Chapter 5

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

5.1 Introduction:

Development is broadly defined as the process of enhancing the capability and opportunity of individuals in the society so that they can reach their full potential of growth and contribution. Development includes education of individuals, economic wellbeing, good health and opportunities for the individuals for further growth in these three dimensions. Income, education and health are the pivotal anchors of development for any society. The adverse impact of gender disparity in education on economic development has been proved by many researchers earlier.

To promote gender equality and empower women and to achieve gender equality and empower all women and girls, Goal 3 of the Millennium Development Goals (MDGs) and Goal 5 of the Sustainable Development Goals (SDGs) were adopted. While under the MDGs, India achieved progress towards equal access to primary and secondary education between girls and boys, girls and specially women continue to face gender inequality in education in India. In the previous chapter i.e. chapter 4, gender disparity in education in India with special reference to Assam in detail was discussed.

In this chapter, impact of gender disparity in education on economic development in India, Assam and BTAD has been discussed. BTAD in Assam was formed on 10th February, 2003. It consists of the four districts, namely Baksa, Chirang, Kokrajhar and Udalguri. First of all, impact of gender disparity in education on economic development in India, secondly, impact of gender disparity in education on economic development in Assam and finally, impact of gender disparity in education on economic development in BTAD have been discussed.

In the analysis of the impact of gender disparity in education on economic development in India, impacts of gender disparity in Literacy Rate (LR) i.e., Literacy Rate gap (LRG), gender disparity in Lower Primary level (LP), gender disparity in Upper Primary level (UP), gender disparity in Secondary level (Secondary), gender

disparity in Higher Secondary level (HS) and gender disparity in Higher Education level (HE) on economic development have been investigated. In the analysis of the impact of gender disparity in education on economic development in Assam, impacts of gender disparities in LR, LP, UP and Secondary on economic development have been found out. In the analysis of the impact of gender disparity in education on economic development in BTAD, impacts of gender disparities in LR, LP, UP and Secondary on economic development have been investigated.

5.2 Observations:

5.2.1 Impact of Gender Disparity in Education on Economic Development in India:

In this section, to discuss the impact of gender disparity in education on economic development in India, impacts of gender disparities in LR, LP, UP, Secondary, HS and HE on economic development in India have been examined.

5.2.1.1 Impact of Gender Disparity in Literacy Rate on Economic Development in India:

To investigate the impact of gender disparity in education on economic development in India, impacts of LRG upon Human Development Index (HDI) in general, Education Index (EI), Total Fertility Rate (TFR), Birth Rate (BR), Death Rate (DR), Sex Ratio (SR), Infant Mortality Rate (IMR), Life Expectancy at Birth (LEB) and Gross Domestic Product Per Capita (GDPPC) have been examined by using regression.

The impacts of LRG on HDI and EI have been shown in Table 5.1 (see appendices 5.3A and 5.3B). As shown in the table, the impacts of LRG on HDI and EI were significantly negative in both the cases. The coefficients of the independent variables came out to be statistically significant at five per cent and one per cent respectively. If LRG increased by one percent, HDI decreased by 0.006 and EI decreased by 0.019.

The impacts of LRG on TFR, BR, DR, SR, LE, IMR and GDPPC in India have been shown in Table 5.2 (see appendix 5.1). It is found that the impacts of LRG on TFR and BR were significantly positive in both the cases. If LRG increased by

one per cent, TFR also increased by 0.343 persons and BR increased by 2.639 persons. The coefficients of the independent variables came out to be significant at five per cent in both the cases. The impacts of LRG on DR and SR were insignificantly negative in both the cases, and the impacts of LRG on IMR and LEB

Table 5.1
Impact of Gender Disparity in Literacy Rate on Economic Development in India

Model	Depend-ant variable	Independent variable/co-nstant	Co-eff.	S.E.	t-value	Sig.	R^2	Adj. R^2	F
2	HDI, 2015	Constant	0.079	.035	20.065	0.000	0.340	0.296	7.733
		LRG, 2011	-0.006	0.002	-2.781	0.014			
2	EI, 2007-2008	Constant	0.907	0.045	19.943	0.000	0.684	.669	45.392
		LRG, 2011	-0.019	0.003	-6.737	0.000			

Sources:

1. Government of India, *Census Report, 2011*.
2. UNDP (2015), "Ranking of Indian States in the World according to 2015 Human Development Report, Livemint". (www.livemint.com/Politics/3KhGMVXGxXcGYBRMsmDCFO/Why-Kerala-is-like-Maldives -and-Uttar-Pradesh-Pakistan.html)
3. Government of India (n.d.), "Human Development Index and its Components by States, 1999-00 and 2007-08", data.gov.in. (https://data.gov.in/catalog/human-development-index-and-its-components-states)

Table 5.2
Impact of Gender Disparity in Literacy Rate on Economic Development in India

Model	Dependent Variable	Independent Variable/ constant	Co-eff.	S.E.	t-value	Sig.	R^2	Adj. R^2	F	D-W
3	TFR, 1951-2011	Constant	-0.059	0.009	-6.523	0.003	0.844	0.712	9.899	2.230
		LRG	0.343	0.109	3.146	0.035				
2	BR, 1951-2011	Constant	-30.554	20.235	-1.510	0.191	0.636	0.536	8.728	1.610
		LRG	2.639	0.893	2.954	0.032				
2	DR, 1951-2011	Constant	-2.984	0.593	-5.028	0.007	0.220	0.025	1.130	2.037
		LRG	-0.158	0.149	-1.063	0.348				
2	SR, 1951-2011	Constant	958.526	14.462	66.279	0.000	0.335	0.202	2.519	1.565
		LRG	-1.013	0.638	-1.587	0.173				
3	IMR, 1961-2011	Constant	-.097	0.016	-6.246	0.008	0.513	0.351	3.166	1.927
		LRG	0.415	0.233	1.779	0.173				
2	LEB,1951-2011	Constant	5.090	0.431	11.821	0.000	0.224	0.031	1.158	2.033
		LRG	0.116	0.108	1.076	0.342				
2	GDPPC, 1961-2011	Constant	3414.792	619.590	5.511	0.005	0.854	0.817	23.325	2.384
		LRG	-128.429	26.592	-4.830	0.008				

Sources:

1. Government of Assam (2014), *Statistical Handbook Assam 2014*, Directorate of Economics and Statistics, Government of Assam, Guwahati.

2. Government of India, *Census Report 2011*.
3. Government of India, Office of the Registrar General, Census of India (n.d.), "State wise literacy rate in 2001 and 2011 and State wise gap in literacy rate of males and females in 2001 and 2011". (mospi.nic.in/sites/default/files/reports_and_publication/statistical_publication/social_statistics/WM16Chapter3)
4. data.worldbank.org
5. Government of India, Ministry of Health and Family Welfare (2011), "Demographic and Health status indicators(1951-2011)", ENVIS Centre on Population and Environment. (iipsenvis.nic.in/Database/Health_4119.aspx)
6. Anon (n.d.), "Gender Composition, Sex Ratio of India and Madhya Pradesh- 1901-2011". (censusindia.gov.in/2011-prov- results/data_files/mp/06GenderCompositio n.pdf)

were insignificantly positive in all. Moreover, as shown in the table, the impact of LRG on GDPPC was significantly negative. If LRG increased by one per cent, GDPPC decreased by $ (U.S.) 128.42. The coefficient of the independent variable came out to be significant at five per cent.

5.2.1.2 Impact of Gender Disparity in Lower Primary Level on Economic Development in India:

To discuss the impact of gender disparity in education in LP on economic development in India, impacts of gender disparities in Gross Enrolment Ratio (GER) and Dropout Rate (DOR) in LP on TFR, BR, DR, IMR, LEB and GDPPC have been examined. Impacts of gender disparity in GER in LP on HDI, EI, SR; impacts of gender disparity in Net Enrolment Ratio (NER) in LP on TFR, BR, DR, IMR, LEB and NSDPC and impacts of gender disparity in DOR in LP on EI and SR in India have also been investigated.

Table 5.3 (see appendix 5.2) presents the impacts of Gender Gap (GG) of DOR in LP on TFR, BR, LEB, DR, IMR and GDPPC. As shown in the table, the regression result reveals that the impacts of GG of DOR in LP on TFR and BR were significantly negative in both the cases in India. The coefficients of the independent variables came out to be significant at ten per cent in both the cases. On the other hand, the impacts of GG of DOR in LP on LEB, DR, IMR and GDPPC were insignificantly positive for the first three variables and negative for the last variable respectively.

The impacts of gender disparity in GER in LP on HDI, EI, SR, TFR, BR, DR, IMR, LEB and NSDPC; the impacts of gender disparity in NER of LP on TFR, BR,

DR, IMR, LEB and NSDPC and the impacts of gender disparity in DOR in LP on EI and SR in India have been shown in Table 5.4 (see appendices 5.3B, 5.3A & 5.3E). From the table, it can be seen that the impacts of GG of GER in LP on TFR, BR, DR, IMR, LEB and NSDPC were a insignificant in all in India. It is also found that the impact of GG of GER in LP on HDI and the impact of Gender Parity Index (GPI) of

Table 5.3
Impact of Gender Disparity in Lower Primary Level on Economic Development in India

Model	Depen-dent variable	Inde-pendent variable/ constant	Coefficient	S.E.	t value	Sig.	R^2	Adj. R^2	F	D-W
1	*2*	*3*	*4*	*5*	*6*	*7*	*8*	*9*	*10*	*11*
3	TFR (07-08 to 13-14)	Constant	0.001	0.000	6.513	0.023	0.908	0.862	19.746	1.948
		GG of DOR in LP	0.000	0.000	-4.444	0.047				
3	LEB (07-08 to 13-14)	Constant	-4.989E-5	0.000	-3.365	0.078	0.766	0.649	6.556	2.355
		GG of DOR in LP	5.710E-5	0.000	2.560	0.125				
3	BR (07-08 to 13-14)	Constant	0.000	0.000	3.102	0.090	0.823	0.735	9.322	2.310
		GG of DOR in LP	0.000	0.000	-3.053	0.093				
3	DR (07-08 to 13-14)	Constant	0.000	0.000	6.459	0.098	0.905	0.809	9.482	1.623
		GG of DOR in LP	0.000	0.000	3.079	0.200				
3	IMR (07-08 to 14-15)	Constant	0.000	0.000	1.731	0.226	0.508	0.262	2.062	1.913
		GG of DOR in LP	0.000	0.000	1.436	0.287				
3	GDPPC (07-08 to 14-15)	Constant	3.023	0.099	30.635	0.000	0.052	-0.138	.272	2.298
		GG of DOR in LP	-0.076	0.145	-0.522	0.642				

Sources:1. www.dise.in
2. www.data.worldbank.org

enrolment in LP on EI were insignificant. Moreover, it is also found that the impact of GPI of enrolment in LP on SR was significantly positive. The coefficient of the independent variable came out to be significant at one per cent. It can be seen from

the table that the impact of GG of NER in LP on TFR was significantly negative. If GG of NER increased by one per cent, TFR decreased by 0.053 persons. The coefficient of the independent variable came out to be significant at ten per cent. It is also found that the impact of GG of NER in LP on BR was significantly negative. If GG of NER in LP increased by one per cent, BR decreased by 0.413 persons. The coefficient of the independent variable came out to be significant at ten per cent. The impacts of GG of NER in LP on DR, LEB, IMR and NSDPC are found to be insignificant. The impacts of GG of DOR in LP on EI and SR also are found to be insignificant in both the cases.

Table 5.4
Impact of Gender Disparity in Lower Primary Level on Economic Development in India

Model	Depen-dent variable	Indepen-dent variable/constant	Coefficient	S.E.	t value	Sig.	R^2	Adj.R^2	F
2	TFR, 2013	Constant	2.109	0.139	15.188	0.000	0.083	0.032	1.623
		GG of GER in LP 2013-2014	-0.063	0.049	-1.274	0.219			
2	BR, 2013	Constant	19.562	1.136	17.220	0.000	0.072	0.021	1.405
		GG of GER in LP 2013-2014	-0.476	.402	-1.185	0.251			
2	DR, 2013	Constant	7.006	0.247	28.310	0.000	0.106	0.056	2.125
		GG of GER in LP 2013-2014	0.128	0.088	1.458	0.162			
2	IMR, 2013	Constant	36.466	3.120	11.687	0.000	0.004	-0.051	0.073
		GG of GER in LP 2013-2014	-0.298	1.104	-0.270	0.790			
2	LEB, 2010-2014	Constant	69.002	0.844	81.786	0.000	0.001	-0.052	0.018
		GG of GER in LP 2013-2014	0.041	0.304	0.134	0.895			
2	NSDPC, 2013	Constant	95483.883	9285.331	10.283	0.000	0.014	-.019	0.419
		GG of GER in LP 2013-2014	1619.922	2501.138	0.648	0.522			
2	HDI,	Constant	0.620	0.015	40.904	0.000	0.022	-0.043	0.339

	2015	GG of GER in LP, 2014-2015	0.003	0.005	0.582	0.569			
2	EI,2007-2008	Constant	0.532	0.559	.953	0.351	0.001	-0.046	0.023
		GPI of Enrl. in LP, 2007-2008	0.092	0.603	0.152	0.881			
2	SR, 2011	Constant	103.630	221.222	0.468	0.643	0.298	0.277	13.996
		GPI of Enrl. in LP, 2011	889.270	237.702	3.741	0.001			
2	TFR, 2013-2014	Constant	2.019	0.147	13.775	0.000	0.173	0.128	3.778
		GG of NER in LP, 2013-2014	-0.053	0.027	-1.944	0.068			
2	BR, 2013	Constant	18.815	1.190	15.809	0.000	0.163	0.117	3.508
		GG of NER in LP, 2013-2014	-0.413	0.221	-1.873	0.077			
2	DR, 2013	Constant	6.809	0.291	23.408	0.000	0.000	-0.055	0.003
		GG of NER in LP, 2013-2014	-0.003	0.054	-0.058	0.954			
2	LEB, 2010-2014	Constant	69.773	0.879	79.420	0.000	0.105	0.058	2.233
		GG of NER in LP, 2013-2014	0.249	0.167	1.494	0.151			
2	IMR, 2013	Constant	34.524	3.363	10.266	0.000	0.064	0.012	1.231
		GG of NER in LP, 2013-2014	-0.691	0.623	-1.109	0.282			
2	NSDPC, 2013	Constant	102762.429	11743.073	8.751	0.000	0.029	-0.005	0.848
		GG of NER in LP, 2013-2014	2122.837	2305.837	0.921	0.365			
2	EI, 2007-2008	Constant	0.596	0.023	25.990	0.000	0.009	-0.047	0.155
		GG of DOR in LP, 2007-2008	0.005	0.011	0.394	0.699			
2	SR, 2011	Constant	932.737	19.145	48.719	0.000	0.002	-0.035	0.064
		GG of DOR in LP, 2010-2011	3.840	15.228	0.252	0.803			

