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Strengthening Micro, Small, and Medium Enterprises (MSMEs) Post COVID-19 Through Local Economic Development (LED) in Kampung Logam-Ngingas, Waru, Sidoarjo

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ABSTRACT

This paper analyzes the impact of the Sidoarjo Governments in fostering Micro, Small, and Medium Enterprises (MSMEs) in Kampung Logam, Desa Ngingas, Waru, Sidoarjo using the Local Economic Development (LED) framework during the Covid-19 pandemic. Researchers discovered problems delegating tasks within the Department of Industry and Trade where overlapping functions across the industrial area, particularly Ngingas, impede MSME growth. Data were acquired through observations, document analysis, and in-depth interviews utilizing a descriptive qualitative methodology in Sidoarjo and Ngingas Village. Research demonstrates that although policies regarding privatization, demand generation, new firm formation, and transformation methods beneficially impact MSME growth, substantial enhancements in programming are required. This encompasses enhancing industrial technical services, fortifying workforce development, and establishing resilient long-term investment plans to guarantee sustainable growth for MSMEs.

Keywords: MSME Development; Local Economic Development (LED); Covid-19 Pandemic.

ABSTRAK

Artikel ini bertujuan untuk menganalisis keterlibatan Pemerintah Sidoarjo dalam membina Usaha Mikro, Kecil, dan Menengah (UMKM) di Kampung Logam, Desa Ngingas, Waru, Sidoarjo dengan menggunakan kerangka *Local Economic Development* (LED) selama pandemi Covid-19. Peneliti menemukan masalah dalam pendelegasian tugas di dalam Dinas Perindustrian dan Perdagangan yang cenderung tumpang tindih sehingga menghambat pertumbuhan UMKM khususnya di Desa Ngingas. Penelitian menggunakan metode kualitatif deskriptif dengan sumber data yang diperoleh melalui observasi, analisis dokumen, dan wawancara mendalam di lembaga pemerintah terkait dan di Desa Ngingas. Penelitian menunjukkan bahwa meskipun kebijakan mengenai privatisasi, pembangkitan permintaan, pembentukan perusahaan baru, dan metode transformasi berdampak menguntungkan pada pertumbuhan UMKM, peningkatan substansial dalam pemrograman masih sangat diperlukan. Hal ini mencakup peningkatan layanan teknis industri, memperkuat pengembangan tenaga kerja, dan membangun rencana investasi jangka panjang yang tangguh untuk menjamin pertumbuhan berkelanjutan bagi UMKM.

Kata Kunci: Pembangunan UMKM; *Local Economic Development* (LED); Pandemi Covid-19.

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INTRODUCTION

Micro, Small, and Medium Enterprises (MSMEs) play a strategic role in the Indonesian economy and contributing significantly to job creation and Gross Domestic Product (GDP) (Anatan & Nur, 2023; Muafi & Roostika, 2022). In 2019, MSMEs accounted for 54% of Indonesia's GDP, approximately IDR 8,573.89 trillion and absorbed over 119 million workers (Nursini, 2020). Despite their importance, MSMEs face chronic challenges such as limited access to finance, skilled labor, and raw materials (Amoah et al., 2022; Armada & Rozi, 2024). The Covid-19 pandemic which has disrupted the global economy since early 2020 has exacerbated these challenges severely impacting the sustainability of MSMEs across Indonesia. Indonesia's Central Statistics Agency (Badan Pusat Statistik/BPS) recorded two consecutive quarters of economic contraction in 2020 with a decline of -5.32% in the second quarter and -2.19% in the third quarter (BPS, 2020). Many MSME operators experienced a drastic reduction in sales with a significant number forced to close due to their inability to withstand these economic pressures (Christa & Kristinae, 2021; Ikawati et al., 2023). An Asian Development Bank (2020) survey reported that 50% of MSMEs in Indonesia shut down while 88% lacked sufficient savings to sustain their businesses (Armada & Rozi, 2024; Pusung et al., 2023).

In response to these challenges, the Indonesian government launched various policies and programs, such as the National Economic Recovery program which allocated IDR 695.2 trillion to support MSMEs and other affected sectors (Coordinating Ministry for Economic Affairs, 2020). In Sidoarjo – East Java, the Department of Industry and Trade played a key role in supporting MSME development especially through the implementation of Local Economic Development (LED) strategies in Kampung Logam, Ngingas Village (Huda et al., 2018; Lukman Hakim et al., 2024). Kampung Logam known as the center of the metalworking industry in Sidoarjo faced significant challenges during the pandemic (Gengatharen & Standing, 2005; Lukman Hakim et al., 2024; Maulana & Auwalin, 2020). While the government has implemented several institutional development and supply-demand strategies, the absence of a Technical Service Unit (UPT) and Industrial Extension Officers (TPI) has hindered further MSME growth in the region (Siano & Canale, 2022).

