EFFECTS OF FEED ON MEAT YIELD OF HYBRID RABBITS AT A FAMILY SCALE IN TU NGHIA DISTRICT, QUANG NGAI PROVINCE

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ABSTRACT

The previous researches related to poverty are so many. Unfortunately, they only explained how success and failed story poverty alleviation in the region. Besides the research explained how povertyhappened and impacted welfare. While poverty researches related to health, are rarely. This researchaims to prove that there is a correlation between poverty and life expectancy. The based on Center Board of Statistics data 2020, the percentage of poverty in West Sumatra has a correlation with life expectancy. It means that more poverty in the region will decrease life expectancy. The consequence of the program is that degree of health in the region can be triggered by reducing poverty itself.

Keywords: poverty, life expectancy, degree of health, west Sumatra

INTRODUCTION

The researches related to poverty are likely so many [1-3] but most of them described characteristics of poverty, failing, and success stories of alleviating it. Besides that poverty was viewed from an economic perspective only. While the case with researches on life expectancy is so many as well but they are also to explain how it relates to the infant mortality rates, accident, aging, and degenerative diseases [4-7]. Nonetheless, the researches on how poverty-related to life expectancy is rarely done. The logical thinking on that reason is if the percentage of poverty increases, the life expectancy will decrease as well because the poor will get difficulty getting health access in terms of willingness and ability to pay on health facilities provided by either the government or privates.

This research aims at proofing that poverty in one's region will affect life expectancy. A correlation test is conducted between the percentage of poverty and life expectancy data at the same time. Focus the research is West Sumatra. It uses secondary data 2020 available on The West Sumatera Center Board of Statistics 2021. To deliver it, this paper is divided into four parts. Firstly, it explains thepossibility of poverty's effect on life expectancy. The second part talks about the method used in this research. The third part is the result. It explains how poverty takes affect life expectancy. The last part is to close remark that explains to recommendation related to how poverty alleviation may be alternative to increase lifeexpectancy in a region.

THE POSSIBILITY POVERTY AFFECT THE LIFE EXPECTANCY

The term of poverty refers to the origin word "poor". The use of it created some methodological challenges. For instance, British in 1601 has formalized The Poor Relief Act [8]. There were

three categories of people who got relief 1) the able-

bodied poor; 2) the impotent poor such as aging, a disabled person; and 3) dependent children. What about does poverty in Indonesia? According to World Bank (2006), there are three (3) predominates of poverty in Indonesia, namely 1) Most of the households in vulnerability to falling to be poor; 2) Poverty measurement is based on income only; and 3) Characteristics of poverty in Indonesia are based onregion.

However, over the past 30 years, successive governments have signed a range of international treaties and agreements that have incorporated definitions of poverty. For example, in 1975, the European Council adopted a relative definition of poverty as "individuals or families whose resources are so small as to exclude them from the minimum acceptable way of life of the Member State in which they live". The conceptof "resources" was defined as "goods, cash income, plus services from public, and private resources" [9].

Definitions of poverty are so many and most of them explain shortcomings. For instance, according to Sholch cited by [10], poverty is a condition of inability to meet basic consumption needs and improve conditions, lack of business opportunities, toa broader understanding that includes social and moral aspects. Another definition coming from [11] is that poverty, either chronic or transitory is low-income. The termsrefer to someone who is not wealthy enough to lead a life of leisure and independence, and therefore, could be considered one of the common people, or as someone with a low income. According to [12] poverty is the people's condition that cannot fulfill the living standard.

According to [13], poverty affects different aspects of people's lives, existing when people are denied opportunities to work, to learn, to live healthy and fulfilling lives, and to live out their retirement years in security. Lack of income, access to good quality health, education, and housing, and the quality of the local environment all affect people's well-being, where our view of poverty covers all these aspects.

RESEARCH METHODS

This research uses secondary data gotten from the [14]. Both poverty and lifeexpectancy are macro indicators and they always to be performance targets to the region both province and regencies/cities. It appropriates to Rule of the Ministry of home affairs No. 97/2017. It is mentioned that reducing poverty and increasinghealth status is always be main indicators of local government. As the consequence, these two data indicators are always measured annually by BPS. The purpose of measurement is to know achievement conducted by local government in terms of reducing poverty and enhancing health quality.

Suppose that life expectancy is a dependent variable that is affected by poverty (independent variable). The constructed assumption in this equation is if the percentage of poverty increases then it is possible that life expectancy will decrease. Why is it happen? Its clearly because poverty will be a barrier to the poor to get health access such as community health centers and other health facilities. Someone, because of their economic inability made them cannot pay health

insurance so that if they suffer from diseases, they cannot pay for medical treatment as well. As a consequence, the chance to heal decreases.