Sources:

1. www.dise.in

2. Government of India, *Census report, 2011*.
3. UNDP (2015), "Ranking of Indian States in the World according to 2015 Human Development Report", Livemint. (www.livemint.com/Politics/3KhGMVXGxXcG YBRMsmDCFO/Why-Kerala-is-like-Maldives-and-Uttar-Pradesh-Pakistan.html)
4. Government of India (n.d.), "Human Development Index and its Components by States, 1999- 00 and 2007-08", data.gov.in. (https://data.gov.in/catalog/human-development-index-and-its- components-states)
5. Government of India, Office of the Registrar General and Census Commissioner of India, "Abridged Life Tables, 2010-2014", P.5. (https://en.wikipedia.org/wiki/List_of_India_states_by_life_expectancy_at_birth)
6. Government of India, SRS Statistical Report (2013), "Infant Mortality Rate (per 1000 live births)", National Institute for Transforming India, Government of India. (niti.gov.in/content/infant-mortality-rate-imr-1000-live-births)
7. Government of India, Ministry of Statistics and Programme Implementation (2015), "India states by GDP per capita", Statistics Times. (statisticstimes.com/economy/gdp-capita-of-indian-states.php)
8. Government of India, Office of the Registrar General and Census Commissioner, *SRS Statistical Report 2013*, Government of India. (www.censusindia.gov.in/vital_statistics/SRSReports-2013.html)

5.2.1.3 Impact of Gender Disparity in Upper Primary Level on Economic Development in India:

To analyse the impact of gender disparity in UP on economic development in India, impacts of gender disparities in GER, NER and DOR in UP on TFR, BR, DR, IMR, LEB and Net State Domestic Product Capita (NSDPC), impact of gender disparity in GER in UP on HDI, EI and SR, impact of gender disparity in NER in UP on HDI and impact of gender disparity in DOR in UP on SR in India have been investigated. The regression results of the above relationships have been presented in Table 5.5 (see appendices 5.3A, 5.3B, 5.3C & 5.3E). As shown in the table, it is found that the impacts of GG of GER in UP on TFR, BR, DR, IMR, LEB and NSDP in India were insignificant in all.

Table 5.5
Impact of Gender Disparity in Upper Primary Level on Economic Development in India

Model	Depend-ent variable	Independent variable/const-ant	Co-efficient	S.E.	t value	Sig.	R^2	Adj. R^2	F
2	TFR, 2013	Constant	2.069	0.150	13.808	0.000	0.100	0.050	2.008
		GG of GER in UP, 2013-2014	-0.029	0.021	-1.417	0.174			
2	BR,	Constant	19.124	1.210	15.800	0.000	0.113	0.064	2.292

	2013	GG of GER in UP, 2013-2014	-0.251	0.166	-1.514	0.147			
2	DR, 2013	Constant	6.88	0.284	24.260	0.000	0.008	-0.047	0.151
		GG of GER in UP, 2013-2014	0.015	0.039	0.389	0.702			
2	IMR, 2013	Constant	35.039	3.332	10.517	0.000	0.044	-0.010	0.819
		GG of GER in UP, 2013-2014	-0.413	0.456	-0.905	0.377			
2	LEB, 2010-2014	Constant	69.593	0.844	82.466	0.000	0.085	0.037	1.774
		GG of GER in UP, 2013-2014	0.159	0.118	1.332	0.199			
2	NSDPC, 2013	Constant	97580.720	10680.924	9.136	0.000	0.016	-0.017	0.476
		GG of GER in UP, 2013-2014	1012.215	1467.734	0.690	0.496			
2	HDI, 2015	Constant	0.636	0.016	40.403	0.000	0.211	0.158	4.001
		GG of GER in UP, 2014-2015	0.004	0.002	2.000	0.064			
3	EI, 2007-2008	Constant	-0.171	0.028	-6.033	0.000	0.161	0.121	4.042
		GPI of GER in UP, 2007-2008	0.894	0.445	2.010	0.057			
2	SR, 2011	Constant	698.945	131.949	5.297	0.000	0.086	0.059	3.124
		GPI of Enrl. in UP, 2010-2011	247.198	139.850	1.768	0.086			
2	HDI, 2015	Constant	0.637	0.016	40.118	0.000	0.251	0.163	4.120
		GG of NER in UP, 2014-2015	0.005	0.002	2.030	0.061			
2	TFR, 2013	Constant	2.019	0.147	13.775	0.000	0.173	0.128	3.778
		GG of NER in UP, 2013-2014	-0.053	0.027	-1.944	0.068			
2	BR, 2013	Constant	18.815	1.190	15.809	0.000	0.163	0.117	3.508
		GG of NER in UP, 2013-2014	-0.413	0.221	-1.873	0.077			
2	DR, 2013	Constant	6.809	0.291	23.408	0.000	0.000	-0.055	0.003
		GG of NER in UP, 2013-2014	-0.003	0.054	-0.058	0.954			
2	IMR, 2013	Constant	34.524	3.363	10.266	0.000	0.064	0.012	1.231
		GG of NER in UP, 2013 - 2014	-0.691	0.623	-1.109	0.282			
2	LEB, 2010-2014	Constant	69.773	0.879	79.420	0.000	0.105	0.058	2.233
		GG of NER in UP, 2013-2014	0.249	0.167	1.494	0.151			
2	NSDPC, 2013	Constant	102762.135	11743.117	8.751	0.000	0.029	-0.005	0.848
		GG of NER in UP, 2013-2014	2122.809	2305.845	0.921	0.365			
2	TFR, 2013	Constant	2.111	0.129	16.314	0.000	0.167	0.112	3.015
		GG of DOR in UP, 2013-2014	-0.120	0.069	-1.736	0.103			
2	BR,	Constant	19.758	1.018	19.403	0.000	0.151	0.094	2.658

	2013	GG of DOR in UP, 2013-2014	-0.890	0.546	-1.630	0.124			
2	DR, 2013	Constant	6.791	0.277	24.491	0.000	0.001	-0.066	0.009
		GG of DOR in UP, 2013-2014	-0.014	0.149	-0.093	0.927			
2	IMR, 2013	Constant	37.513	2.624	14.299	0.000	0.048	-0.016	0.753
		GG of DOR in UP, 2013-2014	-1.220	1.406	-0.867	0.399			
2	LEB, 2010-2014	Constant	68.894	0.736	93.633	0.000	0.024	-0.038	0.385
		GG of DOR in UP, 2013-2014	0.252	0.406	0.621	0.544			
2	NSDPC, 2013	Constant	90616.621	9144.850	9.909	0.000	0.012	-0.029	0.295
		GG of DOR in UP, 2013-2014	2933.679	5403.247	0.543	0.592			
2	SR, 2013	Constant	932.063	15.408	60.493	0.000	0.109	0.076	3.301
		GG of DOR in UP, 2010-2011	18.408	10.132	1.817	0.080			

Sources:

1. www.dise.in
2. Government of India, *Census report, 2011*.
3. UNDP (2015), "Ranking of Indian States in the World according to 2015 Human Development Report", Livemint. (www.livemint.com/Politics/3KhGMVXGxXcG YBRMsmDCFO/Why-Kerala-is-like-Maldives -and-Uttar-Pradesh-Pakistan.html)
4. Government of India (n.d.), "Human Development Index and its Components by States, 1999-00 and 2007-08", data.gov.in. (https://data.gov.in/catalog/human-development-index-and-its-components-states)
5. Government of India, Office of the Registrar General and Census Commissioner of India, "Abridged Life Tables, 2010-2014", P.5. (https://en.wikipedia.org/wiki/List_of_India_states_by_life_expectancy_at_birth)
6. Government of India, SRS Statistical Report (2013), "Infant Mortality Rate (per 1000 live births)", National Institute for Transforming India, Government of India. (niti.gov.in/content/infant-mortality-rate-imr-1000-live-births)
7. Government of India, Ministry of Statistics and Programme Implementation (2015), "India states by GDP per capita", Statistics Times. (statisticstimes.com/economy/gdp-capita-of-indian-states.php)
8. Government of India, Office of the Registrar General and Census Commissioner, *SRS Statistical Report 2013*, Government of India. (www.censusindia.gov.in/vital_statistics/SRSReports-2013.html)

However, it is found that the impact of GG of GER in UP on HDI was significantly positive. If GG of GER in UP increased by one per cent, HDI increased by 0.004. The coefficient of the independent variable came out to be significant at ten per cent. Moreover, the impacts of GPI of GER in UP on EI and SR were significantly positive in both the cases. The coefficients of the independent variables came out to be significant at ten per cent in both the cases. If GPI of GER in UP increased by one per cent then EI increased by 0.894. As shown in the table, it is also found that the impact of GG of NER in UP on HDI was significantly positive. If GG of NER in UP

increased by one per cent, HDI increased by 0.005. The coefficient of the independent variable came out to be significant at ten per cent. The regression results also show that the impacts of GG of NER in UP on TFR and BR were significantly negative in both the cases. If GG of NER in UP increased by one per cent, TFR and BR decreased by 0.053 persons and 0.413 persons respectively. The coefficients of the independent variables came out to be significant at ten per cent in both the cases. However, it is found that the impacts of GG of NER in UP on DR, IMR, LEB and NSDP were insignificant in all. The analysis also reveals that the impacts of GG of DOR in UP on TFR, BR, DR, IMR, LEB and NSDPC were insignificant in all. On the other hand, the impact of GG of DOR in UP on SR was significantly positive. The coefficient of the independent variable came out to be significant at ten per cent.

5.2.1.4 Impact of Gender Disparity in Secondary Level on Economic Development in India:

To analyse the impact of gender disparity in Secondary on economic development in India, impacts of GG of GER in Secondary on HDI, SR, TFR, IMR, BR, DR, LEB and NSDPC; impacts of GG of NER in Secondary on TFR, BR, DR, IMR, LEB, NSDPC and HDI and impacts of GG of DOR in Secondary on TFR, BR, DR, IMR, LEB and NSDPC have been examined. The results of the above relationships have been shown in Table 5.6 (see appendices 5.3B, 5.3C and 5.3D). As shown in the table, it is found that the impacts of GG of GER in Secondary on HDI, SR, TFR, IMR, BR, DR, LEB and NSDPC were insignificant in all. It is also found that the impacts of GG of NER in Secondary on TFR, BR, DR, IMR, LEB, NSDPC and HDI were insignificant in all. The regression results also reveals that the impacts of GG of DOR in Secondary on TFR and DR were insignificant in both the cases. However, it is found that the impacts of GG of DOR in Secondary on BR and IMR were significantly negative in both the cases and on LEB and NSDPC were significantly positive in both the cases. If GG of DOR in Secondary increased by one per cent, BR and IMR declined by 0.669 and 2.783 persons respectively and increased LEB and NSDPC by 0.565 years and rupees 9183.180 respectively. The

coefficients of the independent variables came out to be significant at five per cent, one per cent, five per cent and one per cent respectively.

Table 5.6
Impact of Gender Disparity in Secondary Level on Economic Development in India

Model	Depen-dent variable	Independent variable /constant	Co-efficient	S.E.	t value	Sig.	R^2	Adj. R^2	F
2	HDI, 2015	Constant	0.615	0.013	48.794	0.000	0.057	-.006	0.911
		GG of GER in Sec., 2014-2015	0.002	0.002	0.954	0.355			
2	SR, 2011	Constant	926.611	14.361	64.521	0.000	0.004	-0.026	0.131
		GG of GER in Sec., 2010-2011	0.589	1.624	0.362	0.719			
2	TFR, 2013	Constant	2.196	0.125	17.585	0.000	0.004	-0.052	0.064
		GG of GER in Sec., 2013-2014	0.005	0.018	0.252	0.804			
2	IMR, 2013	Constant	36.990	2.692	13.740	0.000	0.005	-0.051	.084
		GG of GER in Sec., 2013-2014	-0.114	0.396	-0.289	0.776			
2	BR, 2013	Constant	20.221	1.010	20.030	0.000	0.001	-0.055	0.014
		GG of GER in Sec., 2013-2014	0.018	0.148	0.118	0.907			
2	DR, 2013	Constant	6.843	0.221	30.969	0.000	0.043	-0.011	0.801
		GG of GER in Sec., 2013-2014	-0.029	0.032	-0.895	0.383			
2	LEB, 2010-2014	Constant	68.855	0.709	97.160	0.000	0.046	-0.004	0.926
		GG of GER in Sec., 2013-2014	0.102	0.106	0.962	0.348			
2	NSDPC, 2013	Constant	91226.179	8904.566	10.245	0.000	0.012	-0.021	0.360
		GG of GER in Sec., 2013-2014	772.058	1287.472	0.600	0.553			
2	TFR, 2013	Constant	2.200	0.124	17.728	0.000	0.003	-0.052	0.063
		GG of NER in Sec., 2013-2014	0.008	0.033	0.251	0.804			
2	BR, 2013	Constant	20.234	1.003	20.172	0.000	0.000	-0.055	0.005
		GG of NER in Sec., 2013-2014	0.019	0.269	0.071	0.944			
2	DR, 2013	Constant	6.823	0.220	30.990	0.000	0.037	-0.017	0.688
		GG of NER in Sec., 2013-2014	-0.049	0.059	-0.829	0.418			
2	IMR, 2013	Constant	36.919	2.663	13.865	0.000	0.013	-0.042	0.238
		GG of NER in Sec., 2013-2014	-0.348	0.713	-0.488	0.631			
2	LEB, 2013	Constant	68.947	0.704	97.989	0.000	0.044	-0.006	0.877
		GG of NER in Sec., 2013-2014	0.108	0.192	0.937	0.361			
2	NSDPC, 2013	Constant	91335.535	9151.880	9.980	0.000	.000	-.033	0.004
		GG of NER in Sec., 2013-2014	163.433	2653.870	0.062	0.951			
2	HDI, 2015	Constant	0.616	0.013	46.340	0.000	0.035	-0.029	0.550
		GG of NER in Sec., 2014-2015	0.002	0.003	0.741	0.470			
2	TFR, 2013	Constant	2.230	0.116	19.165	0.000	0.143	0.095	2.999
		GG of DOR in Sec., 2013-2014	-0.068	0.039	-1.732	0.100			
2	BR, 2013	Constant	20.531	0.900	22.819	0.000	.213	0.170	4.882
		GG of DOR in Sec., 2013-2014	-0.669	0.303	-2.210	0.040			
2	DR, 2013	Constant	6.844	0.224	30.610	0.000	0.028	-0.026	0.526
		GG of DOR in Sec., 2013-2014	-0.055	0.075	-0.725	0.478			
2	IMR, 2013	Constant	38.133	1.882	20.262	0.000	0.518	0.491	19.333
		GG of DOR in	-2.783	0.633	-4.397	0.000			

