Do village funds have an influence on poverty alleviation in the village?

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Abstract. The Concept of Inclusive Economic Development is an economic development concept that creates broad access and opportunities for all levels of society as a whole, improves welfare, and reduces disparities between groups and regions. Based on the Inclusive Economic Development Index, regionally the districts on Madura Island are classified as low. Therefore, the other three districts, namely Sampang, Pamekesan and Sumenep, were ranked 37th, 35th and 34th respectively. Based on this data, it shows that four districts in Madura are classified as underdeveloped areas compared to 38 districts/cities in East Java Province. This study will analyze the factors that influence poverty from the No Poverty Village Index indicator. The research objects were 961 villages in four districts on Madura Island. The data used in this research is secondary data published by the Ministry of Villages, Development of Disadvantaged Regions and Transmigration. The variables that will be tested for their influence on the Village Index Without Poverty include: Amount of Village Funds, Healthy and Prosperous Village Index, Village Education Quality Index, Equitable Village Economic Growth Index, Village Infrastructure Index According to Innovation and Infrastructure Needs, Partnership Index for Village Development, Dynamic Village Institutional Index and Adaptive Village Culture, and Peaceful and Fair Village Index. The results of the regression analysis show that the Village Education Quality Index variable and the Equitable Village Economic Growth Index variable have a significant effect on reducing poverty. Meanwhile, the other six dependent variables, namely: Amount of Village Funds, Healthy and Prosperous Village Index, Village Infrastructure and Innovation Index According to Needs, Village Development Partnership Index, Dynamic Village Institutions Index and Adaptive Village Culture, and Peaceful and Fair Villages, do not have a significant effect on reducing rural poverty on the island of Madura.

1 Introduction

The structuring and regulatory policy regarding villages was realized with the promulgation of Law Number 6 of 2014 concerning Villages. In order to support the implementation of village duties and functions in administering government and village development in all aspects in accordance with the authority they have, Law Number 6 of 2014 concerning Villages gives a mandate to the government to allocate village funds. Village funds are budgeted every year in the APBN which are given to each village as a source of village income. According to Law Number 6 of 2014 concerning Villages, the objectives of village funds include improving public services in villages, alleviating people from poverty, advancing the village economy, overcoming development gaps between villages, and strengthening village communities as subjects of development. Therefore, distributing funds is the most important thing for more advanced village development.

With the enactment of Law Number 6 of 2014 concerning Villages, what concerns us all is how the village government will manage finances and be accountable for them and follow Government Regulation Number 8 of 2016 concerning the Second Amendment to Government Regulation Number 60 of 2014 concerning Village Fund Resources, Article 2 The State Revenue and Expenditure Budget states that Village Funds are managed in an orderly manner, in accordance with statutory provisions, efficiently, economically, effectively, transparently and responsibly by paying attention to a sense of justice and propriety and prioritizing the interests of the people. Local community. Based on the provisions in this Regulation, effectiveness is one of the things that needs to be considered in managing village funds so that programs or activities are in accordance with the objectives of village funds.

Effectiveness can also be a measure of whether a policy is truly useful in overcoming problems. Until now, one of the problems of economic development in Indonesia is the low level of social welfare or high levels of poverty in rural areas. This condition is also seen in four districts on Madura Island. If we look at the poverty percentage, it can be seen that Madura is an area that contributes quite a lot...
to poverty in East Java Province. In 2022, Sampang Regency has the highest percentage of poor people in East Java at 23.7%, then the second highest is Bangkalan Regency at 21.57%, while Sumenep Regency has the third highest at 20.50%, while Pamekasan Regency occupies the eleventh position out of 38 districts/city in East Java, namely 15.10%.

Likewise, if we look at the inclusive development index, which is an indicator that measures inclusiveness of development in Indonesia through aspects of economic growth, inequality and poverty, as well as access and opportunity, the four districts in Madura also show poor performance. In 2021, the Inclusive Development Index value for Bangkalan Regency was 4.88, ranking lowest in East Java, Sampang Regency received a value of 4.98 and was ranked 37th out of 38 districts/cities in East Java. Meanwhile, Pamekasan Regency and Sumenep Regency are ranked 35th and 34th, with scores of 5.33 and 5.32 respectively.

