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# *Higher Education in West Bengal – An Overview*

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# ***Higher Education in West Bengal – An Overview***

## ***Abstract***

*Higher education plays a pivotal role in the social, economic and scientific development of a nation. Higher education in India has witnessed tremendous increase in institutions and enrolment in recent years. Some of the major issues and challenges of higher education system in India are access, regional disparity, social group disparity, gender representation, imbalance in the diversification of subjects, improving quality and public expenditure on higher education etc. The State of West Bengal has had a great legacy of higher education in the country. In the above backdrop, the present paper is on the look at for the present status of higher education in the state by delving deep into some important parameters in higher education and attempts to find the major areas of concern in the higher education sector in the state.*

Key Words: Higher Education, West Bengal, Disparity, Diversification, Quality, Expenditure

**JEL : I 121, I 123, I 125.**

*This is First Giribala Karmakar Memorial Lecture , 2017, delivered in the 37<sup>th</sup> Annual Conference of Bangiya Arthaniti Parishad at Prabhu Jagatbandhu College, Andul, Howrah, during September 15-16, 2017.*

*So far as I know about Giribala Karmakar (1928—1993) is that she was a pious woman. Though not well learned, she acquired learning and became well versed in the Ramayana, the Mahabharata, as well as the Puranas. She was born at Barisal, now in Bangladesh. Saw turmoils like ‘Chhiyattareer Mannantar’ that came ghastly, staggering and horrible beyond words, and struggle for independence and the great Partition with innumerable sufferings of the people, which she often voiced boldly to her families and neighbours that ‘ BHARAT BHENGE BHAG KARA ’ was the mischievous activities of BURU KHOKA, so callous and disgraceful. She left no stone unturned to make her five sons a proper human being. Surprisingly enough, at the age of sixty, she first wrote four short- stories published in local Patrika and were highly acclaimed. She has had the sharp memory till she breathed her last. For this memorial lecture, I have chosen today the topic “Higher Education in West Bengal – An Overview”*

## **1. INTRODUCTION**

From the days of Adam Smith, the role of education in economic development, as a possible contributor to greater social and economic equality and as an enhancer of development was extensively recognized. The 18<sup>th</sup> and 19<sup>th</sup> Century school reformers in the US like Horace Mann, Henry Barnard, James Carter, Robert Dale Owen and George Evans favoured educational opportunities to be extended to poorer groups of population. In the early 20<sup>th</sup> century, Marshall emphasized that "the most valuable of all capital is that invested in human

beings" and that "knowledge is our most powerful engine of production; it enables us to subdue Nature and force her to satisfy our wants."

The human capital theory propounded by Schultz (1961) laid a strong foundation for treating education as an investment in human beings and for treating it as an important source of economic growth. According to the human capital theory, education transforms raw human beings into productive 'human capital' by imparting knowledge and inculcating skills required by both the traditional sector and the modern sector of the economy, and makes individuals more productive members of the society, not only in the market place but also in the households and also in the whole society. Mincer (1974) have formalized the treatment of education as an investment and as a factor in growth theory. The seminal contributions of Arrow (1973), Spence (1973) and Stiglitz (1975) raised questions on the human capital theory and the possibility of treating education as a signal to the employer instead of having any economic value on its own, a thesis which remained as a hypothesis, and which did not last (*Blaug 1985*). Schultz and Denison's growth accounting equations were again considered to be valid. According to the endogenous growth theories (*Lucas 1988; Romer 1990*), stock of human capital affects the growth rates of the economy by facilitating technological development, more innovations and higher efficiency or total factor productivity (TFP). These endogenous growth theories (*Mankiw 1995*) use two sector growth models and consider manufacturing firms as producing goods and (research) universities as producing knowledge, which is used in both sectors. Extensive empirical research during the last four decades has established that education makes a significant positive contribution to development directly as a factor of production, or indirectly through innovations, skill formation and technological development and through several externalities.

Higher education is a very important form of investment in human capital. Higher education enables people to learn for themselves and think critically. In the present context of transformation into knowledge societies, higher education provides not just educated workers but knowledge workers. The higher education system plays an important role in the social, economic and scientific development of a nation. It equips people with skills for gainful employment and enhances productivity and earnings (*Duraisamy, 2002*). Besides benefits to individuals, higher education confers several social benefits. Evidence shows that higher education plays a significant role in making income distribution more equal (*Gregorio and Lee, 2002*). It makes a significant contribution to the reduction in absolute as well as relative poverty, infant mortality and to the increases in life expectancy, thus contributing to human development. The development of higher education is thus important especially for India, which is currently experiencing a demographic dividend with a relatively higher share of youth in the population.

The post independence period in India has seen a number of policies in the field of higher education. National policy on Education (NPE, 1968) advocated a radical reorganisation of the education system and structure with enhanced for education progressively towards 6% of GDP. However it recommended for regulation of admission to maintain the quality. The Union Government came out with another comprehensive National Policy on Education (NPE in 1986) which recommended for expansion, and standard of education, equal access to neglected groups, management and financing of higher education (*Thorat 2017*). The National Knowledge Commission (NKC, 2006) in 2006 noted that enrolment in higher education in India is too low and it recommended for faster expansion of higher education. The Eleventh Five Year Plan (EFYP) was supposed to 'place the highest priority on education as a central instrument for achieving rapid and inclusive growth'. Concerned about the quality of higher education system in the country, the Government appointed two high-level committees

(National Knowledge Commission and Yashpal Committee) to review the conditions of the education system and make recommendations for the improvement. Both these Committees recommended a drastic reform of regulatory system of higher education in the country (Agarwala 2014). Several new bills were introduced and policies were taken in India to improve the quality of higher education including (a) The Prohibition of Unfair Practices in Technical Educational Institutions and Universities; (b) The National Accreditation Regulatory Authority for Higher Educational Institutions Bill, (c) Foreign Educational Institutions (Regulation of Entry and Operations) Bill, 2010, (d) Central Educational Institutions (Reservation Admission) Act, 2006. Despite all these efforts, achievements are not satisfactory. In higher education elitism remains a central feature and the average performance remains low. Despite significant expansion of higher education, India exhibits substantial disparity in educational achievements across states, location (rural/urban), gender, religion and social groups. The privatisation of higher education with high tuition fees has aggravated the unequal access further. The NSS data show that the share of poor (first two lowest quintile) in private institutions was about 17 per cent, which was lower than non-poor, at 27 per cent (top two quintile) (Thorat 2017). The present paper highlights different issues relating to the present state of higher education in West Bengal.

History of the modern education system in West Bengal dates as far back as to 1817 when the Hindu College was founded in Calcutta, which was later renamed as the Presidency College. The bulk of the higher quality colleges in West Bengal were bunched along the banks of the Ganga-Bhagirathi, whose essentially monocrop and stagnant agriculture made it inevitable that large numbers of indigent lower gentry from higher status families would seek alternative occupations in whatever few opportunities there were, for junior service in trade, commerce and petty administration (Government of West Bengal 1984). Although the Hindu College was established in 1817 through the joint efforts of David Hare and Rammohan Roy and as carried on by a non-official body, it was taken over by the Government in 1855 and developed into the Presidency College. For nearly half a century after establishment of this college all significant attempts of extension of higher education were made by two agencies -the Government and the Christian Missions. Pandit Iswar Chandra Vidyasagar in 1869 founded the Metropolitan institution, first private college undivided Bengal, which still continues with the name Vidyasagar College in Kolkata. One needs to recall that the province of Bengal, undivided till 1947, and later the state of West Bengal, had played a leading role in the country in spreading education at all levels, beginning with mass education and culminating in higher, professional and specialized education thanks to the colonial legacy and renaissance in the state (Jana and Ghosh 2011).

## **2. EXPANSION OF HIGHER EDUCATION IN WEST BENGAL**

The nodal ministry for education in India is the Ministry of Human Resource Development (MHRD). The MHRD has a Department of Higher education which is the apex department “for the overall development of the basic infrastructure of Higher Education sector”. The University Grants Commission (UGC) under the Department of Higher acts as the coordinator as well as prescriber of standards for education in the country. Administrative set up of Higher Education in West Bengal comprises of Department of Higher Education, Education Directorate, and Directorate of Technical Education. Department of Higher Education comprises of West Bengal State Council of Higher Education, Universities and West Bengal College Service Commission. The West Bengal State Council of Higher Education has been established in 1995 for Planning and co-ordination in the area of higher education in the State including co-operation with the UGC.

The statistics on HEIs, enrolment, public expenditure etc. are published by MHRD in the Selected Educational Statistics (SES) up to 2005-06 and statistics of Higher and Technical education (SHTE) for the period 2006-07 to 2009-10. The MHRD compiled the data using pre-prepared data capturing formats from the HEIs through the educational departments of the state governments and UTs. This is supplemented by the information gathered by UGC, AICTE and other regulatory agencies. To overcome limitations, the MHRD has initiated the All India Survey on Higher Education (AISHE) in 2010. The data collection here is through online mode with a dedicated portal and the survey tries to cover all educational institutions (universities, colleges and standalone intuitions). However, it is self-reported and the information submitted by the institutions is not cross-checked for accuracy. AISHE provides data on higher education from 2010-11 to 2015-16. We have used data for the present paper from AISHE, Department of Higher Education, Government of West Bengal and NSS data. Presently there are 44 universities in West Bengal including 20 state aided universities (Table 1). The names of the Central University, State Public University, Deemed University, Private University with their year of establishments and number of affiliated colleges have been given in Table 2. All the nine private universities in West Bengal have been established after 2013.

