ANNEX J HIGHER EDUCATION AND PHILIPPINE SOCIAL STATISTICS

Education is one pathway to get out of poverty. Getting an education means employment opportunities will be high. The data in this section shows the poverty situation in the country, the level of employment/unemployment and the status of higher education that supplies the manpower for industry and other sectoral employment.

From 2012 to 2019, GDP rate of increase (in constant 2018 prices) was constant at about 6%, but this suffered a negative growth in 2019 to 2020, of -9.6 (Figure 1). This is directly related to the lockdowns due to COVID-19. During the same period, poverty incidence was seen to decline (Figure 2). Average poverty incidence rate during 2006- 2018 ranged from 3.7% in NCR to 54.3% in the BARMM (Figure 4). Next to NCR, the two regions with the lowest average poverty incidence for the same period are the Region 4- A and Region 3. These are the highly urbanized regions. These data tend to show that highly urbanized regions have lower poverty incidence that may be due to the employment opportunities in these areas.

Employment rate in the country from 2013 to 2019 have been respectable at higher than 90%. However, this dipped to below the 90% level in 2020 (Figure 5), which again could be due to the COVID-19. Average employment rate of change during the period 2013-2016 and 2017-2019, showed a positive 1.16%, which means an increasing rate. However, the only regions with the positive rate of change (greater than 1) in average employment are those urban and urbanizing types. These are Regions NCR, 3, 4-A, 11, 10 and 13 (Table 6). These regions have major cities such including Davao City, Cagayan de Oro City and Butuan City. Seemingly, employment opportunities are located more in urban setting.

Based on CHED record, during AY 2017 to 2018, total college graduates is 751, 310, of which 59% are women. Available data at CHED also showed that in the same AY 2017-2018, 274, 499 (or 36%) graduated with Science Technology, Agriculture and Math (STEAM) degrees (Table 7). Recent data also show that 24% of the college graduates are unemployed¹.

¹ https://newsinfo.inquirer.net/1377399/batch-2020-how-filipino-college-graduates-job-hunted-through-the-pandemic#:~:text=3.,are%20junior%20high%20school%20graduates.

| TABLE 1.RATE OF | INCREASE IN GDP | |
|-----------------|-------------------|----------------------------|
| YEAR | AT CURRENT PRICES | AT CONSTANT 2018 PRICES |
| 2012-2013 | 9 | 6.8 |
| 2013-2014 | 9.6 | 6.3 |
| 2014-2015 | 5.6 | 6.3 |
| 2015-2016 | 8.5 | 7.1 |
| 2016-2017 | 9.4 | 6.9 |
| 2017-2018 | 10.3 | 6.3 |
| 2018-2019 | 6.9 | 6.1 |
| 2019-2020 | -8.1 | -9.6 |



Figure 1. Gross Domestic Product of the Philippines
Source: Philippine Statistics Authority

| TABLE 2. POVERTY INCIDENCE TRENDS | | | | | | | |
|-----------------------------------|------|--|--|--|--|--|--|
| YEAR POVERTY INCIDENCE | | | | | | | |
| 2006 | 26.6 | | | | | | |
| 2009 | 26.3 | | | | | | |
| 2012 | 25.2 | | | | | | |
| 2015 | 23.5 | | | | | | |
| 2018 | 16.7 | | | | | | |

