

CHAPTER THREE

BARAK VALLEY: PROFILE OF THE STUDY AREA

Assam in the North Eastern Region consisting of 27 districts can be broadly divided into three zones namely, the Brahmaputra Valley, the two hill districts of North Cachar Hills and Karbi Anglong and the Barak Valley consisting of the districts of Cachar, Hailakandi and Karimganj. These three regions of Assam are geographically, historically, socially and economically different from one another in many respects. The Barak Valley in particular, has all the characteristics of a problem region. Stilwell (1972) has pointed out that there are three main types of problem areas: underdeveloped, depressed and congested. Barak Valley possesses the features of all these three types of problem regions. Firstly, it shares the common features of underdevelopment of the North Eastern Region. Secondly, it is a depressed region in the sense that within the state of Assam it has suffered most owing to severance of its link with present Bangladesh as a result of partition of India. It is a demographically congested region as it has experienced unprecedented inflow of population from the erstwhile East Pakistan (now Bangladesh) and its towns and suburb have absorbed substantial quantum of middle class migration from the rest of the North Eastern Region owing to social tension. In the following sections we have undertaken an exercise of analyzing the features of the Barak Valley in a comparative framework.

3.1 Geographical Features

3.2 Gross Domestic Product of Barak Valley

3.3 Demographic Profile

3.4 Agriculture in Barak Valley

3.5 Human Development Profile

3.6 Agricultural Productivity and Poverty

3.1 Geographical Features

The Barak Valley covers an area of 6222 sq. km. and is administratively divided into 27 Blocks, 321 Gaon Panchayats and 1050 Villages. The valley lies between

longitude of 92°15' and 93°15' East and latitude of 24°08' and 25°08' North and geographically isolated not only from mainstream of India but also from the rest of the state of Assam owing to difficult topography of the adjoining areas. It is surrounded by other states of India viz., Tripura, Mizoram and Manipur and a long vulnerable international border with Bangladesh. The topography of the valley is heterogeneous having hills, low lands and plain areas. The Barak-Surma-Kusiara river system passes through this valley. It is geographically the part of what was known as Surma Valley in pre-partition days consisting of the old districts of Sylhet (now included in Bangladesh) and Cachar. Of the Surma Valley, only Cachar and a part of Karimganj subdivision of Sylhet district forms the present Barak Valley deriving its name from the main river, Barak. The valley is covered with a network of sluggish streams and saucer-like depressions. Numerous hillocks stand all over the valley. The valley is also covered by hill ranges from north, east and south. It has vast tracts of forest land in its southern side. The forest cover of the valley has been on the decline and the forest area decreased from 44.4 percent of the geographical area of the valley in 1951 to 34.9 percent in 1994-95.

The hilly terrain in the valley is used for tea plantation and the principal crops produced in the plain areas are rice, jute, sugarcane, potato, rape seed, mustard seed etc. About 90 percent of the gross cropped area is used for cultivation of rice and tea plantation.

The climatic condition of the valley is characterized by high humidity to the extent of 89 percent. Average rainfall is as high as 2700 mm and the minimum and maximum annual rainfall have been noted to be 1700 mm and 4000 mm respectively (2010). Consequently, the valley often experiences flood havoc. The air during the monsoon remains surcharged with moisture. The minimum and maximum temperature observed in the valley during winter and summer respectively are 8°C and 37°C. The Valley's unique geographically location makes it worthy of a nodal point in developing inter-state economic links and cooperation between Assam, Tripura, Meghalaya, Mizoram and Manipur (Goswami, 1994). The valley is also likely to play an important role in Indo-Bangladesh economic cooperation if economic ties are developed between the two countries.

3.2 Gross Domestic Product of Barak Valley

The table 3.1 shows the gross domestic product and net domestic product at 1993-94 prices. The contribution of different sectors in the final output of Barak valley along with the contribution of Barak Valley in the state domestic product of Assam have also been shown in that table.