MSMEs in Kampung Logam have been crucial for local economic development but have also been severely impacted by the pandemic. PT Elang Jagad, a leading metalworking business in the area experienced an 80% drop in productivity during the pandemic due to reduced demand and supply chain disruptions (Kemenperin, 2021). The pandemic caused severe strain on business operations with many MSMEs unable to secure consistent revenue or maintain their workforce. Despite government support through programs like the PEN and other technical assistance initiatives, recovery has been slow. Several issues remain for MSMEs in Kampung Logam. Legal and regulatory hurdles continue to challenge business operators in securing necessary permits and accessing government programs. The spatial planning regulation (Perda No. 6/2009) in Sidoarjo has prevented many MSMEs from formalizing their businesses Restricting their access to financial support and government tenders (BPS, 2021). This has stunted their growth and making them more vulnerable to economic shocks such as the pandemic. Additionally, competition from cheaper imported goods (particularly from China) has further complicated recovery efforts. The higher cost of raw materials in Indonesia (such as metal sheets) has made it difficult for local MSMEs to compete against imported goods (Dinas Koperasi dan UMKM Provinsi Jawa Timur, 2021).

The pandemic also highlighted the importance of digital transformation for MSMEs. With physical restrictions in place, businesses that were unable to shift to digital platforms struggled to maintain operations (Putritamara et al., 2023). This research focuses on the growth of MSMEs through the Local Economic Development (LED) lens after the COVID-19 pandemic from the root. The research argues for the need to foster policies directed towards the development of MSMEs and to encourage digitalisation as a primary goal, understanding that economic growth has to come in a more structured and organised manner over time. This research has limited digital literacy among MSME operators, and inadequate infrastructure in some areas exacerbated this challenge, leaving many businesses behind in the digital economy. The need for digital capacity-building remains critical as MSMEs seek to rebuild and adapt to post-pandemic economic conditions. While the Indonesian government's efforts through the PEN and various local support programs have been instrumental in sustaining MSMEs during the pandemic significant challenges persist. Legal formalization, digital transformation, and competition from imported goods continue to hinder the recovery and growth of MSMEs in Kampung Logam. To ensure long-term resilience, the government must address these barriers by streamlining business licensing processes, enhancing digital infrastructure, and providing targeted support to help MSMEs compete in a globalized market.

LITERATURE REVIEW

This research focuses on the development of MSMEs in the context of the Covid-19 pandemic using the Local Economic Development (LED) approach. The literature review will examine various related concepts and theories, including MSME development, LED, and the impact of the pandemic on the MSME sector.

Micro, Small, and Medium Enterprises (MSMEs)

MSMEs are a crucial sector for Indonesia's economy. In 2019, MSMEs contributed 54% to the Gross Domestic Product (GDP) and absorbed over 119 million workers (Nursini, 2020). According to (Noerhalifah et al., 2023), MSMEs in Indonesia often face chronic issues such as limited access to finance, raw materials, and markets. These challenges became more severe when the Covid-19 pandemic struck, causing a significant drop in demand and leading to the closure of many businesses (Pusung et al., 2023). The Indonesian government has issued various policies to support MSMEs, one of which is the National Economic Recovery (PEN) program aimed at providing stimulus to affected sectors including MSMEs. PEN allocated a stimulus fund of IDR 123.46 trillion to MSMEs to ensure the continuity of their businesses during the pandemic (BPS, 2020). However, the challenges faced by MSMEs are not limited to financial issues but also include innovation, digital transformation, and adaptation to changing markets.

Local Economic Development (LED)

Local Economic Development (LED) is a local economic development approach aimed at creating sustainable economic growth by utilizing local resources (Sturiale et al., 2020; Wang, 2022). LED involves active participation from various stakeholders, including local governments, communities, the private sector, and non-governmental organizations (NGOs), to develop strategies that support job creation, increase community income, and reduce poverty at the local level (Polak & Snowball, 2017). According to Lukman Hakim et al. (2024), LED emphasizes the importance of the role of local elements in economic development. This is based on the idea that local-based development, with an emphasis on sustainable job creation and economic capacity building for the community, will be more successful if implemented at the local rather than national or regional level.

