EDCOM2
The Second Congressional Commission on Education

Priority Area #21
Ensuring Quality in the Provision of TVET

Bridging the Gap in Rural Development: Strategies on MSME-Technical Education Development

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Karol Mark R. Yee, PhD
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Executive Summary

The challenges of rural development stems from the limited access to opportunities of the basic sectors particularly on infrastructure, market, funding, and advanced skills development programs. The growth of Micro, Small, and Medium Enterprise (MSME) is shaped by a combination of enablers and barriers, categorized into soft and hard infrastructure. On the soft infrastructure side, a proactive entrepreneurial mindset, access to training programs, and government initiatives such as financial assistance, coaching centers, and incentives bolster workforce skills, productivity, and operational capabilities (Daño-Luna et al., 2018; Anggadini et al., 2023). High-quality products and services, coupled with adaptability during crises like the COVID-19 pandemic, demonstrate MSMEs' resilience, particularly through online platforms and product customization (Andal et al., 2021). Financial support, identified as a key component of the Department of Trade and Industry's (DTI) 7Ms framework, has also been effective, though challenges in market accessibility and skill mastery persist (Herrera, 2023). In terms of hard infrastructure, integration into global value chains has expanded market access and competitiveness, supported by investments in transportation and digital connectivity (Francisco et al., 2018; Canare et al., 2019).

The study revealed that several government executive branches have developed various programs to support the growth and development of MSMEs in the country, across sectors. However, the bottom three regions based on MSME counts are the same regions where poverty and unemployment rates are higher (BARMM, MIMAROPA, and CARAGA). The same areas have the least access to programs and services of the government in terms of TVET facilities including the limited infrastructure which directly affects the ability of MSMEs to access market and supply channels, therefore, limiting their resource and income generation. The available incentives are mostly provided to existing enterprises instead of investing entrepreneurial intentions to individuals requiring skills development and enterprise development support. It is worth noting that technical education and skills development programs are found to be more effective when integration and localization are in place between national government agencies and local government units– this clearly recognizes the importance of alignment of programs at all levels across sectors. Overall, the MSME sector in the Philippines is growing. With the right combination of skills development and market linkage support, the sector is positioned to scale its impact not only on the economic but also on social and environmental.

Keywords: *MSME, Labor Productivity, Technical Education, Skills Development, Business Continuity*

Introduction[1]

The Micro Small and Medium Enterprises (MSME) is one of the enablers of growth in the country. The sector primarily represents the basic sector, mostly marginalized members of society. Based on the data from the Department of Trade and Industry (2023), there are about 1,246,373 business enterprises as of 2023. From this, around 99.63 % or 1, 241,733 is considered part of the MSMEs while 0.37% or 4640 are large enterprises (DTI, 2023). In terms of specific segments, micro enterprises represent 90.43% or 1,127,058, while 8.82% or 109,912 are considered small. The rest or 0.38% (4,763) is part of the medium enterprise (DTI, 2023). This is on top of the nano enterprises that are usually part of the informal sector operating in communities.

The United Nations' Sustainable Development Goals (SDGs) has clearly indicated the need to "promote sustained, inclusive and sustainable economic growth, full and productive employment and decent work for all" (UN, n.d.). However, the data from PSA (2022) also shows a big gap in terms of the numbers of MSME in the National Capital Region and nearby provinces compared to those that are part of the Visayas and Mindanao. Challenges related to accessibility, availability of economic opportunities and infrastructures are some of the barriers that hinder the development of MSME in these regions. This reality has direct implications on the level, quality, and quantity of jobs available specifically in those regions where the number of MSMEs are small and limited.

Hence, this study entitled "Bridging the Gap in Rural Development: Strategies on MSME-Technical Education Development" is a contribution to the deepening of understanding of enablers, barriers, and gaps in the MSME sector, with emphasis on technical education
and skills development as direct inputs to labor productivity, business continuity, and organizational development. The study prioritizes analysis and insights around the development of humans as the most important resource of MSMEs for both social and economic development.

This research responded to the following research questions/objectives:

1. What are enablers and barriers to the growth of MSMEs based on knowledge, skills and attitude variables in labor productivity?
2. How do MSMEs establish and develop organizational development capacities and what are the gaps that are commonly encountered?
3. What specific forms of support are required by MSMEs in rural areas for both upskilling of human resources and improving their organization capability?
4. What are the available incentives and programs for MSMEs in rural areas that contribute directly or indirectly to their organizational capacities?
5. How do educational programs including technical and vocational training respond to the development needs of MSMEs in rural areas?

