



**State of Tertiary Education in Bhutan 2017**



**Higher Education Planning Division**

**Department of Adult and Higher Education**

**Ministry of Education**

**Royal Government of Bhutan**

**Thimphu: Bhutan**

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## **1. Introduction**

One of the four pillars of Gross National Happiness (GNH) - Sustainable and Equitable Socio-Economic Development is an important element to contribute to happiness and wellbeing of the people and must be promoted. Tertiary Education plays an active role in socio- economic development and the number of people aspiring for tertiary education is increasing rapidly. Therefore, the Royal Government of Bhutan has prioritized enhancing access to tertiary education. Further, given the current pace of development in the country, there is a need for dynamic workforce steeped in knowledge and skill. Therefore, the tertiary education system must be able to respond accordingly by creating an enabling environment for generating new knowledge and developing required competencies in support of knowledge -based economy. In view of above, and to set new directions for the overall human resource development to support the current growth, understanding the state of tertiary education is paramount.

This document provides the evolution of education system, growth, governance and statistics of entire tertiary education system of the country.

## **2. Background of Education System**

Since the advent of Buddhism in the 8<sup>th</sup> century, monastic schools played an important role in the lives of the people and it continues even today. The modern form of education was introduced in Bhutan with the establishment of the first school in 1913 and more schools opened in the 1950s. It has been promoted and expanded since the first Five Year Plan in 1961 to address the basic educational needs, and develop human resources required for the socio-economic development of the country.

From a modest beginning, there are 515 schools and 90 extended classrooms across the country with 168092 students and 9415 teachers as of 2017. The adjusted net enrolment was 98.8% with the teacher student ratio of 1:20 (Annual Education Statistics, 2017).

Sherubtse Junior College was upgraded to undergraduate degree college in 1983 followed by other tertiary education institutes. Prior to 2003, all tertiary education institutions (TEIs) were governed by the relevant Ministries and the degrees were awarded by the institutions themselves. In order to regulate and institute a sound tertiary education system, the Royal University of Bhutan (RUB) was established in June, 2003 and is based on the federated college model. With the establishment of the RUB, all tertiary education institutions, which were previously governed by the relevant ministries and agencies, were placed under the University and restructured both in terms of nomenclature and programme. Khesar Gyalpo University of Medical Sciences of Bhutan (KGUMSB) was established in 2015.

Currently, the tertiary education sector consists of:

- ✓ Royal University of Bhutan with 10 constituent colleges and 2 affiliated colleges.
- ✓ Khesar Gyalpo University of Medical Sciences of Bhutan with three distinct faculties constituting three individual colleges and one affiliated college.

- ✓ Ministry of Labour with 1 constituent college
- ✓ Royal Institute of Management (Autonomous)
- ✓ Jigme Singye Wangchuck School of Law (Autonomous)

### 3. Governance of Tertiary Education

The Ministry of Education is responsible for development of overall national education system of the country. The Department of Adult & Higher Education (DAHE) established in 2003 is mandated with tertiary education services.

The tertiary education system is governed by the Tertiary Education Policy 2010 (TEP) which has mandated establishment of the Tertiary Education Board (TEB) and the Bhutan Accreditation Council (BAC). TEB and BAC are empowered bodies that take all major decisions pertaining to planning, establishment, funding, quality assurance, registration and licensing. They also provide oversight and direction to the TEIs.

### 4. Budget allocation for Tertiary Education

As per the Kuensel Report, 2<sup>nd</sup> June 2016, the total budget allotted to Education Sector for the financial year 2016-17 was 20%, which was about 10.9B of the total budget. The tertiary education expenditure as a percentage of GDP in financial year 2016 -17 was 0.88%. In absolute figures, a total expenditure of Nu.1307.01 million was spent on TE against Nu.148678.93 million GDP in the 2016 fiscal year. The table below shows the expenditure in various universities and institutes for the financial year 2016-17.

**Table. 4.1 - Tertiary education expenditure**

	<b>Capital (in millions)</b>	<b>Current (in millions)</b>	<b>Total (in millions)</b>	<b>Remarks</b>
RIM	31.834	45.456	77.29	
RUB	487.818	2.7	490.518	
KGUMS	43.468	39.497	82.965	
DAHE	329.491	17.258	346.749	
JSWSL	293.525	15.959	309.484	
<b>Total</b>			<b>1,307.01</b>	
<b>GDP</b>			<b>148,678.93</b>	

<b>Exp. as a % of GDP</b>	<b>0.88%</b>
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(Source: DPA, December 2017)

## 5. Statistics of Tertiary Education

The table below shows the year of establishment and location of colleges in Bhutan.

**Table 5.1 -Year of establishment and location of Colleges and institutes**

Sl no	Name	Year of Establishment	Location
<b>Royal University of Bhutan</b>			
1	College of Natural Resources	1992	Lobesa, Punakha
2	College of Science and Technology	2001	Rinchending, Chukha
3	Gaeddu College of Business Studies	2008	Gaedu, Chukha
4	Gyalpozhing College of Information Technology	2017	Gyalpozhing, Mongar
5	College of Language and Culture Studies	1961	Taktse, Trongsa
6	Jigme Namgyel Engineering College	1972	Dewathang, Samdrup Jongkhar
7	Paro College of Education	1975	Paro
8	Samtse College of Education	1968	Samtse
9	Sherubtse College	1968	Kanglung, Trashigang
10	Yonphula Centenary College	2017	Yonphula, Trashigang
<b>Khesar Gyalpo University of Medical Sciences of Bhutan</b>			
1	Faculty of Nursing and Public Health	1974	Thimphu
2	Faculty of Traditional Medicine	1967	Kawang Jangsa, Thimphu
3	Faculty of Postgraduate Medicine (FoPM)	2014	Thimphu
<b>Ministry of Labour and Human Resources</b>			
1	Rigney College	2017	Trashiyangtse
<b>Autonomous Institutes</b>			
1	Royal Institute of Management	1986	Simtokha, Thimphu
2	Jigme Singye Wangchuk School of Law	2017	Pangbisa, Paro
<b>Private Institutes</b>			
1	Royal Thimphu College	2009	Simtokha, Thimphu
2	Reldri Academy of Health Sciences (RAHS)	2015	Allay, Phuntsholing, Chukha
3	Norbuling Rigter College	2017	Dotay, Paro

