

Study On The Potential Of The Village Agriculture Sector To Ensure Food Security (Case Study In Cilongok District, Banyumas Regency)

Arif Andri Wibowo^{1*}, Muhammad Farid Alfarisy², Suharno³

^{1*}Universitas Jenderal Soedirman, arif.andri.wibowo@unsoed.ac.id, Indonesia
 ²Universitas Jenderal Soedirman, muhammad.farid.alfarisy@unsoed.ac.id, Indonesia
 ³Universitas Jenderal Soedirman, suhamo@unsoed.ac.id, Indonesia
 * Arif Andri Wibowo

ABSTRACT

The impact of the Covid-19 pandemic has provided challenges for all sectors of life, including the agricultural sector. The agricultural sector is one of the determinants of ensuring future food security and improving the welfare of farmers. This study aims to identify the potential of the agricultural sector in Cilongok sub-district, Banyumas district. The method used is descriptive analysis and content analysis. The results showed that there were several things that were developed either by utilizing paddy fields or dry land which included food crops, horticulture, and animal husbandry. All villages have this potential, especially for rice and corn.

Keywords: Potential Sectors, Agricultural, Village.

1. Introduction

The onslaught of the COVID-19 pandemic has not yet been completed and has had a significant impact on the economy, including the agricultural sector. The agricultural sector faces new challenges in the increasing importance of access to food security for a country's commodities or even talking about household food security, both for the community at large and for the farming families themselves (Wibowo & Suharno, 2022). One of the success factors in building and developing advanced, independent, and modern agriculture is the availability of quality and sustainable resources (Ranzez et al., 2020). To support this, three resources are needed that are interconnected and contribute to each other, namely natural resources, human resources and technological resources (Ritonga et al., 2015). The participation of each of these resources is very important and must be mutually committed to achieving the same and aligned goals.

Various kinds of resources are owned by regions in Indonesia, including the CIlongok District, Banyumas Regency, Central Java. Cilongok District is the largest rice producer in Banyumas Regency. It can be seen in Figure 1 that Cilongok District is the largest rice producer, followed by Pekuncen District and Sumbang District. This is also supported by the existence of natural resources in the form of land, both rice fields and sufficient fields.



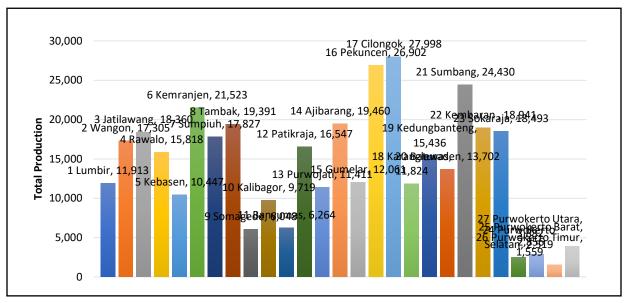


Figure 1. Total Rice Production per District in Banyumas Source: BPS, 2017

Various kinds of agricultural commodities are available in Cilongok. The challenge now is how to regenerate farmers in Cilongok District to ensure the continuity of the agricultural sector in the future. The condition of the declining interest of the younger generation and the aging of farmers have a crisis impact on the successors of farming activities (Pamungkaslara & Rijanta, 2017). The absence of the younger generation entering agriculture makes agriculture inhabited by the old age group and with the majority of petai being old, it will be difficult to spur an increase in agricultural production.

Previous research related to village potential has been carried out but has not been specific. Bambang (2016) examines the potential of villages in Banyumas Regency in general both from the institutional, social and economic side, Supriadi (2013) suggests that to develop villages, it is necessary to study village potentials where this research classifies villages into hierarchies and clusters based on village potential which is owned. Susyanti (2013) suggests that village potential is needed in village development, so the strategy in this development is based on the characteristics of the village it has. The key to the success of village development in realizing independence is the readiness of the entire community to open up and change, and competency training is also needed to manage the village.

