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A STUDY OF THE QUALITY OF HUMAN CAPITAL FROM ENROLLMENT RATIO AND LITERACY RATE ASPECTS IN WEST NUSA TENGGARA AREA

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ABSTRACT

This study aimed to explain the quality of human resources in West Nusa Tenggara or Nusa Tenggara Barat (NTB) from the aspects of the Enrollment Ratio (ER) and Literacy Rate (LR). The data used in this study were secondary data on population education data. This study was a descriptive research with Enrollment Ratio (ER) and Literacy Rate (LR) analysis. Generally, the ER condition showed that the majority of the population was still attending primary education. The highest net enrollment rate was at the primary school level, while the lowest net enrollment rate is at the senior high school level. The average duration of study was still a problem for education in NTB. During the analysis period, the condition of LR in NTB was still not encouraging because it was only 7.91%, still far from the maximum target set by UNDP of 15 years. In conclusion, the quality of human resources in NTB in the education sector is still low.

KEY WORDS

Quality of human capital, enrollment ratio, literacy rate.

Humans with quality cognitive, affective, psychomotor, emotional and human spirit are the principal capital in the modern civilization. There is historical evidence that a country which is barely supported by sufficient natural resources can still exist, even be able to become "the king of nations" at the international level such as Japan, Singapore, South Korea. This is possible because these countries have truly qualified human capital so that they can compete in quality. Logically, countries that have a wealth of natural resources and human resources (human capital) will find it easier to achieve the desired progress in the development process. On the other hand, non-human resources and abundant wealth will not mean much if it is not managed correctly by human resources. Therefore, reliable human resources are essentials as a driver of development.

Education is one way to create reliable and resilient human capital. Education is one of the most strategic vehicles for increasing knowledge and technology in various fields. Also, it can equalize the nation's ability to the advances in science and technology that have been achieved by developed countries (Ismail, 2001).

Quality humans are the essential capital in the current economic order. Even, in the world of subsistence life, if farmers can cultivate their land correctly and in traditional ways, every inch of land will produce a better product than processed careless (Danim, 2004).

Population education level is an essential aspect of human resource development. From a macro and micro perspective (at the individual/household level), education plays a vital role in economic development. At the macro level, education is seen as the main element in creating the quality of human capital, whose role in economic development is felt to be getting bigger. At the micro-level, the role of education in improving welfare is beyond doubt. The estimation results of the income function always show a significant role in the education variable. Thus, there is no doubt that the improvement of education is one (if not the primary) method for vertical mobility towards a better life. More specifically, education is believed to be a way out of the cycle of poverty. Poverty is one of the factors that hinder the development of human capital because it causes a person to be unable to meet adequate basic needs. Therefore, the quality of nutrition and health becomes low and the work productivity is low.

A human capital desired for the future is the high-quality one, not only strong in a physical sense, let alone only highlighting the grandeur of history and puffing out the chest because of the abundant natural resources. The abundant natural resources will be swallowed up by human greedy behaviour. On the other hand, quality human capital will create efforts to meet the need for goods.

Human resources capital is defined as human resources who have specific professional capabilities and technical skills. The presence of professionals in all lines of work will bring many benefits. Personal qualities that have economic value can be developed through education and training. Accordingly, education and training are the primary sources of skill formation that can be learned or trained, from orientation to high economic value.

The manpower theory assumes that the workforce is a capital holder, as reflected in one's skills, knowledge, and productivity. If manpower is the capital holder, they can invest for themselves optimally and for their own interests without any element of exploitation from non-human capital owners. If exploitation occurs, this theory assumes that human resources are considered as nothing more than a means of production of wealth, ownership, production processes, or other people's products. Thus, their potential benefits have been transferred to the owners of the capital. The average length of study is still a problem for education in NTB. However, the provincial government of NTB said that the average length of study could not be an indicator of performance in the shortest time. The average length of study in NTB had not yet reached the Medium-Term Development Plan target. Data from the NTBE and Culture Office revealed that in 2016, the Provincial Government was targeting an average length of study of 7.4 years. It was only 6.79 years just realized (Suara NTB, 2018).

