

# Identification and Analysis of Underdeveloped Village in The Border Area of Bogor District (Studi Wirajaya Village Jasinga)

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**Abstract:** One measure of the success of village development is measured by the achievement of the Village Development Index (IDM), the status of success in the IDM is seen from 5 categories, namely (1). The status of villages is very disadvantaged, (2), underdeveloped villages (3), developing villages (4), advanced villages and (5), independent villages. The villages in the border areas are really cause for concern. Based on the size of the Village Development Index (IDM) 2020, the number of villages on the border that have underdeveloped status and are very disadvantaged is very dominant. Wirajaya village is the only village in Jasinga District that is included in the category of underdeveloped villages with an IDM in 2020 of 0.5819. Sampling was done by collecting data on all economic, social and environmental aspects. Each indicator has a score. The score was determined using the Analytical Hierarchy Process (AHP) method. The calculation of the index on each dimension is carried out using the scoring method which is then transformed into an index. The social resilience index consists of 4 indicators: health, education, social capital, and housing. Health indicators have the lowest contribution of 0.57. The economic resilience index consists of 6 indicators, namely, indicators of diversity in production, trade, distribution access, access to credit, economic institutions, regional openness. Of the six indicators, the lowest contribution is the logistic distribution access indicator, which is 0.00. The environmental resilience index consists of 3 indicators, namely, environmental quality indicators, disaster-prone potential and disaster response. Of the three indicators, the lowest contribution is the disaster-prone potential indicator of 0.00.

**Keywords:** IDM, underdeveloped village, border, wirajaya

## 1. Introduction

In essence, the goal of the development of a country is for the welfare of society, as is the case with the State of Indonesia. In the Preamble to the 1945 Constitution it is stated that the aim of the National Development of the Indonesian Nation is to protect the entire nation and all the blood of Indonesia, promote public welfare, educate the nation's life, and participate in implementing world order. The development of an underdeveloped village is one of the efforts to develop a village inhabited by rural communities with various socio-economic problems and physical limitations to become a developed village with rural communities whose quality of life is the same or not far behind compared to other Indonesians.

One measure of the success of village development is measured by the achievement of the Village Development Index (IDM), the status of success in the IDM is seen from 5 categories, namely (1). The status of villages is very disadvantaged, (2), underdeveloped villages (3), developing villages (4), advanced villages and (5), independent villages. The results of the assessment from the Ministry of Villages show that the achievement of the Village Build Index (IDM) for villages in Bogor Regency in 2020 shows a significant increase compared to 2019, from 416 villages, 29 villages are categorized as independent status, the rest are developed village status categories. as many as 131 villages, the status of developing villages is 252 villages, and there are still 4 villages that are underdeveloped status. The four villages are

Buana Jaya village and Sukarasa village in Tanjungsari sub-district, Cilaku village in Tenjo sub-district and Wirajaya village in Jasinga sub-district. All of these villages are located in the border area of Bogor Regency and other regencies, even bordering another province, namely Banten Province.

The villages in the border areas are really cause for concern. Based on the measurement of the Village Development Index (IDM) 2020, the number of villages on the border that have underdeveloped status and are very disadvantaged is very dominant. A total of 644 villages (45%) are underdeveloped villages and 635 villages (44%) are very disadvantaged. The average for the Village Development Index (IDM) in the border villages is 0.498, while the average national IDM is 0.566. This situation illustrates the low level of welfare in border villages. The picture that shows that the villages on the border are dominated by underdeveloped and very underdeveloped situations shows that the government has not optimized its potential resources to be developed, so that they grow and develop unsteadily according to their internal social dynamics which are the rights of origin and local authority. Meanwhile, the developed and developed villages were more due to geographical fortunes and development policies that crossed them.

Wirajaya Village is one of the villages located in Jasinga District, Bogor Regency, with an area of 1,137 hectares. This village consists of 2 hamlets with 5 Rukun Warga (RW) and 26 Rukun Tetangga (RT). The village boundaries are as follows: North of Curug village, East of Jugalajaya village, South of Cileuksa village, West of Luhur Jaya village (Banten). This means that Wirajaya village is a village directly on the border with other provincial districts, namely Lebak Regency, Banten Province. Wirajaya Village has great potential in the form of a very large oil palm plantation and a large agricultural area.