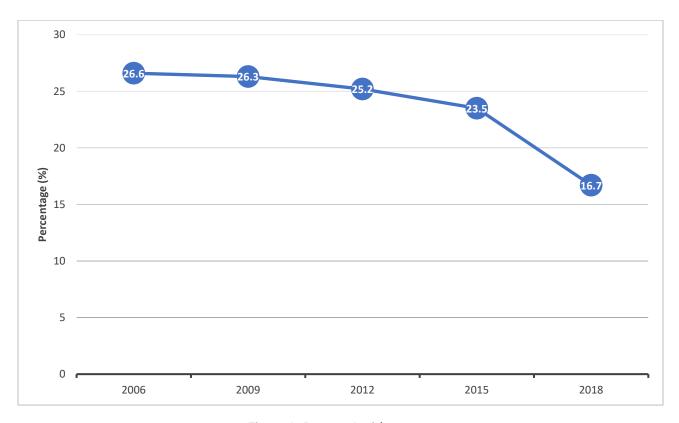


Figure 2. Poverty Incidence Source: Philippine Statistics Authority

| TABLE 3. POVERTY INCI | DENCE RATE B | Y REGION 200 | 6- 2018 | | |
|-----------------------|--------------|--------------|---------|------|------|
| Region | 2006 | 2009 | 2012 | 2015 | 2018 |
| PHILIPPINES | 26.6 | 26.3 | 25.2 | 23.5 | 16.7 |
| NCR | 4.7 | 3.6 | 3.9 | 4.1 | 2.2 |
| CAR | 26.0 | 25.1 | 22.8 | 22.7 | 12.0 |
| Region I | 25.9 | 22.0 | 18.5 | 18.8 | 9.9 |
| Region II | 26.8 | 25.5 | 22.1 | 17.8 | 16.3 |
| Region III | 13.1 | 13.7 | 12.9 | 10.5 | 7.0 |
| Region IV-A | 10.3 | 11.9 | 10.9 | 12.5 | 7.1 |
| Region IV-B | 40.6 | 34.5 | 31.0 | 25.2 | 15.1 |
| Region V | 44.2 | 44.2 | 41.1 | 39.8 | 27.0 |
| Region VI | 29.1 | 30.8 | 29.1 | 24.6 | 16.3 |
| Region VII | 35.9 | 31.0 | 30.2 | 29.4 | 17.7 |
| Region VIII | 41.5 | 42.6 | 45.2 | 41.3 | 30.7 |
| Region IX | 45.0 | 45.8 | 40.1 | 37.7 | 32.7 |
| Region X | 39.0 | 40.1 | 39.5 | 38.7 | 23.1 |
| Region XI | 30.6 | 31.4 | 30.7 | 23.5 | 19.1 |
| Region XII | 37.9 | 38.3 | 44.7 | 38.1 | 28.2 |
| CARAGA | 49.2 | 54.4 | 40.3 | 39.7 | 30.5 |
| BARMM | 47.1 | 47.4 | 55.8 | 59.4 | 61.8 |

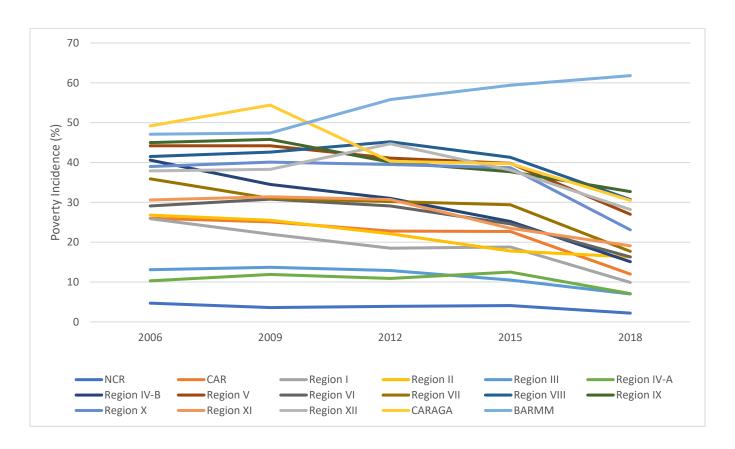


Figure 3. Poverty Incidence Rate, By Region based on 2006, 2009, 2015, 2015 and 2018 Family Income and Expenditure Survey (FIES)

Source: Philippine Statistics Authority

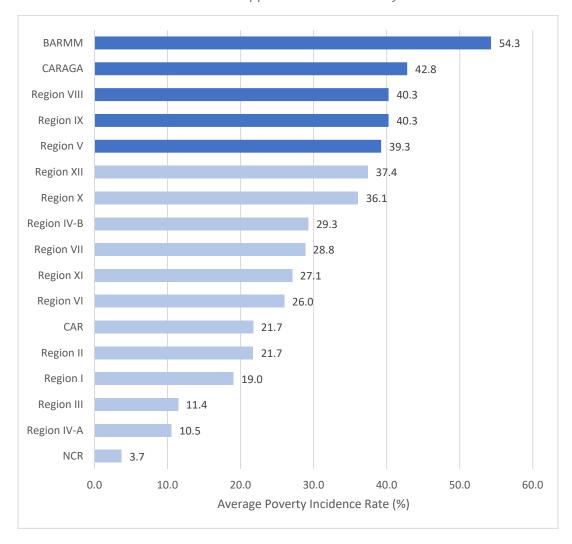


Figure 4. Average Poverty Incidence Rate, By Region based on 2006, 2009, 2015, 2015 and 2018 Family
Income and Expenditure Survey (FIES)

