

# Inter-Village Network of Joint Village-Owned Enterprises for Local Economic Empowerment

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## Article

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## Abstract

Villages as the frontline of poverty alleviation are required to adapt and be able to utilize information and communication technology. The Joint Village Owned Enterprise (BUMDesma) Panca Mandala innovates through the development of technology-based business units in the fields of information technology, animal husbandry, and agriculture. This study aims to identify inter-village networks as part of local economic empowerment efforts. This study uses a qualitative approach with data collection using interviews and institutional surveys (purposive sampling) and data analysis using qualitative descriptive analysis methods. There are 16 key informants, namely stakeholders who have a relationship with BUMDesma, managers, village officials, and the village society. Study results show that the inter-village network is built on the initiative of the community who are aware of the gap in the economic condition of the village community and can take advantage of digital gap opportunities. The inter-village network is built by villages that have the same goals and funding capabilities for their respective BUMDes. The networks are not only formed between villages, but also with external parties. The inter-village network was built because of local economic empowerment and development. Meanwhile, external networks are formed for the development of innovation and utilization of business units.

**Keywords:** Village-Owned Enterprises (BUMDes); Networks; Local economic empowerment.

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## Introduction

Now, villages are at the forefront of poverty alleviation at the local level, as stated in Law Number 6 of 2014 concerning Villages (Undang-Undang Nomor 6 Tahun 2014 Tentang Desa, 2014) In addition, villages are encouraged to build their independently by involving the active participation of the community (Prayitno & Subagiyo, 2018). Government Regulation Number 11 of 2021 concerning Village-Owned Enterprises (BUMDes) provides opportunities and hopes for village communities to improve the village economy through the use of village assets and added value as well as the development

of digital ecosystems in villages (Peraturan Pemerintah Nomor 11 Tahun 2021 Tentang Badan Usaha Milik Desa, 2021). The establishment of BUMDes is an innovation in village economic development (Puspitasari, 2018; Tarlanı & Sirajuddin, 2020).

The creation and development of village business units are based on village's potential or assets, with the existence of BUMDes, it can have a multiplayer effect on village government in the form of increasing village income (PADes), per capita income, increasing the role of the government and increasing Gross Regional Income at the District Level. In addition, the community has an impact on the socio-economic community in the form of increasing equitable access for the community and reducing the village poverty rate as well as increasing community capabilities and expertise (Tarlanı, 2020).

The Village Law provides two or more villages to cooperate, including building Joint-BUMDes (BUMDesma). BUMDesma is a combination of several villages that established joint ventures (Peraturan Pemerintah Nomor 11 Tahun 2021 Tentang Badan Usaha Milik Desa, 2021). In Indonesia, the establishment of BUMDesma is a strategic policy of the Ministry of Villages, Disadvantaged Regions, and Transmigration since 2016. In 2022, there are 280 legally verified BUMDesma (Kemendes, 2022). BUMDesma can be formed driven by the political-administrative, spatial economic and socio-cultural aspects (Tarlanı & Suhirman, 2019). The establishment of BUMDesma is an effort to increase the village partnerships network in a wider range. This is in line with the creation of a great opportunity and global competitiveness that will be realized through a network of partnerships (Rochman, 2019).

