

Education Sector Optimization for Improving Human Development Index

by I Wayan Citrawan

Submission date: 31-May-2022 10:33AM (UTC+0700)

Submission ID: 1847562278

File name: on_sector_optimization_for_improving_human_development_index.pdf (1.12M)

Word count: 6836

Character count: 38650



9

International Journal of Social Sciences and HumanitiesAvailable online at <http://sciencescholar.us/journal/index.php/ijssh>

Vol. 2 No. 1, April 2018, pages: 117~133

e-ISSN: 2550-7001, p-ISSN: 2550-701X

<http://dx.doi.org/10.29332/ijssh.v2n1.102>

Education Sector Optimization for Improving Human Development Index

**I Wayan Citrawan^a, I Wayan Widana^b, I Made Suarta^c**

Article history: Received 10 September 2017, Accepted in revised form 20 February 2018, Approved 15 March 2018,

Available online 21 March 2018

Correspondence Author^a**Keywords**

HDI;
MYS;
EYS;

Abstract

The research was intended for determining: (1) the influence of *Mean Years of Schooling (MYS)* to *Human Development Index (HDI)* and describe the strategies for increasing MYS in Klungkung regency; (2) the influence of *Expected Years of Schooling (EYS)* to HDI and describe the strategies to improving EYS in Klungkung regency; (3) the influence of MYS and EYS simultaneously to HDI and describe the strategies to increasing it in Klungkung regency. In order to achieve the above objectives, the research was conducted on HDI in Klungkung using Mixed Methods Study, the population was the society in Klungkung with purposive sampling, snowball, and random sampling technique. Quantitative data were analyzed using the Eviews 7.0. The qualitative data were analyzed using Miles and Huberman model. The result was obtained that: (1) MYS influence to HDI on the t-statistic was 4.09, probability 0.0264, and R-square 0.97; (2) EYS influence of HDI on t-statistic 11.83, probability 0.0013, and R-square was 0.96; (3) MYS and EYS simultaneously influence of HDI with the t-statistic 29.07, probability 0.0012, and R-square was 0.99. The strategies that can be conducted to increase MYS included: (a) increasing the education budget that amount in accordance with the laws and regulations, (b) launching a program of compulsory education to 12 years, (c) revitalizing of local genius educations, (d) developing schools models, (e) establishing the integrity of the community through character education and anti-corruption education, (f) developing entrepreneurship education, and (g) developing models of learning and computer-based testing (ICT). The rise of EYS could be conducted by: (a) reduce poverty, and (b) overcome the problems due to geography and population distribution was uneven.

^a Guidance and Counseling Studies Program, FIP IKIP PGRI Bali-Indonesia

^b Mathematics Education Studies Program, FPMIPA IKIP PGRI Bali-Indonesia

^c Indonesian Language and Literature Education Studies Program, FPBS IKIP PGRI Bali-Indonesia

e-ISSN : 2550-7001, p-ISSN : 2550-701X © Copyright 2018. The Author.
 Published by ScienceScholar in Universitas Técnica de Manabí.
 This is an open-access article under the CC-BY-SA license
 (<https://creativecommons.org/licenses/by/4.0/>)
 All rights reserved.

Contents

Abstract	117
1. Introduction	118
2. Research Method	120
3. Results and Analysis	122
4. Conclusion	127
Acknowledgements	128
References	129
Biography of Authors	133

1. Introduction

The good living is a universally recognized for a human right. Therefore, 1945 Constitution mandates that one of the main tasks of the government of the Republic of Indonesia is to promote the common welfare, to educate the life of the nation and to realize a social justice for all Indonesian people. It means that live free of poverty and enjoys a decent life is a fundamental right of every citizen to be part of the government's duty to ensure the realization of it. Harmawanti Marhaeni, et al (2008) argued that the government is currently very concerned with the human development issue. This is marked by the inclusion of HDI unlike one of the allocators of *General Allocation Funds (GAF)* to overcome the fiscal gap.

It is viewed from HDI ranking in Bali Province in 2013, Klungkung Regency ranks eight out of nine regencies/cities in Bali. HDI in Klungkung Regency is 72,25 under IPM Bali Province which reaches 74,11. HDI in Klungkung Regency is obtained based on the components of literacy rate is 84.47%. It means that 27,006.67 people or about 15.53% population in Klungkung Regency are still illiterate. Whereas, the average component of school period in Klungkung regency only reached 7.43 years is still far below the average length of studying Bali Province reached 8.58 years. Thus, the Government of Klungkung Regency must work hard to catch up.

Based on the above description can be formulated problems as follows: 1) what influences of the average school period to HDI in Klungkung regency? 2) how the effort to increase the average of school period in Klungkung Regency?; 3) what influences of school period expectation on HDI in Klungkung Regency?; 4) how to improve the school period expectations in Klungkung Regency?; and 5) what influences of school mean and expectation simultaneously to HDI in Klungkung Regency?; and 6) how to increase the average of school period and expectations in Klungkung Regency?

Regarding the above problem formulation, the research is intended to know: 1) the influences of the average of school period to HDI in Klungkung Regency and how to increase the average of school period in Klungkung Regency. Therefore, HDI can be improved; 2) the influence of school period expectations on HDI in Klungkung Regency and how to increase the school period expectancy in Klungkung Regency. Thus, HDI can be improved; and 3) the influences of the school average and expectation simultaneously on HDI in Klungkung Regency and how to increase the average of school period and the expectation in Klungkung Regency. Therefore, HDI can be improved.

Budiriyanto (2011) and Siregar (2014) stated that HDI is a composite index of three indices, i.e., (1) life expectancy index, as the embodiment of long life and longevity dimension. There are two types of the data used in its calculations, e.g., *Child Birth Life (CBL)* and *Child Still Life (CSL)*. The maximum and minimum values have been agreed by all States (175 countries) as UNDP standard, i.e., 85 years as the upper limit and 25 years as the lowest limit; (2) education index, as the embodiment of knowledge dimension. In the calculation using two indicators, i.e., (a) EYS and MYS. EYS is the factor that has a significant relationship with life expectancy at birth. The average school period is the average number of years spent by people, 25 years old and above in all formal education levels who have lived or are undergoing. The indicator is calculated from the highest educational variables attained and the level of education that is being attained

and the level of education being occupied; and (3) a **decent living standard index, as the embodiment of the decent living dimension**.

