

## **Village Funds for Village Community Welfare (Case Study of Lubuk Raja Village, South Sumatera Province, Indonesia)**

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### **Abstract**

*This study aims to test and analyze the influence of Independent Variables on Village Community Welfare in Lubuk Raja Subdistrict, OKU Regency, South Sumatera Province, Indonesia, both partially and simultaneously. The number of samples determined is 200 households from seven villages in Lubuk Raja Sub-district, OKU Regency, South Sumatera Province, and Multiple Logistic Regression was used to test the possibility of forming a dependent variable that can be predicted from the independent variable. The independent variable is a mixture of continuous (metric) and categorical (non-metric) variables. The Wald test shows that 9 out of 12 independent variables (Infrastructure in the Economic Sector, Village Community Empowerment, Making Village Embung, Repairing Fish Ponds, Purchasing Egg Hatching Machines, Purchasing Animal Feed Chopping Equipment, Purchasing Service Business Equipment, Purchasing Coffee Roaster Machines, and Purchasing Village Water Pumps) have a significant effect, supported by the number of  $Exp \beta$  (Odds Ratio), which shows that all nine variables are likely to improve the welfare of the Lubuk-Raja Village community, Ogan Komering Ulu Regency, South Sumatera Province, Indonesia. The coefficient of determination seen from the Nagelkerke R Square value of 0.843 indicates that the ability of the independent variable to explain the dependent variable is 84.3%. The remainder is explained by exogenous variables of 15.7%.*

**Keywords:** Village Fund, Economic Infrastructure, Village Community Empowerment, Construction of Village Embung.

### **1. Introduction**

Development is a process of continuous improvement for the people of a region to obtain a better life. The benchmark of development is not only per capita income but must also be accompanied by improvements in income distribution, a decrease in poverty, and a decrease in unemployment rates, among many other indicators, for a region to have an accelerated development process (De Guimarães et al., 2020). National development is also defined as the deliberate transformation of a nation's economic, social, and cultural structures in a desired direction through policies and strategies. The transformation of the economic structure is evidenced by an increase or acceleration of production growth in the industrial and service sectors, such that their share of national income is increasing (Mutezo & Mulopo, 2021).

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Various development policies launched by the government focus on regional economic development and growth within the territory of the country so that the concept of regional development emerged, which means that development is centered on the development of an area or small scale, namely, villages (villages). Engels et al., 2019). Regional development is a strategy intended to improve the socioeconomic life of a community, and can also be seen as a development program carried out in a planned manner to increase production, income, and welfare to improve the quality of life in the region. Education, health and housing (Zahraee et al. 2020).

In this case, regional development policy, referred to as village development, is the government's decision and intervention, both nationally and regionally, to encourage comprehensive regional development. The formulation of this policy is very important so that the central and local governments can take practical and effective steps in implementing the concept of village development. The ultimate goal of village development policy is to encourage and improve economic growth and overall community welfare (Wedekind et al., 2021).

In general, village development is the effort of the community and government to improve all aspects of life through the use of resources originating from the village itself, government assistance, or assistance from outside organizations. Village development is a part of regional development. Local governments and all elements of society participate in managing existing resources, forming partnerships to create new jobs, and encouraging the growth of economic activities in the region (Lin, 2019).

Proper planning and management are needed to implement regional development and achieve regional development goals. One point that must be considered in implementing a more comprehensive regional development management paradigm is to identify the fundamentals of development more realistically. The points that must be considered in building the identification of development fundamentals are increasing per capita income and significantly reducing poverty, unemployment, and inequality to improve welfare (Rustan et al., 2022).

The Indonesian government has worked hard to improve people's welfare to the smallest regional level through various sustainable regional development programs. One of them is the Village Fund Program, which has been implemented since 2015 and continues to be realized (Stacey et al., 2021). The Village Fund Program is a form of full support from the government to manage and optimize the potential of village communities so that it can become a source of financing to improve their standard of living of village communities. The Village Fund Smart Book states that the Village Fund is financed by the State Budget (APBN), which is intended for villages, transferred through the Regency/City Regional Budget (APBD), and prioritized for the implementation of physical development. This includes infrastructure as the main support for the development of other fields and empowerment of rural communities, which is calculated based on the number of villages and allocated by considering the population, poverty rate, area, and level of geographical difficulty (Permatasari et al., 2021).

The purpose of the Village Fund Program itself is to improve the welfare of the village community, which includes the availability of public services in the village, reducing poverty, advancing the village economy, and reducing the development gap between villages through the development of two main pillars: physical development in the form of providing and improving village infrastructure, and improving the quality of human resources through village community empowerment (Stojanova et al., 2021). The Village Fund program has been rolled out nationally from 2015 to 2021, with a total of approximately 400.2 trillion, as a stimulus that encourages the village economy to accelerate and advance through village development to improve the welfare of rural communities in the long term.

