district of Kokrajhar. Survey data indicates that in this modern age too, large percentage of people lives in a kutcha house in the present study area; highest in Kachugaon Block (47 percent) and lowest in Gossaigaon Block (21 percent). Highest percentage of pucca house has been attained by the Kokrajhar Block (52 percent) followed by Gossaigaon Block (51 percent), Hatidura Block (48 percent), Dotma Block (44 percent) and Kachugaon Block (40 percent). The study also reveals that the percentage of semi-pucca house dwelling by the people in different Blocks of the district is also not encouraging. Survey data indicates that Gossaigaon Block has highest percentage (28 percent) and Kachugaon Block has got lowest percentage (13 percent) of semi-pucca house. Survey data reveals that the percentage of pucca house, semi-pucca house and kutcha house in the district on average is given by (47 percent), (19 percent) and (34 percent) respectively.

Table 5.13   Housing Facilities of Sample Blocks (in Percent)

Blocks / Districts	No. of Sample Household	Pucca House		Semi-Pucca House		Kutcha House	
		NH	%	NH	%	NH	%
Kokrajhar	75	39	52	18	24	18	24
Dotma	75	33	44	13	17	29	39
Kachugaon	75	30	40	10	13	35	47
Gossaigaon	75	38	51	21	28	16	21
Hatidhura	75	36	48	11	15	28	37
Kokrajhar District	**375**	**176**	**47**	**73**	**19**	**126**	**34**

Source: Primary Survey Data
Note: NH represents number of household

Fig. 5.16   Housing Facilities of Sample Blocks in the District
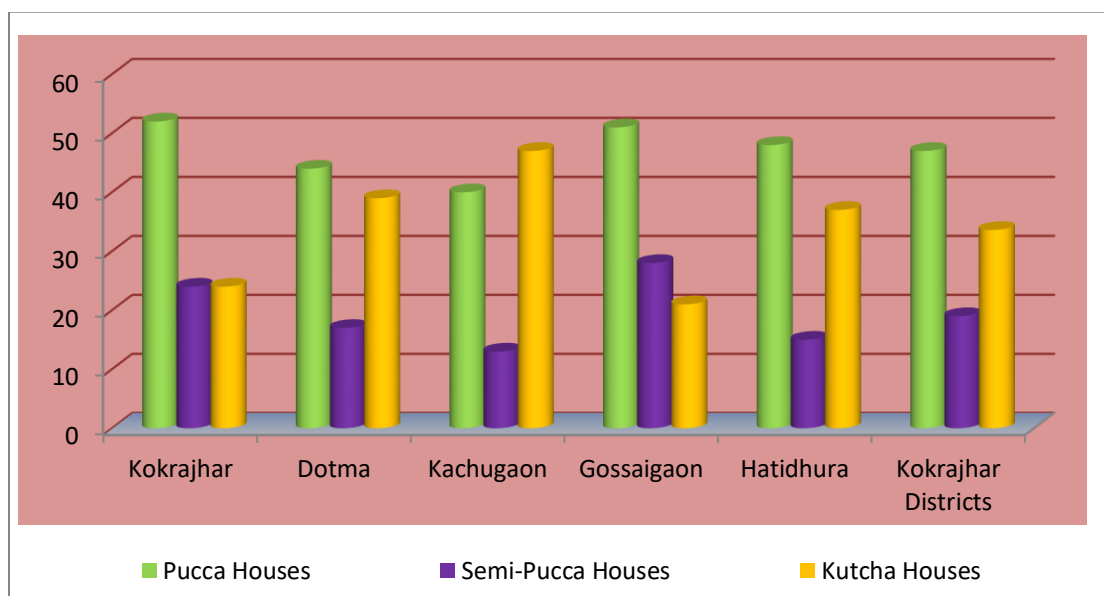
Source: Own calculation based on primary data

It, thus, emerges from the survey data that hosing conditions in the tribal inhabited district of Kokrajhar represents significant degree of deprivations; and the deprivations worryingly substantive in absolute sense. Percentage wise graphical

representation of the dwelling conditions of the sample households are shown in the Fig. 5.16.

5.11 Basic Amenities of Sample Households in the District

Basic amenities like sanitation, bathroom, safe drinking and electricity facilities are important indicators of human development. Assam HDR, 2014 indicates that considerable proportion (32 percent) of households is yet to be connected with electricity and this proportion is much higher in the case of rural Assam (47.2 percent). Percentage of non-electrified households is also in considerable size in the Char areas (47.1 percent). It has been observed that about 70 percent households in the state do not have toilet facility; three-fourth households in the rural area are deprived from improved sanitation facilities. Households in the Hills and Char area are evidently lacking from improved sanitation facility, represented by (88 percent) and (84.6 percent) respectively as published in the Assam HDR, 2014.

Table 5.14 shows the conditions of sanitation, bathroom, safe drinking and electricity facilities in the study area. It is a matter of great concern that the Govt. policy of providing safe drinking water and electricity facility could not be implemented in this tribal inhabited district of Kokrajhar. As per survey data, in average, only (66 percent) households are using safe drinking water facilities in the district. Block wise, Hatidura and Dotma has got highest (69 percent) and Gossaigaon has got lowest percentage of safe drinking water facility (61 percent). Village wise, Haloadol in Kokrajhar Block and Srirampur No.1 in Hatidura Block jointly represent highest safe drinking water facility (76 percent); and Kumtola in Kachugaon Block and Kartimari in Gossaigaon Block jointly represent lowest safe drinking water facility (56 percent). Survey data shows that in average (87 percent) households are connected with electricity in the tribal inhabited district of Kokrajhar. Block wise Hatidura has got highest percentage (99 percent) and Kachugaon with lowest percentage of (61 percent). At village level, households of seven villages, namely Dholmara, Gossainichina, Singimari, 1 No Sekadani, Habrubil, Mechpara and Srirampur No. 1 are connected with 100 percent electricity. The village Boragari in

Dotma Block has lowest percentage of households (76 percent) connected with electricity. It is noteworthy that the village Kumtola in Kachugaon Block has no electricity facility since the demolition and disconnection of electricity by the agitators of Bodoland Movement during 1987-1993 led by ABSU and BLT (as informed by the villagers).