**Table 1 - Recapitulation of village development index in 2020, Jasinga District**

No	Village	IKS 2020	IKE 2020	IKL 2020	IDM 2020	Status
1	Curug	0,7200	0,6167	0,5333	0,6233	Developing
2	Pangradin	0,7886	0,5167	0,5333	0,6129	Developing
3	Kalongsawah	0,8114	0,5667	0,4667	0,6149	Developing
4	Sipak	0,8629	0,7167	0,5333	0,7043	Developing
5	Jasingan	0,8057	0,8167	0,4000	0,6741	Developing
6	Koleang	0,8514	0,5667	0,5333	0,6505	Developing
7	Cikopomayak	0,7543	0,6833	0,6667	0,7014	Developing
8	Setu	0,9314	0,6000	0,6667	0,7327	Developed
9	Barengkok	0,7486	0,6167	0,6000	0,6551	Developing
10	Bagoang	0,7657	0,5333	0,6000	0,6330	Developing
11	Pangaur	0,7429	0,6333	0,6000	0,6587	Developing
12	Pamagersari	0,7771	0,7500	0,5333	0,6868	Developing
13	Jugala Jaya	0,6971	0,5333	0,6667	0,6324	Developing
14	Tegalwangi	0,8171	0,5500	0,4667	0,6113	Developing
15	Neeglasari	0,7943	0,5667	0,5333	0,6314	Developing
16	Wirajaya	0,6457	0,5667	0,5333	0,5819	Under Developed

Source: Ministry of Villages and Disadvantaged Regions (2020)

Based on the data in table 1, Wirajaya village is the only village in Jasinga District that is included in the category of underdeveloped villages with an IDM in 2020 of 0.5819. As the only village in the category of underdeveloped villages, of course this is a problem in itself for both the Jasinga sub-district government and the Wirajaya village government. It needs to be studied and further explored what factors cause Wirajaya village to be included in the category of underdeveloped villages.

## 2. Literature Review

The Village Development Index is a "Technocracy" tool for measuring the development of Village Independence status through analysis and composite scores of all scoring scores for each selected indicator based on the established development policy concept and the authority, duties and functions of the Ministry of Village, PDTT. Thus the results of IDM analysis in determining the status of Village Independence will be a tool for planning integration. The Build Village Index is needed as a reference for the status of the village regulated in the PDTT Permendesa Number 2 of 2016

concerning the Building Village Index. Realizing that the Village is essentially a Level 4 Autonomous Government, the most basic level (foundation) of the 4 layers of the Homeland Structure (Central, Province, Regency/City, Village), as well as the Village community is the smallest Indonesian Nation Community Entity (Core). So it must be ensured that the preparation of the IDM is based on the substance of various regulations in the framework of implementing a national development concept policy that is complete in all aspects that have been determined nationally. Apart from this, it must also ensure that IDM is in line with the strategy for achieving short-term, medium-term and long-term strategic targets in a sustainable manner. Technocratically, IDM is prepared in accordance with the concept of Village development policies to achieve the 9 Objectives of the Village Law as the mandate of the Village Law, implementing the mandate of Presidential Regulation No.2 of 2015 concerning RPJMN 2015-2019, and in line with the mandate authority of Perpres No.12, 2015 concerning the Ministry of Villages, PDTT and upholding the mandate and mandate of the 1945 Constitution along with the existing laws and regulations in the Republic of Indonesia, realizing the state philosophy of Pancasila as a development reference, while respecting the diversity of villages with the paradigm of Bhineka Tunggal Ika. In general, the Guideline for Village Development Index (IDM) is prepared to provide guidance to the central, regional and village governments in utilizing data and information on the Village Development Index as one of the bases in the planning, implementation, and monitoring and evaluation of Village development processes. The specific purpose of compiling the Developing Village Index is so that it can be used as a database for village development which is the basis for assessing the progress and independence of the village, one of the inputs in the formulation of strategic issues and main problems related to development and empowerment. Village community, input in the formulation of targeting (location targets) related to national development targets and coordination instruments between Ministries/Institutions, regional and village governments, in order to effectively achieve national development targets. The indicators available in the Podes are selected which can represent the determinants of the success of regional development;

1. Appropriateness of the Government's Role in selecting development interventions,
2. Community participation in development interventions (planning, development, utilization and maintenance)
3. Regional Characteristics (Typology and Social Capital) of each Village, which will optimize points 1 and 2.