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1 *Any views, statements, or analyses expressed in this paper are those of the authors and should not be attributed to those of EDCOM II*

Overview of MSME in Rural Areas

MSMEs play a big role in the economic landscape of any country. In the Philippines, the Department of Trade and Industry (2023) reported that in 2023, 1, 241,733 out of 1,246,373 or 99.63% of businesses are identified to be MSMEs. In terms of the sectoral distribution, most MSMEs are operating in the following industries: Wholesale and Retail Trade, Repair of Motor vehicles and Motorcycles, Accommodation and Food Services, Manufacturing and Financial and Insurance Activities. Likewise, it was also reported that 66.97% of the total employment of the country were from MSMEs. Despite all this, it is also important to note that this statistics only accounts for the registered businesses in the country and does not include businesses operating in the informal economy. This goes to show how honing MSMEs can bring forth further economic development to the country. Likewise, the sustained operations of MSMEs are aligned with the government's socio-economic goals, which focus on boosting economic growth and improving the quality of life for Filipinos (Herrera, 2023). The economic and social challenges brought about by the COVID-19 pandemic over the past two years have further emphasized the need for MSMEs to shift toward a digital and sustainable economy (Labiaga & Campos, 2024).

Despite the huge number of MSMEs in the Philippines, these businesses still face various barriers in terms of growth and development. In the study of Censon et al. (2023), the researchers mentioned that one of the barriers to MSME growth is financial constraints. This refers to the limited capital access of the business and their limited ability to invest in developmental activities such as investing in human capital improvements. Moreover, another factor that affects the development of MSMEs is poor management of resources (Munoz & Fuentes, 2024). This is stemmed from the limited knowledge and "poor organizational development" of MSMEs. Furthermore, Solina (2020) also identified that the majority of MSMEs experience challenges to grow from lack of access to training or education and lack of market information.

Given all these barriers and the opportunities that MSMEs can contribute to the economic development of the country, public and private sectors have led several programs that can bolster their growth and development. One of the leading agencies in the country that promotes and empowers MSME is the Department of Trade and Industry (DTI). Some of the on-going and proposed programs of the department include the Green Economic Development Program, Shared Service Facilities, Regional Inclusive Innovation Centers, and Coconut Farmers and Industry Development Plan (DTI, 2024). On the other hand, institutions such as the University of the Philippines Institute for Small-Scale Industries (UP ISSI) have continuously provided training and seminars to MSME stakeholders to further elevate the knowledge and skills they would need to operate their business (Legaspi, 2012). Furthermore, the Department of Science and Technology also launched the Small Enterprises Technology Program (SETUP) to help MSME improve their productivity and competitiveness through technological training (Barroga, Wabina, & Sales, 2021).

Enablers and Barriers of MSMEs Growth

Amidst their critical role in the economy, MSME growth is shaped by a combination of enablers and barriers, categorized into soft and hard infrastructure. On the soft infrastructure side, a proactive entrepreneurial mindset, access to training programs, and government initiatives such as financial assistance, coaching centers, and incentives bolster workforce skills, productivity, and operational capabilities (Daño-Luna et al., 2018; Anggadini et al., 2023). High-quality products and services, coupled with adaptability during crises like the COVID-19 pandemic, demonstrate MSMEs' resilience, particularly through online platforms and product customization (Andal et al., 2021). Financial support, identified as a key component of the Department of Trade and Industry's (DTI) 7Ms framework, has also been effective, though challenges in market accessibility and skill mastery persist (Herrera, 2023). In terms of hard infrastructure, integration into global value chains has expanded market access and competitiveness, supported by investments in transportation and digital connectivity (Francisco et al., 2018; Canare et al., 2019).

However, significant barriers continue to hinder MSME growth. Limited access to finance, high interest rates, and low awareness of support programs constrain their capacity to scale, while workforce skill gaps and insufficient technological adoption reduce competitiveness (Labiaga & Campos, 2024; Anggadini et al., 2023). Many MSMEs also acknowledged that they are not yet prepared for transformative changes within their organizations, citing key barriers to technology adoption, including the high cost of technology, insufficient infrastructure, a lack of skilled employees, and limited management knowledge (Aldaba, 2022). High operational costs, regulatory complexity, and inconsistent local government policies exacerbate these challenges (Herrera, 2023). On the hard infrastructure side, inadequate transportation systems, weak digital infrastructure, and corruption disrupt operations, while global competition adds further pressure (Daño-Luna et al., 2018; Anggadini et al., 2023). To unlock MSMEs' full potential and ensure sustainable growth, addressing these barriers through enhanced support and infrastructure investments is crucial, creating an environment conducive to resilience and economic recovery. One important aspect is the capacity building and skills development particularly on the use of e-commerce and other platforms that can improve both the individual and organizational capability of MSMEs. Priority must also be given to the creation of green jobs by promoting the circular economy model or supporting social enterprises whose bottomlines include environmental sustainability. It is worth noting that social enterprises in the Philippines increased from 164, 473 (British Council, 2017) to 202, 281 (Dacanay M.Let al.,2023). This validates the significant presence of social enterprises in the value chains of the Philippines across sectors, particularly in MSMEs.

