# Human Development Index (HDI) As A Planning Plan For Dealing Globalization Of Asean Economic Society (MEA) in Indonesia

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**ABSTRACT:** The purpose of this study is to map the human development index (HDI) of each region and regional planning efforts against the economic community of ASEAN (MEA). The research data used is secondary data sourced from the Central Bureau of Statistics (BPS) from 2010 until 2016. The research methodology used is comparative research using secondary data analysis method, depicting human development index as measured by society welfare, that is health, education, and life standard or often called economic. The research results show that there are 9 provinces that have different HDI with Jakarta Capital City as the capital of Indonesia, West Nusa Tenggara (NTB), East Nusa Tenggara (NTT), West Kalimantan (KALBAR), North Kalimantan, Gorontalo, West Sulawesi , North Maluku and West Papua and Papua. The impact of this study is that central government focuses more on areas with different Human Development Index (HDI) with DKI Jakarta and equitable development to improve infrastructure in the area.

**Keywords:** *human development index, regional planning, globalization*

## INTRODUCTION

In general, globalization is known that no regional restrictions on social conditions and global networks simultaneously unite previously dispersed and isolated communities into a unity of interdependence (Malcon Waters and Emmanuel Richer), trade and technology growth between countries (Princeton N. Lyman and Thomas L. Friedman) .. The phenomenon of globalization that occurs affect the circumstances. First: ethnic flows are characterized by high human mobility in the form of immigrants, tourists, refugees, labor and migrants. Second, technological flows are characterized by technological mobility, the emergence of multinational corporations, and transnational corporations whose activities can penetrate the boundaries of the State. third, financial flows are characterized by high capital mobility, purchasing investment through internet, foreign money deposit. fourth, media flows are characterized by a stronger mobility of information, both through print media, and electronic. Fifth, streams of ideas are marked by the swiftness of new values coming into the State.

The positive impact of globalization is the advancement of information technology that facilitates human interaction, wider opportunities for various ethnic, national, cultural and religious people to interact. While the negative impact of the inclusion of cultural values beyond will eliminate the traditional values of a nation and identity of a people, the exploitation of natural and other resources would be heightened because of the needs of the larger, evolving values of consumerism and individual shifting social values of society, there dehumanization , as human degrees are no longer appreciated for more use of high-tech machines. ASEAN as a regional organization realized the importance of a regional integration and the importance of globalization, then in 2003 held the 9th ASEAN Summit, the establishment of ASEAN Community is aimed at strengthening the integration of ASEAN VISION 2020 based on the three pillars of political, economic and social- culture.

The issue of the human development index is known as long equality of health rights, decent education and decent standard of living be the main idea of the purpose of this discussion. It begins with the concept of Rawls (1972) and United Nations Development Program (UNDP 1990) that every individual is entitled to adequate food, income, health, and the right to liberty and business opportunity, become the standard for all States and criticism of the phenomenon. Human development index gaps in each region reflect seriousness or not, on goal and readiness to face globalization. The central government as an equalization agent as a benchmark and fairness is aimed at fair planning for all regions in Indonesia. The tendency for eligibility for quality of life and food (Camfield, 2005), also affects religious families. Where religion in Indonesia is quite diverse with tolerance of Bhineka Tunggal Ika as the life philosophy of Indonesia. Of course, this mapping will be an option that social welfare for the people of Indonesia can be realized and the preparation towards ASEAN VISION 2020 is characterized by the equality of human development indexes throughout the province.

Our first task was to identify the entire human development index of all provinces that became the indicator of this discussion, the effort made by seeking information through the national statistical center agency, measuring the difference phenomenon that became the focus of this study. In accordance with [1] Maziotta and Pareto (2015), measuring welfare with commonality, grouping and then analyzing differences in phenomena.Each category is grouped based on the national development index based on the province of Jakarta as the state capital as a standard of healthy living, feasible and revenues.This method makes it easy to map the potential of each province and can be used as a central government planning concept focusing on areas with different human development index (HDI) different from the province of Jakarta.