Furthermore, Marhaeni, et al (2008) stated that HDI becomes very important and mastering strategic value and needed by many circles, especially government, as reference material in taking various government policies. One of the government policies is the determination of regional equity funds through GAF using HDI data. In addition, HDI is also used to assess the success of the human development performance in a region. HDI development describes achievement in accordance with the increasing of economic development in a region or country.

MYS defines the average **number of years spent by people aged 15 years old and over** at all levels of formal education who have lived or are undergoing. The indicator is calculated from the highest educational variables being resolved and the level of education that is being rescued or the level of education that is being occupied (UNDP, 2010). However, since 2010, MYS is calculated according to the population aged 25 years old and over. The assumption that at the age 25 years old an education process is over. The higher MYS, indicating the education quality of the population residing in an area is getting better (Siregar, 2014).

Bappenas (2015), UNESCO (2015), Zainuri (2013), and Dores (2015), Rosa & Jolianis (2013) mentioned several factors directly related to MYS variables included: (a) mandated in the 1945 Constitution article 31 section (4) and Law No. 20 in 2003 on National Education System, article 46 section (3) and article 49 section (1) stated that **education funds other than educators' salaries and official education costs are allocated at least 20% for State Budget (APBN) on the education sector and minimal 20% for Regional Revenue and Expenditure Budget (APBD)**; (b) Compulsory Education Program as set forth in PP. 47 in 2008 on Compulsory Education, and Permendikbud No. 80 in 2013 on *Universal Secondary Education (USE)*; and (c) BOS issuance, a government program is basically to provide funding for non-sonnel operating costs for basic education units as implementers of compulsory education programs. In general, BOS program aims to **alleviate the burden of the society towards education financing and play a role in accelerating the achievement of Minimum Service Standards (MSS) in the schools that have not fulfilled MSS, and the achievement of National Education Standards (NES)**. It is already met of MSS.

Empirically, the achievements of DKI Jakarta Province and Maluku Province in 2013 are nationally ranked best of MYS variable. The high MYS number is inseparable from DKI Jakarta government provides education budget about 27.6% from APBD. Whereas, the high MYS in Maluku Province is more dominant on the success of local governments implementing compulsory education program 12 years.

EYS defines one of the indicators in the education component of HDI calculations (UNDP, 2010). EYS measures the school period (in years) expected to be enjoyed **by children at a certain age in the future**. The advantage **the use of EYS indicator due to it is a measure that takes into account the impact and processes school system. It is easy to perform calculations and not require standardization in comparisons involving countries with different age structures** (Rigotti, et al, 2013).

Since 2010, the literacy rate indicator is no longer used as one of the indicators in the educational component to HDI calculation. Literacy rates are considered to have no distinguishing power. Therefore, it can not distinguish the level of education between a region well. For example, the region literacy rate is high. It could be that the literacy rate of an area is close to 100. However, the quality of knowledge or education level is still low. Therefore, in the new method of HDI calculation using EYS as one indicator of an education component. Due to it is considered to have better distinguishing power (Siregar, 2014).

Sukmaraga (2011), Rahmawati (2011), Putera (2010), Alam (2006) & Arsyad (2004) stated that many factors influence of EYS. It correlates with poverty, geographical location, and population spread. Poverty is a disease that arises. If the people always have material and non-material deficiencies *e.g.*, lack of food, malnutrition, less education, less access **information, and other deficiencies depicting poverty**. Geographically, remote areas, the less **transportation due to the unavailability of adequate road infrastructure** greatly influences the population willing to pursue education. Moreover, if the distance between the school and the resident's house is relatively far away. Unfavorable, the geographic conditions will also influence the number of people living in the area. It will influence the spread of population in an area. It often occurs in areas that are geographically unfavorable, affecting the population is less, limited

transportation, and population mobility is too low. It influences the socio-economic development in the community. The less access to information will make it difficult for people to communicate with residents outside their houses. Thus, it is affecting MYS expectations.

2. Research Method

The present study is a *survey research* using *Mixed Methods Research*. It is designed using *inquiry method philosophy* (Creswell & Clark, 2007). It is a foundation for combining quantitative and qualitative approaches. Therefore, the researchers get a better and more accurate understanding of the research problem. If it is compared to using only quantitative or qualitative approaches individually. In this research, the design used is *triangulation design convergence model*. The design selection is based on the advantages possessed by the convergence design triangulation model, *i.e.*, a) efficient, at the same time, quantitative and qualitative data can be collected together; b) data analysis can be conducted separately; and c) qualitative research results can be used to validate the research results, confirm, and corroborate the quantitative research results.

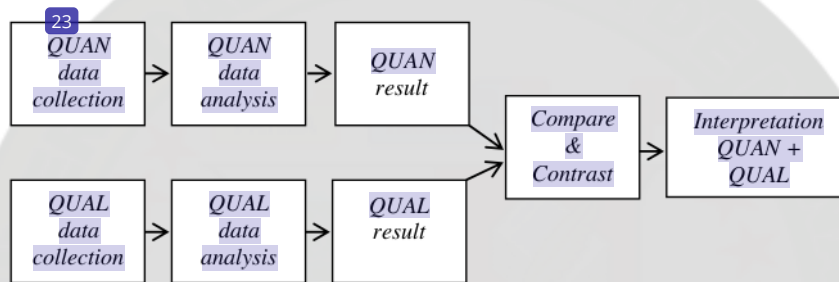


Figure 1. Triangulation design convergence model

The population in the present study is all residents in Klungkung Regency spread over four subdistricts *i.e.*, Nusa Penida, Klungkung, Dawan, and Banjarangkan. The sample selection technique is adjusted to the data needs (quantitative and qualitative). The technique used is purposive sampling, snowball, and random sampling. Data collection techniques through documentation, observation, and interviews. The research instruments used to collect data are interview and observation guidelines. The function model will be used to show the correlation between HDI in Klungkung Regency with MYS education index and EYS, that is:

$$HDI = f(MYS, EYS)$$

HDI functions completely can be written as follows:

$$L_{it} = \alpha(MYS)_{it}^{\beta_1} (EYS)_{it}^{\beta_2} e^{\varepsilon_{it}}$$