The current of the industrial revolution 4.0 encourages the perspective of BUMDes to enter the business in the digital world along with the development of e-commerce, marketplaces, and application-based businesses on smartphones (H Hamdan, 2018; Suwardana, 2018). Considering the literacy and the use of digital technology and internet by rural communities are still limited, this is an opportunity and a challenge for business development by BUMDes. The Data Kominfo, through BAKTI shows that there are villages that are still without a signal (blankspot area) as many as 7.904 points throughout Indonesia in 2021. In this study, BUMDesma Panca Mandala in Jatiwaras District, Tasikmalaya Regency, West Java, became the focus of this study. BUMDesma Panca Mandala was established through the Joint Regulation of the Head of Mandalaurip Village, Papayan Village, Mandalamekar Village, Kertarahayu Village and Ciwarak Village Number 1 Year 2016 about the Establishment of Village-Owned Enterprises with Panca Mandala in Jatiwaras District, Tasikmalaya Regency. This BUMDesma is the first BUMDesma in Indonesia engaged in communication network services (digital) (Puspitasari, 2018), and one of the legally verified BUMDesma (Kemendes, 2022). One of the serious challenges in responding to the industrial revolution 4.0 is the low literacy of the use and utilization internet by rural communities so that it needs a sustainable adaptation to become a habit (Meilandi, 2021). In addition, network exploration in the creation of BUMDesma Panca Mandala innovations is important considering the need to spread the digital village climate in each village. In the Sustainable Development Goals (SDGs), there are 6 goals out of 16 goals in the SDGs that can contribute to solve the problems in villages. This study aims to identify inter-village networks in BUMDesma Panca Mandala that can empower the local economy through digital village transformation.

## Research Method

This study uses a qualitative approach by examining many points of view on the reality situation that occurs mainly related to social phenomena (Babbie, 2010; Hendrarso, 2005). Data collection uses the in-depth interview method and sample selection using the purposive sampling with informant criteria, namely stakeholders who have a relationship with BUMDesma Panca Mandala both as regulators, operators and users. There were 16 informants namely 5 regulator respondents (secretary of sub district of Jatiwaras and 4 head of villages), 8 operator respondents ( 5 structural

officials who managed BUMDesma and 3 business unit managers), and 3 user respondents from community. All of them were given questions relating to the history of formation, the condition of network relations between actors to the impact felt. To validate the obtained data, triangulation of sources and data retrieval techniques was carried out (Sugiyono, 2007). Triangulation of sources is done by asking the same question to different informants to show the saturation in the data. In addition, triangulation of collection techniques is carried out through data collection from agency surveys by collecting documents from relevant agencies. This reinforces the results of interviews with evidence that can be accounted for. Furthermore, the analysis uses a qualitative descriptive analysis method of the results of the transcribed interview and related documents.

To find out the history of the formation of BUMDesma Panca Mandala and photograph the progress of the network relations that have occurred, several stages were carried out including: (1) exploring the history of the formation of BUMDesma Panca Mandala from the founders, both from the regulator (BKAD) and operators (BUMDesma director), (2) explore from various perspectives of regulators, operators and users regarding the running of the cooperation network and its dynamics (administrators and supervisors of BUMDesma Panca Mandala, village heads and the community as users, (3) obtain an overview of the positive impacts of BUMDesma Panca Mandala activities on local economic development, both the Panca Mandala BUMDesma internal party as well as the villages in Jatiwaras District (BUMDes administrators, village heads and the communities).

## Results & Discussion

### The Profile of BUMDESMA Panca Mandala

Panca Mandala area consists of 7 villages, including Papayan Village, Ciwarak Village, Mandalamekar Village, Mandalahurip Village, Kertarahayu Village, Kersagalih Village, and Sindangasih Village from a total of 11 villages in Jatiwaras District. BUMDesma Panca Mandala is a combination of several villages that form joint business activities.

BUMDesma Panca Mandala was formed because of cooperation between villages in accordance with the Joint Regulation of the Head of Mandalamekar Village, Mandalahurip Village, Papayan Village, Kertarahayu Village and Ciwarak Village No. 1 of 2016 concerning the Establishment of Village-Owned Enterprises with Panca Mandala in Jatiwaras District, Tasikmalaya Regency. BUMDesma Panca Mandala became the first BUMDesma that engaged in the business of providing internet communication network services. This is in line with the policy of the Ministry of Communication and Informatics which supports the digitization process of villages and the province of West Java which was declared as a Digital Province. The function of BUMDesma Panca Mandala is as an economic institution and empowerment of youth village in the panca mandala area.

Based on statistics data Indonesia (BPS), the total population of Jatiwaras District in 2019 was 52.019 people with details of 26.414 men and 25.605 women, with 103 sex ratio of the population of Jatiwaras district. Its area is 74.647 km<sup>2</sup> with the population density per square km is 70 people. It can be seen more clearly and detail about the number of residents in Jatiwaras District in the Table 1.