Meanwhile, if you look at the performance of rural economic development released by the PDTT Village Ministry in 2022, it can be seen that in Bangkalan Regency there are only 4 villages with "Independent" village status, Sampang Regency only has 3 villages with "Independent" village status, Pamekasan Regency has "Independent" villages. totaling 17 villages, while Sumenep Regency has 7 "Independent" villages.

The "Independent" village is an illustration of successful village development. This village has an extraordinary ability to improve the quality of life of its people. With an IDM score greater than 0.8155. "Independent" villages are able to maintain social, economic and ecological resilience in a sustainable manner.

Departing from the background of the problem, as well as the need to formulate fiscal decentralization policies, especially for central and village governments, this research aims to analyze several factors, namely: Amount of Village Funds, Healthy and Prosperous Village Index, Village Education Quality Index, Equitable Village Economic Growth Index, Village Infrastructure Index, Partnership Index for Village Development, Dynamic Village Institutional and Adaptive Village Culture Index, and Peaceful and Fair Village Index, towards poverty alleviation in rural communities in Madura.

The use of the eight independent variables above considers and accommodates several economic development theories, especially the new institutional economic theory which not only includes the variables of human resources, natural resources, financial resources in economic development, but also takes into account institutional aspects such as culture, peace, justice, and adaptation to change. This is the novelty of this research compared to previous studies which tend to ignore the above aspects in developing villages and alleviating poverty in rural areas. So this research can make a significant contribution to Development Theory, especially in rural areas and provide policy references for increasing economic growth and alleviating poverty in rural areas that do not only rely on village funds, but rather optimize other resources including social capital which has great potential in rural areas.

Even though there are many independent variables included in this research, the scope of this research is only limited to data on village development performance indicators published by the Ministry of Villages, Development of Underdeveloped Areas and Transmigration. That is the scope of this research and also a limitation of this research.

2 Method

The objects of analysis in this research were 961 villages in four districts on Madura Island. The data used in this analysis is secondary data published by the Ministry of Villages, Development of Disadvantaged Regions and Transmigration. The published data used in this research is for 2022. The data collection process was carried out through the website of the Ministry of Villages, Development of Disadvantaged Regions and Transmigration, so there is no need to doubt the accuracy and reliability of the data.

There are 8 (eight) variables that will be tested for their influence on the Index of Village Without Poverty, namely: (1) Total Village Funds, (2) Healthy and Prosperous Village Index, (3) Village Education Quality Index, (4) Equitable Village Economic Growth Index, (5) Village Infrastructure and Innovation Index, (6) Partnership for Village Development Index, (7) Index of Dynamic Village Institutions and Adaptive Village Culture, and (8) Peaceful and Fair Village Index.

This research uses multiple regression analysis tools, namely statistical techniques that simultaneously develop mathematical relationships between two or more independent variables and a dependent variable. The definition above explains that the reason for choosing this method is based on this research, there are more than two independent variables. The aim is to find out whether there is a relationship between the variables. This research uses a regression analysis tool, with the following regression equation model:

\[
Y = a + b_1 X_1 + b_2 X_2 + b_3 X_3 + b_4
\]

Where,

\( Y \) = Village Without Poverty Index (VWPI)
\( a \) = konstan
\( b_{1,2,3,4,5,6,7,8} \) = Independent variable regression coefficient
\( X_1 \) = Village Funds (VF)
\( X_2 \) = Healthy and Prosperous Village Index (HPVI)
\( X_3 \) = Village Education Quality Index (VEQI)
\( X_4 \) = Equitable Village Economic Growth Index (EVEGI)
\( X_5 \) = Village Infrastructure and Innovation Index (VIII)
\( X_6 \) = Partnership for Village Development Index (PVDI)
\( X_7 \) = Dynamic Village Institutions and Adaptive Village Culture Index (DVIC- AVC)
\( X_8 \) = Peaceful and Fair Village Index (PFVI)

The Village Without Poverty Index (VWPI) is an index that measures and targets the poverty level in villages to reach zero percent by 2030. This means that there should be no poor people in villages by 2030.
The amount of Village Funds (VF) is defined as funds sourced from the APBN intended for Villages which are transferred through the regency/city APBD and used to finance government administration, implementation of development, development, community and community empowerment.