Conceptually, if points 1,2 and 3 are each positively correlated, then it can be ascertained that the impact will be achieved in accordance with the theory and concept of governance policies for sectoral development programs and/or selected strategic fields which in theory development is a determinant of factors in development progress in; Social Dimensions, Economic Dimensions and Environmental Dimensions.

### 3. Methodology

#### 3.1 Data Source

Sampling was carried out by collecting data on all economic, social and environmental aspects in the hope of getting an overall combination of village status and village development.

#### 3.2 Calculation Techniques

Each indicator has a score. The scores are 0 - 5. The scores for the FGDs were determined using the Analytical Hierarchy Process (AHP) method. The calculation of the index on each dimension is carried out by the scoring method which is then transformed into an index:

$$I_x = \frac{\sum n_i \text{ Score } X}{n \times 5}$$

$I_x$  = Index

$n$  = Number of indicators

#### 3.3 Village Development Index Calculation

The Developing Village Index is generated from the average Social Resilience Index, Economic Resilience Index and Environmental Resilience Index calculated by the formula:

$$IDM = \frac{IKS + IKE + IKL}{3}$$

IDM: Developing Village Index

IKS: Social Resilience Index

IKE: Economic Resilience Index

IKL: Environmental Resilience Index

### 3.4 Village Status Classification

Set with the following thresholds:

1. Very Disadvantaged Village :  $IDM \leq 0.4907$
2. Underdeveloped Villages :  $0.4907 < IDM \leq 0.5989$
3. Developing Village :  $0.5989 < IDM \leq 0.7072$
4. Advanced Village :  $0.7072 < IDM \leq 0.8155$
5. Independent Village :  $IDM > 0.8155$

This classification of village status aims to determine the status of development and recommendations for policy interventions that need to be carried out. The approach and intervention that can be applied to the Very Disadvantaged Village Status will have a different level of policy affirmation compared to that of the Disadvantaged Village Status.

### 3.5 Gap Analysis

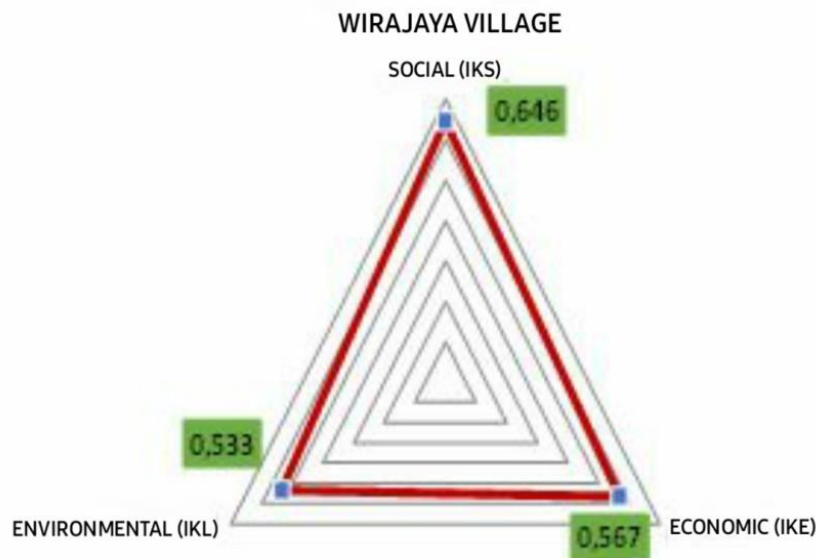
Is an approach to determine the gap (threshold) between the existing conditions and the expected conditions. Gap or needs analysis is a method / tool that helps determine the magnitude of the gap that must be filled. Its operation can be expressed in the following two questions: "Where are we now?" and "Where do we want?". The aim of the gap analysis is to identify gaps between optimistic allocation and integration of inputs, as well as current achievements. Gap analysis helps organizations / institutions measure progress, revealing which ones need improvement. The gap analysis process includes establishing, documenting, and the positive side of the (current) diversity of wants and capabilities. The analysis technique used is descriptive analysis. Descriptive analysis is an analysis used to describe the characteristics of the variables under study including the analysis of the average, highest, lowest, and cross tables. In addition, an analysis was performed to describe the amount and percentage or proportion information. The results of the analysis are presented in tables or graphs

### 3.6 Field Survey

Conducting field surveys through direct observation, interviews and FGDs in locations that are the focus of the treatment plan.