Table 3.1
Gross Domestic Product of Barak Valley: 2000-01

	GDP at 1993-94 prices (in lakhs)	NDP at 1993-94 prices (in lakhs)	Contribution of sectors to GDP (%)	Contribution of Barak valley to GSDP of Assam (%)
1	2	3	4	5
A. Primary (Total)	63617	61136	38.30	8.86
1. Agriculture	54985	53334	33.10	10.48
2. Forest and logging	2679	2642	1.61	8.08
3. Fishing	5510	4832	3.31	4.59
4. Mining and quarrying	443	328	0.27	0.36
B. Secondary (Total)	28186	34047	16.96	10.20
1. Manufacturing	14506	11758	8.73	9.49
(a) Registered	13691	11114	8.24	11.48
(b) Unregistered	816	643	0.49	2.29
2. Construction	12157	11182	7.32	12.32
3. Electricity and water supply	1523	-650	0.92	6.44
C. Tertiary (Total)	74310	66158	44.73	9.44
1. Railway	1045	169	0.63	6.57
2. Storage	-5	-5	-0.003	-3.59
3. Transport by other means	4325	1608	2.60	11.57
4. Communication	3746	2676	2.26	14.28
5. Trade, hotel and restaurant	25465	24461	15.33	10.73
6. Banking and insurance	10442	10114	6.29	12.47
7. Real estate, ownership of dwellings and Business services	2016	1609	1.21	3.22
8. Public administration	10024	8862	6.03	7.61
9. Other services	17247	16664	10.38	8.95
10. Total	166113	161341	100.00	9.32
11. Per capita income	5377	5223		

Source: Department of Agriculture, Government of Assam, Statistical Handbook of Assam, Directorate Economics and Statistics

Primary sector contributes 38.30% in the total output of the valley while agriculture makes the lion's share of 33.10%. Secondary sector adds 16.96% in the total income with the biggest share of manufacturing sector worth 8.73% and construction worth of 7.32%. However it is the tertiary sector or the service sector of the economy which makes the biggest contribution worth 44.73%. Trade and hotel-restaurant comprises of 15.33% and other services 10.38%. Contribution of railway (0.63%), storage (-0.03%), transport by other means (2.26%), communication (2.60%) etc are really insignificant and depict a formidable condition of the economic infrastructure.

On the other hand the contribution of Barak Valley in the GSDP of Assam is not bad at all. The agriculture alone adds 10.48% of the GSDP while secondary and tertiary sector add 10.20% and 9.44% respectively. The total contribution of the valley in the state income is 9.32%. The per capita income of Barak Valley is Rs. 5223 (2000-01).

3.3 Demographic Profile

The decadal growth rate of population in Barak valley, Assam and all India (in percentage) & District-wise scenario in Barak Valley is shown in Table 3.2.

Table 3.2
Decadal Growth Rate of Population in Barak Valley (in percentage)

Year 1	Barak valley 2	Assam 3	India 4	Cachar	Karaimganj	Hailakandi
1901-11	13.80	6.90	5.7	12.33	12.94	16.09
1911-21	5.60	20.5	0.3	5.98	3.91	7.59
1921-31	6.30	19.9	11.0	7.60	8.91	7.08
1931-41	11.00	20.4	14.2	13.08	9.52	10.29
1941-51	23.80	19.9	13.3	23.92	29.87	17.48
1951-61	24.30	34.9	21.6	22.60	22.96	27.23
1971-81	24.20	34.9	24.1	23.96	25.13	23.61
1981-91	45.20	53.3	48.5	47.59	42.08	45.94
1991-2001	19.97	18.85	21.34	18.66	21.35	20.92
2001-2011	20.79	16.93	17.64	20.17	20.74	21.44

Source:- Census Report-2011

The demographic change took place in Barak Valley and Assam very rapidly within one century. The growth rate was 13.80% in 1901-11 due to higher birth rate along with inflow of people from eastern part of Bengal. The rate of growth could not be controlled. From 1930s to 1990s, it went upwards and in 1991-2001, the rate was 19.97% while in 2001-2011 the growth rate was 20.79%. The rate of growth has been consistent more or less with the state and India as a whole. This is evident from the figures in the above table. The district wise growth rate also shows that the rate of growth has been consistent with the valley, state and nation.