Healthy and Prosperous Village Index (HPVI), an index that measures village achievements in ensuring a healthy life for village residents in order to achieve prosperity. This goal requires easy access to health services for village residents.

Village Education Quality Index (VEQI), an index that measures the availability of skills education services for village residents, preschool education services, non-formal education, as well as the availability of reading parks or village libraries.

The Equitable Village Economic Growth Index (EVEGI), an index that measures economic growth accompanied by equal distribution of development results, is the main target for this goal. Apart from that, it is targeted to create decent jobs and open up new economic opportunities for all village residents.

Village Infrastructure and Innovation Index (VIII), an index that measures the reliability of village infrastructure and the birth of innovation in villages in all fields, such as the economy, public services and superior village products.

Village Development Partnership Index (VDPI), an index that measures partnerships for village development. This is basically a means of implementing and revitalizing village partnerships to realize all sustainable development goals.

Dynamic Village Institutional and Adaptive Village Culture Index, an index that measures the village's ability to maintain local wisdom and revitalize and mobilize all elements of institutions at the village level. Because, the involvement of all elements of the village, the strength and functioning of village institutions in community life, will support the dynamic life of diversity in the village, as well as driving the achievement of village development.

Peaceful and Fair Village Index (PFVI), an index that measures the absence of incidents of crime, fighting, domestic violence, and violence against children; preserving the culture of mutual cooperation in the village; increasing the democracy index in the village; and the absence of human trafficking and child labor.

3 Results and discussion

3.1 Distribution of village funds in Madura

Madura Island is administratively divided into four districts, namely Sumenep, Pamekasan, Sampang and Bangkalan. In this section, an overview of the amount of Village Funds distributed by the central government to each district on Madura Island will be presented.

This district is administratively divided into 27 sub-districts, and is divided into 330 villages. In 2022, the total Village Fund distributed to 330 villages in Sumenep Regency will be IDR. 332,807,461,000 (three hundred thirty-two billion eight hundred forty-seven million four hundred and sixty-one thousand rupiah). Bluto District is the district that receives the largest Village Fund budget in Sumenep Regency, namely IDR 19,665,005,000. Meanwhile, the lowest allocation of Village Funds based on Sumenep Regency Subdistrict is Masalembu District, namely IDR 4,199,522,000. Based on the results of the number of Village Fund distributions in 330 villages throughout Sumenep Regency, Guluk-Guluk Village in Guluk, Guluk District is the largest recipient of Village Fund distribution compared to other villages in Sumenep Regency, namely IDR. 2,251,834,000.00. Meanwhile, the lowest recipient of Village Fund distribution was Bungin-Bugin Village, Dungkek District, namely only Rp. 633,458,000.

Pamekasan is administratively divided into 13 sub-districts, and is divided into 178 villages. In 2022, the total Village Funds distributed to 178 villages in Pamekasan Regency will be IDR. 198,575,032,000 (one hundred ninety eight billion five hundred seventy five million thirty two thousand rupiah). Proppo District is the district that receives the largest Village Fund budget in Pamekasan Regency, namely IDR. 29,466,327,000. Meanwhile, the lowest Village Fund allocation based on Pamekasan Regency is Pamekasan Regency, namely IDR. 7,908,684,000.

Sampang Regency is administratively divided into 14 sub-districts, and is divided into 273 villages. In 2022, the total Village Funds distributed to 273 villages in Sampang Regency will be IDR. 227,571,894,000 (two hundred twenty seven billion seven hundred eighty four one million eight hundred forty thousand rupiah). Kedundung District is the district that receives the largest Village Fund budget in Sampang Regency, namely IDR. 29,712,709,000. Meanwhile, the lowest allocation of Village Funds according to sub-districts in Sampang Regency is Pangaregang District, namely IDR. 6,680,690,000.