		Sec., 2013-2014							
2	LEB, 2010-2014	Constant	68.640	0.624	109.947	0.000	0.272	0.234	7.113
		GG of DOR in Sec., 2013-2014	0.565	0.212	2.667	0.015			
2	NSDPC, 2013	Constant	82479.683	7070.381	11.666	0.000	0.356	0.334	16.551
		GG of DOR in Sec., 2013-2014	9183.180	2257.272	4.068	0.000			

Sources:

1. www.dise.in
2. Government of India, Census report, 2011.
3. UNDP (2015), "Ranking of Indian States in the World according to 2015 Human Development Report", Livemint. (www.livemint.com/Politics/3KhGMVXGxXcG YBRMsmDCFO/Why-Kerala-is-like-Maldives -and-Uttar-Pradesh-Pakistan.html)
4. Government of India (n.d.), "Human Development Index and its Components by States, 1999-00 and 2007-08", data.gov.in. (https://data.gov.in/catalog/human-development-index-and-its-components-states)
5. Government of India, Office of the Registrar General and Census Commissioner of India , "Abridged Life Tables, 2010-2014", P.5. (https://en.wikipedia.org/wiki/List_of_India_states_by_life_expectancy_at_birth)
6. Government of India, SRS Statistical Report (2013), "Infant Mortality Rate (per 1000 live births)", National Institute for Transforming India, Government of India. (niti.gov.in/content/infant-mortality-rate-imr-1000-live-births)
7. Government of India, Ministry of Statistics and Programme Implementation (2015), "India states by GDP per capita", Statistics Times. (statisticstimes.com/economy/gdp-capita-of-indian-states.php)
8. Government of India, Office of the Registrar General and Census Commissioner, *SRS Statistical Report 2013*, Government of India. (www.censusindia.gov.in/vital_statistics/SRSReports-2013.html)

5.2.1.5 Impact of Gender Disparity in Higher Secondary Level on Economic Development in India:

To discuss the impact of gender disparity in HS on economic development in India, impacts of Gender Gaps (GGs) of GER, NER and DOR in HS on TFR, BR, DR, IMR, LEB, NSDPC; GG of GER in HS on HDI and SR and GG of NER in HS on HDI in India have been discussed. The regression results of the above relationships are presented in Table 5.7 (see appendices 5.3B, 5.3D and 5.3E). As shown in the table, it is found that the impacts of GG of GER in HS on BR and IMR were significantly positive in both the cases and on NSDPC was significantly negative in India. If GG of GER in HS increased by one per cent, BR increased by 0.290 persons, IMR increased by 0.799 persons and NSDPC decreased by rupees 2520.617. The coefficients of the independent variables came out to be significant at ten per cent, ten per cent and five per cent respectively. The analysis also shows that the impacts of GG of GER in HS on TFR, DR, LEB, HDI and SR were insignificant in all. Moreover, it is found that the impacts of GG of NER in HS on TFR, BR and

IMR were significantly positive in all and the impacts of GG of NER on NSDPC and HDI were significantly negative for both the cases. If GG of NER in HS increased by one per cent, TFR, BR and IMR increased by 0.062 persons, 0.573 persons and 1.746 persons respectively. The coefficients of the independent variables came out to be significant at five per cent, five per cent and one per cent respectively. If GG of NER increased by one per cent, NSDPC and HDI decreased by rupees 5247.499 and 0.006. The coefficients of the independent variable came out to be significant at one

Table 5.7
Impact of Gender Disparity in Higher Secondary Level on Economic Development in India

Model	Dependent variable	Independent variable/constant	Coefficient	S.E.	t value	Sig.	R^2	Adj. R^2	F
1	*2*	*3*	*4*	*5*	*6*	*7*	*8*	*9*	*10*
2	TFR, 2013	Constant	2.164	0.125	17.357	0.000	0.133	0.082	2.599
		GG of GER in HS, 2013-2014	0.031	0.019	1.612	0.125			
2	BR, 2013	Constant	19.883	0.979	20.306	0.000	0.180	0.131	3.721
		GG of GER in HS, 2013-2014	0.290	0.150	1.929	0.071			
2	DR, 2013	Constant	6.787	0.215	31.509	0.000	0.072	0.018	1.324
		GG of GER in HS, 2013-2014	-0.038	0.033	-1.151	0.266			
2	IMR, 2013	Constant	35.098	2.467	14.227	0.000	0.207	0.160	4.441
		GG of GER in HS, 2013-2014	0.799	0.379	2.107	0.050			
2	LEB, 2010-2014	Constant	69.213	0.741	93.369	0.000	0.032	-.022	0.591
		GG of GER in HS, 2013-2014	-0.090	0.117	-0.768	0.452			
2	NSDPC, 2013	Constant	93643.094	8116.291	11.538	0.000	0.156	0.127	5.349
		GG of GER in HS, 2013-2014	-2520.617	1089.905	-2.313	0.028			
2	HDI, 2015	Constant	0.620	0.014	44.016	0.000	0.012	-.058	0.172
		GG of GER in HS, 2014-2015	0.000	0.001	-0.415	0.685			
2	SR, 2011	Constant	928.029	14.464	64.161	0.000	0.001	-.031	0.032
		GG of GER in HS, 2010-2011	0.408	2.274	0.180	0.859			
2	TFR,	Constant	2.254	0.118	19.085	0.000	0.217	0.171	4.723

	2013	GG of NER in HS, 2013-2014	0.062	0.028	2.173	0.044			
2	BR, 2013	Constant	20.722	0.909	22.799	0.000	0.289	0.247	6.913
		GG of NER in HS, 2013-2014	0.573	0.218	2.629	0.018			
2	DR, 2013	Constant	6.719	0.222	30.286	0.000	0.010	-.048	0.176
		GG of NER in HS, 2013-2014	-0.022	0.053	-0.419	0.680			
2	IMR, 2013	Constant	37.539	2.125	17.664	0.000	0.408	0.373	11.730
		GG of NER in HS, 2013-2014	1.746	0.510	3.425	0.003			
2	LEB, 2010-2014	Constant	68.855	0.699	98.564	0.000	0.142	0.094	2.976
		GG of NER in HS, 2013-2014	-0.296	0.171	-1.725	0.102			
2	NSDPC, 2013	Constant	88117.655	7846.806	11.230	0.000	0.260	0.235	10.212
		GG of NER in HS, 2013-2014	-5247.499	1642.117	-3.196	0.003			
2	HDI, 2015	Constant	0.614	0.012	50.416	0.000	0.249	0.196	4.652
		GG of NER in HS, 2014-2015	-0.006	0.003	-2.157	0.049			
2	TFR, 2013	Constant	2.046	0.109	18.780	0.000	0.215	0.144	3.013
		GG of DOR in HS, 2013-2014	-0.058	0.033	-1.736	0.110			
2	BR, 2013	Constant	18.988	1.036	18.332	0.000	0.160	0.083	2.088
		GG of DOR in HS, 2013-2014	-0.458	.317	-1.445	0.176			
2	DR, 2013	Constant	6.937	0.257	26.949	0.000	0.431	0.379	8.321
		GG of DOR in HS, 2013-2014	-0.227	0.079	-2.885	0.015			
2	IMR, 2013	Constant	35.599	3.829	9.298	0.000	0.114	0.034	1.420
		GG of DOR in HS, 2013-2014	-1.396	1.172	-1.192	0.258			
2	LEB, 2010-2014	Constant	69.399	0.885	78.434	0.000	0.205	0.139	3.097
		GG of DOR in HS, 2013-2014	0.494	0.281	1.760	0.104			
2	NSDPC, 2013	Constant	83453.030	9583.086	8.708	0.000	0.421	0.395	16.022
		GG of DOR in HS, 2013-2014	10198.833	2547.977	4.003	0.001			

Sources:

1. www.dise.in
2. Government of India, *Census Report, 2011*.
3. UNDP (2015), "Ranking of Indian States in the World according to 2015 Human Development Report", Livemint. (www.livemint.com/Politics/3KhGMVXGxXcGYBRMsmDCFO/Why-Kerala-is-like-Maldives-and-Uttar-Pradesh-Pakistan.html)
4. Government of India (n.d.), "Human Development Index and its Components by States, 1999-00 and 2007-08", data.gov.in. (https://data.gov.in/catalog/human-development-index-and-its-components-states)
5. Government of India, Office of the Registrar General and Census Commissioner of India, "Abridged Life Tables, 2010-2014", P.5. (https://en.wikipedia.org/wiki/List_of_India_states_by_life_expectancy_at_birth)
6. Government of India, SRS Statistical Report (2013), "Infant Mortality Rate (per 1000 live births)", National Institute for Transforming India, Government of India. (niti.gov.in/content/infant-mortality-rate-imr-1000-live-births)
7. Government of India, Ministry of Statistics and Programme Implementation (2015), "India states by GDP per capita", Statistics Times. (statisticstimes.com/economy/gdp-capita-of-indian-states.php)
8. Government of India, Office of the Registrar General and Census Commissioner, *SRS Statistical Report 2013*, Government of India. (www.censusindia.gov.in/vital_statistics/SRSReports-2013.html)

per cent and ten per cent respectively. However, it is found that the impacts of GG of NER in HS on DR and LEB were insignificant in both the cases. The results of the impacts of GG of DOR in HS on DR and NSDPC indicate that impacts of GG of DOR in HS on DR and NSDPC were significantly negative and significantly positive respectively. If GG of DOR in HS increased by one per cent DR decreased by 0.227 persons and NSDPC increased by rupees 10198.833. The coefficients of the independent variables came out to be significant at five per cent and one per cent respectively. From the analysis, it is also found that the impacts of GG of DOR in HS on TFR, BR, IMR and LEB were insignificant in all.

5.2.1.6 Impact of Gender Disparity in Higher Education on Economic Development in India:

To analyse the impact of gender disparity in HE on economic development in India, impacts of GG of GER in HE on HDI, SR, TFR, BR, DR, IMR, LEB and NSDPC have been investigated. The impacts of GG of GER in HE on the above mentioned variables have been shown in Table 5.8 (see appendices 5.3B and 5.3E). As shown in the table, it is found that the impacts of GG of GER in HE on HDI and LEB were significantly negative in both the cases and on IMR was significantly positive in India. If GG of GER in HE increased by one per cent then HDI decreased

Table 5.8
Impact of Gender Disparity in Higher Education on Economic Development in India

Model	Dependent variable	Independent variable/constant	Coefficient	S.E.	t value	Sig.	R^2	Adj. R^2	F
1	*2*	*3*	*4*	*5*	*6*	*7*	*8*	*9*	*10*
2	HDI, 2015	Constant	0.624	0.012	50.018	0.000	0.232	0.181	4.528
		GG of GER in HE, 2014-2015	-0.006	0.003	-2.128	0.050			
2	SR, 2011	Constant	928.756	15.686	59.208	0.000	0.003	-0.028	0.087
		GG of GER in HE, 2010-2011	0.907	3.076	0.295	0.770			
2	TFR, 2013	Constant	2.154	0.134	16.060	0.000	0.036	-0.017	0.674
		GG of GER in HE, 2012-2013	0.026	0.031	0.821	0.422			
2	BR, 2013	Constant	19.738	1.066	18.514	0.000	0.065	0.013	1.259
		GG of GER in HE, 2012-2013	0.279	0.249	1.122	0.277			
2	DR, 2013	Constant	6.679	0.233	28.630	0.000	0.105	0.055	2.110
		GG of GER in HE, 2012-2013	0.079	0.054	1.453	0.164			
2	IMR, 2013	Constant	34.908	2.721	12.829	0.000	0.147	0.100	3.105
		GG of GER in HE, 2012-2013	1.119	0.635	1.762	0.095			
2	LEB, 2010-2014	Constant	69.546	0.695	100.054	0.000	0.208	0.166	4.987
		GG of GER in HE, 2012-2013	-0.370	0.166	-2.233	0.038			
2	NSDPC, 2013	Constant	96534.608	8412.882	11.475	0.000	0.063	0.033	2.099
		GG of GER in HE, 2012-2013	-1163.915	803.459	-1.449	0.157			

Sources:

1. www.dise.in
2. Government of India, *Census Report, 2011*.
3. UNDP (2015), "Ranking of Indian States in the World according to 2015 Human Development Report", Livemint. (www.livemint.com/Politics/3KhGMVXGxXcG YBRMsmDCFO/Why-Kerala-is-like-Maldives -and-Uttar-Pradesh-Pakistan.html)
4. Government of India (n.d.), "Human Development Index and its Components by States,1999-00 and 2007-08", data.gov.in. (https://data.gov.in/catalog/human-development-index-and-its-components-states)
5. Government of India, Office of the Registrar General and Census Commissioner of India, "Abridged Life Tables, 2010-2014", P.5. (https://en.wikipedia.org/wiki/List_of_India_states_by_life_expectancy_at_birth)
6. Government of India, SRS Statistical Report (2013), "Infant Mortality Rate (per 1000 live births)", National Institute for Transforming India, Government of India. (niti.gov.in/content/infant-mortality-rate-imr-1000-live-births)
7. Government of India, Ministry of Statistics and Programme Implementation (2015), "India states by GDP per capita", Statistics Times. (statisticstimes.com/economy/gdp-capita-of-indian-states.php)
8. Government of India, Office of the Registrar General and Census Commissioner, *SRS Statistical Report 2013*, Government of India. (www.censusindia.gov.in/vital_statistics/SRSReports-2013.html)
9. Government of India-Ministry of Human Resource Development (2013, 2015, 2016), *All India Survey on Higher Education, 2010-11, 2012-13, 2014-15*, Government of India.(aishe.nic.in/aishe/viewDocument.action?documentId=125, aishe.nic.in/aishe/viewDocument.action?documentId=194, aishe.nic.in/aishe/viewDocument.action?documentI d=206)

by 0.006 and LEB decreased by 0.370 years and IMR increased by 1.119. The coefficients of the independent variables came out to be significant at ten per cent, five per cent and ten per cent respectively. From the analysis, it is also found that the impacts of GG of GER in HE on SR, TFR, BR, DR and NSDPC were insignificant in all.

5.2.2 Impact of Gender Disparity in Education on Economic Development in Assam:

In this section, to discuss the impact of gender disparity in education on economic development in Assam, impacts of gender disparities in LR, LP, UP and Secondary on economic development in Assam have been examined.