Life expectancy is to be one of the indicators of the human development index whichconsists of the degree of health, the average length of school, and purchasing power. So far, the life expectancy will increase if the prevalence of disease decreases, infant and maternal mortality decreases as well. In developing countries, life expectancy tends to increase because health access is easier and more complete than before. So far, the infant mortality rate was so high because of thelack of health facilities and access so that slow in the handling of the childbirth process. Otherwise, if the health facilities and access are adequate, is it possible for the life expectancy to decrease? Of course, it is still possible if the community still has difficulty accessing health facilities due to their inability to pay due to economic conditions or, more roughly, chronic or temporary poverty factors.

Admitted that poverty indirectly has a potential to decrease life expectancy in a region, but indirectly this will have less effect if the poor get access to health facilitieswhen they are sick. It means that even though they are poor, there are no obstacles in accessing health services to cope with their patients.

In many cases, such as the most developed countries, the poor get the same services in health access so that poverty does not affect life expectancy. On theother hand, in developing countries, many people pretend to be poor by not wanting to pay state health insurance, so that they are subsidized by the government. This condition makes the country even more burdensome to bear the poverty rate.

Life expectancy also indicates the health quality in one's region because everything that deals with disease management and decreasing mortality rate is to increase life expectancy. The economic consequences that can be broken down from the increased life expectancy in an area are 1) the cost of life and health insurance will decrease; 2) community productivity will increase; and 3) people's incomes also increase. The based on the two data (poverty and life expectancy, finally can be conducted simple regression. The formula is as follows.

$$Y = a + bX + e$$

RESEARCH RESULTS

The poverty rate in West Sumatera 2020 was around 6,28%. The highest percentage happened in the Mentawai Islands. It was around 14,35%. The lowest was in Sawahlunto City and Solok City. They were 2,16% and 2,77% respectively. However, this poverty rate is not comparable to the unemployment rate, where the unemployment rate in the Mentawai Islands is only 3.98%. The deep meaning of this figure is that labor productivity in the Mentawai Islands has not been able to alleviate the poverty that has existed in the region so far.

This research is to understand more deeply the possible correlation between povertyand life expectancy in West Sumatra. Based on BPS 2020, the life expectancy in thisregion reached 72,38 years old with the highest life expectancy reached by the

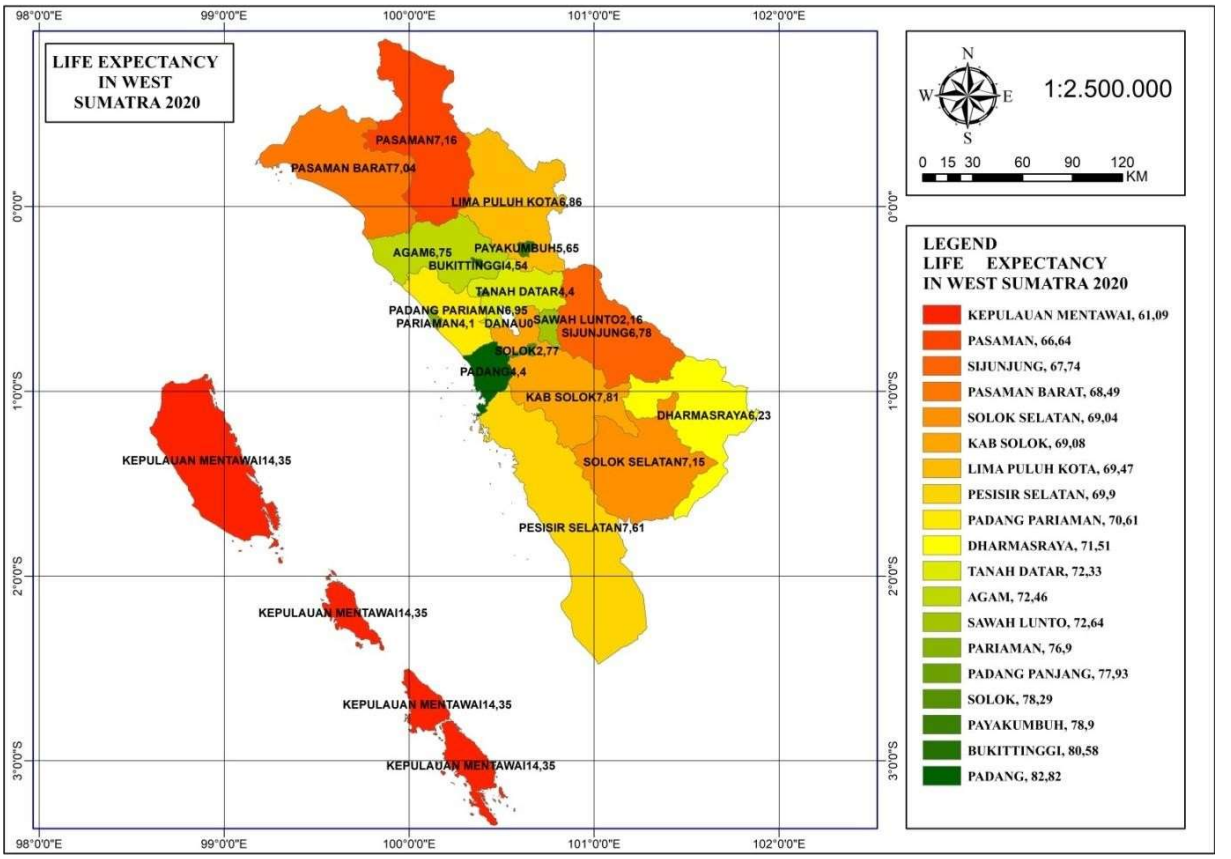
Bukittinggi City reaching 80,58 years old, and the lowest in the Mentawai Islands Regency which was 61,09 years old. The low life expectancy in the MentawaiIslands Regency may be due to the large number of infant deaths caused by delays in assistance. Understandably, these islands have difficulty accessing health services and the lack of health facilities, so that many of the people's illnesses are referred to hospitals in Padang City. For the rich Mentawai people, if they want to give birth, two weeks before the birth, they usually go to Padang City to prepare for birth, so that if the birth process is abnormal, the rich will quickly get assistant. On the other hand, the Mentawai people who are poor due to lack of money, just wait onthe island until the birth process occurs. If there are obstacles in their birth, they just surrender and wait for the ship to dock every Monday, Wednesday, and Friday.

