Chapter - VI

Human Development of Bodos in Chirang District

- 6.1 Introduction
- 6.2 HDI Key Dimensional Achievements of Sample Villages and Towns
 - 6.2.1 Life Expectancy at Birth of the Bodo People in Chirang District
 - 6.2.2 Mean Year of Schooling (MYS) of the Bodo People in Chirang District
 - **6.2.3** Expected Year of Schooling (EYS) of the Bodo People in Chirang District
 - **6.2.4** Annual Per-Head Household Income of the Bodo People in Chirang District
- 6.3 Dimensional Index and HDI of Sample Villages and Towns
 - 6.3.1 Health Dimensional Index of the Bodo People in Chirang District
 - **6.3.2** Education Dimensional Index of the Bodo People in Chirang District
 - **6.3.3** Living Standard Dimensional Index of the Bodo People in Chirang District
- 6.4 Human Development Index of the Bodo People in Chirang District
- 6.5 Conclusion

Chapter-VI

Human Development of Bodos in Chirang District of Assam

6.1. Introduction

One of the objectives of this study is to calculate the Human Development Index (HDI) for Bodo households of Chirang district. In this chapter, the HDI of the sample villages and towns were calculated based on primary data. The HDI is a composite index of human development. It considers three components of human life as basic indicators of human development and they are health, education and living standard. Hence, the three key dimensions of HDI are- a long and healthy life, access to knowledge and a decent standard of living. The process of calculation of HDI has been explained widely in the methodology chapter. Now, we explain the human development index of sample villages and towns.

6.2. HDI Key Dimensional Achievements of Sample Villages and Towns

According to the new methodology (UNDP 2010), Human Development Index (HDI) is the geometric mean of the dimensional indexes – Health Index, Education Index and Index of Living Standard. Health Index is evaluated by life expectancy at birth. Life expectancy is the year of life that a child can expect to live at the time of his/her birth. The educational index is a composite measure of the mean year of schooling and expected years of schooling. The average year of institutional education is known as the mean year of schooling (MYS). The expected year of schooling (EYS) is the year of institutional education that every child can expect to complete in his/her life. Index of living standard is evaluated from Purchasing Power Parity (PPP) per-capita income (PCI). Therefore, HDI is a composite index of four key dimensional achievements of human life. They are- Life Expectancy at Birth (e_x), Mean Year of Schooling (MYS), Expected Year of Schooling (EYS) and Per-capita Income (PCI).

Table 6.1 HDI Key-Dimensional Index of the Sample Villages and Towns

Sl.	8 6.1 HDI Key-Dim Name of Village		Mean	Expected	Annual Per-
	Name of Village			-	Head Household
No.		Expectanc		Year of	
		•	Schooling	Schooling	Income (At the
		$(\mathbf{e}_{\mathbf{x}})$	(MYS)	(EYS)	constant price of
11	Amguri	53.3	3.95	9.44	37315
2	Aminpara	52.8	2.84	7.29	20077
3	Amteka	54.52	2.995	8.663	18985
4	Betnapara	61.52	3.357	8.971	31568
5	Bhatarmari	48.18	2.491	7.411	17477
6	Bikrampur	58.2	4.34	9.75	28947
7	Baldi No.2	56.28	4.36	10.06	22768
8	Chamugaon	52.98	3.19	9.01	24085
	Chanaguri	57.42	11.05	12.34	51069
	Dahalpara	58.41	2.92	6.52	34120
	Dakhin Makra	49.85	3.01	7.11	22150
	Dangaigaon	58.41	4.26	8.47	35804
	Deulguri	54.87	3.88	8.05	32697
	Dimaihora	52.47	3.21	7.83	32049
	Duttapur	56.56	4.36	10.55	31267
	Gorgaon No.1	57.15	5.04	9.11	33094
17	Kahitama	49.74	2.88	7.83	20219
	Kahibari	47.92	2.19	9.35	22068
	Kashikotra	55.89	10.43	11.01	35761
20		54.37	4.15	7.12	20529
21	Khamarpara	46.91	3.51	8.13	
22	Khungring				15160
23	Koila Moila	46.86	3.66	8.41	24736
	Kachubil No.1	54.13	3.11	6.03	32203
24	Kukurmari	58.89	11.36	13	47534
	Kumargaon	61.3	4.92	10.83	23980
	Maigaon	58.61	5.47	10.94	27507
	Nilibari	56.27	6.44	11.3	24903
	Ouguri	50.39	3.51	8.03	22742
29	Oxiguri	60.08	4.85	9.02	39883
	Patkiguri	52.21	3.92	7.89	37071
	Patabari	47.88	2.07	6.91	24222
32	Salbari Bhurnar	44.98	2.36	5.99	22424
33	Silbari Abidanara	51.67	3.18	9.8	23124
	Subaiihar	54.71	5.83	11.27	21684
	Sukhanipara	53.34	8.03	10.68	37735
	Tangabari	49.08	3.57	5.97	23497
	Uttar Burikhamar	43.09	2.34	6.33	19745
	Uttar Runikhata	55.62	6.52	10.3	32741
	Biini Town	58.67	10.02	13	52884
	Basugaon Town	57.87	9.62	12.76	48193
	aple Average for	53.835	4.73	9.062	31043
	Bodo People				
Chirang District (AHDR,2014) *		68.52	5.82	12.57	21504
Assam (AHDR, 2014)		54.00	6.17	11.85	24660