5.2.2.1 Impact of Gender Disparity in Literacy Rate on Economic Development in Assam:

To examine the impact of gender disparity in education on economic development in Assam, impacts of LRG on HDI, EI, TFR, BR, DR, SR, IMR, PCNSDP and Net State Domestic Product (NSDP) have been examined. Table 5.9 (see appendix 5.7) shows the impacts of LRG on HDI and EI. As shown in the table, it is found that the impact of LRG on HDI was significantly negative. The coefficient

Table 5.9
Impact of Gender Disparity in Literacy Rate on Economic Development in Assam

Model	Depen-dant variable	Indepen-dent Variable/ constant	Co-eff.	S.E.	t value	Sig.	R^2	Adj. R^2	F
1	*2*	*3*	*4*	*5*	*6*	*7*	*8*	*9*	*10*
2	HDI, 2013	Constant	0.713	0.068	10.550	0.000	0.180	0.147	5.474
		LRG, 2011	-0.013	0.006	-2.340	0.028			
2	EI, 2013	Constant	0.730	0.055	13.238	0.000	0.061	0.023	1.625
		LRG, 2011	-0.006	0.005	-1.275	0.214			

Sources:

1. Government of India, *Census Report, 2011*.
2. Government of Assam and UNDP (2014), *Assam Human Development Report 2014*, Government of Assam, Pp. 192 and 203.

Table 5.10
Impact of Gender Disparity in Literacy Rate on Economic Development in Assam

Model	Depen-dant variable	Indepen-dent Variab-le/ Consta-nt	Co-eff.	S.E.	t-value	Sig.	R^2	Adj. R^2	F	D-W
2	TFR (1971-2011)	Constant	-1.107	0.496	-2.233	0.155	0.195	-0.208	0.484	1.823
		LRG	-0.120	0.173	-0.695	0.559				
2	BR (1971-2011)	Constant	4.131	5.909	0.699	0.535	0.873	0.830	20.530	1.551
		LRG	1.495	0.330	4.531	0.020				
2	DR (1971-2011)	Constant	-2.895	5.693	-0.509	0.646	0.700	0.600	6.995	1.552
		LRG	0.841	0.318	2.645	0.077				
2	SR (1951-2011)	Constant	1041.590	29.545	35.254	0.000	0.812	0.774	21.606	1.447
		LRG	-7.019	1.510	-4.648	0.006				
2	IMR (1971-2011)	Constant	-26.160	10.778	-2.427	0.136	0.146	-0.281	0.342	2.100
		LRG	-2.200	3.760	-0.585	0.618				
2	PCNSDP (1951-2011)	Constant	54326.114	11482.578	4.731	0.005	0.779	0.734	17.574	2.066
		LRG	-2460.283	586.877	-4.192	0.009				
2	NSDP (1951-2011)	Constant	162744.116	36860.655	4.415	0.007	0.757	0.709	15.601	1.999
		LRG	-7441.292	1883.957	-3.950	0.011				
2	LEB (2001-2013	Constant	89.706	10.288	8.719	0.001	0.691	0.613	8.925	1.899
		DR	-3.363	1.126	-2.988	0.040				

Sources:

1. Government of Assam (1973, 1988, 2004, 2012, 2013, 2014), *Statistical Hand Book Assam, 1973, 1988, 2004, 2012, 2013, 2014*, Directorate of Economics and Statistics, Government of Assam, Guwahati.
2. Government of India, *Census Report, 2011*.
3. Government of India, Office of the Registrar General and Census Commissioner of India (n.d.), "State wise literacy rate in 2001 and 2011 and State wise gap in literacy rate of males and females in 2001 and 2011". (mospi.nic.in/sites/default/files/reports_and_publication/statistical_publication /social_statistics/WM16Chapter3).
4. Thakur, A.K. and Kumar, D. (2009), *Regional Development and Levels of Living in India*, Deep and Deep Publications Pvt. Ltd.,F- 159, Rajouri Garden, New Delhi-110027.
5. Das, M. (2007), *Problems and Prospects of Ericulture in Assam with Special Reference to Barpeta District*, unpublished Ph.D. thesis submitted at North Eastern Hill University, Shillong, Meghalaya, India, Pp. 133.
6. Government of India, Ministry of Health and Family Welfare (2006), *Report of the Technical group on Population Projections-Projected levels of expectation of life at birth in India and Major states 2001-2025*. (cbhidghs.nic.in/Writeraddata/main linkFile /File1131.pdf)

of the independent variable came out to be significant at five per cent. If LRG increased by one per cent, HDI decreased by 0.013. On the other hand, it is observed that the impact of LRG on EI was insignificantly negative.

The impacts of LRG on TFR, BR, DR, SR, IMR, PCNSDP and NSDP in Assam have been presented in Table 5.10 (see appendices 5.4 and 5.5). As shown in the table, it is found that the impact of LRG on TFR was insignificantly negative. However, it is found that the impacts of LRG on BR and DR were significantly positive in both the relations and on SR was significantly negative. If LRG increased by one per cent, BR increased by 1.495 persons and DR increased by 0.841 persons. The coefficients of the independent variables in respect of BR, DR and SR came out to be significant at five per cent, ten per cent and five per cent respectively. The regression results reveal that the impact of LRG on IMR was insignificant while its impacts on PCNSDP and NSDP were significantly negative in both the relationships. If LRG increased by one per cent, PCNSDP and NSDP decreased by rupees 2460.283 and rupees 7441.292 crores respectively. The coefficients of the independent variables came out to be significant at five per cent in both the cases.

The analysis of the impact of DR on LEB shows that the impact of DR on LEB was significantly negative in Assam. If DR increased by one per cent, LEB decreased by 3.363 years. The coefficient of the independent variable came out to be statistically significant at five per cent. Since the impact of LRG on DR was significantly positive, and impact of DR on LEB was significantly negative, so it can be inferred that the impact of LRG on LE was negative.

5.2.2.2 Impact of Gender Disparity in Lower Primary level on Economic Development in Assam:

To analyse the impact of gender disparity in LP on economic development in Assam, impact of GG of GER in LP and impact of GG of DOR in LP on TFR, BR, DR, IMR, PCNSDP and NSDP have been analysed. The impacts of the independent variables on dependent variables are shown in Table 5.11 (see appendix 5.6). As shown in the table, the impact of GG of GER in LP on TFR was significantly negative in Assam. As a result of increase of GG of GER in LP by one per cent, TFR decreased by 0.136 persons. The coefficient of the independent variable came out to

Table 5.11
Impact of Gender Disparity in Lower Primary Level on Economic Development in Assam

Model	Depen-dant variable	Indepen-dent variable/ constant	Coeffici-ent	S.E.	t -value	Sig.	R^2	Adj. R^2	F	D-W
2	TFR	Constant	2.478	0.042	59.010	0.000	0.799	0.770	27.802	1.557
		GG of GER in LP	-0.136	0.026	-5.273	0.001				
2	BR	Constant	-0.292	0.051	-5.764	0.001	0.014	-0.127	0.096	1.620
		GG of GER in LP	-0.027	0.087	-0.310	0.766				
2	DR	Constant	-0.123	0.031	-3.938	0.006	0.075	-0.058	0.565	1.986
		GG of GER in LP	0.041	0.054	0.751	0.477				
2	IMR	Constant	-0.376	0.644	-0.584	0.580	0.000	-0.166	0.003	1.820
		GG of GER in LP	-0.050	0.971	-0.051	0.961				
2	PCNS DP	Constant	542.968	574.334	0.945	0.388	0.018	-0.179	0.090	1.483
		GG of GER in LP	-251.750	840.310	-0.300	0.777				
2	NSDP	Constant	9.692E6	1.761E6	5.504	0.001	0.230	0.120	2.089	1.634
		GG of GER in LP	1.562E6	1.080E6	1.445	0.192				
2	TFR	Constant	3.200	0.273	11.705	0.000	0.389	0.302	4.460	1.460
		GG of DOR in LP	-0.344	0.163	-2.112	0.073				
2	BR	Constant	0.002	0.055	0.045	0.965	0.205	0.073	1.551	1.386
		GG of DOR in LP	0.094	0.076	1.246	0.259				
2	DR	Constant	-0.003	0.029	-0.086	0.934	0.484	0.398	5.620	2.090
		GG of DOR in LP	-0.096	0.041	-2.371	0.055				
2	IMR	Constant	-0.395	0.607	-0.651	0.539	0.110	-0.038	0.745	1.696
		GG of DOR in LP	-0.727	0.842	-0.863	0.421				
2	PCNS DP	Constant	544.369	575.376	0.946	0.388	0.015	-0.182	0.076	1.559
		GG of DOR in LP	-214.176	775.232	-0.276	0.793				
2	NSDP	Constant	1.407E6	1.282E6	1.098	0.314	0.506	0.424	6.143	2.201
		GG of DOR in LP	-7.893E6	3.185E6	-2.478	0.048				

Sources:

1. Government of Assam (2010, 2013, 2014), *Statistical Hand Book Assam, 2010, 2013 and 2014*, Directorate of Economics and Statistics, Government of Assam, Guwahati.
2. Government of Assam, Sarva Shiksha Abhiyan, *office record*, Guwahati, Assam.

be significant at one per cent. The regression results shown in the table also reveals that the impacts of GG of GER in LP on BR, DR, IMR, PCNSDP and NSDP were

insignificant in all. Moreover, it is found that the impacts of GG of DOR in LP on TFR, DR and NSDP were significantly negative in all. An increase of GG of DOR in LP by one per cent decreased TFR, DR, NSDP by 0.344 persons, 0.096 persons and Rs. 7.9 crores respectively. The coefficients of the independent variables came out to be significant at ten per cent in all. The analysis also shows that the impacts of GG of DOR in LP on BR, IMR, PCNSDP were insignificant in all.

The impacts of GG of GER in LP and GG of DOR in LP on HDI have also been examined in Assam. Table 5.12 (see appendix 5.7) presents the impact of GG of GER in LP and GG of DOR in LP on HDI in Assam. The results shown in the table reveals that the impacts of GG of GER in LP and GG of DOR in LP on HDI were insignificantly negative in both the cases.

Table 5.12
Impact of Gender Disparity in Lower Primary Level on Economic Development in Assam

Model	Depend-ant variable	Independent variable/ constant	Coeffici-ent	S.E.	t value	Sig.	R^2	Adj. R^2	F
1	*2*	*3*	*4*	*5*	*6*	*7*	*8*	*7*	*8*
2	HDI, 2013	Constant	0.553	0.018	30.685	0.000	0.014	-0.027	0.336
		GG of GER in LP, 2013-2014	-0.029	0.050	-0.580	0.568			
2	HDI, 2013	Constant	0.574	0.017	34.736	0.000	0.088	0.051	2.401
		GG of DOR in LP, 2013-2014	-0.014	0.009	-1.550	0.134			

Sources:

1. Government of Assam and UNDP (2014), *Assam Human Development Report 2014*, Government of Assam.
2. Government of Assam, Sarva Shiksha Abhiyan, *office record*, Guwahati, Assam.

5.2.2.3 Impact of Gender Disparity in Upper Primary Level on Economic Development in Assam:

To discuss the impact of gender disparity in UP on economic development in Assam, impacts of GG of GER in UP and GG of DOR in UP on TFR, BR, DR, IMR,

Table 5.13
Impact of Gender Disparity in Upper Primary Level on Economic Development in Assam

Model	Depe-ndant varia-ble	Indepen-dent variable/ constant	Co-efficient	S.E.	t value	Sig.	R^2	Adj. R^2	F	D-W
1	*2*	*3*	*4*	*5*	*6*	*7*	*8*	*7*	*9*	*10*
2	TFR	Constant	0.013	0.090	0.139	0.895	0.269	0.123	1.844	1.790
		GG of GER in UP	-0.024	0.018	-1.358	0.233				
2	BR	Constant	0.070	0.071	0.981	0.371	0.356	0.227	2.760	1.513
		GG of GER in UP	-0.024	0.014	-1.661	0.158				
2	DR	Constant	0.000	0.026	-0.027	0.979	0.598	0.531	8.914	1.707
		GG of GER in UP	0.028	0.009	2.986	0.024				
2	IMR	Constant	-0.376	0.641	-0.587	0.579	0.007	-0.159	0.041	1.797
		GG of GER in UP	0.047	0.232	0.203	0.846				
2	NSDP	Constant	9.846E6	2.038E6	4.831	0.002	0.178	0.061	1.521	1.626
		GG of GER in UP	515262.416	417855.209	1.233	0.257				
2	PCNSDP	Constant	554.504	533.614	1.039	0.346	0.134	-0.039	0.775	1.918
		GG of GER in UP	159.118	180.764	0.880	0.419				
2	TFR	Constant	0.021	0.106	0.193	0.855	0.018	-0.178	0.094	2.705
		GG of DOR in UP	-0.016	0.051	-0.307	0.771				
2	BR	Constant	0.006	0.060	0.103	0.921	0.063	-0.093	0.404	1.865
		GG of DOR in UP	0.031	0.048	0.636	0.548				
2	DR	Constant	-0.111	0.028	-3.997	0.005	0.003	-0.140	0.021	1.604
		GG of DOR in UP	-0.005	0.036	-0.144	0.890				
2	IMR	Constant	-0.389	0.651	-0.598	0.572	0.003	-0.163	0.019	1.761
		GG of DOR in UP	-0.071	0.525	-0.136	0.896				
3	NSDP	Constant	6.650	0.318	20.944	0.000	0.043	-0.094	0.316	2.004
		GG of DOR in UP	0.573	1.020	0.562	0.592				

2	PCN SDP	Constant	357.523	499.899	0.715	0.506	0.302	0.162	2.162	1.671
		GG of DOR in UP	-575.915	391.637	-1.471	0.201				

Sources: 1.Government of Assam (2010, 2013, 2014), *Statistical Hand Book Assam, 2010, 2013, 2014*, Directorate of Economics and Statistics, Government of Assam, Guwahati.
2. Government of Assam, Sarva Shiksha Abhiyan, *office record*, Guwahati, Assam.

NSDP and PCNSDP have been examined. The impacts of the independent variables on the dependent variables have been shown in Table 5.13 (see appendix 5.6). As shown in the table, it is found that the impact of GG of GER in UP on DR was significantly positive. If GG of GER in UP increased by one per cent, DR increased by 0.028 persons. The coefficient of the independent variable came out to be significant at five per cent. On the other hand, the analysis shows that the impacts of GG of GER in UP on TFR, BR, IMR, NSDP and PCNSDP and the impacts of GG of DOR in UP on TFR, BR, DR, IMR, NSDP and PCNSDP were insignificant in all.

The impact of GG of GER in UP and GG of DOR in UP on HDI has also been investigated. As shown in Table 5.14 (see appendix 5.7), the impact of GG of GER in UP and impact of GG of DOR in UP on HDI were insignificant in both the cases.

