

Economic Resilience and Entrepreneurial Transformation of MSMEs Post-Disaster in West Sumatra: A Phenomenological Study of Disaster-Affected Communities

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ABSTRACT

Natural disasters in West Sumatra significantly impacted the sustainability of micro, small, and medium enterprises (MSMEs), thus requiring economic resilience and entrepreneurial transformation. This study aims to understand the experiences of MSMEs in building economic resilience and carrying out business transformation after the disaster. The study used a qualitative approach with phenomenological methods to explore the lived experiences of disaster-affected communities. Data were collected through in-depth interviews and analyzed using an interpretive phenomenological approach. The results indicate that economic resilience is formed through adaptability, utilization of social networks, and support from family and government. Entrepreneurial transformation is reflected in business innovation, changes in business models, and the use of digital technology. These findings emphasize the importance of strengthening the capacity of MSMEs based on disasters. The research was conducted in several disaster-affected areas in West Sumatra Province, particularly those experiencing natural disasters such as floods, earthquakes, and landslides

INTRODUCTION

West Sumatra is one of the Indonesian provinces with a high level of vulnerability to natural disasters, such as floods, landslides, earthquakes, and volcanic eruptions. In recent years, floods and landslides that have hit various regencies/cities such as Padang, Agam, Tanah Datar, and Pesisir Selatan have had a significant impact on the social and economic lives of the community. The most affected groups are Micro, Small, and Medium Enterprises (MSMEs), given that the majority of MSMEs in West Sumatra operate in the trade, agriculture, culinary, and home-based sectors, which are highly dependent on environmental conditions and access to local markets (Kalutara et al., 2025).

Field data shows that post-disaster, many MSMEs experienced a drastic decline in turnover, damage to production facilities, disruption of supply chains, and loss of working capital (Khan., 2013). Some MSMEs were even forced to temporarily or permanently suspend their operations due to limited resources and limited access to recovery financing. However, amid these limitations, an interesting phenomenon was discovered where some MSMEs were able to survive and recover through various adaptive strategies, such as product diversification, business model changes, utilization of digital technology, and strengthening social and institutional networks. This phenomenon indicates varying levels of economic resilience among MSMEs post-disaster (Badoc et al., 2021).

Economic resilience is influenced not only by external factors such as government assistance and social institutions, but also by internal factors, particularly the entrepreneurial transformation of business actors (Iacobucci., 2021). This transformation is reflected in a change in mindset (entrepreneurial mindset), the ability to innovate, the courage to take risks, and the readiness to adapt to post-disaster uncertainty. However, various economic recovery programs implemented to date tend to focus on physical assistance and capital, while the subjective experiences, meanings, and adaptation processes of MSMEs in rebuilding their businesses have not received much in-depth study (Sabatino., 2016).

Therefore, a phenomenological approach is needed to comprehensively explore the lived experiences of disaster-affected MSMEs in building economic resilience and undertaking entrepreneurial transformation. Based on these conditions, this research is crucial for understanding in-depth how MSMEs in West Sumatra interpret disasters, respond to economic crises, and transform their entrepreneurial practices as a means of post-disaster survival and recovery. The research findings are expected to inform the formulation of economic recovery policies based on the real needs of MSMEs and strengthen regional economic resilience post-disaster (Badoc et al., 2021).

However, the reality on the ground also demonstrates the phenomenon of economic resilience and resilience among some MSMEs. Despite post-disaster limitations, some MSMEs have been able to survive and gradually recover their businesses through various forms of entrepreneurial adaptation and transformation. These transformations include changes in product types, business diversification, shifting marketing channels from conventional to

digital, utilizing social media and marketplaces, and strengthening social networks based on family, community, and local institutions. This phenomenon indicates that the economic resilience of MSMEs post-disaster is not solely determined by external factors such as government assistance or social institutions, but is also significantly influenced by the internal factors of the entrepreneurs themselves (Kalutara et al., 2025).