**Table 1**  
**Total Population of Jatiwaras District**

No	Village Name	Gender		Sum
		M	F	
1	Mandalamekar	1.73	1.611	3.341
2	Kersagalih	1.85	1.751	3.601
3	Ciwarak	3.291	3.293	6.584
4	Jatiwaras	2.126	2.084	4.21
5	Papayan	2.474	2.372	4.846
6	Neglasari	2.708	2.376	5.084

7	Kaputihan	4.343	4.128	8.471
8	Setiawangi	2.482	2.321	4.803
9	Sukakerta	2.325	2.321	4.646
10	Kertarahayu	1.897	2.111	4.008
11	Mandalahurip	1.188	1.237	2.425
	Sum	26.414	25.605	52.019

Source: *Statistic Indonesia, 2022*

### Establishment of Inter-Village Network

The establishment of inter-village networks was initiated by the community to build solutions for the gaps in the rural development. As it can be seen in the Figure 1, initially, collaboration was built through the establishment of PT. BUMADes Panca Mandala by 3 villages, then through deliberations between villages it was decided to establish BUMDesma Panca Mandala. Currently, there are 7 out of 11 villages collaborating in BUMDesma and under the auspices of the Inter-Village Cooperation Agency (BKAD). These villages include: Papayan Village, Ciwarak Village, Mandalamekar Village, Mandalahurip Village, Kertarahayu Village, Kersagalih Village, and Sindangasih Village. The establishment of BUMDesma Panca Mandala is currently carried out capital participation from the funds of 3 (three) villages which initially focused on developing communication network and internet infrastructure businesses, then expanding to the agricultural and livestock sectors as well as marketing MSME products.

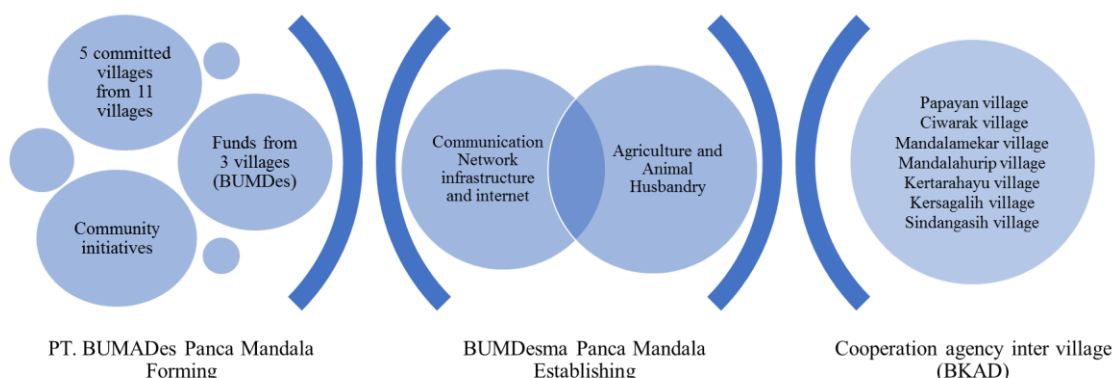


Figure 1. *The Process of Forming Inter-Village Networks*

The initiator of BUMDesma Panca Mandala, who is an expert from the Ministry of Communication and Information, determined the development of a communication network and internet infrastructure business as a business unit because of his attention to the digital divide, especially in rural areas. The gap is can be seen from infrastructure that tends to be centered in big cities, limited of internet usage and utilization literacy, hardware and software that are still unfamiliar to the public and digital language content that tends to be difficult to understand for ordinary people. One of the strong drivers of the establishment of BUMDesma Panca Mandala is the distance of villages in Jatiwaras District to cities that are quite far away, and the road access conditions that are not feasible that need a breakthrough to solve the problems and the needs of village community. BUMDesma Panca Mandala sees this problem as a business opportunity to improve the economy of rural communities and empower the local communities.