Source: Philippine Statistics Authority

| TABLE 4. EMPLOYMENT RATE | | |
|--------------------------|-----------------|------|
| YEAR | EMPLOYMENT RATE | |
| 2013 | | 92.8 |
| 2014 | | 93.2 |
| 2015 | | 93.7 |
| 2016 | | 94.5 |
| 2017 | | 94.3 |
| 2018 | | 94.7 |
| 2019 | | 94.9 |
| 2020 | | 89.7 |

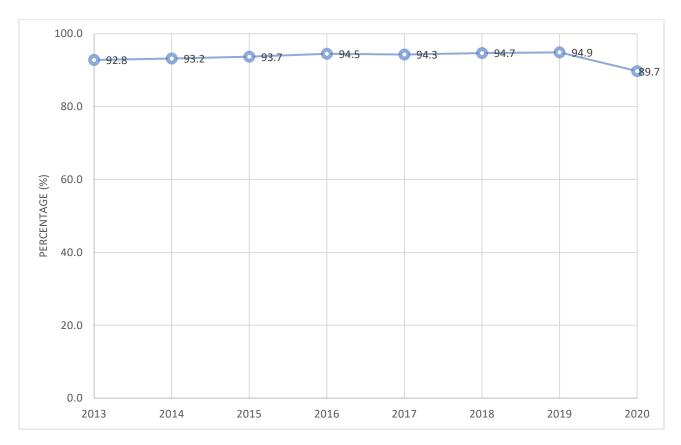


Figure 5. Employment rate of the Philippines from 2013-2020 Source: Philippine Statistics Authority

| TABLE 5. EMPLOYMENT RATE BY RE | | 2014 | 2015 | 2016 | 2017 | 2010 | 2010 | 2020 |
|--|------|------|------|------|------|------|------|------|
| REGION | 2013 | 2014 | 2015 | 2016 | 2017 | 2018 | 2019 | 2020 |
| Philippines | 92.8 | 93.2 | 93.7 | 94.5 | 94.3 | 94.7 | 94.9 | 89.7 |
| National Capital Region (NCR) | 89.7 | 89.6 | 91.5 | 93.4 | 92.6 | 93.4 | 94.0 | 88.3 |
| Cordillera Administrative Region (CAR) | 95.4 | 94.5 | 95.2 | 95.5 | 95.7 | 95.9 | 96.5 | 89.6 |
| Region I (Ilocos Region) | 91.7 | 91.6 | 91.6 | 93.7 | 91.1 | 93.2 | 94.7 | 86.6 |
| Region II (Cagayan Valley) | 96.8 | 96.3 | 96.8 | 96.9 | 96.8 | 97.0 | 96.4 | 91.3 |
| Region III (Central Luzon) | 91.3 | 91.7 | 92.2 | 93.4 | 93.4 | 94.2 | 94.9 | 86.9 |
| Region IV-A (CALABARZON) | 90.8 | 91.8 | 92 | 92.8 | 93.0 | 93.4 | 93.8 | 88.4 |
| MIMAROPA Region | 95.9 | 95.4 | 96.7 | 95.9 | 95.2 | 95.3 | 95.7 | 92.7 |
| Region V (Bicol Region) | 93.5 | 93.8 | 94.4 | 95.3 | 95.4 | 95.1 | 94.9 | 90.5 |
| Region VI (Western Visayas) | 93.1 | 94 | 94.6 | 95.1 | 94.6 | 94.7 | 95.3 | 92.2 |
| Region VII (Central Visayas) | 93.7 | 94 | 94.1 | 95.0 | 95.5 | 94.7 | 94.8 | 89.7 |
| Region VIII (Eastern Visayas) | | | 94.6 | 95.5 | 95.6 | 95.8 | 95.6 | 92.0 |
| Region IX (Zamboanga Peninsula) | 96.6 | 96.3 | 96.5 | 96.1 | 96.0 | 95.9 | 96.3 | 90.1 |
| Region X (Northern Mindanao) | 94.3 | 94.2 | 94.4 | 94.7 | 94.7 | 95.9 | 95.6 | 93.6 |
| Region XI (Davao Region) | 93.1 | 94.2 | 94.2 | 95.5 | 95.1 | 95.7 | 96.2 | 90.8 |
| Region XII (SOCCSKSARGEN) | 95.6 | 96.4 | 96.5 | 95.8 | 96.0 | 96.1 | 95.6 | 90.9 |
| Region XIII (Caraga) | 94 | 94.2 | 94.3 | 94.9 | 94.9 | 96.0 | 95.2 | 92.4 |
| Bangsamoro Autonomous Region in Muslim Mindanao (BARMM) | 95.4 | 96.5 | 96.5 | 96.2 | 96.6 | 96.3 | 93.7 | 91.0 |