Salonga et al. (2023) identified digital resilience as vital for MSME survival and growth in the Philippines post-COVID-19. The study highlighted how social enterprises adapted through digital technologies, expanding their reach and optimizing operations via e-commerce and online platforms. Digital resilience refers to the ability of organizations, particularly MSMEs, to adapt and thrive in the face of digital disruptions and challenges. This includes their ability to adopt emerging technologies, enhance digital literacy, and manage their resources effectively. While digital tools offered benefits, many MSMEs struggled with adoption due to limited resources and tech literacy, emphasizing the need for support and training. Embracing digital resilience is crucial for MSMEs to stay competitive and sustainable in a fast-changing market. The accelerated shift towards IoT, cloud computing, and e-commerce has become crucial for MSME survival, particularly in sectors of retail, food and beverage (Petropoulou et al., 2024; Noor & Sriyono, 2024). A resilience roadmap integrating various forms of capital—technological, economic, social, and psychological—can aid businesses in recovery and long-term adaptation (Rahman et al., 2024). Additionally, frameworks emphasizing emotional intelligence, customer-centric strategies, and innovation play a vital role in addressing contemporary challenges (Nwosu et al., 2024). Government intervention through financial aid and policy support remains essential in fostering a resilient digital ecosystem, ensuring that MSMEs can navigate and thrive in the evolving digital economy (Petropoulou et al., 2024; Nwosu et al., 2024).

Public and Private Sector-led Programs on MSME Development

The Philippine government has implemented several enabling policies to support the development and growth of micro, small, and medium enterprises (MSMEs). Republic Act (RA) 9501, also known as the Magna Carta for MSMEs, builds on earlier amendments from RA 6977 of 1991 and RA 8289 of 1997 and establishes the national policy to promote, support, and strengthen MSMEs. Complementing this, RA 10644 of 2014, or the "Go Negosyo Act,". The law aimed to further enhance MSME development by establishing Negosyo Centers across all provinces, cities, and municipalities. These centers were designed to facilitate ease of doing business by offering assistance with business registration, providing business advisory services, sharing business information and advocacy, and conducting monitoring and evaluation (Raquiza, 2021). The RA 9178 of 2002 or the "Barangay Micro Business Enterprises Act," provides incentives to small-scale businesses. More recently, RA 11293 of 2019, the Philippine Innovation Act and RA 11337, Innovative Startup Act that promotes an entrepreneurial mindset and innovation-driven development, particularly targeting MSMEs and startups. These legislative measures collectively aim to enhance the competitiveness and sustainability of Philippine MSMEs.

Several government executive branches have developed various programs to support the growth and development of MSMEs. For instance, the Department of Trade and Industry (DTI), through initiatives such as the Kapatid Mentor Micro-Entrepreneurs Program (KMME) and the Industry Cluster Enhancement Program (ICEP), aims to empower micro-enterprises by providing funding and access to technology. These efforts help boost economic and employment opportunities, particularly for enterprises that typically operate in poorer, low-income areas of cities and towns, in contrast to medium and large enterprises that are more commonly found in urban centers and industrial zones.

In line with the government's aggressive push to advance ICT initiatives, these programs also include efforts to implement digitally-enabled services across all sectors, particularly for MSMEs. Agencies such as DTI and the Department of Science and Technology (DOST) are actively rolling out projects like OneSTore, which provides

MSMEs with opportunities to trade online and expand their linkages. MSMEs that are recipients of DOST's Small Enterprise Technology Upgrading Program (SETUP) receive technical assistance for technology adoption, further enhancing their competitiveness.

As part of the Medium-Term Philippine Development Plan (2023–2024), which aims to make the country's MSMEs globally competitive, the government continues to host provincial and national trade fairs for domestic manufacturers and food processors. Noteworthy initiatives include the One Town, One Product (OTOP) showcases and Go Lokal! concept stores in major malls, which provide marketing support to industries focused on the domestic market (Tecson, 2022). To enhance competitiveness against foreign counterparts, businesses are equipped with the necessary knowledge and tools to ensure quality and safe production through the Shared Services Facilities (SSF) program, which is expanding to improve accessibility, particularly in regions outside the National Capital Region. Additionally, the DTI is collaborating with the National Academy of Science and Technology and the Philippine American Academy of Science and Engineering to further strengthen the OTOP program. DTI regional offices will also partner with their respective Regional Development Councils (RDC) to advance production-based regional development (NEDA, 2023). Other government departments and offices, such as the Department of Agriculture (DA), Landbank, the Philippine Center for Entrepreneurship, and the Department of Science and Technology (DOST), also provide support to MSMEs through training programs and financial assistance.

The Micro, Small, and Medium Enterprise Development Plan (MSMED Plan) 2023–2028 outlines key strategies to strengthen the MSME ecosystem, enhance access to financing, and promote digitalization. It also emphasizes focus areas critical to fostering the growth and sustainability of MSMEs in the Philippines, including the legal and regulatory environment, personnel and technological competencies, and market opportunities (MSMEDC, 2024). The development of MSMEs in the Philippines is further supported by private sector initiatives and strategic partnerships. Large corporations collaborate with the Department of Trade and Industry (DTI) to streamline processes and provide targeted assistance to MSMEs. For instance, partnerships with companies like Jollibee highlight a shared commitment to fostering economic growth through innovative programs that drive MSME development. Private retailers such as malls also provide MSMEs a place where they can place their product (Isip, 2022). In recruitment, collaborations with platforms like SeeMeCV help MSMEs optimize hiring processes, ensuring access to skilled talent essential for their sustainability and growth. Additionally, the private sector plays a vital role in facilitating technology transfer and innovation (Ng et al., 2022). Collaborations with organizations like KIAT focus on automating export product qualification verification, aligning with the Philippine Innovation Act to enhance MSME capabilities. These initiatives establish innovation centers that empower MSMEs to adopt advanced technologies, improving their competitiveness and resilience in an evolving economic landscape.