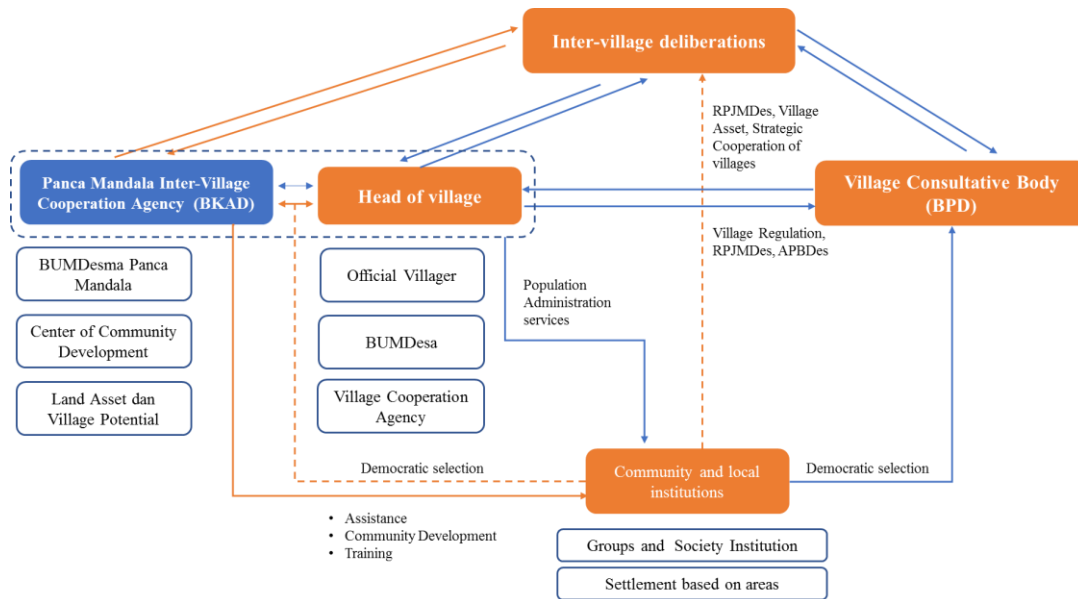


Figure 2. Panca Mandala Institution  
 Source: Adopted from BUMDesMa Panca Mandala report, 2022

In the institutional structure, figure 2 shows that BUMDesma Panca Mandala position is under the auspices of the Panca Mandala Inter-Village Cooperation Agency (BKAD). This BKAD also houses the Community Development Center and inventory land assets and village potential. This BKAD coordinates with village, sub-district and official heads, especially in relation to mentoring and empowering local communities and institutions. BKAD, village heads, service heads, and the Village Consultative Body (BPD) make decisions through village deliberations, especially related to activities that will be included in the village development plan and cooperation between villages. BKAD also has a role in providing of training, mentoring and community development for local institutions and communities in the Jatiwaras sub-district through a clear regional basis (settlement based).

In determining the business direction of BUMDesma, it will pay attention to strategic programs from surrounding villages, especially for the investing. Therefore, the review of village regulation concerning the village development middle plan (RPJMDes) and village revenue and cost budget (APBDes) documents are the inseparable agendas in the deliberations between villages. With the integrative efforts, it hopes that the two institutions, namely BUMDesma Panca Mandala and the villages involved in providing a reciprocal relationship with one another.

**Inter-Village Network**

The business development of BUMDesa Panca Mandala forms a network between villages in the Rural Area of Jatiwaras district and external networks as can be seen in Figure 3.