Another objective of the Village Fund Program is to positively influence village self-reliance, as indicated by an increase in village status. Village status can be used to illustrate the welfare level of a community. Nationally, secondary data show that there are still around 21,173 villages (28.2 percent of the total 74, 953 villages in Indonesia) that are categorized as underdeveloped and very underdeveloped. Of the 74,953 villages, 3,540 were very underdeveloped and 17,633 were underdeveloped. The open unemployment rate in rural areas also increased by 0.1% to 3.55% from the previous year's 3.45%, from 6.82 million people in 2019 to 6.88 million (Xiao et al., 2023).

The Village Fund program can be used as a minimal source of investment that will provide a strong impetus for successful economic development in underdeveloped or peri-urban areas, in this case, the rural areas targeted by the program (Moon & Lee, 2020). The legal basis for village regulations and village funds is contained in Law No. 6/2014 on villages, further regulated in Permendagri No. 114/2014 on Village Development Guidelines and PermenDES No. 19/2017 on Priority Use of Village Funds for Fiscal Year 2018. PermenDES prioritizes two main objectives of the Village Fund Program: the use of Village Funds for village development and community empowerment. The priority utilization of village development includes the gradual and sustainable development of village infrastructure. By prioritizing these two objectives, improving the quality of life of rural communities, improving the welfare of rural communities, alleviating poverty, and improving public services (Arifin et al., 2020).

South Sumatra is one of the provinces in Indonesia that consistently receives Village Fund assistance. The distribution of the Village Fund in the South Sumatra region has been realized by 99.98% and absorbed by 60.02% or Rp1.61 trillion. Most villages in South Sumatra have experienced an increase in village status, which is a measure of village independence. However, in the seven years of realization of village funds, only 11.53% increased to the status of Advanced Village, and 0.53% increased to the status of Independent Village.

In the Developing Village Index (IDM) Status of districts/cities in South Sumatra Province in 2021, the Status of Very Underdeveloped Villages is still found in Ogan Komering Ulu Regency at 0.04%. Ogan Komering Ulu is one of the districts in the South Sumatra region that has received 100 the distribution of Village Funds. The Village Fund Program, which has been running since 2015 and consistently flows funds to village treasuries, is expected to improve the economy of rural communities, so that community welfare increases. However, from the inception of the Village Fund Program in 2015 until 2021, the expected results of the Village Fund Program have not yet reached the desired target. For example, IDM status is still dominated by the status of underdeveloped and developing villages. Ogan Komering Kabupaten Ulu (OKU Regency), which consists of 143 villages and comes from 13 sub-districts, is one of the districts where many villages still have IDM status as Underdeveloped Villages, and only one village has IDM status as an Independent Village in 2021, namely Batu Raden Village in Lubuk Raja Sub-district. Seven years after the implementation of the village fund programme, the change in village status was more to the status of underdeveloped and developing villages. Some villages have achieved developed village status, and only one village has achieved Independent Village status until 2021, namely Batu Raden Village in the Lubuk Raja sub-district. The Lubuk Raja sub-district is one in which all villages have advanced, developed, and independent status. The Lubuk Raja sub-district has seven villages, all of which are categorized as Independent Villages and have been upgraded to a Developing, Advanced and Independent status. It is the only sub-district that will have an Independent Village in 2021. The Village Fund received is intended for infrastructure development and village community empowerment in accordance with the provisions of the Ministry of Villages and PDT. Thus, this study aims to investigate the utilization of village funds for infrastructure in the economic sector and village community empowerment and its effect

on the level of welfare of village communities in the Lubuk-Raja sub-district of Ogan Komering Ulu District.

**2. Method**

This study analyzed the effect of the use of village funds for economic infrastructure and village community empowerment on the level of welfare. The data used in this study are quantitative, namely in the form of primary data or the results of questionnaire answers from respondents distributed to 200 sample households in seven villages in the Lubuk Raja Subdistrict.

This study uses an inferential analysis method conducted to test variables that are likely to have a significant influence on the welfare of village communities using the Multilevel Logistic Regression method. Metode ini menguji kemungkinan terbentuknya variabel dependen yang dapat diprediksikan dari variabel independennya.

Because the independent variable is a mixture of continuous (metric) and categorical (non-metric) variables, the normality assumption is not required in Logistic Regression analysis (Ghozali, 2018).