## LITERATURE REVIEW

To review the literature, several articles discussed about index groups such as [2] analyzed the new development of human development index using the same method with UNDP resulting in the accuracy of the first model of 76, 60 % and 78.72% in the second model, reveals that the human development index is more realistic and more measurable in national development than gross domestic product (GDP), divided into three dimensions, long life, education and decent standard of living is the key to national development, in accordance with opinion (Hall (2013), Craveirinha and Clı'maco (2012) Maziotta and Pareto (2015) , states that many aspects of life can be a comparison between perception and objective evidence (Hall, 2013) quality of life is better than production activities or other standards, (Craveiri nha and Clı'maco (2012), distinguishing dimensions showing the size of multidimensional phenomena and monitoring changes over time (Maziotta and Pareto (2015). [3]found that the Human Development Index group of each Country is to prove the true value between low and high, even life expectancy and literacy are complementary (Hopkins, 1991). The importance of the human development index is based on Berenger and Chouchane's (2007) opinion,

...The crucial problem is to assign suitable weights to the indicators. Information can be aggregated into a single measure in two main ways. One is by bringing into play the arbitrariness and beliefs of the researcher and may involve public and expert judgments. The choice of aggregation function is also crucial as it affects the compensability of additive aggregations. The derived indices can be either additive or functional, depending on the context of analysis. (p. 1266–1267)

then, this aim is to provide information and may improve public and government decisions determining important aspects of improved health and long life, proper education and income such as research [4] that the comparison of human development index provides better human development performance from health and education aspect. [5]One of the most pertinent problems, after the relevant subindicators have been selected and normalized, which are supposed to reflect their relative importance.

## DYNAMIC HUMAN DEVELOPMENT INDEX

The objective development of human development index in Indonesia is statistically, used to show the level of inter-regional progress, economic stability, and regional planning in the future. In accordance with UNDP on how to create the environment of each region to develop human potential, productivity and a decent standard of living towards human welfare. Even multidimensional, including the progress of all

aspects such as creating security, environment concern, cultural freedom and the ease of public services[5]. Thus, the efforts of the central and local governments to develop environmental potential in a sustainable aimed for human progress in aspects of health, education and decent living and reflects the performance of better regional progress and performance According to research[4], (Ross & Mirowsky, 2010) , also a close relationship of income and education (Becker, 1993: Mincer, 1974: schulz, 1961)

**THE CONTRIBUTIONS OF EXPERTS**

Since, 1960 to 1990 like experts, Rawls 1972: Sen 1973; Mincer 1974; Schulz, 1961; Finnis, Boyle and Grized 1987), the experts argue that the basic human needs of human beings as social beings, interact with each other, are mutually sufficient to contribute to the basic nature of human beings, especially physical life, health, spirit, comfort, social respect, friendship and Equal rights of human principles get basic needs, free to try, freedom of life longer.

In 1990 - 1999 experts such as Kelly, 1991; Hopkins 1991; Barro (1997); Barro & Lee, 1993; Chen & Feng, 1996; Feng, 1997; Persson & Tabellini, 1992); Doyal and Gough (1991); Sen (1992); Foster and Sen 1997; Anand and Sen, 1997; Noorbakhsh, 1998, experts view human progress as inseparable from a more viable way of life such as education and health, the view of educational progress being the reason that every individual regardless of whether rich or poor, in poor or developed countries places great importance on education as a basis for human progress and knowledge advancement, the educational outlook will increase the life expectancy of the individual and the hope of finding a business for continuous effort. In poor and developed countries Education will reduce the poverty rate by 2 + 2.5%, the influence of education extends into trade growth, legal regulation, political stability, income distribution, inflation and into the index assessment among regions or the State. Individual health, related to the individual's understanding of the health of physical nutrients such as food and water, health care, birth control and maternity safety. Education and health equality is the responsibility of the government in improving the quality of life of individuals the 21st century such as Narayan-Parker (2000); Feng et al. (2000); Nussbaum (2000); (Ogwang, 2000); (Bostock, 2000); Zhao and Zhou (2001); Lai (2001); (Booysen, 2002); Knight and Song (2003); Camfield (2005) in addition, the views of experts on welfare. The dimension of welfare is defined in the welfare of the body, environment, security, old age, social welfare, freedom of expression. the role of the government can promote long-term development by applying a population policy that supports economic growth to be a determinant of the success of human development progress.