Source: Own calculation based on primary data

N.B. * Assam Human Development Report, 2014.

Note: The Annual Per-Head Household Income was estimated at constant price of 2013-14 through expenditure method and value added method.

But, in this study, annual per-head household income was used as income variable of the Bodo people of the study area. The Annual Household Per-Head Household Income was estimated at constant price of 2013-14 through expenditure method and value added method. The performances of the sample villages and towns on the HDI key dimensions are stated in the following Table 6.1.

6.2.1 Life Expectancy at Birth of the Bodo People in Chirang District

As stated earlier, life expectancy at birth is the average year of life that a newborn child can expect to live. The life expectancy at birth for the Bodo households of Chirang district is found to be 53.835 (Table 6.1). But, according to AHDR-2014, the life expectancy rate is 68.52 for Chirang district which is the fourth-highest among all districts of Assam. This difference is because of the purpose of the study. Here, life expectancy is calculated only for the Bodo community, but AHDR-2014 was calculated life expectancy for all communities as a whole at the district level. This information states that the life expectancy of the Bodo community in Chirang district is lower compared to that of other communities. It is highlighted by red and green bars in Figure 6.1 that the sample average life expectancy rate for Bodo people is found more or less equal to the AHDR-2014 calculated value of 54.00 for Assam.

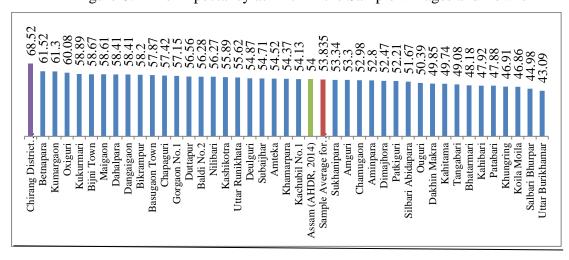


Figure 6.1 Life Expectancy at Birth in the Sample Villages and Towns

Source: Own calculation based on primary data

N.B. * Assam Human Development Report, 2014.

In this study, the highest life expectancy rate is found to be 61.52 and it is achieved by Betnapara village because this village is nearer to Bijni town and people seem to be conscious of health. On the other hand, the lowest life expectancy rate is found 43.09 in Uttar Burikhamar village, because, this village is located nearest to the forest area of Manas National Park where people are deprived of the adequate medical facility.

6.2.2 Mean Year of Schooling (MYS) of the Bodo People in Chirang District

The mean year of schooling is the average years of institutional education obtained by family members of a household. It is found that the MYS score of all sample Bodo households of Chirang district is 4.73 (Figure 6.2). According to the Assam Human Development Report-2014, the MYS score for the Chirang district is 5.82 and it is 6.17 for all over Assam. It is obvious from this information that the sample average MYS score of the Bodo people calculated in this study is lower than the AHDR calculated MYS score of all communities of Chirang district as well as MYS score of all over Assam. Hence, the mean year of schooling of Bodo people is less than that of the other community in Chirang district as well as the state average.

In this study, the highest MYS score is found at 11.36 for Kukurmari village. The lowest MYS score is 2.34 and it is for Uttar Burikhamar village. The UNDP-2010 recommended scheme of comparison states that

If MYS< 0.500, we consider the case as the low mean year of schooling.