Table 5.14   Basic Amenities in Sample Villages in the District

Village/ District	No. of Sample Household	Sanitation (Latrine)		Bathroom		Safe Drinking		Electricity	
		NH	%	NH	%	NH	%	NH	%
Haloadol	25	16	64	5	20	19	76	22	88
Ghoramara	25	20	80	2	8	17	68	23	92
Dholmara	25	21	84	1	4	15	60	25	100
Kokrajhar	**75**	**57**	**76**	**8**	**11**	**51**	**68**	**70**	**93**
Gossainichina	25	21	84	19	76	18	72	25	100
Singimari	25	18	72	0	0	16	64	25	100
Boragari	25	12	48	21	84	18	72	19	76
Dotma	**75**	**51**	**68**	**40**	**53**	**52**	**69**	**69**	**92**
Gangia	25	06	24	02	8	16	64	21	84
1No Sekadani	25	19	76	04	14	18	72	25	100
Kumtola	25	01	04	02	08	14	56	00	00
Kachugaon	**75**	**26**	**35**	**08**	**11**	**48**	**64**	**46**	**61**
Habrubil	25	21	84	06	24	15	60	25	100
Kartimari	25	11	44	03	12	14	56	20	80
Tulshibil	25	22	88	10	40	17	68	24	96
Gossaigaon	**75**	**54**	**72**	**19**	**25**	**46**	**61**	**69**	**92**
Mechpara	25	19	76	03	12	15	60	25	100
Srirampur No.1	25	21	84	08	32	19	76	25	100
Pokalagi	25	18	72	04	16	18	72	24	96
Hatidura	**75**	**58**	**77**	**15**	**20**	**52**	**69**	**74**	**99**
Kokrajhar District	**375**	**246**	**66**	**90**	**24**	**249**	**66**	**328**	**87**

Source: primary Survey

Most of the households do not have bathroom facility. At Block level, Kokrajhar and Kachugaon have only (11 percent) households using bathroom facility. It is worth mentioning that Block with highest percentage of Bathroom facility represented by Dotma Block (53 percent). Village wise, Boragari in Dotma Block has got highest percentage (84 percent) followed by Gossainichina in Dotma Block (76 percent). Apart from these two villages, bathroom facility is very poor in sample households of the study area. This is very much serious concern that there are no single households in Singimari village availing bathroom facility. Dholmara in Kokrajhar Block has got only (4 percent) and Gangia in Kachugaon Block and Ghoramara in Kokrajhar Block have only (8 percent) bathroom facility. Survey data reveals that the Kokrajhar district on average has only 24 percent households availing bathroom facility.

Fig. 5.17   Basic Amenities of Sample Blocks in Kokrajhar District (in %)
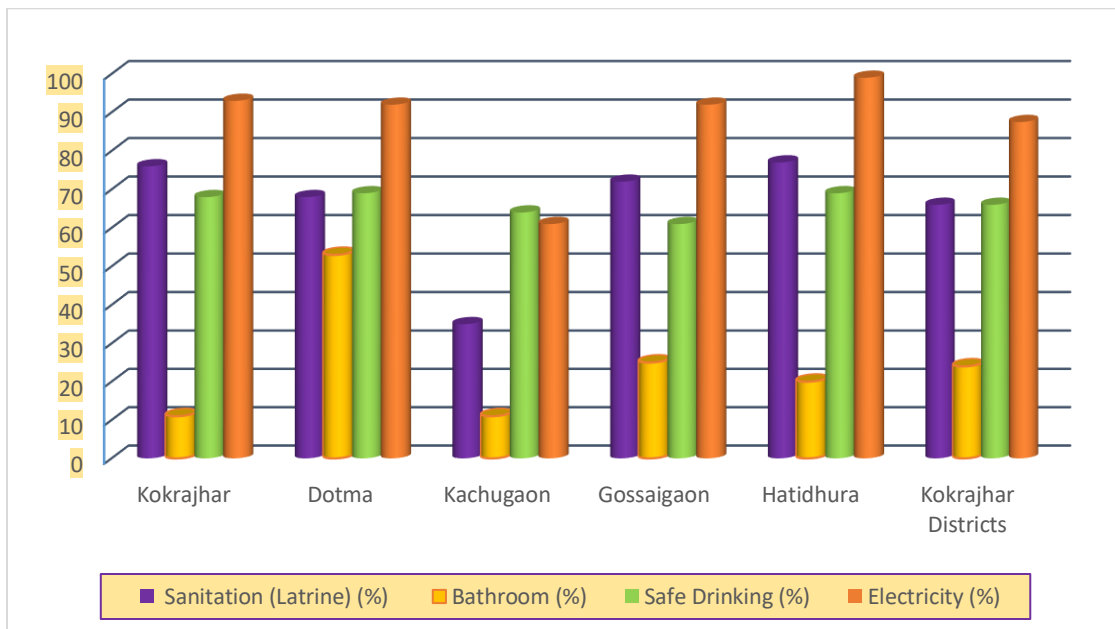
Source: Own calculation based on primary data

Sanitation facility (latrine and toilet) in the study area is too poor; the district in average has got only (65.20 percent). At Block level, Hatidura represents highest percentage (77 percent) followed by Kokrajhar (76 percent), Gossaigaon (72 percent), Dotma (68 percent) and Kachugaon (35 percent). At village level, Tulshibil in Dotma

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Block has highest percentage of sanitation facility (88 percent); Kumtola in Kachugaon Block represents lowest percentage (4 percent) followed by Gangia in Kachugaon Block (24 percent). This poor facility of safe drinking, sanitation facility may have formed basic reason for ill-health condition in this tribal inhabited district of Kokrajhar. Survey data indicates that a large percentage of the population still either defecate in open space or use unsanitary bucket latrines or smelly public toilets. Graphical representation of the basic amenities in sample block is depicted in Fig. 5.17.

5.12 BPL, APL and Bank Accounts

The size of population living below the poverty line is extremely high in the state of Assam. Despite of declining trend, the proportion is yet considerable size and about one third of its population are below the poverty line who is denying basic necessities of human live such as food, clothing and shelter. The percentage of population living below the poverty line in the state of Assam is highest among the NER. Rural-urban divide has also been observed, the proportion is represented by two out of five in the rural and less than one in ten in urban areas of the state. The incidence of poverty is even higher in the tribal inhabited district of Kokrajhar. As per 2011 census data, 31.98 percent of the total population was living below the poverty line in the district.

Above Poverty Line (APL) ration cards that were issued to households living above the poverty line as estimated by the Planning Commission of India. Below Poverty Line (BPL) ration cards that were issued to households living below the poverty line. These households received 25-35 kilograms of food grain per month. Survey data as depicted in Table 5.15 shows that on average (65 percent) households in the district availed BPL card during the survey period. The percentage of BPL card users is highest in Kokrajhar Block (73 percent). At village level, highest percentage of BPL card is availed jointly by Singimari in Dotma Block and Srirampur No.1 in Hatidura Block (84 percent). Gangia in Kachugaon Block received lowest percentage of BPL card (28 percent) followed by Boragari in Dotma Block 52 percent). Survey data also reveals that on average (44 percent) household availed APL card in the

district. At Block level, Kokrajhar received highest percentage of APL card (51 percent). At village level, Dholmara in Kokrajhar Block availed highest percentage of APL card (72 percent). Singimari in Dotma Block availed lowest percentage of APL card (16 percent).