To have a comparative and clear idea of the growth of population in the Barak Valley, annual average growth rates of population for different decades have been estimated along with those of Assam and India. The data reveal that the valley during the five decades witnessed fluctuating growth rates of population. It had the highest demographic growth rate of 2.23 percent per annum during 1941-51. This was marginally reduced to 2.13 percent in the decade, 1951-61. Again it increased to 2.20 percent in 1961-71 and further declined to 1.8 percent during the two decades of 1971-91, where as the Barak Valley witnessed a decrease in the growth rate of population between 1941-51 and 1951-61, Brahmaputra Valley witnessed a substantial increase in population growth during the same span of time. Perhaps this can be explained by greater impact of inter-state migration to Brahmaputra Valley during this period. The trend was reversed in both the valleys between the decades 1951-61 and 1961-71. Assam as whole and Barak and Brahmaputra Valleys in particular, have witnessed higher growth rate of population than India as a whole in the post-partition era.

3.4 Agriculture in Barak Valley

The economy of the Barak Valley is pre dominated by agriculture and allied sectors. More than 58 percent of the total working population in the valley is either cultivators or agricultural laborers and 70.7 percent of its workers earn their livelihood from the primary sector activities. But agriculture is already

overcrowded and it shows that only 30.9 percent of the total geographical area in the valley constitutes its net sown area against 41.6 percent in the state of Assam. This means that the Barak Valley suffers from relative scarcity of cultivable land. In the consequence, Barak Valley is constrained to feed as many as 8277 persons per 1000 hectares of cultivable land. The corresponding figures for the Brahmaputra Valley and the State of Assam are 6445 and 6567 (2003) respectively whereas the all-India figure is 4305. Added to the scarcity of cultivable land in the valley is its inadequate progress in intensive farming.

Table 3.3
Land utilization in Assam and Barak valley

Classification	Area (in hectare)		Percentage of reporting area	
	Assam	Barak valley	Assam	Barak valley
1	2	3	4	5
1. Total geographical area	7843800	692200		
2. Reporting area	7850005	691097	100.0	100.0
3. Forest	1931631	261741	24.61	37.87
4. Not available for cultivation	2530925	134445	32.24	19.45
(a) Non agricultural uses	1069891	74671	13.63	10.8
(b) Barren and uncultivable	1461034	59774	18.61	8.65
5. Other uncultivable land (excluding fellow land)	477368	43617	6.08	6.31
(a) Permanent pastures and other grazing land	162968	6242	2.08	0.90
(b) Miscellaneous tree crops and groves	234206	32963	2.98	4.77
(c) Cultivable waste land	80194	4412	1.02	0.64
6. Fellow land	175620	17441	2.24	2.52
(a) Fellow land other than current fellows	65219	9081	0.83	1.31
(b) Current fellows	110401	8360	1.41	1.21
7. Net area sown	2734461	233853	34.83	33.85
8. Gross cropped area	4087341	302272	-	-
Area sown more than once	1352880	68419	-	-
Cropping intensity	149	129		

Source: Department of Agriculture, Government of Assam
Department of Forest, Government of Assam,
Statistical Handbook of Assam, Directorate Economics and Statistics

Table 3.4**GCA (Gross Cropped Area) in Barak Valley and Assam, 1981-82 and 1999-2000**

Year	Barak Valley		Assam	
	G.C.A. (In hectare)	Percentage of the reporting area	G.C.A. (In hectare)	Percentage of the reporting area
1981-82	268943	38.9	3460082	44.1
1997-98	299191	43.29	3926143	50.88
1999-2000	302272	43.74	4087341	52.07

Source: Department of Agriculture, Government of Assam, Statistical Handbook of Assam, Directorate Economics and Statistics.

The figures in table 3.4 show a distinguishing picture of Barak valley and entire state. The gross cropped area in the valley has increased from 38.9% in 1981-82 to 43.74% in 1999-2000 while for Assam it was 44.1% in 1981-82 to 52.07% in 1999-2000. The ratio of gross cropped area to net sown area in the valley works out to 1.25 whereas it is 1.29 in the Brahmaputra Valley and 1.28 in Assam as a whole. Low intensity of cropping in the Barak Valley is mainly owing to poor irrigation facilities. Hardly 6.4 percent of the net sown area in the Barak Valley have irrigation facilities compared 18.3 percent in the Brahmaputra Valley, 17.3 percent in Assam and 32.5 percent in India. Irrigation facilities in the Barak Valley are also less assured as these are mainly devised at individual farmers' level.

