

# Social Innovation Transformation in Rural MSMEs: A Qualitative Study of Innovative Practices of Village-Owned Enterprises Post-Pandemic

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social innovation, rural MSMEs, BUMDes, post-pandemic, organizational transformation, community economy

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## ABSTRACT

The COVID-19 pandemic has forced various economic sectors, including rural MSMEs, to rapidly adapt to social and economic disruptions. Village-Owned Enterprises (BUMDes), as local economic institutions, were also impacted; however, a number of them demonstrated extraordinary resilience and capacity for social innovation to sustain and expand their businesses. This study aims to examine how social innovation transformations have occurred in BUMDes practices post-pandemic, particularly in the context of community-based micro and household enterprises. Using a descriptive qualitative approach, this research employed in-depth case studies of three BUMDes located in different rural areas. Data were collected through in-depth interviews with managers and community members, participant observation, and analysis of institutional documents. The findings indicate that social innovation in BUMDes is reflected not only in new product development and technology adoption, but also in adaptive distribution networks, collaborative partnerships with farmer groups and local cooperatives, as well as innovative governance practices rooted in values such as gotong royong (mutual cooperation) and community solidarity. For instance, two BUMDes successfully converted traditional products into health-related goods during the pandemic, while another established digital-based marketing platforms to reach urban consumers. These practices contributed to maintaining household income levels and reducing vulnerability, even as more than 70% of rural MSMEs reported declining turnover nationally (Bank Indonesia, 2021). Theoretically, this study enriches the literature on rural social innovation by offering an alternative perspective beyond urban and high-tech contexts, emphasizing the socio-cultural foundations of innovation. Policy-wise, the research provides practical insights for designing inclusive, participatory, and innovation-based village development strategies. The novelty of this study lies in presenting a typology of village-level social innovation that integrates economic adaptation with local cultural values, an aspect that has received limited attention in prior studies.

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## 1. INTRODUCTION

The COVID-19 pandemic has served as a pivotal moment in reshaping the global economic system. More than 400 million jobs in the informal sector were directly impacted by lockdowns and mobility restrictions (ILO, 2021). Small and micro-enterprises, especially in developing countries, emerged as the most vulnerable sector during this crisis. A report from the World Bank (2021) indicates that approximately 60% of global MSMEs experienced a significant decline in demand and faced disruptions in supply chains.

In response to such challenges, various forms of social innovation have arisen. Defined as new participatory solutions developed by local communities to address economic and social issues (Murray et al., 2010), these innovations are often not high-tech but involve structural changes in social relations, distribution methods, and collaborative work models. During crises, social innovation has proven effective in strengthening collective resilience (UNDP, 2020; Nicholls & Ziegler, 2019).

In Indonesia, the MSME sector contributes over 61% of Gross Domestic Product (GDP) and employs more than 97% of the workforce (Ministry of Cooperatives and SMEs, 2023). The pandemic's impact was particularly severe in rural areas, where MSMEs are predominantly household-based and operate subsistence-level activities (OECD, 2022). Village-Owned Enterprises (BUMDes), established under Law No. 6 of 2014, were designed as collectively managed institutions to stimulate local economic development. Despite their potential, many BUMDes lack adaptive capacity: out of more than 60,000 BUMDes, only about 25% remain active and resilient in the face of crises (Kemendes PDTT, 2023). Nonetheless, some BUMDes have demonstrated resilience through innovative practices rooted in community solidarity.

The challenges faced by rural MSMEs during and after the pandemic are summarized in Table 1. These include restrictions on goods distribution, limited digital literacy, restricted access to financing, dependence on local markets, and a lack of risk management strategies, which collectively hinder recovery efforts (see Table 1). Recent studies further underscore that rural MSMEs continue to struggle with digital adoption and accessing inclusive financing mechanisms post-pandemic (Setyowati & Handayani, 2023; Lee & Arifin,

**Table 1.** Problem of Rural MSMEs Post-COVID-19 Pandemic

No	Problems	Impact on MSMEs	Source
1	Restrictions on the mobility of goods distribution	60-70% decline in turnover	Bank Indonesia, 2021
2	Weak digital literacy of business actors	Unable to adapt to online platforms	OECD, 2022
3	Very limited access to financing	Difficulty obtaining working capital	Ministry of Cooperatives and SMEs, 2023
4	Dependence on local markets alone	Unable to reach outside consumers during lockdown	Ministry of Villages, 2023
5	Lack of business risk management	Many businesses close without survival strategies	World Bank, 2021

Existing research on social innovation in Indonesia predominantly focuses on urban contexts and technology-driven enterprises (Suparno, 2022; Wibowo & Nurcahyani, 2019).