The equation used in the Multiple Logistic Regression is as follows:

$$\ln\left(\frac{1}{1-p}\right) = \beta_0 + \beta_1X_1 + \beta_2X_2 \dots \dots \beta_kX_k + e$$

$$\hat{p}_i = \frac{1}{1 + e^{\beta_0 + \beta_1X_1 + \beta_2X_2 + e_i}}$$

If  $+\beta_1X_1 + \beta_2X_2 + e_i$  is equal to infinity then,  $\hat{p}_i = \frac{1}{1+\infty} = \frac{1}{1} = 1$

If  $\beta_0 + \beta_1X_1 + \beta_2X_2 + e_i$  is equal to minus infinity then,  $\hat{p}_i = \frac{1}{1+\infty} = \frac{1}{0} = 0$

The steps in the Logistic Regression Test included Count R2, Pseudo R2, Parameter Significance Test, Data Suitability (Nagelkerke R Square), Odds Ratio, Wald statistic.

The operational Variables used in this study are described in Table 1.

Table 1. Operational Research Variables

| Independent Variabel (X)                     | Definition   | Measurement scale        |
|--|--|--------------------------|
| X1; IBE<br>Economic Infrastructure           | Village Funds Distributed for Infrastructure in the Economic Sector from 2017 to 2022<br><br>Scale 1 ≥ Rp 2.625.840.317<br>Scale 0 < Rp 2.625.84.0317<br><br>(The total for each year compared to the average number of Village Funds realized) is IDR 2.625.840.317,-   | Existing (1)<br>None (0) |
| X2; PMD<br>Village Empowerment               | Community<br>Village Fund channeled for Village Community Empowerment from 2017 to 2022<br><br>Scale 1 ≥ Rp 3.571.072.027,-<br>Scale 0 < Rp 3.571.072.027,-<br><br>(Total each year compared to the average number of Village Funds realized) which is IDR 3.671.072.027 | Existing (1)<br>None (0) |
| X3; PED<br>Construction of Village Reservoir | The Village Fund allocated for the construction of village reservoirs is in accordance with the provisions of each village.  | Existing (1)<br>None (0) |

|  |   |                               |
|--|---|-------------------------------|
|  | Existing (1) : Answers $\geq$ 50%<br>None (0) : Answers $<$ 50%   |                               |
| X4; PKI<br>Fish Pond Repair                        | The Village Fund allocated for the repair of fish ponds owned by residents who have freshwater fish farming businesses. in accordance with the provisions of each village.<br>Existing (1) : Answers $\geq$ 50%<br>None (0) : Answers $<$ 50%         | Existing (1)<br>None (0)      |
| X5; PMPT<br>Purchase of Egg Hatching Machine       | The Village Fund allocated for the purchase of egg hatchers for residents who have poultry farming businesses is in accordance with the provisions of each village.<br>Existing (1) : Answers $\geq$ 50%<br>None (0) : Answers $<$ 50%                | Existing (1)<br>None (0)      |
| X6; PAPPT<br>Purchase of Animal Feed Chopper       | Village funds allocated for the purchase of animal feed chopping equipment for residents who have livestock businesses in accordance with the provisions of each village.<br>Existing (1) : Answers $\geq$ 50%<br>None (0): Answers $<$ 50%           | Existing (1)<br>None (0)      |
| X7; PPUJ<br>Purchase of Service Business Equipment | Village funds allocated for the purchase of service business equipment for residents who have a business in the service sector, in accordance with the provisions of each village.<br>Existing (1) : Answers $\geq$ 50%<br>None (0) : Answers $<$ 50% | Existing (1)<br>None (0)      |
| X8; PMPP<br>Purchase of Rice Milling Machine       | Village funds allocated for the purchase of service business equipment for residents who have a business in the service sector, in accordance with the provisions of each village.<br>Existing (1) : Answers $\geq$ 50%<br>None (0) : Answers $<$ 50% | Existing (1)<br>None (0)      |
| X9; PMRK<br>Purchase of Coffee Roaster Machine     | The Village Fund allocated for the purchase of coffee roaster machines for residents who have coffee sales businesses, in accordance with the provisions of each village.<br>Existing (1) : Answers $\geq$ 50%<br>None (0) : Answers $<$ 50%          | Existing (1)<br>Tidak Ada (0) |
| X10; PPAD<br>Purchase of Village Water Pump        | Village funds are allocated for the purchase of village water pumps for shared use by villagers, in accordance with the provisions of each village.<br>Existing (1) : Answers $\geq$ 50%<br>None (0) : Answers $<$ 50%                                | Existing (1)<br>None (0)      |
| X11; PBD<br>Establishment BUMDesa                  | The Village Fund allocated for the establishment of Village-Owned Enterprises is in accordance with the provisions of each village.<br>Existing (1) : Answers $\geq$ 50%<br>None (0) : Answers $<$ 50%  | Existing (1)<br>None (0)      |
| X12; PUMK<br>Small Mikro Business Training         | Village funds allocated for Micro and Small Business training for groups of business actors in the village, in accordance with the provisions of each village.  | Existing (1)<br>None (0)      |