LED is also defined as a participatory process that enables local governments, local businesses, and the community to collaborate in creating an economic environment that is conducive to growth. The goal is to improve the welfare of the community by providing access to local resources, including human capital, physical infrastructure, and social capital, to strengthen the local economy. Furthermore, Amoah (2022) defines LED as a process aimed at creating the capacity of local communities to sustainably enhance their economy, focusing on the use of local potential. This concept broadens the view that economic development is not only about increasing income but also about improving the overall quality of life, including poverty alleviation and better access to basic services. According to Yuningsih et al. (2022), LED is a process where stakeholders at both local and external levels collaborate to create new jobs, stimulate economic activities, and strengthen the local economy through various strategies. In the context of MSME development, LED becomes an important framework for promoting the growth of local sectors in an inclusive manner (Anwar et al., 2019). Local governments can play a central role by creating policies that support access to markets, capital, and the skills needed by MSME operators. By maximizing local resources, LED aims to create resilient and independent economies.

Impact of the Covid-19 Pandemic on MSMEs

The Covid-19 pandemic has had a profound impact on MSMEs in Indonesia, , leading to substantial revenue declines and challenges in sales systems, particularly for those employing consignment sales methods (Suwarni et al., 2023). According to a survey by the Asian Development Bank (2020), 50% of MSMEs in Indonesia experienced business closures while around 93% of MSMEs saw a significant decline in sales. A survey conducted by BPS (2020) also showed that 87.5% of MSMEs were affected by the pandemic with the main problems being a decline in demand, difficulty accessing raw materials, and challenges in paying employee salaries. The economic impact of the pandemic forced MSMEs to adapt by digitizing business processes, diversifying products, and seeking new markets. However, the ability of MSMEs to adapt was also limited by access to technology and the skills required (Anatan & Nur, 2023). In this situation, the government and financial institutions played a key role in providing support in the form of training, access to capital, and tax incentives to ease the burden on MSMEs during the pandemic (Christa & Kristinae, 2021; Maulana et al., 2023).

The Role of Local Government in MSME Development

Government initiatives including digital literacy training and financial technology support were instrumental in helping MSMEs transition to digital platforms and enhance their market presence (Assanniyah & Setyorini, 2024). Local governments have a strategic role in supporting the development of MSMEs at the local level. According to research by Huda et al. (2018), local governments can play a central role in LED by creating policies that support MSMEs, providing adequate infrastructure, and enhancing the capacity of business operators through training and access to information. In Sidoarjo, the role of the Department of Industry and Trade is crucial in supporting MSME sustainability, particularly during the pandemic. The Department of Industry and Trade of Sidoarjo Regency has made several efforts to develop MSMEs, particularly through the LED program which focuses on Kampung Logam, Ngingas Village. However, resource limitations such as the absence of a Technical Service Unit (UPT) and Industrial Extension Officers (TPI), have become obstacles to more optimal MSME development in the area (interview results).

Digital Transformation as an Effort for MSME Development

One of the adaptations made by MSMEs during the pandemic is digital transformation. Digital technology is key solution for expanding markets and improving operational efficiency. According to a survey by the Ministry of Cooperatives and MSMEs (2019), MSMEs that adopted digital technology were more likely to survive during the pandemic. Through the MSME digitalization program, the Indonesian government has encouraged small business operators to switch to digital platforms for sales and product marketing (BPS, 2020; Ministry of Cooperatives and MSMEs, 2019). However, the adoption of digital technology among MSMEs remains limited, primarily due to a lack of access to technology and digital skills. Therefore, building the digital capacity of MSME operators has become one of the government's main focuses to support the sustainability of this sector in the future (Gehan & Yulianti, 2024).

RESEARCH METHODS

This study adopts a qualitative descriptive approach to understand the role of the government, particularly the Department of Industry and Trade of Sidoarjo Regency in the development of MSMEs during the Covid-19 pandemic (Yin, 2016). This approach was chosen because the study aims to explore in-depth the experiences and challenges faced by MSME operators as well as government interventions in the context of Local Economic Development (LED) (Amoah et al., 2022; Haenssgen, 2020; Yin, 2018). Data collection was carried out through three primary methods, in-depth interviews, observations, and document studies. Semi-structured interviews were conducted with officials from the Department of Industry and Trade as well as MSME operators in Kampung Logam. The informants were selected using purposive sampling, involving individuals directly engaged in MSMEs development programs such as Officials from the Sidoarjo Department of Industry and Trade (4 respondents), MSMEs Entrepreneurs in Kampung Logam (7 respondents), Local Community Representatives (4 respondents), and Industry Experts and Financial Institutions (4 respondents). Field observations were also conducted to observe the condition of MSMEs and the implementation of government programs on the ground. Document studies included the analysis of government reports, relevant policies, and statistical data regarding MSME development in Sidoarjo Regency (Asian Development Bank, 2020).