**Table. 5.2 - Programmes offered by colleges / institutes**

**1 - Royal University of Bhutan**

<b>Sl No</b>	<b>Name</b>	<b>Programmes</b>
1	<b>College of Language and Culture Studies</b>	<ul style="list-style-type: none"> <li>• Bachelor of Arts in Language and Culture</li> <li>• Masters in Dzongkha and Choekey</li> <li>• Bachelor of Arts in Bhutanese and Himalayan Studies</li> <li>• Bachelor of Arts in Language and Literature</li> <li>• Diploma in Language and Communication Skills</li> <li>• Honours of Arts in Bhutanese and Himalayan Studies</li> <li>• Honours of Arts in Language and Literature</li> </ul>
2	<b>College of Natural Resources</b>	<ul style="list-style-type: none"> <li>• B.Sc Agriculture (Diploma Nested)</li> <li>• B.Sc Animal Science (Diploma Nested)</li> <li>• B.Sc Environment &amp; Climate Studies</li> <li>• B.Sc Food Science &amp; Technoloy (Diploma Nested)</li> <li>• B.Sc Forestry (Diploma Nested)</li> <li>• B.Sc Sustainable Development</li> <li>• M.Sc Natural Resources Management</li> <li>• Master's in Development Practice</li> </ul>
3	<b>College of Science and Technology</b>	<ul style="list-style-type: none"> <li>• Bachelor of Architecture</li> <li>• Bachelor of Engineering in Civil Engineering</li> <li>• Bachelor of Engineering in Civil Engineering (In-service)</li> <li>• Bachelor of Engineering in Electrical Engineering</li> <li>• Bachelor of Engineering in Electrical Engineering (In-service)</li> <li>• Bachelor of Engineering in Electronics and Communication Engineering</li> <li>• Bachelor of Engineering in Information Technology</li> <li>• Master of Engineering in Renewable Energy</li> </ul>
4	<b>Gaeddu College of Business Studies</b>	<ul style="list-style-type: none"> <li>• Bachelor of Commerce</li> <li>• Bachelor of Business Administration</li> <li>• Master of Business Administration</li> </ul>
5	<b>Gyalpozhing College of Information Technology</b>	<ul style="list-style-type: none"> <li>• Bachelor of Computer Applications</li> </ul>
6	<b>Jigme Namgyel Engineering College</b>	<ul style="list-style-type: none"> <li>• Bachelor in Engineering in Power Engineering</li> <li>• Diploma in Civil Engineering</li> <li>• Diploma in Computer System and Network</li> <li>• Diploma in Electrical Engineering</li> <li>• Diploma in Electronics and Communication Engineering</li> </ul>

		<ul style="list-style-type: none"> <li>• Diploma in Materials and Procurement Management</li> <li>• Diploma in Mechanical Engineering</li> <li>• Diploma in Surveying</li> </ul>
7	<b>Paro College of Education</b>	<ul style="list-style-type: none"> <li>• B.Ed Dzongkha</li> <li>• B.Ed Primary</li> <li>• B.Ed Secondary</li> <li>• Diploma in Physical Education &amp; Sports Coaching</li> <li>• PGDE in Dzongkha</li> <li>• B.Ed Primary DE</li> <li>• Diploma in ECCD</li> <li>• M. Ed in Educational Leadership &amp; Management</li> </ul>
8	<b>Samtse College of Education</b>	<ul style="list-style-type: none"> <li>• Bachelor of Education (B. Ed) Primary</li> <li>• Bachelor of Education (B. Ed) Secondary</li> <li>• Master of Education(M. Ed) in Science and Maths</li> <li>• Post Graduate Diploma in Contemplative Counseling and Psychology (PGDCCP) (Post Graduate Diploma) full time</li> <li>• Post Graduate Diploma in Education (PGDE)</li> <li>• Diploma in Library and Information Management (DLIM)</li> <li>• Diploma in School Science Laboratory Management (DSSLM)</li> <li>• Master of Arts in Contemplative Counseling and Psychology (MACCP)</li> <li>• Post Graduate Certificate in Higher Education (PGCHE)</li> <li>• Post Graduate Diploma in Contemplative Counseling and Psychology (PGDCCP) (Post Graduate Diploma) part time</li> <li>• Post Graduate Diploma in Education (PGDE)</li> <li>• Post Graduate Diploma in Higher Education (PGDHE)</li> </ul>
9	<b>Sherubtse College</b>	<ul style="list-style-type: none"> <li>• B.A Dzongkha &amp; English</li> <li>• B.A Economics &amp; Population Studies</li> <li>• B.A Geography &amp; Economics</li> <li>• B.A History &amp; Dzongkha</li> <li>• B.A Media Studies &amp; Dzongkha</li> <li>• B.A Media Studies &amp; English</li> <li>• B.A Political Science &amp; Sociology</li> <li>• B.A Population &amp; Development Studies</li> <li>• B.Sc. Environmental Science</li> <li>• B.Sc. in Chemistry &amp; Mathematics</li> <li>• B.Sc. in Mathematics &amp; Physics</li> <li>• B.Sc. in Physics &amp; Chemistry</li> <li>• B.Sc.Chemistry</li> </ul>

		<ul style="list-style-type: none"> <li>• B.Sc.Computer Science</li> <li>• B.Sc.Life Science</li> <li>• B.Sc.Mathematics</li> <li>• B.Sc.Physics</li> <li>• Postgraduate Diploma In Englis</li> </ul>
10	<b>Yonphula Centenary College</b>	<ul style="list-style-type: none"> <li>• MA in English</li> </ul>