Bangkalan is administratively divided into 18 sub-districts, and is divided into 273 villages. In 2022, the total Village Funds distributed to 273 villages in Bangalan Regency will be IDR. 317,495,477,000 (three hundred seventeen billion four hundred ninety-five million four hundred seventy-seven thousand rupiah). Kokop District is the district that receives the largest Village Fund budget in Bangalan Regency, namely IDR. 27,021,648,000. Meanwhile, the lowest allocation of Village Funds based on sub-districts in Bangkalan Regency is Bangkalan Regency, namely IDR. 5,173,966,000.

3.2 Village development performance in Madura

In this section, an overview of village development performance will be presented as seen from the achievement of the Village Development Index (VDI) value in each village in the districts on Madura Island. The discussion will be reviewed based on the VDI scores obtained by each sub-district.

3.2.1 Village development performance in sumenep regency

Based on the 2022 Average Village Development Index (VDI) ranking, Sumenep Regency is ranked 217th out of
434 districts in Indonesia with an VDI score of 0.6901 and "Developing" status. Based on the IDM value of each village in Sumenep Regency, it shows that the village with the highest VDI value is East Lenteng Village with an VDI value of 0.9510 with "independent" village status. Meanwhile, the village with the lowest VDI value in Sumenep Regency is Buli'ean Village, namely 0.6051 with "developing" village status.

Overall, Sumenep Regency has 7 villages with Independent Village status, 93 villages with Advanced Village status, while the remaining 230 villages have Developing Village status. The following is an overview of village development performance in Sumenep Regency based on the percentage of village status.

![Fig. 1. Percentage of villages based on village status in Sumenep Regency.](https://example.com/fig1.png)

The picture above shows that the majority or 69.70% of villages in Sumenep Regency are Developing Villages. Meanwhile, 28.18% have Advanced Village status, while the remaining 2.12% have Independent Village status.

**Source:** Ministry of Villages, Development of Disadvantaged Regions and Transmigration, 2022 (processed).

**Fig. 1.** Percentage of villages based on village status in Sumenep Regency.

3.2.2 Village development performance in Pamekasan regency

Based on the average Village Development Index (IDM) score in 2022, Pamekasan Regency is ranked 146th out of 434 districts in Indonesia with an IDM score of 0.7186 and "advanced" status. Based on the IDM value of each village in Pamekasan Regency, it shows that the village with the highest IDM value is East Tentenan Village with an IDM value of 0.8895 with "independent" village status. Meanwhile, the village that has the lowest IDM value in Pamekasan Regency is Katapang Laok Village, namely 0.5992 with "developing" village status.

Overall, Pamekasan Regency has 17 villages with Independent Village status, 65 villages with Advanced Village status, while the remaining 226 villages have Developing Village status. The following is an overview of village development performance in Pamekasan Regency based on the percentage of village status.

![Fig. 2. Percentage of villages based on village status in Pamekasan Regency.](https://example.com/fig2.png)

The picture above shows that most or 53.93% of villages in Pamekasan Regency are included in the Developing Village group. Meanwhile, 36.52% have Advanced Village status, while the remaining 9.55% have Independent Village status.

**Source:** Ministry of Villages, Development of Disadvantaged Regions and Transmigration, 2022 (processed).

**Fig. 2.** Percentage of villages based on village status in Pamekasan Regency.

3.2.3 Village development performance in Sampang regency

Based on the IDM value of each village in Sampang Regency, it shows that the village with the highest IDM value is Pangarengan Village with an IDM value of 0.8410 with "independent" village status. Meanwhile, the village with the lowest IDM value in Sampang Regency is Katapang Laok Village, namely 0.5992 with "developing" village status.