Data analysis was performed thematically, involving data reduction, coding, and drawing conclusions based on the main themes emerging from the data. Data validity was tested using triangulation techniques, which involved comparing data from various sources to ensure consistency of information (Creswell & Poth, 2017). Additionally, member checking was conducted to ensure that the researcher’s interpretations aligned with the views of the informants (Erdmann & Potthoff, 2023). It means that the researcher's interpretation of the respondents' argument aligns with what the respondents mean (Birt et al., 2016). So, it makes the research outcomes valid and can be trusted.

RESULTS AND DISCUSSION

This study focuses on analyzing the development of MSMEs in Kampung Logam, Ngingas Village, Waru, Sidoarjo during the Covid-19 pandemic using the Local Economic Development (LED) approach. Based on data collected through interviews, observations, and document studies, several important findings emerged related to the research problem, particularly regarding efforts and challenges in MSME development, as well as the role of local government, specifically the Department of Industry and Trade of Sidoarjo.

The Role of Local Government in MSME Development

The Department of Industry and Trade of Sidoarjo Regency plays a crucial role in supporting the sustainability of MSMEs in the region, particularly during and after the Covid-19 pandemic. The findings of the research show that several MSME development programs have been initiated by the local government, but their implementation still faces significant obstacles. It's in line with some research that researchers found before, like Agarwal & Ojha (2023) and Satapathy & Mishra (2022). The local government, in this case the Department of Industry and Trade has applied several strategies consistent with the LED concept as outlined below:

a. Financial Management

Instead of providing direct financial assistance, the Sidoarjo Department of Industry and Trade prefers a facilitative measure such as running "link and match" programs to integrate MSMEs with large companies like PLN. These programs allowed MSMEs to retain contracts and revenue streams amid the economic imbalance triggered by the pandemic. The problem was that the Department's mandate limited the issuing of direct financial aid, which was managed by the Cooperative and MSME Office, resulting in MSMEs being dependent on traditional access to funding rather than going through the appropriate channels to secure proper financing, such as through the People's Business Credit (Kredit Usaha Rakyat/KUR). KUR has provided low-interest loans; however, restrictions on collateral and complex application processes made access difficult, especially for smaller MSMEs. Financial assistance became the only solution; cooperatives such as Koperasi Waru Buana provided loan facilities. Nonetheless, MSMEs and cooperatives faced financial pressure due to a higher risk of defaults on loans and increases in the cost of raw materials. To further compound this issue, businesses such as UD Karya had difficulties in keeping production rolling because of expenses such as utility bills. In addition, smaller MSMEs had more limited access to bank loans as they could not recycle themselves by providing collateral or formal financial documentation—consequently, the financial aid needed to be more distributed.

The Department of Industry and Trade also helped address financial constraints by linking businesses through business matching programs. MSMEs were able to reach potential clients and access new market opportunities that initiatives led to growth in sales numbers. However, challenges such as delayed payments from corporate clients and limited working capital continued. MSME owners have also resorted to various cost-cutting measures, including better terms with suppliers and reduced wastage to counter the financial constraint. They also stressed the importance of providing holistic support, such as grants and a simplified loan process, to improve accessibility to financial programs and drive sustainable growth for smaller MSMEs. Several countries also carry out this kind of assistance to maintain MSMEs so that they do not fall, such as the USA with the CARES Act 2020 program, Australia launching the Recovery Loan Scheme, and India with the RBI (Reserve Bank of India) with various methods to help MSMEs (Singh et al., 2022).