**Table 5.15   BPL, APL and Bank Account in Sample Villages**

Village/ Block/ District	No. of Sample Household	BPL		APL		Bank Account	
		NH	%	NH	%	NH	%
Haloadol	25	15	60	9	36	21	84
Ghoramara	25	19	76	11	44	25	100
Dholmara	25	21	84	18	72	25	100
Kokrajhar	**75**	**55**	**73**	**38**	**51**	**71**	**95**
Gossainichina	25	11	44	15	60	25	100
Singimari	25	21	84	4	16	21	84
Boragari	25	13	52	7	28	21	84
Dotma	**75**	**45**	**60**	**26**	**35**	**67**	**89**
Gangia	25	7	28	15	60	17	68
1No Sekadani	25	18	72	13	52	25	100
Kumtala	25	14	56	8	32	14	56
Kachugaon	**75**	**39**	**52**	**36**	**48**	**56**	**75**
Habrubil	25	14	56	14	56	22	88
Kartimari	25	19	76	7	28	22	88
Tulshibil	25	16	64	10	40	25	100
Gossaigaon	**75**	**49**	**65**	**31**	**41**	**69**	**92**
Mechpara	25	18	60	7	56	25	96
Srirampur No.1	25	21	84	11	44	25	100
Pokalagi	25	15	72	14	28	24	100
Hatidura	**75**	**54**	**72**	**32**	**43**	**74**	**99**
Kokrajhar District	**375**	**242**	**65**	**163**	**43**	**337**	**90**

Source: Primary Survey

The banking system plays an important role in the modern economy. Banks collect the savings of the individuals and lend them out to business- people and manufacturers for production as well as consumption purposes. Thus, the banks play

an important role in the creation of new capital (or capital formation) in a country and thus help the growth process in the economy. Community banks have a critical role in keeping their local economies vibrant and growing by lending to creditworthy borrowers in their regions. Such lending helps foster the economy by allowing businesses to buy new equipment, add workers, or sign contracts for increased trade or services which contribute to the growth and development of the economy.

Fig. 5.18   BPL, APL and bank Account in Sample Blocks
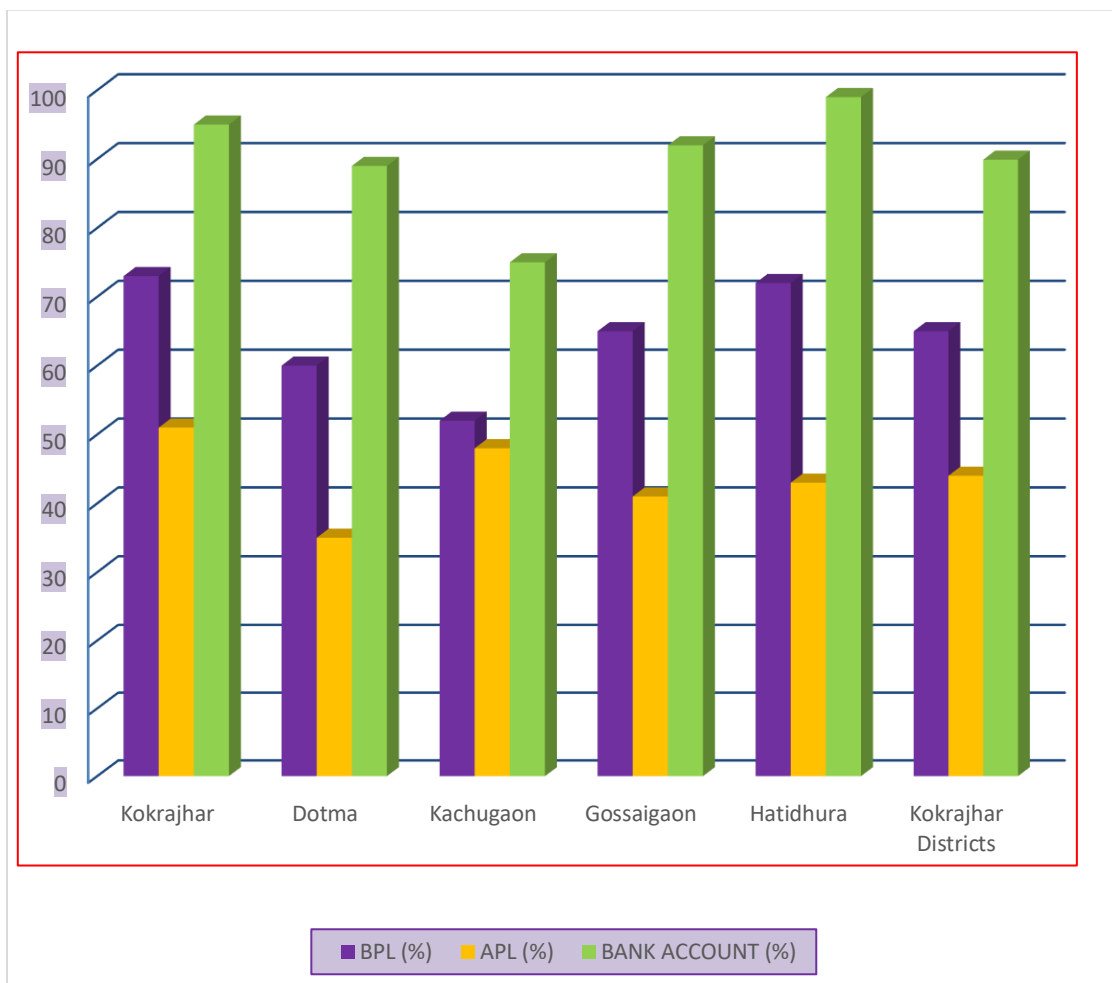
Source: Own calculation based on primary data

Primary survey data shows that most of the households have bank account, except few in some villages of the study area. On average, (90 percent) households possess bank account in the district. At Block level, Hatidura has highest percentage

(99 percent) followed by Kokrajhar (95 percent), Gossaigaon (92 percent), Dotma (89 percent) and Kachugaon (75 percent). It is worth mentioning that at village level, Ghoramara and Dholmara in Kokrajhar Block, 1 No. Sekadani in Kachugaon Block, Tulshibil in Gossaigaon Block, Srirampur No.1 and Pokalagi in Hatidura Blok availing (100 percent) bank account. It is a serious concern that Kumtola and Gangia in Kachugaon Block availed only (56 percent) and (68 percent) bank account respectively. Facility availed by the households in terms of BPL, APL and Bank Account is diagrammatically in the Fig. 5.18.