Regarding the form of naturalist logarithm can be expressed as follows:

$$\ln L_{it} = \ln \alpha + \beta_1 \ln(MYS)_{it} + \beta_2 \ln(EYS)_{it} + \varepsilon_{it}$$

e.g.,

$$\ln L_{it} = Y_{it}; \ln \alpha = \beta_{0it}; \ln(MYS)_{it} = X_{1it};$$

$$\ln(EYS)_{it} = X_{2it}$$

Therefore, the sample regression model can be written:

$$Y_{it} = \beta_{0it} + \beta_1 X_{1it} + \beta_2 X_{2it} + \varepsilon_{it}$$

Descriptions:

Y_{it} : Non-free HDI variable towards cross-section to-i, and the year to-t

X_{1it} : MYS free variable towards to-i, and the year to-t

X_{2it} : EYS free variable to-i, and the year to-t

ε_{1it} : Error towards cross-section to-i, and the year to-t

(1) Cross section data model

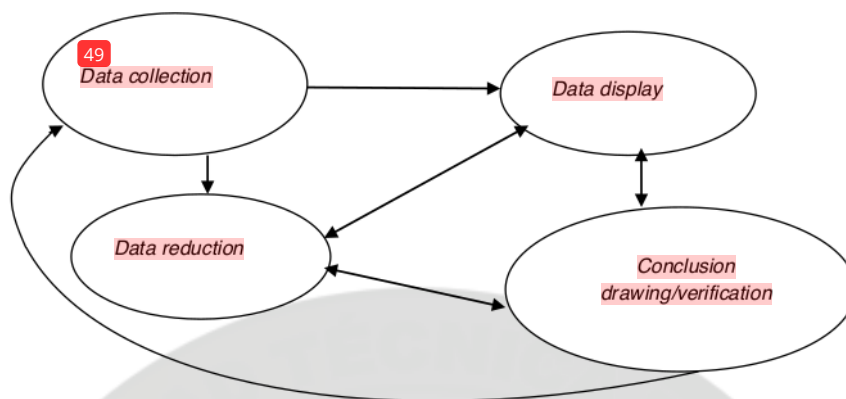
$$Y_i = \beta_0 + \sum_{k=1}^k \beta_k X_{ki} + \varepsilon_i, \text{ within } i=1, 2, 3... N.$$

(2) Time series data model

$$Y_t = \beta_0 + \sum_{k=1}^k \beta_{kt} + \varepsilon_t, \text{ within } t=1, 2, 3... T.$$

Quantitative data in the panel data form is a combination of time series data and cross-sectional data, analyzed using Eviews 7.0 Program (Jaya dan Sunengsih, 2009).

Qualitative data is analyzed using Miles and Huberman model (Sugiyono, 2008). The qualitative descriptive analysis is used to describe the phenomena related to the problems studied. The flow analysis of the quantitative data is begun with data collection directly from the informant. Furthermore, the data that has been collected is reduced. It is to summarize, select the main points, focus on the important things, look for the theme, and pattern and remove unnecessary data. The next step is to display data, e.g., in the form of brief descriptions (narrative text), charts, relationships between categories, and flowcharts. The final step is the conclusion and verification. The preliminary conclusions raised are temporary and will change. If there is no strong evidence to support the next stage of data collection. However, if the conclusions raised in the initial stages are supported by valid and consistent evidence. If the researcher returns to the data gathering arena, then the conclusion put forward is a credible conclusion. Miles and Huberman's analysis model can be described as follows.



56
Figure 2. Interactive Model by Miles and Huberman

3. Results and Analysis

Data of the research result in the form of quantitative and qualitative data are presented simultaneously, considering the research is *mixed method i.e.*, the combined research of quantitative and qualitative method. Quantitative data in the form of HDI, MYS, and EYS is obtained through documentation study at the *statistical center agency (BPS)* in Klungkung Regency. The following data show HDI, MYS, and EYS development in the last five years since 2010-2014.

Table 1
HDI development, Klungkung Regency in 2010-2014

Year	HDI	MYS	EYS
2010	66,01	6,60	11,55
2011	67,01	6,68	12,17
2012	67,64	6,81	12,30
2013	68,08	6,88	12,43
2014	68,30	6,90	12,57

(Source: BPS Klungkung Regency, 2015)

52
Based on the above data in Table 1, it shows that quantitatively HDI Klungkung District in 2010-2014 period has increased although very low. The largest HDI percentage increase achieved in 2010 to 2011 increase from 66.01 to 67.01 or an increase about 1.49%. Whereas, the lowest increase occurred in 2013 to 2014 increase from 68.08 to 68.30 or just increase about 0.32%. Similarly, MYS has increased from 2010-2014, although very small. The largest increase in MYS occurred in 2011 to 2012 rose from 6.60 to 6.68 or increased about 1.91%. The lowest increase occurred in the year 2013 to 2014 only rose from 6.88 to 6.90 or rose about 0.29%. The EYS variable also increases annually. However, it is very low. The highest increase occurred in 2010 to 2011 increase from 11.55 to 12.17 or increase about 5.09%. Meanwhile, the lowest increase occurred in 2012 to 2013 increase from 12.30 to 12.43 or increase about 1.05%.

The average annual growth rate for each variable HDI, MYS, and EYS also looks very low. The growth rate is marked positive, meaning that there is the progress of the human resource development through education sector. For HDI variable has an average growth per year is 0.008405 or about 0.84%. The average of MYS growth rate equal to 0,011840 or about 1,184%, and for EYS variable growth per year is equal to 0,019039 or about 1,9039%. MYS partially influence towards HDI can be explained through data analysis using Eviews 7.0 as follows.