b. Supply Chain Distribution

The local government granted numerous permits to facilitate factory industrial operations within their business premises, minimizing the need for extensive travel. In these complex circumstances, one notable permit is the Izin Operasional Mobilitas Kegiatan Industri (IOMKI). Permits have been granted for operational activities, subject to mobility restrictions in critical zones, including MSME in Kampung Logam, Ngingas. The existence of the IOMKI fosters optimism regarding the seamless distribution of both raw materials and finished products. Agus stated that this would facilitate the clarification of the Ministry of Industry and Trade supply chains. Issuing additional permits and facilitating the uninterrupted operation of essential industries contributed significantly to stabilizing the economy. Nonetheless, the Korean women present appeared to pursue government permits without any strategic planning or oversight of the supply chain. This situation compelled small and medium-sized enterprises to confront expenses that were far from economical and experiencing shortages in raw materials. For instance, UD Karya encountered challenges in sourcing an adequate supply of affordable raw materials, which hindered its production capabilities and increased prices. The acquisition of imported material required considerable effort and diligence. Certain items may necessitate daily delivery in the future or upon arrival; their cost could significantly increase due to constraints in international shipping. Challenges and Turmoil The logistics sector is currently facing significant challenges. It lacks a formal structure and does not possess defined lines. The reliance on a singular supply source and pipeline channels requiring greater specificity has introduced considerable systemic risks into the framework.

Before this crisis, characterized by diminishing demand, large corporations eagerly embraced every conceivable plan, believing that an abundance of pure raw materials was readily available, and they envisioned significant economies of scale. Conversely, the smaller MSMEs were compelled to incur a more significant cost per unit for any specified quantity. The prohibition of transport resulted in significant challenges in distributing goods to distant markets. It resulted in a deficiency of competitiveness at every juncture. What course of action should we take regarding these matters? Stakeholders have advocated for establishing logistics hubs at regional levels or purpose-built warehouse facilities that facilitate easy access to raw materials while minimizing costs. These initiatives signify an alleviation of the individual responsibilities of MSMEs. Ultimately, as time progresses, they will alleviate this burden from all companies, leading to a more robustly established industry conglomeration.

Several countries also mitigate supply chain risk with some adjustments to demographics, economics, and geography. Like the Government of India, by providing emergency transportation, logistics subsidies, and shipping flexibility, container delays and supply imbalances are still challenges (Gupta & Kumar Singh, 2023). Japan focuses on supply chain digitalization through platforms such as Gotanda Eats that connect MSMEs directly with customers, reduce dependence on traditional distribution systems, and increase operational efficiency (Kawane et al., 2024). Meanwhile, other Asian countries such as Vietnam, Malaysia, and Bangladesh have policies that are more or less similar to Indonesia's, such as implementing credit access coverage for raw materials, transportation tax incentives, and building strategic warehouses to accelerate distribution (Takeda et al., 2022).

c. Digital Transformation

The COVID-19 pandemic brought substantial market changes for MSMEs in Kampung Logam Ngingas, and digital transformation became a top priority. The local government Department of Industry and Commerce actively encouraged MSMEs to use digital platforms to save their livelihoods. Agus, Head of the Department of Industry and Trade, explained that the department held socialization programs in partnership with significant e-commerce companies such as Bukalapak, Tokopedia, and Lazada. These events were designed to teach MSMEs how to use online selling channels effectively and, at the same time, employ digital marketing strategies so that even in a pandemic, people could remain stable economically. The department also employed a foothold strategy in organizing MSME owners to participate in training sessions with representatives from e-commerce companies. At these meetings, they could learn the simple matters of setting up online stores, listing products, and how to handle digital payments. The department also took steps to support digital transformation by using its website to promote local MSME products. Ipung, an Extension Officer with the Department of Industry and Trade, noted that the department website offered different products from Kampung Logam Ngingas, where the local metal industry's abilities were shown. The website gave information on product categories where micro-businesses could be found, promoted featured local business profiles, and supplied contact details for potential buyers. By promoting MSMEs through the department's website, the government aimed to raise the visibility of local products on the market and attract new customers who had never previously been aware that Kampong Logam Ngingas produced such goods.

For its MSME clients, which account for most of the company's revenue, some challenges remained in adapting to digital channels. However, the overwhelming need to survive pushed many MSMEs into embracing some online marketing. For all that, the company could find no reliable substitute for face-to-face exchanges with suppliers and buyers—still important to business operations. An owner of UD Rose Mekar, Abi, complained that during the pandemic. He tried to sell his products on Facebook Marketplace on various occasions and from different perspectives. It was clear, however, that he had yet to find a satisfactory answer in this respect. He wanted to expand his online presence via Facebook Market and Google ads. However, he found it difficult because else a higher-level advertising package came along. Perhaps he also felt the need to join one of those promotions! Abi made this adaptation possible by linking with traditional network partners such as Discount/TipTop. Haji Agus, chairman of the Asplindo association and owner of UD Trilaksana mandiri, noted that while some MSMEs had successfully adopted digital marketing. Many others were hesitant or found it challenging to use the available tools. He said transitioning to selling goods online was more difficult than mastering basic technical skills. This type of selling involved several digital marketing strategies, and some MSMEs did not have the basic knowledge to begin making those transitions. Although the government and e-commerce companies' training courses provided a good foundation, haji Agus said more intensive and follow-up training sessions were required to help MSMEs leap “abstract concepts” to practical tools. What is more, pay-low e-commerce service providers use.