It goes to the credit of the farmers of the Barak Valley that in spite of serious limitations in irrigation, they have succeeded in bringing about 48 percent of the net sown area under HYV. But introduction of HYV crops could not achieve its full impact on productivity and crop intensity because of lack of irrigation facilities. As chemical fertilizers have complementary relation with irrigation as inputs, the valley's progress in the application of chemical fertilizer is also retarded. Per hectare consumption of fertilizer in the Barak Valley is as low as 16.4 kg in great contrast to India's 69.9 kg. Consequently, average yield of rice per hectare in the valley is as low as 1447 kg as against India's figure of 1745 kg. (2004-05). Significantly enough, the relevant figure of the Brahmaputra Valley the most fertile region of Assam is only 1131 kg. i.e., lower than that of the Barak

Valley. The first generation problem of the green revolution has been to induce farmers to adopt the new technology to raise production (Ghatak, 1995).

It seems that the Barak Valley is still unable reap the benefits of the green revolution because of the serious infrastructural deficiency in the form of irrigation facility. It may be added that average yield of rice in the Barak Valley during the period from 1950-51 to 1973-74 has been higher than that India. It is only after 1973-74 that the valley has been lagging behind the average of India. This only highlights uneven regional impact of the green revolution to the disadvantage of regions like the Barak Valley owing to disparity in infrastructural development. The upshot of the above discussion is that the Barak Valley requires a special pattern of state intervention in agriculture. This is only possible through area specific agricultural planning.

Table 3.5
Percentage share of principal crops in Barak valley during 1971-72
to 2004-05

CROPS	1971-72	1979-80	1984-85	1990-91	1994-95	2001-02	2004-05
1	2	3	4	5	6	7	8
Autumn rice	16.55	19.36	13.85	16.49	11.20	8.47	8.95
Winter rice	71.32	68.40	72.52	70.95	76.30	73.48	72.11
Summer rice	5.52	4.94	5.27	5.64	5.20	5.59	7.18
Total rice	93.39	92.70	91.64	93.08	92.70	87.54	88.23
Other cereals	0.15	0.20	0.12	0.11	0.06	0.11	0.11
Total cereals	93.54	92.90	91.76	93.18	92.76	87.64	88.34
Pulses	0.80	0.93	1.41	1.32	2.36	2.38	5.69
Total Food grains	94.34	93.83	93.17	94.50	95.12	90.02	94.03
Rape and mustard	0.66	0.80	1.78	1.77	0.93	1.04	1.23
Other oilseed	0.16	0.20	0.20	0.15	0.27	0.13	0.16
Total oilseed	0.82	1.00	1.98	1.92	1.20	1.17	1.39
Total fibre	0.50	0.35	0.29	0.17	0.15	0.14	0.17
Potato	1.13	1.11	1.74	1.42	1.63	1.86	1.96
Sugarcane	2.12	2.76	1.86	1.24	1.17	0.53	0.48
Others	1.09	0.96	0.96	0.75	0.73	6.27	1.97
Total	100.00	100.00	100.00	100.00	100.00	100.00	100.00

Source: Department of Agriculture, Government of Assam, Statistical Handbook of Assam, Directorate Economics and Statistics

The percentage share of principal crops shows that autumn rice has declined overtime since 1971-72 from 16.55% to 8.95% in 2004-05. The share of winter rice has been steady and the most important contributor in the rice production in the valley. Perhaps due to the geographical and climatic problem of flood and the heavy risk that is associated with the production and sale of agricultural produce during the other seasons especially in the time of April to October, the farmers prefer to produce during winter season. From 1971-72 to 2004-05, it remained more than 71%. The share of summer rice has shown insignificant growth since 1971-72 with 5.52% to 7.18% in 2004-05. Most of the cropped area remained under paddy as crop diversification is poorer in the zone and paddy has been cultivated in the 93.39% in 1971-72 to 88.23% in 2004-05 of the total area under cropping. Other cereals are insignificant as the share has risen from only 0.11% in 1971-72 to 0.15% in 2004-05.