While these studies illuminate important aspects of innovation, they often overlook village-based settings where social innovations are less reliant on advanced technology and more rooted in sociocultural values such as *gotong royong* (mutual cooperation), solidarity, and community participation (Rakhmani & Dewi, 2021). Furthermore, few studies have systematically mapped the typologies of social innovations within BUMDes—such as collective distribution platforms, product adaptations for pandemic needs, or collaborations with diaspora networks.

This research addresses this critical gap by explicitly examining how social innovation transformations occur within rural BUMDes institutions during and after the pandemic. Unlike prior urban-centric and high-tech focused studies, this study emphasizes community-rooted, values-based innovations. The novelty lies in highlighting that resilience in rural enterprises hinges less on technological sophistication and more on social governance, collective participation, and cultural values. It also aims to categorize various typologies of social innovations emerging in BUMDes, providing a nuanced understanding of their roles in economic recovery.

This study aims to explore the process of social innovation transformation in BUMDes amid post-pandemic challenges, with particular attention to rural MSMEs and community resilience. The specific objectives are to identify and describe the forms of social innovation emerging within BUMDes institutions, including products, services, and governance models; to analyze the factors that facilitate or hinder the success of these innovations; and to develop a community-based social innovation strategy model for sustainable, adaptive, and participatory rural economic recovery.

Theoretically, this research enriches the literature on rural social innovation by shifting focus from urban, technology-oriented perspectives to community-based, sociocultural approaches. Practically, it offers actionable insights for BUMDes managers and local policymakers to design strategies aligned with local cultural values and social dynamics. Policy-wise, the findings support the formulation of inclusive, participatory policies for village economic recovery at the village, district, and national level.

## **2. METHOD**

### **Research Design**

This study employs a descriptive qualitative approach to explore and describe in-depth the phenomenon of social innovation transformation within village-owned enterprises (BUMDes) in the post-pandemic period, especially in the context of rural MSMEs. The qualitative approach was chosen because it allows for an understanding of social processes, community perceptions, and contextual dynamics that are not quantifiable numerically. The focus is on capturing narratives, practices, and experiences of local actors involved in developing community-based social solutions.

### **Operational Definitions**

1. **Social Innovation Transformation:** The process of developing, implementing, and institutionalizing new or modified social practices, models, or strategies within BUMDes that aim to address local socio-economic challenges post-pandemic, emphasizing community participation, sociocultural values, and social governance.
2. **Rural MSMEs:** Micro, small, and medium enterprises operating in rural areas, often characterized by household-based activities, subsistence orientation, and limited access to formal markets and financial services.

## Research Location and Subjects

### Justification for Location Selection

The research was conducted in three villages purposively selected based on specific criteria to ensure relevance and richness of data:

1. The villages have active BUMDes that have shown signs of innovative transformation after the pandemic.
2. The BUMDes in these villages have documented or observable efforts to adapt and develop new social practices.
3. These locations are representative of rural contexts where community-based social innovations are likely to be rooted in local sociocultural values.

The selection aimed to achieve data saturation—i.e., the point at which additional data no longer yield new insights—rather than aiming for statistical representativeness, which is less applicable in qualitative research.

### Subjects of the Study

The key informants involved in the study include:

1. Village heads
2. BUMDes managers and administrators
3. MSME actors within the villages
4. Community leaders and social activists
5. Beneficiary residents participating in social innovation programs

### Data Collection Techniques

Data was collected through three main techniques:

#### 1. In-depth Interviews

Interviews with key informants aimed to explore perceptions, strategies, challenges, and experiences related to social innovation practices. The interviews were semi-structured, allowing flexibility to probe emerging themes.

#### 2. Participatory Observation

Researchers conducted direct observations of social and economic activities within BUMDes and community interactions pertinent to social innovation. This helped to understand the practical context and implementation processes.

#### 3. Document Study

Review of relevant documents such as BUMDes activity reports, village meeting minutes, innovation program archives, and visual materials (photos, posters, socialization documents).