Diagram 1
Development Human Being
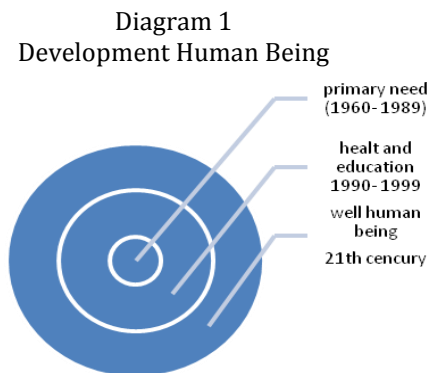


Based on the exposure ,  this hypothesis is the difference of Human Development Index in Province of Indonesia Country.

**DATA AND METHODOLOGY**

Data source from the national statistical agency in 2010 until 2016, all regional aspects 33 provinces. The methodology used is the analysis of varian (ANOVA), a statistical test tool used to test the comparative hypothesis of the sample when the data is on the interval or ratio scale. Anova is included in the parametric

statistics group. Testing using ANOVA is classified as comparative test that aims to compare (differentiate) whether the average of three or more groups tested differ significantly or not.

1. Descriptive analysis, by using 95% confidence level, it will be known areas that have human development index below or above average.
2. Test of homogeneity of variance is to test the assumption of ANOVA assumption is to test whether the whole group has the same variance (uniform) or not. For the purposes of this test, the proposed hypothesis is
   H0= the entire population has the same variance (uniform)
   H1= entire population has different variance

For the provision of testing the hypothesis is
a. If p value (sig)> 0.05, then H0 is accepted
b. If p value (sign) ≤ 0.05, then H0 is rejected

3. ANOVA test, to test whether the mean (mean) of all different groups significantly or not, then the hypothesis proposed is
   H0 = the whole population has the same average (identi)
   H1 = the entire population has an unequal average

For the provision of testing the hypothesis are:
a. If p value (sig)> 0.05, then H0 is accepted
b. If p value (sign) ≤ 0.05, then H0 is rejecte

4. Post Hoc Test, this section serves to determine the difference in the average index of human development between provinces. The hypothesis proposed is
a. If p value (sig)> 0,05, then H0 is accepted (group does not differ significantly)
b. If p value (sign) ≤ 0.05, then H0 is rejected (group differ significantly)

5. Homogeneous Subset, this output provides the fourth output gain. The difference is the out put on this test indicates which provinces the Human Development Index is no different
a. If p value (sig)> 0,05, then H0 is accepted (group does not differ significantly)
b. If p value (sign) ≤ 0.05, then H0 is rejected (group differ significantly.

**RESULTS**

Descriptive Analysis

In the descriptive analysis, the average of the provincial human development index is 65,454 to 67,675, which means that there are some provinces with below average human development index, ie, Nusa Tenggara Barat (NTB) of 62. 092 - 65.151, Nusa East Kalimantan with 62,637 - 65,474, North Kalimantan of 5,290 --73,165, Southeast Sulawesi with 64,210 - 66,936 Gorontalo, 63,420 - 65,811, West Sulawesi with 60,422 - 62,924, Maluku with 64,851 - 67,129 , North Maluku with 63,327 - 65,933, West Papua 59,955 - 61,739, Papua 55,009 - 5757,365, South Sumatera 65,060 - 67,500, and lampung 64,298 - 66,996. see table 1

| Table 1 Descriptives | | | | | | | | |
|---|---|---|---|---|---|---|---|---|
| IPM (less than 65.454 until 67.675) | | | | | | | | |
| | N | Mean | Std. Deviation | Std. Error | 95% Confidence Interval for Mean | | Minimum | Maximum |
| | | | | | Lower Bound | Upper Bound | | |
| NTB | 7 | 63,621 | 1,6537 | ,6250 | 62,092 | 65,151 | 61,2 | 65,8 |
| NTT | 7 | 61,429 | 1,4088 | ,5325 | 60,126 | 62,731 | 59,2 | 63,1 |
| KALBAR | 7 | 64,056 | 1,5338 | ,5797 | 62,637 | 65,474 | 62,0 | 65,9 |
| KALUTAR | 7 | 39,227 | 36,6953 | 13,8695 | 5,290 | 73,165 | ,0 | 69,2 |
| SULTENG | 7 | 65,573 | 1,4735 | ,5569 | 64,210 | 66,936 | 63,3 | 67,5 |