Area under pulses production is insignificant yet the share of cultivation has been on the rise overtime since 1970s to this millennium. The area under pulses increased from 0.80% in 1971-72 to 5.69% in 2004-05. However the share of total food grains has remained the principal crop in this valley with 94.03%. The area under oilseeds increased from a meager 0.82% in 1971-72 to 1.39% in 2004-05. Rae and mustard rose from 0.66% in 1971-72 to 1.23% in 2004-05. Other oilseed production has been less important as remained with share of only 0.16% overtime. Total fiber production covers only 0.17% of the cropped area. Another important vegetable potato covers 1.13% in 1971-72 to 1.96% in 2004-05. Others are mostly insignificant regarding cropping intensity while sugarcane lost its importance as the share has declined from 2.12% in 1971-72 to 0.48% in 2004-05. Cash crops and raw materials depend on industrial demand which is poorer in Barak valley while vegetables and fruits depend on infrastructural improvement.

Table 3.6
Area under different categories of paddy
in Barak valley and Assam (1971-72 to 2004-05)

Barak valley (percentage to the total area)				Assam (percentage to the total area)		
Year	Autumn	Winter	Summer	Autumn	Winter	Summer
1	2	3	4	5	6	7
1971-72	17.72	76.37	5.91	26.77	71.62	1.61
1974-75	22.44	71.56	6.00	27.38	71.10	1.52
1979-80	20.90	73.80	5.30	25.42	72.84	1.74
1984-85	15.11	79.14	5.75	26.11	71.85	2.04
1989-90	14.97	78.30	6.37	25.44	71.42	3.14
1992-93	13.31	80.67	6.02	24.82	69.40	5.78
1994-95	12.08	82.31	5.61	26.00	68.70	5.30
1999-2000	9.49	85.37	5.14	24.24	66.63	9.13
2004-05	10.14	81.72	8.14	--	--	--

Source: Department of Agriculture, Government of Assam
Statistical Handbook of Assam, Directorate Economics and Statistics

The table 3.6 depicts that since 1971-72, the share of autumn rice in the total paddy production in the Valley has gone down regarding distribution of area under the autumn rice. It was 17.72% in 1971-72 while 10.14% in 2004-05 in Barak Valley while the percentage share of summer rice has increased slowly from 5.91% in 1971-72 to 8.14% in 2004-05. It is the winter crop which plays the most important part in the paddy production of the Valley. From 76.37% in 1971-72, it increased to 81.72% in 2004-05. For the state as a whole the share of summer rice and autumn rice are in a little batter position yet the share of winter

rice plays the most vital role in the paddy production of the state and the Barak valley together. The share of winter paddy is 66.63% for Assam in 2004-05.

Table 3.7
Annual compound growth rate of different crops in the Barak Valley (1979-80 to 1999-2000 in percentage)

Crops	Area	Production	Yield
1	2	3	4
1. Autumn	-2.85 (0.34)	-1.71 (1.68)	1.17 (1.34)
2. Winter	0.75 (0.81)	3.52 (2.35)	2.75 (1.54)
3. Summer	1.51 (7.61)	1.34 (10.39)	-0.17 (2.77)
Total	0.15 (0.89)	2.46 (2.51)	2.30 (1.62)
4. Pulses	5.99 (1.93)	7.58 (3.16)	1.50 (1.23)
5. Sugarcane	-6.22 (-0.85)	-4.86 (0.14)	1.46 (1.00)
6. Potato	2.95 (5.22)	2.64 (7.48)	-0.30 (2.26)
7. Rape and mustard	8.07 (4.10)	8.24 (5.52)	0.15 (1.42)

Source: calculated by the author

Figures in brackets provide the data for the state.

The table 3.7 shows the annual compound growth of major crops of Barak Valley from 1979-80 to 1999-2000. The 20 years compound growth rate explains the stagnant condition of agriculture in the Barak Valley region of the state. Only winter rice could be able to achieve positive growth rate over 20 years period. The area under production has increased at the rate of 0.75% in Barak Valley and 0.81% in the state. The production rate is better than the state with 3.52% while state has obtained 2.35%. Regarding yield the performance, it has improved with 2.75% in Barak Valley and with 1.54% in the state.

The performance of the autumn rice and summer has not increased at a rate up to the marks. However the production of total rice and the yield are in line with the performance of Assam as shown in the table. The growth rate of pulses was 7.58% and area under pulses rose at 5.99% which are commendable in relation to the performance of the state as whole. Rape and mustard grew also considerably but at a rate lower than that of the state. The most terrible experience was made by potato and sugarcane as is revealed from the above table. They achieved negative growth rate while states performance was considerably better.