In contrast to previous research, this study aims to examine the potential of the economic sector owned by villages in Cilongok District. Through this research, it is hoped that it can provide a comprehensive picture related to the economic potential of the agricultural sector owned by villages in Cilongok District so that it becomes the basis for developing the community's economy.



2. Literature Review

2.1 Farming Households

The Covid-19 pandemic does not only have an impact on health, but also has an impact on various aspects of socio-economic life, including the fulfillment of food needs. To meet food needs, domestic production plays a key role even though there is an option to import. However, in a pandemic, imports can be hampered because a number of countries hold back food exports to meet their domestic needs. Price stability of basic food needs cannot be separated from adequate supply. Availability of basic foodstuffs in a pandemic condition plays an important role. The government needs to ensure the availability of food in the midst of a pandemic (National Team for the Acceleration of Poverty Reduction, 2020).

2.2 Village and Village Economic Potential

According to the Village Law no. 6/2014, a village is defined as a legal community unit that has territorial boundaries that are authorized to regulate and manage government affairs, the interests of the local community based on community initiatives, origin rights, and/or traditional rights that are recognized and respected in the government system of the Unitary State of the Republic of Indonesia. Based on article 7 of this law, it is stated that the government, provincial government, and district/municipality regional governments can carry out village structuring based on the results of the evaluation of the development level of village government. The purpose of this village arrangement is to realize the effectiveness of the implementation of Village Government, accelerate the improvement of the welfare of the Village community, accelerate the improvement of the quality of public services, improve the quality of Village Government governance and increase the competitiveness of the Village.

The development paradigm is currently experiencing a shift where development emphasizes empowerment known as human development (people centered development), local resource-based development (resource based development) and institutional development (Suswanto et al., 2013). According to Syahza and Suarman (2013), rural development must be carried out with an approach that is in accordance with its nature and characteristics. Rural development must follow four major efforts, which are interrelated and constitute the main strategy of rural development.

Mapping of local potential is an activity carried out to find and recognize the socio-economic and cultural potential of local communities or also known as social orientation activities. This activity is part of the initial socialization process, carried out after and/or in conjunction with Informal Visits to strategic groups at the village level. Socio-cultural and socio-economic conditions that need to be identified include the following conditions: what values are dominantly embraced by the community that are able to move the community; what social forces are capable of bringing about changes so that people can change from within themselves; what is the character and characteristics of the community, especially in responding to social interventions; such as what is the pattern of communication information that occurs in the community, both in the dissemination of information and in the learning framework; What media and learning resources are used and believed by the community as a means of information and learning; Dominant social forces within the framework of social change; What are the environmental factors that influence people's attitudes and behavior (Moerad et al., 2016).



2.3 Village Economic Development Prospect

The development of the economic base in rural areas has long been carried out by the government through various programs. However, these efforts have not yielded satisfactory results as desired together. One of the most dominant factors is that government intervention is too large, as a result, it inhibits the creativity and innovation of rural communities in managing and running the economic engine in rural areas. Economic institutional systems and mechanisms in rural areas do not work effectively and have implications for dependence on government assistance so that it kills the spirit of independence.

Community economic activities in the form of institutions or business entities that are managed professionally, but still rely on the original potential of the village. This can make community businesses more productive and effective the village as a government that clearly understands the potential of both natural resources and human resources is expected with the village finance program, the village is expected to have its own finances (Zulkarnaen, 2016). Village finance is a hierarchy of the central financial structure of the government above it. Districts, provinces, and the central government have a big hand in allocating village financial resources.

3. Research Methodology

This research was conducted in Cilongok District with the unit of analysis being the villages in the sub-district which focus on resources in the agricultural sector. This research was conducted in 2022. The data in this study are secondary data from the relevant agencies. The analytical method used in this research is descriptive qualitative method and content analysis by linking various related sources.

4. Results

Economic potential in an area is one of the regional media in how to manage and organize economically the area. Knowing the potential of the village is the first and strategic step in improving the economy of a village. The potential of the village is the available natural resources either visible or still under the earth, human resources and a set of village institutions as a provider of facilities (Abdurokhman, 2014). Of all the existing potentials, village potentials that can be utilized and have economic value are the driving force for the village economy to be better. The potential of the village can be said as the economic potential of the village.

