

## **Higher Education Against the Spread In The Region Of North Sumatera**

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**Abstract**—Distribution of education is very important; in accordance to the opening 1945 constitution about to educate nation's life. North Sumatera is one of the largest provinces in Indonesia, which has about 13 million inhabitants' with distribution of 33 regencies and municipalities with an area of approximately 73,000 km<sup>2</sup>. Seeing a large area and its distribution, the higher education needs to get to all corners of the areas, especially in northern Sumatera for this study takes the object of the distribution of higher education in North Sumatera. Due to the number of high school graduates, each year increased, and in 2014, according to statistics of high school graduates numbered stated there have been more than 116,000. We need to know that college capacity will not be able to meet all the graduates, so the research result states that students are accepted into one of the universities where the implementation of this research turned out to spread throughout 33 countries and municipalities in North Sumatera. This study also discusses about the percentage of students accepted each area in North Sumatera, so that each region.

Keywords: *education, higher education, north sumatera, students*

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### **INTRODUCTION**

A resident of North Sumatera, according to census data is about 13 million. North Sumatera Province is one of the largest province in Indonesia, has an approximately 73,000km<sup>2</sup> area, having 33 cities and regencies. For elementary school level to high school level of education may have been reached in 33 cities and regencies in North Sumatera Province, and for 2014 the number of graduates of high school (SHS) is equivalent of 116,000 students.

A higher education bachelor level public university in North Sumatera is as few as eight institutions of higher education. As for the eight state institutions including University of Sumatera Utara, State University of Medan, North Sumatera Islamic Institute, Christian Religion Tarutung Colleges and others. This can be seen in Figure 1 below.

The statement above clearly illustrates the regencies and cities are not entirely untouched by higher education. Given the

higher education is crucial to the development of human resources. According to previous studies which concluded that the development of regional education can be developed through one of them to create a higher education in the area [1]. Another study states that in order to improve the education sector management jobs should be held between higher education institutions and the business community, which can be achieved through the introduction of information analysis [2]. The study shows that higher education institutions are very influential in regional communities in the region, including the business world. Another study discusses about the importance of higher education is on the importance of higher education for sustainable development, this study took a study case in Russia [3]. And research shows that the effect of population density is positive if the average educational

attainment is high (above Junior High School), while it is negative otherwise [4]. Meanwhile here to discuss about other educational levels even higher, which is above SHS. Another study discusses about the importance of education to spread to the area because education is an investment in the area [5].

Higher education is not just a problem in Indonesia, other countries also face similar problems to those in Indonesia. Research in other countries such as Turkey mentions that higher education is very important for working, because higher education is a gateway to the next life [6].

The government policy is important for the spread of education evenly in the area, the research related to this can be seen in the study case in Brazil and Portugal in which the strategic environmental assessment is based on the higher education, assessment instruments

in the curriculum could have significant implications for a higher increase educational practices for sustainable development, by promoting a better assessment and management strategies, policies, legislation, plans and programs and decision-making processes involved [7]. Modern education at this time can also be done through Information and Communication Technology [8].

Research above declares very clearly that higher education is essential to the progress of a region; mapping education should also be made to create policies that support the quality of education in each - each region.

These studies are different from others where the study before never mapping the spread of origin area that entered into public universities in Indonesia, especially North Sumatera Province.

Table source obtained from DIKTI Forlap

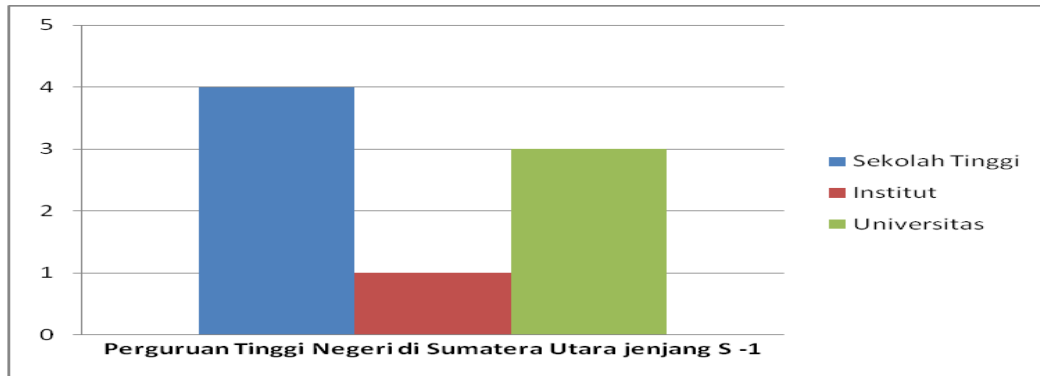


Figure 1. List of Bachelor Stage Universities in North Sumatera

### METHOD

The method used in this research Information System Management based method, the data retrieved from the State University becomes the object and partly data captured data from the Ministry of Research, Technology and Higher Education of the Republic of Indonesia.

Management information system here is the recruitment process supporting data when the students get into college and filled in their personal data in accordance with the request

from the college. Figure 2 shows the process or Standard Operating Procedures on how to fill out a student biographical data.

As for the data taken from the Ministry of Research, Technology and Higher Education in the form of the spread of the region at the time the student received, the data is sourced from SNMPTN, SBMPTN and Independent Examination.