## 2. Khesar Gyalpo University of Medical Science of Bhutan

1	<b>Faculty of Nursing and Public Health (FNPH)</b>	<ul style="list-style-type: none"> <li>• Clinical Couseling</li> <li>• Community Health</li> <li>• Dental Hygiene</li> <li>• Dental Technician</li> <li>• Foundation</li> <li>• Medical Laboratory Technology</li> <li>• Nursing and Mdiwifery</li> <li>• Nursing and Midwifery</li> <li>• Pharmacy</li> <li>• Physiotherapy</li> <li>• Public Health</li> <li>• Radiography and Medical Imaging</li> </ul>
2	<b>Faculty of Postgraduate Medicine (FoPM)</b>	<ul style="list-style-type: none"> <li>• MD Anesthesiology</li> <li>• MD General Practice</li> <li>• Md in Pediatrics</li> <li>• MD in Surgery</li> <li>• MD Medicince</li> <li>• MD Obstetrics and Gynecology</li> <li>• MD Orthopedics</li> <li>• MD Ophthalmology</li> </ul>
3	<b>Faculty of Traditional Medicine (FoTM)</b>	<ul style="list-style-type: none"> <li>• Diploma in Sorig Pharmacy</li> <li>• Diploma in Traditional Medicine</li> <li>• Masters in Traditional Medicine</li> <li>• Bachelors in Traditional Medicine</li> </ul>

## 3. Ministry of Labour and Human Resources

1	<b>Rigney College</b>	<ul style="list-style-type: none"> <li>• BA Language and Literature General</li> </ul>
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### 3. Autonomous Institute

1	<b>Jigme Singye Wangchuck School of Law</b>	<ul style="list-style-type: none"> <li>• LL.B./LL.M.</li> </ul>
2	<b>Royal Institute of Management</b>	<ul style="list-style-type: none"> <li>• Master of Business Administration (MBA)</li> <li>• Post Graduate Diploma in Financial Management (PGDFM)</li> <li>• Post Graduate Diploma in National Law (PGDNL)</li> <li>• Post Graduate Diploma in Public Administration (PGDPA)</li> <li>• Diploma in Financial Management (DFM)</li> <li>• Diploma in Information System (DIMS)</li> <li>• Diploma in National Law (DNL)</li> </ul>

### 4. Private Institutions

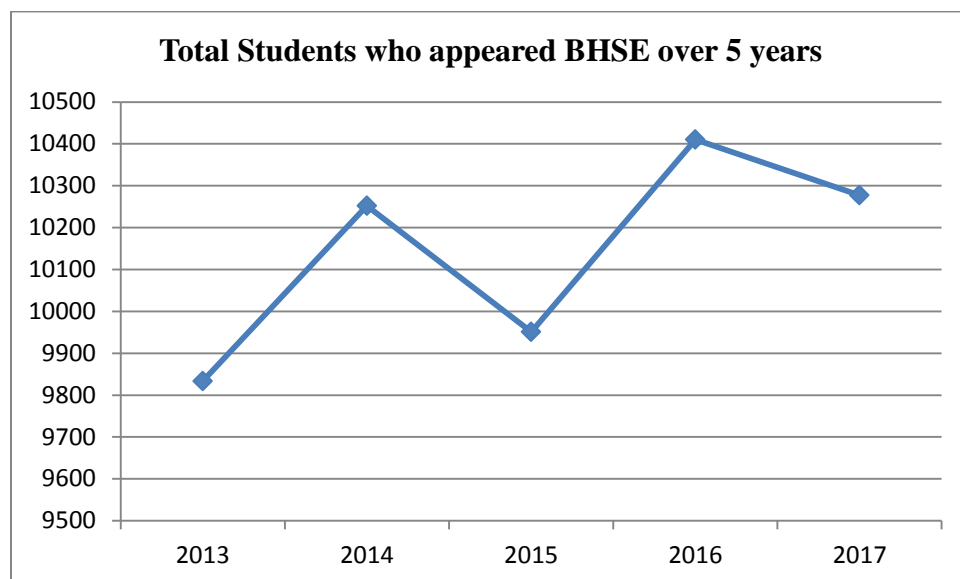
1	<b>Royal Thimphu College</b>	<ul style="list-style-type: none"> <li>• Bachelor of Arts in Development Economics</li> <li>• Bachelor of Arts in English Studies</li> <li>• Bachelor of Science in Environmental Management</li> <li>• Bachelor of Arts in History &amp; Dzongkha</li> <li>• Bachelor of Arts in Political Science &amp; Sociology</li> <li>• Bachelor of Arts in English &amp; Dzongkha</li> <li>• Bachelor of Arts in English &amp; Environmental Studies</li> <li>• Bachelor of Arts in Economics &amp; Environmental Studies</li> <li>• Business Foundation</li> <li>• Bachelor of Commerce</li> <li>• Bachelor of Business Administration</li> <li>• Bachelor of Computer Application</li> </ul>
2	<b>Reldri Academy of Health Sciences</b>	<ul style="list-style-type: none"> <li>• General Nursing and Midwifery</li> </ul>
3	<b>Norbuling Rigter College</b>	<ul style="list-style-type: none"> <li>• B Com</li> <li>• BBA</li> </ul>

(Source: [www.dahe.gov.bt/tess](http://www.dahe.gov.bt/tess), retrieved on 20<sup>th</sup> December 2017)

**Table - 5.3 - Number of students who appeared BHSE**

Year	Male	Female	Total	No. of students passed
2013	5083	4750	9833	-
2014	5300	5952	10252	9163
2015	4979	4972	9951	8855
2016	5162	5248	10410	8830
2017	5247	5030	10145	9280

(Source: BCSEA as of Sept, 2017)



A total of 9833 students appeared Bhutan Higher Secondary Examination (BHSE) in 2013, 10,252 students in 2014 and 9951 students in 2015, 10410 students in 2016 and 10277 students in 2017.

The existing statistics shows that there is a slight decrease in number of students who appeared BHSE in 2017 as compared to 2016. In addition, there was more number of male as compared to female students. The percentage of female was 48.9% in 2017.

**Table: 5.4- Total intake of students in 2017**

<b>Name of colleges</b>	<b>RGOB</b>	<b>Self-funding</b>	<b>Other funding</b>	<b>Total</b>
CLCS	399	27	0	426
CNR	246	57	7	310
CST	225	79	0	304
GCBS	431	183	0	614
GCIT	79	0	0	79
JNEC	383	75	0	458
PCE	216	11	0	227
RC	12	0	0	12
SCE	205	36	0	241
SC	469	79	0	548
YCC	32	0	0	32
FNPH	151	0	0	151
FoPM	11	0	0	11
FoTM	23	2	0	25
RIM	82	80	0	162
JSWSL	25	0	0	25
NRC	0	85	6	91
RAHS	0	14	0	14
RTC	24	301	63	388
<b>Total</b>	<b>3013</b>	<b>1029</b>	<b>76</b>	<b>4118</b>

(Source: [www.dahe.gov.bt/tess](http://www.dahe.gov.bt/tess), retrieved on 20<sup>th</sup> December 2017)

The total intake in 2017 was 4118 of which 1029 were self- financing students studying in various colleges in Bhutan. Gaedu College of Businesses Studies enrolled the highest number of students in 2017 with 614 students which were about 14.91% of the total intake.