If 0.500≤MYS≤0.799, it indicates a medium mean year of schooling.

If MYS≥0.800, it suggests a high mean year of schooling.

Applying the above mentioned scheme of comparison, we found that MYS scores of 6 (15 percent) sample villages (including two towns) are more than 0.800 and their mean year of schooling may be considered as high. MYS scores of 5 (13 percent) sample villages lie between 0.500 and 0.788. The mean year of schooling of these 5 villages may be considered as a medium. It is found that MYS scores of the remaining 29 (76 percent) villages are less than 0.500.

As per the UNDP-2010 recommended scheme of comparison stated above, the mean year of schooling of these 29 sample villages is low.

Kukurmari Chapaguri Rashikotra Bijni Town Basugaon Town Nilbari Malgaon Town Subaijhar Sample Average for. Angala Baldi No. 2 Deulguri Baldi No. 2 Deulguri Barkiguri Barkikhamar Bartiguri Barkikhamar Bartiguri Barkikhamar Bartiguri Barkikhamar Bartiguri Barkikhamar Bartiguri Barkikhamar Bartiguri Bartigur

Figure 6.2 Mean Year of Schooling (MYS) in the Sample Villages and Towns

Source: Own calculation based on primary data

N.B. * Assam Human Development Report, 2014.

6.2.3 Expected Year of Schooling (EYS) of the Bodo People in Chirang District

The expected year of schooling is the years of institutional education that any child can expect to complete in his life. It is one of the determinants of the dimensional index of educational achievement.

In this study, the average of the Expected Year of Schooling (EYS) of all sample villages and towns is found as 9.062 as indicated by the sample average EYS in Figure 6.3. The highest EYS is found as 13 and it is achieved by the Kukurmari village and Bijni town. The lowest EYS score of 5.97 is found for the Tangabari village.

The AHDR-2014 states that the EYS scores for Assam and Chirang district are 11.85 and 12.57 respectively. But the sample average EYS is found as 9.062 which is calculated for the people of the Bodo community only. The

sample average EYS score (9.062) calculated in this study is less than the AHDR-2014 estimated EYS scores (11.85) of Assam and Chirang district (12.57). Therefore, we confirm that the expected year of schooling of the Bodo community is lower than other communities in Chirang district as well as all over Assam.

Figure 6.3 Expected Year of Schooling (EYS) in the Sample Villages and Towns

Source: Own calculation based on primary data N.B. * Assam Human Development Report, 2014.

6.2.4 Annual Per-Head Household Income of the Bodo People in Chirang District

At the time of the sample survey, annual per-head household income is found Rs.31043/- for the Bodo people in Chirang district which was estimated at constant price of 2013-14 applying the expenditure method and value added method. According to the AHDR-2014, the annual PCI of Chirang district is Rs.21504/- and that is Rs.24660/- for all over Assam. Thus, the annual per-head household income of the people of the Bodo community in the Chirang district is higher than the average income of the people of other communities.

According to Figure 6.4, the highest annual per-head household income is found at Rs.52884/- and it is for the Bodo people of Bijni town. The

lowest annual per-head household income is found as Rs.15160/- and it is for the Bodo people of Khungring village.

Figure 6.4 Annual Per-Head Household Income of the Sample Villages and Towns (in Rs.)

Source: Own calculation based on primary data

N.B. * Assam Human Development Report, 2014.

Note: The Annual Per-Head Household Income was estimated at constant price of 2013-14 through expenditure method and value added method.

6.3 Dimensional Index and HDI of Sample Villages and Towns

In the above discussion, we have found the HDI key dimensional achievement of the sample villages and towns. Now we have to calculate the HDI dimensional indices along with the Human Development Index (HDI) for the Bodo people of Chirang district. Here, we have calculated HDI and its dimensional indices for every sample village/ town. First of all, for example, we carry the process of calculation of HDI Dimensional Indices and HDI for Amguri village. And the same was done for all other sample villages and towns.