## 4. Discussion

The value of the Village Development Index (IDM) of Wirajaya village is 0.5819 which is resulted from the calculation of the three-dimensional composite index, namely the social, economic and environmental dimensions, depicted in the following graph.



**Fig. 1 - The value of the Village Development Index (IDM) in Wirajaya Village 2020**

The results of the analysis show that the IDM value of Wirajaya village is 0.5819, which is still below the threshold  $< IDM \leq 0.5989$ , meaning that it is still under the status of a disadvantaged village. To see the contribution of each index

to the formation of IDM, especially those that contributed low, the following describes the value of the forming indicators and the value of the contribution of each item.

#### 4.1 Social Resistance Index

The social resilience index consists of 4 indicators, namely (1), health indicators, (2), education, (3), social capital and (4), housing. Of the four indicators, the lowest contribution is the health indicator at 0.57 and the social capital indicator at 0.57, a more detailed analysis of each indicator is described as follows:

1. In the Health indicator, the lowest index value is the aspect of health services, which is 0.50, this is due to:
  - a. low access to poskesdes, polindes and posyandu
  - b. low availability of health personnel.
2. In the education indicator, the lowest index value is the aspect of access to public knowledge, namely 0.20, this is due to:
  - a. the low availability of public reading gardens, village libraries;
  - b. low availability of course activities;
  - c. low access to upper education.
3. In the Social Capital indicator, the lowest index value is the tolerance aspect, which is 0.20, this is due to:
  - a. the incident of mass fighting in the village
  - b. low availability of public space.
4. In the settlement indicator, the lowest index value is the aspect of access to information and communication facilitation, namely 0.60, this is due to:
  - a. low internet access to the village
  - b. low availability of landfills.
  - c. Weak internet network

Policy implications for the factors causing the low contribution value of each item to the composite index of social resilience (IKS), require appropriate program / activity interventions for each of the lowest items, especially in education indicators and indicators of social capital.

#### 4.2 Economic Resistance Index

The economic resilience index consists of 6 indicators, namely (1), indicators of production diversity, (2), trade, (3), distribution access (4), access to credit, (5), economic institutions, (6), regional openness. Of the six indicators, the lowest contribution is the logistic distribution access indicator at 0.00 and the credit access indicator at 0.10, the trade indicator at 0.10. More detailed analysis of each indicator is described as follows:

1. In the logistics distribution indicator, the lowest index value is the aspect of access to logistics distribution, which is 0.00, this is due to the absence of post offices and logistics services:
2. In the indicator of access to credit, the lowest index score is the aspect of access to economic and credit institutions, namely 0.10, this is due to:
  - a. low population access to credit;
  - b. unavailability of banking institutions and BPRs;
3. In the trade indicator, the lowest index value is the aspect of the availability of a community trading center, namely 0.10, this is due to:
  - a. low population access to credit;
  - b. unavailability of banking institutions and BPRs;
4. In the economic institution indicator, the lowest index value is the aspect of the availability of community economic institutions, namely 0.60, this is due to:
  - a. low availability of food stalls, restaurants, hotels and inns;
  - b. the unavailability of public economic institutions (cooperatives/BUM Desa);

Policy implications for the factors causing the low contribution value of each item to the composite index of economic resilience (IKE), require appropriate program / activity interventions for each of the lowest items, especially in education indicators and indicators of logistics distribution and access to capital.

#### 4.3 Environmental Resistance Index

The environmental resilience index consists of 3 indicators, namely (1), environmental quality indicators, (2), disaster-prone potential, (3), disaster response. Of the three indicators, the lowest contribution is the disaster-prone

potential indicator of 0.00 and the disaster response indicator of 0.10, a more detailed analysis of each indicator is described as follows:

1. In the indicator of potential disaster-prone, the lowest index value is the aspect of potential disaster-prone, which is 0.00, this is due to the development of natural disasters:
2. In the disaster response indicator, the lowest index value is the disaster response aspect, which is 0.10, this is due to the low level of efforts / actions towards potential disaster-prone

Policy implications for the factors causing the low contribution value of each item to the environmental resilience composite index (IKL), require appropriate program/activity interventions for each of the lowest items, especially in the disaster response indicators.