**Table 5.5- Total intake capacity at tertiary level with source of funding within and outside Bhutan, 2017.**

SI No	Colleges	RGoB funding			Self-funding			Other funding			Grand total		
		M	F	Total	M	F	Total	M	F	Total	M	F	Total
1	CLCS	613	551	1164	34	64	98	0	0	0	647	615	1262
2	CNR	269	245	514	65	71	136	13	4	17	347	320	667
3	CST	656	189	845	132	83	215	0	0	0	788	272	1060
4	GCBS	577	454	1031	211	184	395	0	0	0	788	638	1426
5	GCIT	39	40	79	0	0	0	0	0	0	39	40	79
6	JNEC	495	239	734	104	51	155	0	0	0	599	290	889
7	PEC	389	473	862	55	52	107	0	0	0	444	525	969
8	SEC	464	491	955	85	119	204	0	0	0	549	610	1159
9	SC	721	671	1392	117	129	246	0	0	0	838	800	1638
10	YCC	21	11	32	0	0	0		0	0	21	11	32
<b>Total</b>		<b>4244</b>	<b>3364</b>	<b>7608</b>	<b>803</b>	<b>753</b>	<b>1556</b>	<b>13</b>	<b>4</b>	<b>17</b>	<b>5060</b>	<b>4121</b>	<b>9181</b>
11	FNPB	192	212	404	9	16	25	0	0	0	201	228	429
12	FoPM	21	9	30	0	0	0	0	0	0	21	9	30
13	FoTM	51	31	82	3	4	7	0	0	0	54	35	89
<b>Total</b>		<b>264</b>	<b>252</b>	<b>516</b>	<b>12</b>	<b>20</b>	<b>32</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>276</b>	<b>272</b>	<b>548</b>
14	RC	6	6	12	0	0	0	0	0	0	6	6	12
15	RIM	48	34	82	46	34	80	0	0	0	94	68	162
16	JSWSL	12	13	25	0	0	0	0		0	12	13	25
<b>Total</b>		<b>60</b>	<b>47</b>	<b>107</b>	<b>46</b>	<b>34</b>	<b>80</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>106</b>	<b>81</b>	<b>187</b>
17	NRC	0	0	0	36	49	85	3	3	6	39	52	91
18	RAHS	0	0	0	17	35	52	0	0	0	17	35	52
19	RTC	30	54	84	444	468	912	79	113	192	553	635	1188
<b>Total</b>		<b>30</b>	<b>54</b>	<b>84</b>	<b>497</b>	<b>552</b>	<b>1049</b>	<b>82</b>	<b>116</b>	<b>198</b>	<b>609</b>	<b>722</b>	<b>1331</b>
<b>Total In-Country</b>		<b>4604</b>	<b>3723</b>	<b>8327</b>	<b>1358</b>	<b>1359</b>	<b>2717</b>	<b>95</b>	<b>120</b>	<b>215</b>	<b>6057</b>	<b>5202</b>	<b>11259</b>
20	Tertiary Students Studying Abroad	701	462	1163	2579	2049	4628	0	0	0	3280	2511	5791
<b>Grand Total</b>		<b>5305</b>	<b>4185</b>	<b>9490</b>	<b>3937</b>	<b>3493</b>	<b>7345</b>	<b>95</b>	<b>120</b>	<b>215</b>	<b>9337</b>	<b>7713</b>	<b>17050</b>

(Source: [www.dahe.gov.bt/tess](http://www.dahe.gov.bt/tess) & SSSD, RCSC, ECPF, BSA & Loden Foundation)

The total number of students in all TEIs in the country for the academic year 2017 was 11,259 (6057 male and 5202 female) and the total number of students within and outside Bhutan was 17050 which include Scholarship and privately funded students (9337 male and 7713 female).

**Table 5.6 – Students Enrolled in STEM subjects within and outside, Bhutan, 2017.**

Field of Study	Male	Female	Total
<b>In-country Students</b>			
Medicine	293	307	600
Biological Science	347	320	667
Engineering	1387	562	1949
Science & Allied Sciences	836	202	1038
<b>Total</b>	<b>2863</b>	<b>1391</b>	<b>4254</b>
<b>Ex Country student (Scholarship &amp; Self- funding)</b>			
Medicine	365	446	811
Biological Science	146	75	221
Engineering	964	362	1326
<b>Total</b>	<b>1475</b>	<b>883</b>	<b>2358</b>
<b>Grand Total</b>	<b>4338</b>	<b>2274</b>	<b>6612</b>

The total number of students enrolled in STEM subjects within country were 4254 (2863 male and 1391 female) while, the total number of students enrolled in STEM subjects within and outside Bhutan were 6612 (4338 male and 2274 female).

**Table 5.7 Key Tertiary Education Indicators, 2017**

Sl.no	Indicators	Male	Female	Total
1	Gross Enrolment Ratio (GER) at tertiary level within Bhutan (19-21 years old) * Denominator used 41669 from Department of Civil Registration and Census. MoHCA	14.54%	12.48%	27.02%
2	Gross Enrolment Ratio (GER) at tertiary level within and outside Bhutan (19-21 years old)	22.41%	18.51%	40.92%
3	Gross Enrolment Ratio (GER) at tertiary level within Bhutan (19-23 years old) *Denominator used 69765 from Department of Civil Registration and Census. MoHCA	8.68%	7.46%	16.14%
4	Gross Enrolment Ratio (GER) at tertiary level within & outside Bhutan (19-23 years old)	13.38%	11.06%	24.44%
5	Percentage of Tertiary Students Studying abroad	29.49%	36.50%	33.96
6	Percentage of Self- funding students within Bhutan	-	-	24.13%