Table 5.14
Impact of Gender Disparity in Upper Primary Level on Economic Development in Assam

Model	Dependent variable	Independent variable/ Constant	Coefficient	S.E.	t value	Sig.	R^2	Adj. R^2	F
1	*2*	*3*	*4*	*5*	*6*	*7*	*8*	*9*	*10*
2	HDI, 2013	Constant	0.559	0.018	30.391	0.000	0.000	-0.042	0.000
		GG of GER in UP, 2013-2014	0.000	0.016	0.009	0.993			
2	HDI, 2013	Constant	0.563	0.018	31.989	0.000	0.004	-0.037	0.097
		GG of DOR in UP, 2013-2014	-0.002	0.008	-0.312	0.758			

Sources:
1. Government of Assam and UNDP (2014), *Assam Human Development Report 2014*, Government of Assam.
2. Government of Assam, Sarva Shiksha Abhiyan, *office record*, Guwahati, Assam.

5.2.2.4 Impact of Gender Disparity in Secondary Level on Economic Development in Assam:

To analyse the impact of gender disparity in Secondary on economic development in Assam, impact of GG of GER in Secondary, impact of GG of DOR in class IX and impact of GG of DOR in class X on HDI have been analysed. The regression results shown in Table 5.15 (see appendix 5.7) reveals that the impacts of GG of GER in Secondary, GG of DOR in class IX and GG of DOR in class X on HDI were insignificant in all in Assam.

Table 5.15
Impact of Gender Disparity in Secondary Level on Economic Development in Assam

Model	Depe-ndent variable	Independent variable/ Constant	Coeffici-ent	S.E.	t value	Sig	R^2	Adj. R^2	F
1	*2*	*3*	*4*	*5*	*6*	*7*	*8*	*9*	*10*
2	HDI, 2013	Constant	0.559	0.027	20.918	0.000	0.000	-0.042	0.001
		GG of Secondary GER , 2013-2014	-6.358E-5	0.002	-0.028	0.978			
2	HDI, 2013	Constant	0.557	0.016	34.215	0.000	0.003	-0.039	0.061
		GG of Class IX DOR, 2013-2014	0.001	0.004	0.247	0.807			
2	HDI, 2013	Constant	0.559	0.014	39.486	0.000	0.001	-0.041	0.025
		GG of Class X DOR, 2013-2014	0.001	0.004	0.157	0.877			

Sources:

1. Government of Assam and UNDP (2014), *Assam Human Development Report 2014*, Government of Assam.
2. Government of Assam, Rashtriya Madhyamik Shiksha Abhiyan, *office record*, Guwahati, Assam.

5.2.3 Impact of Gender Disparity in Education on Economic Development in BTAD:

To discuss the impact of gender disparity in education on economic development in BTAD, impacts of gender disparities in LR, LP, UP and Secondary on economic development in BTAD have been examined. Impacts of gender

disparities in LR, DOR in LP, GER in UP, DOR in UP, GER in Secondary and DOR in classes IX and X on (Health Index) HI, EI, (Living Standard Index) LSI, BR, DR, SR, Mean Years of Schooling (MYS) and Average Per Capita Income (APCI) have been examined.

5.2.3.1 Impact of Gender Disparity in Literacy Rate on Economic Development in BTAD:

The impacts of LRG on HI, EI, LSI, BR, DR, SR, MYS and APCI are presented in Table 5.16 (see appendix 5.8). As shown in the table, it is found that the

Table 5.16
Impact of Gender Disparity in Literacy Rate on Economic Development in BTAD

Model	Depen-dent variable	Indep-endent Variable/ constant	Coeff.	S.E.	t - value	Sig.	R^2	Adj. R^2	F
1	*2*	*3*	*4*	*5*	*6*	*7*	*8*	*9*	*10*
2	HI, 2013	Constant	2.563	0.839	3.054	0.093	0.745	0.617	5.828
		LRG	-0.141	0.058	-2.414	0.137			
2	EI, 2013	Constant	1.029	0.217	4.740	0.042	0.626	0.439	3.348
		LRG	-0.028	0.015	-1.830	0.209			
2	LSI, 2013	Constant	0.584	0.250	2.337	0.145	0.167	-0.249	0.402
		LRG	-0.011	0.017	-0.634	0.591			
2	BR, 2011	Constant	14.354	37.697	0.381	0.740	0.000	-0.500	0.000
		LRG	-0.009	2.618	-0.003	0.998			
2	DR, 2011	Constant	-12.513	6.732	-1.859	0.204	0.736	0.605	5.589
		LRG	1.105	0.468	2.364	0.142			
2	SR, 2011	Constant	899.028	47.603	18.886	0.003	0.518	0.278	2.153
		LRG	4.851	3.306	1.467	0.280			
2	MYS, 2013	Constant	12.066	2.651	4.552	0.045	0.776	0.664	6.931
		LRG	-0.485	0.184	-2.633	0.119			
2	APCI, 2013	Constant	2451.401	1296.538	1.891	0.199	0.168	-0.248	0.404
		LRG	-57.238	90.041	-0.636	0.590			

Sources:

1. Government of India, *Census Report, 2011*.
2. Government of Assam and UNDP (2014), *Assam Human Development Report 2014*, Government of Assam.

3. Government of Assam (2011, 2012, 2014), *Statistical Handbook Assam, 2011, 2012, 2014,* Directorate of Economics and Statistics, Government of Assam, Guwahati.

impacts of LRG on HI, EI, BR, LSI, MYS and APCI were insignificantly negative in all and on DR and SR were insignificantly positive in all.

5.2.3.2 Impact of Gender Disparity in Lower Primary Level on Economic Development in BTAD:

To discuss the impact of gender disparity in LP on economic development in BTAD, impacts of gender disparity in DOR in LP on HI, EI, LSI, BR, DR, SR,

Table 5.17
Impact of Gender Disparity in Lower Primary Level on Economic Development in BTAD

Model	Dependent variable	Independent Variable/ constant	Coeff.	S.E.	t value	Sig.	R^2	Adj. R^2	F
1	*2*	*3*	*4*	*5*	*6*	*7*	*8*	*9*	*10*
2	HI, 2013	Constant	0.689	0.100	6.920	0.020	0.640	0.460	3.557
		GG of DOR in LP 2013-2014	-0.236	0.125	-1.886	0.200			
2	EI, 2013	Constant	0.646	0.033	19.312	0.003	0.113	-0.330	0.255
		GG of DOR in LP 2013-2014	-0.021	0.042	-0.505	0.664			
2	LSI, 2013	Constant	0.455	0.008	57.542	0.000	0.917	0.875	22.000
		GG of DOR in LP 2013-2014	-0.047	0.010	-4.690	0.043			
2	BR, 2011	Constant	14.762	3.741	3.946	0.059	0.016	-0.476	0.033
		GG of DOR in LP 2013-2014	-0.849	4.692	-0.181	0.873			
2	DR, 2011	Constant	2.081	0.624	3.332	0.079	0.773	0.660	6.827
		GG of DOR in LP 2013-2014	2.047	0.783	2.613	0.121			
2	SR, 2011	Constant	970.312	6.719	144.407	0.000	0.041	-0.438	0.086
		GG of DOR in LP 2013-2014	-2.475	8.428	-0.294	0.797			
2	MYS, 2013	Constant	5.504	0.429	12.836	0.006	0.415	0.122	1.417
		GG of DOR in LP 2013-2014	-0.640	0.538	-1.190	0.356			
2	APCI, 2013	Constant	1780.401	43.208	41.205	0.001	0.908	0.862	19.665
		GG of DOR in LP 2013-2014	-240.335	54.196	-4.435	0.047			

Sources:

1. Government of India, *Census Report, 2011*.
2. Government of Assam and UNDP (2014), *Assam Human Development Report 2014,* Government of Assam.
3. Government of Assam (2011, 2012, 2014), *Statistical Handbook Assam, 2011, 2012, 2014,* Directorate of Economics and Statistics, Government of Assam, Guwahati.
4. Government of Assam, Sarva Shiksha Abhiyan, *office record*, Guwahati, Assam.

MYS and APCI have been examined. The impacts of gender disparity in DOR in LP on HI, EI, LSI, BR, DR, SR, MYS and APCI are shown in Table 5.17 (see appendices 5.8 & 5.9). From the analysis, it is found that the impacts of GG of DOR in LP on LSI and APCI were significantly negative in both the cases. An increase in the GG of DOR in LP by one percent decreased LSI and APCI by 0.047 and rupees 240.335 respectively. The coefficients of the independent variables came out to be significant at five per cent and ten per cent respectively. The regression results shown in the table also shows that the impacts of GG of DOR in LP on HI, EI, BR, DR, SR and MYS were insignificant in all.

5.2.3.3 Impact of Gender Disparity in Upper Primary Level on Economic Development in BTAD:

To discuss the impact of gender disparity in UP on economic development in BTAD, impacts of gender disparities in GER and DOR in UP on HI, EI, LSI, BR, DR, SR, MYS and APCI have been investigated. The impacts of independent variables on the dependent variables have been shown in Table 5.18 (see appendices 5.8 and 5.9). As shown in the table, it is found that the impacts of GG of GER in UP

Table 5.18
Impact of Gender Disparity in Upper Primary Level on Economic Development in BTAD

Model	Depen-dent variable	Independent Variable/ constant	Coeff.	S.E.	t value	Sig.	R^2	Adj. R^2	F
1	*2*	*3*	*4*	*5*	*6*	*7*	*8*	*9*	*10*
2	HI, 2013	Constant	0.705	0.232	3.036	0.093	0.227	-0.160	0.586
		GG of GER in UP, 2013-2014	0.298	0.390	0.766	0.524			
2	EI, 2013	Constant	0.674	0.047	14.383	0.005	0.311	-0.033	0.905
		GG of GER in UP, 2013-2014	0.075	0.079	0.951	0.442			
2	LSI, 2013	Constant	0.461	0.034	13.518	0.005	0.386	0.080	1.259
		GG of GER in UP, 2013-2014	0.064	0.057	1.122	0.378			
2	BR, 2011	Constant	7.631	3.226	2.365	0.142	0.710	0.565	4.904
		GG of GER in UP, 2013-2014	-11.990	5.415	-2.214	0.157			
2	DR, 2011	Constant	2.850	2.046	1.393	0.298	0.037	-0.445	0.076

		GG of GER in UP, 2013-2014	-0.950	3.434	-0.277	0.808			
2	SR, 2011	Constant	974.381	10.018	97.262	0.000	0.156	-0.265	0.371
		GG of GER in UP, 2013-2014	10.238	16.814	0.609	0.605			
2	MYS, 2013	Constant	5.700	0.763	7.470	0.017	0.266	-0.101	0.725
		GG of GER in UP, 2013-2014	1.090	1.281	0.851	0.484			
2	APCI, 2013	Constant	1816.143	174.585	10.403	0.009	0.403	0.105	1.352
		GG of GER in UP, 2013-2014	340.714	293.017	1.163	0.365			
2	HI, 2013	Constant	0.579	0.096	6.055	0.026	0.287	-0.069	0.806
		GG of DOR in UP, 2013-2014	-0.041	0.046	-0.898	0.464			
2	EI, 2013	Constant	0.646	0.010	67.780	0.000	0.845	0.767	10.884
		GG of DOR in UP, 2013-2014	-0.015	0.005	-3.299	0.081			
2	LSI, 2013	Constant	.427	.019	22.967	.002	0.009	-0.486	0.019
		GG of DOR in UP, 2013-2014	-0.001	0.009	-0.138	0.903			
2	BR, 2011	Constant	12.957	1.582	8.189	0.015	0.621	0.432	3.279
		GG of DOR in UP, 2013-2014	1.382	0.763	1.811	0.212			
2	DR, 2011	Constant	3.241	0.869	3.728	0.065	0.055	-0.417	0.117
		GG of DOR in UP, 2013-2014	0.143	0.419	0.341	0.756			
2	SR, 2011	Constant	967.216	3.985	242.716	0.000	0.274	-0.089	0.756
		GG of DOR in UP, 2013-2014	1.672	1.923	0.869	0.476			
2	MYS, 2013	Constant	5.271	0.267	19.721	0.003	0.510	0.266	2.085
		GG of DOR in UP, 2013-2014	-0.186	0.129	-1.444	0.286			
2	APCI, 2013	Constant	1635.608	96.313	16.982	0.003	0.013	-0.481	0.026
		GG of DOR in UP, 2013-2014	-7.474	46.470	-0.161	0.887			

Sources:

1. Government of India, *Census Report, 2011*.
2. Government of Assam and UNDP (2014), *Assam Human Development Report 2014*, Government of Assam.
3. Government of Assam (2011, 2012, 2014), *Statistical Handbook Assam, 2011, 2012, 2014*, Directorate of Economics and Statistics, Government of Assam, Guwahati.
4. Government of Assam, Sarva Shiksha Abhiyan, *office record*, Guwahati, Assam.

on HI, EI, LSI, BR, DR, SR, MYS and APCI were insignificant in all. However, it is observed that the impact of GG of DOR in UP on EI was significantly negative. If the GG of DOR in UP increased by one per cent, EI decreased by 0.015. The coefficient of the independent variable came out to be significant at ten per cent. From the analysis, it is also found that the impacts of GG of DOR in UP on HI, LSI, BR, DR, SR, MYS and APCI were insignificant in all.

5.2.3.4 Impact of Gender Disparity in Secondary Level on Economic Development in BTAD:

To discuss the impact of gender disparity in Secondary on economic development in BTAD, impacts of GGs of GER and DOR in Secondary level on economic development have been analysed. The impact of GGs of GER in Secondary and DOR in classes IX and X on HI, EI, LSI, BR, DR, SR, MYS and APCI have been presented in Table 5.19 (see appendices 5.8 & 5.9). The regression results shown in the table indicates that the impact of GG of GER in Secondary on BR was significantly negative in BTAD. An increase of GG of GER in Secondary level by one per cent reduced BR by 1.932 persons. The coefficient of the independent variable came out to be significant at ten per cent. On the other hand, it is found that the impacts of GG of GER in Secondary on HI, EI, LSI, DR, SR, MYS, APCI were insignificant in all. On the other hand, the impacts of GG of DOR in classes IX and X on BR were significantly positive and significantly negative respectively. As a result of increase in GG of DOR in class IX by one per cent, BR increased by 0.952 persons and as a result of increase in GG of DOR in class X by one per cent BR reduced by 1.077 persons. The coefficients of the independent variables came out to be significant at ten per cent in both the cases. From the analysis, it is also found that the impacts of GG of DOR in classes IX and X on HI, EI, LSI, DR, SR, MYS and APCI were insignificant in all.