5.13 Per Capita Monthly Income, Consumption Expenditure and Surplus Income of Sample Households

Although income cannot be considered as sole measure of human well-being in the society, per capita income represents one of the important components of HDI as income determines extent of access of resources. Though income does not measure directly the well-being of individuals, it is considered an important means by which individuals can improve their economic attainments and well-being in the society. It is worth mentioning that the per capita consumption expenditure (food and non-food items) is considered a more preferable indicator of individual's command over resources and better measure of economic well-being.

Since independence, although the state of Assam experienced appreciable economic development, the rate of growth of income in the state continued to be below the all-India average. It is a serious concern that gap is widening, the trend which need to be corrected urgently. Though the state has experienced encouraging economic growth, the growth rate of net state domestic product has remained below the all-India average which causes a serious economic implication for Assam. Data also reveals inter-district inequity; and the condition is even more concerning in the tribal inhabited district of Kokrajhar.

Table 5.16 depicts per capita monthly income, per capita monthly consumption expenditure and balance amount of the sample households. Survey data reveals that the per capita monthly income of the sample households in the district of Kokrajhar is

**Table 5.16   Per Capita Monthly Income, Consumption Expenditure and Surplus income of Sample Household**

Village/ Block/ District	Population	Total Monthly Income	Per Capita Monthly Income	Total Monthly Consumption Expenditure	Per Capita Monthly Consumption Expenditure	Balance / Surplus
Haloadol	115	633500	5509	433600	3770	1739
Dholmara	160	698000	4363	457000	2856	1507
Ghoramara	154	510500	3343	375500	2438	905
Kokrajhar	**429**	**1842000**	**4294**	**1266100**	**2951**	**1343**
Gossainichina	143	809000	5657	532000	3720	1937
Singimari	126	530000	4206	413000	3278	928
Boragari	119	457000	3840	334500	2811	1029
Dotma	**388**	**1796000**	**4629**	**1279500**	**3298**	**1331**
Gangia	156	277500	1779	164100	1052	727
1No. Sekadani	143	338000	2364	202600	1417	947
Kumtola	108	277000	2565	190000	1759	806
Kachugaon	**407**	**892500**	**2193**	**556700**	**1368**	**825**
Habrubil	113	893000	7903	674000	5965	1938
Kartimari	132	487000	3689	377500	2860	829
Tulshibil	130	610000	4692	445000	3423	1269
Gossaigaon	**375**	**1990000**	**5307**	**1496500**	**3991**	**1316**
Mechpara	126	289000	2294	193500	1536	758
Srirampur No. 1	150	306500	2043	209600	1397	646
Pokalagi	130	548000	4215	381000	2931	1284
Hatidura	**406**	**1143500**	**2817**	**784100**	**1931**	**886**
Kok. District	**2005**	**7664000**	**3822**	**5382900**	**2685**	**1137**

Source: Primary Survey

very low this gives low level of consumption representing low standard of living of the people. At Block level, Gossaigaon is on the top with rupees (5,307) followed by Dotma (4,629), Kokrajhar (4,294), Hatidura (2,817) and Kachugaon (2,193). While

considering per capita monthly consumption at the Block level, Gossaigaon represents highest amount (3,991) followed by Dotma (3,298), Kokrajhar (2,951), Hatidura (1,931) and Kachugaon (1,368). The Table shows that the sample villages are not capable to save as the balance amount which is available for saving (per capita monthly income--per capita monthly consumption expenditure) is too low. At Block level, Kokrajhar Block (1,343) represents at the top, followed by Dotma (1,331), Gossaigaon (1,316), Hatidura (886) and Kachugaon (825). Village level data of per capita monthly income, per capita monthly consumption expenditure and balance amount in the study area largely vary across the sample villages; and this aspect is analyzed along with diagrammatic representation.

Fig. 5.19 Per-Capita Monthly Income, Per-Capita Monthly Consumption Expenditure and Surplus Income of the Sample Villages
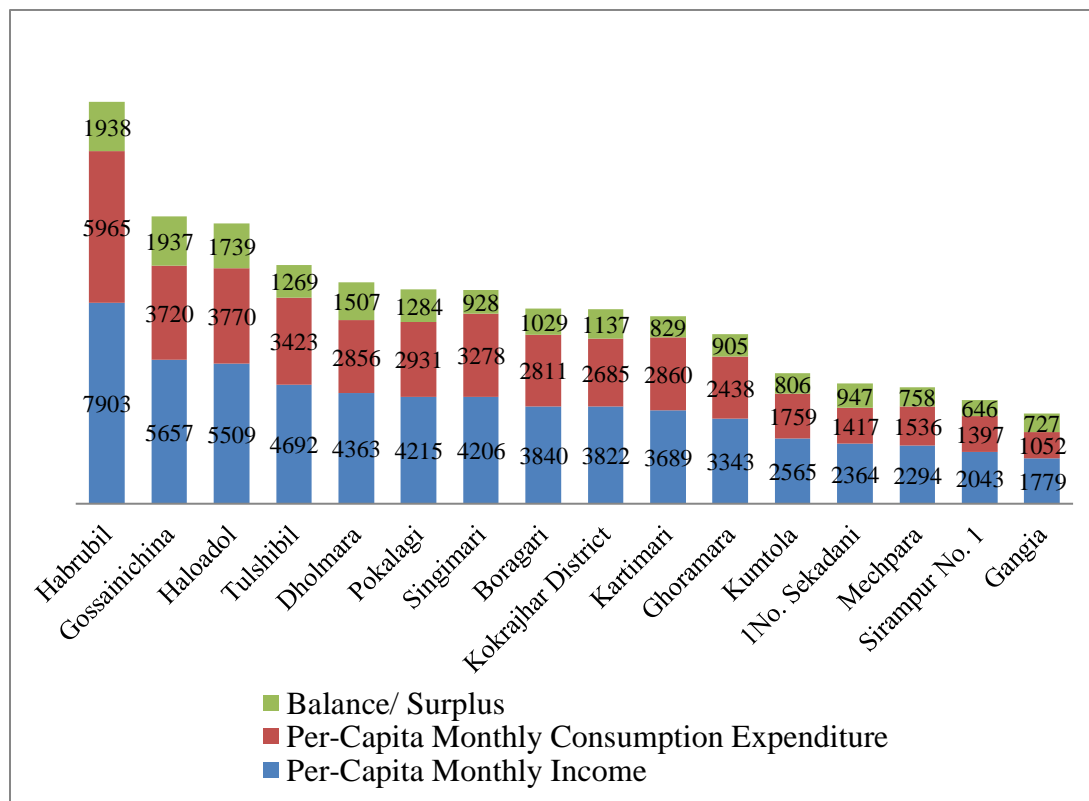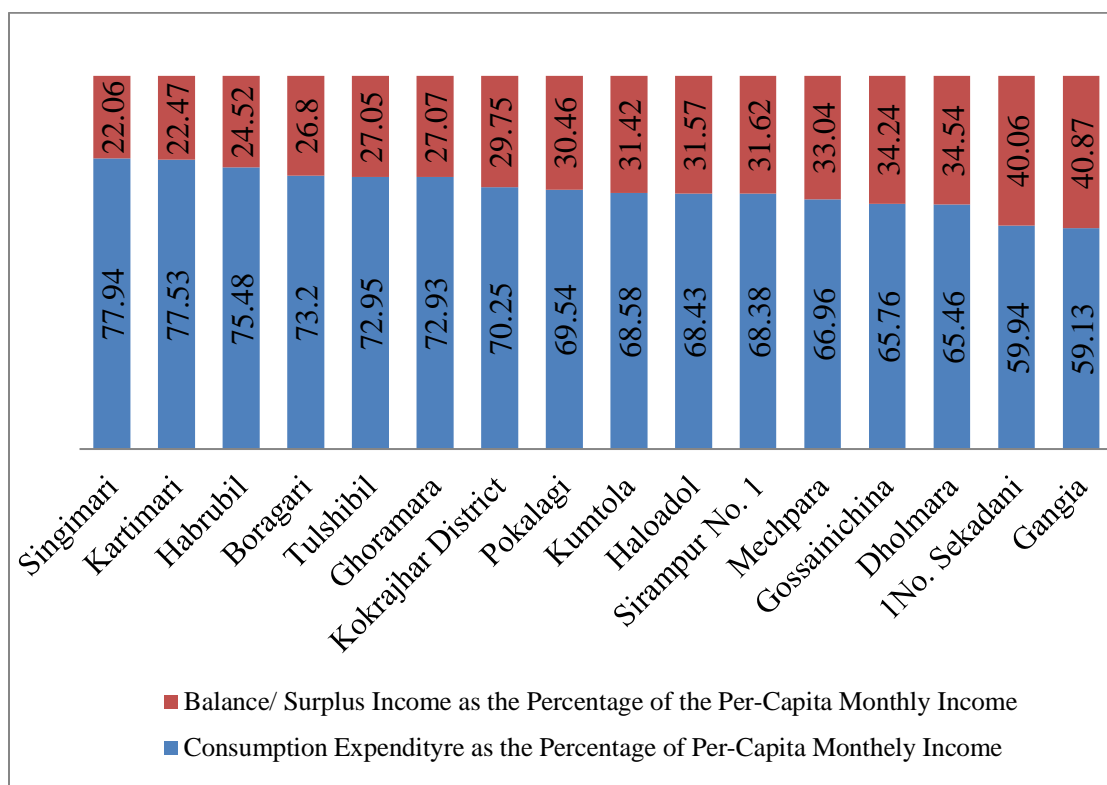