Cilongok sub-district as one of the sub-districts in Banyumas Regency which has a large area of land has several resources that contribute to the district. Figure 1 shows the distribution of land use in Cilongok District. It can be seen that the use of land by residents for the agricultural sector, both in the form of rice fields and fields and for fisheries as ponds, reaches 37 percent of the total area in Cilongok District. This illustrates that the agricultural sector is almost pursued in every village in Cilongok District.



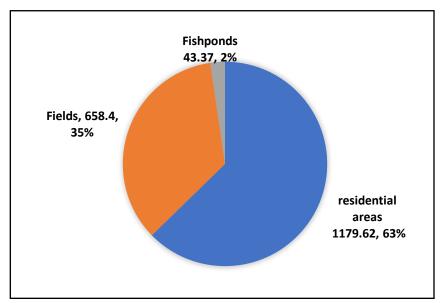


Figure 2. Distribution of Land Use in Cilongok District 2021 Source: Kecamatan dalam Angka (BPS Kabupaten Banyumas, 2021)

After learning about the land use in Cilongok District, the main mainstay is rice and corn production, with Karanglo Village, Panusupan Village, and Kalisari Village as the villages with the highest production in 2021 (BPS Kabupaten Banyumas, 2021). Various types of plants also exist in Cilongok District which include groups of food crops, horticulture, and livestock.

• Food Crops

Groups of food crops in Cilongok District include lowland rice, upland rice, corn, cassava, sweet potatoes, soybeans, and peanuts. The following is the production of food crops by village and type of plant.

Tabel 1. Types of Food Crops in Cilongok District

		Types of Food Crops									
No	Village	Paddy Rice	Field Rice	Corn	Cassava	Sweet Potato	Soya Bean	Peanuts			
1	Batuanten	1.607,40	126	23,0	277,2						
2	Kasegeran	860,36		31,5	218,7	6,7		6,8			
3	Jatisaba	674,56		65,8	347,2			11,2			
4	Panusupan	3.658,59	126	61,2	193,6	12,4	2,4	2,4			
5	Pejogol	1.365,66		75,6	655,5		1,2	13,5			
6	Pageraji	425,04		38,4	633,6			16,1			
7	Sudimara	641,48		33,6	422,5			9,6			
8	Cilongok	626,04		30,6	33,0	6,2	1,1				
9	Cipete	849,68		45,9	256,5		1,1	8,4			
10	Cikidang	1.639,16		8,1	468,0	6,4	2,4	16,8			
11	Pernasidi	115,08		31,2	621,6	6,4		4,6			
12	Langgongsari	1.022,09		90,1	1.067,6						



		Types of Food Crops								
No	Village	Paddy Rice	Field Rice	Corn	Cassava	Sweet Potato	Soya Bean	Peanuts		
12	D	1 000 24		0.6	50.0		Beuil			
13	Rancamaya	1.098,24		9,6	59,0	6,2				
14	Panembangan	1.565,85		14,4	25,3					
15	Karanglo	4.030,52		25,5	28,4					
16	Kalisari	1.739,01		19,2	57,2	6,8				
17	Karangtengah	999,81		30,6	88,8					
18	Sambirata	1.478,96		9,4	114,0	6,4				
19	Gununglurah	1.286,94		9,6	283,2	12,4				
20	Sokawera	1.108,38		23,5	267,3					
Jumlah		26.792,85	252	749,7	6.415,2	69,9	8,2	89,4		

Based on table 1, almost all villages in Cilongok District have various types of food crops. The following are 5 (five) villages that have the highest number of productions in Cilongok District