**Table 2.** Data Collection Techniques and Their Objectives

Technique	Purpose	Description
<b>In-depth Interview</b>	Explore perceptions, experiences, and strategies	Conducted with key informants to gain detailed insights
<b>Participatory Observation</b>	Understand social dynamics and practices	Observing community activities and BUMDes operations
<b>Documentation Study</b>	Trace administrative and practical evidence	Reviewing reports, records, and visual materials

### Data Analysis Techniques

The data analysis was conducted qualitatively using a thematic approach, following an iterative process:

- Data Reduction:** Sorting and focusing on data relevant to social innovation transformation.
- Data Presentation:** Organizing the data into narratives and themes such as forms of innovation, actors involved, and barriers faced.
- Conclusion Drawing:** Interpreting the patterns and deriving insights related to social innovation processes.

**Table 3.** Data Analysis Stages

Stage	Explanation
Data Reduction	Selecting relevant data aligned with research focus
Data Presentation	Grouping data into themes and categories
Drawing Conclusions	Synthesizing findings into comprehensive narratives

### Data Validation Techniques

To ensure credibility and trustworthiness, the following validation procedures were employed:

- Source Triangulation:** Comparing information across multiple informants to verify consistency.
- Method Triangulation:** Combining interviews, observations, and document review to cross-validate findings.
- Member Checking:** Presenting preliminary findings to informants for confirmation of accuracy and interpretation.

**Table 4.** Data Validation Techniques

Technique	Objectives and Benefits
Source Triangulation	Ensures data consistency across informants
Method Triangulation	Increases reliability by cross-verifying data sources
Member Check	Confirms accuracy of findings and interpretations

### Ethical Considerations

Prior to data collection, ethical approval was obtained from [name of ethics review board/institution], ensuring adherence to research ethics standards. All participants received detailed information about the purpose of the study, their voluntary participation, and their right to withdraw at any time. Informed consent was obtained in writing, and confidentiality of data was maintained throughout the research process.

## 3. RESULTS AND DISCUSSION

### Forms of Social Innovation Transformation in BUMDes Post-Pandemic

This research found that social innovation transformation in village-owned enterprises (BUMDes) occurs not only through changes in products or technology but more importantly through shifts in social structures and community governance. These innovations emerged as responses to resource constraints during the pandemic but sparked locally based creativity that is adaptive and participatory.

### Diversification of Business Units

A common practice identified is the diversification of BUMDes businesses from sectors like services and tourism—most affected during the pandemic—to agriculture, local food production, and village logistics. An illustrative example is Karya Mandiri BUMDes in Jatirejo Village, which initially operated a homestay and educational tourism site but transitioned into a distribution center for basic necessities and agricultural products, thereby maintaining economic sustainability and strengthening community solidarity through local products.

### Collective Distribution Innovation

The BUMDes in Ciburial Village developed a community-based collective distribution scheme for food products, utilizing pre-order systems and neighborhood WhatsApp groups. This approach minimizes losses from unsold stock and shortens the value chain, making it more efficient and equitable.

### Adaptive Digitalization

Although many BUMDes face digital limitations, they employ adaptive efforts such as basic digital training, utilizing local social media platforms (e.g., Facebook groups, WhatsApp), and developing simple product catalogs via Google Forms.

**Table 5.** Forms of Social Innovation Found in the Research Locations

Type of Innovation	Implementation Form	Social Impact
Business Diversification	Transition from homestay to logistics and from tourism to home farming	Preserves businesses and absorbs local labor
Collective Distribution Innovation	Community-based pre-order and delivery system	Enhances social connections and demand certainty
Adaptive Digitalization	Online catalogs, community promotion, social media training	Improves basic digital literacy among MSME actors
Inter-Village Collaboration	Formation of marketing clusters between villages (e.g., livestock breeders and feed producers)	Increases business efficiency and expands networks

### Driving and Inhibiting Factors of Social Innovation Transformation

An in-depth analysis reveals that the social innovation process in BUMDes heavily depends on social capital, the quality of local leadership, and community adaptability. However, several structural and cultural barriers also exist.

#### Driving Factors

1. **Transformational Leadership:** Village heads and BUMDes managers with a collective vision and the ability to mobilize the community are key drivers. They foster a sense of urgency and mutual cooperation.
2. **Social Solidarity:** Mutual cooperation and social cohesion are vital, especially when formal distribution systems collapse. Communities support each other in production and distribution.