Table 3.8

Irrigated and non-irrigated areas of Barak valley, 2004-05

Irrigated area (in hactres)		Unirrigated area(in hactres)	Net area sown (in hactres)
1	2	3	4
Cachar	1809.1 (1.5 %)	121692.39 (98.6%)	123451.5 (100.0)
Karimganj	1945.47 (2.3%)	82848 (97.7%)	84793 (100.0)
Hailakandi	126.26 (0.3 %)	47072.49 (99.7%)	47198.75 (100.0)
Barak valley	3880.83 (1.5%)	251612.88 (98.5%)	255493.7 (100.0)

Source: Department of Agriculture, Government of Assam
Statistical Handbook of Assam, Directorate Economics and Statistics

The table 3.8 show that irrigation potential in the Valley is heavily inadequate and a primary obstacle towards rapid improvement of agriculture. The irrigation in the valley is only 1.5% of the total sown area. Hailakandi district with 2.3%, Cachar with 1.5% and karimganj with 0.3% are having very poor irrigation facility.

3.5 Human Development Profile

Economists like Amartya Sen have forcefully argued in favour of judging socioeconomic performance of a country by the achievements in the field of extending capabilities and enhancing functionings. Taking cue from this approach the United Nations Development Program (UNDP) has been publishing Human Development Report since 1990. According to this approach, human development is the end and economic growth is the means.

Table 3.9
Human Development Index in Barak valley

District	HDI value	Income index	Education index	Health index	HDI Rank	Income Rank	Education Rank	Health Rank
Cachar	0.402	0.266	0.634	0.307	8	7	9	12
Hailakandi	0.363	0.234	0.563	0.293	11	9	14	14
Karimganj	0.301	0.078	0.620	0.207	19	19	11	18
Assam	0.407	0.286	0.595	0.343	--	--	--	--

Source: Assam Human Development Report-2003.

According to the ranking of the districts, it can be easily perceived that Barak Valley exists in the medium category of the human development zone. Not only lagging behind in all over HDI value but also in all parameters i.e. income, education and health as well. Jorhat tops in the overall value along with education and health. Kamrup is the first regarding the income. Cachar is 8th in HDI ranking, Hailakandi 11th and Karimganj is formidably at the 19th position. The income, education and health ranking of Cachar district is at 7th, 9th and 12th while that of Hailakandi district is at 9th, 14th and 14th respectively. The condition of Karimganj district is the most terrible in the valley. It is at the 19th, 11th and 18th position in income, education and health respectively. The districts of lower Assam and hill districts of N.C.Hills and Karbi Anglong are at low human development zone.

Table 3.10**Human Development Characteristics of Barak Valley (in Percentage)**

District	Literacy rate (age 7+)			School attendance (age 6-11)		Have Electricity connection	Have Access to toilet facility	Improved source of drinking water	Have a television	Have a mobile phone	Infant Mortality Rate (per 1000)
	Total	Male	Female	Boys	Girls						
						36.7	87.3	48.1	32.4	29.0	57
Cachar	80.36	85.85	74.62	97.8	97.4						
Hailakandi	75.26	81.61	68.54	98.5	98.8	32.2	96.5	40.9	18.5	26.0	55
Karimganj	79.72	85.70	73.49	97.2	98.2	26.8	85.6	50.5	18.6	23.1	69
Assam	73.18	78.81	67.27	98.3	98.6	37.1	69.9	74.9	29.1	28.7	60

Source: NFHS-3, Vital Statistics Division, Office of the Registrar General,

The educational, health and household characteristics present the socio-economic condition of the Valley. Regarding literacy rate the position of Barak Valley is better than the state average. The literacy rate is 80.36% in Cachar district and 79.72% in Karimganj district while 75.26% in Hailakandi district and all three district have achieved better than the state average. In case of male and female literacy rate the condition remains the same. All three districts have better situation than the state average while regarding the male-female differences the valley is a little worse than the state as a whole. School attendance (age 6-11) is same for the state position and Hailakandi district while Cachar and Karimganj are little lagging behind, however school attendance has shown much improvement in the entire state including Barak Valley.