Table 5.19
Impact of Gender Disparity in Secondary Level on Economic Development in BTAD

Model	Depen-dent variable	Independent Variable /constant	Coeff.	S.E.	t value	Sig.	R^2	Adj. R^2	F
1	*2*	*3*	*4*	*5*	*6*	*7*	*8*	*9*	*10*

2	HI, 2013	Constant	0.676	0.463	1.460	0.282	0.043	-0.436	0.089
		GG of GER in Secondary, 2013-2014	0.018	0.062	0.299	0.793			
2	EI, 2013	Constant	0.728	0.074	9.871	0.010	0.468	0.202	1.759
		GG of GER in Secondary, 2013-2014	0.013	0.010	1.326	0.316			
2	LSI, 2013	Constant	0.420	0.078	5.392	0.033	0.003	-0.496	0.006
		GG of GER in Secondary, 2013-2014	0.000	0.010	-0.075	0.947			
2	BR, 2011	Constant	0.055	3.170	0.017	0.988	0.913	0.869	20.95
		GG of GER in Secondary, 2013-2014	-1.932	0.422	-4.577	0.045			
2	DR, 2011	Constant	4.163	3.691	1.128	0.377	0.023	-0.465	0.048
		GG of GER in Secondary, 2013-2014	0.108	0.492	0.219	0.847			
2	SR, 2011	Constant	963.229	19.127	50.361	0.000	0.042	-0.437	0.087
		GG of GER in Secondary, 2013-2014	-0.753	2.547	-0.296	0.795			
2	MYS, 2013	Constant	5.989	1.460	4.101	.055	0.163	-0.256	0.388
		GG of GER in Secondary, 2013-2014	0.121	.194	.623	.597			
2	APCI, 2013	Constant	1609.393	404.661	3.977	.058	0.001	-0.498	0.002
		GG of GER in Secondary, 2013-2014	-2.639	53.882	-0.049	.986			
2	HI, 2013	Constant	0.548	0.115	4.764	.041	0.008	-0.488	0.015
		GG of DOR in Class-IX, 2013-2014	-0.004	0.032	-0.124	.912			
2	EI, 2013	Constant	0.643	0.019	32.993	.001	0.377	0.065	1.208
		GG of DOR in Class-IX, 2013-2014	-0.006	0.005	-1.099	.386			
2	LSI, 2013	Constant	0.423	0.019	22.713	.002	0.042	-0.437	0.088
		GG of DOR in Class-IX, 2013-2014	0.002	0.005	0.297	0.795			
2	BR, 2011	Constant	12.619	1.073	11.757	0.007	0.832	0.748	9.918
		GG of DOR in Class-IX, 2013-2014	0.952	0.302	3.149	0.088			
2	DR, 2011	Constant	3.533	0.880	4.016	0.057	0.069	-0.397	0.147
		GG of DOR in Class-IX, 2013-2014	-0.095	0.248	-0.384	0.738			

2	SR, 2011	Constant	967.905	4.599	210.445	0.000	0.069	-0.396	0.149
		GG of DOR in Class-IX, 2013-2014	0.500	1.296	0.386	0.737			
2	MYS, 2013	Constant	5.179	0.371	13.944	0.005	0.090	-0.365	0.198
		GG of DOR in Class-IX, 2013-2014	-0.047	0.105	-0.445	0.700			
2	APCI, 2013	Constant	1616.303	97.049	16.655	0.004	0.035	-0.447	0.073
		GG of DOR in Class-IX, 2013-2014	7.375	27.338	0.270	0.813			
2	HI, 2013	Constant	0.518	0.091	5.700	0.029	0.266	-0.101	0.725
		GG of DOR in Class-X, 2013-2014	0.026	0.030	0.852	0.484			
2	EI, 2013	Constant	0.625	0.015	42.463	0.001	0.579	0.368	2.748
		GG of DOR in Class-X, 2013-2014	0.008	0.005	1.658	0.239			
2	LSI, 2013	Constant	0.423	0.016	26.798	0.001	0.188	-0.217	0.465
		GG of DOR in Class-X, 2013-2014	0.004	0.005	0.682	0.566			
2	BR, 2011	Constant	15.165	0.787	19.265	0.003	0.893	0.840	16.742
		GG of DOR in Class-X, 2013-2014	-1.077	0.263	-4.092	0.055			
2	DR, 2011	Constant	3.435	0.825	4.166	0.053	0.033	-0.451	0.067
		GG of DOR in Class-X, 2013-2014	-0.072	0.276	-0.259	0.820			
2	SR, 2011	Constant	968.635	4.376	221.349	0.000	0.004	-0.494	0.008
		GG of DOR in Class-X, 2013-2014	0.132	1.464	0.090	0.936			
2	MYS, 2013	Constant	5.007	0.279	17.956	0.003	0.393	0.090	1.297
		GG of DOR in Class-X, 2013-2014	0.106	0.093	1.139	0.373			
2	APCI, 2013	Constant	1611.865	81.114	19.872	0.003	0.203	-0.195	0.510
		GG of DOR in Class-X, 2013-2014	19.374	27.135	0.714	0.549			

Sources:

1. Government of India, *Census Report, 2011*.
2. Government of Assam and UNDP (2014), *Assam Human Development Report 2014*, Government of Assam.

3. Government of Assam (2011, 2012, 2014), *Statistical Handbook Assam, 2011, 2012, 2014*, Directorate of Economics and Statistics, Government of Assam, Guwahati.
4. Government of Assam, Sarva Shiksha Abhiyan, *office record*, Guwahati, Assam.
5. Government of Assam, Rashtriya Madhyamik Shiksha Abhiyan, *office record*, Guwahati, Assam.

5.3 Conclusion:

In this chapter, an attempt has been made to examine the impact of gender disparity in education on economic development in India, Assam and BTAD.

For India as a whole, from the analysis it can be concluded that impact of gender disparity in education on economic development was negative. An increase in LRG significantly decreased HDI as a whole, EI and GDPPC and increased TFR and BR. An increase in GG of GER in HS significantly increased BR and IMR and decreased NSDPC. An increase in GG of NER in HS also significantly increased TFR, BR and IMR and decreased NSDPC and HDI. Impacts of GG of GER in HE on HDI and LEB were significantly negative in both the cases and impact of GG of GER in HE on IMR was significantly positive.

So far as Assam is concerned, the impact of gender disparity in education on economic development was negative. Increase in LRG significantly decreased HDI and LEB in Assam. Increase in LRG significantly increased BR and DR and decreased SR, PCNSDP and NSDP. It is also found that, if GG of DOR in LP increased, NSDP decreased and, if GG of GER in UP increased DR also increased.

For BTAD, it can be concluded from the analysis that impact of gender disparity in education on economic development in BTAD was negative. The analysis found that the impacts of GG of DOR in LP on LSI and APCI were significantly negative in both the cases, impact of GG of DOR in UP on EI was significantly negative and impact of GG of DOR in class IX on BR was significantly positive in BTAD.

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www.dise.in

Appendix 5.1
LRG, TFR, BR, DR, SR, IMR, LE, GDPPC and TLR in India

Year	LRG	TFR	BR	DR	SR	IMR	LE	GDPPC (current prices, US dollar)	TLR
1	*2*	*3*	*4*	*5*	*6*	*7*	*8*	*9*	*10*
1951	18.3	6.0	40.800	25.1	946	NA	36.60	NA	18.33
1961	25.05	5.903	41.865	21.877	941	162.5	41.7904847	87.03116614	28.30
1971	23.99	5.519	38.847	16.752	930	140.6	48.40741463	120.952379	34.45
1981	26.62	4.767	35.85	13.023	934	111.3	54.32853659	275.9166525	43.57
1991	24.8	3.959	30.912	10.581	927	86.1	58.43821951	309.3279361	52.2
2001	21.6	3.243	26.004	8.553	933	64.2	63.01985366	460.8261999	64.8
2011	16.25	2.563	21.116	7.520	940	44.4	66.90417073	1471.658439	72.98

Note: NA represents not available.

Sources:

1. Government of Assam (2014), *Statistical Handbook Assam 2014*, Directorate of Economics and Statistics, Government of Assam, Guwahati.
2. Government of India, *Census Report, 2011*.
3. Government of India, Office of the Registrar General and Census Commissioner of India (n.d.), "State wise literacy rate in 2001 and 2011 and State wise gap in literacy rate of males and females in 2001 and 2011". (mospi.nic.in/sites/default/files/reports_and_publication/statistical_publication/social_statistics/WM16Chapter3)
4. data.worldbank.org
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6. Anon (n.d.), "Gender Composition, Sex Ratio of India and Madhya Pradesh- 1901-2011". (censusindia.gov.in/2011-prov- results/data_files/mp/06Gender Composition.pdf)

Appendix 5.2
GPI Enrolments (Enrl. or E)/Gross Enrolment Ratios (GERs) in LP and UP, GG of DOR in LP, TFR, LEB, DR, BR, IMR, GDPPC in India for the period 2003-2004 to 2014-2015

Year	GPI of E/GER in LP	GPI of E/GER in UP	GG of DOR in LP	TFR	LEB	DR	BR	IMR	GDPPC (current prices, US dollar)
1	*2*	*3*	*4*	*5*	*6*	*7*	*8*	*9*	*10*
2003-2004	0.9	0.82	NA	3.105	63.77453659	8.32	25.087	57.8	557.8973659
2004-2005	0.91	0.83	NA	3.036	64.14780488	8.213	24.622	55.8	640.6005222
2005-2006	0.92	0.84	NA	2.966	64.52387805	8.109	24.146	53.9	729.000727
2006-2007	0.93	0.87	NA	2.896	64.90809756	8.005	23.653	51.9	816.7337762
2007-2008	0.93	0.89	NA	2.826	65.30043902	7.901	23.144	50	1050.024801
2008-2009	0.94	0.91	0.72	2.755	65.69943902	7.80	22.625	48.2	1022.577592
2009-2010	0.94	0.93	0.49	2.687	66.10263415	7.7	22.103	46.3	1124.519446
2010-2011	0.94	0.94	0.76	2.622	66.50614634	7.606	21.595	44.4	1387.880084
2011-2012	0.94	0.95	0.85	2.563	66.90417073	7.52	21.116	42.6	1471.658439
2012-2013	0.94	0.95	0.55	2.51	67.28987805	7.446	20.679	40.9	449.664875
2013-2014	1.03	1.02	0.02	2.465	67.66041463	7.385	20.291	39.3	1455.102191
2014-2015	1.03	1.09	0.39	NA	NA	NA	NA	37.9	1581.510703

Sources: 1. www.dise.in 2. www.data.worldbank.org
Note: NA represents not available.

Appendix 5.3 A
GPI of LP Enrolment in 2007-08 and 2010-11, GG of GER in LP in 2014-15, NER in LP in 2013-14, DOR in LP in 2007-08 and 2010-11 and EI in 2007-08 in the Indian States and Union Territories (UTs)

States/UTs	GPI of LP enrolment 2007-08	GPI of LP enrolment 2010-11	GG of LP GER 2014-15	GG of LP NER 2013-14	GG of LP DOR 2007-08	GG of LP DOR 2010-11	EI 2007-08	LRG, 2011
1	*2*	*3*	*4*	*5*	*6*	*7*	*8*	*9*
A and N Islands	0.95	0.95	NA	3.06	NA	NA	NA	7.842
Andhra Pradesh	0.97	0.95	0.2	-1.32	0.59	1.07	.553	15.734
Arunachal Pradesh	0.92	0.95	NA	-0.92	0.75	1.15	NA	14.853
Assam	0.97	0.98	-3.2	-8.16	1.55	1.54	.636	11.579
Bihar	0.87	0.94	-6.31	-12.86	-0.79	2.90	.409	19.702
Chandigarh	0.81	0.85	NA	-3.45	8.69	NA		8.798
Chhattisgarh	0.96	0.96	NA	-1.13	-0.22	0.40	.526	20.034
Dadra & Nagar Haveli	0.91	0.89	NA	5.58	NA	-0.41	NA	20.857
Daman & Diu	0.88	0.87	NA	-6.49	-1.77	0.36	NA	11.995
Delhi	0.88	0.88	NA	-6.12	NA	NA	.809	10.179
Goa	0.94	0.93	NA	-2.92	-1.93	NA	.758	7.989
Gujarat	0.88	0.86	-2.53	0.92	-0.36	-0.10	.577	16.075
Haryana	0.85	0.84	-3.69	-4.32	-0.09	NA	.622	18.113
Himachal Pradesh	0.90	0.91	-1.88	-0.48	-0.14	-0.66	.745	13.605
Jammu & Kashmir	0.87	0.90	-1.94	-1.23	0.12	-0.26	.597	20.320
Jharkhand	0.96	0.97		-5.45	0.10	0.77	.485	21.420
Karnataka	0.94	0.93	0.1	-0.13	0.55	0.24	.605	14.393
Kerala	0.98	0.98	0.22	-0.03	NA	-0.09	.924	4.043
Lakshadweep	0.97	0.95	NA	6.71	NA	0.49	NA	7.611
Madhya Pradesh	0.96	0.97	1.7	-7.31	0.54	1.53	.522	19.492
Maharashtra	0.89	0.89	0.12	-0.76	-0.49	-0.04	.715	12.510
Manipur	0.99	0.99	NA	NA	-0.70	-0.56	NA	13.326
Meghalaya	1.01	1.02	NA	-9.36	1.35	2.22	NA	3.068
Mizoram	0.95	0.91	NA	-1.85	1.93	2.91	NA	4.081
Nagaland	0.96	0.96	NA	-4.47	-0.46	0.81	NA	6.637
Odisha	0.95	0.95	2.8	-0.03	NA	-0.14	.499	17.577
Puducherry	0.98	0.95	NA	-3.92	NA	NA	NA	10.591
Punjab	0.85	0.80	-3.9	-3.29	-0.20	0.26	.654	9.710
Rajasthan	0.87	0.88	2.51	3.74	-1.84	1.31	.462	27.074
Sikkim	0.98	0.94	NA	-6.1	3.01	2.76	NA	10.941
Tamil Nadu	0.94	0.95	-0.7	-2.01	0.02	0.21	.719	13.330
Telengana	NA	NA	NA	NA	NA	NA	NA	NA
Tripura	0.94	0.96	NA	NA	1.92	0.04	NA	8.798
Uttar Pradesh	0.97	0.98	-7.39	-9.68	2.43	0.91	.492	20.097
Uttarakhand	0.95	0.91	NA	-1.27	1.12	1.09	.638	17.396
West Bengal	0.96	0.98	-1.1	-9.07	0.68	1.59	.575	11.151
NE(EA)	NA	NA	NA	NA	NA	NA	.670	NA
All India	0.93	0.94	NA	-5.07	0.55	0.85	NA	16.249

Sources:

1. www.dise.in
2. Government of India (n.d.), "Human Development Index and its Components by States, 1999- 00 and 2007-08", data.gov.in. (https://data.gov.in/catalog/human-development-index- and-its-components-states)
3. Government of India, *Census Report, 2011*.