Table 2
MYS influence towards HDI

39

Dependent Variable: HDI
Method: Least Squares
Date: 12/01/15 Time: 13:18
Sample: 15
Included observations: 5

Variable	Coefficient	Std. Error	t-Statistic	Prob.
C	19.99000	4.887115	4.090348	0.0264
MYS	7.000000	0.721346	9.704085	0.0023

12

R-squared	0.969126	M ² dependent var	67.40800
Adjusted R-squared	0.958835	S.D. dependent var	0.923834
S.E. of regression	0.187439	Akaike info criterion	-0.221553
Sum squared resid	0.105400	Schwarz criterion	-0.377778
Log-likelihood	2.553884	Hannan-Quinn criteria.	-0.640845
F-statistic	94.16926	Durbin-Watson stat	2.665085
Prob. (F-statistic)	0.002324		

Estimation Command:

=====

LS HDI C MYS

22

Estimation Equation:

=====

HDI = C(1) + C(2)*MYS

Substituted Coefficients:

=====

HDI = 19.99 + 7*MYS

Analysis results interpretation:

- MYS has an influence towards HDI, within *intercept* (constants) about 19.99000 with *t-statistic* is 4.090348 and *probability* is 0.0264 <0.05 (significant).
- MYS coefficient is 7,00000 within *t-statistic* about 9,704085 and *probability* is 0,0023 <0,05 (significant).
- R-square is 0.969126 means HDI variable can be explained by MYS about 96.9126%. The value of *R-square* is close to 1, means MYS variable strongly influence HDI. Thus, to increase HDI in Klungkung Regency is one of the factors that must be improved *i.e.*, MYS variable.
- F-statistic is equal to 94,16926 with *probability* is 0,002324 <0,05 (significant) means MYS variable has an influence on HDI significantly.
- If EYS variable and the interactive influence between MYS * EYS are assumed to be constant, then the model equation is obtained as follows: HDI = 19.99 + 7 * MYS.

Qualitatively, the data that has been related to influence factors for MYS can be explained based on observation, documentation study, and interview to respondents as follows.

- a) Education fund allocation (including a salary of teacher and employee) is in accordance with Regional Regulation of Klungkung Regency, No.6 in 2014 dated December 30th, 2014, on *Regional Income and Expenditure Budget (APBD)*, Klungkung in 2015 is IDR. 322.946.882.174,00 of the total budget Klungkung regency about IDR. 912.707.523.258,15 or has reached 35.38% of total APBD. In accordance with applicable laws and regulations, the budget for education should be set at least 20% of APBD beyond the salary of teachers and employees. The fund's allocation of teachers and employee salaries is IDR. 291,672,028,053.00 or about 90.32% of the total education funds allocation. Thus, the real funds used for the improvement of the education quality is only IDR. 31.274.854.121,00 or about 9.68% of the education budget. If it is viewed the percentage of the education budget to total budget, then the education budget for Klungkung Regency in 2015 merely reached about 3.73% of total APBD. It is still far from the amount mandated by the law.
- b) Compulsory education program nine years has been implemented for elementary and junior high school. It is not obtained the exact data the success extent yet. The societies feel there is a compulsory 9-year compulsory education because it is free of school fees.
- c) BOS funds utilization. In elementary and junior high schools, BOS fund is the main funds for conducting school program. No funds come from parents, communities or from other sources.

Based on the above data and information, it is very reasonable and logical that HDI growth in Klungkung Regency is very low. The one factor that HDI influence towards MYS is also very low development. The low development for MYS is also inseparable from the factors that influence it. Especially, the education budget is a very minimal to improve the education quality. Another factor is still reluctance of the society to take education due to it is felt less directly the life of society. For example, there are still many children who do not know ethics, courtesy in society (less character building), less exemplary. After the school graduation, most of the unemployed children can not help their parents earn a living due to the lessons in school are very theoretical, not applicative unlike they expect. In the schools, it is not taught ways to be independent, not creative looking and creating jobs (entrepreneurial spirit is less). The societies hope that education can bring the education world to the business world. The EYS partially influence towards HDI can be explained by the data analysis using Eviews 7.0 as follows.

Table 3
EYS influence towards HDI

Variable	Coefficient	Std. Error	t-Statistic	Prob.
C	39.43156	3.333125	11.83021	0.0013
EYS	2.292400	0.273003	8.396969	0.0035
R-squared	0.959189	Mean dependent var		67.40800
Adjusted R-squared	0.945585	S.D. dependent var		0.923834
S.E. of regression	0.215503	Akaike info criterion		0.057492
Sum squared resid	0.139325	Schwarz criterion		-0.098733
Log-likelihood	1.856270	Hannan-Quinn criteria.		-0.361800
F-statistic	70.50909	Durbin-Watson stat		2.282781
Prob(F-statistic)	0.003543			

Estimation Command:

=====

LS HDI C EYS

22

Estimation Equation:

=====

HDI = C(1) + C(2)*EYS

Substituted Coefficients:

HDI = 39.4315560406 + 2.29239953781*EYS

Interpretation

- EYS has an influence towards HDI, within *intercept* (constant) is equal to 39,43156 on *t-statistic* is 11,83021 and *probability* is 0,0013 <0,05 (significant).
- EYS coefficient is 2.292400 within *t-statistic* is 8.396969 and *probability* is 0,0035 <0,05 (significant).
- R-square* is 0.959189 means that HDI variable can be explained by EYS about 95.9189%. The *R-square* value is close to 1, means EYS variable highly influence to HDI. Thus, to increase HDI in Klungkung Regency is one of the factors that must be improved is EYS variable.
- F-statistic* is equal to 70,50909 within *probability* is 0,003543 <0,05 (significant) means EYS variable have an influence towards HDI significantly.
- If MYS variable and the interactive influence between MYS * EYS are assumed to be constant, then the model equation obtained is:
HDI = 39,4315560406 + 2,29239953781 * EYS.