| TABLE 6. AVERAGE EMPLOYMENT RATE BY REGION (20 | 013-2016, AND 201 | 7-2019) | |
|--|-------------------|-----------|---------|
| Region | 2013-2016 | 2017-2019 | Percent |
| | | | Change |
| Philippines | 93.55 | 94.63 | 1.16 |
| National Capital Region (NCR) | 91.05 | 93.33 | 2.51 |
| Cordillera Administrative Region (CAR) | 95.15 | 96.03 | 0.93 |
| Region I (Ilocos Region) | 92.15 | 93.00 | 0.92 |
| Region II (Cagayan Valley) | 96.70 | 96.73 | 0.03 |
| Region III (Central Luzon) | 92.15 | 94.17 | 2.19 |
| Region IV-A (CALABARZON) | 91.85 | 93.40 | 1.69 |
| MIMAROPA Region | 95.98 | 95.40 | -0.60 |
| Region V (Bicol Region) | 94.25 | 95.13 | 0.94 |
| Region VI (Western Visayas) | 94.20 | 94.87 | 0.71 |
| Region VII (Central Visayas) | 94.20 | 95.00 | 0.85 |
| Region VIII (Eastern Visayas) | 95.05 | 95.67 | 0.65 |
| Region IX (Zamboanga Peninsula) | 96.38 | 96.07 | -0.32 |
| Region X (Northern Mindanao) | 94.40 | 95.40 | 1.06 |
| Region XI (Davao Region) | 94.25 | 95.67 | 1.50 |

| Region XII (SOCCSKSARGEN) | 96.08 | 95.90 | -0.18 |
|---|-------|-------|-------|
| Region XIII (Caraga) | 94.35 | 95.37 | 1.08 |
| Bangsamoro Autonomous Region in Muslim Mindanao | 96.15 | 95.53 | -0.64 |
| (BARMM) | | | |

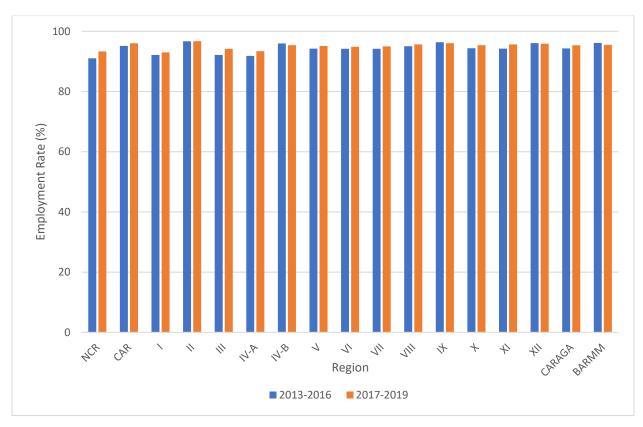


Figure 6. Employment rate of the Philippines by Region Source: Philippine Statistics Authority