111

| | | | | | | | |
|---|---|---|---|---|---|---|---|
| GORONTALO | 7 | 64,616 | 1,2928 | ,4886 | 63,420 | 65,811 | 62,7 | 66,3 |
| SULBAR | 7 | 61,673 | 1,3525 | ,5112 | 60,422 | 62,924 | 59,7 | 63,6 |
| MALUKU | 7 | 65,990 | 1,2314 | ,4654 | 64,851 | 67,129 | 64,3 | 67,6 |
| MALUKU UTARA | 7 | 64,630 | 1,4091 | ,5326 | 63,327 | 65,933 | 62,8 | 66,6 |
| PAPUA BARAT | 7 | 60,847 | ,9644 | ,3645 | 59,955 | 61,739 | 59,6 | 62,2 |
| PAPUA | 7 | 56,187 | 1,2734 | ,4813 | 55,009 | 57,365 | 54,5 | 58,1 |
| SUMSEL | 7 | 66,280 | 1,3191 | ,4986 | 65,060 | 67,500 | 64,4 | 68,2 |
| LAMPUNG | 7 | 65,647 | 1,4585 | ,5513 | 64,298 | 66,996 | 63,7 | 67,7 |
| Total | 238 | 66,565 | 8,6958 | ,5637 | 65,454 | 67,675 | ,0 | 79,6 |

Province with index of human development more than average that is DKI Jakarta equal to 76,927 - 79,038, West Java 66,759 - 69,453, Central Java 66,672 - 69,385, Yogyakarta equal to 75,716 - 77,619, East Java 66,063 - 68,957, Banten 68,225 - 70,424 , Bali is 70,841 - 73,182, Central Kalimantan of 66,333 - 68,478, East Kalimantan of 72,005 - 74,206, North Sulawesi of 68,384 - 70,493, South Sulawesi 66,640 - 70,493 South Sulawesi 66,507 - 68,710, Aceh 67,431 - 69,401, North Sumatera amounting to 67,396 - 69,435, West Sumatra of 67,945 -70,169, Riau with 68,940 - 70,769, Jambi of 66,175 - 68,962, Bengkulu of 66,010 - 68,676, Kep. Bangka Belitung is 66,617 - 68,986, Kep.Riau is 71,745 - 73,758 South Kalimantan with 65,893 - 68,393. see table 2