Source: Own calculation based on Primary Data

Fig. 5.19 reveals that the per-capita monthly consumption of the sample villages in the district on average is Rs 2685. Out of total 15 samples villages, nine (9) villages have higher than district average of per-capita monthly consumption expenditure; and six (6) villages have lower than average per-capita monthly consumption expenditure. It is noteworthy that among the 15 sample villages, Habrubil in Gossaigaon Block (Rs 5965), Haloadol in Kokrajhar Block (Rs 3770) and Gossainichina in Dotma Block (Rs 3720) represents top three; while Gangia in Kachugaon Block (Rs 1052), Srirampur No. 1 in Hatidura Block (Rs 1397) and 1 No. Sekadani in Kachugaon Block could maintain first three villages from the bottom in terms of per-capita monthly consumption expenditure.

Survey data indicates that the surplus income of the district on average is represented by Rs 1137 as shown in the Fig. 5.19. Out of total 15 sample villages, six (6) villages have attained higher than district average of surplus income amount; and nine (9) villages have lower than average surplus amount. Habrubil in Gossaigaon Block (Rs 1958), Gossainichina in Dotma Block (Rs 1937) and Haloadol in Kokrajhar Block (Rs 1739) managed to maintain top three villages; while Srirampur No. 1 in Hatidura Block (Rs 646), Gangia in Kachugaon Block (Rs 727) and Mechpara in Hatidura Block (Rs 758) maintained last three position in terms of surplus income amount.

Fig 5.20 shows the per-capita consumption expenditure and surplus income as the percentage of per-capita monthly income of the sample villages in the study area. Fig. 5.20 reveals that the per-capita monthly consumption expenditure as the percentage of per-capita monthly income in the district on average is 70.25 percent. Six (6) villages have attained higher than district average percentage; and nine (9) villages have attained lower than district average. Singimari in Dotma Block and Gangia in Kachugaon Block managed to maintain 1st position and 15th last position in terms of per-capita monthly consumption expenditure as the percentage of per-capita monthly income. Survey data reveals high percentage of income devoted to consumption expenditure as the level of income of the sample households remained at the low level during the survey year.

Fig. 5.20   Consumption Expenditure and Surplus Income as the Percentage of Per-Capita Monthly Income in the Sample Villages
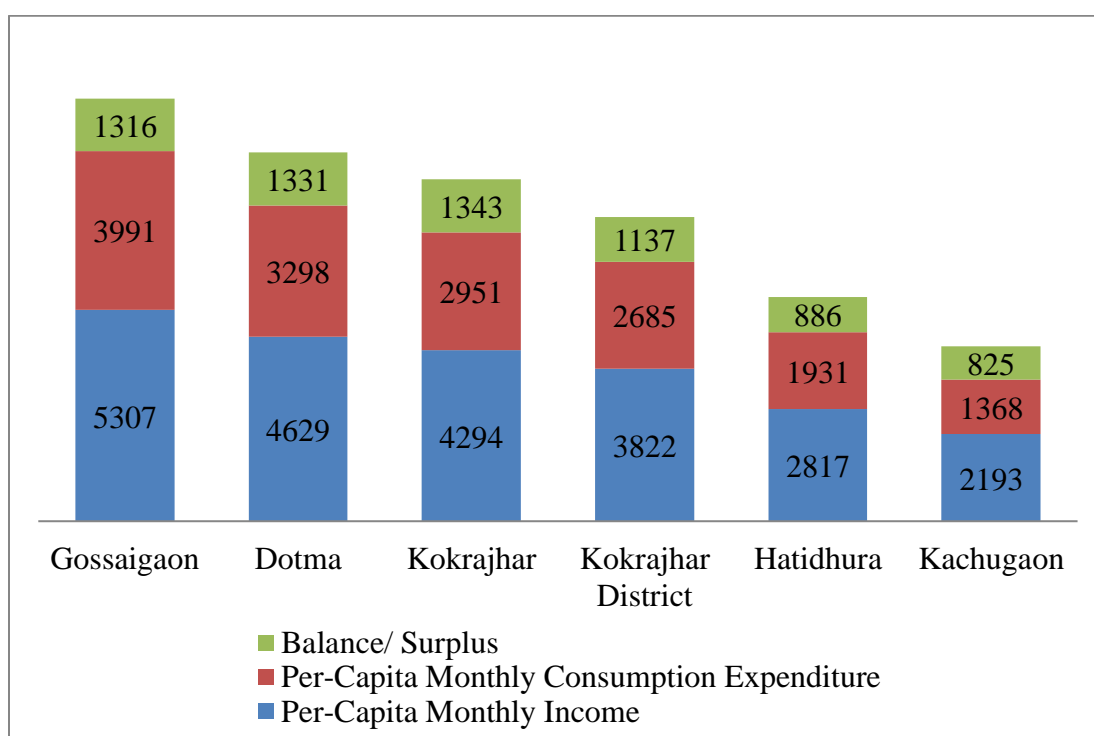