Table 1. The poverty rate and life expectancy 2020 in West Sumatra Province

Regions	Poverty & life expectancy 2020	
	Provelty	Life expectancy
West Sumatra (Province)	6,28	72,38
Mentawai Islands Regency	14,35	61,09
Pesisir Selatan Regency	7,61	69,90
Solok Regency	7,81	69,08
Sijunjung Regency	6,78	67,74
Tanah Datar Regency	4,40	72,33
Padang Pariaman Regency	6,95	70,61
Agam Regency	6,75	72,46
Lima Puluh Kota Regency	6,86	69,47
Pasaman Regency	7,16	66,64
Solok Selatan Regency	7,15	69,04
Dharmasraya Regency	6,23	71,51
Pasaman Barat Regency	7,04	68,49
Padang City	4,40	82,82
Solok City	2,77	78,29
Sawahlunto City	2,16	72,64
Padang Panjang City	5,24	77,93
Bukittinggi City	4,54	80,58
Payakumbuh City	5,65	78,90
Pariaman City	4,10	76,90

Source Url: https://sumbar.bps.go.id/indicator/23/34/1/persentase-penduduk-miskin- menurut-kabupaten-kota-di-sumatera-barat.html. Access Time: May 2, 2021, 10:11 pm

Fig 1. Life Expectancy in West Sumatra 2020



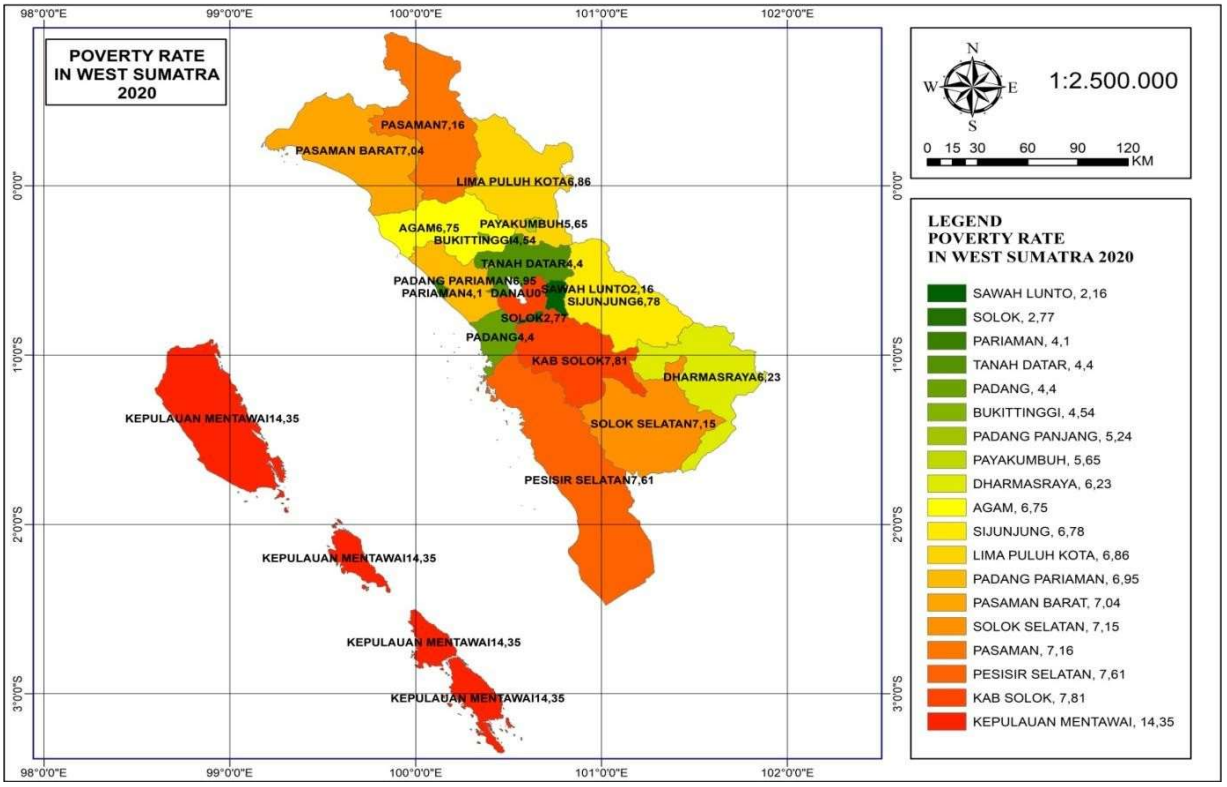


Fig 2. Poverty Rate in West Sumatra 2020

Based on the two data, where life expectancy (le) and poverty rate (pov) and after conducting a simple regression analysis is performed, it is used to measure the influence of one independent variable (x) on the dependent variable (y) and the eligibility requirements for using this method are 1) The number of samples used must be e equal; 2) The number of independent variables is only one; 3) The residual value is normally distributed; and 4) There is a linear relationship between the variables x and y.

To find out the residual value is normally distributed, this research uses the Kolmogorov Smirnov test as follows: 1) Normally distributed data, and 2) Data is not normally distributed.

By looking at the probability numbers, provided that:

Probability (P-value) > 0.05 then Ho is accepted

Probability (P-value) <0.05 then Ho is rejected

The calculation results state that the probability (p-value) is 0.140 because the probability is greater than the test level used, namely 0.05 in the study, so there is sufficient evidence to state that Ho is accepted. Thus it can be concluded that the data follow the normal distribution.