**Table 1: Types of Universities in West Bengal (2017)**

Category	Number of Universities
State-aided Universities	20
State Specialised Universities	6
Deemed University	1
Central Universities and Institutes of Higher Learning	8
Private Universities	9
<b>Total</b>	<b>44</b>

Source: Govt. Of West Bengal, 2017

**Table 2: List of Universities and Number of Affiliated Colleges**

	University Name	District	Year of Establishment	No. of Colleges
Central University				
1	Visva Bharati, Shantiniketan	Birbhum	1951	1
State Public University				
2	Calcutta University, Kolkata	Kolkata	1857	148
3	Jadavpur University, Kolkata	South 24 Pgs	1955	2
4	Burdwan University	Barddhaman	1960	158
5	Kalyani University	Nadia	1960	67
6	North Bengal University, Darjeeling	Darjiling	1962	60
7	Rabindra Bharati University, Kolkata	Kolkata	1962	1
8	Vidya Sagar University, Midnapore	Paschim Medinipur	1981	108
9	Netaji Subhash Open University, Kolkata	Kolkata	1997	
10	Aliah University, Kolkata	Kolkata	2007	
11	University Of Gour Banga, Malda	Malda	2008	65
12	West Bengal State University	North 24 Parganas	2008	53
13	Presidency University	Kolkata	2010	1
14	Sidho-Kanho Birsa University	Puruliya	2010	31
15	Kazi Nazrul University, Asansol	Barddhaman	2012	21

16	Cooch Behar Panchanan Barma University	Koch Bihar	2012	15
17	Diamond Harbour Women's University	South 24 Parganas	2012	1
18	Bankura University	Bankura	2014	25
19	Raiganj University	Uttar Dinajpur	2015	
20	West Bengal University of Teachers' Training, Education Planning and Administration	Kolkata	2015	177
21	Sanskrit College and University	Kolkata	2015	
Deemed University				
22	Ramakrishna Mission Vivekananda University	Kolkata	2015	
Private University				
23	Seacom Skills University	Birbhum	2014	1
24	Amity University	North 24 Parganas	2015	
25	Techno India University	North 24 Parganas	2013	
26	Adamas University	North 24 Parganas	2015	
27	Neotia University	South 24 Parganas	2015	
28	University of Engineering and Management	Kolkata, New Town	2015	
29	Brainware University	North 24 Parganas	2016	
30	St. Xavier's University	Kolkata	2017	
31	JIS University	North 24 Parganas	2015	

Source: AISHE 2015-16 & Dept. of Higher Education, Govt. of West Bengal

In Table 3 we have presented type wise universities in West Bengal compared to India.

**Table 3: Type wise universities in West Bengal and India**

Type of Universities	Number		%	
	India	WB	India	WB
Central Open University	1	0	0.1	0.0
Central University	44	1	5.1	2.4
Deemed University-Government	33	0	3.8	0.0
Deemed University-Government Aided	10	0	1.2	0.0
Deemed University-Private	79	1	9.2	2.4
Institute of National Importance	100	6	11.6	14.6
Institute under State Legislature Act	5	0	0.6	0.0
State Open University	13	1	1.5	2.4
State Private Open University	1	0	0.1	0.0
State Private University	231	8	26.9	19.5
State Public University	342	24	39.8	58.5
Grand Total	859	41	100.0	100.0

Source: AISHE, 2016-17

In Table 4, we have presented the growth of number of colleges in West Bengal and India during the period 2002-03 to 2016-17. Table 4 reveals that though a number of colleges has been established in West Bengal in recent years, its share in India has only been slightly improved. It is a challenge for the government to enhance the access to higher education keeping in pace with the increasing number of students passing out in Higher Secondary Examination has increased from 1.49 lakhs in 2001 to 6.22 lakhs in 2017.

**Table 4: Growth of Number of Colleges in West Bengal and India, 2016**

Year	West Bengal	India	% of West Bengal
2002-03	537	16206	3.3
2003-04	541	16888	3.2
2004-05	603	18080	3.3
2005-06	621	19327	3.2
2006-07	774	21170	3.7
2007-08	805	23206	3.5
2008-09	889	25951	3.4
2009-10	891	31324	2.8
2010-11	889	32964	2.7
2011-12	896	35539	2.5
2012-13	942	37204	2.5
2013-14	1057	39671	2.7
2014-15	1061	40760	2.6
2015-16	1082	39071	2.8
2016-17	1229	42285	2.9

Source: AISHE (*various years*)

### 3. DIVERSIFICATION AND DISPARITIES IN HIGHER EDUCATION IN WEST BENGAL

We have discussed diversification and disparities in higher education in West Bengal in terms of caste, gender, gross enrolment ratio.

#### 3.1 Caste-wise and Gender-wise enrolment pattern in West Bengal

Total enrolment (U.G. and P.G.) in general degree education in West Bengal including universities and colleges stood at 21.14 lakhs in 2012-13 of which U. G. Enrolment was 19.5 lakhs and P. G. Enrolment was 1.6 lakhs. The gender-wise distribution of these students and UG and PG Enrolment in West Bengal (2012-13) shown in Table 5.

**Table 5: UG and PG Enrolment in West Bengal (2012-13)**

Area of Study	UG			PG			UG & PG
	Boys	Girls	Total	Boys	Girls	Total	Total
Arts	433282	891729	1325011	26526	54416	80942	1405953
Science	103491	118196	221687	14307	23181	37488	259175
Commerce	92916	98196	191112	3659	5622	9281	200393
Education	5922	7415	13337	1660	3230	4890	18227
Law	4429	5050	9479	281	582	863	10342
Engineering	75317	97487	172804	3570	4286	7856	180660
Management	6020	7668	13688	2575	3597	6172	19860
Others	2696	3119	5815	4507	9967	14474	20289
<b>TOTAL</b>	<b>724073</b>	<b>1228860</b>	<b>1952933</b>	<b>57085</b>	<b>104881</b>	<b>161966</b>	<b>2114899</b>

Source: Govt. of West Bengal, 2012-13

The highest percentage of students in combined U.G. & P.G. is occupied by Arts followed by Science, Commerce and Engineering. It is seen from the Table 6 that among the prominent disciplines 65.37 % of students obtain degrees in Arts, 14.15 % in Science, 9.89 % in



Commerce, and 7.24 % in Engineering/Technology. The representation of SC categories is 17 % and that of ST categories is 3.22 % in the higher education in the state.

**Table 6: Percentage of Enrolment (U.G. & P.G.) of Students in Different Areas of Study in Universities and Colleges (2012-13) in West Bengal**

Area of Study	BOYS				GIRLS				GRAND TOTAL
	GEN	SC	ST	TOTAL	GEN	SC	ST	TOTAL	
Arts	25.26	7.70	0.11	34.48	30.21	5.29	0.97	36.46	70.94
Science	7.19	1.42	0.02	8.83	1.00	0.66	0.11	1.77	10.60
Commerce	6.55	0.60	0.00	7.24	0.40	0.11	0.03	0.54	7.78
Education	0.43	0.11	0.01	0.57	0.12	0.09	0.02	0.23	0.80
Law	0.30	0.04	0.00	0.35	0.04	0.02	0.00	0.07	0.42
Engineering	5.39	0.48	0.00	5.91	1.59	0.12	0.01	1.72	7.63
Management	0.61	0.03	0.00	0.64	0.19	0.01	0.00	0.20	0.84
Others	0.47	0.06	0.01	0.54	0.40	0.04	0.01	0.44	0.98
<b>TOTAL</b>	<b>46.20</b>	<b>10.45</b>	<b>0.16</b>	<b>58.57</b>	<b>33.94</b>	<b>6.33</b>	<b>1.16</b>	<b>41.43</b>	<b>100.00</b>

Source: Department of Higher Education, Government of West Bengal, Annual Report

### 3.2 Gross Enrolment ratio in Higher Education

Gross Enrolment Ratio (GER) for West Bengal and India has been compared for castes and gender in Table 7. The gap between female and male GER is noticeable. In 2015-16, the West Bengal GER was 17.7 with all India average being 24.5. There is also wide discrepancy across gender and castes in GER. Therefore, more efforts to raise the GER for females would not only reduce the gap between malefemale GER but would also improve the overall GER. The expansion of the higher education system not accompanied by affirmative action will fail to disparities in higher education.

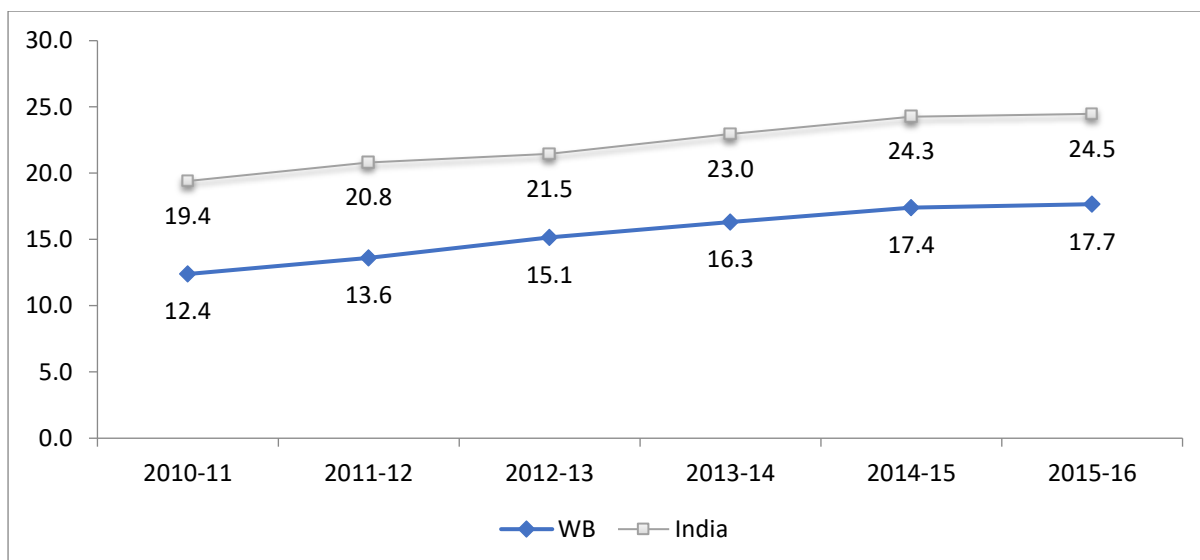
**Table 7: Gross Enrolment Ratio (GER) in West Bengal and India**

		West Bengal	India
All Category	Male	19.1	25.4
	Female	16.2	23.5
	Total	17.7	24.5
SC	Male	14.2	20.8
	Female	11.5	19.0
	Total	12.8	19.9
ST	Male	10.6	15.6
	Female	8.4	12.9
	Total	9.5	14.2

Source: AISHE, 2015-16

Gross Enrolment Ratio (GER) in higher education in West Bengal and India during the period 2010-11 to 2015-16 have been presented in Figure 1