The retrieved data then being processed and analyzed, after the data processing is the data performed in a comparative study which later became the results in this study.

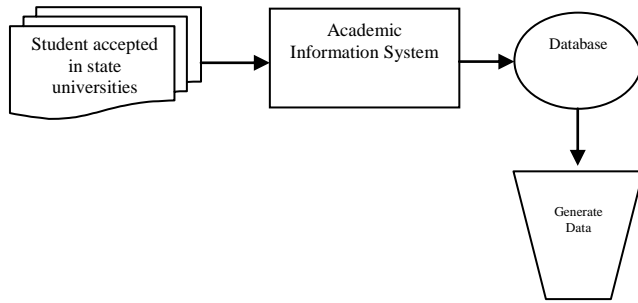


Figure 2. Students Biodata Filling Process

I. RESULTS AND DISCUSSIONS

After processing the data using statistical methods, the recapitulation of the number of students accepted to the bachelor level in the past 3 years has been recorded. The recapitulation can be seen in Table 1:

Table 1. Recapitulation of Students accepted into One State University in Past 3 Years

No	Regency/City	total	2016	2015	2014
1	Nias Regency	93	31	26	36
2	Tapanuli Selatan Reg.	308	85	122	101
3	Tapanuli Tengah Reg.	421	127	125	169
4	Tapanuli Utara Reg.	407	135	114	158
5	Labuhan Batu Reg.	673	208	234	231
6	Asahan Reg.	692	199	261	232

Table 1, cont.

7	Simalungun Reg.	496	146	159	191
8	Dairi Reg.	335	113	108	114
9	Karo Reg.	483	176	156	151
10	Deli Serdang Reg.	1455	428	450	577
11	Langkat Reg.	604	146	218	240
12	Toba Samosir Reg.	365	121	117	127
13	Mandailing Natal Reg.	277	110	93	74
14	Sibolga City	277	95	97	85
15	Tanjung Balai City	189	42	87	60
16	P.Siantar City	1065	330	314	421
17	Tebingtinggi City	380	115	114	151
18	Medan City	8710	2669	2930	3111
19	Binjai City	637	223	190	224
20	P.Sidempuan City	550	174	194	182
21	Batubara Reg.	155	80	51	24
22	Humbang Hasundutan Reg.	206	72	59	75
23	Labuhanbatu Selatan Reg.	43	15	12	16
24	Labuhanbatu Utara Reg.	70	19	16	35
25	Nias Barat Reg.	2	1	1	0
26	Nias Selatan Reg.	11	5	4	2
27	Nias Utara Reg.	8	4	4	0
28	Padang Lawas Reg.	35	17	9	9
29	Padang Lawas Utara Reg.	8	2	2	4
30	Pakpak Bharat Reg.	30	10	8	12
31	Samosir Reg.	56	19	20	17
32	Serdang Bedagai Reg.	127	31	49	47
33	G. Sitoli City	54	18	23	13

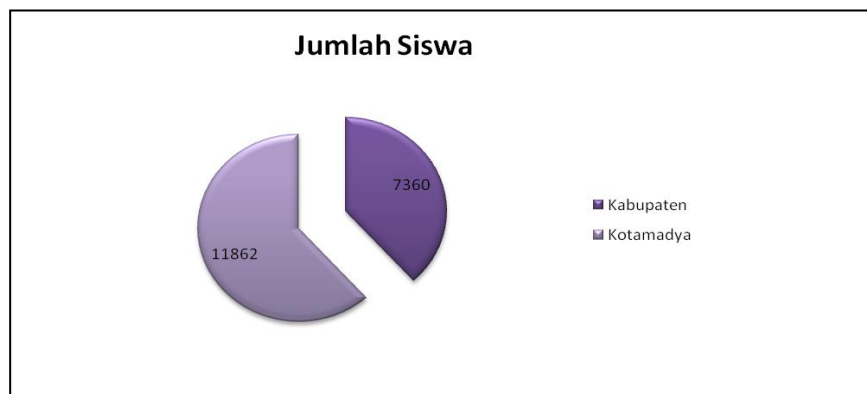


Figure 3. Comparison Summary of the Regency and City

Table 1 show that the distribution area in North Sumatra for higher education has spread, but on the table, it can be seen that there are few isolated areas that get into state universities. As

in the West Nias (Nias Barat), North Nias (Nias Utara) and Padang Lawas Utara Regency that consist of a very small number. Padang Utara

totally received is 8 people, 2 people of West Nias and North Nias 8 people.

Through Table 1 above it can be seen that higher education is mostly filled from large cities such as Medan, Siantar and Binjai.

Through Figure 3 can be seen below the level of the comparison between regencies and cities in the province of North Sumatra.

From the Figure 3 above we can see the number of comparisons between the 8 cities and 25 regencies in North Sumatera. From figure above is clearly seen that higher education still belongs to big cities in North Sumatera. Through this research is expected to be the basic for the regency in formulating policies related to education in North Sumatera.

### CONCLUSIONS

It was concluded that the spread of education, especially in the region of North Sumatra still belongs to the big city. Regencies that have the highest number of students accepted is Deli Serdang. Through this study are expected for the government to formulate policies in each area to be followed, especially for higher education.

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