6.3.1 Health Dimensional Index of the Bodo People in Chirang District

The health dimensional index is calculated from life expectancy at birth. Life expectancy at birth is considered as the key dimensional achievement in health. Health Dimensional Index is also termed as Life Expectancy Index. Let us calculate the health dimensional index for Amguri village. The life expectancy at birth for Amguri village is found 53.3 and it has been calculated using the Chiang method as discussed in methodology Chapter-III. Similarly, as explained in the methodology chapter, for all over the world, the highest life expectancy is considered 85 and the lowest life expectancy is considered 20. Therefore, the Life Expectancy Index for Amguri village is found at 0.512. That is,

$$\frac{\text{Actual Value} - \text{Minimum Value}}{\text{Maximum Value} - \text{Minimum Value}} = \frac{53.3 - 20}{85 - 20} = 0.512$$

The Life Expectancy Index of every sample villages and towns is given in Table 6.2. The bar diagrams of the health dimensional index for all sample villages and towns are stated in Figure 6.5 below.

In Figure 6.5, the highest health index is found 0.639 for Betnapara village because of its highest life expectancy. While the lowest health index is 0.355 and it is for Uttar Burikhamar village. Here we may apply the UNDP-2010 recommended scheme of comparison to specify the performances in a particular dimensional index such that

If Index< 0.500, we consider the case, as low performance in a particular dimensional achievement.

If 0.500\leq Index\leq 0.799, it indicates a medium performance.

If Index≥0.800, it suggests high performance.

Applying this scheme of comparison we get, performances in the health dimensional index of 13 sample villages are below the minimum value of 0.5 as per the recommendation of UNDP-2010. It indicates that the health status of the

Bodo people of these 13 villages is low. On the other hand, the scores of the remaining 25 sample villages and two towns lie between the values of mediumrange of 0.500 and 0.799. Therefore, the health status of the Bodo people of these 25 villages and two towns are medium. There is no single village or town whose health index is greater or equal to 0.800 so that its health status may be considered as high.

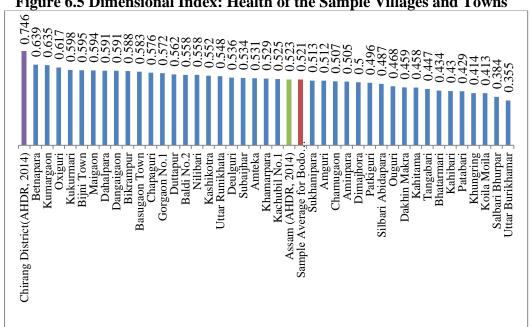


Figure 6.5 Dimensional Index: Health of the Sample Villages and Towns

Source: Own calculation based on primary data

N.B. * Assam Human Development Report, 2014.

According to the AHDR-2014, the health index for Chirang district is 0.746 but the health index for Bodo people of Chirang district calculated in this study is 0.521. The AHDR-2014 was calculated health index for all communities of Assam. Here, the health index is calculated for the people of the Bodo community only. Since the health index calculated in this study is less than the AHDR-2014 calculated health index for Chirang district, the health status of Bodo people is low compared to the people of other communities.

6.3.2 Education Dimensional Index of the Bodo People in Chirang District

In this section, the dimensional index of education for the sample villages and towns has been calculated. Educational Index is the average of two Key-Dimensional Indices of educational achievement- index of Mean Year of Schooling (MYS) and index of Expected Year of Schooling (EYS). Index of Mean Year of Schooling (MYS) is the ratio between MYS and maximum year of schooling assumed and used for normalisation. As per the AHDR-2014 methodology, the maximum year of schooling is 15 years which ensures a person to have a secondary level of schooling. Index of Expected Year of Schooling (EYS) is also the ratio between the value of EYS and the maximum value of EYS. According to AHDR-2014, the maximum value of EYS is 13 years in India instead of 18 years considering UNDP methodology. It is because, in India, "one is considered to be a child up to the age of 18 with a school start age of 6" (AHDR, 2014, p-27). Therefore, enrolments within the age group 6 to 18 years were considered for estimating EYS.

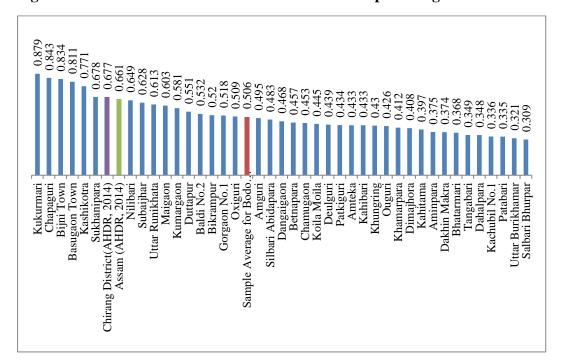


Figure 6.6 Dimensional Index: Education of the Sample Villages and Towns

Source: Own calculation based on primary data N.B. * Assam Human Development Report, 2014.