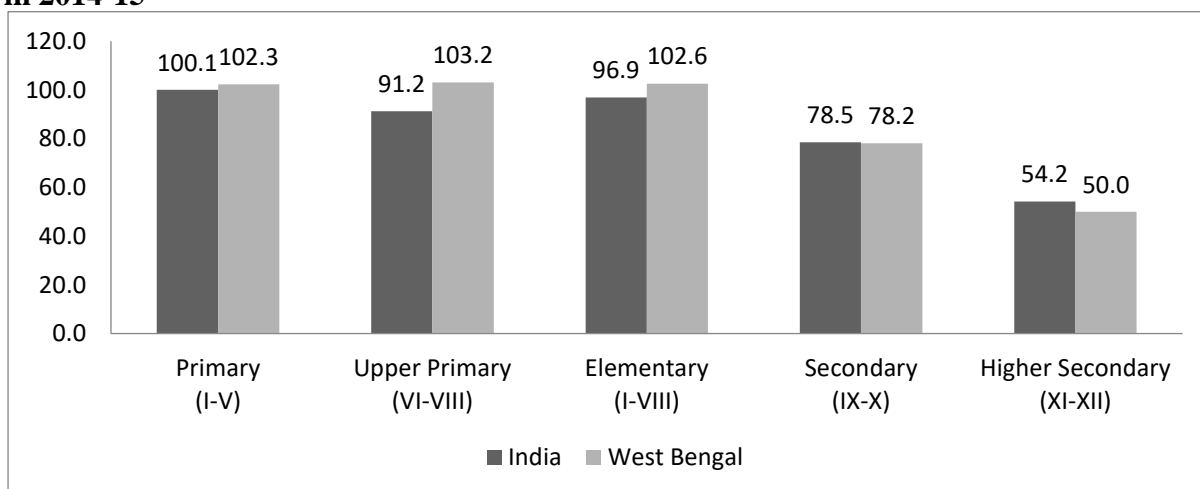
**Figure 1: Gross Enrolment Ratio (GER) in West Bengal and India**



Source: AISHE (Various Year)

We have shown in Figure 2 Gross Enrolment Ratio( GER) at different levels of school education in West Bengal and India in 2014-15 which shows that GER at higher levels is falling in West Bengal compared to India.

**Figure 2: Gross Enrolment Ratio (GER) in School Education in India and West Bengal in 2014-15**



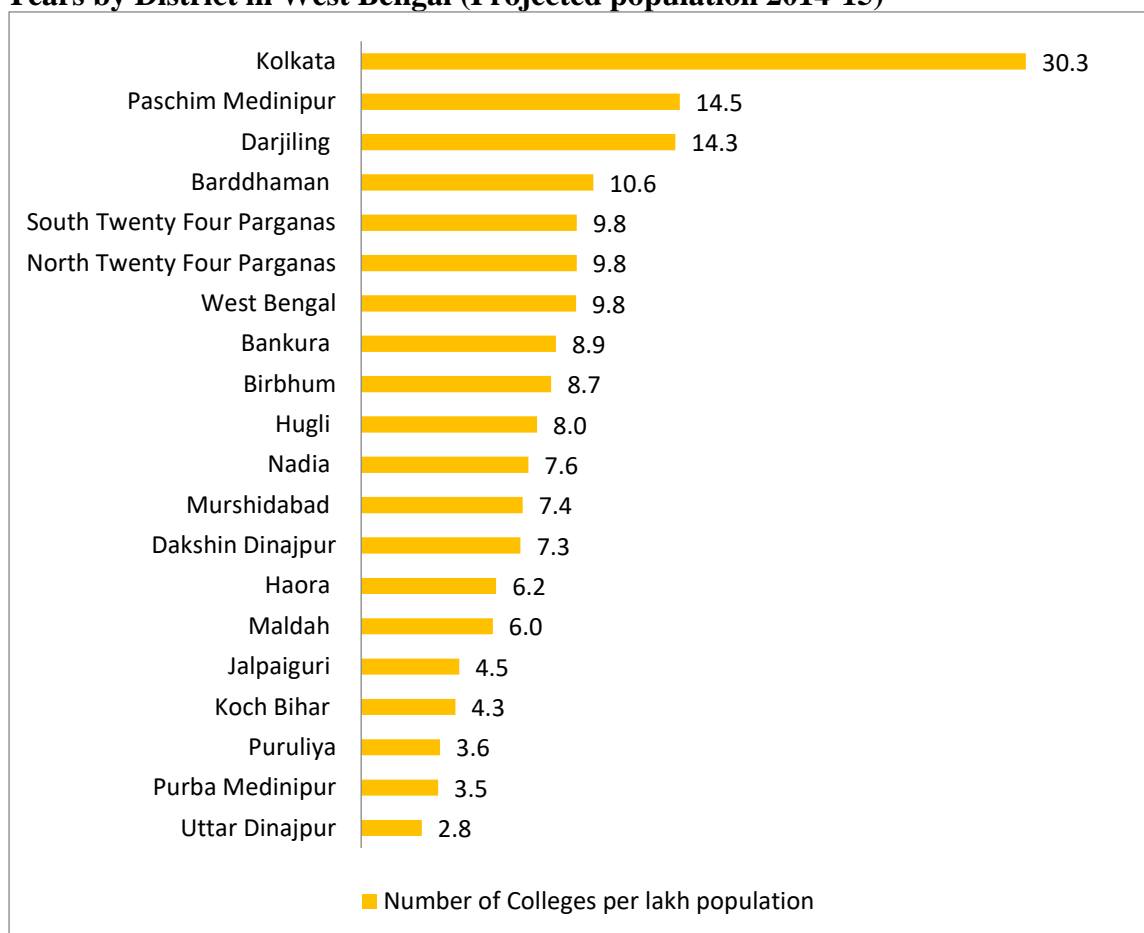
Source: DISE, 2014-15

### 3.3 District wise Distribution of Colleges in West Bengal

In West Bengal, on an average, a college served a population of 2.44 thousand and an area of 249 square kilometres (Jana 2012). The number of feeder higher secondary schools was 10 per college and that of secondary schools is 18 per college. The size of the population, area and number of institutions in the different districts vary widely. For a correct understanding, we have to relate the number of colleges to the size of the population in the respective districts. In an analysis of the regional imbalance in the facilities of higher education, the socio-economic factors like occupational distribution and age-composition of the population are important variables to be considered. Generally, the age group seeking admission in colleges is 18-24 years. Figure 3 reveals that there is wide disparity across districts in terms of population within (18-24) years per college. It is lowest in Dinajpur (N) with 208 lakh literate population per

college and highest in Kolkata with 30.3 lakh literate population per college. Number of Colleges per lakh population belonging to the age group 18-24 by District in West Bengal (Projected population 2014-15) is shown in Figure 3.

**Figure 3: Number of Colleges per lakh population Belonging to the age group 18-24 Years by District in West Bengal (Projected population 2014-15)**



Source: AISHE, 2014-15, Census-2011

In West Bengal under the administrative jurisdiction of Higher Education Department, there are different categories of colleges including general degree colleges, law colleges, teachers' training colleges and engineering and technological colleges affiliated to different universities. However not all the colleges are under jurisdiction of Higher Education Department. There are at present a total of 1079 colleges in West Bengal including general degree colleges. Specialization-wise number of Colleges (2015-16) in West Bengal & India shown is in Table 8. A diversified system channels students into various study programmes that are not equal in terms of prestige and employment opportunities. According to data available, there were nearly 42,000 seats in Bengal in 2014. But in 2017, the number is around 33,124, though the number seats in government engineering and state-run universities (3,747) has remained constant (The Hindu, 2017).

**Table 8: Specialization-wise number of Colleges (2015-16) in West Bengal & India (Based on actual response)**

State	West Bengal	All India	% of West Bengal
General	666	24311	2.7

Agriculture	0	213	0.0
Architecture	0	132	0.0
Arts	10	770	1.3
Commerce	1	219	0.5
Computer Application	11	255	4.3
Education/Teacher Education	169	2390	7.1
Engineering & Technology	72	2250	3.2
Fine Arts	8	110	7.3
Fisheries	0	12	0.0
Hotel & Tourism Management	6	74	8.1
Journalism & Mass Communication	0	9	0.0
Law	22	504	4.4
Management	25	687	3.6
Medical-Allopathy	20	233	8.6
Medical-Ayurveda	4	167	2.4
Medical-Dental	2	190	1.1
Medical-Homeopathy	11	96	11.5
Medical-Others	6	155	3.9
Nursing	16	969	1.7
Oriental Learning	0	66	0.0
Para Medical	2	110	1.8
Pharmacy	8	589	1.4
Physiotherapy	3	119	2.5
Sanskrit	0	284	0.0
Science	2	202	1.0
Sports/Yoga/Physical Education	3	80	3.8
Veterinary	0	39	0.0
Others	12	432	2.8
Grand Total	1079	35667	3.0

Source: AISHE, 2015-16

### 3.4 Correspondence/Distance Education

The system of correspondence education opens up the opportunities for students who want to continue higher education in spite of various adverse conditions. The flexible nature of the open university curriculum allows the students to pursue their desired courses and careers in a manner that takes care of each student's preferences as well his/her constraints. The open university system has also another advantage: it facilitates spread of higher education without putting too much stress and burden on the existing infrastructure. In West Bengal, to meet the demand for higher education from different groups of students, the University of Burdwan and Vidyasagar University had started correspondence courses in 1994. The state government has also opened an Open University, namely Netaji Subhas Open University, during the 9<sup>th</sup> plan. Netaji Subhas Open University (NSOU) started functioning with effect from July 1998 to provide an opportunity of higher education in the vernacular medium to various disadvantaged groups of aspiring learners. It is the tenth open university of the country and the ninth state open university. Presently, the NSOU is offering 15 subjects for Bachelor's Degree Programme (BDP) and have 118 study centres. Indira Gandhi National Open University (IGNOU) was established in the country by an Act passed in Parliament in 1985. Since then

this University has been conducting different types of degree, diploma and certificate courses through its study centres. There are presently 58 study centres of IGNOU across West Bengal. Percentage of enrolment in different programmes in distance mode in West Bengal and India is shown in Table 9. The Table reveals that distance education in Under Graduate Programme is low compared to the whole India.