| TABLE 7. NUMBER OF GRADUATES IN STEAM BY DISCIPLINE AND INSTITUTION TYPE: AY 2017-18 | | | | | | | | |
|--|---------|--------|-----|---------|----------------|--|--|--|
| DISCIPLINE | SUCS | LCUS | OGS | PRIVATE | GRAND TOTAL | | | |
| Science | 15,550 | 1,989 | 341 | 45,425 | 63,305 | | | |
| Technology | 67,002 | 6,965 | 115 | 55,590 | 129,672 | | | |
| Engineering | 25,192 | 858 | - | 25,135 | 51,185 | | | |
| Agriculture | 25,688 | 349 | 183 | 641 | 26,861 | | | |
| Mathematics | 2,916 | 211 | - | 319 | 3,446 | | | |
| Grand Total | 136,348 | 10,372 | 639 | 127,110 | 274,469 | | | |

SUC- State universities and colleges; LCUs= Local Colleges and Universities; OGS= other government schools

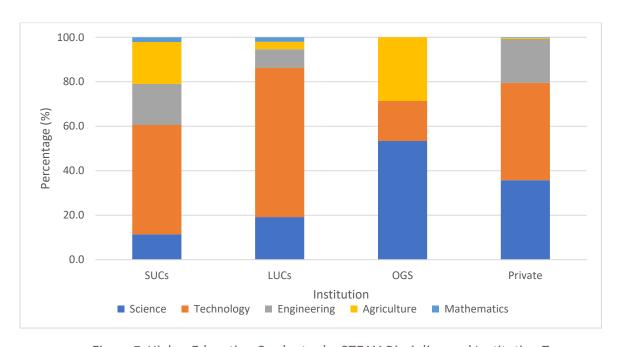


Figure 7. Higher Education Graduates by STEAM Discipline and Institution Type Source: Commission on Higher Education

| TABLE & BODIN ATION BY DESIGN | |
|---|----------------|
| TABLE 8. POPULATION BY REGION | |
| REGION | POPULATION |
| Cordillera Administrative Region (CAR) | 1,797,660.00 |
| Region I (Ilocos Region) | 5,301,139.00 |
| Region II (Cagayan Valley) | 3,685,744.00 |
| Region III (Central Luzon) | 12,422,172.00 |
| National Capital Region (NCR) | 13,484,462.00 |
| Region IV-A (CALABARZON) | 16,195,042.00 |
| Region IV-B (MIMAROPA) | 3,228,558.00 |
| Region V (Bicol Region) | 6,082,165.00 |
| Region VI (Western Visayas) | 7,954,723.00 |
| Region VII (Central Visayas) | 8,081,988.00 |
| Region VIII (Eastern Visayas) | 4,547,150.00 |
| Region IX (Zamboanga Peninsula) | 3,875,576.00 |
| Region X (Northern Mindanao) | 5,022,768.00 |
| Region XI (Davao Region) | 5,243,536.00 |
| Region XII (SOCCSKSARGEN) | 4,901,486.00 |
| Bangsamoro Autonomous Region in Muslim Mindanao (BARMM) | 4,404,288.00 |
| Region XIII (Caraga) | 2,804,788.00 |
| PHILIPPINES | 109,033,245.00 |

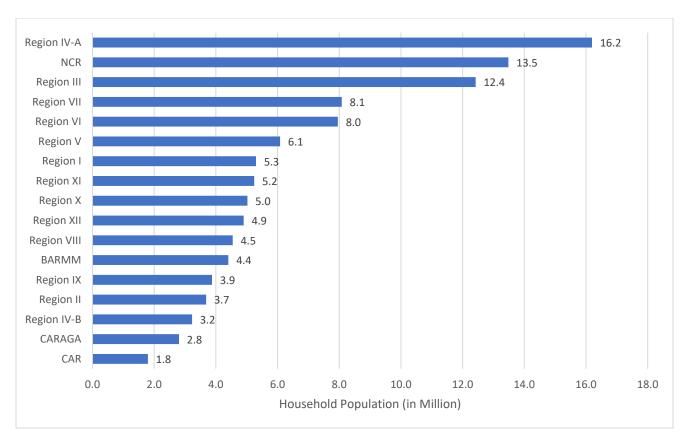


Figure 8. Population of the Philippines by Region: 2020 Source: Philippine Statistics Authority