## 5. Conclusion and Recommendations

### 5.1 Conclusion

#### 1. Social Resilience Index

The social resilience index consists of 4 indicators: health, education, social capital, and housing. Health indicators have the lowest contribution of 0.57. A more detailed analysis of each indicator is described as follows:

##### a. Health Indicators

In this indicator, the lowest index value is 0.50, which is the aspect of the distance to the Poskesdes, Polindes or Posyandu which is quite far, which is more than 5,000 meters.

##### b. Educational Indicators

In this indicator, the lowest index value is the aspect of access to education for SMA / SMK / MA <6 km, which is 0.20, and the community reading park or village library, which is 0.20. This is due to the distance to access to SMA / SMK / MA education and the absence of public reading gardens such as the Village Library.

##### c. Social Capital Indicators

In this indicator, the lowest index value is the aspect of ethnic / ethnic diversity in the village and the daily language of the villagers, which is 0.20. This is because the majority of the population is Sundanese.

##### d. Settlement Indicators

In this indicator, the lowest index value is the aspect of internet access at the village office, which is 0.60. This is due to the absence of a wifi network at the village office and a weak internet network.

#### 2. Economic Resilience Index

The economic resilience index consists of 6 indicators: diversity of production, trade, access to distribution, access to credit, economic institutions, and regional openness. Of the six indicators, the lowest contribution is the logistics distribution indicator at 0.00. The detailed analysis of each lowest indicator is as follows:

a. In the logistics distribution indicator, the lowest index value is the aspect of access to logistics distribution, which is 0.00, this is due to the absence of post offices and logistics services:

b. In the indicator of access to credit, the lowest index score is the aspect of access to economic and credit institutions, namely 0.10, this is due to the low access of the population to credit; unavailability of banking institutions and BPRs;

c. In the trade indicator, the lowest index value is the aspect of the availability of a community trade center, which is 0.10, this is due to the low access of the population to credit and the unavailability of banking institutions and rural banks;

d. On the indicator of economic institutions, the lowest index value is the aspect of the availability of community economic institutions, namely 0.60, this is due to the low availability of food shops, restaurants, hotels and inns and the unavailability of people's economic institutions (cooperatives / BUM Desa);

#### 3. Environmental Resilience Index

The environmental resilience index consists of 3 indicators, namely (1), environmental quality indicators, (2), disaster-prone potential, (3), disaster response. Of the three indicators, the lowest contribution is the disaster-prone potential indicator of 0.00 and the disaster response indicator of 0.10, a more detailed analysis of each of the lowest indicators is described as follows:

a. In the disaster-prone potential indicator, the lowest index value is the potential disaster-prone aspect, which is 0.00, this is due to the development of natural disasters:

b. In the disaster response indicator, the lowest index value is the disaster response aspect, which is 0.10, this is due to the low level of efforts / actions towards potential disaster-prone

### 5.2 Suggestion

#### 1. Social Resilience Index

- a. To improve health indicators, efforts that must be made are establishing and building Posyandu in each RW.

- b. To improve education indicators, it is recommended that at least one SMA / SMK / MA be built by the Village government or West Java Province as well as by the private sector and one Village Library established by the government or CSR assistance.
- c. To improve settlement indicators requires the availability of village internet which is managed by Village-Owned Enterprises (BUM Desa).
2. Economic Resilience Index
  - a. To improve logistics distribution indicators, the effort that must be done is to establish a postal and logistics service business that can be carried out by local BUMDesa.
  - b. To improve the indicators of access to credit, it is necessary to have a savings and loan financial institution that can be carried out by Village-Owned Enterprises (BUM Desa).
  - c. To increase the trade index, what must be done is to build village markets, this can be done by Village-Owned Enterprises (BUM Desa).
  - d. Village Economic Institution indicator, this index value is sufficient but it would be nice to increase it, namely the indicators of developing people's economic institutions, namely increasing the capacity of BUMDesa businesses.
3. Environmental Resilience Index
  - a. Indicators of potential disaster-prone, this value is sufficient but if it is to be increased then efforts that can be made are to make efforts to anticipate landslides such as making embankments in sloping areas.
  - b. For disaster response indicators, this value can be increased with efforts such as establishing evacuation routes and establishing disaster preparedness posts.