Source: Data processed, 2023

### 3. Results and Discussion

The Lubuk Raja Sub-district is a sub-district in Ogan Komering Ulu Regency, South Sumatra, Indonesia, which administratively has seven villages: Batumarta I Village, Batu Winangun Village, Batu Raden Village, Batumarta II Village, Marta Jaya Village, Lekis Rejo Village, and Lubuk Banjar Village. The Lubuk Raja sub-district covers an area of 166.06 km<sup>2</sup> with the majority of the population being Javanese, Komerling, and Ogan Ulu. The Lubuk Raja sub-district is partly bordered to the east by the East Ogan Komering Ulu District (OKUT), whereas to the west, it is partly bordered by the East Baturaja and Lubuk Batang sub-districts. In the south, it is partly bordered by the East Baturaja Sub-district and partly directly bordered by OKUT District. To the north, it is partly bordered by the Peninjauan and Sinar Peninjauan subdistricts.

All seven villages in the Lubuk-Raja sub-district were classified as self-sufficient. The livelihoods of the population are very diverse, ranging from farmers in both rice fields and plantations to livestock breeders, traders, and micro-enterprises in the form of household industries, including culinary, handicrafts, and service businesses.

Since the implementation of the Village Fund Program, the seven villages in the Lubuk Raja Sub-district have experienced an increase in IDM status, so that in 2021 there are no more villages with Very Disadvantaged and Disadvantaged IDM status. Two villages, Batu Winangun Village and Lekis Rejo Village, have developing status. Furthermore, four villages, Batumarta 1 Village, Batumarta 2 Village, Marta Jaya Village, and Lubuk Banjar Village, have advanced village status. Finally, Batu Raden Village was upgraded to an independent status. This Independent Village status is the only status achieved by Batu Raden Village in the Ogan Komering Ulu Regency.

Below is a map of the Lubuk Raja subdistrict.



Figure 1. Map of Lubuk Raja Sub-District



Next, a recapitulation of the results of distributing questionnaires to a predetermined sample was presented.

Table 2. Repaitulation of Questionnaire Distribution Results

| No. |  |      | Answers   |   | Total (%) |
|-----|--|------|---|---|-----------|
|     |  |      | > IDR<br>2.625.84.031<br>7 (1)  | < IDR<br>2.625.84.031<br>7 (0)              |           |
| X1  | Use of Village Funds for Economic Infrastructure | Freq | 92  | 108   | 100       |
|     |  | %    | 46,0  | 54,0  |           |
|     |  |      | > Rp<br>3.571.072.02<br>7 (1)   | < Rp<br>3.571.072.02<br>7 (0)               | Total (%) |
|     |  | X2   | Use of Village Funds for Village Community Empowerment                          | Freq  | 100       |
|     |  |      | Existing<br>(1)   | None<br>(0)                                 | Total (%) |
|     |  | X3   | Was any of the Village Fund used for the construction of the village reservoir? | Freq  | 89        |
|     |  |      | 44,5  | 55,5  |           |
|     |  | X4   | Has any Village Fund been used to repair fish ponds?                            | Freq  | 163       |
|     |  |      | 81,5  | 18,5  |           |
|     |  | X5   | Was any Village Fund used for the purchase of egg hatchers?                     | Freq  | 155       |
|     |  |      | 77,5  | 22,5  |           |
|     |  | X6   | Was any of the Village Fund used to purchase the fodder chopper?                | Freq  | 118       |
|     |  |      | 59,0  | 41,0  |           |
|     |  | X7   | Has any Village Fund been used to purchase equipment for service businesses?    | Freq  | 96        |
|     |  |      | 48,0  | 52,0  |           |
|     |  | X8   | Was any Village Fund used for the purchase of rice milling machines?            | Freq  | 134       |
|     |  |      | 67,0  | 33,0  |           |
|     |  | X9   | Was any Village Fund used for the purchase of the coffee roaster machine?       | Freq  | 161       |
|     |  |      | 80,5  | 19,5  |           |
|     |  | X10  | Has any Village Fund been used to purchase village water pumps?                 | Freq  | 62        |
|     |  |      | 31,0  | 69,0  |           |
|     |  | X11  | Is there Village Fund used for the establishment of BUMDesa?                    | Freq  | 77        |
|     |  |      | 38,5  | 61,5  |           |
|     |  | X12  | Is any of the Village Fund used for micro and small business training?          | Freq  | 100       |
|     |  |      | 50,0  | 50,0  |           |
|     |  |      | Prosperous ><br>IDR<br>3.404.177<br>(1)   | Not Prosperous <<br>IDR<br>3.404.177<br>(0) | Total (%) |
| Y   | Village Community Welfare Level                  | Freq | 102   | 98  | 100       |
|     |  | %    | 51,0  | 49,0  |           |