Source: Own calculation based on Primary Data

Fig. 5.20 also reveals that the surplus income of the sample villages as the percentage of per-capita monthly income in the district on average is 29.75 percent. Out of total 15 sample villages, nine (9) villages have attained higher than district average percentage; and six (6) villages have attained lower than district average. Gangia in Kachugaon Block and Singimari in Dotma Block managed to maintain 1st position and 15th last position in terms of surplus income amount as the percentage of per-capita monthly income. From the survey data it can be observed that the sample villages with low level of income comparatively devote less percentage of their income on consumption.

Fig. 5.21 represents Block wise per-capita monthly income, per-capita monthly consumption expenditure and surplus income of the sample households in the study area. The Fig. reveals that the per-capita monthly income of the sample Blocks in the

district on average is Rs 3822. Three (3) Blocks, namely Gossaigaon (Rs 5307), Dotma (Rs 4629) and Kokrajhar (Rs 4294) have attained higher than district average of per-capita monthly income; and two (2) Blocks, namely Hatidura (Rs 2817) and Kachugaon (RS 2193) have attained lower than district average. It is worth mentioning that among the 5 sample Blocks, Gossaigaon Block and Kachugaon Block managed to maintain 1st position and last 5th position in terms of per-capita monthly income.

Fig. 5.21   Block Wise Per-Capita Monthly Income, Consumption Expenditure and Surplus Income of the Sample Households.

Source: Own calculation based on Primary Data

Fig. 5.21 also reveals that the per-capita monthly consumption expenditure of the sample Blocks in the district on average is Rs 2685. Three (3) Blocks– Gossaigaon (Rs 3991), Dotma (Rs 3298) and Kokrajhar (Rs 2951) have attained higher than district average of per-capita monthly consumption expenditure; and two (2) Blocks – Hatidura (Rs 1931) and Kachugaon (Rs 1368) have attained lower than district average. It is worth mentioning that among the 5 sample Blocks, Gossaigaon Block

and Kachugaon Block managed to maintain 1st position and last 5th position in terms of per-capita monthly consumption expenditure.

Fig. 5.21 also gives the surplus income of the sample Blocks in the district on average is Rs 1137. Three (3) Blocks – Kokrajhar (Rs 1343), Dotma (Rs 1331) and Gossaigaon (Rs 1316) have attained higher than district average; and two (2) Blocks – Hatidura (Rs 886) and Kachugaon (Rs 825) have attained lower than district average. Kokrajhar Block and Kachugaon Block managed to maintain 1st position and last 5th position in terms of surplus income amount.

Fig. 5.22   Block Wise Consumption Expenditure and Surplus Income as the Percentage of Per-Capita Monthly Income in Kokrajhar District
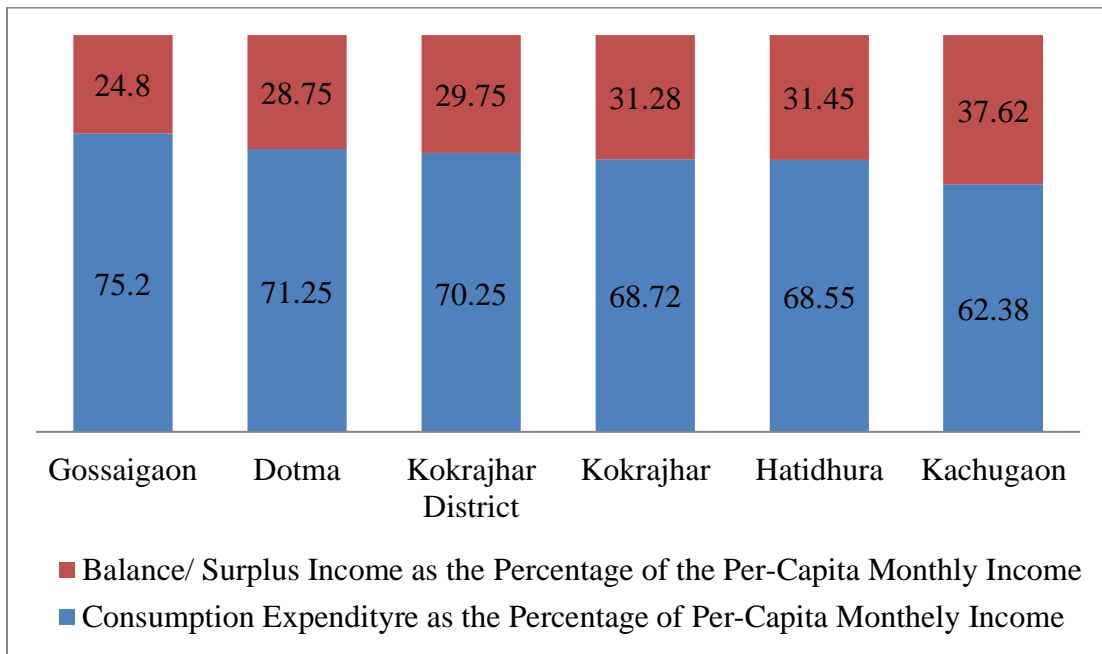
Source: Own calculation based on Primary Data

Fig. 5.22 represents Block wise consumption expenditure and surplus income as the percentage of per-capita monthly income in Kokrajhar District. The Fig. reveals that the per- capita monthly consumption expenditure of the sample Blocks as the percentage of per-capita monthly income in the district on average is 70.25 percent. Two (2) Blocks have attained higher than district average percentage; in descending order Gossaigaon (75.20 percent), and Dotma (71.25 percent); and three (3) Blocks,

Kokrajhar (68.72 percent), Hatidura (68.55 percent) and Kachugaon (62.38 percent) have attained lower than district average. Gossaigaon Block and Kachugaon Block managed to maintain 1st position and last 5th position respectively in terms of per-capita monthly consumption expenditure as the percentage of per-capita monthly income.