7	Percentage of Self- funding within and outside Bhutan	-	-	43.08%
8	Percentage of Self- funding Students in Public TEIs within Bhutan	-	-	16.82%
8	Gender Parity Index in tertiary education within Bhutan	-	-	0.86
9	Gender Parity Index in tertiary education within and outside Bhutan	-	-	0.83
10	Percentage of students studying in Private TEIs within Bhutan	-	-	11.82%
11	Percentage of students enrolled in STEM programmes within and outside Bhutan	38.53	20.20	58.73%
12	Percentage of female students enrolled in STEM programmes within Bhutan.	-	-	26.74%

**Table 5.8 – Programme level wise statistics at tertiary level within Bhutan, 2017.**

<b>Programme Level</b>	<b>Male</b>	<b>Female</b>	<b>Total</b>
Diploma	857	645	<b>1502</b>
Bachelor	3918	3491	<b>7409</b>
Bachelor Honours	825	784	<b>1609</b>
Post Graduate Certificate	17	13	<b>30</b>
Post Graduate Diploma	235	192	<b>427</b>
Master	184	68	<b>252</b>
Doctorate	21	9	<b>30</b>
<b>Total</b>	<b>6057</b>	<b>5202</b>	<b>11259</b>

(Source: [www.dahe.gov.bt/tess](http://www.dahe.gov.bt/tess), retrieved on 20<sup>th</sup> December 2017)

The number of students pursuing bachelor degree is the highest as of 2017 with 7409 students in the colleges/ institutes in Bhutan followed by students undergoing bachelor degree honours. The number of students pursuing post graduate certificate programme and doctorate are the least with 30 students each.

**Table 5.9 - Tertiary students by year and programme level in country, 2017**

Year	RGoB - funding			Self - funding			Other - funding			Total		
	Male	Female	Total	Male	Female	Total	Male	Female	Total	Male	Female	Total
<b>Bachelor</b>												
Bachelors-1st Year	981	778	1759	404	379	783	34	38	72	1419	1195	2614
Bachelors-2nd Year	662	510	1172	214	278	492	23	35	58	899	823	1722
Bachelors-3rd Year	760	655	1415	276	274	550	34	46	80	1070	975	2045
Bachelors-4th Year	271	256	527	85	81	166	0	0	0	356	337	693
Bachelors-5th Year	132	120	252	42	41	83	0	0	0	174	161	335
<b>Total</b>	<b>2806</b>	<b>2319</b>	<b>5125</b>	<b>1021</b>	<b>1053</b>	<b>2074</b>	<b>91</b>	<b>119</b>	<b>210</b>	<b>3918</b>	<b>3491</b>	<b>7409</b>
<b>Bachelor Honours</b>												
Bachelor Honours-1st Year	261	208	469	39	40	79	0	0	0	300	248	548
Bachelor Honours-2nd Year	242	217	459	46	41	87	0	0	0	288	258	546
Bachelor Honours-3rd Year	189	222	411	32	48	80	0	0	0	221	270	491
Bachelor Honours-4th Year	16	8	24	0	0	0	0	0	0	16	8	24
<b>Total</b>	<b>708</b>	<b>655</b>	<b>1363</b>	<b>117</b>	<b>129</b>	<b>246</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>825</b>	<b>784</b>	<b>1609</b>
<b>Diploma</b>												
Diploma-1st Year	292	235	527	50	35	85	0	0	0	342	270	612
Diploma-2nd Year	322	202	524	64	50	114	0	0	0	386	252	638
Diploma-3rd Year	124	115	239	5	8	13	0	0	0	129	123	252
<b>Total</b>	<b>738</b>	<b>552</b>	<b>1290</b>	<b>119</b>	<b>93</b>	<b>212</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>857</b>	<b>645</b>	<b>1502</b>
<b>Doctorate</b>												
Doctorate-1st year	7	4	11	0	0	0	0	0	0	7	4	11
Doctorate-2nd Year	4	3	7	0	0	0	0	0	0	4	3	7
Doctorate-3rd Year	4	1	5	0	0	0	0	0	0	4	1	5

Doctorate-4th Year	6	1	7	0	0	0	0	0	0	6	1	7
<b>Total</b>	<b>21</b>	<b>9</b>	<b>30</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>21</b>	<b>9</b>	<b>30</b>
<b>Master</b>												
Masters-1st Year	105	45	150	20	10	30	3	1	4	128	56	184
Masters-2nd Year	35	12	47	0	0	0	1	0	1	36	12	48
Masters-3rd Year	20	0	20	0	0	0	0	0	0	20	0	20
<b>Total</b>	<b>160</b>	<b>57</b>	<b>217</b>	<b>20</b>	<b>10</b>	<b>30</b>	<b>4</b>	<b>1</b>	<b>5</b>	<b>184</b>	<b>68</b>	<b>252</b>
<b>Post Graduate Certificate</b>												
Post Graduate Certificate	17	13	30	0	0	0	0	0	0	17	13	30
<b>Post Graduate Diploma</b>												
Post Graduate Diploma	154	118	272	81	74	155	0	0	0	235	192	427
<b>Total</b>	<b>4604</b>	<b>3723</b>	<b>8327</b>	<b>1358</b>	<b>1359</b>	<b>2717</b>	<b>95</b>	<b>120</b>	<b>215</b>	<b>6057</b>	<b>5202</b>	<b>11259</b>

(Source: [www.dahe.gov.bt/tess](http://www.dahe.gov.bt/tess), retrieved on 20<sup>th</sup> December 2017)

**Table. 5.10- Tertiary students by field of study and gender in country, 2017**

Field of study	Male	Female	Total
Engineering	1387	562	1949
Management	67	42	109
Business and Commerce	1125	990	2115
Education	993	1135	2128
Arts	1317	1420	2737
Law	39	39	78
Science and Allied Sciences	836	707	1543
Medicines	75	44	119
Nursing	81	121	202
Public Health	22	32	54
Allied Health Professional	115	110	225
<b>Total</b>	<b>6057</b>	<b>5202</b>	<b>11259</b>

(Source: [www.dahe.gov.bt/tess](http://www.dahe.gov.bt/tess), retrieved on 20<sup>th</sup> December 2017)

It is seen that the maximum number of students are enrolled in Arts with 2737 students and the least number is in public health with 54 students. The table 5.10 shows the students availing tertiary education by the field of study within the country.