These internal factors include an entrepreneurial mindset, the ability to identify opportunities amidst a crisis, the courage to take risks, flexibility in business decision-making, and the ability to learn from disaster experiences. Entrepreneurial transformation is a crucial element that enables MSMEs not only to survive but also to adapt and even thrive in post-crisis conditions. On the other hand, various post-disaster economic recovery policies and programs that have been implemented tend to focus on physical assistance, infrastructure rehabilitation, and the provision of business capital. This approach has not fully addressed the subjective experiences of MSMEs in facing disasters, their business decision-making processes, and the meaning of resilience they build based on their life experiences. Yet, a deep understanding of MSMEs' experiences and adaptive strategies is crucial for designing more sustainable and contextual economic recovery policies (Sabatino., 2016).

Therefore, a study is needed that can deeply explore the lived experiences of disaster-affected MSMEs in building economic resilience and carrying out entrepreneurial transformation. A phenomenological approach is considered relevant to understanding how MSMEs interpret disasters, respond to economic pressures, and interpret the changes they make in running their businesses post-disaster. This approach allows researchers to capture social and economic realities from the perspective of the business actors themselves, not solely from quantitative indicators (Sabatino., 2016).

Based on this description, research on the Economic Resilience and Entrepreneurial Transformation of MSMEs Post-Disaster in West Sumatra is very important to conduct (Imanuella et al., 2025). This research is expected to provide theoretical contributions in developing the concept of economic resilience based on the experiences of MSMEs, as well as practical contributions as a basis for formulating more adaptive, inclusive, and sustainable MSME recovery policies and programs in disaster-prone areas.

Based on the background of the problem above, the following questions are formulated: What is the Concept of Post-Disaster Economic Resilience of MSMEs? What is Entrepreneurial Transformation in Post-Disaster Situations? What is the MSMEs and Vulnerability to Disasters in the Region? What is the Phenomenological Approach in Post-Disaster Studies?

LITERATURE REVIEW

1. The Concept of Post-Disaster Economic Resilience of MSMEs

Economic resilience refers to the ability of individuals, households, or businesses to survive, adapt, and recover after experiencing economic shocks caused by disasters (Sabatino, M., 2016), (Rose, A., 2007). In the context of MSMEs, economic resilience encompasses the capacity of businesses to maintain business continuity, restore production assets, and adapt business strategies to post-disaster conditions (Rose., 2007). Several studies indicate that MSMEs are highly vulnerable to natural disasters due to limited capital, limited access to formal financing, and minimal protection of business assets (Skouloudis et al., 2023), (Utami et al., 2021). However, MSMEs are also considered to have high flexibility in making operational adjustments and simple innovations that enable a faster recovery process compared to large-scale businesses Ragoobur, et al ., (2023). MSME resilience after a disaster is determined not only by economic factors, but also by social capital, business experience, and institutional support and government policies (Reniaty, et al., 2025).

2. Entrepreneurial Transformation in Post-Disaster Situations

Entrepreneurial transformation refers to changes in mindset, behavior, and business strategies of entrepreneurs in response to extreme external environmental dynamics, including natural disasters (Morrish, & Jones 2020). Post-disaster, many MSMEs are forced to undergo transformation, whether through changes in business type, product innovation, diversification of revenue sources, or the adoption of new technologies and marketing networks (Eggers., 2020). Previous research has shown that disasters can create momentum for entrepreneurial opportunities, as entrepreneurs identify new needs of affected communities, such as food, construction services, and health and hygiene products (Morrish & Jones., 2020). This entrepreneurial transformation is often triggered by necessity, but in the long term, it can shape entrepreneurial traits that are more adaptive, innovative, and oriented towards business sustainability.

3. MSMEs and Vulnerability to Disasters in the Region

West Sumatra is one of Indonesia's disaster-prone regions, particularly earthquakes, floods, and landslides. These geographic and topographical conditions frequently disrupt production and distribution activities for MSMEs in the region. Disaster studies show that MSMEs in disaster-prone areas tend to experience loss of physical assets, decreased turnover, and disruptions to market networks and raw material supplies (Cutter et al., 2008). However, strong local sociocultural values, such as mutual cooperation and kinship networks, serve as important social capital in the post-disaster economic recovery process. This social capital plays a role in accelerating access to aid, sharing resources, and strengthening trust between businesses and communities (Aldrich & Meyer, 2015).