• Paddy Rice : Karanglo Village, Panusupan Village, Kalisari Village, Cikidang

Village, Batuanten Village

• Fields Rice : Batuanten Village and Panusupan Village

• Corn : Langgongsari Village, Cikidang Village, Pejogol Village, Jatisaba

Village, Panusupan Village

• Cassava : Langgongsari Village, Pejogol Village, Pageraji Village, Pernasidi

Village, Cikidang Village

• Sweet Potato : Gununglurah Village, Panusupan Village, Kalisari Village,

Kasegeran Village, Cikidang Village

• Soya Bean : Cikidang Village, Panusupan Village, Pejogol Village, Cilongok

Village, Cipete Village

Peanuts : Cikidang Village, Pageraji Village, Pejogol Village, Jatisaba

Village, Sudimara Village

By comparing it with the size of the land area used by each type of food crop, the productivity figure is obtained. This productivity figure serves to see how productive a land is by looking at the amount of output (production) produced.

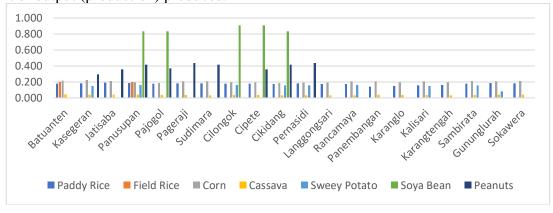


Figure 3. Productivity of Food Crops in Cilongok District



Based on Figure 6, it shows that taking into account the productivity figure obtained, the largest type of food crop is owned by the soybean food crop which is spread in Panusupan Village, Pejogol Village, Cilongok Village, Cipete Village and Cikidang Village. In addition, these types of plants have lower productivity numbers

Horticulture

Horticulture is the cultivation of garden plants. There are several types of plants that do have improvements that have not previously been cultivated. The types of plants cultivated include avocado, star fruit, duku, durian, guava, guava, jengkol, manga, mangosteen, melinjo, jackfruit, pineapple, papaya, petai, and banana. In 2019, production results were dominated by banana, durian, and duku trees, while in 2020 it shifted to bananas, petai and durians.

Farm

There are various types of livestock in Cilongok District, including large cattle and various types of poultry. The large livestock are beef cattle, horses and goats. While those included in the poultry are native chickens, broilers, ducks, and manila ducks (more details are found in table 2). The following is the dominance of the village that has the largest number of livestock in Cilongok District

• Beef Cattle : Panusupan Village, Cilongok Village, Karangtengah

Village, Sudimara Village, Langgongsari Village

Horse : Cikidang Village

• Goat : Gununglurah Village, Langgongsari Village,

Sambirata Village, Jatisaba Village, Panusupan

Village

• Chicken : Panusupan Village, Batuanten Village, Pejogol

Village, Pageraji Village, Cilongok Village

• Purebred Chicken : Gununglurah Village, Pejogol Village,

Karangtengah Village, Karanglo Village, Pernasidi

Village

• Duck : Panusupan Village, Gunglurah Village, Batuanten

Village, Pageraji, Sudimara Village

• Manila Duck : Batuanten Village, Panembangan Village,

Panusupan Village, Gununglurah Village, Pejogol

Village

Table 2. Large number of Livestock and Poultry in Cilongok District

		Farm								
No Village	Big Farm			Poultry Farm						
	Beef Hors	Goat	Chicken	Purebre d	Duck	Manila Duck				
		Cattle	e	3041		Chicken				
1	Batuanten	22		274	9.315	36.622	157	476		
2	Kasegeran	7		263	3.391	13.664	44	46		
3	Jatisaba	10		339	3.769	19.129	63	117		
4	Panusupan	183		337	21.313	27.327	226	380		