| Table 2 Descriptives | | | | | | | | |
|---|---|---|---|---|---|---|---|---|
| IPM (average more than  65.454 until 67,675) | | | | | | | | |
| | N | Mean | Std. Deviation | Std. Error | 95% Confidence Interval for Mean | | Minimum | Maximum |
| | | | | | Lower Bound | Upper Bound | | |
| DKI JAKARTA | 7 | 77,983 | 1,1412 | ,4313 | 76,927 | 79,038 | 76,3 | 79,6 |
| JAWA BARAT | 7 | 68,106 | 1,4566 | ,5506 | 66,759 | 69,453 | 66,2 | 70,1 |
| JAWA TENGAH | 7 | 68,029 | 1,4665 | ,5543 | 66,672 | 69,385 | 66,1 | 70,0 |
| YOGYAKARTA | 7 | 76,667 | 1,0288 | ,3889 | 75,716 | 77,619 | 75,4 | 78,4 |
| JAWA TIMUR | 7 | 67,510 | 1,5647 | ,5914 | 66,063 | 68,957 | 65,4 | 69,7 |
| BANTEN | 7 | 69,324 | 1,1887 | ,4493 | 68,225 | 70,424 | 67,5 | 71,0 |
| BALI | 7 | 72,011 | 1,2652 | ,4782 | 70,841 | 73,182 | 70,1 | 73,7 |
| KALTENG | 7 | 67,406 | 1,1596 | ,4383 | 66,333 | 68,478 | 66,0 | 69,1 |
| KALTIM | 7 | 73,106 | 1,1900 | ,4498 | 72,005 | 74,206 | 71,3 | 74,6 |
| SULUT | 7 | 69,439 | 1,1399 | ,4308 | 68,384 | 70,493 | 67,8 | 71,1 |
| SULSEL | 7 | 67,890 | 1,3510 | ,5106 | 66,640 | 69,140 | 66,0 | 69,8 |
| SULTENGGAR | 7 | 67,609 | 1,1909 | ,4501 | 66,507 | 68,710 | 66,0 | 69,3 |
| ACEH | 7 | 68,416 | 1,0650 | ,4025 | 67,431 | 69,401 | 67,1 | 70,0 |
| SUMUT | 7 | 68,416 | 1,1021 | ,4166 | 67,396 | 69,435 | 67,1 | 70,0 |
| SUMBAR | 7 | 69,057 | 1,2025 | ,4545 | 67,945 | 70,169 | 67,3 | 70,7 |
| RIAU | 7 | 69,854 | ,9890 | ,3738 | 68,940 | 70,769 | 68,7 | 71,2 |
| JAMBI | 7 | 67,569 | 1,5069 | ,5695 | 66,175 | 68,962 | 65,4 | 69,6 |
| BENGKULU | 7 | 67,343 | 1,4413 | ,5448 | 66,010 | 68,676 | 65,4 | 69,3 |
| KEP.BANGKA BELITUNG | 7 | 67,801 | 1,2807 | ,4841 | 66,617 | 68,986 | 66,0 | 69,6 |
| KEP.RIAU | 7 | 72,751 | 1,0885 | ,4114 | 71,745 | 73,758 | 71,1 | 74,0 |
| KALSEL | 7 | 67,143 | 1,3518 | ,5109 | 65,893 | 68,393 | 65,2 | 69,1 |
| Total | 238 | 66,565 | 8,6958 | ,5637 | 65,454 | 67,675 | ,0 | 79,6 |

**TEST OF HOMOGENEITY OF VARIANCE**

The second output shows that the levene test is 178,604 with P value (sign) is 0.000. because p value <0.05, then H0 rejected, H1 accepted that the entire population has a different variance. Thus the assumption of ANOVA is fulfilled. See Table 3

**Table 3**
**Test of Homogeneity of Variances**
IPM

| Levene Statistic | df1 | df2 | Sig. |
|---|---|---|---|
| 178,604 | 33 | 204 | ,000 |

**POST HOC TESTS**

This section serves to determine the difference in the mean of human development index among provinces. In this result, there are 9 provinces that have Human Development Index different from DKI Jakarta as Standard Human Development Index. Provinces with (sig) <0.05 such as West Nusa Tenggara 0.017, East Nusa Tenggara 0.001, West Kalimantan 0.026, North Kalimantan 0.000, Gorontalo 0.046, West Sulawesi 0.002, North Maluku 0.046, West Papua 0.001 and Papua 0.000.

**Table 5**
**Multiple Comparisons**

Dependent Variable: IPM
Tukey HSD

| No | (J) PROVINSI | Mean Difference (I-J) | Std. Error | Sig. | 95% Confidence Interval | |
|---|---|---|---|---|---|---|
| | | | | | Lower Bound | Upper Bound |
| 1 | Nusa Tenggara Barat | 14,3614[*] | 3,4329 | ,017 | 1,086 | 27,637 |
| 2 | Nusa Tenggara Timur | 16,5543[*] | 3,4329 | ,001 | 3,279 | 29,830 |
| 3 | Kalimantan Barat | 13,9271[*] | 3,4329 | ,026 | ,652 | 27,202 |
| 4 | Kalimantan Utara | 38,7557[*] | 3,4329 | ,000 | 25,480 | 52,031 |
| 5 | Gorontalo | 13,3671[*] | 3,4329 | ,046 | ,092 | 26,642 |
| 6 | Sulawesi Barat | 16,3100[*] | 3,4329 | ,002 | 3,035 | 29,585 |
| 7 | Maluku Utara | 13,3529[*] | 3,4329 | ,046 | ,078 | 26,628 |
| 8 | Papua Barat | 17,1357[*] | 3,4329 | ,001 | 3,860 | 30,411 |
| 9 | Papua | 21,7957[*] | 3,4329 | ,000 | 8,520 | 35,071 |