Organizational Development of MSME

Organizational Development (OD) refers to the methodical process of deliberate change in organizational attitudes, beliefs, and values (Lewin, 1947 as cited in Niyireba, Rao & Rutungwa, 2024). By applying this definition to the context of the Philippines, it is quite hard to precisely create the picture of OD practices of MSMEs due to a limited number of studies pertaining to such. Organizational Development (OD) is also a systematic, planned effort to improve an organization's effectiveness, efficiency, and performance (Anderson, 2016). It involves applying behavioral science principles to develop and implement strategies, processes, and practices that enhance the organization's capacity to achieve its goals. OD focuses on aligning an organization's structure, culture, and systems with its strategic objectives while fostering a positive work environment (Schein, 2016). Organizational Development (OD) in MSMEs involves several key elements that work together to improve the effectiveness and adaptability of the organization.

Despite this, themes regarding management of resources and labour utilization, which are part of the process of ED can give a brief view of how MSMEs in the Philippines operate. In the study of Munoz and Fuentes (2024), they inferred that poor management of resources is one of the biggest issues that hinders MSMEs. In their study, they mentioned that MSMEs in Latin America face this particular challenge due to lack of deeper understanding of all the elements and factors that constitute an organization. In the case of the Philippines, it is the lack of capital to invest in human development that hinders growth and organizational development. In the study of Censon et al. (2023), it can be noted that growth within and outside the business is not felt due to "employing inadequately trained human capital".

Consequently, it is also important to note that the stakeholders of MSMEs play a crucial role in its organizational development. Soomro, Memon & Soomro (2024) have identified that entrepreneur skills, networking, and entrepreneurial competency are some of the needed attributes for MSME entrepreneurs. Furthermore, Atichasari et al. (2024) also mentioned that another good attribute that MSME stakeholders should have is ambidexterity. It was mentioned in their study that ambidexterity refers to the ability of the stakeholders to simultaneously leverage on their existing capabilities and explore new opportunities.

Organizational Development Practices of MSMEs

Organizational development (OD) practices in MSMEs focus on improving the effectiveness of the organization through strategic changes to structure, processes, and culture. Given the limited resources often available to MSMEs, OD practices in these organizations tend to be more flexible and adaptive. Inter-organizational learning (IOL) plays a crucial role in fostering organizational development and ensuring long-term survival (Alaswal et al., 2019). For example, by acquiring and internalizing external knowledge, SMEs can enhance areas such as finance, customer relationships, human resources, and overall organizational development (Alaswal et al., 2019). An organization's internal learning is complemented by external learning, which occurs through the interdependencies between organizations (Alaswal et al., 2019). The adoption of Industry 4.0 technologies, such as customer relationship management software, enterprise resource planning systems, and social media platforms, as part of organizational development practices, enhances organizational learning through information and knowledge sharing (Li et al., 2019). These technologies have significantly aided data-driven decision-making by providing organizations with advanced tools and systems for collecting, processing, and analyzing large volumes of data in real-time to guide initiatives effectively, thereby improving efficiency, innovation, and decision-making processes (Gonzales et al., 2020; Kulkarni et al., 2024).

Moreover, a critical aspect of OD is leadership development within MSMEs (Schein, 2016). Building the capacity of owners and leaders to steer enterprises successfully through periods of growth and change is vital, as their leadership and motivation significantly impact MSMEs' productivity and performance (Kristanti et al., 2023). Similarly, employee development practices are central to OD, focusing on enhancing individual and collective skills, knowledge, and engagement to achieve higher performance levels (Campos, 2024). Weigold (2021) argued that without employee alignment with the enterprise's vision, any developmental initiative is likely to fail. Therefore, organizations must invest in equipping their employees with the necessary competencies and skills to drive organizational development.

Networking and collaboration are integral to OD practices for MSMEs (Buli and Yesuf, 2015). By participating in business networks, industry associations, and partnerships, MSMEs can share resources, gain market insights, and access development opportunities. These collaborative efforts promote innovation, resource optimization, and growth within the competitive business landscape. Further, In an increasingly VUCA (Volatility, Uncertainty, Complexity, and Ambiguity) environment, change management plays a crucial role in facilitating and managing transitions for MSMEs (Khurana et al., 2021). It is essential for improving processes, technologies, and organizational structures, ensuring that organizations can adapt effectively to evolving challenges and opportunities. By guiding enterprise stakeholders through periods of change, promoting flexibility, and fostering a culture of continuous improvement, change management enables organizations to maintain their competitiveness (Isip, 2022).