### Tertiary students on scholarship abroad

Every year, the RGoB provides Scholarships for class XII graduates to study various academic degrees abroad. Due to limited slots, the selection of the students is done on academic merit basis. Several other funding agencies like the Government of India also provide undergraduate scholarships. The table below shows the number of undergraduate students on scholarships abroad.

**Table. 5.11 - Tertiary students currently studying in various countries on scholarship coordinated by DAHE, 2017**

Sl. No	Funding Agency/Programme	Australia	Bangladesh	Canada	Cuba	India	Korea	Malaysia	Sri Lanka	Thailand	Bhutan	United Kingdom	USA	Maldives	Total
1	GOI					378									378
2	RGoB	17	2	2	0	3		25	94	18		4	9		174
3	APEMS		28			1			66						95
4	In - Country RTC										85				85
5	Queen's Endowment for Cultural Studies					50									50
	<b>Grand Total</b>	<b>17</b>	<b>30</b>	<b>2</b>	<b>0</b>	<b>432</b>	<b>0</b>	<b>25</b>	<b>160</b>	<b>18</b>	<b>85</b>	<b>4</b>	<b>9</b>	<b>0</b>	<b>782</b>
<b>Bilateral Scholarships</b>															
6	ICCR					75									75
1	Fulbright												1		1
2	Cuban Govt.				12										12
3	SAARC CHAIR					4								1	5
4	Korean Govt						3								3
5	Presidential Scholarships, Sri Lanka								4						4
6	AYUSH Scholarship									4					4
7	Khon Kaen Scholarship									5					5
	<b>Total</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>12</b>	<b>79</b>	<b>3</b>	<b>0</b>	<b>4</b>	<b>9</b>	<b>0</b>	<b>0</b>	<b>1</b>	<b>1</b>	<b>109</b>
	<b>Grand Total</b>	<b>17</b>	<b>30</b>	<b>2</b>	<b>12</b>	<b>511</b>	<b>3</b>	<b>25</b>	<b>164</b>	<b>27</b>	<b>85</b>	<b>4</b>	<b>10</b>	<b>1</b>	<b>891</b>

(Source: SSSD, DAHE, as of December, 2017)

As of 2017, there were 891 undergraduate students pursuing various courses in different countries under RGoB and other presidential scholarship. This also includes those undergraduate students with partial scholarships known as Assistance to Privately Enrolled Medical Students (APEMS) scholarships. As presented in the above tables, majority of these students are pursuing their studies in India.

**Table. 5.12 Tertiary students currently studying in various countries on scholarship coordinated by RCSC, 2017**

Sl.no	Country	Gender		Total
		Male	Female	
1	Australia	32	26	58
2	Austria	3	1	4
3	India	56	15	71
4	Indonesia	1	0	1
5	Italy	0	1	1
6	Japan	8	7	15
7	Korea	0	2	2
8	Mongalia	1	0	1
9	Netherland	4	1	5
10	New Zealand	0	2	2
11	Singapore	2	0	2
12	Sweden	1	0	1
13	Switzerland	1	0	1
14	Thailand	65	25	90
15	United Kingdom	1	1	2
16	USA	6	2	8
17	Bangladesh	1	0	1
18	France	1	1	2
19	Germany	2	1	3
20	Hong Kong	1	0	1
21	Hungary	1	0	1
	<b>Total</b>	<b>187</b>	<b>85</b>	<b>272</b>

*(Source: RCSC, as of December, 2017)*

For the Tertiary postgraduate level RCSC coordinates in providing various Scholarship programmes, currently RCSC has 272 post graduate students pursuing tertiary education abroad. The table 5.12 shows the tertiary students currently studying in various countries on scholarship coordinated by RCSC, 2017

**Table. 5.13 - Scholarship Students by field of study and gender, 2017**

<b>Field of Study</b>	<b>Male</b>	<b>Female</b>	<b>Total</b>
Medicine	185	156	341
Biological Sciences	126	56	182
Engineering	188	65	253
Education and Academics	76	85	161
Arts and Humanities	125	101	226
<b>Total</b>	<b>700</b>	<b>463</b>	<b>1163</b>

(Source: SSSD, DAHE, and RCSC as of December, 2017)

The scholarship students studying abroad were highest in engineering with 253 students and least in education and Academics with 161 students. The table 5.13 show the scholarship students by field of study and gender 2017.

**Table. 5.14- Tertiary students currently studying in various countries on self - funding, 2017**

<b>Sl.no</b>	<b>Country</b>	<b>Gender</b>		<b>Total</b>
		<b>Male</b>	<b>Female</b>	
1	Australia	332	291	623
2	Austria	0	1	1
3	India	2040	1504	3544
4	Malaysia	28	19	47
5	New Zealand	0	1	1
6	Singapore	2	3	5
7	Sri lanka	7	12	19
8	Switzerland	1	1	2
9	Thailand	115	132	247
10	USA	15	17	32
11	Bangladesh	37	64	101
12	Canada	2	4	6
	<b>Total</b>	<b>2579</b>	<b>2049</b>	<b>4628</b>

(Source: SSSD, ECPF, BSA & Loden Foundation as of December, 2017)

A significant number of students also study abroad through self-funding. The private student numbers are based on the data captured by DAHE using online registration system, data collected from ECPF, BSA and Loden Foundation. As of 2017, there were 4628 students pursuing various degree courses through private funding with majority of them in India as shown above. However, it is believed that number of tertiary students studying abroad on their own should be more than what was been captured by DAHE.

**Table 5.15- Privately funded students by field of study and gender, 2017**

SL #	Category Wise	Male	Female	Total
1	Medicine & Paramedics	180	294	474
2	Biological Sciences	20	19	39
3	Engineering	776	297	1073
4	Education and Academics	1023	833	1856
5	Arts & Humanities	580	606	1186
	<b>Total</b>	<b>2579</b>	<b>2049</b>	<b>4628</b>

(Source: SSSD, ECPF and Loden Foundation as of December, 2017)

The table 5.15 shows the number of students availing tertiary education through self-funding by the field of study aboard. The number of students enrolled in Education and Academics was the highest with 1856 and biological science being the least with 39 students.