Fig. 5.22 also reveals that the surplus income amount of the sample Blocks as the percentage of per-capita monthly income in the district on average is 29.75 percent. Two (3) Blocks have attained higher than district average percentage; in descending order Kachugaon (37.62 percent), Hatidura (31.45 percent) and Kokrajhar (31.28 percent); and two (2) Blocks, Dotma (28.75 percent) and Gossaigaon (24.8 percent) have attained lower than district average. Kachugaon Block and Gossaigaon Block could maintain 1st and 5th position respectively in terms of surplus income amount as the percentage of per-capita monthly income.

5.14 HDI, Standard Deviations and Co-efficient of Variations

In this section, co-efficient of variation in terms of population, per-capita monthly income, per-capita monthly consumption expenditure and surplus income are estimated and interpreted. First, attempt is made Block wise; and then the district as a whole. Analysis of co-efficient of variation of statistical data is important as it provides the information about to what extent data point variant from mean value. The coefficient of variation shows the extent of variability of data in a sample in relation to the mean value. A variance of zero indicates that all of the data values are identical and all non-zero variances are positive. A small variance indicates that the data points tend to be very close to the mean, and to each other and a high variance indicates that the data points are very spread out from the mean, and from one another.

Table 5.17 gives the value of standard deviation and co-efficient of variation in the sample Block Kokrajhar. From the Table, it is seen that co-efficient of variation in the sample Block is highly spread among the different dimensions; population, per-capita monthly income, per-capita monthly

consumption expenditure and surplus income. Data reveals large inter village differences in terms of per- capita monthly income, CV being (24.60 percent); highest value (Rs 5509) of village Haloadol is much higher than the lowest value attained by Ghoramara (Rs 3343); representing a gap of (Rs 2166). Co-efficient of variation in terms of per-capita monthly consumption expenditure (22.55 percent) is also very large indicating a large gap among the villages in the sample Block; highest value (Rs 3770) attained by Haloadol and lowest value (Rs 2438) attained by Ghoramara; representing a gap of (Rs 1332). Surplus income dimension reveals large inter village gap, CV being (31.11 percent); highest amount (Rs 1739) attained by the village Haloadol is much higher than the lowest amount (Rs 905) attained by the village Ghoramara representing a gap of (Rs 834).

Table 5.17 Per-Capita Monthly Income, Consumption Expenditure and Surplus Income of the Sample Households in Kokrajhar Block (in Rs.)

Village/ Block/ District	Population	Total Monthly Income	Per Capita Monthly Income	Total Monthly Consumption Expenditure	Per Capita Monthly Consumption Expenditure	Balance / Surplus
Haloadol	115	633500	5509	433600	3770	1739
Dholmara	160	698000	4363	457000	2856	1507
Ghoramara	154	510500	3343	375500	2438	905
Kokrajhar Block	**429**	**1842000**	**4294**	**1266100**	**2951**	**1343**
Kokrajhar District	**2005**	**7664000**	**3822**	**5382900**	**2685**	**1137**
Standard Deviation	**24.43**	**95358.9**	**1083.61**	**41963.1**	**681.22**	**430.46**
Co-efficient of Variation (in %)	**17.09**	**15.51**	**24.60**	**9.94**	**22.55**	**31.11**

Source: Estimated based on Secondary Data

Table 5.18 gives the value of standard deviation and co-efficient of variation in the sample Block Dotma. Data reveals that the co-efficient of variation in the sample Block Dotma highly spread among the different dimensions representing a large gap between the highest and lowest dimension. The gap between the highest and lowest value in terms of per-capita monthly

Table 5.18 Per-Capita Monthly Income and Consumption Expenditure of the Sample Households in Dotma Block (in Rs.)

Village/ Block/ District	Population	Total Monthly Income	Per Capita Monthly Income	Total Monthly Consumption Expenditure	Per Capita Monthly Consumption Expenditure	Balance/ Surplus
Gossainichina	143	809000	5657	532000	3720	1937
Singimari	126	530000	4206	413000	3278	928
Boragari	119	457000	3840	334500	2811	1029
Dotma Block	**388**	**1796000**	**4629**	**1279500**	**3298**	**1331**
Kokrajhar District	**2005**	**7664000**	**3822**	**5382900**	**2685**	**1137**
Standard Deviation	**12.34**	**185775**	**960.98**	**99439.68**	**454.56**	**555.69**
Co-efficient of Variation (in %)	**9.54**	**31.03**	**21.04**	**23.32**	**13.90**	**42.81**

Source: Estimated based on Secondary Data

income, per capita-monthly consumption and surplus income in the Block is represented by (Rs1817), (Rs 909) and (Rs 1009) respectively. Highest variation can be observed in the case of surplus income; CV being (42.81 percent).

Table 5.19 Per-Capita Monthly Income, Consumption Expenditure and Surplus Income of the Sample Households in Kachugaon Block (in Rs.)

Village/ Block/ District	Population	Total Monthly Income	Per Capita Monthly Income	Total Monthly Consumption Expenditure	Per Capita Monthly Consumption Expenditure	Balance/ Surplus
Gangia	156	277500	1779	164100	1052	727
1No. Sekadani	143	338000	2364	202600	1417	947
Kumtola	108	277000	2565	190000	1759	806
Kachugaon Block	**407**	**892500**	**2193**	**556700**	**1368**	**825**
Kokrajhar District	**2005**	**7664000**	**3822**	**5382900**	**2685**	**1137**
Standard Deviation	**24.83**	**35074.92**	**408.33**	**19629.14**	**353.56**	**111.45**
Co-efficient of Variation (in %)	**18.30**	**11.79**	**18.26**	**10.58**	**25.09**	**13.48**

Source: Estimated based on Secondary Data

Table 5.19 gives the value of standard deviation and co-efficient of variation in the sample Block Kachugaon. Data reveals that the co-efficient of variation in the sample Block Kachugaon is highly spread among the different dimensions. The gap in terms of per-capita monthly income, per-capita monthly consumption expenditure and surplus income are represented by (Rs 786), (Rs 907) and (Rs 220) respectively. Survey data reveals highest variation in the case of per-capita monthly consumption expenditure; CV being (25.09 percent).

Table 5.20 gives the value of standard deviation and co-efficient of variation in the sample Block Gossaigaon. Primary data shows that the co-efficient of variation in the sample Block Gossaigaon is highly spread among the different dimensions; population, per-capita monthly income, per-capita monthly consumption expenditure and surplus income. The gap between the highest and lowest values in terms of per-capita monthly income, per-capita monthly consumption expenditure and surplus income are represented by (Rs 4214), (Rs 3105) and (Rs 1109) respectively. Highest variation in the Block can be observed in terms of surplus income; CV being (41.51 percent).