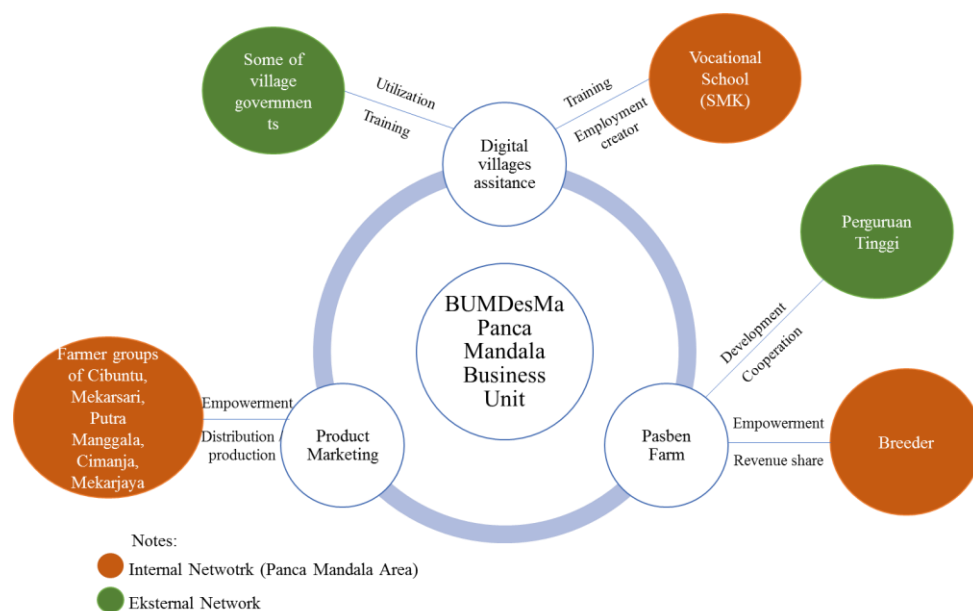


Figure 3. Panca Mandala BUMDesma Network

The network between villages in the Panca Madala Area is shown through the collaboration of BUMDesma with SMK (the Vocational High School), the breeders, and the farmers. This network is in the nature of empowering and improving the community's economy. BUMDesma Panca Mandala offers an internet concept that has been implemented in the Panca Mandala area. With a budget of Rp. 50.000.000, the internet can be connected to the village through training activities, assistance, and internet support tools. In addition, BUMDesma manage the Siska application. This application simplifies the process of processing village data into digital form. Because a lot of other villages use SIDEKA, currently SIDEKA is taken over by the Ministry of Communication and Informatics so that its management can be centrally carried out. BUMDesma Panca Mandala only provides a help desk to support and monitor the internet services in the village.

In the field of information and technology (IT), BUMDesma do the collaborate with SMK schools in theirs IT field. Students who graduated from SMK are projected to manage the IT at BUMDesma Panca Mandala. In addition, SMK students were also given training to develop soft skills in the IT field until they were ready to distributed to bumdesma partner internships. The IT managers at BUMDesma are also a companion or speaker for other villages thatbuilding the IT sector too. In fact,a Job Training Center (BLK) has been built for the public owned by the foundation that houses SMK. This BLK will in the long term to improve the technical and non-technical capabilities of rural communities around Jatiwaras District.

The development of livestock sector's BUMDesma Panca Mandala empowers the farmers in each village. The BUMDesma Panca Mandala system offers the preparing cages, feeding, overseeing and caring for the mother sheep that given by the BUMDesma until giving birth to the farmers. Furthermore, the obtained profits from the lambs produced are divided by a 45% distribution system for BUMDesma, 45% for farmers, and 10 % for mentoring and health. This continues to be done regularly and consistently. In addition, breeders are also facilitated by BUMDesma by holding training on animal husbandry itself.

Meanwhile, the external networks are shown through cooperation with several villages in Indonesia and universities. This network is developing and utilizing BUMDesma business units for economic improvement and empowerment of local communities. From the livestock sector, BUMDesma Panca Mandala collaborates with a team from the Faculty of Animal Husbandry, Padjadjaran University. Supervision of livestock activities using IoT technology that makes it easier for BUMDesma to monitor livestock' farmers. BUMDesma also builds networks with another

villages in Indonesia, especially the villages that are developing the technology and information infrastructure or transforming towards digital villages. Some of them are villages in Mamaju Regency, Lower Bone Regency, Ciamis Regency, Lampung, Jogjakarta, Raja Ampat Regency, Lombok, Makasar, and Bali. Digital village assistance activities include internet network development, BEKALI workshop as a training and mentoring center for BUMDesMa, and as a helpdesk for SIDEKA (Village and Regional Information System) under the Ministry of Communication and Information (Kemenkominfo).