The low average number of study duration in NTB was due to the large number of people over the age of 25 who only attend primary school. Based on the survey, many of the population over the age of 25 have never attended school. "This is due to a large number of people did not continue their education, moreover many of them never went to school. This is one of the problems and challenges that affect the Human Development Index (HDI) in NTB. Moreover, the average duration of study is one of the essential dimensions of the three dimensions forming the human development index.

NTB Provincial Government is gradually providing educational assistance for needy students who are still actively studying. This assistance is given directly to schools at all levels according to the quota and sharing prepared by each district/city (Provincial Government of NTB, 2009). The low HDI in NTB is partly due to the low level of public education. Therefore, to further study and provide a clearer illustration of the quality of human capital as an indicator of NTB's HDI from the educational aspect, the researcher will analyze it by using the indicators of measurement of population education analysis. Those two indicators are Enrollment Ratio and Literacy Rate, which is an indicator of the quality of human capital (Hasan, 1996), commonly used by the World Bank and the National Development Planning Body. HDI is an important indicator to determine the success building the quality of human life/communities/population, published regularly by Central Bureau of Statistics (BPS), and HDI is an indicator of the impact of the previous 5-10 years program.

Based on the description on this background, the formulated problem is "How is the condition of the quality of human capital in NTB with the ER and LC indicators in NTB Province in 2007/2008". The purpose of this paper was to describe the condition of the quality of human capital in NTB for the 2018/2019 period.

This research aimed to explain/describe the objective conditions of the quality of human capital in NTB for the 2018/2019 period based on the educational aspect from the ER and LR indicators. It is intended to use as a reference for policymakers/determinants at the level of the NTB provincial government to improve the quality of human capital in the future to produce faithful and competitive human resource.

LITERATURE REVIEW

The synergy between material capital and non-material capital will manifest the quality of human capital. Indeed, in general, ordinary people are not used to mentioning the

knowledge, understanding, abilities, skills acquired as assets. The development of knowledge over time enriches the quality of human capital. Economists and entrepreneurs agree that the quality of human capital is a prerequisite for added value (Danim, 2004)

Rechery (1968) argues that education is related to the broad function of maintaining and improving the life of a society. Education is an activity or a necessary social process that enables the younger generation to live in social complexity and economic modernization. Brubacher (1969) says that education is a process to develop necessary human potentials related to moral, intellectual, and physical aspects to achieve life goals within the framework of a social system. Meanwhile, Noor Syam (1981) defines education as a human activity and effort to improve his/her personality by fostering the personal potential, spiritual (thought, intention, taste, creativity, conscience) and physical (senses and skills) (Danim, 2004).

According to William B. Wenther and Keith Davis, human resources are citizens who are ready, willing and able to contribute to the achievement of organizational goals. In Population science, this concept can be aligned with the concept of manpower which includes the workforce and not workforce (Ndraha, 1999). Human Capital theory assumes that the workforce is the capital holder, as reflected in one's skills, knowledge, and work productivity. If the workforce is the capital holder, they can invest for themselves optimally and for their own interests without any element of exploitation from the capital owner.

Human Capital theory is a school of thought which considers that human resources are capital goods that can determine efforts to achieve benefits and productivity as well as other forms such as technology, machinery, land, money, etc. The broad concept of HR causes the analysis of the concept of HR not only to be viewed from one scientific discipline but an issue that must be explored from various social and relevant disciplines. From its broad scope, HR development is carried out through various efforts, including through school education (Suryadi, 1997). Until now, school education is considered as the main element in HR development. The type of education itself consists of general education and vocational education, which have different implications for human resource development.

Adam Smith (1776) says that although not systematically bringing new theories and concepts in the discipline of economics, it is a must to provide continuous confidence to all parties that HR is an important factor, as important as the factors of capital and means of production, to increase productivity (Balitbang Dikbud, 1997). In the 18th century, Smith had begun to think that the skills of the workforce/HR were the dominant force for industrial progress. In his definition of fixed capital, Smith includes the elements of HR. According to Smith, human capital consists of the abilities and skills acquired by all members of society. The acquisition of abilities and skills can be made through education, self-study, and learning while working.