Regarding household characteristics the performance of Barak Valley is not much improved along with the entire state. The population having electricity connection is 36.7% in rural areas of Cachar district which is higher than other two districts of the valley. Hailakandi has 32.2% people having electricity connection and Karimganj has only 26.8% but Assam has 37.1% people having electricity connection in the rural area (2007). 87.3% population have access to toilet facility in Cachar district but 96.5% people have toilet facility in Hailakandi district and it is one of the highest in the state. Karimganj district has only 85.6% people having access to toilet facility. However all three districts have achieved

much better in this respect than the state average of only 69.9%. Regarding improved source of drinking water, Barak Valley is lagging behind. Cachar district has 48.1% people having access to it while in Hailakandi district only 40.9% and in Karimganj district only 50.5%. But in Assam it is much higher than that of the entire Barak Valley with 74.9%. People having access to television show a peculiar picturesque in Assam and Barak Valley. Cachar district has a better position with 32.4% than the entire state with 29.1% but other two districts are much lagging behind the state average with a score of only 18.5%. Similar situation is found in the case of having access to mobile phone. Cachar district has 29.0% people having access which is more than the state average of 28.7% but Hailakandi and Karimganj districts have 26.0% and 23.1% respectively. The infant mortality rate in Assam is the fifth highest in India and is highest among all the North-Eastern states. Cachar and Hailakandi have lower infant mortality than the state average but Karimganj has higher.

Table 3.11
Urbanization in Barak Valley

District	Number of towns	Urban population (in %)	Rural population (in %)
Cachar	2	13.94	86.06
Karimganj	3	7.27	92.73
Hailakandi	2	8.29	91.71

Source: Assam Human Development Report-2003

Urbanization is regarded as one of the most important factor in the human development of any area. In this category once again upper Assam districts are ahead of others. Barak Valley is lagging behind here too. Cachar has 2 towns and 13.94% population in urban area while Karimganj has 3 towns and 7.27% population. Hailakandi has 2 towns and 8.29% population having access to urban amenities of life. The Kamrup district has the highest position in this regard with 7 towns and 35.79% population having access to urban amenities of life, Nagaon has 7 towns with 12.01% population, Dibrugarh with 6 towns and 18.17%

population. Lower Assam districts are also lagging behind and flood affected district of Dhemaji is at the lowest.

3.6 Agricultural Productivity and Poverty

The agricultural production per hectare of agricultural crop has been turned in to value terms by using state level prices of various agricultural crops. These prices were generated by dividing state level value of output of each crop estimated by CSO by the output of the crop for the year 2003-04 and 2004-05. According to CSO methodology such prices represent farm gate prices. The value of per hectare productivity in Cachar district was Rs.29728 which is lower than Hailakandi district with Rs.34515 and Karimganj district was with Rs.29037. But output per worker is higher in Cachar district i.e. Rs.21491, in Hailakandi district with Rs.17890 and Rs.16638 in Karimganj district.

Table 3.12

**Agricultural Productivity & other salient characteristics in Barak Valley
(per hectare)**

District	Production per hectare (value in RS.)	Production per worker (value in RS.)	Fertiliser-NPK per hectare (NSA)	AFV %	Crop Intensity %	Worker per hectare	Rainfall: mm	NSA: 000 ha	Rural poor %
Cachar	29728	21491	44	14.8	127	1.38	2366.1	115	33.50
Hailakandi	34515	17890	30	11.7	141	1.93	3094.2	46	37.00
Karimganj	29037	16638	60	9.2	140	1.75	4559.9	69	40.90

Source: Statistical Abstract, Directorate of Agriculture/Horticulture, CSO

Fertiliser-NPK per kg per hectare of net sown area in Barak Valley, AFV- Area under fruits and vegetables.

References

1. Goswami, P.C. (1994): The Economic Development of Assam, Kalyani Publishers, Ludhiana.
2. Ghatak, S. (1995): Introduction to Development Economics, Routledge, London
3. Sen, A K (1981): Poverty and Famines: An Essay on Entitlement and Deprivation, Clarendon Press, Oxford.
4. Stillwell, Frank J.B. (1972), 'Regional Economic Policy', Macmillan Publisher, London
5. UNDP (1990), Human Development Report. New York: Oxford University Press
6. National Family Health Survey-3 (2007), Vital Statistics Division, Office of the Registrar General
7. Government of Assam (2003), Assam Human Development Report, Planning and Development Department, Dispur, Assam
8. Government of Assam (2009): Statistical Handbook, Directorate of Economics and Statistics, Guwahati