Tabel 2. One-Sample Kolmogorov-Smirnov Test

One-Sample Kolmogorov-Smirnov Test			
		Pov2020	Le2020
N		20	20
Normal Parameters[a]	Mean	5.7500	69.6000
	Std. Deviation	2.48945	2.70283
Most Extreme Differences	Absolute	.258	.113
	Positive	.258	.091
	Negative	-.141	-.113
Kolmogorov-Smirnov Z		1.153	.504
Asymp. Sig. (2-tailed)		.140	.961

a. Test distribution is Normal.

In general, the formula for a simple linear regression equation is Y= a + bX. Meanwhile, to find out the value of the regression coefficient, it can refer to the output in the following coefficients Table 3 below.

Tabel 2. Dependent Variable

Coefficients[a]

Model		Unstandardized Coefficients		Standardized Coefficients	T	Sig.
		B	Std. Error	Beta		
1	(Constant)	73.995	1.134		65.236	.000
	Pov2020	-.764	.182	-.704	-4.206	.001

a. Dependent Variable: Le2020

DISCUSSIONS

a = constant number of unstandardized coefficients. In this case, the value is 73.995. This figure is a constant number which means that if there is no poverty rate in a region, so the consistent value of life expectancy is 73.995.

b = number of regression coefficients, the value is -0.764. This figure means that for every 1% addition to the poverty rate, the life expectancy will increase by -0.764. Dueto the negative value of the regression coefficient, it can be said that poverty hurts lifeexpectancy, so the equation is written as follows:

$$Y= 73,995 – 0,764 X$$

To find out whether the regression coefficient is significant or not, the tests arecarried out as follows:

H0 = There is no effect of Poverty on life expectancyH1

= There is an effect of Poverty on life expectancy

As for the basis for making decisions in this regression analysis by looking at the significance value (Sig) of the SPSS. processing output results

1. If the sig value is smaller than the alpha value of 0.05, it means that there is an influence between poverty and life expectancy
2. On the other hand, if the sig value is greater than the alpha value of 0.05, it meansthat there is no influence between poverty and life expectancy.