**Table 9: Percentage of Enrolment in Distance Mode in West Bengal and India**

State		Distance mode enrolment		% of Distance mode enrolment	
		West Bengal	All India	West Bengal	All India
Ph.D.	Male	0	87	0.0	0.0
	Female	0	49	0.0	0.0
	Total	0	136	0.0	0.0
Post Graduate	Male	46883	510526	25.0	13.3
	Female	69598	597836	37.0	15.6
	Total	116481	1108362	62.0	29.0
Under Graduate	Male	36900	1421708	19.6	37.2
	Female	29287	1077682	15.6	28.2
	Total	66187	2499390	35.2	65.3
PG Diploma	Male	690	41383	0.4	1.1
	Female	577	27252	0.3	0.7
	Total	1267	68635	0.7	1.8
Diploma	Male	1772	64175	0.9	1.7
	Female	1352	40053	0.7	1.0
	Total	3124	104228	1.7	2.7
Certificate	Male	658	17374	0.4	0.5
	Female	176	26775	0.1	0.7
	Total	834	44149	0.4	1.2
Integrated	Male	0	1	0.0	0.0
	Female	0	0	0.0	0.0
	Total	0	1	0.0	0.0
Grand Total	Male	86903	2055254	46.3	53.7
	Female	100990	1769647	53.7	46.3
	Total	187893	3824901	100.0	100.0

Source: AISHE, 2015-16

### 3.5 Privatisation of Higher Education

Private colleges came into existence even before independence and these were created by philanthropists with the genuine intention of serving the community. The government came out with a grant-in-aid system during the 1950s and 1960s and these institutions became private-aided colleges. As a consequence, the government exercised control by regulating student admission and tuition fee. In India, education is in the concurrent list, where federal states and the central government share responsibilities. Until recently, legislations in higher education prohibited profit making in the sector. Higher education was defined as a not-for-profit sector. Private investments were to be made by sponsoring bodies that had to be a "Society registered under the Societies Registration Act 1860, or any other corresponding law for the time being in force in a state, or a public trust or a company registered under Section 25

of the Companies Act, 1956.” The State provided for tax exemptions for donations made to this sector (Loomba, 2014). It was only during the Twelfth Five Year Plan in India (2012-2017) that the state considered re-evaluating this status of higher education in India. However, until recently there has been no clarity on how this suggestion would be implemented. A 100 per cent Foreign Direct Investment (FDI) is promoted in higher education through the automatic route which requires no prior approval from the state. However, the regulatory environment prescribes several conditions for foreign universities including fixing of fees, or the need of foreign institutions to affiliate with an Indian counterpart, which has dissuaded investments. In 2015-16 in West Bengal, 58.6 per cent colleges were privately managed, out of which 38.1 per cent were private unaided colleges and 20.5 per cent were private aided colleges. While considering the total enrolment in colleges, it was observed that 9.7 per cent were enrolled in private unaided colleges, 26.8 per cent were enrolled in private aided colleges, and 63.5 per cent were enrolled in government colleges (Table 10). Government of West Bengal has taken the following two policy initiatives in respect of privatisation: West Bengal Government’s Policy and Guidelines for setting up the Private Universities, 2013 2 West Bengal Government’s Policy and Guidelines for setting up self-financing General Degree College, 2015 ( Government of West Bengal 2016).

**Table 10: Number and Enrolment in Private & Govt. Colleges**

		Number of Colleges		% of Enrolment	
		West Bengal	All India	West Bengal	India
Number of Private and Government Colleges (based on actual response)	Private Un-Aided	411	22755	38.1	63.8
	Private Aided	221	4924	20.5	13.8
	Total Private	632	27679	58.6	77.6
	Government	447	7988	41.4	22.4
	Total	1079	35667	100.0	100.0
Enrolment in Private and Government Colleges (based on actual response)	Private Un-Aided	149257	11729224	9.7	45.6
	Private Aided	412303	5516630	26.8	21.4
	Total Private	561560	17245854	36.5	67.0
	Government	978503	8485309	63.5	33.0
	Total	1540063	25731163	100.0	100.0

Source: AISHE, 2015-16

### 3.6 Position of West Bengal in terms of Different Educational Parameters

We have presented the ranks of West Bengal in the states of India for different parameters of higher education in Table 11. The Table reveals

**Table 11: Different Parameter wise Number and Rank in West Bengal all over India**

	Items	Number	Rank (All 36 states)
1	Total No. of Universities	31	9
2	No. of General Universities	20	9
3	Total College	1051	13
4	General Degree College	628	12
5	Govt. College	427	7
6	College per lakh population	10	32
7	Average enrolment per college	1455	6
8	GER (Total)	17.4	27
9	GER (Male)	19.1	28

10	GER (Female)	15.8	28
11	Gender Parity Index (GPI)	0.83	29
12	Number of Teachers	50435	12
13	Pupil Teacher Ratio (PTR)	38	6
14	Out turn	378005	8
15	Population (Projection 2014-15)	10925358	4
16	Percentage of ST Population (out of 28 States)	6	9
17	GER(XI-XII) (out of 28 states)	42.97	17
18	Public Exp on higher education per person (18-23) (Out of 28 states)	1912	19
19	Higher Education Institutions per lakh pop (out of 28 states)	9.6	26
20	Technical/ professional expenditure per student (Out of 28 states)	58436	18
21	Vocational Expenditure per student (out of 28 states)	21104	19

Source: AISHE, 2014-15

#### 4. QUALITY OF HIGHER EDUCATION IN WEST BENGAL

Quality of higher education has been a major concern in India as well as the state of West Bengal despite significant expansion of higher education (Jana and Barman 2010). Some of the policy measures taken in this direction are redesigning academic programme to synchronise with the market demands, greater emphasis on interactive modes of learning, changes in the assessment procedure and examinations, introduction of the semester system, teachers' assessment, grade, credit system, faculty improvement programme, maintenance of national database of academic qualification etc (Panagariya et al 2014). National Policy on Education (NPE, 1986) laid special emphasis on advocating the quality of higher education in India and strengthening the quality initiatives with the establishment of accreditation agencies in India. Presently, there are three accreditation agencies functioning in India, National Assessment and Accreditation Council (NAAC) being set up by UGC in 1994 to monitor quality of HEIs in general education, National Board of Accreditation (NBA) by All India Council of Technical Education (AICTE) for technical education and Accreditation Board (AB) of Indian Council of Agriculture Research (ICAR) for accrediting agriculture institutions.

##### 4.1 NAAC Assessment

NAAC is considered as a major quality assurance (QA) body in India as it covers all kinds of HEIs unlike other bodies engaged in specialised accreditation. From the initial phase of apprehension surrounding the philosophy of external review, the NAAC has gradually been able to build a greater appreciation from the higher education community of the intrinsic benefits of accreditation. For example, the wider participation of academia in NAAC policymaking has been of great benefit in building a greater acceptance of the assessment process. The gradation system of NAAC has changed at different times. In Table 12, accreditation method at different years has been presented.

**Table 12: Assessment and accreditation methodology adopted by NAAC**

SL NO.	Scale	Grading system	Years	No of institutions assessed in India
1	Two-point scale	Accredited/not accredited with parameter scores	February, 1999	9 HEIs

2	Five-point scale	Star rating: A*, A**, A***, A****, A*****	1st march 1999 to February 2002	240 HEIs
3	Nine-point scale	Letter grades (each letter grade rated at three levels) C, C+, C++, B, B+, B++, A, A+, A++	March 2002 to March 2007	3495 HEIs (1 <sup>st</sup> cycle: 3374; 2 <sup>nd</sup> cycle: 121)
4	Three-point scale	CGPA with A, B and C letter grades	April 2007 till date	2909 HEIs (1 <sup>st</sup> cycle: 1671; 2 <sup>nd</sup> cycle: 1195; 3 <sup>rd</sup> cycle: 43)

Source : Patil and Pillai (2017)

In Table 13, we have presented grades achieved by different Universities in West Bengal over years.

**Table 13: NAAC Assessment of Universities in West Bengal**

		Cycle 1		Cycle 2		Cycle 3	
		Grade	Date	Grade	Date	Grade	Date
1	Jadavpur University	5	05-11-2001	A	16-09-2008	A	24-09-2014
2	Presidency University	A	16-12-2016				
3	Rabindra Bharati University	4	05-11-2001	A	19-02-2016		
4	University of Burdwan	4	22-03-2001	B++	31-03-2007	A	05-11-2016
5	University of Calcutta	5	21-05-2001	A	31-12-2009	A	23-01-2017
6	University of Gour Banga	B	25-05-2016				
7	University of Kalyani	3	21-05-2001	B	16-09-2008	A	16-12-2016
8	University of North Bengal	3	20-09-2000	B++	21-05-2006	A	02-12-2016
9	Vidyasagar University	3	12-02-2002	B	29-01-2009	B	10-12-2014
10	Visva-Bharati	B	11-05-2015				

Source: Self-review document of NAAC

In Table 14, we have presented the state-wise results of NAAC assessment. The results reveal that out of 154 colleges assessed in West Bengal upto December 2016, the percentages of different grades of colleges in West Bengal are as follows- A:12.3%, B:83.1% and C:4.5%. The average grade point of the colleges in West Bengal is 2.52 which is below the all India average of 2.59 with rank of the state being 17 out of 32.