Let us calculate the educational index based on primary data for Amguri village. Based on the primary survey, the values of MYS and EYS for Amguri village are 3.95 and 9.44 respectively (Table: 6.1). Therefore, mean years of schooling index is 0.263 (3.95/15 = 0.263) and the expected years of schooling index is 0.726 (9.44/13 = 0.726). Thus, the Educational Index for these sample households of Amguri village is 0.495 [(0.263+0.726)/2 = 0.495]. Similarly, educational indices for all sample villages and towns are calculated as stated in Table: 6.2.

As per the UNDP-2010 recommended scheme of specification stated earlier discussion; we find that the values of educational indices of 24 sample villages are less than 0.500. Thus, the educational status of the Bodo people of 24 villages is low. Educational indices of 12 sample villages lie between the values 0.500 and 0.799, thereby, the educational status of Bodo people of these 12 villages are medium. On the other hand, the educational indices of two sample villages (Kukurmari and Chapaguri) and two sample towns (Bijni and Basugaon) are more than 0.800. The educational status of Bodo people of Kukurmari, Chapaguri, Bijni and Basugaon may be considered as high. Because these areas are either semi urban or they are located nearest to an urban area.

The educational index of Bodo people of Chirang district is found to be 0.506 (Figure 6.6). But, AHDR-2014 calculated educational index is 0.677 and it is for the people of all communities of Chirang district. It confirms that the educational index calculated for Bodo people shows lower educational status compared to other communities in the Chirang district because the AHDR-2014 calculated educational index is greater.

6.3.3 Living Standard Dimensional Index of the Bodo People in Chirang District

The AHDR-2014 used Per Capita Annual Income (PCAI) in the calculation of district wise index of the standard of living. Similarly, the Annual Per-Head Household Income (APHHI) at constant price 2013-14 of the sample households has been used for the calculation of the standard of living index of

Bodo people of the sample villages and towns in this study. Similar to the AHDR-2014 methodology, a maximum income of Rs.119030 and a minimum income of Rs.5090 are taken to normalise the level of income of the sample villages and towns. The formula for calculating income index is,

Income Index =
$$\frac{\ln(Actual\ Income) - \ln(5090)}{\ln(119030) - \ln(5090)}$$

Where, 'ln' stands for natural logarithm.

Let us calculate the Income Index for Amguri village. During the sample survey, Annual Per-Head Household Income for Amguri village is found as Rs.37315/-. Using the above mentioned formula, we calculate the income index for Amguri village as

Income Index(Amguri) =
$$\frac{\ln(37315) - \ln(5090)}{\ln(119030) - \ln(5090)} = 0.632$$

Similarly, income indices for other sample villages are calculated and their values are stated in Figure 6.7. Adopting the UNDP-2010 recommended scheme of comparison such that

If the Income Index< 0.500, we consider that the standard of living is low because of the low level of income.

If 0.500\le Income Index\le 0.799, it indicates a medium standard of living.

And if Income Index ≥ 0.800, it suggests a high standard of living because of the high level of income.

According to Figure 6.7, the income indices of 16 villages are less than 0.500. It means that the annual incomes of the 42% sample villages are low. The Income indices of the remaining 22 villages and two towns are found between the values 0.500 and 0.799. Here, the annual incomes of the 58% sample villages and of two sample towns are medium. There is not a single village or town found to have a high level of income as per UNDP recommendation.

But, the income index for the district as the sample average is found to be 0.563 which is greater than the income indices of Assam 0.501(AHDR, 2014) and Chirang district 0.457 (AHDR, 2014). It proves that the annual incomes of the Bodo households in the Chirang district are more than that of the households of other communities. Similarly, the annual per-head household income of the Bodo households Rs. 31043/- in Chirang district is more compared to the per capita State Domestic Product of Assam Rs. 24660/- (AHDR, 2014).

Figure 6.7 Dimensional Index: Living Standard of the Sample Villages and Towns

Source: Own calculation based on primary data

Thus, regarding the level of income, Bodo people in Chirang district is found to be in a better position in comparison to overall Assam and people of other community in the district.