Simanjuntak (1982) said that human resource development, on the one hand, is intended to improve social skills or work abilities in carrying out various kinds of activities in society. On the other hand, human resource development is closely related to efforts to improve living standards. What often emphasized is the first aspect, assuming the second aspect will fulfil itself if the first has been done.

Von Thunen (1875) believes that the level of service from humans is the most important part of national assets. Therefore, obtaining higher education, as a proxy for increased abilities and skills, coupled with better forms of physical capital, will make a person earn a higher income than those with less education or no education at all. This opinion is in line with the human capital theory, which has the basic assumption that a person can increase his income through increasing education. Therefore, in order to improve welfare, increasing education is critical in order to improve the quality of human capital (Tjiptoheriyanto et al., 1982).

Through education, the attitudes and values of human resources are instilled and developed systematically and programmatically so that through specific processes, human resources will have a higher value, whether viewed economically, socio-culture, national personality, or values that are more meaningful for national development. Recovery in the educational process is more concerned on the quality aspect, by realizing that teachers are a key factor affecting the quality of graduates (Suryadi, 1998).

Several research results have proven that the higher the educational background, the higher the person's abilities and skills to contribute to the welfare of himself or the people of his nation. Productivity itself is a concept influenced by various values, both existing in humans (insight, behaviour, skills, and expertise) and derived from cultural values such as work ethic. Work ethic is the value of human resources that comes from a cultural value system (Kuntjaraningrat, 1985).

John Kedrick's study shows that during 1919 - 1957, the national income of the United States increased by 3.25% a year, while capital and labour increased by only 1.1% a year. Therefore, the remaining, namely an increase in national income of 2.1% a year, was the result of work productivity increase as a result of improvement in management and technology, nutrition and health, and the quality of labour increase in terms of education. Likewise, the results of the study by Edward F. Denison pointed out that the increase in the national income of the United States from 1929 to 1957 was a contribution from improving the quality of labour mainly due to education development (Tjiptoherjanto, 1982).

The research results of Hasan et al. (1996) showed that the EA rate, for the three provinces as well as for the national level, was still dominant in the condition of not completing primary school. Based on the ER indicator, the percentage of the population who are still in school is mostly in the 7-12 year age group or at the primary school level, both for the three provinces and in national scale. Meanwhile, a study on LR in South Sulawesi showed that the figure had increased from 1990 (77.8%) to 81.49% in 1994.

METHODS OF RESEARCH

This research was conducted in NTB Province with a purposive location selection. The study was descriptive research intended to describe several variables relating to the problem and the unit under study without questioning the relationship among variables (Faisal, 1995). The sample were all students at school age and the population at school age, the number of people aged ten years above who can read and write, and the population aged ten years above. In this study, the type of data used for quantitative analysis was entirely secondary data in the form of raw data sourced from population data, educational data, and other supporting data. This data was obtained from the BPS NTB and related agencies. To answer the problems posed, the collected data that is analyzed using the ER and LR (Hasan, 1996).

The formula to see/find out the conditions of ER:

- a. Pure ER (Pure Enrollment Rate) is the ratio between the number of students at school age and the number of people at the same age.

$$ER(i) = \frac{\text{Number of children (i) who are currently attending school} \times 100}{\text{Number of children aged (i)}}$$

- b. Gross ER (Gross Enrollment Rate) is the ratio between the number of students and the population of school-age according to their education level:

$$ER(\text{gross}) = \frac{\text{Total Students} \times 100}{\text{Population aged (i)}}$$

Where: (i) = certain age group or education level.

The formula to determine the condition of the population from the aspect of literacy (illiteracy) with LR indicator is:

$$LR = \frac{\text{number of population } 10^+ \text{ that can read/write} \times 100}{\text{Total Population } 10^+}$$

RESULTS AND DISCUSSION

Enrollment Ratio is also known as school enrollment ratio or "School Participation Rate". This method measures the proportion of school-age children who have been

registered (temporarily in school) according to the level of islamic/primary school (SD/MI), islamic/junior high school (SMP/MTs), and islamic/senior/vocational high school.