| TABLE 9. POPULA | ATION GROWTH RATE, 20 | 000-2020 | |
|-----------------|-----------------------|-----------|-----------|
| REGION | 2000-2010 | 2010-2015 | 2015-2020 |
| | | | |
| NCR | 1.78 | 1.58 | 0.97 |
| CAR | 1.70 | 1.21 | 0.91 |
| I | 1.23 | 1.09 | 1.13 |
| II | 1.39 | 1.27 | 1.39 |
| III | 2.14 | 1.95 | 2.17 |
| IV-A | 3.07 | 2.58 | 2.48 |
| IV-B | 1.79 | 1.47 | 1.82 |
| V | 1.46 | 1.29 | 1.02 |
| VI | 1.35 | 1.13 | 1.14 |
| VII | 1.77 | 1.61 | 1.88 |
| VIII | 1.28 | 1.52 | 0.50 |
| IX | 1.87 | 1.21 | 1.39 |
| Χ | 2.06 | 1.68 | 1.46 |
| XI | 1.97 | 1.74 | 1.46 |
| XII | 2.46 | 1.94 | 1.60 |
| CARAGA | 1.49 | 1.28 | 1.63 |
| BARMM | 1.51 | 2.89 | 3.26 |

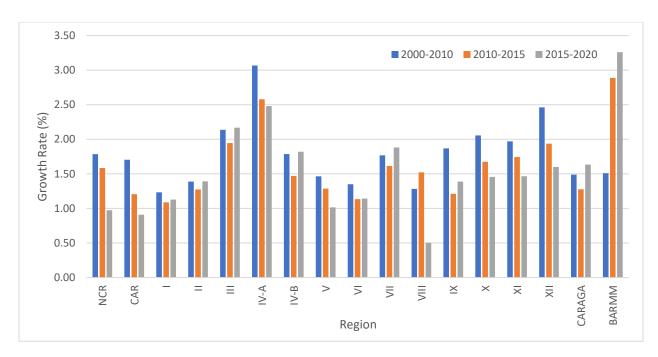


Figure 9. Population growth rate of the Philippines by Region based on the 2000, 2010, 2015 and 2020 censuses

Source: Philippine Statistics Authority

| Region | State l | Jniversities | | Other | Gov't HI | Els | Gov't Total | Gov't | Priv | ate | Private | Total | Total |
|---|---------|-------------------|------|-------|----------|----------------|---|---------|------------|-------------------|---------|------------------------------------|------------------------------------|
| | | Colleges SUCs) | | | | | (Excluding Total Satellite (Including Campus) Satellite | | (Including | | Total | (Excluding Satellite Campus) | (Including Satellite Campus) |
| | Main | Satellite* | LUCs | CSI | OGS | Special HEI | Campus) | Campus) | Sectarian | Non- Sectarian | | Campus) | Campus) |
| Cordillera Administrative Region (CAR) | 6 | 14 | | | | 1 | 7 | 21 | 6 | 27 | 33 | 40 | 54 |
| Region I (Ilocos Region) | 6 | 21 | 4 | | | | 10 | 31 | 15 | 66 | 81 | 91 | 112 |
| Region II (Cagayan Valley) | 5 | 20 | | | | | 5 | 25 | 11 | 37 | 48 | 53 | 73 |
| Region III (Central Luzon) | 12 | 39 | 14 | | | | 26 | 65 | 26 | 149 | 175 | 201 | 240 |
| National Capital Region (NCR) | 8 | 8 | 16 | | | 4 | 28 | 36 | 64 | 244 | 308 | 336 | 344 |
| Region IV-A (CALABARZON) | 5 | 56 | 16 | | | 1 | 22 | 78 | 54 | 211 | 265 | 287 | 343 |
| Region IV-B (MIMAROPA) | 6 | 43 | 2 | | | | 8 | 51 | 8 | 31 | 39 | 47 | 90 |
| Region V (Bicol Region) | 9 | 24 | 23 | | | | 32 | 56 | 13 | 101 | 114 | 146 | 170 |
| Region VI (Western Visayas) | 11 | 54 | 10 | | 1 | | 22 | 76 | 28 | 52 | 80 | 102 | 156 |
| Region VII (Central Visayas) | 5 | 23 | 10 | | | | 15 | 38 | 29 | 98 | 127 | 142 | 165 |
| Region VIII (Eastern Visayas) | 10 | 27 | 3 | | | | 13 | 40 | 16 | 33 | 49 | 62 | 89 |
| Region IX (Zamboanga Peninsula) | 6 | 22 | 1 | | | | 7 | 29 | 14 | 42 | 56 | 63 | 85 |
| Region X (Northern Mindanao) | 5 | 25 | 12 | | | | 17 | 42 | 18 | 48 | 66 | 83 | 108 |
| Region XI (Davao Region) | 6 | 9 | 6 | | | | 12 | 21 | 22 | 59 | 81 | 93 | 102 |
| Region XII (SOCCSKSARGEN) | 3 | 11 | 2 | | | | 5 | 16 | 12 | 70 | 82 | 87 | 98 |
| Bangsamoro Autonomous Region in Muslim Mindanao (BARMM) | 5 | 14 | 1 | 6 | | | 12 | 26 | 10 | 75 | 85 | 97 | 111 |
| Region XIII (Caraga) | 4 | 11 | 1 | | | | 5 | 16 | 10 | 30 | 40 | 45 | 56 |
| Total | 112 | 421 | 121 | 6 | 1 | 6 | 246 | 667 | 356 | 1,373 | 1,729 | 1,975 | 2,396 |