To prevent stagnation and achieve sustainable growth, MSMEs must adopt continuous improvement as a core OD practice (Nuryantu et al., 2024). This approach emphasizes the ongoing evaluation and refinement of workflows, policies, and procedures to ensure efficiency and adaptability (Nandini et al., 2023). By regularly assessing and optimizing internal processes, MSMEs can reduce inefficiencies, drive operational excellence, and maintain a competitive edge. Finally, to harmonize these organizational development practices, it is essential to cultivate a strong organizational culture (Anderson, 2016). An ideal organizational culture fosters collaboration, innovation, and shared values, laying the foundation for long-term success.

Challenges in Implementing OD in MSMEs

Implementing organizational development (OD) in micro, small, and medium enterprises (MSMEs) presents several challenges, primarily due to their inherent resource limitations and structural characteristics. Financial constraints often hinder MSMEs from investing in comprehensive OD initiatives (Anderson, 2016), such as employee training programs, advanced technologies, or external consultancy services (Agarwal et al., 2023). Additionally, the lack of formal organizational structures and processes can make it difficult to adopt and sustain systematic change management practices (Wiegold, 2021).

Many MSMEs face resistance to change as employees and leaders may perceive OD interventions as disruptive or unnecessary, particularly in environments where traditional methods have prevailed (Anderson, 2016),. Organizational culture plays a critical role in this resistance, as a culture that values tradition and resists change can create additional barriers to implementing new practices (Zuñiga-Collazos et al., 2024). Time constraints also pose a significant barrier, as MSME leaders and employees often juggle multiple responsibilities, leaving little room for strategic planning or the implementation of developmental initiatives (Kristanti et al., 2023).

Moreover, limited access to data and analytics tools can impede data-driven decision-making, a core aspect of effective OD (Campos, 2024). The absence of specialized expertise in areas like leadership development, process improvement, and organizational culture transformation further complicates efforts (Anderson, 2016; Campos, 2024). Further, Weigold (2021) emphasized that organizational development is essential for aligning a company with its future vision but often encounters obstacles such as differences in business models and employee acceptance. Effective implementation requires structured planning, clear communication, and active involvement of all stakeholders, with a primary focus on employees, whose support is critical for success. To ensure smooth transitions, the enterprise must foster key competencies and skills among employees through proactive management efforts.

In the post-pandemic Philippines, these challenges are further intensified by economic uncertainties, digital transformation, and shifting market dynamics. While existing studies highlight OD practices, there remains a gap in understanding how MSMEs establish and develop their organizational capacities and the specific challenges they encounter. Addressing this gap is crucial for strengthening MSMEs' resilience, adaptability, and long-term sustainability in an increasingly competitive business environment.

Contributions of MSME to Upskilling and Labor Productivity

The report from the International Labour Organization and the Organization for Economic Co-operation and Development (ILO-OECD, 2022) argues that although MSMEs are a major source of employment globally, they lag behind larger companies in terms of labor productivity. Evidence indicates that the productivity gap between firms of different sizes has widened over the past decade in many developed countries, likely due to increased market concentration. Moreover, in developing countries like the Philippines, MSMEs are increasingly recognized for offering opportunities to upskill workers and enhance labor productivity, thereby driving economic development and workforce capacity-building (NEDA, 2023). With advancements in technology, MSMEs are taking the lead in digital transformation to remain competitive, leveraging their simpler organizational structures. During the COVID-19 pandemic, for instance, MSMEs adopted digital tools and automation to streamline operations, using digital platforms to enhance technical capabilities and overall efficiency (Satpathy et al., 2025).

MSMEs also play a crucial role in fostering skill development, particularly in local communities, where they often provide on-the-job training tailored to industry-specific needs (Grimm and Paffhausen, 2015). Their smaller scale enables a hands-on approach to workforce development, allowing employees to acquire diverse skills across multiple roles (Sobanke et al., 2014). Badriyah and Muratom (2024) emphasize the importance of systematic training to build digital skills and improve productivity, advocating for accessible models to help MSMEs adopt e-commerce and technological tools. These efforts not only drive individual and enterprise productivity but also cultivate a versatile and adaptable workforce capable of meeting evolving business demands.

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Desired Knowledge, Skills, and Attitude among MSME Stakeholders

The knowledge, skills, and attitudes required by MSME stakeholders play a vital role in promoting growth, sustainability, and innovation within these enterprises (Wakhyuni & Rafianti, 2024). To remain competitive and compliant, stakeholders—such as owners, employees, and collaborators—must have a strong grasp of organizational development processes and their business operations (Stary and Kepler, 2022). This includes expertise in financial management, marketing, human resource strategies, industry trends, digital tools, and sustainable practices (Anderson, 2016). Wakhyuni and Rafianti (2024) highlight that increasing business knowledge through training and workshops enhances MSME stakeholders' understanding of business strategies, financial management, and risk management, leading to more strategic decision-making. These programs improve cash flow management, tax compliance, and long-term planning, while digital marketing knowledge helps MSMEs expand to national and international markets (Ho et al., 2022). Additionally, knowledge in sustainability practices is crucial for maintaining long-term competitiveness and compliance with the evolving regulatory environment (Zainon et al., 2014; Asa et al., 2024; Agarwal et al., 2023).