The first step to calculate ER was to collect data on the total number of children aged 7-12 years, 13-15 years, and 16-18 years. Then, it collected data about each age group. The results of calculations can be seen in tables.

In analyzing the enrollment ratio (school enrollment ratio) or the school enrollment rate, it used two kinds of calculations, namely calculating the net enrollment rate and the gross enrollment rate. The net enrollment rate is the ratio between the number of students at school age and the population at the same age. Meanwhile, the gross enrollment rate is the ratio between the number of students and the population of school age according to their level of education. These two indicators were used to see how far the carrying capacity of each level of education is.

Based on the results of the calculation, it could be explained that in a "pure" level of education, the ER of the 7-12 year age group showed that the school participation rate was 97.66%. It meant that out of one hundred population, those attending the school were 98 people (rounded), meaning that there are still 2 (two) people who did not go to school.

In the group of children aged 13-15-year-old with SMP/MTs education level, among 100 people, 80 were temporarily attending school, while the remaining were not.

In the group of children aged 16-18-year old with SMA/MA/AMK education level, of the 100 school-age population, only 49 are currently attending school, while more than 50% were not.

The results of the gross ER calculation revealed that those attending primary school education had a relatively high ER, reaching more than 100% (110.08%). It meant that the number of children attending primary school level in the 2017/2018 school year was more than those who should have occupied that education. The excess of around 10.08% was caused by the presence of people who were still under seven years old (underage) and above twelve years old who were still attending primary school.

The gross enrollment rate for the 13-15 year age group at the junior high school was 97.82%, meaning that there were 98 out of 100 people who were attending school.

The age group of 16-18 years with the education level of SMA/MA/SMK was the age group with the lowest percentage of the population attending school. Of the 100 residents who should go to school, only 59 were enjoying it.

From the calculation of the ER, it could be seen that the level of education of SMA/MA/SMK was the level of education where the enrollment rate is still low (around 50%). This means that it was still half of the amount that should be achieved to make the quality of human capital in NTB better.

These figures indicate that the quality of human capital in NTB was still low until the study period. The ER, which is closer to 100, means the better the quality of the population as human capital. In the future, the 12-year compulsory education program must pay more attention to access to services for the primary education level in question.

The development of the ER in NTB had an increase in the school participation rate of NTB residents from year to year for each level of education, meaning that NTB people's access to education services has increased. However, it has not significantly improved the quality of human capital in NTB. We still have to work even harder to get to a highly competitive society in the national and international arena.

Literacy Rate

Apart from the problem of the level of school participation and the status of education completed, what really needs to pay attention is the problem of literacy eradication. Reading and writing skills are a basic need for now. Without literacy and writing skills, it is tough to keep up with the developments that are currently so fast in the era of globalization and the era of sophisticated technology in the millennial era. What is being eradicated is no longer just illiteracy, but is already at the stage of "technology illiteracy". For this reason, we must hurry to spur ourselves and the environment, as well as the nation's community, to be literate so as not to get further and left behind from other regions.

The problem of illiteracy is still a significant homework in NTB. This is because the percentage of illiteracy in NTB is far above the national average. Based on BPS data, according to the national socio-economic survey in March 2018, the Illiteracy Rate in NTB reached 12.58%. Meanwhile, the illiteracy rate at the national level is only 1.93%.

The illiteracy rate in five districts is still above 11%. Five districts with high illiteracy rates were Central Lombok 18.58%, West Lombok 16.28%, North Lombok 16.09%, East Lombok 13.31%, and Bima 11.6%. Then, five other districts/cities had the percentage of bellow 8%. They were Sumbawa by 6.04%, Dompu by 7.86%, West Sumbawa by 4.97%, Mataram City by 5.96%, and Bima City by 7.17%.