Qualitatively, the data that has been related to EYS factors influence can be explained based on observation result, documentation study, an interview with respondent as follows.

Unlike the interview result to the Head of Commission III in Klungkung Parliament stated that the poor people are still often found in Nusa Penida. This is due to the culture in there. The people generally have not realized the importance of education in their life. Their children are invited to help each day to earn a living. The government role in determining compulsory education policy becomes something that is very important to do. Without a compulsory education program, it is hard to imagine, the public is aware of their own awareness in registering their children to school.

Klungkung Regency is geographically separated by the sea at Klungkung mainland and Nusa Penida islands. The most of Klungkung area is located in Nusa Penida islands. Geographically, Nusa Penida islands with mountainous natural. Therefore, the area is difficult to reach, especially West and East Nusa Penida. In addition, Nusa Penida area is also separated by the sea. Thus, if the people in Nusa Penida want to Klungkung mainland needs a sea transportation. There are still many remote areas in Nusa Penida islands, due to the lack of transportation facilities. A gap in the socio-economic life is felt. There are farmers and fishermen communities with a mediocre social and economic life. There are also many people in Klungkung who have been successful in business and entrepreneur, so that in the socio-economic life belonging to a capable society.

The population distribution in Klungkung Regency is uneven. The most of Klungkung residents are domiciled in Klungkung mainland. As a result, the population density in Klungkung mainland is higher than the population density in Nusa Penida area. 73.83% residents are in Klungkung mainland. Only 26.17% population lives in Nusa Penida and surrounding areas. Based on BPS data in 2013, the total population in Klungkung is 173,900 residents. The number spread to four sub-districts as follows: Nusa Penida 45,340 people, Banjarangkan, 38,150 people, Klungkung 56,570 people and Dawan 33,840 people (Bappeda Klungkung, 2014).

Based on the above data and information, Klungkung Regency must make concrete efforts to overcome the problems associated with EYS. Geographical problem is naturally difficult to change. However, the problems that arise geographical factor impact can still be overcome gradually and pay attention to the priority scale. For example, adding a fleet of transport, connecting road segments inter-village. Therefore, unlike to reduce the difficult areas of transportation affordable means. The teacher equalization should also progressively be conducted. Therefore, all people feel the quality of education services. An equity of the educational infrastructure facilities should also be concerned by the local governments. If the existing educational facilities in Klungkung mainland and the archipelago are the same. Then, Nusa Penida societies do not need to move to the mainland. It has an impact on the more equitable population distribution. If the population spread more equally. Therefore, the socio-economic situation will also be equitable. The MYS and EYS influence simultaneously towards HDI can be explained through the data analysis using Eviews 7.0 program as follows.

Table 4
MYS and EYS influence toward HDI

32

Dependent Variable: HDI
Method: Least Squares
Date: 12/01/15 Time: 13:19
Sample: 15
Included observations: 5

Variable	Coefficient	Std. Error	t-Statistic	Prob.
C	27.64874	0.451319	61.26210	0.0003
MYS	3.872607	0.133234	29.06621	0.0012
EYS	1.108343	0.043858	25.27138	0.0016

5

R-squared	0.999904	Mean dependent var	67.40800
Adjusted R-squared	0.999807	S.D. dependent var	0.923834
S.E. of regression	0.012827	Akaike info criterion	-5.590878
Sum squared resid	0.000329	Schwarz criterion	-5.825215
Log-likelihood	16.97719	Hannan-Quinn criteria.	-6.219816
F-statistic	10374.13	Durbin-Watson stat	3.319086
Prob. (F-statistic)	0.000096		

Estimation Command:

=====
LS HDI C MYS EYS

22
Estimation Equation:

=====
HDI = C(1) + C(2)*MYS + C(3)*EYS

Substituted Coefficients:

=====
HDI = 27.6487383277 + 3.8726068328*MYS + 1.10834341092*EYS

Interpretation

- Regression equation constant is equal to 27,64874 within *t-statistic* is 61,26210 and *probability* is 0.0003 < 0,05 (significant).
- MYS coefficient is 3,872607 within *t-statistic* is 29,06621 and *probability* is 0,0012 < 0,05 (significant).
- EYS coefficient is 1.108343 within *t-statistic* is 25,27138 and *probability* is 0,0016 < 0,05 (significant).

- d) *R-Square* is 0.999904 means that HDI variable can be explained by MYS and EYS simultaneously about 99.9904%.
- e) *F-statistic* is 10374,13 in *probability* is 0,000096 <0,05 (significant) mean that MYS and EYS variable simultaneously have an influence towards HDI significantly.
- f) Thus, the model equation obtained is as follows.
$$IPM = 27,6487383277 + 3,8726068328 * MYS + 1,10834341092 * EYS.$$

The above quantitative analysis results reinforce that HDI in Klungkung Regency is strongly influenced both factors on MYS and EYS simultaneously. It means that the factors that MYS and EYS influence, should be a genuine concern from stakeholders in Klungkung Regency. Qualitatively, it can be stated that the valuable inputs from Klungkung society in an effort to increasing HDI, become a consideration in decision making.

4. Conclusion

Based on the analysis results of the research data that was conducted quantitatively and qualitatively, the conclusions could be drawn as follows: (1) MYS influence to HDI in Klungkung Regency, (2) EYS influence to HDI in Klungkung Regency, and (3) MYS and EYS influence simultaneously to HDI in Klungkung Regency. The factors influence for MYS variables included: (a) education funding allocation policy, (b) compulsory education program, (c) leading programs in education for education quality improvement, (d) schools model development, (f) data collection of out of school and non-school populations, and (g) involvement of the local society or security apparatus, community leaders, religious leaders, and government officials to become tutors for the community. Whereas, the factors influence for EYS included: (a) poverty, (b) geography, and (c) population distribution.

Recommendation

Based on the data analysis results and valuable input from Klungkung society related to efforts at improving MYS and EYS. It can be formulated some recommendations as follows.