**HOMOGENOUS SUB SET**

This section serves to determine the difference in the mean of human development index among provinces. In this result, there are 23 provinces that have Human Development Index no different from DKI Jakarta as Standard Human Development Index. Provinces with (sig) ≥ 0.05, Central Java of 0.528, Yogyakarta 1,000, East Java 0.410, Banten 0.812, Bali 0.999, Central Kalimantan 0.387, East Kalimantan 1,000, North Sulawesi 0.832, Central Sulawesi 0.108 South Sulawesi 0.432, Maluku 0.151, Aceh 0.620, North Sumatra 0.620, West Sumatera 0.761, Riau 0.895, Jambi 0.423, South Sumatra 0.187, Bengkulu 0.374. Lampung of 0.115, Kep. Bangka Belitung is 0.475, Riau Islands 1,000 and South Kalimantan 0.333. see table 6

**Table 6**
**Multiple Comparisons**

Dependent Variable: IPM
Tukey HSD

| No | (J) PROVINSI | Mean Difference (I-J) | Std. Error | Sig. | 95% Confidence Interval Lower Bound | Upper Bound |
|---|---|---|---|---|---|---|
| 1 | Jawa Tengah | 9,9543 | 3,4329 | ,528 | -3,321 | 23,230 |
| 2 | Yogyakarta | 1,3157 | 3,4329 | 1,000 | -11,960 | 14,591 |
| 3 | Jawa Timur | 10,4729 | 3,4329 | ,410 | -2,802 | 23,748 |
| 4 | Banten | 8,6586 | 3,4329 | ,812 | -4,617 | 21,934 |
| 5 | Bali | 5,9714 | 3,4329 | ,999 | -7,304 | 19,247 |
| 6 | Kalimantan Tengah | 10,5771 | 3,4329 | ,387 | -2,698 | 23,852 |
| 7 | Kalimantan Timur | 4,8771 | 3,4329 | 1,000 | -8,398 | 18,152 |
| 8 | Sulawesi Utara | 8,5443 | 3,4329 | ,832 | -4,731 | 21,820 |
| 9 | Sulawesi Tengah | 12,4100 | 3,4329 | ,108 | -,865 | 25,685 |
| 10 | Sulawesi Selatan | 10,0929 | 3,4329 | ,496 | -3,182 | 23,368 |
| 11 | Sulawesi Tenggara | 10,3743 | 3,4329 | ,432 | -2,901 | 23,650 |
| 12 | Maluku | 11,9929 | 3,4329 | ,151 | -1,282 | 25,268 |
| 13 | Aceh | 9,5671 | 3,4329 | ,620 | -3,708 | 22,842 |
| 14 | Sumatera Utara | 9,5671 | 3,4329 | ,620 | -3,708 | 22,842 |
| 15 | Sumatera Barat | 8,9257 | 3,4329 | ,761 | -4,350 | 22,201 |
| 16 | Riau | 8,1286 | 3,4329 | ,895 | -5,147 | 21,404 |
| 17 | Jambi | 10,4143 | 3,4329 | ,423 | -2,861 | 23,690 |
| 18 | Sumatera selatan | 11,7029 | 3,4329 | ,187 | -1,572 | 24,978 |
| 19 | Bengkulu | 10,6400 | 3,4329 | ,374 | -2,635 | 23,915 |
| 20 | Lampung | 12,3357 | 3,4329 | ,115 | -,940 | 25,611 |
| 21 | KEP. Bangka Belitung | 10,1814 | 3,4329 | ,475 | -3,094 | 23,457 |
| 22 | KEP.Riau | 5,2314 | 3,4329 | 1,000 | -8,044 | 18,507 |
| 23 | Kalimantan Selatan | 10,8400 | 3,4329 | ,333 | -2,435 | 24,115 |

**CONCLUSION**

The difference of human development index all provinces in Indonesia, positive signification identified in ANOVA test and Post Hoc Tests covering 9 provinces that have different human development index with Jakarta human development index as national standard, This study is very important for central government more focusing on areas that have different Human Development Index (HDI) with DKI Jakarta as well as equitable development to improve infrastructure in the area.

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