Based on gender, the illiteracy rate was highest in women at 16.58%. Meanwhile, for men it was only 8.14%. The highest female illiteracy rate was in Central Lombok by 23.52%, West Lombok by 22.02%, North Lombok by 21.32%, East Lombok by 16.92%, Bima by 15.56%, Dompu by 10.33%, Bima City by 9.28% percent, Mataram City by 8.76%, Sumbawa and West Sumbawa by 8.04% and 6.12% respectively. Meanwhile, the most illiterate males in Central Lombok were 12.73%, followed by North Lombok by 10.46%, West Lombok by 10.07%, East Lombok by 8.84%, Bima by 7.5%, Dompu by 5.39%, Bima City by 4.92%, Sumbawa by 4.11%, West Sumbawa by 3.84%, and Mataram City by 3.03%.

The illiteracy rate for those aged 15-59 years in NTB provinces was still relatively high, even above the national figure. NTB Province is in second place out of 11 provinces with the highest illiteracy rate. Provinces that have illiteracy rates above the national rate were Papua (28.75%), NTB (7.91%), NTT (5.15%), West Sulawesi (4.58%), West Kalimantan (4.50%), South Sulawesi (4.49%), Bali (3.57%), East Java (3.47%), North Kalimantan (2.90%), Southeast Sulawesi (2.74%), and Central Java (2.20%).

Meanwhile, 23 other provinces are already below the national figure. When viewed from gender differences, it appears that women have a greater illiteracy rate than men, namely 1,157,703 men and 2,258,990 women.

From the total number of illiterate people in NTB, if we look at the distribution per District and City, it appears that the illiteracy rate in the districts/cities in Lombok island is much higher than the districts/cities in Sumbawa Island. The districts of West Sumbawa, Bima, Bima City, and Dompu District were recorded as the districts/cities that were most successful in eliminating illiteracy. This fact is quite ironic, considering that in terms of education accessibility, including the existence and participation and contribution of educational institutions (such as Islamic boarding schools), Lombok island has far more resonance than in Sumbawa island.

If viewed from the components of the average length of study, NTB is still classified as low in Indonesia (National). BPS NTB data in 2017 showed the average length of study in NTB is only 6.79 years, equivalent to class VII of junior high school. This is still far from the target set by UNDP, which is 15 years". The facts showed that the development of human resources in NTB was still to achieve the set target.

CONCLUSION AND SUGGESTIONS

From the results of calculations and data analysis regarding indicators of the quality of human capital in West Nusa Tenggara from the aspect of education, it can be concluded that:

1. Enrollment Ratio Condition (school enrollment ratio/school enrollment rate) generally shows that the majority of the population who are still attending school is at the primary school level. The highest net enrollment rate is at primary school education level, while the lowest net enrollment rate is at senior/vocational high education level.
2. There is an increasing trend from year to year for the Enrollment Ratio (Pure Participation Rate and Gross Participation Rate) even though the increase is not significant. When viewed from the average length of study, NTB is the lowest in national scale.
3. The condition of literacy rate in NTB during the analysis period shows a figure that is still not encouraging because it is still at 7.91%.

4. The illiteracy rate in NTB is 12.58%. The districts with the highest illiteracy rate are Central Lombok, while the districts/cities with the lowest illiteracy rates are West Sumbawa, Mataram City, and Bima District.
5. From the calculation results of the human capital quality indicators in NTB, it is indicated that they are still at a low-quality level. This is shown by the ER and LR figures, as well as the average length of study below 100.

According to the objective conditions of the analysis results of the educational aspect, several things need more serious attention to achieve the expected quality target of human capital in order to increase the human development index:

1. Accessibility of education is made easier with adequate infrastructure support capacity, so that education is no longer a "luxury item" or a burden for the poor people, but has become a basic need that must be properly fulfilled so that people are "well-nourished" so that it has comparative value and competitive value.
2. It needs to promote the socialization of the twelve-year compulsory education to the community and give an understanding and encouragement of the importance of education for the improvement of personal quality to have a decent and dignified life.
3. The scholarship program for underprivileged children should be sustainable, so that the twelve-year compulsory education program is not merely rhetoric, but the results can be enjoyed.
4. Here, the role of the government and the community is needed to solve illiteracy jointly. To improve the quality of human capital, synergies among fields and between sectors should be carried out in an integrated framework of thinking from regional policyholders.

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