- a) Increasing the education budget gradually to reach 20% as mandated in the legislation. Without adequate financial support, the efforts to provide quality education services are difficult to achieve. Inadequate education can not motivate people to get a longer education.
- b) Universal Secondary Education (12 Year Compulsory Education). PMU objective is in every Indonesian citizen 16 years to 18 years old who wishes to pursue secondary education and accelerate the achievement of *Primary Participation Grade (PPG)* for secondary education to 97% (ninety-seven percent) in 2020.
- c) Conducting *Local Excellence Based Education (LEBE)*. LEBE is taught with aim at equipping learners with the attitudes, knowledge, and skills necessary to: (1) recognize and love the natural, social, cultural, and spiritual environments in the region; (2) to preserve and develop regional excellence and wisdom that is useful for themselves and their environment in order to support national development (Directorate of High School Development in 2010).
- d) *Model School Development (Pilot School)*. It was developed as a form of coaching to other schools in equal, to implement SPM and SNP achievement.
- e) Implementing the *mental revolution* program in education, *i.e.*, the integration of character education and anti-corruption education in schools on KTSP.
- f) Organizing Integrated Entrepreneurship Education in KTSP, educational units as formal institutions should be able to facilitate the future needs of learners in the society through the entrepreneurship education development. In other words, the preparation of an entrepreneur lies in forging all the personal power of the learners to make it dynamic and creative, in addition to being able to strive to live forward and achieve. One of the traits an entrepreneur is to have a strong personality.

- g) Developing learning model and *Computer Based Test (CBT)* model. One positive step to improve the national integrity is to develop an honest character in education. CBT is designed to minimize dishonesty in testing, especially *National Test (UN)*.

Acknowledgments

The author would like thanking I Nyoman Suwirtha, Klungkung Regent who has given the opportunity to IKIP PGRI Bali Research Team to contribute to improving Human Development Index, Klungkung Regency, Bali Province.

References

1. Alam, J. (2006). *Disparitas pendapatan dan faktor-faktor yang berpengaruh terhadap pencapaian indeks pembangunan manusia di Kabupaten Bekasi* (Doctoral dissertation, FE-UI).
[View in \(Google Scholar\)](#)
2. Bappenas. (1999). *Data Dasar Pembangunan Daerah Kabupaten/Kota Tahun 1999*. Jakarta: Bappenas.
[View in \(PDF\)](#)
3. Billaiya, R., Malaiya, S., & Parihar, K. S. (2017). Impact of Socio Economic Trends on Students in Quality Education System. *International Journal of Social Sciences and Humanities (IJSSH)*, 1(1), 16-20.
[View in \(Google Scholar\)](#)
4. BPS, B. (2004). UNDP, Laporan Pembangunan Manusia Indonesia: Ekonomi dari Demokrasi, Membiayai Pembangunan Manusia Indonesia. Jakarta: BPS, Bappenas dan UNDP.
[View in \(Google Scholar\)](#)
5. Brata, I. B., & Pemayun, A. G. P. (2018). Human Resource Competency Tourism Bali together with ASEAN Economic Community. *International Research Journal of Management, IT and Social Sciences (IRJMIS)*, 5(2), 186-194.
[View in \(Google Scholar\)](#)
6. Creswell, J. W., & Clark, V. L. P. (2007). Designing and conducting mixed methods research.
[View in \(Google Scholar\)](#)
7. Dores, E. (2015). Pengaruh Angka Melek Huruf dan Angka Harapan Hidup terhadap Jumlah Penduduk Miskin di Propinsi Sumatera Barat. *JURNAL ECONOMICA: Research of Economic And Economic Education*, 2(2), 126-133.
[View in \(Google Scholar\)](#)
8. Budiriyanto, E. (2011). Indeks Pembangunan Manusia (IPM) Dalam Formulasi DAU. *Ditjen Perimbangan Keuangan, Kemenkeu RI*.
[View in \(Google Scholar\)](#)
9. Faturrohmin, R. (2012). pengaruh PDRB, harapan hidup dan melek huruf terhadap tingkat kemiskinan (studi kasus 35 Kabupaten/kota di Jawa Tengah).
[View in \(Google Scholar\)](#)
10. Gede, I., Jaya, N. M., & Neneng, S. (2009, May). *Kajian Analisis Regresi dengan Data Panel*. In *Seminar Nasional Penelitian, Pendidikan, dan Penerapan MIPA 2009*.
[View in \(Google Scholar\)](#)
11. Harmawanti Marhaeni, dkk. (2008). Indeks Pembangunan Manusia 2006-2007. Jakarta: BPS.
[View in \(PDF\)](#)
12. Hartono, M. D. (2009). *Problematik dan Solusi Amandemen Undang-Undang Dasar 1945*. PT Gramedia Pustaka Utama.
[View in \(Google Scholar\)](#)


Citrawan, I., Widana, I., & Suarta, I. (2018). Education sector optimization for improving human development index. *International Journal Of Social Sciences And Humanities (IJSSH)*, 2(1), 117-133.
doi:10.29332/ijssh.v2n1.102