4. Phenomenological Approach in Post-Disaster Studies

A phenomenological approach is used to understand the subjective experiences of MSMEs in facing and interpreting disaster events. Phenomenology emphasizes lived experiences, namely how individuals perceive, interpret, and give meaning to the social realities they experience (Creswell, 2013). In the context of research on economic resilience and entrepreneurial transformation, a phenomenological approach allows researchers to delve deeply into the adaptation processes, survival strategies, and changes in the entrepreneurial mindset of MSMEs post-disaster. This approach is relevant because the dynamics of economic recovery are not only material but also closely related to the psychological, social, and local values of disaster-affected communities.

METHODOLOGY

This study uses a qualitative approach with a phenomenological approach. This approach was chosen because this study aims to deeply understand the lived experiences of MSMEs in facing, surviving, and transforming their entrepreneurial activities after experiencing a disaster (Badoc et al., 2021). The main focus of this study is on the subjective meanings, perceptions, and economic adaptation strategies developed by MSMEs post-disaster.

The research was conducted in several disaster-affected areas in West Sumatra Province, particularly those experiencing natural disasters such as floods, earthquakes, and landslides. The locations were selected based on their high level of disaster vulnerability and the presence of MSMEs directly affected by production, distribution, and business continuity.

Research informants were determined using purposive sampling, with the following criteria: MSMEs directly impacted by natural disasters in West Sumatra MSMEs that survived or resumed operations after the disaster Micro, small, and medium enterprises operating in the trade, culinary, agriculture, home industry, or service sectors Business owners willing to share their experiences and business recovery process.

RESEARCH RESULTS

1. Findings Related to the Concept of Post-Disaster MSME Economic

Resilience The research results indicate that post-disaster MSME economic resilience is interpreted by business actors as the ability to survive, recover, and reorganize economic activities under conditions of constraint. Resilience is not understood as a complete return to pre-disaster conditions, but rather as a gradual adaptive process that occurs according to the MSME's capacity (Skouloudis et al., 2023).

Transcript of interview with informant 1:

“Waktu bencana itu, usaha saya benar-benar berhenti. Alat rusak, bahan habis, uang juga tidak ada. Tapi mau tidak mau saya harus mulai lagi, walaupun kecil-kecilan. Yang penting bisa makan dulu, usaha bisa jalan pelan-pelan”.

Transcript of interview with informant 1:

“Resiliensi itu bagi saya ya kuat mental. Walaupun jatuh, tetap coba bangun lagi. Kadang jualan apa saja dulu, yang penting ada pemasukan untuk keluarga”.

MSME actors demonstrate economic resilience through several key patterns, including the ability to restart their businesses, albeit on a smaller scale, utilize remaining resources, and combine existing businesses with alternative employment to maintain stable household income (Agarwal, et al., 2023). Economic resilience is also reflected in business actors' perseverance in the face of uncertainty and their ability to manage post-disaster economic and psychological stress. These findings indicate that post-disaster MSME economic resilience is dynamic, influenced by individual experience, social support, and the ability to adapt to changes in the business environment (Skouloudis et al., 2023), (Tagliazucchi, et al., 2023).

2. Entrepreneurial Transformation in Post-Disaster

Situations Research has found that disasters trigger entrepreneurial transformation among MSMEs (Samantha, G 2018). This transformation is not always planned in advance, but emerges as a response to the pressures and limitations of post-disaster situations. MSMEs experience a shift in their perspective on business, from simply seeking profit to a means of survival and maintaining family economic sustainability (Nwuke & Adeola 2023). Entrepreneurial transformation is evident in changes in business types, adjustments to business models, and product and service innovations (Nwuke & Adeola 2023). Transcript of interview with informant 3:

“Dulu saya fokus satu produk saja. Setelah bencana, saya sadar itu berisiko. Sekarang saya bikin beberapa jenis produk supaya kalau satu tidak laku, masih ada yang lain”.