Operating an online shop and addressing customer inquiries promptly presents considerable difficulties for small businesses in areas with poor internet connectivity. Young observed that lacking dependable digital infrastructure has compelled certain MSMEs to persist with conventional marketing strategies, including word-of-mouth advertising, alongside their direct sales or local distributors. The variation in digital readiness impacted the results of these studies, resulting in uneven success in the government's digital transformation initiatives. Some businesses demonstrated substantial growth, while others encountered difficulties in maintaining operations. This study indicated that integrating digital sales with traditional business practices presents a substantial challenge. Many MSMEs found that online sales enhanced their existing offline operations. Businesses with direct engagement in local markets or via distributors acknowledged the need for support in handling direct-to-consumer shipping, returns, and digital payments. The HRD staff at PT Elang Jagad, Yudi, notes that while e-commerce can expand market reach, changes in business processes and logistics are required, which not all MSMEs are equipped to adopt.

The research indicated that the government depended on enforcement rather than merely providing recommendations for digital reform. The Department of Industry and Trade provided training and collaborated with e-commerce enterprises to enhance operational support. The measures overlooked numerous firms that needed tailored assistance for success. Upon the availability of basic training, issues emerged: the materials typically lacked focus on the specifics of Digital Marketing and provided insufficient descriptions for advanced analytics platforms. They could have determined how customers might integrate their operations across two websites. I will propose to the government that the Industry Division should implement additional specialized courses targeting specific areas, including advanced digital marketing operations, search engine optimization, and "vermiculite art" within We-Media. Equipped in this manner, MSMEs are better prepared for the challenges they will face in a digital economy. Additionally, certain MSMEs faced financial constraints during the implementation of digitalization. The expenses associated with professional imaging for online stores or acquiring tools adhering to best practices, such as utilizing the WeChat interface, may have been more accessible for low-budget small enterprises. Despite Abi recognizing the potential advantages of transitioning his business online, the substantial initial costs associated with high-quality product photography and developing a web platform for pin advertising presented considerable challenges. The outcome indicated that the government's digital transformation initiatives failed to address these financial limitations. Consequently, certain MSMEs required additional resources to engage effectively online, markedly diminishing their market presence.

Companies that produce digital-format books, music, games, and films exhibit increased facilitation in their expansion efforts. These companies have the necessary systems and personnel to manage e-commerce and reallocate this infrastructure. If MSMEs had formed relationships with online platforms such as Shopee, Tokopedia or utilized online marketing strategies, they could have quickly adjusted their sales channels to meet the increased demand for digital products. Budi stated that the Department of Industry and Trade employed success stories of MSMEs in training sessions to motivate other business owners to embrace modern technologies. The government is considering additional measures to address MSMEs' varying digital readiness levels to face reality. The measures comprise financial incentives for digital adoption, grants for acquiring tools essential for online transition, and subsidies for internet connections for small enterprises. The final point concerns the capacity of these programs to reduce entry barriers for small businesses, thus facilitating their adoption of digital platforms. The establishment of a mentoring program is proposed, wherein successful entrepreneurs in online digital business would guide less experienced MSMEs in creating and managing their pillar pages.

Research conducted by Putritamara et al. (2023) and Trinugroho et al. (2022) states that the Indonesian Government has implemented various policies to support the digital transformation of MSMEs to increase competitiveness and business resilience during the COVID-19 pandemic. The Government focuses on capacity building and digital transformation through training, technical assistance, and partnerships with several e-commerce platforms such as Tokopedia and Bukalapak. The study also shows that MSMEs adopting digital technologies such as online marketing and payments have much better business resilience than those not. Some of these efforts are at least relevant and integral to the strategy of the Industry and Trade Service in encouraging the digital transformation of MSMEs in Kampung Logam Ngingas to expand market access for the sustainability of their businesses. Several factors that influence digital transformation, such as internet penetration and consumer demand, can also be the main drivers in accelerating the digitalization of MSMEs, further strengthened by government policies' support. Meanwhile, in other countries such as Latvia, the