**Table 14: State wise College Assessment (Percentage) (up to December, 2016)**

	Name of State	Colleges Assessed	A	B	C	Average Grade
1	Chandigarh	9	55.6	44.4	0.0	3.02
2	Kerala	148	53.4	45.9	0.7	2.92
3	Goa	18	38.9	61.1	0.0	2.90



4	Delhi	36	52.8	47.2	0.0	2.89
5	Panjab	126	35.7	62.7	1.6	2.75
6	Meghalaya	11	36.4	54.5	9.1	2.74
7	Tamil Nadu	540	33.5	65.0	1.5	2.71
8	Sikkim	1	0.0	100.0	0.0	2.70
9	Telangana	123	32.5	58.5	8.9	2.62
10	Jammu & Kashmir	46	26.1	69.6	4.3	2.61
11	Maharastra	674	25.5	68.5	5.9	2.61
12	Andhra Pradesh	175	33.1	62.3	4.6	2.61
13	Karnataka	397	21.4	72.3	6.3	2.56
14	Gujrat	190	19.5	74.7	5.8	2.55
15	Puducherry	17	29.4	70.6	0.0	2.54
16	Madhya Pradesh	139	18.7	70.5	10.8	2.52
<b>17</b>	<b>West Bengal</b>	<b>154</b>	<b>12.3</b>	<b>83.1</b>	<b>4.5</b>	<b>2.52</b>
18	Haryana	158	16.5	75.3	8.2	2.51
19	Uttarakhand	29	10.3	86.2	3.4	2.50
20	Arunachal Pradesh	5	20.0	60.0	20.0	2.49
21	Assam	77	7.8	87.0	5.2	2.49
22	Uttar Pradesh	298	13.8	74.2	12.1	2.46
23	Nagaland	9	11.1	88.9	0.0	2.42
24	Rajasthan	130	9.2	82.3	8.5	2.40
25	Manipur	14	14.3	78.6	7.1	2.39
26	Chhattisgarh	16	6.3	87.5	6.3	2.37
27	Odisha	74	6.8	81.1	12.2	2.34
28	Himachal Pradesh	27	7.4	77.8	14.8	2.32
29	Bihar	10	10.0	70.0	20.0	2.27
30	Mizoram	7	0.0	57.1	42.9	2.23
31	Tripura	7	0.0	71.4	28.6	2.20
32	Jharkhand	9	0.0	77.8	22.2	2.19
	India	3674	24.4	69.6	6.0	2.59

Source: NAAC website

#### 4.2 National institutional Ranking Framework (NIRF)

National Institutional Ranking Framework (NIRF) is a methodology adopted by the Ministry of Human Resource Development (MHRD), Government of India, to rank all institutions of higher education in India. The Framework was approved by the MHRD and launched by Minister of Human Resource Development on 29 September 2015. There are separate rankings for different types of institutions depending on their areas of operation like universities and colleges, engineering institutions, management institutions, pharmacy institutions and architecture institutions. The Framework uses several parameters for ranking purposes like resources, research, and stakeholder perception. These parameters have been grouped into five clusters and these clusters were assigned certain weightages. The weightages depend on the type of institution. About 3500 institutions voluntarily participated in the first round of rankings.

Considering the fact that universities in India are essentially set-up for postgraduate education and research, NIRF decided to assign higher percentage (40%) weightage to “Research

Productivity, Impact and IPR”, 30 % weightage to “Teaching, Learning and Resources”, 5% weightage to “Graduation Outcomes”, 5% weightage to “Outreach and Inclusivity” and lastly 10% weightage to “Perception” ( Table 15).

**Table 15: Parameters for Ranking Universities**

	Parameters	Marks	Weight
1	Teaching, Learning & Resources (TLR)	100	0.3
2	Research Productivity, Impact and IPR (RPII)	100	0.4
3	Graduation Outcome (GO)	100	0.05
4	Outreach and Inclusivity(OI)	100	0.15
5	Perception(PR)	100	0.1
	Total		1

Source: NIRF

MHRD has published ranks of the participating institutes for two years – 2016 and 2017. The universities in West Bengal ranked in top 100 for these two years with their scores have been given in Table 16.

**Table 16: Scores and Ranks of the Universities in West Bengal in top 100 NIRF Ranking**

		Score	Rank
NIRF 2017	Jadavpur University	57.52	5
	Calcutta University	48.90	16
	Visva Bharati	48.19	19
	Kalyani University	36.84	66
	Vidyasagar University	35.23	87
NIRF 2016	Visva Bharati	76.1	11
	Bidhan Chandra Krishi Vishwavidyalaya	66.3	31
	Precendancy University	63.5	41
	Kalyani University	61.3	45

Source: NIRF

### 4.3 Research Publications

Research and publication is treated as an indicator of the excellence of its faculty. Usual parameters of evaluating the research output of institutions are citations and papers in reputed journals. International indices do not always take into consideration citations in Indian journals. The CII report (CII 2016) is based on ‘Indian Citation Index (ICI)’ database which currently indexes 950+ journals published from India covering all subject disciplines. ICI does not index journals published from foreign countries even if they publish articles of authors of Indian origin. The data depth of ICI database is 2004 onwards. In Table 17, we have presented first 20 states by ranks. Though in terms of total number of publications in ICI indexed journals, the rank of West Bengal is good, it is not so for citations per paper.

**Table 17: State wise number of publications and citations in Journals indexed by ICI**

		No. of article	Rank Articles	Citations	Rank Citations	Citations /paper	Rank citations /paper
1	Tamilnadu	51195	1	27611	2	0.539	22
2	Maharashtra	49223	2	27777	1	0.564	20
3	Uttar Pradesh	40593	3	23796	4	0.586	17
4	Karnataka	40140	4	23998	3	0.598	14
5	Delhi	33220	5	23005	5	0.693	5
6	West Bengal	22558	6	10641	6	0.472	31
7	Telangana	18942	7	9984	8	0.527	24
8	Gujarat	16543	8	10271	7	0.621	9
9	Andhra	16034	9	7612	11	0.475	30
10	Rajasthan	15954	10	9301	9	0.583	19
11	Haryana	14457	11	7426	12	0.514	26
12	Punjab	14399	12	7349	13	0.51	27
13	Madhya Pradesh	13808	13	8324	10	0.603	11
14	Kerala	12531	14	6118	15	0.488	28
15	Uttarakhand	11941	15	7126	14	0.597	15
16	Orissa	7604	16	4559	16	0.6	12
17	Jammu	6937	17	3252	20	0.469	32
18	Himachal	6232	18	3759	18	0.603	10
19	Assam	6103	19	3615	19	0.592	16
20	Chandigarh	5804	20	3802	17	0.655	8

Source: CII (2016)

In Table 18, we have presented top 30 institutes by the number of articles Published in the Journals indexed in ICI. The top performer is Bidhan Chandra Krishi Viswavidyalaya (BCKV) followed by Jadavpur University (JU), University of Calcutta and Indian Institute of Technology Kharagpur.

**Table 18: Number of articles Published in the Journals indexed in ICI**

		No. of article
1	Bidhan Chandra Krishi Viswavidyalaya (BCKV)	2498
2	Jadavpur University (JU)	2002
3	University of Calcutta (UC)	1878
4	Indian Institute of Technology Kharagpur (IIT Kharagpur)	1547
5	Institute of Post Graduate Medical Education and Research (IPGMER)	1207
6	West Bengal University of Animal and Fishery Sciences (WBUAFS)	1123
7	University of Burdwan (UB)	970
8	Nilratan Sarkar Medical College and Hospital (NSMCH)	861
9	University of Kalyani (UK)	824
10	Medical College (MC)	749
11	Calcutta National Medical College and Hospital (CNMCH)	734
12	Uttar Banga Krishi Viswavidyalaya (UBKV)	697
13	R G Kar Medical College and Hospital (RGKMCH)	620
14	Visva Bharati University (VBU)	594

15	University of North Bengal (UNB)	517
16	Vidyasagar University (VU)	451
17	Indian Statistical Institute (ISI)	436
18	North Bengal Medical College (NBMC)	405
19	Zoological Survey of India (ZSI)	379
20	Burdwan Medical College and Hospital (BMCH)	376
21	Presidency University (PU)	346
22	Seth Sukhlal Karnani Memorial Hospital (SSKMH)	323
23	Bankura Sammilani Medical College (BSMC)	311
24	Botanical Survey of India (BSI)	305
25	Midnapore Medical College and Hospital (MMCH)	302
26	Geological Survey of India (GSI)	295
27	National Institute of Technology Durgapur (NIT Durgapur)	278
28	Indian Association for the Cultivation of Science (IACS)	274
29	Central Research Institute for Jute and Allied Fibres (CRIJAF)	248
30	Bengal Engineering and Science University (BESU)	242

Source: Indian citation index, 2017

#### 4.4 Higher Education and Employment

National Sample Survey (NSS) data allows an analysis of the workforce by the three types of employment: self-employed, casual labour or regular salaried work. It is not surprising that hardly any illiterate has regular salaried jobs. Most illiterate are either casual workers or in self-employment usually engaged in low productivity work. It has long been known that the rate of open unemployment of university graduates is greater than that of those with lower levels of education. This in itself is not surprising since those with lower levels of education cannot afford to be openly unemployed. The major reasons for the quality problems that led to issue of employability (Mehrotra 2017) are: (i) Teacher and instructor shortage: one of the most serious problems that arose with rapid expansion of the higher education system – in fact its ‘massification’ – is the shortage of the teacher. (ii) Private sector growth with little regulation affected quality: the private higher education enrolment increased accounting for 59 percent of the total. Typically of this situation is the growth of engineering colleges across country, but especially in south India. (iii) Accreditation system has a very narrow coverage: institutional accreditation through the National Assessment and Accreditation Council (NAAC) has been growing very slowly partly because accreditation is voluntary for higher education institutions. (iv) Skewed funding of public institution: first, household spending and private investment have grown more rapidly than government spending on higher education in recent years. Second, ‘government spending, and particular state government spending, has fallen far short of the funding requirement in the face of the dramatic expansion of the system and rising expectation of the people in terms of quality, access and equity’. Table 19 reveals that 98 graduates are unemployed per 1000 graduates where it is 100 for India. The major reason for unemployment has been found as non-availability of jobs matching with education/skill/experience.

**Table 19: Per 1000 distribution of unemployed person having graduate level qualification aged 15 years & above by reasons of unemployment (Rural + Urban)**

Name	Per 1000 distribution of unemployed	Per 1000 distribution of unemployed persons having graduate level qualification by reasons of unemployment
------	-------------------------------------	--

	person having graduate level qualification	non-availability of jobs matching with education/skill/experience	non-availability of adequate remuneration	family/personal problems	Others
<b>Graduate</b>					
West Bengal	98	590	76	20	314
India	100	583	228	53	135
<b>Post Graduate</b>					
West Bengal	139	492	76	1	431
India	98	624	215	38	124

Source: Govt. Of India, Ministry of labour and employment, 2016

It should be pointed out that unless there is sustained high growth of SDP, the problem of educated unemployment cannot be solved. The problem of unemployment cannot be solved only by improving education system. It can only endeavour that the supply of different types of skill are in line with the demand for them (Government of West Bengal, 1984). In Table 20, we have presented unemployment rates in 2011-12 under different criteria.