6.4 Human Development Index of the Bodo People in Chirang District

In the above discussion of this chapter, we explained HDI key dimensions' achievements and HDI dimensional indices for the Bodo people in this study. Now, we are in a position to calculate HDI for the Bodo people of Chirang district. In this section of this chapter, we calculate the HDI of sample villages and towns wise to investigate the position of Human Development of Bodo people in the Chirang district.

According to the UNDP methodology of calculating HDI-2010 as explained in the methodology chapter, the Human Development Index is the geometric mean of Education Index, Income Index and Life Expectation Index. The formula for calculation of the HDI is,

$$HDI = \sqrt[3]{Education\ Index * Income\ Index * Health\ Index}$$

Let us calculate the Human Development Index for the sample villages. As an example of the calculation of HDI for sample villages, we take Amguri village.

According to Table 6.2, for Amguri village, Education Index is 0.495, Income Index is 0.632 and Health Index is 0.512. Placing these values of dimensional indices in the HDI calculation formula, we get the Human Development Index for Amguri village as,

HDI (Amguri) =
$$\sqrt[3]{0.495 * 0.632 * 0.512} = 0.543$$
.

Here, we get the score of HDI for Amguri village at 0.543. Similarly, HDI scores for the other 37 villages and 2 towns have been calculated and results are presented in Table 6.2.

As stated in Table: 6.2, the highest HDI score is found to be 0.720 and it is for Kukurmari village. The lowest HDI score is found to be 0.366 which is for Uttar Burikhamar village. Again applying the UNDP-2010 recommended scheme of comparison, we may interpret the result such a way that

If HDI< 0.500, we consider low human development.

If 0.500\(\leq\)HDI\(\leq\)0.799, it indicates a medium human development.

And if HDI≥0.800, it suggests high human development.

As per UNDP's recommended scheme of comparison, there is not even a single village or town of which HDI is found to be more than 0.800. It indicates that the human development of Bodo households of Chirang district is not high.

Table 6.2 Dimensional Index and Human Development Index of the Sample Villages and Towns in Chirang District

Sl. No.	Name of Village/			Health	HDI	Rank
	Towns	Index	Index	Index		
1	Kukurmari	0.879	0.709	0.598	0.72	1
	Biini Town	0.834	0.743	0.595	0.717	2
	Chanaguri	0.843	0.732	0.576	0.708	3
	Basugaon Town	0.811	0.713	0.583	0.696	4
5	Kashikotra	0.771	0.619	0.552	0.641	5
6	Nilibari	0.649	0.645	0.558	0.616	6
7	Kumargaon	0.581	0.602	0.635	0.606	7
- 8	Sukhanipara	0.678	0.636	0.513	0.605	8
9	Oxiguri	0.509	0.653	0.617	0.59	9
	Uttar Runikhata	0.613	0.591	0.548	0.583	10
11	Maigaon	0.603	0.535	0.594	0.577	11
	Duttapur	0.551	0.576	0.562	0.563	12
	Gorgaon No.1	0.518	0.594	0.572	0.56	13
	Dangaigaon	0.468	0.619	0.591	0.555	14
	Betnapara	0.457	0.579	0.639	0.553	15
16	Bikrampur	0.52	0.551	0.588	0.552	16
17	Amguri	0.495	0.632	0.512	0.543	17
18	Subaiihar	0.628	0.46	0.534	0.536	18
	Baldi No.2	0.532	0.475	0.558	0.52	19
	Deulguri	0.439	0.59	0.536	0.518	20
	Patkiguri	0.434	0.63	0.496	0.514	21
	Dahalpara	0.348	0.604	0.591	0.499	22
	Dimaihora	0.408	0.584	0.5	0.492	23
	Chamugaon	0.453	0.493	0.507	0.484	24
25	Silbari Abidapara	0.483	0.48	0.487	0.483	25
	Kachubil No.1	0.336	0.585	0.525	0.469	26
	Ouguri	0.426	0.502	0.468	0.464	27
28	Amteka	0.433	0.418	0.531	0.458	28
29	Khamaroara	0.412	0.442	0.529	0.458	29
	Koila Moila	0.445	0.502	0.413	0.452	30
	Kahibari	0.433	0.465	0.43	0.442	31
32	Aminpara	0.375	0.435	0.505	0.435	32
	Dakhin Makra	0.374	0.467	0.459	0.431	33
	Kahitama	0.397	0.438	0.458	0.43	34
	Tangabari	0.349	0.485	0.447	0.423	35
36	Patabari	0.335	0.495	0.429	0.414	36
	Bhatarmari	0.368	0.391	0.434	0.397	37
38	Khungring	0.43	0.346	0.414	0.395	38
39	Salbari Bhurpar	0.309	0.47	0.384	0.382	39
	Uttar Burikhamar	0.321	0.43	0.355	0.366	40
Sample Average for Bodo People		0.506	0.563	0.521	0.529	
Chi	Chirang District*		0.457	0.746	0.614	
	Assam*	0.611	0.501	0.523	0.557	