Government faces challenges such as IT security and a limited digital workforce, which are then mitigated with training subsidies and tax incentives (Rupeika-Apoga & Petrovska, 2022).

d. Network Relationship

Multi-sectoral linkages were connected by linking MSMEs with corporate firms, government institutions, and state-owned companies through the Initiatives Program, which included “link and match,” business-matching sessions, and trade missions. The Sidoarjo Department of Industry and Trade coordinates these activities. Somehow, these landscapes were shaped by the various government-sponsored programs that assisted MSMEs in securing contracts. Supply goods and undertake ventures while partnerships forged with PLN offered essential revenue inflows during the pandemic. The Department also conducted trade missions to promote market access by taking the MSMEs to areas outside Java where the demand for metal products was higher. The degree of success of these programs was very erratic, though, like most other business activities. Barriers like lack of legal compliance, finances, and quality cut off the participation of significantly smaller MSMEs in link-and-match programs. Companies that lacked even the basic certifications or could not meet the stipulations put forward by larger corporate firms were, as a norm, disadvantaged and left out in the cold regarding networking. Due to these imbalances, the Department developed new programs aimed at low-resource-filled MSMEs through cooperation and regional network partnerships with lower entry requirements. Informal networks were also crucial, as MSMEs pooled resources and collaborated to complete more significant contracts. Despite these efforts, stakeholders proposed that inclusivity could be further enhanced by organizing tiered business matching events, which would allow MSMEs of different scales to engage according to their level of preparedness. These changes could open up opportunities for smaller businesses and help the federal government reach and engage with a broader set of participants in its networking programs.

As shown in previous studies, openness to business-to-business and business-to-customer networks of MSMEs plays an essential role in business growth; in Italy, the involvement of MSMEs in global networks through the collaboration of trade associations and government allows access to international markets and new business opportunities that are broader and more progressive (Jafari Sadeghi & Biancone, 2018). In Senegal, the government addresses the challenges of access to finance and capital constraints by easing MSMEs' connection to formal financial institutions (despite legal compliance constraints) (Koloma, 2021). Meanwhile, the two-sided model analyzed by Choi (2021) shows that reducing cross-border matching costs through bilateral economic integration can increase opportunities for MSMEs to join international networks (although bargaining power and resource constraints remain significant challenges). This is similar to Ngingas Metal Village in Sidoarjo, where link, match, and market expansion programs have been implemented to overcome various barriers and expand MSME networks to markets outside Java and abroad.

e. Government Policy

This research reveals opportunities and challenges for government support that can significantly affect the growth and development of local MSMEs during and after the pandemic. Government initiatives under the National Economic Recovery (PEN) program have been shown to ease the financial burden by providing loan deferrals and credit extensions. However, the derivatives of these programs, in some cases, cannot be fully accessed by MSMEs, especially those that do not have formal financial documents integrated with financial institutions. Therefore, several efforts related to this still need support from government agencies, including providing education and socialization so that MSMEs can make good balance sheets or business licenses to be able to take advantage of these programs so that they can take advantage of assistance from the government related to economic recovery due to the pandemic. However, on the other hand, what needs to be understood is that PEN is not a systemic financing program because it does not directly solve problems, especially those related to infrastructure, cash flow systems, or legal matters such as annual taxes, are resolved thoroughly without solving problems on the ground, said the owner of UD Trilaksana Mandiri who is also the chairman of the Asplindo Association. In this case, he insisted that assistance be channeled through direct subsidies or grants to help informal businesses better.

In addition, there are also zoning regulations that are a significant barrier for MSMEs in Kampung Logam. Legally, the land used by MSMEs is categorized as a residential area, thus indirectly limiting industrial activities. Because they do not have these permits, MSMEs cannot obtain licenses, financial assistance, and formal contracts with large companies. So, in this case, the Department of Industry and Trade outlined zoning changes to reduce industrial activity in various areas through legal documentation to allow for legal business licensing and government participation. Therefore, despite the evolution of regulatory changes, it is also a barrier for MSMEs to be legally rescued as quickly and appropriately as possible by the government. The government has undertaken programs to simplify the licensing process, but a lack of awareness and bureaucratic hurdles reduce their effectiveness. Samsul, chairman of the Pikulan Association, called for systemic reforms to ease administrative and licensing burdens for MSMEs in key sectors, including metalworking and other investments, to be undertaken as soon as possible. The government has, therefore, responded to this issue by encouraging MSMEs to adopt diversification strategies and implementing “link and match” programs that connect MSMEs with large companies. These efforts are helping some businesses win contracts and stay afloat, but broader reforms are needed to achieve long-term resilience in a way that provides equitable support for all MSMEs.