Source: Data processed, 2023

The dependent variable or response variable in this study is Village Community Welfare (KMD) which consists of two scales that are categorical or dummy, and refers to the Minimum Wage of Ogan Komering Ulu Regency which is IDR 3,404,177. An income level < Rp 3,404,177 is categorized as Not Prosperous (Y=0), while an income level ≥ Rp 3,404,177 is categorized as prosperous (Y=1).

The variability of the independent variable in explaining the dependent variable is measured using the coefficient of determination, which can be seen from the Nagelkerke R-Square value in the form of decimals, which can be converted into percentages for easy understanding and interpretation.

Table 3. Model Summary

| Step | -2 Log likelihood   | Cox & Snell R Square | Nagelkerke R Square |
|------|---------------------|----------------------|---------------------|
| 1    | 76.979 <sup>a</sup> | .632                 | .843                |

Source: Data processed, 2023

Based on Table 3, the coefficient of determination obtained from the Nagelkerke R Square value is 0.843. The figure indicates that the ability of the independent variables to explain the dependent variable was 84.3%. The remainder is explained by exogenous variables of 15.7%.

Furthermore, a Multiple Logistic Regression analysis was carried out by examining the effect of infrastructure in the economic sector, village community empowerment, construction of village reservoirs, repair of fish ponds, purchase of egg hatching machines, purchase of animal feed chopping tools, purchase of service business equipment, purchase of rice milling machines, purchase of coffee roaster machines, purchase of village water pumps, establishment of BUMDesa, and small micro business training on the welfare level of village communities in Lubuk-Raja district, Ogan Komering Ulu Regency. The following table shows the results of Multiple Logistic Regression analysis.

Table 4. Variables in the Equation

|                |          | Variables in the Equation |       |        |    |      |        | 95% C.I.for EXP(B) |         |
|----------------|----------|---------------------------|-------|--------|----|------|--------|--------------------|---------|
| Step           |          | B                         | S.E.  | Wald   | df | Sig. | Exp(B) | Lower              | Upper   |
| 1 <sup>a</sup> | IBE_X1   | 1.345                     | .690  | 3.794  | 1  | .051 | 3.837  | .992               | 14.845  |
|                | PMD_X2   | 2.191                     | .703  | 9.719  | 1  | .002 | 8.946  | 2.256              | 35.474  |
|                | PED_X3   | 2.353                     | .982  | 5.739  | 1  | .017 | 10.521 | 1.534              | 72.160  |
|                | PKI_X4   | 2.944                     | 1.032 | 8.138  | 1  | .004 | 18.989 | 2.513              | 143.517 |
|                | PMPT_X5  | 3.444                     | .960  | 12.879 | 1  | .000 | 31.309 | 4.773              | 205.367 |
|                | PAPPT_X6 | 2.802                     | .853  | 10.797 | 1  | .001 | 16.484 | 3.098              | 87.707  |
|                | PPUJ_X7  | 2.152                     | .741  | 8.434  | 1  | .004 | 8.601  | 2.013              | 36.753  |
|                | PMPP_X8  | 0.441                     | 1.091 | .163   | 1  | .686 | 1.554  | .183               | 13.198  |
|                | PMRK_X9  | 2.051                     | .906  | 5.119  | 1  | .024 | 7.774  | 1.315              | 45.939  |
|                | PPAD_X10 | 2.374                     | .850  | 7.804  | 1  | .005 | 10.743 | 2.031              | 56.828  |
|                | PBD_X11  | 1.624                     | 1.084 | 2.247  | 1  | .134 | 5.074  | .607               | 42.435  |
|                | PUMK_X12 | -0.337                    | .716  | .222   | 1  | .638 | .714   | .176               | 2.903   |
|                | Constant | -13.048                   | 2.487 | 27.513 | 1  | .000 | .000   |                    |         |

a. Variable(s) entered on step 1: X1, X2, X3, X4, X5, X6, X7, X8, X9, X10, X11, X12.