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## References

- [1] Adisasmita, Raharjo. (2006). *Pembangunan Pedesaan dan Perkotaan*. Graha ilmu. Yogyakarta.
- [2] AG, Subarsono. (2005). *Analisis Kebijakan Publik, Konsep, Teori dan Aplikasi*. Pustaka Pelajar:Yogyakarta.
- [3] Bachrein, S. (2010). Pendekatan Desa Membangun di Jawa Barat: Strategi dan Kebijakan Pembangunan Perdesaan. *IAARD E-Journal*, 8(2), 133–149.
- [4] Dunn, William N. (2000). *Pengantar Analisis Kebijakan Publik*. Yogyakarta: Gadjah Mada Press
- [5] Hamidi, H., Setijonegoro, F. N., Fujitriartanto, Sa'id, A., Harioso, Huda, Hardiyanto, A., Waluyanto, B., Lubis, I. S. G., Setiawan, D., Prayitno, H., & Mu'arofah, A. F. (2015). *Indeks Desa Membangun*. Kementerian Desa, Pembangunan Daerah Tertinggal dan Transmigrasi.
- [6] Harjo, B. (2017). Model Membangun Desa Mandiri. *Saburai Vol 2 No.1* 28-35. Retrieved December 14, 2018, from <http://www.jurnal.saburai.ac.id/index.php/jshs/article/view/106>
- [7] Hulu, Y., Harahap, R. H., & Nasution, M. A. (2018). Pengelolaan Dana Desa dalam Pemberdayaan Masyarakat Desa. *Jurnal Pendidikan Ilmu-Ilmu Sosial*, 10, 146–154. <https://doi.org/https://doi.org/10.24114/jupiis.v10i1.9974.g9070>
- [8] *Indeks Desa Membangun. 2020*. Kementerian Desa, Pembangunan Daerah Tertinggal dan Transmigrasi, Jakarta
- [9] Kursini. (2007). *Konsep dan Aplikasi Sistem Pendukung Keputusan*. Yogyakarta: Andi.
- [10] Marimin. (2007). *Tehnik dan Aplikasi Pengambilan Keputusan Kriteria Majemuk*. Jakarta: Grasindo.
- [11] M Dahria, dan Herriyance. (2016). Analisa Metode Analytical Hierarchy Process(AHP) dan SIMPLE Multi Attribute Rating Technique (SMART) dalam Pemilihan Produk Printer. ISSN: 1978-6603.*Jurnal Ilmiah Saintikom* (3 Oktober 2017)
- [12] Miratun, N. A., & Nugrahani, K. (2019). Strategi Mempercepat Pembangunan Desa Mandiri: Studi Di Desa Kemandang Gunungkidul. *Jurnal Pemberdayaan Masyarakat: Media Pemikiran Dan Dakwah Pembangunan*, 2(1), 169–188. <https://doi.org/10.14421/jpm.2018.021-09>
- [13] Nita Merlina, dan Sarifah. (2015). Sistem Penunjang Keputusan Pemilihan Handphone Menggunakan Metode Analytical Hierarchy Process. ISSN: 1978-1946. *Jurnal Pilar Mandiri Volume XI, No.1* Maret 2015. Diambil <http://pilar.nusamandiri.ac.id/index.php/pilar/article/view/97>(3 Oktober 2017)
- [14] Nugeraha, Didit. (2017). *Sistem Penunjang Keputusan*. Yogyakarta: Garudhawaca.
- [15] Peraturan Menteri Desa, Pembangunan Daerah Tertinggal dan Transmigrasi No. 2 Tahun 2016 tentang Indeks Desa Membangun, (2016).
- [16] Permendesa PDTT Nomor 2 Tahun 2016 tentang Indeks Desa Membangun

- [17] Suroso. (2020). Kebijakan Pembangunan Desa Tertinggal Berbasis Indeks Desa Membangun (IDM) dan Potensi Lokal. *Jurnal Litbang: Media Informasi Penelitian, Pengembangan Dan IPTEK*, 16(1), 47–62. <https://doi.org/10.33658/jl.v16i1.167>
- [18] [www.kecamatanjasinga.bogorkab.go.id](http://www.kecamatanjasinga.bogorkab.go.id) (2020)
- [19] [www.wirajaya-jasinga.desa.id](http://www.wirajaya-jasinga.desa.id) (2020)
- [20] Zuliansyah, A., Malik, A., & Adi, B. L. (2020). Membangun Desa Masa Depan yang Ideal: Kendala dan Kebutuhan Pemerintahan Desa dalam Mengimplementasikan Undang-Undang Desa. *Al Mu'awanah: Jurnal Pengabdian Kepada Masyarakat*, 1(1), 19–28.