- 26
13. Indonesia, M. P. D. K. R. (2013). Peraturan Menteri Pendidikan Dan Kebudayaan Republik Indonesia Nomor 44 Tahun 2014.
[View in \(Google Scholar\)](#)
- 34
14. Indonesia, P. R. (2005). *Peraturan Pemerintah Republik Indonesia nomor 19 tahun 2005 tentang standar nasional pendidikan*. Departemen Pendidikan Nasional Republik Indonesia.
[View in \(Google Scholar\)](#)
- 3
15. Indonesia, R. (2008). Peraturan Pemerintah Republik Indonesia Nomor 48 Tahun 2008 Tentang Pendanaan Pendidikan.
[View in \(Google Scholar\)](#)
- 3
16. Indonesia, R. (2015). Peraturan Pemerintah Republik Indonesia Nomor 13 Tahun 2015 tentang Perubahan Kedua at 35 Peraturan Pemerintah Nomor 19 Tahun 2005 tentang Standar Nasional Pendidikan.
[View in \(Google Scholar\)](#)
17. Klugman, J. (2010). Human Development Report 2010–20th Anniversary Edition. The Real Wealth of Nations: Pathways to Human Development.
[View in \(Google Scholar\)](#)
- 19
18. Malaiya, S., Shrivastava, A., Prasad, G., & Jain, P. (2017). Impact of Medical Education Trend in Community Development. *International Journal of Health Sciences (IJHS)*, 1(1), 23-27.
[View in \(Google Scholar\)](#)
- 10
19. Martini, I. A. O., Lasmi, N. W., Jaya, N. K., & Sutrisni, N. K. E. (2017). Improving Cooperative Performance through Human Resource Development Efforts. *International Journal of Social Sciences and Humanities (IJSSH)*, 1(3), 49-58..
[View in \(Google Scholar\)](#)
- 2
20. Melliana, A., & Zain, I. (2013). Analisis Statistika Faktor yang Mempengaruhi Indeks Pembangunan Manusia di Kabupaten/Kota Provinsi Jawa Timur dengan Menggunakan Regresi Panel. *Jurnal Sains dan Seni ITS*, 2(2), D237-D242.
[View in \(Google Scholar\)](#)
21. Mulyani, E., Suropto, S., NUZIA, W. Z., & Fatmasari, R. (2014). Ekonomi Pembangunan.
[View in \(Google Scholar\)](#)
22. Nasional, K. N. P. P., & Di Indonesia, B. K. D. G. (2009). Background Study RPJMN 2010-2014. *Overview Dan Arah Ke Depan. Tahun*.
[View in \(Google Scholar\)](#)
23. Pemerintah Daerah Klungkung. (2014). *Klungkung dalam Angka*. Klungkung: Bappeda Klungkung.
[View in \(PDF\)](#)

- 30
24. Peraturan Menteri Pendidikan dan Kebudayaan Nomor 161 Tahun 2014 tentang Petunjuk Teknis dan Pertanggungjawaban Keuangan Dana Bantuan Operasional Sekolah Tahun Anggaran 2015. Jakarta: Kemdikbud, 2014.
[View in \(PDF\)](#)
- 3
25. Peraturan Pemerintah Republik Indonesia Nomor 47 Tahun 2008 Tentang Wajib Belajar.
[View in \(Google Scholar\)](#)
- 8
26. Pérez, A. V., Gámez, M. R., Briones, V. F. V., Viteri, C. G. V., & Molina, L. A. V. (2018). Sustainable Development Seen from Environmental Training in University Linkage. *International Journal of Life Sciences (IJLS)*, 2(1), 12-20.
[View in \(Google Scholar\)](#)
- 29
27. Putra, R. E. (2010). Formulasi Kebijakan Anggaran Pendidikan dalam Mewujudkan Peningkatan Pemerataan Pendidikan Era Otonomi Daerah di Kabupaten Solok. *Jurnal Demokrasi*, 9(2).
[View in \(Google Scholar\)](#)
- 4
28. RI, P. (2013). Peraturan menteri pendidikan dan kebudayaan republik indonesia nomor 107 tahun 2013 tentang tunjangan kinerja bagi pegawai di lingkungan kementerian pendidikan dan kebudayaan.
[View in \(Google Scholar\)](#)
- 6
29. Rigotti, J. I. R., Sawyer, D. O., de Souza, L. R., & Rodrigues, C. G. (2013). A Re-examination of the Expected Years of Schooling: What Can It Tell US?. *Brasília: International Policy Centre for Inclusive Growth (IPC-IG)*.
[View in \(Google Scholar\)](#)
30. Statistik, B. P. (2013). Indeks Pembangunan Manusia 2016. Jakarta: CV. Rioma.
[View in \(Google Scholar\)](#)
- 42
31. Statistik, B. P. (2015). Indeks Pembangunan Manusia: Metode Baru. Jakarta: Badan Pusat Statistik.
[View in \(Google Scholar\)](#)
- 21
32. Subijanto, S. (2015). Kebijakan Program Pendidikan Berbasis Keunggulan Lokal di Sekolah Menengah Negeri 2 Pekalongan. *Kebijakan Program Pendidikan Berbasis Keunggulan Lokal di Sekolah Menengah Negeri 2 Pekalongan*, 21(2), 115-134.
[View in \(Google Scholar\)](#)
- 17
33. Sukmaraga, P., & HAYATI, B. (2011). Analisis Pengaruh Indeks Pembangunan Manusia, PDRB per kapita, dan Jumlah Pengangguran terhadap Jumlah Penduduk Miskin di Provinsi Jawa Tengah (Doctoral dissertation, Universitas Diponegoro).
[View in \(Google Scholar\)](#)
- 37
34. Undang-Undang, R. I. (2003). No. 20 Tahun 2003 tentang Sistem Pendidikan Nasional. Bandung: Citra Umbara.
[View in \(Google Scholar\)](#)

35. UNESCO. (2015). ⁴⁰ *UIS Methodology for Estimation of Mean Years of Schooling*, <http://www.uis.unesco.org> diakses tanggal 3 September 2015.
[View in \(PDF\)](#)
36. US, S. (2013). ⁴⁴ *Aplikasi Statistika Dalam Penelitian: Konsep Statistika Yang Lebih Komprehensif*. Jakarta: Change Publication.
[View in \(Google Scholar\)](#)
37. Yustisia, T. V. (2015). ³⁸ *Undang-Undang No 23 Tahun 2014 tentang Pemerintahan Daerah dan Perubahannya*. VisiMedia.
[View in \(Google Scholar\)](#)
38. ¹⁴ Zainuri, M., Matsum, J. H., & Thomas, Y. (2014). Tingkat Pendapatan, Sosial Budaya Dan Jarak Rumah Dengan Sekolah Sebagai Faktor Penyebab Anak Putus Sekolah Di SMPN. *Jurnal Pendidikan dan Pembelajaran*, 3(10).
[View in \(Google Scholar\)](#)