Source: Data processed, 2023

Based on Table 4, the results of the Multiple Logistic Regression analysis were as follows:

$$KMD\_Y = - 13.048 + 1.345 IBE\_X1 + 2.191 PMD\_X2 + 2.353 PED\_X3 + 2.944 PKI\_X4 + 3.444 PMPT\_X5 + 2.802 PAPPT\_X6 + 2.152 PPUJ\_X7 + 0.441 PMPP\_X8 + 2.051 PMRK\_X9 + 2.374 PPAD\_X10 + 1.624 PBD\_X11 + -337 PUMK\_X12$$



The Multiple Logistic Regression equation above can be used to analyze the effect of the independent variables on the dependent variable, among others:

1. The Economic Infrastructure variable (IBE) had a  $\beta$  value of 1.345 and an Exp  $\beta$  value of 3.387 or 2.387. This means that the Village Fund used to finance the Economic Sector Infrastructure has the opportunity to increase Village Community Welfare (KMD) by 2.287%.
2. The Village Community Empowerment variable (PMD) had a  $\beta$  value of 2.191 and an Exp  $\beta$  value of 8.946 or 7.946. This means that the Village Fund used to finance Village Community Empowerment increases Village Community Welfare (KMD) by 7.946%.
3. The Village Embung Development (PED) variable had a  $\beta$  value of 2.353 and an Exp  $\beta$  value of 10.521 or 9.521. This means that the Village Fund used to finance the Construction of Village Embung has the opportunity to increase Village Community Welfare (KMD) by 9.521%.
4. The Fish Pond Improvement (PKI) variable had a  $\beta$  value of 2.944 and an Exp  $\beta$  value of 18.989 or 17.989. This means that the Village Fund used to finance the construction of fishponds has the opportunity to increase Village Community Welfare (KMD) by 17.989%.
5. The variable Purchase of Egg Hatching Machines (PMPT) had a  $\beta$  value of 3.444 and an Exp  $\beta$  value of 31.309 or 30.309. This means that the Village Fund used to finance the Purchase of Egg Hatching Machines has the opportunity to increase Village Community Welfare (KMD) by 30.309%.
6. The variable Purchase of Animal Feed Chopping Equipment (PAPPT) has a  $\beta$  value of 2.802 and an Exp  $\beta$  value of 16.484 or 15.484. This means that the Village Fund used to finance the Purchase of Animal Feed Chopping Machines has the opportunity to increase Village Community Welfare (KMD) by 15.484%.
7. The Purchase of Service Business Equipment (PPUJ) variable had a  $\beta$  value of 2.152 and an Exp  $\beta$  value of 8.601 or 7.601. This means that the Village Fund used to finance the Purchase of Service Business Equipment has the opportunity to increase Village Community Welfare (KMD) by 7.601%.
8. The variable Purchase of Rice Milling Machines (PMPP) had a  $\beta$  value of 0.441 and an Exp  $\beta$  value of 1.554 or 0.554. This means that the Village Fund used to finance the Purchase of Rice Milling Machines has the opportunity to increase Village Community Welfare (KMD) by 0.554%.
9. The variable Purchase of Coffee Roaster Machine (PMRK) has a  $\beta$  value of 2.051 and an Exp  $\beta$  value of 7.774 or 6.774. This means that the Village Fund used to finance the Purchase of Coffee Roaster Machines has the opportunity to increase Village Community Welfare (KMD) by 6.774%.
10. The Village Water Pump Purchase (PPAD) variable had a  $\beta$  value of 3.374 and an Exp  $\beta$  value of 10.743 or 9.743. This means that the Village Fund used to finance the purchase of Village Water Pumping Machines has the opportunity to increase Village Community Welfare (KMD) by 9.743%.
11. The BUMDesa Establishment variable (PBD) had a  $\beta$  value of 1.624 and an Exp  $\beta$  value of 5.074 or 4.074, respectively. This means that the Village Fund used for the establishment of BUMD has the opportunity to increase Village Community Welfare (KMD) by 4.074%.
12. The Small Mikro Business Training (PUMK) variable has a  $\beta$  value of 0.337 and an Exp  $\beta$  value of 0.714 or -0.286. This means that the Village Fund used for the establishment of BUMD has the opportunity to reduce Village Community Welfare (KMD) by -0.286%.

### Wald Test (Partial Test)

The Wald test is used to test whether each independent variable has an effect on Village Community Welfare in Lubuk Raja District, Ogan Komering Ulu Regency. To determine whether the hypothesis is accepted or rejected, comparing the significant value with a significance level  $\alpha = 0.05$  with the following criteria: 1) If the sig value  $< 0.05$ , the independent variable has an effect on the dependent variable, and 2) if the sig value  $> 0.05$ , the independent variable has no effect on the dependent variable.