Some MSMEs shift to businesses that better suit post-disaster needs and have faster capital turnover. Furthermore, there is an increased awareness of the importance of flexibility, creativity, and the courage to seize new opportunities in crisis situations. This shift in entrepreneurial mindset shapes MSMEs into becoming more adaptive, independent, and open to new learning, including utilizing simple technology for marketing and business networking.

3. MSMEs and Vulnerability to Disasters in Disaster-Prone

Areas Research findings reveal that MSMEs in disaster-prone areas of West Sumatra are highly vulnerable, primarily due to limited capital, business locations in vulnerable zones, and minimal protection of business assets. Disasters cause physical damage, disrupt market access, and the loss of MSMEs' primary source of income. Transcript of interview with informant 1:

“Kalau usaha kecil seperti kami ini, tidak ada cadangan. Tidak ada asuransi. Jadi bencana sedikit saja dampaknya besar”.

Transcript of interview with informant 5:

“Kami memang rentan, tapi untungnya di kampung masih kuat rasa kebersamaan. Kalau ada yang kena musibah, tetangga datang bantu. Itu yang bikin kami tidak menyerah.”

However, this vulnerability is offset by strong social capital and local values. Kinship networks, community solidarity, and a culture of mutual cooperation are key pillars of economic recovery. MSMEs provide mutual assistance with labor, information, and moral support, which plays a significant role in accelerating business recovery. These findings demonstrate that although MSMEs are highly vulnerable to disasters, local social and cultural strengths can strengthen the adaptive capacity and economic resilience of affected communities.

4. Phenomenological Approach in Post-Disaster

Studies A phenomenological approach allows researchers to deeply capture the subjective experiences of MSMEs in facing disasters and the economic recovery process. The research results show that each MSME has different experiences, meanings, and adaptation strategies, even within the same disaster context. Transcript of interview with informant 7:

“Bencana itu berat, tapi dari situ saya belajar. Saya jadi lebih kuat, lebih sabar, dan tidak gampang putus asa. Usaha ini bukan cuma cari uang, tapi soal bertahan hidup.”

Transcript of interview with informant 9:

“Kalau dipikir sekarang, bencana itu titik balik. Dari situ saya berubah, baik cara usaha maupun cara melihat hidup.”

Through narratives of MSMEs' lived experiences, it is revealed that resilience and entrepreneurial transformation are influenced not only by economic factors, but also by psychological aspects, personal values, and hopes for the future of the business. MSMEs interpret disasters as tests, learning experiences, and turning points in their entrepreneurial journeys. The phenomenological approach provides a more holistic understanding of the dynamics of post-disaster economic resilience because it explores the internal processes, self-reflection, and meanings constructed by MSMEs in facing crisis situations.

DISCUSSION

This study aims to understand the economic resilience and entrepreneurial transformation of MSMEs post-disaster in West Sumatra through a phenomenological approach. The results show that disasters not only result in material losses and disruptions to economic activity, but also trigger adaptation processes and fundamental changes in how MSMEs interpret and operate their businesses.

The research results indicate that the economic resilience of MSMEs in West Sumatra after the disaster is adaptive and dynamic. Resilience is not defined as the ability to return to pre-disaster business conditions, but rather as a process of surviving and adapting to existing limitations. MSMEs build economic resilience through strategies of restarting their businesses on a smaller scale, diversifying their income sources, and utilizing social capital and community networks. These findings reinforce the view that flexibility,

perseverance, and social support are key factors in maintaining the sustainability of MSMEs in disaster-prone areas.

Furthermore, post-disaster conditions encourage entrepreneurial transformation, characterized by changes in mindset, business strategy, and business orientation among MSMEs. Disasters become a turning point that triggers the emergence of adaptive entrepreneurship, where business actors are more open to innovation, product diversification, and the use of simple technology for marketing. The phenomenological approach in this research uncovers the subjective meanings of MSMEs in interpreting disasters as learning experiences and opportunities for change, thus providing a more holistic understanding of the dynamics of economic resilience and post-disaster entrepreneurial transformation.