Source: Own calculation based on primary data

Note: * indicates Assam Human Development Report, 2014.

According to Figure 6.8, HDI scores of 19 villages and two towns are found between 0.500 and 0.799. These 19 villages and 2 towns include 262

sample households and they are 60.93 percent of the total 430 sample households (Table: 6.3). Hence, 60.93 percent of Bodo households of Chirang district are found to have medium HDI.

Figure 6.8 Human Development Index of the Sample Villages and Towns in Chirang District

Source: Own calculation based on primary data

On the other hand, the remaining 19 sample villages have HDI scores less than 0.500. Moreover, these 19 villages include 168 sample households or 39.07 percent of the total 430 sample households. Therefore, 39.07 percent of Bodo households in Chirang district have low human development.

Table: 6.3. Percentage of Sample Households in Different Ranges of HDI

HDI	Number of Sample Villages/ Towns	Number of Sample Households	Percentage of sample Households (out of 430 households)
Less than 0.500	19	168	39.07%
0.500 to 0.799	21	262	60.93%
Above 0.800	Nil	Nil	0%

Source: Own calculation based on primary data.

In this study, it is found that the percentage of sample households (60.93%) with medium HDI is higher than the percentage of sample households (39.07%) with low HDI. Similarly, the sample average HDI score for Bodo

people 0.529 in Chirang district is slightly greater than 0.500 signifying medium human development. Thus, we may consider that majority of the Bodo households in the Chirang district have a medium HDI score.

Now, comparing with the AHDR-2014 calculated HDI score of Chirang district 0.614 with the sample average HDI score of Bodo people 0.529 we can say that HDI of Bodo people is too low (Figure 6.8). Moreover, the differences between the sample average HDI score of Bodo people 0.529 and AHDR-2014 calculated Chirang district HDI score 0.614 is tested and found significant at 1% level of significance and the null hypothesis is rejected (calculated Z value is 5.6598 with standard error 0.015). Therefore, we accept the alternative hypothesis that there is difference between the HDI of Bodo and overall HDI of Chirang district. Since HDI of Bodo is lower than the overall HDI of Chirang district, we confirm that HDI of Bodo people is lower compared to the HDI of other communities in this district. Thus, Bodo people have lower human development compared to the people of other community in Chirang district.

6.5 Conclusion

In this chapter, we have analysed the position of human development of Bodo people in the Chirang district which is one of the objectives of this study. Here, we have found that the achievements of Bodo people in key dimensions of human development are very poor in comparison not only to the other community but also to Assam as a whole. The majority of the sample villages are found to have low life expectancy, low expected year of schooling and low mean year of schooling.

And finally, we have calculated the HDI for the sample villages and towns where the majority of the sample villages have HDI scores greater than 0.500 but less than 0.799 signifying medium human development. Similarly, the majority of the sample households are found to belong to the sample villages and towns that have HDI scores greater than 0.500 but less than 0.799. Here, 0.720 is the highest HDI score in this study and it is achieved by Kukurmari village. THE lowest HDI is 0.366 and it is for Uttar Burikhamar village. It is

very unfortunate that not even a single sample village or town is found to have high HDI as per UNDP-2010 recommendation.

Human development of Bodo people in Chirang district is found to be lower because of the sample average HDI score 0.529 is less than that of overall HDI score 0.614 calculated by AHDR-2014. The difference between these two was tested and was found significant at 1% level of significance. By rejecting the null hypothesis we accept the alternative hypothesis that HDI of Bodo people in Chirang district is significantly lower than overall HDI. On the other hand this proves that the Bodo people of Chirang district are deprived of many aspects of human capabilities that remain unanswered. In the next chapter, we will discuss the capability deprivation of the Bodo people of the study area.