Table 4 shows that for variables consisting of Infrastructure in the Economic Sector (X1), Village Community Empowerment (X2), Village Embung Making (X3), Fish Pond Repair (X4), Purchase of Egg Hatching Machine (X5), Purchase of Animal Feed Chopper (X6), Purchase of Service Business Equipment (X7), Purchase of Coffee Roaster Machine (X9), and Purchase of Village Water Pump (X10), the significant value is  $< 0.05$ , so H1 is accepted. For the variable purchase of rice milling machines (X8), the establishment of BUMDesa (X11), and micro and small business training (X12), the significance value is  $> 0.05$ , so H0 is accepted.

### Omnibus Tests of Model Coefficients (Simultaneous Test)

The Omnibus Tests of Model Coefficients test is used to jointly test whether all independent variables have the opportunity to influence the dependent variable, as shown in Table 5.

Table 5. Omnibus Tests of Model Coefficients

|        |       | Omnibus Tests of Model Coefficients |    |      |
|--------|-------|-------------------------------------|----|------|
|        |       | Chi-square                          | df | Sig. |
| Step 1 | Step  | 200.200                             | 12 | .000 |
|        | Block | 200.200                             | 12 | .000 |
|        | Model | 200.200                             | 12 | .000 |

Based on table 5, it can be seen that the significance value is  $0.000 < 0.05$ , so it can be concluded that all independent variables together are able to influence the Village Community Welfare variable and have a good model fit.

## 4. Discussion

The model significance test was used to prove the hypothesis that the independent variables together have a significant effect on the dependent variable, which can be seen in the intercept; only the final variable value shows a p-value  $< \alpha$  ( $0.000 < 0.05$ ). This value indicates that the independent variables consisting of Infrastructure for the Economy (X1), Village Community Empowerment (X2), Construction of Village Embung (X3), Repair of Fish Ponds (X4), Purchase of Egg Hatching Machines (X5), Purchase of Animal Feed Chopper (X6), Purchase of Service Business Equipment (X7), Purchase of Rice Milling Machine (X8), Purchase of Coffee Roaster Machine (X9), Purchase of Village Water Pump (X10), Establishment of BUMDesa (X11), and Micro and Small Business Training (X12) are jointly able to influence the Village Community Welfare variable and have a good model fit.

This is in accordance with the Strong Push Theory or better known as the Big Push Theory which says that there is a need for a strong push in the form of a large comprehensive program in the form of a minimum amount of investment to advance a region, especially underdeveloped and or peripheral areas. The Village Fund Program is a large national program intended to support the work programs of peripheral areas in rural areas of Indonesia. The concept of the Indonesian government, which wants to advance Indonesia from the periphery and underdeveloped areas, was realized by implementing the Village Fund Program, which began in 2015.

In line with the Regulation of the Minister of Villages, Development of Disadvantaged Regions and Transmigration Number 11 of 2019 concerning Priorities for the Use of Village Funds in 2020, the use of Village Funds is prioritized to finance the implementation of programs and activities in the field of village development that will provide maximum benefits to the village community, among others, in the form of improving the welfare of the village community itself.

In the first four years, from 2015 to 2018, the Village Fund was prioritized to build infrastructure in various fields, which in turn would support the economic turnover and improvement of a region. Furthermore, from 2019 to the present, the priority of the Village Fund is to improve the ability of human resources in rural areas, who are expected to manage their economy independently. This is manifested in village community empowerment programmes.

The concept of running the Village Community Empowerment Program is in accordance with the Endogenous Growth Theory, which emphasizes human capital as the main driver of economic growth. In this theory, Romer makes the determinants of growth endogenous variables in the model. Romer models in which technological progress depends on the total amount of knowledge invested. Investment in knowledge can be achieved through development of the R&D sector. Investments can be made through additional capital to increase individual research, which will increase private knowledge. Thus, the endogenous growth model emphasizes human capital as the main driver of economic growth.