CONCLUSIONS AND RECOMMENDATIONS

Conclusion

This study concludes that the economic resilience of MSMEs in West Sumatra after the disaster is an adaptive process built through the ability to survive, adapt, and reorganize business activities under limited conditions. Resilience is not defined as a return to pre-disaster conditions, but rather as an effort to maintain economic continuity through gradual strategies, diversification of income sources, and utilization of social capital and local values.

Disasters also encourage entrepreneurial transformation, characterized by changes in mindset, increased business flexibility, and the emergence of innovation in response to new post-disaster needs. A phenomenological approach provides a comprehensive understanding of the subjective experiences of MSMEs in interpreting disasters as both challenges and opportunities for change.

Recommendations

Based on the research findings, it is recommended that the government and stakeholders design post-disaster MSME recovery policies that focus not only on capital assistance but also on strengthening adaptive capacity, developing an entrepreneurial mindset, and utilizing technology appropriate to the local context. Sustainable mentoring programs, adaptive entrepreneurship training, and strengthening community networks and social capital need to be an integral part of the economic recovery strategy. Furthermore, further research is recommended to combine a phenomenological approach with quantitative methods or longitudinal studies to obtain a more comprehensive picture of the dynamics of MSME resilience and entrepreneurial transformation post-disaster.

ADVANCED RESEARCH

Based on the results of this study, further studies should be directed at developing a post-disaster MSME economic resilience model that integrates individual, social, and institutional factors. Future research could employ a mixed methods approach to quantitatively test the key resilience factors identified in this phenomenological study, such as the role of social capital, entrepreneurial mindset transformation, and technology utilization. Longitudinal measurement of economic resilience indicators is also crucial to understand the dynamics of MSME recovery from the emergency phase to the rebuilding phase.

Furthermore, further research could focus on cross-disaster comparisons to identify differences in resilience patterns and entrepreneurial transformation based on social, cultural, and disaster type characteristics. An in-depth study of the effectiveness of post-disaster MSME recovery policies and programs, including the roles of local governments, financial institutions, and local communities, is also a key agenda. Thus, further research is expected to produce more evidence-based and contextualized policy recommendations for strengthening MSME resilience in disaster-prone areas.

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REFERENCES

- Agarwal, V., Mathiyazhagan, K., Malhotra, S., & Pimpunchat, B. (2023). Building resilience for sustainability of MSMEs post COVID-19 outbreak: An Indian handicraft industry outlook. *Socio-Economic Planning Sciences*, 85, 101443. <https://doi.org/10.1016/j.seps.2022.101443>
- Badoc-Gonzales, B. P., Mandigma, M. B. S., & Tan, J. J. (2021). Resilience and sustainability interventions in selected Post-Haiyan Philippines: MSMEs perspective. *International Journal of Disaster Risk Reduction*, 57, 102162. <https://doi.org/10.1016/j.ijdr.2021.102162>
- Eggers, F. (2020). Masters of disasters? Challenges and opportunities for SMEs in times of crisis. *Journal of business Research*, 116, 199-208. <https://doi.org/10.1016/j.jbusres.2020.05.025>
- Frank, A. G., Mendes, G. H., Ayala, N. F., & Ghezzi, A. (2019). Servitization and Industry 4.0 convergence in the digital transformation of product firms: A business model innovation perspective. *Technological Forecasting and Social Change*, 141, 341-351. <https://doi.org/10.1016/j.techfore.2019.01.014>
- Iacobucci, D., & Perugini, F. (2021). Entrepreneurial ecosystems and economic resilience at local level. *Entrepreneurship & Regional Development*, 33(9-10), 689-716. <https://doi.org/10.1080/08985626.2021.1888318>
- Imanuella, S. F., Idris, A., & Kamaruddin, N. (2025). Social entrepreneurship and rural development in post-independence Indonesia. *Social Enterprise Journal*, 21(1), 46-66. <https://doi.org/10.1108/SEJ-12-2023-0155>
- Kalutara Koralalage Britto Adikaram, N., & Achchi Kankanamge Nadee Sheresha Surangi, H. (2025). Exploring crisis vulnerability of small and medium enterprises (SMEs): evidence from Sri Lanka's tourism industry. *Cogent Business & Management*, 12(1), 2547959. <https://doi.org/10.1080/23311975.2025.2547959>
- Khan, M. A. U., & Sayem, M. A. (2013). Understanding recovery of small enterprises from natural disaster. *Environmental Hazards*, 12(3-4), 218-239. <https://doi.org/10.1080/17477891.2012.761593>
- Lelewana, I. D., Fattah, V., Kadang, J., & Risendy, R. (2024). The Role of Financial Literacy in Post-Disaster Financial Management of MSMEs: A Case Study in Huntap Duyu and Balaroa Sub-districts, Palu City. *The Journal of Financial, Accounting, and Economics*, 1(2), 69-77. <https://doi.org/10.58857/JFAE.2024.v01.i02.p02>