The results show that there is an influence between poverty on life expectancy byseeing that the sig value is 0.001 which means it is smaller than alpha 0.05.

To see the magnitude of the influence of poverty on life expectancy, the results ofSPSS processing outputs are as follows (Tabel 4).

Tabel 4. Model Summary

Model Summary[b]

Model	R	R Square	Adjusted R Square	Std. Error of the Estimate
1	.704[a]	.496	.468	1.97217

a. Predictors: (Constant), Pov2020

b. Dependent Variable: Le2020

The based on output, the R Square value is 0.496. It implies that the effect of povertyon life expectancy is 49.6%, while 50.4% of life expectancy is influenced by other variables that are not be examined.

CONCLUSIONS

Finally, this research strengthens that poverty takes an opportunity to get health facilities so that if the poor are sick, they cannot pay for medical treatment. It is because they may not pay medical insurance so that medical treatment cannot be generated by medical officers. It is possible to recommend that subsidize them in terms of paying state medical insurance (BPJS) will make them get medical services.In developed countries, it may run well, so that the poor are guaranteed medical

treatment. On the contrary, in developing and under-developing countries it may not be covered apart. There are some deadly diseases and high-cost treatment cannotbe paid overall so that the opportunity to live longer is to be impossible. Life expectancy is closely related to the opportunity to get health access when people suffer from the disease. They need medical treatment in enhancing the chance toheal so that the opportunity of life is hopefully longer. Besides the life insurance, the poor also face difficulty to get decent food so that what they meal sometimes not sufficient in nutrition so that they easily suffer from diseases.

ACKNOWLEDGEMENTS

The author would like to thank the subjects and respondents, to friends and allparties who have helped in the collection of data to the preparation of this Scientific Writing. Thank you, the authors also convey the Center for Population and BKKBN ofWest Sumatra Province for their input, financial assistance, criticism, and advice.

REFERENCES

1. Ajakaiye, D. O., & Adeyeye, V. A. (2001). Concepts, measurement and causesof poverty. *Central Bank of Nigeria Economic and Financial Review*, *39*(4), 8-44.
2. Olowa, O. W. 2012). Concept, measurement and causes of poverty: Nigeria in perspective. *American Journal of Economics*, *2*(1), 25-36.
3. Haushofer, J., & Fehr, E. (2014). On the psychology of poverty. *science*, *344*(6186), 862-867.
4. Kairani, A. F., Azka, A. N., Faried, A., Amelia, I., Ardisasmita, M. N., Tanzilah, S., Rinawan, F. R., Agustian, D., & Afriandi, I. (2018). Characteristic of Motor Vehicle Accident Patients Presenting to a National Referral Hospital in West Java, Indonesia. *The Southeast Asian Journal of Tropical Medicine and Public Health*, *49*(5), 887–893.
5. Lopez, A. D., Ahmad, O. B., Guillot, M., Inoue, M., Ferguson, B. D., & Salomon, J. A. (2001). Life tables for 191 countries for 2000: data, methods, results. *Geneva: World Health Organization*.
6. Dicker, D., Nguyen, G., Abate, D., Abate, K. H., Abay, S. M., Abbafati, C., Abbasi, N., Abbastabar, H., Abd-Allah, F., Abdela, J., Abdelalim, A., Abdel-Rahman, O., Abdi, A., Abdollahpour, I., Abdulkader, R. S., Abdurahman, A. A., Abebe, H. T., Abebe, M., Abebe, Z., … Murray, C. J. L. (2018). Global, regional, and national age-sex-specific mortality and life expectancy, 1950-2017: A systematic analysis for the Global Burden of Disease Study 2017. *The Lancet*, *392*(10159), 1684–1735.
7. Naghavi, M., Abajobir, A. A., Abbafati, C., Abbas, K. M., Abd-Allah, F., Abera, S. F., Aboyans, V., Adetokunboh, O., Ärnlöv, J., Afshin, A., Agrawal, A., Kiadaliri, A. A., Ahmadi, A., Ahmed, M. B., Aichour, A. N., Aichour, I., Aichour, M. T. E., Aiyar, S., Al-Eyadhy, A., … Murray, C. J. L. (2017). Global, regional, and nationalage-sex specifc mortality for 264 causes of death, 1980-2016: A systematic analysis for the Global Burden of Disease Study 2016. *The Lancet*, *390*(10100), 1151–1