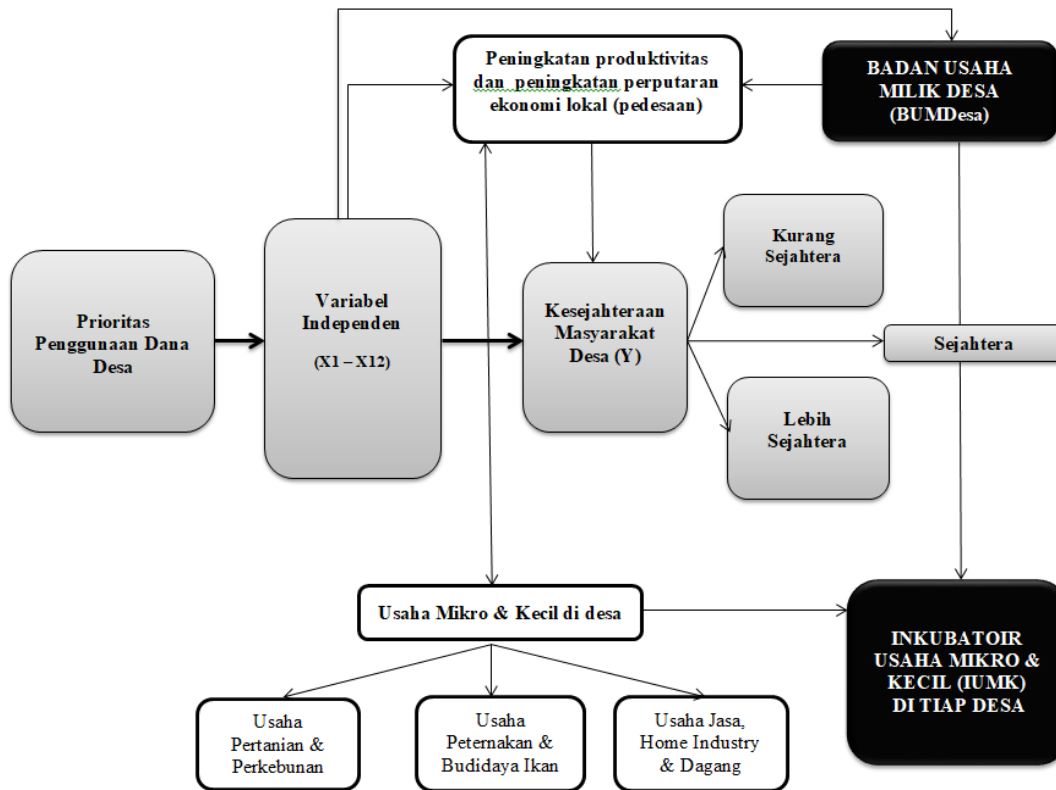
There are two important principles in Endogenous Growth Theory, according to Romer (1), which focus on human capital, such as knowledge, skills, and training individuals. Human capital and growth are linked, in that when the economy improves, they are more inclined to "invest" in society, schools, and job training. A healthier and more productive workforce, on the other hand, leads to a growing standard of living. (2) Emphasis on technological innovation by private enterprises as a trigger for productivity growth. In short, this theory is related to the emphasis on human capital formation because the development and use of technological innovations require skilled labor.

#### Novelty of Research

The novelty that is found in this research is an improvement type novelty, which is an improvement of the previous principle and an improvement of the existing theory/practice, including

The idea of the Village Fund Program management model in determining the form of activities/programs to be implemented in terms of utilizing the Village Fund is adjusted to the principles and priorities of use.

b. Consistent prototype ideas for measuring the outcomes of programs realized through funding from village funds are associated with improving the welfare of village communities.



To make a greater contribution to increasing productivity and local economic turnover, the allocation pattern must be changed, including the allocation of the Village Fund, which has focused on BUMDesa development and operations in each village, to fund the formation of Micro and Small Business Incubators (IUMK) in each village. IUMK will embrace micro- and small-scale business actors in developing their businesses. Thus, productivity and turnover of the local economy will increase, ultimately improving the welfare of the village community.

## 5. Conclusion

The results of the analysis and discussion provide a conclusion that the Village Fund, whose use is prioritized for the development of Infrastructure for the Economic Sector, Village Community Empowerment, Construction of Village Reservoirs, Repair of Fish Ponds, Purchase of Egg Hatching Machines, Purchase of Animal Feed Chopping Tools, Purchase of Service Business Equipment, Purchase of Rice Milling Machines, Purchase of Coffee Roaster Machines, Purchase of Village Water Pumps, Establishment of BUMDesa, and Small Micro Business Training with the aim of improving the Welfare of Village Communities in Lubuk Raja District, Ogan Komering Ulu Regency, can increase productivity and local economic turnover, namely the village economy itself, which ultimately improves the welfare of the village community.

### Suggestions

The following suggestions are proposed:

1. The prioritization of the use of the Village Fund for all independent variables should be continued and increasingly focused on independent variables that have a large percentage of opportunities to improve the welfare of village communities.
2. The three Independent Variables that have a great opportunity to improve the welfare of village communities in the Lubuk Raja sub-district are the repair of fishponds, purchase of egg hatching machines, and purchase of animal feed chopping equipment.

These should be the main priorities supported by funding through the Village Fund Program in an effort to realize the Lubuk Raja Sub-district Plan and Strategy to make all its villages have the title of superior villages and independent status.

3. Establish Micro and Small Business Incubators (IUMK) in each village and focus on providing ongoing coaching and mentoring independently funded by the Village Fund.
4. Creating the existence of absolute minimum requirements on demand with the simultaneous establishment of industries or businesses that are interrelated and need each other. This is intended to maintain the sustainability of the production industry or business so that it has a clear and definite market share.

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