**Table 20. Unemployment rate among the youth (15-29 years) according to Different Status in 2011-12**

Status	Region	West Bengal	India
Usual Principal Status (UPS)	Rural	103	65
	Urban	162	102
Current Weekly Status (CWS)	Rural	102	73
	Urban	146	107
Current Daily Status (CDS)	Rural	141	101
	Urban	170	120

Source: Government of West Bengal (2015)

It has also been sometimes found that suitable candidates are not available for particular job. For example, for the appointment of full time teachers in colleges, the vacancies declared by the West Bengal College Service Commission for ST categories were 607 whereas only 174 candidates were found to be empanelled. Subject-wise vacancies declared and number of empanelled candidates for ST categories have been given in Table 20.

#### **4.5 Vocational Education and Skill Development**

For vocational training, the experience of India is dismal. Technical institutes have been ill equipped in hardwares with low teaching staff and low student interest. Business world is also found not having enough enthusiasm for cooperation in such training. Among the BRICS economies percentage of students in upper secondary education enrolled in vocational

education in 2013 were ( Karmkar and Jana 2015): Brazil: 7.6%, Russia:59.8%, India:2.4%, China: 47.8% and South Africa:13.7%. We can learn from Germany who has been successful in integration of vocational education and training ( work based training by companies and school based training by government institutes). In recent years Government of India has taken various measures for skill development. Central government in December 2013 notified National Skills Qualifications Framework (NSQF). They offer programmes leading to certificates (after one year), diplomas or associate degrees (after two years) with option to transfer to regular degree programmes. Online platforms and ICT tools have opened the scope in taking higher education to millions of deserving students in far-flung areas who were earlier left out of the higher education system, or had to settle for lower quality alternatives. The push towards creating of courses under the massive open online courses (MOOCs) is intended to provide online courses to all who desire free of cost and in Indian languages; christened Swayam (Study Webs of Active – Learning for Young Aspiring Minds) ( Sanjay 2017). National e-library is another initiative. The National Digital Library at IIT Kharagpur is a massive project intended to aggregate and make available institutional digital repositories of several institutions. This will open up access through single-node knowledge resources. SWAYAM Prabha – the 32 DTH channels is in operation for telecasting high quality educational content free of charge using the GSAT-15 satellite transponders. Presently number of courses under this Programme are different Categories are: Engineering - 48, Science -18, Management -11, Arts and Recreation - 10, General - 7, Library - 6, Mathematics - 5, Humanities – 4 and Language - 4 Government of India (2017a). For career-oriented and skill-based education, Community College Scheme (CCS) has been introduced in five Degree Colleges in West Bengal. Tie-ups have been made with local industry partners in only five colleges so that students can be considered for absorption/employment in the market upon completion of the course ( Government of West Bengal 2016). West Bengal is one of the states which has implemented Common Service Centres (CSCs) under National e-Governance Plan (NeGP). Presently there are about 250 ITI and 146 Polytechnic colleges in West Bengal. In 2015-16, 2833 number of Vocational Training Centres (VTCs) were imparting vocational education and training in West Bengal (Government of West Bengal, 2016).

#### 4.6 Pupil Teacher Ratio

Pupil-Teacher Ratio (PTR) is defined as average number of pupils (students) per teacher at a specific level of education in a given school-year. Table 21 reveals comparative disadvantageous position of West Bengal in terms of pupil-teacher ratio.

**Table 21: Growth of Pupil teacher ratio in India and West Bengal**

Year	Regular & Distance Mode		Regular Mode	
	West Bengal	India	West Bengal	India
2011-12	36	23	33	21
2012-13	38	23	35	20
2013-14	39	24	35	21
2014-15	38	23	34	21

Source: AISHE 2014-15

As the number of departments is going up without corresponding increase in full time posts, colleges are becoming increasingly dependant on part time teachers and contractual teachers. This is particularly true for self-financing courses. The ratio of average number of teachers calculated for full time teachers, guest teachers and contractual teachers from NAAC reports for colleges come out to be 32:27:6.

#### 4.7 Students' attendance and Dropping Out

The poor students' attendance is a big problem in West Bengal particularly in rural areas. The students depend very much upon private tuitions, particularly in UG level, for the notes prepared by the tutor. Way back in 1991 Ashok Mitra Commission emphasized on the need to end the malpractice of extracting money in the form of private tuition (Majumdar 1993). Students rarely go to the library for reference books in most colleges. The situation has not improved even after the introduction new examination system and internal assessment. Dropping out in higher education is also a big problem. A Study on Vidyasagar University reveals that more than 50% students discontinue their studies from college at UG level (Jana 2017)

### 5. EXPENDITURE PATTERN OF HIGHER EDUCATION IN WEST BENGAL

#### 5.1 Public Expenditure on higher education

It is true that public expenditures on education in India have increased remarkably in the post independence era. However the growth has not been impressive from the point of view of expenditure in real prices or in per capita terms (Jana 2012). Total budget expenditure on higher education in West Bengal in nominal terms has increased from Rs. 526.27 crores in 2000-01 to 1943.76 crores in 2010-11 i.e. expenditure on higher education in West Bengal has increased by about four times in 30 years. The share of educational expenditure in SDP may be taken as an indicator of state's priority to education. The percentage share of expenditure on education and higher education to Net State Domestic Product (NSDP) for the period 2000-2001 to 2010-11 have been presented in the Table 22. During this period, though percentage of budget expenditure on education with respect to state budget has improved, percentage of budget expenditure on higher education with respect to education sector has not increased. The share of Budget Expenditure (B.E.) on higher education in net state domestic product (NSDP) has improved slightly in recent years.

**Table 22: Expenditure on Higher Education in West Bengal**

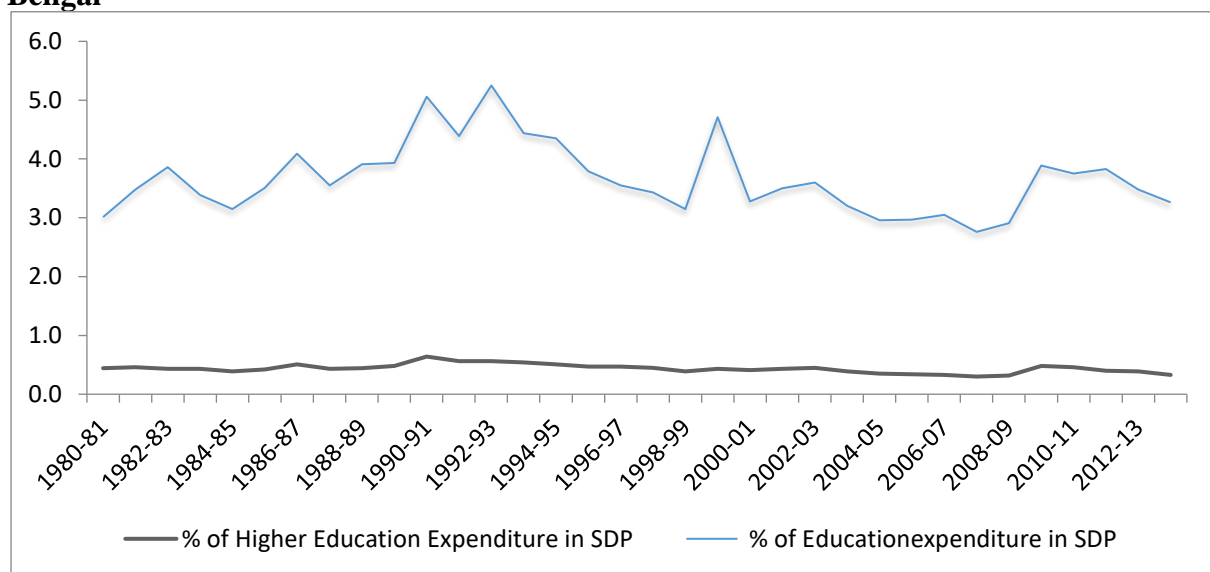
	Total Budget Exp. (BE) for Higher education	% of Budget Exp (B.E.) of higher education with reference to B.E. on Education	% of B.E. on education with respect to state budget	% of B.E. on higher education with respect to NSDP
2000-2001	526.27	14.21	15.13	0.408
2001-2002	604.87	13.94	14.84	0.419
2002-2003	677.26	14.20	15.42	0.440
2003-2004	665.15	13.88	13.56	0.384
2004-2005	663.73	13.43	12.83	0.349
2005-2006	721.95	12.90	14.81	0.344
2006-2007	801.64	11.94	15.92	0.336
2007-2008	836.39	12.16	14.99	0.306
2008-2009	986.95	12.28	15.6	0.318
2009-2010	1733.84	14.01	17.09	0.469
2010-2011	1943.76	14.01	17.94	0.449

2011-2012	1996.03	12.92	19.08	0.416
2012-2013	2479.3	13.33	20.21	0.445
2013-2014	2487.02	12.05	20.39	0.391

Source: Based on Department of Higher Education, Government of West Bengal

In Figure 4 we have presented the percentage of education budget and higher education budget in SDP in the state of West Bengal. Figure 3 shows there is no substantial changes in share of and higher education budget in SDP, though fluctuations are there for total education budget over the period 1980-81 to 2012-13.

**Figure 4: Percentage of Education Budget & Higher Education Budget in SDP in West Bengal**



Source: Government of West Bengal, Statistical Abstract various years

Budgetary expenditure on higher education in the state may be classified into two categories: plan and non-plan expenditures. Non-plan provision is mostly paid to the payment of salary in general degree colleges in the state. Major portion of plan expenditure is utilized for establishing new colleges and also for creating new infrastructure facilities in existing colleges. Declining plan expenditure, therefore, means declining effort for creation or addition of new educational facilities and swelling non-plan expenditure denotes increasing burden of salary payment and maintenance expenditure on the shoulder of the state government. Percentage on plan higher education expenditure to total higher education expenditure is shown in Table 23.