Source: CHED

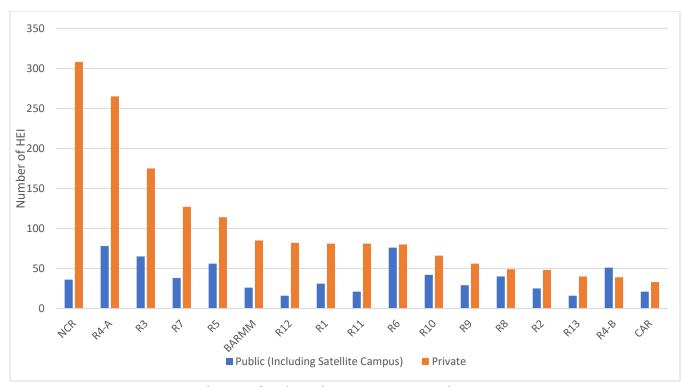


Figure 10. Distribution of Higher Education Institutions by Region: AY 2019-20 SOURCE: Commission on Higher Education

| TABLE 11.CLASSIFICATION OF STUDENT POPULATION OF THE SAMPLED HEIS BY PUBLIC AND PRIVATE, LARGE AND SMALL | | | | | | |
|--|--------|---------|-------|--|--|--|
| CLASSIFICATION | PUBLIC | PRIVATE | TOTAL | | | |
| Large (more than 10k students) | 4 | 2 | 6 | | | |
| Small (less than 10k students) | 2 | 3 | 5 | | | |
| Total | 6 | 5 | 11 | | | |

| TABLE 12. STUDENT POPULATION IN SAMPLED UNIVERSITY | | | |
|--|---------|--------------------------------------|--------------------|
| SAMPLED UNIVERSITY | TYPE | SIZE (SMALL < 10K; LARGE >10K) | NO. OF STUDENTS |
| University of the Philippines Los Baños | Public | Large | 14160 (a) |
| Batangas State University | Public | Large | 27246 |
| Cebu Institute of Technology | Private | Small | 8064 |
| University of San Carlos | Private | Large | 12496 |
| UP Cebu | Public | Small | 1611 (a) |
| Mindanao State University-Iligan Institute of Technology | Public | Large | 10274 |
| University of Science and Technology of Southern Philippines | Public | Small | 9965 |
| Xavier University | Private | Small | 6120 |
| Technological Institute of the Philippines | Private | Small | 6209 |
| University of the Philippines Diliman | Public | Large | 26453 |
| De la Salle University | Private | Large | 15899 |

Source: CHED AY 2017-2018; a= 2013 figure