## Conclusions

BUMDesma Panca Mandala is a Joint BUMDes that utilizes technology in the development of its business units. The development of rural internet service access is the initial idea of them to adapt and support the acceleration of Indonesia's digital village transformation. Inter-village networks are built on the initiation of people who have awareness of the gaps in the economic conditions of rural communities and can take advantage of digital opportunities, especially in rural areas. Inter-village networks are built by villages that have the same goals and funding capabilities of their respective BUMDes.

The business development of BUMDesma forms a network between villages in the Panca Mandala Area and an external network. The network between villages is shown through the collaboration of BUMDesma with SMK, breeders, and farmers. This network is empowering and improving the community's economy. Meanwhile, external networks are shown through cooperation with several villages in Indonesia and universities. This network is developing and utilizing BUMDesma business unit.

## References

- Babbie, E. (2010). *The Practice of Social Research*.
- H Hamdan. (2018). Industri 4.0: Pengaruh revolusi industri pada kewirausahaan demi kemandirian ekonomi. *Jurnal Nusantara Aplikasi*, 3(2), 1. <https://doi.org/10.29407/nusamba.v3i2.12142>
- Hendrarso. (2005). *Penelitian Kualitatif: Suatu Pengantar, dalam Metode Penelitian Sosial: Berbagai Alternatif Pendekatan*.
- Kemendes. (2022). Bumdes. Bumdes.Kemendes.Go.Id.
- Meilandi, I. (2021). *Pengembangan Unit Usaha BUMDes*.
- Undang-Undang Nomor 6 Tahun 2014 tentang Desa, (2014).
- Peraturan Pemerintah Nomor 11 Tahun 2021 tentang Badan Usaha Milik Desa, (2021).
- Prayitno, G., & Subagiyo, A. (2018). *Membangun Desa: Merencanakan Desa dengan Pendekatan Partisipatif dan Berkelanjutan*. In Tutorial Tips.
- Puspitasari, D. C. (2018). *Wirausaha Muda Membangun Desa: Dinamika Partisipasi Pembangunan Desa*. *Jurnal Studi Pemuda*. <https://doi.org/10.22146/studipemudaugm.36817>
- Rochman, G. P. (2019). *Pengelolaan Kota Melalui jejaring Sister City : Kasus Studi dari Indonesia*. 7(2), 200–209.
- Sugiyono. (2007). *Metode Penelitian Kuantitatif, Kualitatif, dan Statistika*. In Airlangga University Press.
- Suwardana, H. (2018). *Revolusi Industri 4. 0 Berbasis Revolusi Mental*. *JATI UNIK : Jurnal Ilmiah Teknik Dan Manajemen Industri*, 1(1), 102. <https://doi.org/10.30737/jatiunik.v1i2.117>
- Tarlani, & Sirajuddin, T. (2020). *Rural development strategies in Indonesia: Managing villages to achieve sustainable development*. *IOP Conference Series: Earth and Environmental Science*, 447(1). <https://doi.org/10.1088/1755-1315/447/1/012066>
- Tarlani, T. (2020). *Menilai Dampak BUMDES Bersama Danar terhadap Masyarakat di Kecamatan Leles Kabupaten Garut [Assessing the Impact of BUMDES with Danar on the Community in*

Leles District, Garut Regency]. *ETHOS: Jurnal Penelitian Dan Pengabdian Kepada Masyarakat*.  
<https://doi.org/10.29313/ethos.v8i2.5888>

Tarlani, T., & Suhirman. (2019). Behind the Joint BUMDes (Badan Usaha Milik Desa Bersama) (Insight the motive for establishing joint BUMDes Danar Garut). <https://doi.org/10.2991/icorsia-18.2019.52>.