**Table 23: Percentage of Non Plan and Plan Expenditure in Higher Education to Total Higher Education Expenditure**

Year	Non Plan		Plan	
	West Bengal	India	West Bengal	India
2004-05	98.9	86.3	1.1	13.7
2005-06	98.2	85.6	1.8	14.4
2006-07	97.6	82.0	2.4	18.0
2007-08	96.6	78.6	3.4	21.4
2008-09	91.7	73.3	8.3	26.7

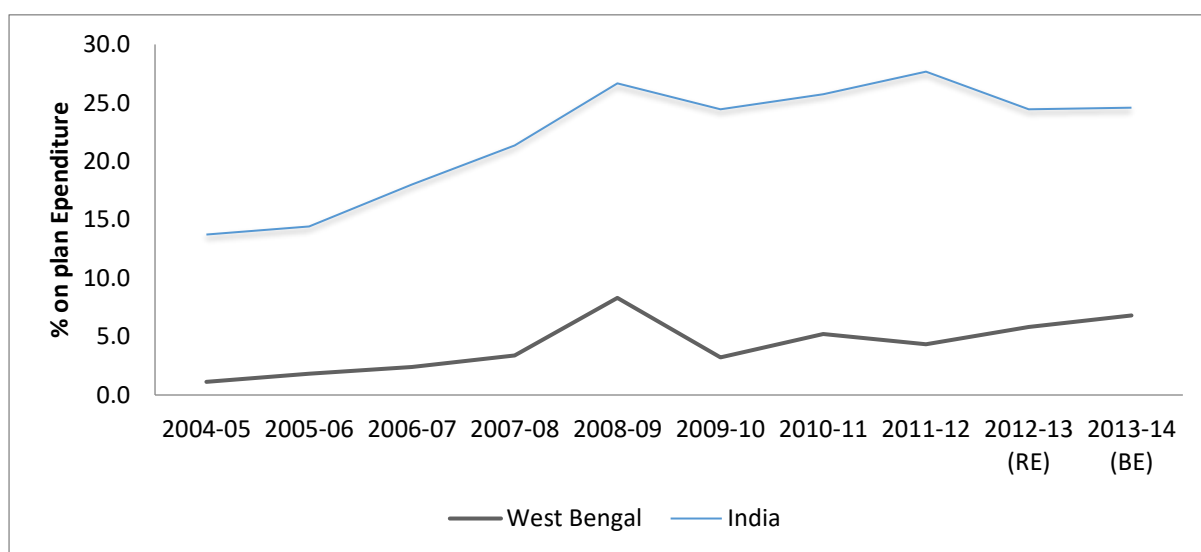


2009-10	96.8	75.6	3.2	24.4
2010-11	94.8	74.3	5.2	25.7
2011-12	95.6	72.3	4.4	27.7
2012-13 (RE)	94.2	75.5	5.8	24.5
2013-14 (BE)	93.2	75.4	6.8	24.6

Source: MHRD (Analysis of Budgeted Expenditure on Education) Various Year

The changes of percentage of plan higher education expenditure to total higher education expenditure for West Bengal and India shown in Figure 5.

**Figure 5: Percentage of Plan Higher Education Expenditure to Total Higher Education Expenditure in West Bengal and India**



Source: MHRD (Analysis of Budgeted Expenditure on Education) Various Year

#### Composition of Expenditure of Higher Education in West Bengal:

Table 24 shows that composition of Expenditure of Higher Education in West Bengal 2009-10 and 2012-13 in Percentages. The percentage share indicates that assistance to Non-Government colleges has increased while the assistance of Universities has declined.

**Table 24: Composition of Expenditure of Higher Education in West Bengal 2009-10 & 2012-13 in Percentages**

Budget Heads	2009-10 (Percentage)			(2012-13) (Percentage)		
	Non-Plan	State Plan	Total	Non-Plan	State Plan	Total
Assistance of Universities	37.35	3.95	41.30	32.67	2.76	35.43
Government Colleges and Institutes	6.85	1.02	7.88	5.56	1.95	7.51
Assistance to Non-Government Colleges	41.16	2.95	44.11	47.42	1.57	48.99
Institutes of higher learning and Other Expenditure	0.43	0.60	1.04	0.38	0.35	0.73
Promotion of Modern Indian Languages	0.03	0.02	0.05	0.04	0.02	0.06
Research, Scholarships, etc.	1.50	0.02	1.52	1.72	0.01	1.73
Technical Education	1.84	1.40	3.24	1.55	2.87	4.42
Physical Education & Youth Welfare (Excluding N.C.C.)	0.14	0.14	0.28	0.23	0.19	0.42

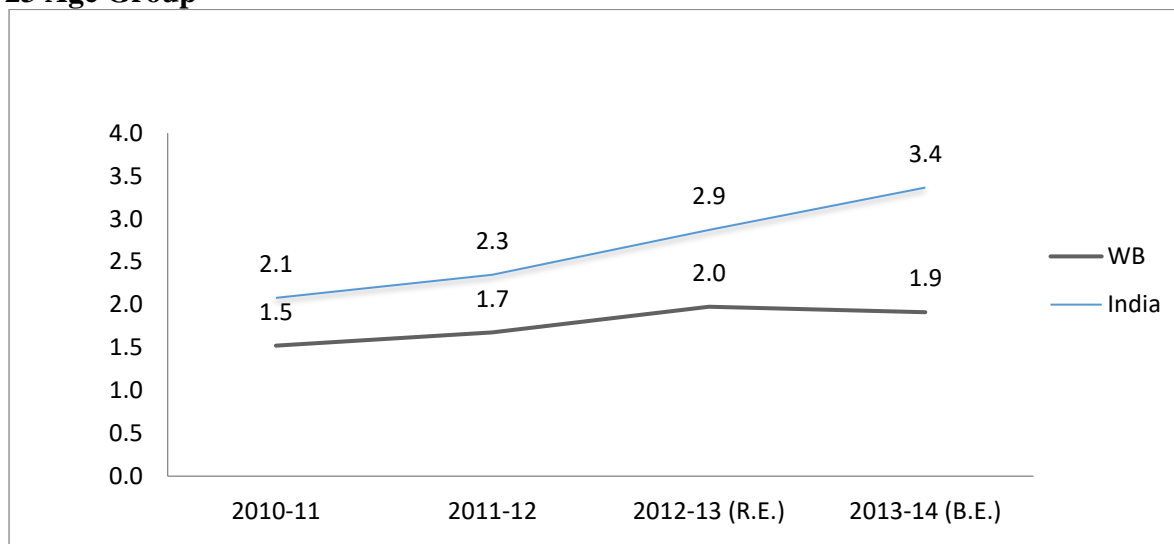
Promotion of Art and Culture	0.36	0.18	0.54	0.49	0.17	0.66
Surveys and Statistics Gazetteers & Statistical Memories	0.04	0.00	0.04	0.05	0.00	0.05
% Total	89.71	10.29	100.00	90.11	9.89	100.00
Total (in Crore)	1743.758	200	1943.758	2186.7	240.00	2426.72

Source: Department of Higher Education, Government of West Bengal, Annual Report

### Per Head Higher Education Expenditure:

Per head higher education expenditure (In Thousand Rs.) in Population 18-23 age group in West Bengal and India is shown in Figure 6. The figure reveals wide disparity in per head higher education expenditure between India and West Bengal.

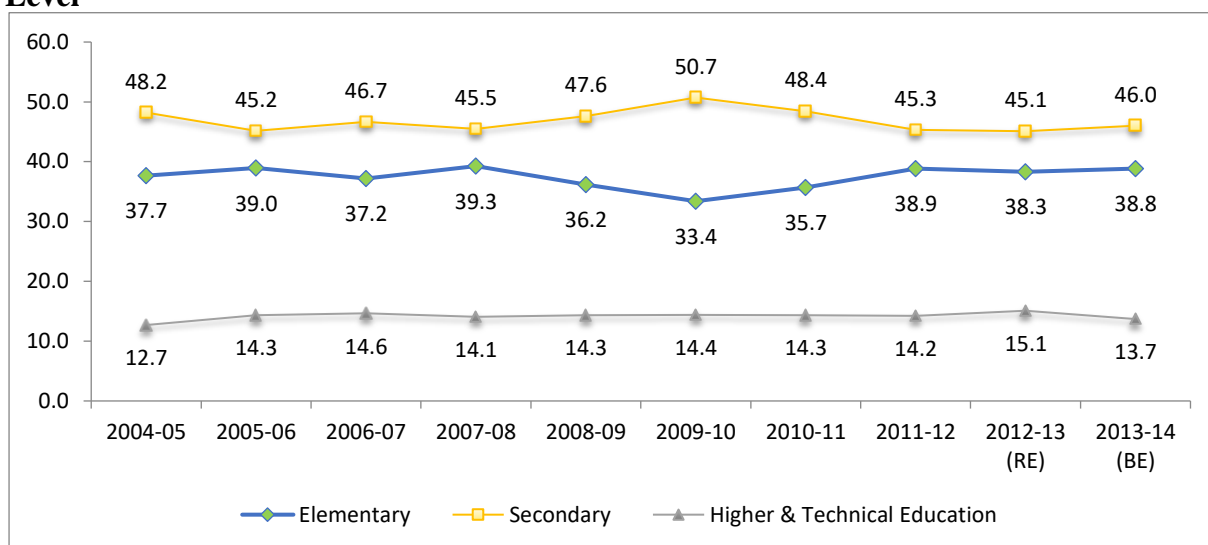
**Figure 6: Per Head Higher Education Expenditure (In Thousand Rs.) in Population 18-23 Age Group**



Source: AISHE, 2013-14

**Intra-Sectoral Resource Allocation to Education in West Bengal:** State expenditure on education comprises of expenditure on elementary education, secondary education, higher education, adult education and language development. Of these elementary had got the highest priority though its share has declined over the years. As is evident from the Figure 7, proportion of budget expenditure on higher education in West Bengal has not improved in the post reform period. The relative importance of secondary education has increased compared to primary, secondary and higher education.

**Figure 7: Year-wise Percentage Share in Primary, Secondary and Higher Education Level**



Source: AISHE, 2013-14

We have made a comparison in Table 25 among states in terms of three parameters of expenditure on higher education - Higher Education expenditure/GSDP, Higher Education expenditure /Education Expenditure, and Education Expenditure /SDP. It is found West Bengal is found to be behind the national average in terms of first and third parameter.