Notes: 1. NE (EA) represents North East India excluding Assam.
2. NA represents not available.
3. A and N Islands represents Andaman and Nicobar Islands.

Appendix 5.3 B
HDI, SR,TFR, BR, DR, IMR and NSDPC in 2013 and LEB during 2010-2014 in the Indian States and UTs

States/UTs	HDI 2015	SR 2011	TFR 2013	LEB 2013	BR 2013	DR 2013	IMR 2013	NSDPC 203-14
1	*2*	*3*	*4*	*5*	*6*	*7*	*8*	*9*
A and N Islands	NA	876	NA	NA	NA	NA	NA	107418
Andhra Pradesh	0.6165	993	1.8	65.8	17.4	7.3	39	81397
Arunachal Pradesh	NA	938	NA	NA	NA	NA	NA	85468
Assam	0.5555	958	2.3	63.9	22.4	7.8	54	44263
Bihar	0.5361	918	3.4	68.1	27.6	6.6	42	31199
Chandigarh	NA	818	NA	NA	NA	NA	NA	156951
Chhattisgarh	NA	991	2.6	64.8	24.4	7.9	46	58547
Dadra & Nagar Haveli	NA	774	NA	NA	NA	NA	NA	NA
Daman & Diu	NA	618	NA	NA	NA	NA	NA	NA
Delhi	NA	868	1.7	73.2	17.2	4.1	24	212219
Goa	NA	973	NA	NA	NA	NA	NA	224138
Gujarat	0.6164	919	2.3	68.7	20.8	6.5	36	106831
Haryana	0.6613	879	2.2	68.6	21.3	6.3	41	133427
Himachal Pradesh	0.6701	972	1.7	71.6	16.0	6.7	35	92300
Jammu & Kashmir	0.6489	889	1.9	72.6	17.5	5.3	37	59279
Jharkhand	NA	948	2.7	66.6	24.6	6.8	37	46131
Karnataka	0.6176	973	1.9	68.8	18.3	7.0	31	89545
Kerala	0.7117	1084	1.8	74.9	14.7	6.9	12	103820
Lakshadweep	NA	946	NA	NA	NA	NA	NA	NA
Madhya Pradesh	0.5567	931	2.9	64.2	26.3	8.0	54	51798
Maharashtra	0.6659	929	1.8	71.6	16.5	6.2	24	117091
Manipur	NA	985	NA	NA	NA	NA	NA	41573
Meghalaya	NA	989	NA	NA	NA	NA	NA	61548
Mizoram	NA	976	NA	NA	NA	NA	NA	76120

Contd.....

HDI, SR,TFR, BR, DR, IMR and NSDPC in 2013 and LEB during 2010-2014 in the Indian States and UTs (Continued)

Nagaland	NA	931	NA	NA	NA	NA	NA	77529
Odisha	.5567	979	2.1	65.8	19.6	8.4	51	52559
Puducherry	NA	1037	NA	NA	NA	NA	NA	143677
Punjab	.6614	895	1.7	71.6	15.7	6.7	26	92350
Rajasthan	.5768	928	2.8	67.7	25.6	6.5	47	65974
Sikkim	NA	890	NA	NA	NA	NA	NA	176491
Tamil Nadu	.6663	996	1.7	70.6	15.6	7.3	21	112664
Telengana	NA	NA	NA	NA	NA	NA	NA	95361
Tripura	NA	960	NA	NA	NA	NA	NA	69705
Uttar Pradesh	.5415	912	3.1	64.1	27.2	7.7	50	36250
Uttarakhand	NA	963	NA	71.7	NA	NA	NA	103716
West Bengal	.6042	950	1.6	70.2	16.0	6.4	31	70059
NE(EA)	NA	NA	NA	NA	NA	NA	NA	NA
All India	NA	NA	NA	NA	NA	NA	NA	NA

Sources:

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Notes:

1. NA represents not available.
2. A and N Islands represents Andaman and Nicobar Islands.

Appendix 5.3 C
GPI of Enrolment in UP in 2007-08 and 2010-11, GG of GER in UP in 2014-15, GG of NER in UP in 2013-14 and 2014-15, GG of DOR in UP in 2010-11 and 2013-14 and GG of GER in Secondary in 2010-11 in the Indian States and UTs

States/UTs	GPI of UP enrl. 2007-08	GPI of UP enrl. 2010-11	GG of UP GER 2014-15	GG of UP NER 2013-14	GG of UP NER 2014-15	GG of UP DOR 2010-11	GG of UP DOR 2013-14	GG of sec. GER 2010-11
1	*2*	*3*	*4*	*5*	*6*	*7*	*8*	*9*
A &N Islands	0.9	0.94	NA	3.06	4.08	-1.91	NA	7.44
Andhra Pradesh	0.94	0.96	-0.27	-1.32	-0.54	0.83	-0.66	-0.97
Arunachal Pradesh	0.89	0.95	NA	-0.92	NA	0.23	-2.30	10.76
Assam	1.01	1.06	-11.8	-8.16	-9.45	1.97	1.06	-9.13
Bihar	0.76	0.91	-17.86	-12.86	-15.57	3.68	-0.42	5.11
Chandigarh	0.81	0.79	NA	-3.45	-7.74	NA	-0.83	12.75
Chhattisgarh	0.92	0.96	NA	-1.13	-1.15	1.48	0.58	2.3
Dadra & Nagar Haveli	0.76	0.83	NA	5.58	5.15	-0.51	-1.78	1.33
Daman & Diu	0.71	0.91	NA	-6.49	-6.35	-2.74	-0.30	-13.71
Delhi	0.85	0.85	NA	-6.12	NA	NA	0.76	-3.31
Goa	0.85	0.89	NA	-2.92	-4.07	-0.05	NA	2.73
Gujarat	0.83	0.84	0.16	0.92	-0.41	0.27	-4.52	24.92
Haryana	0.87	0.82	-9.54	-4.32	-6.3	NA	-1.28	1.99
Himachal Pradesh	0.90	0.88	-1.79	-0.48	-1.25	-0.25	-0.38	-2.42
Jammu & Kashmir	0.82	0.87	-2.29	-1.23	-2.02	-0.89	-0.94	11.7
Jharkhand	0.87	0.96	NA	-5.45	-7.22	2.22	-0.46	8.22
Karnataka	0.93	0.93	-1.36	-0.13	-1.08	-0.12	-0.42	4.52
Kerala	0.96	0.96	-0.87	-0.03	-1.34	-1.77	NA	-0.94
Lakshadweep	0.88	1.11	NA	6.71	6.63	NA	-1.34	0.48
Madhya Pradesh	0.84	0.98	-8.51	-7.31	-6.61	1.18	-3.69	9.6
Maharashtra	0.88	0.88	-1.91	-0.76	-2.09	-0.96	NA	6.94
Manipur	0.96	0.98	NA	NA	NA	0.52	0.94	3.05
Meghalaya	1.10	1.12	NA	-9.36	-7.81	0.80	-0.94	-10.82
Mizoram	0.96	0.92	NA	-1.85	-1.17	2.51	1.22	1.72
Nagaland	0.95	0.98	NA	-4.47	-4.68	-0.44	0.45	-1.03
Odisha	0.91	0.95	0.7	-0.03	0.36	1.62	0.63	-0.21
Puducherry	0.96	0.93	NA	-3.92	-3.33	-0.05	-0.46	-4.49
Punjab	0.86	0.78	-5.13	-3.29	-4.96	NA	-0.75	-3.15
Rajasthan	0.69	0.78	3.58	3.74	3.24	NA	-3.46	28.42
Sikkim	1.18	1.19	NA	-6.1	-8.11	1.22	2.37	-5.92
Tamil Nadu	0.93	0.94	-2.53	-2.01	-1.98	-0.19	-0.29	-0.41
Telengana	NA	NA	NA	NA	-2.17	NA	-0.16	NA
Tripura	0.96	0.97	NA	NA	NA	0.13	1.01	0.52
Uttar Pradesh	0.94	1.03	-14.14	-9.68	-10.98	-0.53	NA	4.49
Uttarakhand	0.95	0.94	NA	-1.27	-0.84	-0.01	0.21	5.55
West Bengal	0.98	1.07	-14.51	-9.07	-9.87	3.20	2.53	-5.26
NE(EA)	NA	NA	NA	NA	NA	NA	NA	NA
All India	NA	NA	NA	-5.07	-6.07	0.93	-1.40	5.41

Source: www.dise.in. **Notes:** 1. NA represents not available, 2. A and N Islands represents Andaman and Nicobar Islands, 3. NE(EA) represents North East India excluding Assam.

Appendix 5.3 D
GG of Secondary GER in 2013-14 and 2014-15; GG of Secondary NER in 2013-14 and 2014-15 and GG of HS GER in 2013-14, 2014-15 and 2010-11 in the Indian States and UTs

States/UTs	GG of Sec. GER 2013-14	GG of Sec.GER 2014-15	GG of Sec. NER 2013-14	GG of Sec. NER 2014-15	GG of Sec. DOR 2013-14	GG of HS GER 2013-2014	GG of HS GER 2014-2015	GG of HS GER 2010-2011
1	*2*	*3*	*4*	*5*	*6*	*7*	*8*	*9*
A and N Islands	5.53	5.46	-0.44	0.91	2.38	8.49	6.14	-2.63
Andhra Pradesh	-3.01	-1.96	-1.55	-1.24	-1.42	-1	-0.76	2.55
Arunachal Pradesh	3.48	3.01	2.57	3.61	3.33	-0.22	-1.44	5.00
Assam	-11.6	-11.21	-7.89	-8.22	-3.51	-2.49	-2.69	0.49
Bihar	-5.3	-8.77	-3.53	-5.46	-1.38	-0.84	0.25	0
Chandigarh	-0.08	-1.48	-2.68	-2.71	NA	-2.38	-1.25	-2.73
Chhattisgarh	-2.64	-3.08	-1.85	-2.47	1.38	2.11	1.53	5.67
Dadra & Nagar Haveli	8.71	6.49	4.03	2.14	3.19	-4.22	-4.82	2.62
Daman & Diu	-14.26	-14.92	-10.77	-9.94	-0.87	-30.18	-27.52	-10.71
Delhi	-0.84	-4.46	-0.82	-2.24	4.16	-3.42	-4.72	-2.66
Goa	8.63	10.43	-1.96	-1.32	4.49	-4.04	-8.89	-5.15
Gujarat	15.87	14.15	8.79	8.74	3.04	9.81	5.42	5.55
Haryana	5.91	3.19	0.45	1.18	-1.35	7.41	4.47	3.56
Himachal Pradesh	5.24	6.75	1.35	1.71	0.49	-0.04	2.38	-1.49
Jammu & Kashmir	3.89	2.89	2.79	1.93	-1.44	6.55	36.23	6.89
Jharkhand	-3.12	-5.29	-1.4	-3.22	-0.33	-0.11	-0.69	5.99
Karnataka	-1.25	-1.58	-1.21	-0.82	1.92	-3.14	-4.51	NA
Kerala	2.71	0.81	1.34	-0.58	5.90	-3.31	-6.39	-10.04
Lakshadweep	-15.78	-10.01	-12.51	-15.66	0.83	29.15	9.59	-5.63
Madhya Pradesh	1.7	1.73	0.78	0.98	-2.70	5.36	4.85	8.45
Maharashtra	4.11	3.81	0.97	0.8	1.26	0.21	1.39	3.72
Manipur	4.03	1.65	-0.33	0.74	-2.93	6.55	5.9	6.48
Meghalaya	-11.52	-11.98	-5.11	-6.47	1.64	-6.85	-8.26	-3.43
Mizoram	-1.42	-1.9	-4.34	-5.86	2.63	-3.88	-0.34	2.11
Nagaland	-3.97	-7.58	-2.82	-2.23	-1.94	1.37	1.05	0.4
Odisha	0.31	0.56	-0.25	0.04	-0.18	NA	NA	NA
Puducherry	-6.81	-11.66	-4.66	-8.03	8.20	-20.03	-20.09	-10.86
Punjab	2.93	0.3	-0.45	-0.43	0.22	0.75	-1.77	-2.42
Rajasthan	14.31	14.05	7.8	8.06	-2.21	15.96	15.83	17.92
Sikkim	-16.44	-14.4	-2.5	-3.05	1.60	-15.79	-16.05	-1.53
Tamil Nadu	-1.44	-3.5	-1.58	-1.98	8.14	-16.5	-15.76	-12.84
Telengana	NA	-5.36	NA	-3.19	1.13	NA	-5.67	NA
Tripura	0.27	-1.55	0.09	-1.47	-1.19	7.94	6.43	6.09
Uttar Pradesh	0.73	0.12	0.52	0.01	-0.09	2.63	3.35	1.7
Uttarakhand	2.25	1.34	1.62	1.13	2.41	-0.05	-1.13	3.25
West Bengal	-12.72	-15.38	-6.34	-8.2	-3.04	-1.58	-3.55	5.85
NE(EA)	NA	NA	NA	NA	NA	NA	NA	NA
All India	0.33	-0.81	-0.21	-0.76	0.14	1.19	0.76	2.99

Source: www.dise.in. **Notes:** 1. NA represents not available, 2. A and N Islands represents Andaman and Nicobar Islands, 3. NE(EA) represents North East India excluding Assam.