Key skills such as leadership (Campos, 2024), decision-making (Racaza, 2022), problem-solving (Santos et al., 2022), communication (Wiegold, 2021), and adaptability (Satpathy et al., 2025) are essential for MSME stakeholders to act as change agents, helping to navigate challenges, drive productivity, and foster collaboration (Anderson, 2016). Proficiency in industry-specific tools plays a critical role in enhancing operational efficiency (Das, 2015; Estrellado et al., 2023). The technological system extends beyond contemporary information technology, encompassing the skills, knowledge, procedures, and tools utilized by any stakeholder to effectively carry out their responsibilities (Anderson, 2016). Equally important are attitudes that foster a growth mindset, resilience in the face of adversity, and a customer-centric approach focused on meeting customer needs. A positive entrepreneurial attitude encompasses proactivity, innovation, openness to change, and the ability to navigate business challenges with resilience (Wakhyuni & Rafianti, 2024). Ethical responsibility, along with a commitment to transparency and inclusivity, also plays a vital role in fostering an environment that supports long-term success for MSMEs, particularly in light of the rapid evolution of Artificial Intelligence and other emerging technologies (Kulkarni et al., 2024). An ethical and positive attitude toward the utilization of these technologies will result in greater transparency, organized management, enhanced work-life balance, increased efficiency, optimized resource utilization, and improved customer satisfaction (Virmani et al., 2024). By cultivating these knowledge areas, skills, and attitudes, MSME stakeholders can build dynamic, sustainable businesses that contribute meaningfully to economic growth and community development. Ultimately, labor productivity within MSMEs is shaped by knowledge, skills, and attitude factors. When well-developed, these factors serve as growth enablers, driving efficiency and competitiveness. Conversely, when lacking, they become barriers that hinder MSME growth and scalability. Therefore, targeted capacity-building initiatives are essential to bridging gaps and enhancing MSME success. While the impact of knowledge, skills, and attitudes on MSME labor productivity is widely acknowledged, a significant research gap remains in understanding how these factors function as enablers or barriers to MSME growth in rural areas of the Philippines, particularly in the post-pandemic context. This study seeks to identify the key enablers and barriers to MSME growth based on knowledge, skills, and attitude variables in labor productivity in the post-pandemic period.

MSME Business Models in Select Rural Areas

While MSMEs in urban areas are gradually transitioning to digital business models, those in rural areas often rely on traditional business models that align with their local contexts and available resources (Wang and Zhang, 2025). These include retail, service-based, cooperative, agribusiness, tourism, food processing, and handicraft models. In recent years, emerging business models such as the social enterprise model have also gained traction, combining profit-making with addressing social or environmental issues (Salonga et al., 2023). These alternative business models play a vital role in supporting the growth and sustainability of MSMEs in rural areas by leveraging local strengths, meeting community needs, and fostering economic resilience.

The most common of these business models is retail which provides rural entrepreneurs and MSMES with accessible opportunities to sell goods directly to consumers, meeting daily needs and encouraging local spending (Gangata et al., 2024). Similarly, service-based models enable small businesses to offer essential services in the community, such as tailoring or grooming, which are critical for the community's convenience. These models thrive on their ability to deliver localized and basic solutions, often with minimal capital requirements, making them ideal for rural settings (Ganguly et al., 2020).

The cooperative model fosters collective action by enabling groups of individuals, such as farmers or fishers, to pool resources and collaborate, which MSMEs are increasingly becoming members of cooperative networks and business clusters (Satpathy et al., 2025). This approach not only enhances production efficiency but also strengthens bargaining power, ensuring better prices and more equitable profit-sharing. The agribusiness model, another cornerstone of rural economies, supports agricultural production, livestock raising, and related activities, which are deeply rooted in rural livelihoods. By formalizing these operations, agribusiness models help rural MSMEs expand their reach to larger markets while improving their productivity and income potential (Solarte-Montufar et al., 2021).

The tourism and hospitality model leverages the natural and cultural assets of rural areas, offering opportunities for local businesses to cater to visitors through lodging, dining, and guided experiences (Sharma et al., 2021). This model stimulates the local economy by creating jobs and promoting regional attractions. Meanwhile, the food processing model adds value to raw agricultural materials, enabling MSMEs to produce market-ready goods such as sauces or preserved foods, thereby increasing profitability and reducing post-harvest losses (Solarte-Montufar et al., 2021).

The handicraft model supports rural artisans in preserving cultural heritage while generating income through the creation of handmade goods (Agarwal et al., 2023). This model highlights the importance of craftsmanship and provides access to niche markets that value authenticity and artistry. Moreover, although the digital maturity of certain rural areas may vary, the digital business model is increasingly making strides, enabling MSMEs to leverage technology and online platforms to expand their reach beyond local boundaries, unlocking new revenue streams and market opportunities (Wang and Zhang, 2025).