Table 5.20   Per-Capita Monthly Income, Consumption Expenditure and Surplus Income of the Sample Households in Gossaigaon Block (in Rs.)

Village/ Block/ District	Population	Total Monthly Income	Per Capita Monthly Income	Total Monthly Consumption Expenditure	Per Capita Monthly Consumption Expenditure	Balance / Surplus
Habrubil	113	893000	7903	674000	5965	1938
Kartimari	132	487000	3689	377500	2860	829
Tulshibil	130	610000	4692	445000	3423	1269
Gossaigaon Block	**375**	**1990000**	**5307**	**1496500**	**3991**	**1316**
Kokrajhar District	**2005**	**7664000**	**3822**	**5382900**	**2685**	**1137**
Standard Deviation	**10.44**	**208188.2**	**2201.3**	**155407.8**	**1654.28**	**558.43**
Co-efficient of Variation(in %)	**8.35**	**31.39**	**40.55**	**31.15**	**40.52**	**41.51**

Source: Compiled and Estimated based on Secondary Data

Table 5.21 gives the value of standard deviation and co-efficient of variation in the sample Block Hatidura. Survey data shows that the co-efficient variation in the sample Block Hatidura is highly spread among the different dimensions; population, per-capita monthly income, per-capita monthly consumption expenditure and surplus income. The gap between the highest and lowest values in terms of per-capita monthly income, per-capita monthly consumption expenditure and surplus income are represented by (Rs 2173), (Rs 1534) and (Rs 526) respectively. Highest variation in the Block can be observed in the case of per-capita monthly consumption expenditure; CV being (43.40 percent).

Table 5.21   Per-Capita Monthly Income, Consumption Expenditure and Surplus Income of the Sample Households in Hatidura Block (in Rs.)

Village/ Block/ District	Population	Total Monthly Income	Per Capita Monthly Income	Total Monthly Consumption Expenditure	Per Capita Monthly Consumption Expenditure	Balance / Surplus
Mechpara	126	289000	2294	193500	1536	758
Sirampur No. 1	150	306500	2043	209600	1397	646
Pokalagi	130	548000	4215	381000	2931	1284
Hatidhura Block	**406**	**1143500**	**2817**	**784100**	**1931**	**886**
Kokrajhar District	**2005**	**7664000**	**3822**	**5382900**	**2685**	**1137**
Standard Deviation	**12.86**	**144746.6**	**1188.19**	**103917.8**	**848.38**	**340.65**
Co-efficient of Variation (in %)	**9.50**	**37.97**	**41.68**	**39.76**	**43.40**	**38.02**

Source: Compiled and Estimated based on Secondary Data

From the analysis of co-efficient of variation of the sample Blocks in terms of per-capita monthly income, per-capita monthly consumption expenditure and surplus income that highest variation has been observed in the Gossaigaon Block; as the achievement of the village Habrubil is much higher than the other two villages in different dimensions.

Table 5.22   SD and CV of Per-Capita Monthly Income, Consumption Expenditure and Surplus Income in the Study Area (in Rs.)

Block/ District	Population	Total Monthly Income	Per Capita Monthly Income	Total Monthly Consumption Expenditure	Per Capita Monthly Consumption	Balance / Surplus
Kokrajhar	429	1842000	4294	1266100	2951	1343
Dotma	388	1796000	4629	1279500	3298	1331
Kachugaon	407	892500	2193	556700	1368	825
Gossaigaon	375	1990000	5307	1496500	3991	1316
Hatidura	406	1143500	2817	784100	1931	886
Kokrajhar District	**2005**	**7664000**	**3822**	**5382900**	**2685**	**1137**
Standard Deviation	**20.55**	**483593.10**	**1298.03**	**390271.40**	**1055.06**	**260.96**
Co-efficient of Variation (in %)	**5.13**	**31.55**	**33.73**	**36.25**	**38.96**	**22.89**

Source: Compiled and Estimated based on Primary Data

Table 5.22 represents the value of standard deviation and co-efficient of variation in the sample Blocks of the district Kokrajhar. The Table shows that the co-efficient of variation in the sample Blocks in the Kokrajhar district is highly spread among the different dimensions; population, per-capita monthly income, per-capita monthly consumption expenditure and surplus income. The gap between the highest and lowest dimensions in terms of per-capita monthly income, per-capita monthly consumption expenditure and surplus income are represented by (Rs 3144), (Rs 518) and (Rs 458) respectively. Block wise analysis reveals large variation in all the dimensions; CV of per-capita monthly income, per-capita monthly consumption expenditure and surplus income being (33.73 percent), (38.96 percent) and (22.89 percent) respectively.

5.15   Conclusion

In the previous sections of the present chapter, various aspects and indicators of human development are analyzed based on primary survey data. Positions of the sample Blocks and villages in terms of HDI are also analyzed. Data reveals that the

state of Assam is lagging behind most the states of India in terms of human development indicators; and the condition is even more concerning in the tribal inhabited district of Kokrajhar. The present study estimated the value of HDI at 0.449 which is much lower than the state average of 0.557 as published by the Assam HDR, 2014. However, HDI value of present study represents only the rural area of the district. The position of Bodo inhabited district of Kokrajhar in terms of human development aspect is different from other districts of the state; district-wise close examination shows poor performance and large variations in human development across the districts in the state of Assam (Basumatary, 2012). The present study clearly indicates that, in terms of the progress in overall human development aspect, the Kokrajhar district is just about halfway point in achieving the desired goal. The value of HDI in the study area is particularly lowered by the achievement in income dimension which necessitates the desired process of growth in the district. The one to one survey report reveals that about half of the people in the study area are satisfied with the present status and various processes of human development achievements in the area. While promoting human development aspect, strategy needs to be adopted considering the aspect of inclusive institutions, and thus ensuring people's participation in the process of development. Strategy of creating gainful employment opportunities, thus, holds the key initiative for improving human development in the district. Present survey report indicates that sample households in the study area has been confronting with poor condition of basic amenities of life such as poor housing facility, insignificant levels of safe drinking and sanitation facilities. IMR of the district which has been considered as health indicator in the present study is higher than the state average. Proper strategy to reduce IMR, provisioning universal quality of public healthcare services is important. Given the multi dimensional complexities and prevalent diversities in the present study area, the required policy initiative cannot be a type of generic set of policies; the underlying problems calls for focused and specific set of policies for addressing the issues of human development. The present study is indicative of critical and analytical insights towards inclusive human development in the tribal inhabited district of Kokrajhar.