Appendix 5.3 E
GG of HS NER in 2013-14 and 2014-15; GG of HS DOR in 2013-14; GG of HE GER in 2010-11, 2012-13 and 2014-15; GG of LP GER in 2013-14 and GG of UP GER in 2013-14 in the Indian States and UTs

States/UTs	GG of HS NER 2013-2014	GG of HS NER 2014-2015	GG of HS DOR 2013-2014	GG of HE GER 2010-2011	GG of HE GER 2012-2013	GG of HE GER 2014-2015	GG of LP GER, 2013-2014	GG of UP GER, 2013-2014
1	*2*	*3*	*4*	*5*	*6*	*7*	*8*	*9*
A and N Islands	-1.38	-0.26	6.74	-3.8	-4.9	-2.7	3.19	5.72
Andhra Pradesh	-1.33	-0.91	1.80	7.7	7.4	7.9	-0.25	-1.57
Arunachal Pradesh	0	0.05	3.08	14.1	-1.5	0.7	1.3	-2.7
Assam	-1.66	-2.09	0.79	-0.1	0.3	1.1	-3.4	-10.84
Bihar	-0.95	0.15	NA	2.7	2.8	2.8	-6.17	-14.32
Chandigarh	-3.78	-3.65	4.75	1.8	-6.5	-17.8	-7.67	-3.07
Chhattisgarh	-0.01	0.09	NA	4.4	1.5	1.3	0.2	-0.7
Dadra & Nagar Haveli	-4.59	-5.01	1.74	-0.4	-1.4	-1.8	7.61	9.37
Daman & Diu	-23.89	-20.62	9.59	-2.9	-3.6	-5	-1.98	-6.55
Delhi	-2.82	-4.34	8.83	5.2	-2.1	-3.4	-4.2	-11.7
Goa	-6.38	-7.98	9.83	-4.8	-11.2	-5.5	-0.3	1.1
Gujarat	3.05	2.89	2.88	4.7	4	4.7	-1.8	2.1
Haryana	-0.17	1.09	-2.02	6.5	2.2	0.1	-3.98	-6.77
Himachal Pradesh	-2.68	-1.82	2.90	-0.1	-1	-4.1	-1.5	-0.4
Jammu & Kashmir	4.53	2.06	2.60	0.3	-2.9	-1.4	-1.85	-1.69
Jharkhand	-0.04	0.11	NA	1.3	0.2	1.2	-1.3	-7.39
Karnataka	-2.31	-3.36	NA	2.3	1.6	0.7	0.5	-0.19
Kerala	-7.61	-7.09	1.05	-6.3	-7.3	-9.2	0.53	0.03
Lakshadweep	5.01	-4.92	0.44	NA	-11.4	-4.2	5.66	6.36
Madhya Pradesh	2.51	1.92	-2.31	3.2	7.5	4.3	0.8	-9.86
Maharashtra	-1.86	-1.01	-1.04	6.5	4.4	4.4	0.25	-0.13
Manipur	7.08	4.25	0.22	5.2	1.9	2.3	-7.1	-3.5
Meghalaya	-3.66	-5.5	NA	-4.5	-1.1	-1.4	-5	-17.8
Mizoram	-2.12	-1.88	NA	0.9	0.4	0.5	3.9	1.4
Nagaland	1.31	-0.21	2.40	8.9	3.8	-0.9	-4.4	-7.64
Odisha	NA	NA	NA	4	4.5	3.7	2.7	0.49
Puducherry	-14.22	-15.5	3.96	2.7	4.8	3.5	-5.85	-5.75
Punjab	-0.9	-1.46	4.67	9.1	-3.1	-2.4	-2.9	-2.99
Rajasthan	8.26	8.52	NA	5.7	6.6	4	1.8	4.89
Sikkim	-3.71	-4.27	2.19	3.8	-5.1	-4	7.6	-12
Tamil Nadu	-11.68	-10.74	0.20	7.4	6.7	3.6	-0.3	-2.3
Telengana	NA	-4.32	0.47	NA	7.6	6.2	NA	NA
Tripura	5.73	4.18	0.09	5	4.9	6.7	-1.3	-1.7
Uttar Pradesh	1.01	1.65	NA	-2.2	-1.6	-1	-6.54	-12.79
Uttarakhand	-1.54	-0.8	0.23	-3.5	-1.4	2.1	-1.32	-2.72
West Bengal	-0.37	-1.82	0.27	2.9	3.9	3.3	-1.7	-14.06
NE(EA)	NA	NA	NA	NA	NA	NA	NA	NA
All India	-0.37	-0.27	-0.13	2.9	2.6	2.1	-2.5	-6.44

Sources: 1. www.dise.in

2. Government of India -Ministry of Human Resource Development (2013, 2015, 2016), *All India Survey on Higher Education, 2010-11, 2012-13, 2014-15*, Government of India.(aishe.nic.in/aishe/viewDocument.action?documentId=125, aishe.nic.in/aishe/viewDocument.action?documentId=194, aishe.nic.in/aishe/viewDocument.action?documentId=206).

Notes: 1. NA represents not available, 2. A and N Islands represents Andaman and Nicobar Islands, 3. NE(EA) represents North East India excluding Assam.

Appendix 5.4
TFR, BR, DR, SR, IMR, PCNSDP, NSDP and LRG in Assam

Year	TFR	BR	DR	SR	IMR	PCNSDP (current prices in rupees)	NSDP (current prices, Rs. in crore)	LRG
1	*2*	*3*	*4*	*5*	*6*	*7*	*8*	*9*
1951	NA	NA	NA	868	NA	299.2	236.50	20.43
1961	NA	NA	NA	869	NA	315.30	336.00	25.66
1971	5.7	38.50	17.80	896	139	527.60	757.70	20.96
1981	4.1	33.00	12.60	901	106	1200.00	2356.10	19.94*
1991	3.5	30.90	11.50	923	81	4261.00	8905.00	18.84
2001	3.0	27.00	9.60	935	74	10718.00	28262.14	16.67
2011	2.4	22.80	800	958	55	33087.00	100627	11.58

Notes: 1. NA represents not available
2.* represents interpolated data

Sources: 1. Government of Assam (1973,1988, 2004, 2012, 2013, 2014) , *Statistical Handbook Assam, 1973,1988, 2004, 2012, 2013, 2014*, Directorate of Economics and Statistics, Government of Assam, Guwahati.
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Appendix 5.5
DR and LEB in Assam

Year	DR	Period (LEB)	Midyear, (LEB)	LEB
1	*2*	*3*	*4*	*5*
2000	9.6	1998-2002	2000	57.90
2001	9.5	1999-2003	2001	58.05
2002	9.2	2000-2004	2002	58.30
2003	9.1	2001-2005	2003	58.65
2004	8.8	2002-2006	2004	58.95
2008	8.6	2006-2010	2008	62.10
2013	7.8	2011-2015	2013	64.20

Sources:1. Government of Assam (2004, 2005, 2012, 2013, 2014) , *Statistical Handbook Assam, 2004, 2005, 2012, 2013 and 2014*, Directorate of Economics and Statistics, Government of Assam, Guwahati.

2. SRS based abridged life table, 1998-2002. (iipsindia.org/pdf/05_b_09cchep5.pdf).

3. Government of India, Ministry of Health and Family Welfare (2006), *Report of the Technical group on population projections- projected levels of Expectation of life at birth in India and major states 2001-2025*. (www.cbhidghs. nic.in/Writeraddata/mainlinkFile/File 1131).

Appendix 5.6
NSDP, PCNSDP, IMR, DR, BR, TFR, GG of GER in LP and UP and DOR of LP and UP in Assam in the period 2005-2006 to 2014-2015

Year	TFR	BR	DR	IMR	NSDP at current prices in rupees lakhs (2004-05 price)	PCNSDP at current prices in rupees (2004-05 price)	GG of GER in LP	GG of DOR in LP	GG of GER in UP	GG of DOR in UP
2005-2006	2.9	25.1	8.8	66	5243969	18396	-2.9	1.217	-7.2	1.277
2006-2007	2.9	25.0	8.7	68	5703346	19737	-2.6	1.405	-7.3	2.612
2007-2008	2.7	24.6	8.7	67	6234163	21290	-2.6	1.365	-7.3	2.093
2008-2009	2.7	24.3	8.6	66	7147811	24099	-1.3	1.700	-7.1	2.307
2009-2010	2.6	23.9	8.6	64	8525310	28383	-0.3	1.454	-1.3	2.569
2010-2011	2.6	23.6	8.4	61	1006671	33087	-0.3	2.177	-0.8	1.578
2011-2012	2.5	23.2	8.2	58	11183282	36320	-0.1	1.824	-0.8	1.769
2012-2013	2.4	22.8	8.0	55	12137973(P)	38945 (P)	0.1	2.128	-1.3	2.567
2013-2014	2.4	22.5	7.9	55	13960400(Q)	44263(Q)	-0.3	1.539	-0.8	1.342
2014-2015	2.3	22.4	7.8	54	NA	NA	-0.2	1.505	-0.7	1.068

Sources: 1.Government of Assam, Sarva Shiksha Abhiyan, *office record*, Guwahati, Assam.

2. Government of Assam (2010, 2013, 2014) , *Statistical Handbook Assam, 2010, 2013, 2014*, Directorate of Economics and Statistics, Government of Assam, Guwahati.

Note: NA represents Not Available.

Appendix 5.7

HDI of 2014; GG of GER in LP, UP and Secondary in 2013-2014 and GG of DOR in LP, UP, class IX and class X in 2013-2014 in the Districts of Assam

District	HDI, 2013	GG of GER of LP	GG of GER of UP	GG of GER of Secondary	GG of DOR in LP	GG of DOR in UP	GG of DOR in class IX	GG of DOR in class X	LRG, 2011	EI, 2013
1	*2*	*3*	*4*	*5*	*6*	*7*	*8*	*9*	*10*	*11*
Baksa	0.437	-0.1	-0.5	-6.53	1.234	1.417	-0.233	1.239	15.75	0.606
Barpeta	0.624	-0.4	-1.8	-19.03	3.728	0.536	-2.315	-2.669	11.23	0.684
Bongaigaon	0.564	-0.2	-0.3	-13.04	2.813	-2.737	-7.183	-3.774	10.43	0.667
Cachar	0.463	-0.2	-0.3	-6.81	1.301	2.542	4.804	2.328	11.09	0.647
Chirang	0.614	-0.1	-0.2	-5.65	0.127	-1.352	-0.892	5.301	13.59	0.677
Darrang	0.519	-1.2	-3.3	-18.65	1.678	-0.768	-2.681	-0.883	9.83	0.566
Dhemaji	0.507	0.1	-0.1	-7.65	1.015	0.131	0.772	-1.554	14.63	0.688
Dhubri	0.482	-0.5	-2.8	-18.94	3.700	0.697	0.932	-3.467	9.76	0.579
Dibrugarh	0.560	0.1	0.4	-4.09	-0.566	1.794	3.439	3.539	13.83	0.700
Dima Hasao	0.638	-0.8	-0.8	-0.73	-0.729	0.777	-1.642	-2.256	11.96	0.662
Goalpara	0.591	-0.3	-1.6	-23.53	3.681	2.807	5.593	-5.294	8.33	0.612
Golaghat	0.543	-0.1	-0.1	-3.93	0.292	1.466	4.170	5.904	12.47	0.684
Hailakhandi	0.437	0	0	-6.38	2.347	4.590	5.477	-8.859	13.14	0.605
Jorhat	0.655	0.1	0.3	-6.47	0.549	3.744	6.948	-1.705	11.18	0.744
Kamrup Metro	0.703	-0.3	-0.9	-6.65	-0.532	1.393	3.531	-3.225	7.06	0.783
Kamrup Rural	0.630	-0.3	-0.6	-11.94	0.481	-0.690	0.058	5.433	11.84	0.648
Karbi Anglong	0.612	-0.4	-0.8	-0.8	-0.382	-0.389	0.801	-1.664	14.14	0.645
Karimganj	0.456	-0.2	-0.4	-8.29	2.245	1.351	0.516	3.177	12.03	0.627
Kokrajhar	0.519	-0.1	-0.8	-7.2	0.986	-0.048	0.893	-0.677	13.62	0.645
Lakhimpur	0.583	0.1	-0.6	-11.23	0.580	2.704	3.527	-3.517	12.85	0.693
Morigaon	0.576	-0.4	-1.4	-18.16	2.774	3.227	2.040	4.434	7.86	0.678
Nagaon	0.592	-0.3	-1.9	-19.95	2.643	2.909	3.120	3.785	8.44	0.684
Nalbari	0.576	-0.2	-0.5	-12.04	2.077	4.895	9.062	-0.819	11.79	0.721
Sibsagar	0.629	-0.1	0.1	-5.39	-1.572	2.166	4.874	2.802	11.13	0.758
Sonitpur	0.526	0	-0.2	-9.41	1.703	3.603	5.602	3.933	12.92	0.615
Tinsukia	0.505	-0.1	-0.1	-4.38	-1.268	-0.758	0.071	1.343	15.46	0.625
Udalguri	0.523	-0.1	-0.7	-9.96	0.177	3.653	6.983	-2.377	14.53	0.602

Sources:1.Government of Assam and UNDP (2014), *Assam Human Development Report, 2014*, Government of Assam.

2. Government of Assam, Sarva Shiksha Abhiyan, *official record*, Guwahati, Assam.

3. Government of Assam, Rashtriya Madhyamik Shiksha Abhiyan, *office record*, Guwahati, Assam . 4. Government of India, *Census Report, 2011*.

Appendix 5.8
HI, EI, LSI, BR, DR, SR, LRG, MYS and APCI in BTAD

District	HI, 2013	EI, 2013	LSI, 2013	BR, 2011	DR, 2011	SR, 2011	LRG, 2011	MYS, 2013	APCI, 2013
1	*2*	*3*	*4*	*5*	*6*	*7*	*8*	*9*	*10*
Kokrajhar	0.539	0.645	0.402	15.625	3.284	959	13.62	5.19	18048
Chirang	0.746	0.677	0.457	10.278	2.215	969	13.59	5.82	21504
Baksa	0.340	0.606	0.404	12.205	5.224	974	15.75	4.49	18192
Udalguri	0.538	0.602	0.441	18.795	2.766	973	14.53	4.90	20436

Sources: 1.Government of Assam and UNDP (2014), *Assam Human Development Report, 2014*, Government of Assam.
2. Government of India, *Census Report, 2011*.
3. Government of Assam (2012, 2014), *Statistical Hand Book Assam, 2012, 2014*, Directorate of Economics and Statistics, Government of Assam, Guwahati.

Appendix 5.9
GG of GER and GG of DOR in LP, UP and Secondary in BTAD in 2013-2014

District	GG of GER in LP	GG of GER in UP	GG of GER in Second-ary	GG of DOR in LP	GG of DOR in UP	GG of DOR in class IX	GG of DOR in class X
1	*2*	*3*	*4*	*5*	*6*	*7*	*8*
Kokrajhar	-0.1	-0.8	-7.2	0.986	-0.048	0.893	-0.677
Chirang	-0.1	-0.2	-5.65	0.127	-1.352	-0.892	5.310
Baksa	-0.1	-0.5	-6.53	1.234	1.417	-0.233	1.239
Udalguri	-0.1	-0.7	-9.96	0.177	3.653	6.983	-2.377

Sources: 1.Government of Assam and UNDP (2014), *Assam Human Development Report, 2014*, Government of Assam.
2. Government of India, *Census Report, 2011*.
3. Government of Assam (2012, 2014), *Statistical Hand Book Assam, 2012, 2014*, Directorate of Economics and Statistics, Government of Assam, Guwahati.
4. Government of Assam, Sarva shiksha Abhiyan, *office record*, Guwahati, Assam.
5. Government of Assam, Rashtriya Madhyamik Shiksha Abhiyan, *office record*, Guwahati, Assam.