Finally, the social enterprise model merges economic and social objectives, empowering rural MSMEs to address societal challenges while achieving financial sustainability (Salonga et al., 2023). This model often supports marginalized communities and focuses on solving pressing issues such as unemployment, environmental degradation, or lack of access to basic services. By doing so, it ensures a broader impact beyond profitability.

Collectively, these business models provide rural MSMEs with frameworks to thrive in diverse conditions, cater to community needs, and contribute to local development. Their adaptability to rural contexts enables them to harness available resources effectively, foster innovation, and build economic resilience in underserved areas.

Entrepreneurial Development and Technical Education & Skills Development

The United Nations Educational, Scientific and Cultural Organization (UNESCO), in its 2016–2030 Sustainable Development Goals Report, identified Technical and Vocational Education and Training (TVET) as a strategic approach to fostering sustainable societies and economies. TVET is positioned as a means to promote social mobility through lifelong learning, ensure access and equity, and mitigate unemployment, thereby contributing to sustainable development (Francisco and Neri, 2023). TVET plays a crucial role in equipping individuals with essential workforce skills, thereby improving quality of life while addressing global demands for enhanced productivity, employability, and career transitions (Budhrani et al., 2018). Furthermore, TVET is instrumental in uplifting marginalized sectors by providing skill acquisition opportunities that are integral to societal needs, contributing to economic growth and the creation of employment opportunities (Talento et al., 2022).

The Technical and Vocational Educational Training in the Philippines is mostly run by Technical Education And Skills Development Authority (TESDA). The agency is mandated by Republic Act 7796 or TESDA act of 1994 which sets out the policies and goals of the government in relation to technical education. Throughout the years, TESDA has provided different programs that are geared towards the poor and the vulnerable population (ADB, 2021). Despite this goal, the 2021 report of Asian Development Bank stated that enrollment in poorer regions are not necessarily higher than their counterparts. As such, they have mentioned in the report that there is a need to create local programs that are more focused on the needs of each locality such as those pertaining to agriculture, fisheries, and the likes.

Consequently, TVET in the Philippines varies depending on the type of program that a person takes. Sometimes, it might only take a few months while programs like diploma programs might take up to three years. Furthermore, TVET in the country also comes in the form of non-formal vocational education through the form of seminars and community-based training. TVET are offered through both private and public institutions. Orbeta and Corpus (2024) mentioned in their study that even though public schools ensure the availability of their programs in the rural areas, it is still vital to constantly connect the programs to its urban counterparts to ensure that training provided are up-to-date and at par with the industry standards. Furthermore, the study of Barroga, Wabina and Sales (2021) highlighted that knowledge alone does not ensure the likelihood of a business to acquire a technological innovation. In this regard, it is imperative that TVET should break free from traditional models. As mentioned by Han and Najord (2024), vocational training should align closely to the principles of the sector that is mainly available in rural areas by defining clear development objectives, fostering the cultivation of high quality talents, and enhancing the overall quality of the workers.

The paper by Mawo et al. (2021) examines how knowledge transfer between Technical and Vocational Education and Training (TVET) institutions and small and medium enterprises (SMEs) enhances business performance. It argues that TVET graduates contribute to SME growth by providing practical, technical, and entrepreneurial skills that address labor shortages, improve productivity, and foster innovation. Similarly, Hlasny (2019) discusses how TVET graduates support MSME growth by enhancing innovation, productivity, and competitiveness through practical skills and workplace-based learning. The study explains that SMEs benefit from vocationally trained workers who help adopt new technologies, improve processes, and support product development, while close collaboration between vocational training systems and enterprises strengthens sustainable growth. Moreover, Sandirasegarane et al. (2016) propose integrating vocational education (VET) with entrepreneurial training (ET) to develop both technical and business competencies among students. This combined approach promotes self-employment, job creation, and enterprise development, ultimately reinforcing MSME growth and local economic resilience.

Meanwhile, in the Philippines, there is a dearth of studies that directly explore the impact of TVET graduates on MSME growth. The study by Generalao et al. (2025) does not directly examine the role of TESDA or TVET graduates in MSME development but provides indirect insights into how they can contribute to it. By emphasizing the link between technical-vocational education and improved employment outcomes—particularly through enterprise-based and demand-driven training—the study suggests that TVET graduates enhance workforce productivity, innovation, and job readiness, which are essential for MSME competitiveness. The findings indicate that many TVET graduates are employed in MSME-dominated sectors such as manufacturing, retail trade, and services, underscoring their vital role in supporting operational efficiency and business expansion. Furthermore, the study highlights the importance of stronger private sector involvement in TVET program design and implementation to better align skills development with industry needs, thereby indirectly promoting MSME growth (Bayudan-Dacuycuy et al., 2024). However, the study also identifies key barriers that limit this contribution, including persistent skills mismatches due to outdated curricula and limited employer recognition of TVET certifications.