- Morrish, S. C., & Jones, R. (2020). Post-disaster business recovery: An entrepreneurial marketing perspective. *Journal of Business Research*, 113, 83-92. <https://doi.org/10.1016/j.jbusres.2019.03.041>
- Nwuke, O., & Adeola, O. (2023). Leadership transition and survival strategies for family-owned SMEs in an emerging economy. *Journal of Family Business Management*, 13(4), 1343-1365. <https://doi.org/10.1108/JFBM-01-2023-0004>
- Ragoobur, V. T., Seetanah, B., Jaffur, Z. K., & Mooneeram-Chadee, V. (2023). Building recovery and resilience of Mauritian MSMEs in the midst of the COVID-19 pandemic. *Scientific African*, 20, e01651. <https://doi.org/10.1016/j.sciaf.2023.e01651>
- Reniaty, R., Susantyo, B., Irmayani, N. R., Sabri, F., & Widiastuti, W. (2025). The influence of leadership strategies and social capital on the business performance and resilience of Indonesian MSMEs. *Journal of the Knowledge Economy*, 16(2), 9932-9971. <https://doi.org/10.1007/s13132-024-02254-8>
- Rose, A. (2007). Economic resilience to natural and man-made disasters: Multidisciplinary origins and contextual dimensions. *Environmental hazards*, 7(4), 383-398. <https://doi.org/10.1016/j.envhaz.2007.10.001>
- Sabatino, M. (2016). Economic crisis and resilience: Resilient capacity and competitiveness of the enterprises. *Journal of Business Research*, 69(5), 1924-1927. <https://doi.org/10.1016/j.jbusres.2015.10.081>
- Sabatino, M. (2016). Economic crisis and resilience: Resilient capacity and competitiveness of the enterprises. *Journal of Business Research*, 69(5), 1924-1927. <https://doi.org/10.1016/j.jbusres.2015.10.081>
- Samantha, G. (2018). The impact of natural disasters on micro, small and medium enterprises (MSMEs): a case study on 2016 flood event in Western Sri Lanka. *Procedia engineering*, 212, 744-751. <https://doi.org/10.1016/j.proeng.2018.01.096>
- Skouloudis, A., Leal Filho, W., Deligiannakis, G., Vouros, P., Nikolaou, I., & Evangelinos, K. (2023). Coping with floods: impacts, preparedness and resilience capacity of Greek micro-, small-and medium-sized enterprises in flood-affected areas. *International Journal of Climate Change Strategies and Management*, 15(1), 81-103. <https://doi.org/10.1108/IJCCSM-09-2022-0122>
- Tagliazucchi, G., De Canio, F., & Martinelli, E. (2023). Exploring perceived post-disaster performance in micro-businesses: how does entrepreneur psychological resilience matter?. *Entrepreneurship & Regional Development*, 35(5-6), 445-459. <https://doi.org/10.1080/08985626.2023.2185687>

- Utami, I. D., Santosa, I., & Leila, M. V. (2021). Priority resilience strategy for micro, small, and medium enterprises for dealing with natural disasters. *International Journal of Disaster Risk Reduction*, 55, 102074. <https://doi.org/10.1016/j.ijdrr.2021.102074>