Overall, Sampang Regency has 1 village with Independent Village status, 46 villages with Advanced Village status, while the remaining 226 villages have Developing Village status. The following is an overview of village development performance in Sampang Regency based on the percentage of village status.

![Fig. 3. Percentage of villages based on village status in Sampang Regency.](https://example.com/fig3.png)

The picture above shows that most or 68.78% of villages in Sampang Regency are included in the Developing Village group. Meanwhile, 16.85% have Advanced Village status, while the remaining 0.37% have Independent Village status.

**Source:** Ministry of Villages, Development of Disadvantaged Regions and Transmigration, 2022 (processed).

**Fig. 3.** Percentage of villages based on village status in Sampang Regency.
3.2.4 Village development performance in Bangkalan regency

Based on the VDI value of each village in Bangkalan Regency, it shows that the village with the highest VDI value is Sabiyan Village with an IDM value of 0.8560 with "independent" village status. Meanwhile, the village with the lowest IDM value in Bangkalan Regency is Pakong Village, namely 0.5990 with "developing" village status.

Overall, Bangkalan Regency has 3 villages with Independent Village status, 31 villages with Advanced Village status, while the remaining 206 villages have Developing Village status. The following is an overview of village development performance in Bangkalan Regency based on the percentage of village status.

Source: Ministry of Villages, Development of Disadvantaged Regions and Transmigration, 2022 (processed).

**Fig. 4.** Percentage of villages based on village status in Bangkalan Regency.

The picture above shows that the majority or 85.65% of villages in Bangkalan Regency are included in the Developing Village group. Meanwhile, 13.08% have Advanced Village status, while the remaining 1.27% have Independent Village status.

Based on the Village Without Poverty Index value, Sumenep Regency received a score of 44.41. Based on data from the Village Without Poverty Index for each sub-district in Sumenep Regency, it shows that the sub-district with the highest score is Gulukguluk Sub-district with a score of 51.82. The subdistrict that has the lowest Village Without Poverty Index value is Masalembu Subdistrict, namely 15.74. Meanwhile, based on the Village Without Poverty Index value based on each village in Sumenep Regency, it shows that the village that has the highest Village Without Poverty Index value is Pangaranangan Village with a Village Without Poverty Index value of 100. Meanwhile, the village that has the highest Village Without Poverty Index value is the Village Pangarangan with a
Poverty Village Index value of 75.75. Based on the Village Without Poverty Index value, Pamekasan Regency received a score of 44.72. Based on the Village Without Poverty Index score for each sub-district in Pamekasan Regency, it shows that the sub-district with the highest score is Pakong Sub-district with a score of 49.45. The sub-district that has the lowest Village Without Poverty Index value is Pagantenan Subdistrict, namely 39.72.

Meanwhile, based on the Village Without Poverty Index value for each village in Pamekasan Regency, it shows that the village that has the highest Village Without Poverty Index value is Dasuk Village with a Village Without Poverty Index value of 100. Meanwhile, the village that has a No Poverty Village Index value is 100. Village Without Poverty Index of 100. The lowest in Pamekasan Regency is Palenggeaan Dajah Village with an index value of 0.

Based on the Village Without Poverty Index score for each sub-district in Sampang Regency, it shows that the sub-district with the highest score is Torjun Sub-district with a score of 60.55. The sub-district that has the lowest Village Without Poverty Index value is Karangpenang Subdistrict, namely 40.60. Meanwhile, based on the Village Without Poverty Index value for each village in Sampang Regency, it shows that the village with the highest Village Without Poverty Index value is Batukarang Village with a No Poverty Village Index value of 75.75. Meanwhile, the village with the lowest Village Without Poverty Index value in Sampang Regency is Dharma Tanjung Village with an index value of around 0.

Based on the Village Without Poverty Index score for each sub-district in Bangkalan Regency, it shows that the sub-district with the highest score is Socah Sub-district with a score of 66.79. The sub-district that has the lowest Village Without Poverty Index value is Galis Subdistrict, namely 49.65. Meanwhile, based on the Village Without Poverty Index value for each village in Bangkalan Regency, it shows that the village with the highest Village Without Poverty Index value is Pabiyan Village with a Village Without Poverty Index value of 81.65. Meanwhile, the village with the lowest Village Without Poverty Index value in Bangkalan Regency is Telaga Biru Village with an index value of 0.