**Table 5.16 - Tuition Fees structure at RUB, KGUMSB, RTC, NRC and RAHS per year**

University /College	Programme	2014	2015	2016	2017	% of increase
RUB	Arts & Humanities	64,154/-	69710/-	68344/-	68344/-	0.3 – 9%
	Science	79520/-	86360/-	84668/-	84668/-	
RTC	All Courses	109000/-	1144000/-	119400/-	122900/-	
FNPB (KGUMSB)	All Courses				93000/-	
FTM (KGUMSB)	Bachelors				108000/-	
	Masters				180000/-	
RAHS	Diploma				75,000/-	
NRC	Bachelors				83,000/-	

(Source: [www.dahe.gov.bt/tess](http://www.dahe.gov.bt/tess), retrieved on 20<sup>th</sup> December 2017)

The students who wish to study as self- financing students in various colleges in Bhutan need to pay tuition fees. The Public colleges provide accommodation to the self -financing students but the students of Private Colleges need to arrange accommodation of their own. The fees structure for the four consecutive years in various colleges is shown in the table 5.16. The percentage of variation in fees over the years is from 0.3-9%.

**Table. 5.17 The total number of students enrolled under student loan scheme**

Sl.No	Colleges	2014		Sub-Total	2015		Sub-Total	2016		Sub-Total	2017		Sub-Total	G Total		Overall Total
		M	F		M	F		M	F		M	F		M	F	
1	CNR	0	0	0	3	2	5	5	4	9	2	9	11	10	15	25
2	CST	3	1	4	6	1	7	9	0	9	5	4	9	23	6	29
3	GCBS	4	2	6	12	11	23	22	6	28	10	8	18	48	27	75
4	CLCS	0	3	3	5	5	10	4	2	6	1	3	4	10	13	23
5	PCE	0	2	2	4	0	4	0	2	2	2	3	5	6	7	13
6	SCE	0	2	2	3	2	5	1	3	4	1	0	1	5	7	12
7	SC	6	2	8	8	11	19	8	9	17	5	7	12	27	29	56
8	RTC	5	11	16	28	32	60	8	14	22	15	18	33	56	75	131
9	JNEC	0	0	0	0	0	0	7	1	8	9	7	16	16	8	24
10	FNPB	0	0	0	0		0	1	3	4				1	3	4
11	FTM	0	0	0			0	0	1	1				0	1	1
12	RAHS	0	0	0	0	0	0	6	7	13	1	1	2	7	8	15
13	India	4	2	6	7	7	14	0	0	0	0	0	0	11	9	20
<b>Total</b>		<b>22</b>	<b>25</b>	<b>47</b>	<b>76</b>	<b>71</b>	<b>147</b>	<b>71</b>	<b>52</b>	<b>123</b>	<b>51</b>	<b>60</b>	<b>111</b>	<b>220</b>	<b>208</b>	<b>428</b>

(Source: HEPD, DAHE as of 20<sup>th</sup> December 2017)

The student loan scheme for tertiary education was started in the year 2014. Since its inception students enrolled under tertiary education has increased. A total of 462 students were selected under student loan scheme for tertiary education until 2017. However, only 428 tertiary students' actually availed loan with maximum students studying in RTC. Out of 428 students 22 students successfully completed their studies in July 2017.

The table 5.17 shows the year and college wise students enrolled under loan scheme for tertiary education as of 2017.

## 6. Status of accreditation of Tertiary Education Institutions

As per the Tertiary Education Policy of the Kingdom of Bhutan 2010, the Bhutan Accreditation Council was constituted through the Executive Order on 14 June 2011. The Council is the national autonomous body on accreditation, quality assurance and interpreting and recognizing qualifications. The Quality Assurance and Accreditation Division, Department of Adult and Higher Education, Ministry of Education, serves as the Secretariat to the Council. Till date it has developed three documents in house, namely Accreditation Principles, Accreditation Manual and Bhutan Qualifications Framework (BQF).

Accreditation is one of the most important tools used globally for quality assurance. There are two types of accreditation; institutional accreditation and programme accreditation. The Council started with institutional accreditation, and depending on the need it may initiate programme accreditation in future, as deemed appropriate. Accreditation aims to assure educational quality and accountability, and encourages quality enhancement. It entails a continuous process to help Tertiary Education Institutions (TEIs) analyze its functions, mission, assess its own performance, review its planning procedure and identify ways to enhance its educational effectiveness. Accreditation is mandatory for all the TEIs in Bhutan.

Accreditation is based on the following six core standards:

1. Curricular Elements
2. Research, Innovative practices & Institutional linkages
3. Governance, Leadership and Management
4. Infrastructure & Learning resources
5. Student support
6. Internal QA and Enhancement system

**Table. 6.1 Accreditation Status of Tertiary Education Institutions**

Sl No.	Institution	Grade	Descriptor	Date of Accreditation
1	Gaedu College of Business Studies	A	Very Good	May, 2016
2	Royal Thimphu College	A+	Excellent	June, 2016
3	Samtse College of Education	A	Very Good	May, 2017
4	Paro College of Education	B	Good	May, 2017
5	Faculty of Traditional Medicine	B	Good	June, 2017
6	Faculty of Nursing and Public Health	B	Good	June, 2017
7	College of Science and Technology	A	Very Good	November, 2017
8	Jigme Namgyel Engineering College	A	Very Good	November, 2017
9	Sherubtse College	A	Very Good	November, 2017

*(Source: Quality Assurance and Accreditation Division)*

Bhutan Accreditation Council accredited 9 tertiary education institutes as of December 2017. Besides, the above council has also accredited Reldri Academy of Health Sciences (RAHS) from in April, 2016 and issued the provisional certificate accreditation.

The accreditation for College of Natural Resources (CNR), RUB, College of Language & Cultural Studies (CLCS) and Royal Institute of Management (RIM) is scheduled to be completed by the end of financial year 2017-2018.

## 7. Labour market and employment rate:

The labour force survey 2016 has estimated the population at 774367 with 3676519 males and 397848 female. The percentage of female constitutes 51.37%. As of 2016, there were 347130 persons employed and 7521 unemployed. Out of this employed persons there are about 190,818 (55.0%) males and 156311 (45%) female. The unemployment rate has decreased to 2.1 % in 2016 from 2.6 % in 2015. However, the youth unemployment has increased to 13.2% from 10.7% in 2015. The table 5.16 sows the unemployment rates of youths over few years

**Table. 7.1 Gender wise unemployment rate from 2011 to 2016**

As per the National Human Resource Development Advisory 2014 record, a total of approximately 2800 to 4000 graduates were expected to enter the labour market in the 11 FYP periods. 65 % being those graduating the RUB, KGUMSB colleges/ institutes and DAHE scholarship and 35% being those who are privately funded. The following table shows the youth unemployment rates by completed education over few years.