Some countries have also implemented several policies aimed at saving MSMEs. The Thai government created a program through financial assistance with soft loans, low interest rates, and tax breaks (Ali et al., 2024). The program is named Amazing Thailand Safety and Health Administration (SHA). Meanwhile, Ghana has a program called CARES Obaatanpa Programme and CAP-BuSS, which offers low-interest funding and direct assistance to digitization training to reach a broader market (Arthur & Arthur, 2024). Then, the Government of India created a program called Aatmanirbhar Bharat Abhiyan, which focuses on providing financial incentives through emergency credit, postponement of tax payments, and digitization training for MSMEs (Singh et al., 2022). So, in terms of policy, several countries have common sense in making policies to mitigate the risks resulting from the COVID-19 pandemic.

The Impact of the Covid-19 Pandemic on MSME Sustainability

The Covid-19 pandemic has had a profound impact on the sustainability of MSMEs in Kampung Logam. Based on interviews with several peoples, it was revealed that nearly all MSMEs experienced a decline in revenue during the pandemic. Most MSMEs operators reported a drop in sales of up to 50% with some businesses experiencing even more severe declines (Tambunan, 2020). Additionally, some MSMEs from the Kampung Logam were forced to reduce their workforce or temporarily halt operations because they could not cover operational costs. Limited access to markets during the pandemic, both locally and nationally, was one of the primary factors contributing to the decline in sales. MSME operators in Kampung Logam predominantly rely on direct sales to consumers or through marketing agents. When large-scale social restrictions (Pembatasan Sosial Berskala Besar/PSBB) and reduced public mobility were implemented, many MSME operators lost customer access. Furthermore, liquidity issues became a significant crisis for MSME operators during the pandemic. This study found that most MSME operators had insufficient savings or reserve capital to cover losses caused by decreased demand. Although financial aid programs provided by the government helped to some extent, they did not fully meet the long-term needs of MSME operators to survive.

Effectiveness of Local Government Programs

The Department of Industry and Trade of Sidoarjo has launched several programs to assist MSME operators during the pandemic. However, the effectiveness of these programs remains suboptimal. Although some initiatives such as technical training and mentoring were successful. Other programs such as digitalization efforts and financial aid distribution have not fully addressed the fundamental challenges MSME operators face. Obstacles such as technological limitations, resource constraints, and poor coordination between the government and MSMEs have led to less-than-optimal outcomes for these programs. Some MSME operators interviewed expressed that government aid programs were not always well-targeted. Some micro-business operators with limited capital did not receive the same support as more established medium-sized businesses. As a result, micro-business operators who were more vulnerable to the pandemic’s effects did not receive adequate assistance to sustain their businesses.

CONCLUSIONS AND RECOMMENDATIONS

This research reveals that the Sidoarjo Industry and Trade Office carries out several programs to save MSMEs from the COVID-19 pandemic in Kampung Logam, Ngigas Village, Waru, Sidoarjo by implementing financial management strategies, supply chain sustainability, and business networks - digital transformation. Program initiatives such as “link and match” and grants to MSMEs through IOMKI permits allow them to continue operating and earning income from their businesses despite considerable obstacles. Some of these barriers include limited access to formal financial support, regulatory challenges (zoning and legality), and uneven digital transformation among MSMEs. These challenges require both direct and indirect interventions that are more inclusive and targeted, such as simplifying administrative processes, channeling subsidized grants for operational costs, and improving digital infrastructure for MSMEs. In addition, structural issues related to supply chain constraints and strengthening collaboration between MSMEs and more prominent companies must be addressed to build MSME resilience and sustainability.

Although the rescue measures taken by the state have reduced some of the burdens caused by the pandemic, much homework still needs to be done to encourage the sustainable development of MSMEs in Kampung Logam after the COVID-19 pandemic. Therefore, the presence of every party (especially in this case, the state) is needed to restore and even increase the resilience of MSMEs after the pandemic. However, these efforts also require comprehensive, holistic, and participatory policies by prioritizing regulatory reforms, equitable access to resources, and MSME capacity-building initiatives to create more resilient conditions for MSMEs in the future when facing crises.

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