### 3.4 The influence of village funds on poverty alleviation

In this section, we will analyze the factors that influence poverty in terms of the Village Without Poverty index value in Madura. The results of the research will provide answers to whether the Village Fund, which is the implementation of fiscal decentralization policies from the central government to the Village Government, is effective in reducing poverty in Madura.

The objects of analysis in this research were 961 villages in four districts on Madura Island. The data used in this analysis is secondary data published by the Ministry of Villages, Development of Disadvantaged Regions and Transmigration. There are 8 variables that will be tested for their influence on the Village Without Poverty Index, including: Village Funds (VF), Healthy and Prosperous Village Index (HPVI), Village Education Quality Index (VEQI), Equitable Village Economic Growth Index (EVEGI), Village Infrastructure and Innovation Index (VIII), Partnership for Village Development Index (PVDI), Dynamic Village Institutions and Adaptive Village Culture Index (DVI-AVCI) Peaceful and Fair Village Index (PFVI).

The results of multiple linear regression analysis show the results which are summarized in the following mathematical equation.

$$IDTK = -12.747 + 0.017DD - 0.016IDSS + 0.295IDDB + 0.246IDPEDM + 0.125IDSDK + 0.071IKPD - 0.099IKDD-BDA - 0.082IDDB + e$$

Based on the equation above, it can be interpreted using a=10%. The results of the coefficient of determination test can be seen from the Adjusted R Square value of 0.133 or the equivalent of 13.3%, which means that the Village Without Poverty Index can be influenced by Funds (VF), Healthy and Prosperous Village Index (HPVI), Village Education Quality Index (VEQI), Equitable Village Economic Growth Index (EVEGI), Village Infrastructure and Innovation Index (VIII), Partnership for Village Development Index (PVDI), Dynamic Village Institutions and Adaptive Village Culture Index (DVI-AVCI) Peaceful and Fair Village Index (PFVI). Meanwhile, 86.7% was influenced by other variables outside the model.

Based on the results of the regression analysis, it shows that only two variables have a significant effect on alleviating rural poverty in Madura, namely the Village Education Quality Index (VEQI) variable and the Equitable Village Economic Growth Index (EVEGI) variable. These two variables have a positive and significant influence of +0.295 and +0.246 respectively. The coefficient value shows that if there is an increase of 1 index unit in the Village Education Quality Index (VEQI) value, it will have an effect on increasing the Village Without Poverty Index value by 0.295%, which means that the poverty level in the village has decreased.

Meanwhile, the coefficient value of the Fair Equitable Village Economic Growth Index variable is +0.246, indicating that if there is an increase of 1 index unit in the Equitable Village Economic Growth Index value, it will have an effect on increasing Villages Without Poverty. The index value is 0.246%, which means the poverty level in the village has decreased.

Meanwhile, the other six dependent variables are: Village Fund Amount, Healthy and Healthy and Prosperous Village Index, Village Infrastructure and Innovation, Partnership for Village Development Index, Dynamic Village Institutions and Adaptive Village Culture Indexes, and Peaceful and Fair Village Index, has no significant effect. significant impact on reducing rural poverty on Madura Island.

### 4 Conclusion
Based on the status of the Village Development Index (VDI), village development performance on Madura Island is still classified as unsatisfactory. This can be seen from the still minimal number of villages with Independent Village status on Madura Island. Meanwhile, Village Funds are a variable that does not have a significant influence on poverty alleviation in Madura. Variables that influence rural poverty alleviation in Madura are the quality of education and economic growth. Based on the findings of this research, the policy recommendation that can be made is to channel village funds into the aspect of strengthening village economic activities to encourage equitable village economic growth, so as to absorb labor and reduce poverty, unemployment which will ultimately reduce the number of rural poverty in Madura.

Reference

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