		Farm							
		Big Farm			Poultry Farm				
No	Village	Beef Cattle	Hors e	Goat	Chicken	Purebre d Chicken	Duck	Manila Duck	
5	Pejogol	17		286	6.297	106.577	69	181	
6	Pageraji	19		276	5.154	34.023	126	26	
7	Sudimara	31		262	2.544	5.192	124	119	
8	Cilongok	55		266	4.627	549	121	52	
9	Cipete	20		77	2.906			38	
10	Cikidang	12	5	128	2.119	23.228	98	55	
11	Pernasidi	18		88	860	54.655		27	
12	Langgongsari	25		415	484	2.733	14	84	
13	Rancamaya	6		150	1.029		41	40	
14	Panembangan	19		316	2.909	13.664	87	452	
15	Karanglo	5		39	2.272	54.655		18	
16	Kalisari	12		124	3.270	32.793	41	152	
17	Karangtengah	33		205	739	62.853	123	114	
18	Sambirata	18		359	1.659		84	170	
19	Gununglurah	20		1.085	505	109.310	180	195	
20	Sokawera	2		161	3.027			36	
Jum	Tumlah 534 5 5.450			78.189	596.974	1.598	2.778		

Source: BPS Kabupaten Banyumas, 2021, data diolah

5. Conclusion

Cilongok sub-district has an area of 10,534 ha, which is divided into several land uses. Cilongok sub-district is the sub-district with the largest area, filling 7.93% of the Banyumas Regency area. Various types of agricultural sector resources exist in Cilongok sub-district including food crops, horticulture and animal husbandry which are spread in almost all villages in Cilongok sub-district. From year to year there is also an increase in production so this is important given the importance of agricultural sector commodities in order to ensure the achievement of household food security in Banyumas Regency

References

Abdurokhman. (2014). Pengembangan Potensi Desa.

BPS Kabupaten Banyumas. (2021). Kecamatan Cilongok dalam Angka 2021. In *BPS Kabupaten Banyumas*. BPS Kabupaten Banyumas.

Moerad, S. K., Susilowati, E., & Windiani. (2016). Pemetaan Potensi dan Dampak Ekonomi Masyarakat di Kawasan Pertambangan Bukit Tumpang Pitu Banyuwangi. *Jurnal Sosial Humaniora*, 9(6), 114–138.

Pamungkaslara, S. B., & Rijanta, R. (2017). Regenerasi Petani Tanaman Pangan di Daerah Perkotaan dan



- Perdesaan Kabupaten Grobogan. *Jurnal Bumi Indonesia*, 6(3), 228723. https://www.neliti.com/publications/228723/
- Ranzez, M. C., Anwarudin, O., & Makhmudi, M. (2020). Peranan Orangtua Dalam Mendukung Regenerasi Petani Padi (Oryza Sativa L) Di Desa Srikaton Kecamatan Buay Madang Timur. *Jurnal Inovasi Penelitian*, 1(2), 117–128. https://doi.org/10.47492/jip.v1i2.58
- Ritonga, A. ., Erlina, & Supriadi. (2015). Analisis Peran Pemuda Pedesaan Pada kegiatan Pertanian Berkelanjutan Di Kabupaten Labuhanbatu Utara. *Jurnal Pertanian Tropik*, *II*(3), 311–322.
- Suswanto, B., Handoko, W., & Sabiq, A. (2013). Model Community Development Sebagai Strategi Pemberdayaan Berbasis Kearifan Lokal. *Jurnal Review Politik*, 03, 298–312.
- Syahza, A., & Suarman. (2013). Strategi pengembangan daerah tertinggal dalam Upaya Percepatan Pembangunan Ekonomi Pedesaan. *Jurnal Ekonomi Pembangunan*, *14*(1), 126–139.
- Tim Nasional Percepatan Penganggulangan Kemiskinan. (2020). Menjaga Ketahanan Pangan di Tengah Pandemi Covid-19. In *Australian Government*.
- Wibowo, A. A., & Suharno. (2022). Study of Farmers Household Food Security: Case Study in Kebasen District, Banyumas Regency. *Jurnal Agrisep*, 21(1), 161–172. https://doi.org/10.31186/jagrisep.21.1.161-172
- Zulkarnaen, R. M. (2016). Pengembanga Potensi Ekonomi Desa Melalui Badan Usaha Milik Desa (BUMDES) Pondok Salam Kabupaten Purwakarta. *Jurnal Aplikasi Ipteks Untuk Masyarakat*, 5(1), 1–4.