Year	Male	Female	Total
2010	7.1	11	9.2
2011	6.8	10.9	9.2
2012	7.3	7.2	7.3
2013	9.2	9.9	9.6
2014	8.6	10	9.4
2015	8.2	12.7	10.7
2016	16.4	11	13.2

*(Source: Labour Force survey -Annual Report 2016)*

**Table 7.2 Youth unemployment rate by completed education and gender, 2016**

Completed Education	Gender		Total
	Male	Female	
No education	0.0	1.5	1.1
Primary and Lower Education	3.6	2.3	3.0
Middle and Higher Education	26.7	16.6	21.3
Bachelor's degree	64.8	68.1	67.2
Master's Degree and above	0.0	0.0	0.0

*(Source: Labour Force Survey – Annual Report 2016)*

Table 7.2 shows that youth unemployment rate is highest for both male and female with Bachelor's Degree qualification followed by students with middle and higher education level (labour Force Survey-Annual Report, 2016).

## 8. TVET Institutions

Technical and Vocational Education and Training (TVET) institutions offering technical training programme is the responsibility of the Ministry of Labour and Human Resources (MoLHR). As of 2017, there were 8 TVET institutions (6 Technical Training Institutes and 2 Institutes of Zorig Chusum) with 1411 students (936 males and 475 females).

The following table shows the programme offered by TVET institutions.

**Table 8.1- Programme offered by TVET Institutions.**

SI No	Name	Course
1	TTI, Ranjung, Trashugang	<ul style="list-style-type: none"> <li>• Electrical</li> <li>• Computer Hardware</li> <li>• Furniture Making</li> <li>• Automobile</li> </ul>
2	TTI, Samthang, Wangduephodrang	<ul style="list-style-type: none"> <li>• Auto Mechanic</li> <li>• Heavy Vehical Driving</li> <li>• Earth Moving Operator</li> </ul>
3	TTI, Thimphu	<ul style="list-style-type: none"> <li>• Automobile</li> </ul>
4	TTI, Dekiling, Sarpang	<ul style="list-style-type: none"> <li>• Carpentry</li> <li>• Masonry</li> <li>• Plumbing</li> <li>• Mechanical</li> </ul>
5	TTI, Khuruthang, Punakha	<ul style="list-style-type: none"> <li>• Electrical</li> <li>• Mechanical</li> <li>• Mechanical Furniture</li> <li>• Mechanical Welder</li> </ul>
6	TTI, Chumey, Bumthang	<ul style="list-style-type: none"> <li>• Carpentry</li> <li>• Masonry</li> <li>• Plumbing</li> <li>• Welding</li> </ul>
7	Institute of Zorig Chusum, Thimphu	<ul style="list-style-type: none"> <li>• Tshemdrup (Emdroidery)</li> <li>• Jimzo (Sculptor)</li> <li>• Tsemzo (Tailoring)</li> <li>• Lhadri (Painting)</li> <li>• Troezo (G/Silver Smith)</li> <li>• Thagzo</li> <li>• Patra (Wood Carving)</li> <li>• Chagzp</li> </ul>
8	Institute of Zorig Chusum, Trashiyangtse	<ul style="list-style-type: none"> <li>• Lhadri (Painting)</li> <li>• Jimzo (Sculptor)</li> <li>• Troezo (G/Silver Smith)</li> <li>• Tsemzo (Tailoring)</li> <li>• Tshemdrup (Emdroidery)</li> <li>• Shagzo/Saezo (Wood Turning)</li> <li>• Patra (Wood Carving)</li> <li>• Baab Zo (Mask Carving)</li> <li>• Machine Embroidery</li> <li>• Dralham making (Traditional Bookmaking)</li> </ul>



The table below shows the number of trainees in various TVET institutions in 2016. The number of female trainees was found to be almost half the number of male trainees. The percentage of male was 66.34 %.

**Table 8.2 – TVET trainees by Institutions and gender.**

<b>SI No</b>	<b>Name of TVETs</b>	<b>Male</b>	<b>Female</b>	<b>Total</b>
1	TTI - Ranjung, Trashigang	111	63	174
2	TTI - Samthang, Wangdue	107	22	129
3	TTI - Thimphu, Thimthrom	63	10	73
4	TTI - Dekiling, Sarpang	49	7	56
5	TTI - Khuruthang, Punakha	144	82	226
6	TTI - Chumey, Bumthang	104	73	177
7	Instituides of Zorig Chusum, Tashuyangtse	93	71	164
8	Instituides of Zorig Chusum, Thimthrom	212	96	308
<b>Tourism Council of Bhutan</b>				
9	Royal Institute of Tourism and Hospitality	53	51	104
	<b>Total</b>	<b>936</b>	<b>475</b>	<b>1411</b>

## References:

1. *Tertiary Education Policy of Bhutan*, 2010. Ministry of Education. Thimphu
2. LABOUR FORCE SURVEY REPORT (2016). Ministry of Labour and Human Resources.
3. *Bhutan Living Standard Survey 2007 Report*. National Statistics Bureau, Royal Government of Bhutan.
4. Thinley, K. A Country Report: HIGHER EDUCATION IN THE KINGDOM OF BHUTAN -*Cherishing Dreams and Confronting Challenges*.
5. Barber, M., Donnelly, K, and Rizvi, S (2013). *AN AVALANCHE IS COMING- HIGHER EDUCATION AND THE REVOLUTION AHEAD*. 2013
6. *National Human Resource Development Advisory, 2014- A focus on graduates and labour market dynamics*. Ministry of Labour and Human Resources
7. Royal Government of Bhutan, *Bhutan at a Glance 2014*. National Statistics Bureau
8. Royal Government of Bhutan, **State of TSA- WA- SUM**, fifth session of the second parliament of Bhutan, June 2015.
9. Annual Education Statistics, 2017. Ministry of Education. Thimphu