### 3. **Structural Flexibility of BUMDes:** The absence of rigid bureaucratic constraints

#### **Inhibiting Factors**

1. **Low Technological Literacy:** Many MSMEs are not yet accustomed to using online communication tools for promotion or record-keeping.
2. **Dependence on Key Individuals:** Relying heavily on a single figure (such as the village head or a BUMDes administrator) makes the sustainability and regeneration of innovations fragile.
3. **Limited Access to Capital and Mentoring:** Access to microfinance and innovation training remains limited.

**Table 6.** Driving and Inhibiting Factors of Social Innovation Transformation

<b>Aspect</b>	<b>Driving Factors</b>	<b>Inhibiting Factors</b>
Institutional	Collaborative leadership and long-term vision	Dependence on a single individual
Socio-cultural	Community solidarity and cooperation	Resistance to change among older generations
Technology	Simple social media adaptation	Low digital literacy
Economy	Business diversification and local demand	Limited capital, no cash reserves during crises

#### **Community-Based Social Innovation Strategy Model**

Based on the analysis of the three research sites, a community-based social innovation strategy model called SIPEDES (Rural Innovation Strategy) was developed. This model provides a practical framework for BUMDes in developing sustainable social innovations.

Main Components of the SIPEDES Model:

1. **Identification of Local Potential**  
Mapping social, economic, and cultural assets as a foundation for innovation.
2. **Multistakeholder Collaboration**  
Engaging families, traditional leaders, youth organizations, and diaspora as innovation partners.
3. **Community-Based Distribution Innovation**  
Pre-order systems and logistics managed within the community to strengthen supply chains and marketing.
4. **Adoption of Appropriate Technology**  
Utilizing village-friendly digital media such as WhatsApp Business, PDF catalogs, and local social media platforms.
5. **Participatory Monitoring**  
Community members participate in periodic evaluations and formulate village policies based on field data

**Table 7.** SIPEDES Model Framework: Community-Based Social Innovation Strategy

Stage	Strategy	Description
Potential Mapping	Asset survey (human resources, raw materials, social networks)	Identifying local resources for innovation
Strengthening Collaboration	Cross-village forums involving community groups	Building partnerships among local actors and businesses
Collective Distribution Innovation	Community-based pre-order and delivery systems	Improving logistics and marketing
Contextual Digitalization	Social media training, online catalogs	Enhancing digital literacy and online promotion
Participatory Evaluation	Village dialogues and periodic assessments	Engaging community in continuous improvement

### Theoretical and Contextual Discussion

The findings align with Phills et al.'s (2008) theory of social innovation, which emphasizes that the success of social innovations hinges on their capacity to generate systemic impact by leveraging existing social structures. The community-based approach observed in this study reinforces this theory by integrating local values not only as a source of identity but also as a strategic tool for adaptation.

Furthermore, Murray et al.'s (2010) concept of "open" and participatory social innovation is reflected in the SIPEDES model, where communities are not merely recipients of development but active actors in innovation processes. The strength of this approach lies in empowering local actors and fostering bottom-up growth rather than top-down interventions.

This model also complements the grassroots innovation framework (Hossain, 2016), emphasizing the importance of local culture and context as the foundation for successful innovation. In the Indonesian context, this approach offers a relevant alternative for achieving more equitable and sustainable post-pandemic economic recovery at the village level.

## 4. CONCLUSION

Based on the research results and discussions, it can be concluded that the transformation of social innovation in BUMDes (Village-Owned Enterprises) post-pandemic is a result of a synergistic interplay of local strengths, such as visionary leadership, community solidarity, and social adaptability. The primary objectives of this study were to (1) identify the forms and types of social innovation emerging in villages, (2) analyze the driving and inhibiting factors influencing these innovations, and (3) develop a practical community-based strategy model to foster sustainable social innovation.

Further studies could explore quantitative assessments of the impact of social innovations on village economic indicators, such as income growth and employment rates. Additionally, longitudinal research could examine the sustainability of these innovations over time and their scalability across different regions. Investigating the role of external support systems and digital infrastructure development would also contribute to a more comprehensive understanding of enabling factors.



In conclusion, the research underscores the importance of leveraging local assets and community participation in building resilient and sustainable social innovations in villages, especially in post-pandemic recovery contexts.

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