Biography of Author

	<p>I Wayan Citrawan graduated his bachelor degree at Education Studies, FKIP Udayana University in 1983. He finished his master degree at Research and Evaluation Education, IKIP Singaraja in 2004. He completed his doctoral degree at Cultural Studies, Udayana University of Education in 2013. He has been published some research in the last 5 years. (1) <i>Marginalisasi Guru Perempuan dalam Peningkatan Kepala Sekolah SMPN dan SMAN Denpasar</i>. (2) <i>Meningkatkan Indeks Pembangunan Manusia Kabupaten Klungkung melalui Indeks Pendidikan: Mixed Method Study</i>. (3) <i>Penyusunan Naskah Akademik Rancangan Peraturan Daerah Kabupaten Badung tentang Pendidikan Inklusif</i>. (4) <i>Sebagai Tim Penyusunan Naskah Akademik Revisi PERDA No 5 tahun 2008 Tentang Sistem Penyelenggaraan Pendidikan Kabupaten Badung</i>. (5) <i>Pengaruh Kepemimpinan Institusi terhadap Motivasi Berprestasi Dosen IKIP PGRI Bali</i>, <i>Jurnal Pendidikan Widyadari</i>, VII/1907-3232. Email: citrawanwayan@yahoo.com</p>
---	---

Education Sector Optimization for Improving Human Development Index

ORIGINALITY REPORT

19%

SIMILARITY INDEX

15%

INTERNET SOURCES

11%

PUBLICATIONS

13%

STUDENT PAPERS

PRIMARY SOURCES

1	ejournal.iainpurwokerto.ac.id Internet Source	1%
2	ejournal.upi.edu Internet Source	1%
3	jdih.sidoarjokab.go.id Internet Source	1%
4	Submitted to Universitas PGRI Semarang Student Paper	1%
5	Submitted to School of Business and Management ITB Student Paper	1%
6	Submitted to Westcliff University Student Paper	1%
7	Submitted to Leeds Beckett University Student Paper	1%
8	Noelia Araújo Vila, Diego R. Toubes, Arthur Filipe de Araújo, Jose Antonio Fraiz Brea.	1%

"chapter 9 Company Internships", IGI Global, 2021

Publication

9	repository.pelitabangsa.ac.id:8080 Internet Source	1 %
10	Submitted to Universitas Mataram Student Paper	<1 %
11	files.eric.ed.gov Internet Source	<1 %
12	toc.123doc.net Internet Source	<1 %
13	Submitted to Northcentral Student Paper	<1 %
14	ejournal.uin-suka.ac.id Internet Source	<1 %
15	serialsjournals.com Internet Source	<1 %
16	digilib.its.ac.id Internet Source	<1 %
17	Repository.umy.ac.id Internet Source	<1 %
18	afghanistan.unfpa.org Internet Source	<1 %
19	Submitted to Excelsior College Student Paper	<1 %

20	Lia Safitri. "Material Development for English Tourism Subject Based on the Local Wisdom", EDULINK : EDUCATION AND LINGUISTICS KNOWLEDGE JOURNAL, 2020 Publication	<1 %
21	positori.perpustakaan.kemdikbud.go.id Internet Source	<1 %
22	www.analiz.com Internet Source	<1 %
23	Anne H. Outwater, Jacquelyn C. Campbell, Edward Mgaya. "Implementation of WHO/CDC Guidelines for Intentional Injury Death Surveillance", Homicide Studies, 2011 Publication	<1 %
24	Submitted to Universitas Sebelas Maret Student Paper	<1 %
25	eprints.uniska-bjm.ac.id Internet Source	<1 %
26	Submitted to University of Melbourne Student Paper	<1 %
27	Submitted to BPP College of Professional Studies Limited Student Paper	<1 %
28	journal.unnes.ac.id Internet Source	<1 %

29	jurnalpuslitjakdikbud.kemdikbud.go.id Internet Source	<1 %
30	pendidikan-diy.go.id Internet Source	<1 %
31	www.easpublisher.com Internet Source	<1 %
32	dione.lib.unipi.gr Internet Source	<1 %
33	repository.uinjkt.ac.id Internet Source	<1 %
34	conference.um.ac.id Internet Source	<1 %
35	Andrew Thatcher, Patrick Waterson, Andrew Todd, Neville Moray. "State of Science: ergonomics and global issues", Ergonomics, 2017 Publication	<1 %
36	Mayra Puente. "A Critical Race Spatial Analysis of Rural Latinx Students' College (In)Opportunities and Conscious Choices during the COVID-19 Pandemic", Journal of Latinos and Education, 2022 Publication	<1 %
37	journal2.um.ac.id Internet Source	<1 %

38	saudijournals.com Internet Source	<1 %
39	Submitted to Wesleyan University Student Paper	<1 %
40	docplayer.net Internet Source	<1 %
41	repository.unair.ac.id Internet Source	<1 %
42	Submitted to Sriwijaya University Student Paper	<1 %
43	journal.um-surabaya.ac.id Internet Source	<1 %
44	journal.unpak.ac.id Internet Source	<1 %
45	Submitted to The University of Memphis Student Paper	<1 %
46	Submitted to Universitas Gunadarma Student Paper	<1 %
47	Submitted to Universitas Muhammadiyah Ponorogo Student Paper	<1 %
48	bravo.ipca.pt Internet Source	<1 %
49	gatrenterprise.com	

Internet Source

<1 %

50

text.123doc.org

Internet Source

<1 %

51

Submitted to Padjadjaran University

Student Paper

<1 %

52

I W E Mahendra, N K Erawati, N W Sunita.
"Mental construction in mathematical proof",
Journal of Physics: Conference Series, 2019

Publication

<1 %

53

eprints.utas.edu.au

Internet Source

<1 %

54

ujcontent.uj.ac.za

Internet Source

<1 %

55

www.iiste.org

Internet Source

<1 %

56

www.ijmas.org

Internet Source

<1 %

57

www.journal.staihubbulwathan.id

Internet Source

<1 %

Exclude quotes Off

Exclude matches Off

Exclude bibliography Off