**Table 25: State wise share of higher education in GSDP**

		Higher Education expenditure/GSDP	Rank	Higher Education expenditure /Education Expenditure	Rank	Education Expenditure /SDP	Rank
1	Andhra Pradesh	0.45	13	20.04	6	2.19	26
2	Arunachal Pradesh	0.42	15	9.26	23	2.75	20
3	Assam	1.02	4	17.82	9	4.25	8
4	Bihar	1.08	3	22.74	3	5.75	4
5	Chhattisgarh	0.4	16	10.14	20	3.25	14
6	Goa	0.51	10	23.54	2	4.51	7
7	Gujarat	0.25	26	13.58	17	3.83	10
8	Haryana	0.34	23	12.99	18	6.67	2
9	Himachal Pradesh	0.36	20	8.46	24	2.24	25
10	Jammu & Kashmir	0.61	7	16.28	13	2.87	19
11	Jharkhand	0.47	12	15.19	14	3.11	15
12	Karnataka	0.58	8	19.55	7	1.82	28
13	Kerala	0.65	6	22.74	4	4.76	6
14	Madhya Pradesh	0.35	22	11.10	19	6.98	1
15	Maharashtra	0.39	18	16.49	12	2.95	18
16	Manipur	1.18	2	21.82	5	3.96	9
17	Meghalaya	0.72	5	18.80	8	2.63	22
18	Mizoram	1.76	1	26.34	1	2.26	24
19	Nagaland	0.45	14	6.42	28	2.64	21

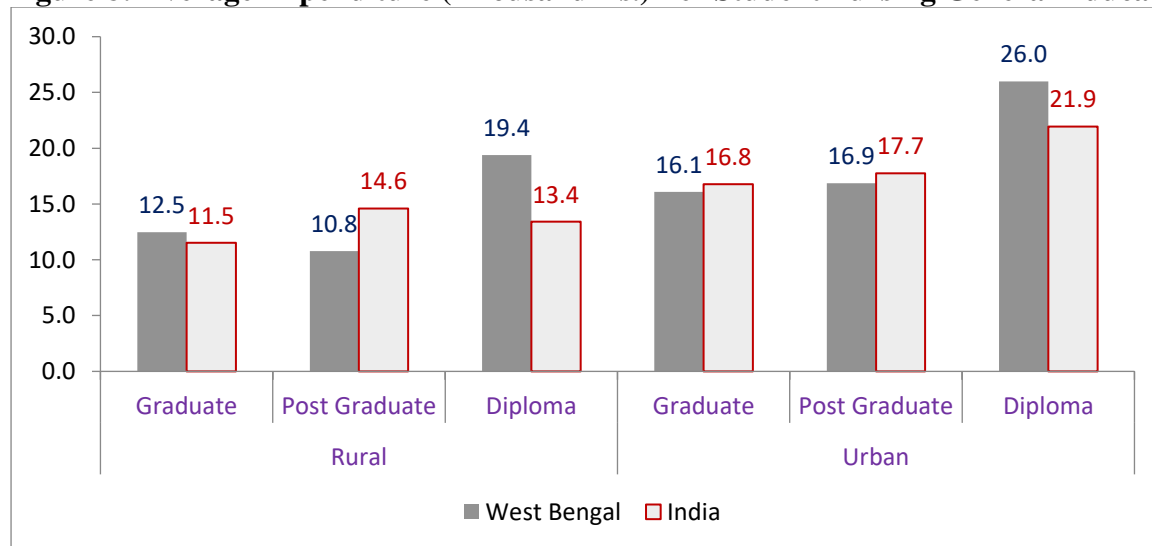
20	Odisha	0.57	9	17.56	10	3.72	12
21	Punjab	0.21	28	10.14	21	2.11	27
22	Rajasthan	0.23	27	7.46	25	6.07	3
23	Sikkim	0.48	11	17.55	11	3.08	16
24	Tamilnadu	0.34	24	15.10	15	2.37	23
25	Tripura	0.39	19	6.46	27	3.79	11
26	Uttarakhand	0.27	25	7.45	26	3.60	13
27	Uttar Pradesh	0.36	21	9.39	22	3.06	17
28	West Bengal	0.40	17	15.04	16	5.42	5
	Total	0.43		14.94		2.86	

Source: Based on AISHE, 2013-14

## 5.2 Cost of Higher Education in West Bengal

The private expenditure on education is calculated as spending by students in the form of payment of course fees (including tuition fees, examination fees etc.), purchase of books, stationery and uniforms, expenses on conveyance, private coaching, etc. Average Expenditure (Rs.) per student pursuing general education is shown in Figure 8 for rural and urban areas for West Bengal and India. A student on an average spend around Rs 11.5 thousands from his/ her own pocket in an academic session if he/she opts for general education, Rs. 12.5 thousands for general education in rural areas and Rs. 16.1 thousand in urban areas. It is revealed that private expensed for post graduate studies is less in West Bengal compared to National average both for rural and urban areas.

**Figure 8: Average Expenditure (Thousand Rs.) Per Student Pursuing General Education**



Source: NSSO, 71<sup>st</sup> Round.

NSSO study reveals the private expenditure on technical/professional courses and vocational education is much higher compared to general education both for West Bengal as well as India. Average expenditure (Rs.) per student pursuing technical/professional education and types of institutions in West Bengal and India is shown in Table 26. The Table reveals that private expenses in the State is lower medical education and higher for Engineering, Law, management compared to national average.

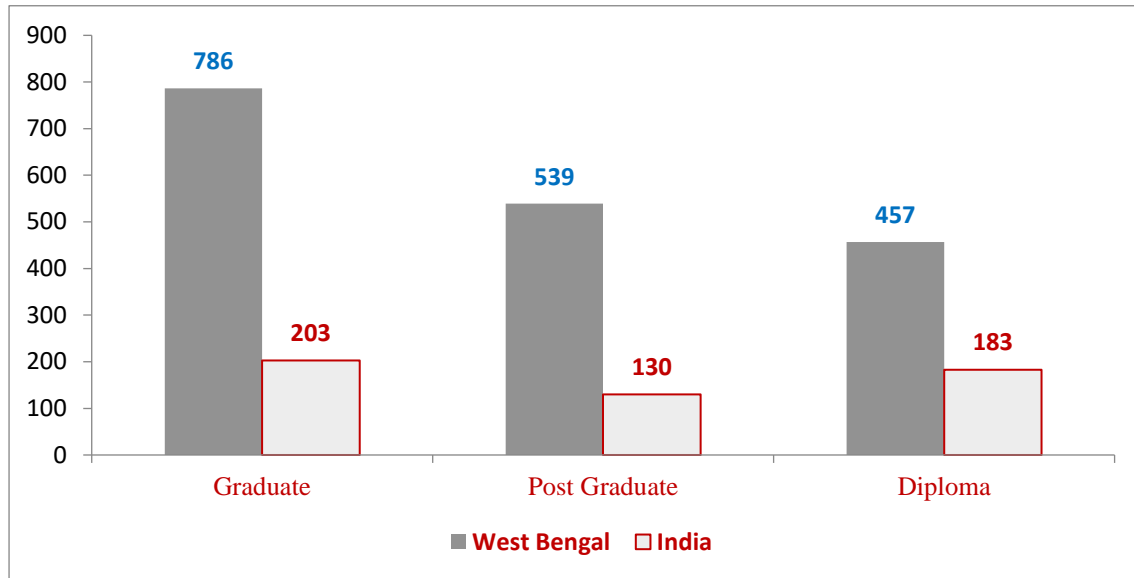
**Table 26: Average Expenditure (Rs.) per Student Pursuing Technical/Professional Education and Types of Institutions in West Bengal and India**

		West Bengal	India
Medicine	Govt.	47897	64968
	Pvt. Aided	18367	90205
	Pvt. Unaided	73611	118657
Engineering	Govt.	45756	42401
	Pvt. Aided	95762	69696
	Pvt. Unaided	93215	78227
Law	Govt.	67238	39193
	Pvt. Aided	52366	31984
	Pvt. Unaided	19517	67392
Management	Govt.	157912	44519
	Pvt. Aided	101794	62124
	Pvt. Unaided	211384	105188
IT/Computer Course	Govt.	16949	28686
	Pvt. Aided	43981	48858
	Pvt. Unaided	55619	51051
Vocational Institute	Govt.	13905	13942
	Pvt. Aided	31655	31852
	Pvt. Unaided	30215	33773
Others	Govt.	24087	18330
	Pvt. Aided	63296	36466
	Pvt. Unaided	62729	43199
Total		55172	57094

Source: NSSO, 71<sup>st</sup> Round

The high private education expenditure may be due to taking private coaching by students. Proportion of students (per 1000) taking private coaching for different levels of higher Education is shown in Figure 9.

**Figure 9: Proportion of Students (Per 1000) Taking Private Coaching for Levels of Higher Education in India and West Bengal**



Source: NSSO, 71<sup>st</sup> Round

## 6. CONCLUSION:

Our analysis of the state of higher education scenario in West Bengal reveals that the state – which was once the foremost one in the country in educational attainment – has now been lagging behind the national average in terms of many of the performance indicators. Also, the higher education sector in the state is characterized by uneven regional or inter-district development as well as imbalance in the diversification of the streams or subjects. However, what is most important is that quantitative figures alone do not reflect the true performance of the state. If one takes into account the quality aspect of higher education sector, then the picture is also not comfortable. It needs to be emphasized that this sector is plagued by various problems – viz. dearth of eligible and quality teachers, infrastructure. While increasing private sector participation in higher education promotes educational opportunities, it has been the same time concern for the quality of higher education and raises question about equity. To improve the employability of graduates of general academic higher education or technical education, some actions are necessary: improving soft skills, updating curricular, better academic environment in the educational institutions, better regulation of private providers and more collaboration with industries and business world. Rising number of students need more vocational courses at school and tertiary level. It is true that some positive initiatives have been taken in some respects. About 1.78 lakh meritorious students in the state have been granted scholarships under Vivekananda Merit-cum-Means Scholarship scheme. A major e-governance initiative has been taken to bring in greater transparency and fairness in admissions to all UG and PG levels. All the state-run universities of West Bengal are in the process of introducing for uniform revised syllabus as per UGC model Syllabus in undergraduate courses from the session 2017-18. However much need to be done so that that West Bengal can come to the forefront in the higher education sector and contribute to the economic development of

the country. India should try to develop its own form of integration between universities and business world. For forming the foundation of knowledge economy along with appropriate value system, school education should not be elitist and should be integrated in proper way with higher education system.

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