Edralin and Pastrana (2023) examined the role of Technical and Vocational Education and Training (TVET) in the Philippines and its alignment with Sustainable Development Goal 4 (SDG 4). Using a descriptive research design and qualitative archival research, the study was guided by the Philippine Qualifications Framework, which served as the foundational model for establishing a standardized system for education and training providers. The study found that, over the years, TVET has made significant progress in setting strategic directions, implementing standards, and enhancing skills development. These efforts have improved employment opportunities for TVET graduates and provided clearer policy directions for its implementation. However, challenges remain in ensuring its responsiveness to labor market demands, as enterprise-based programs account for only 3% of the total training programs implemented. The study recommends aligning TVET curriculum development with the Philippine Development Plan 2022-2028 and integrating Industry 4.0 competencies to strengthen its future direction and contribution to sustainable development. TVET equips students with the knowledge, technical expertise, and soft skills needed for employment across various sectors or entrepreneurship. It enhances workforce productivity, mobility, and adaptability while improving overall quality. By developing industry-relevant skills, TVET strengthens organizational competitiveness in an increasingly globalized digital economy (Thevatas and Zakaria, 2024;).

ASEAN Member States (AMS) recognize that digital transformation, including the Fourth Industrial Revolution (Industry 4.0), has significant implications for economies, industries, and employment (ASEAN, 2022). A report on MSME participation in ASEAN's digital economy highlights the need to refine training and education programs, as MSMEs heavily rely on word-of-mouth for digitalization-related information. Peer learning and mentoring initiatives may be more effective in addressing this challenge. While AMS have policies supporting MSME digitalization, low awareness remains a key barrier to adoption. To bridge this gap, governments must enhance education policies and TVET programs that emphasize digital skills for MSMEs (ERIA, 2020). As part of the ASEAN Strategic Action Plan for SME Development 2016–2025, vocational training centers and SME technical training initiatives are being established in collaboration with the private sector. These efforts aim to align TVET programs with industry needs and equip the workforce with relevant skills for an evolving labor market.

ASEAN-wide TVET initiatives are coordinated by the ASEAN Education Ministers Meeting (ASED), the Southeast Asia Ministers of Education Organization (SEAMEO), and the ASEAN TVET Council (ATC). Key programs include TVET exchange initiatives, quality assurance mechanisms, regional standards for TVET personnel, and the ASEAN Qualification Reference Framework, with Malaysia, the Philippines, Thailand, and Indonesia completing their Referencing Reports. Despite these efforts, challenges persist, such as fragmented governance due to national sovereignty, multiple providers, and diverse certification pathways. Additionally, negative public perceptions of TVET as inferior to traditional academic routes hinder adoption, while socio-economic and socio-cultural disparities across ASEAN create inconsistencies in TVET access and quality (ASEAN, 2022). Moreover, several studies have argued that many TVET initiatives fail due to a misalignment between the skills provided and employer needs, a lack of occupational standards, inadequate trainer availability, insufficient resources for market research, competing priorities, and an emphasis on immediate livelihood concerns rather than long-term sustainable development goals (Lamichhane, 2016; Tadesse et al., 2024; Harun et al., 2023). Overall, these factors contribute to the low maturity levels of micro and small enterprises (Tadesse et al., 2024). To address these challenges, it is recommended to provide demand-driven TVET aligned with labor market needs, rebrand TVET to shift public perceptions, and enhance equity and accessibility within a TVET ecosystem (ASEAN, 2022; Harun et al., 2023).

An OECD study highlights TVET's role in fostering inclusive growth in Southeast Asia, particularly in its impact on poverty reduction, inequality, and social exclusion by improving employment, wages, and job quality (OECD, 2018). TVET programs promote inclusion and strengthen economic, social, and political engagement. To maximize impact, the report recommends comprehensive programs integrating in-class learning, on-the-job training, entrepreneurship, and soft skills. Holistic approaches combining TVET, literacy, and life skills, along with entrepreneurship initiatives offering start-up grants, enhance employability and business performance. Additionally, longer programs, targeted training with stipends, private sector involvement, and alignment with formal education through standardized certification contribute to stronger labor market outcomes.

In terms of MSME development, ASEAN countries benefit from TVET programs. In Malaysia, high-quality training and curriculum improvements empower TVET graduates to continuously enhance their businesses, fostering an entrepreneurial mindset that contributes to economic growth (Harun et al., 2023; Suradi et al., 2017). In Indonesia, a study by Herissuparman and Ismane (2024) highlights the significance of quality agricultural education and training as a key driver of innovation in MSMEs and the rural economy. This education includes advanced agricultural techniques, sustainable practices, and business management. With the right technology, rural farmers and enterprises can optimize resources, reduce waste, improve production efficiency, minimize manual labor, and enhance overall productivity.

In Vietnam, the Community-Based Training for Job and Enterprise Development model, introduced by the International Labour Organization (ILO) in 2017, is a low-cost and easily implementable training approach designed to help institutions support entrepreneurs and micro-business owners in starting or improving their businesses (ILO, 2015). The model is implemented through mobile vocational training and job-focused programs targeting rural populations. These initiatives have enhanced the alignment between vocational training and labor market demands, equipping farmers and rural residents with essential knowledge for self-employment, business creation, and job generation within their communities (Thang et al., 2017).

In Cambodia, the Cambodian Qualifications Framework skill evaluation surveys indicate that 5.10% of respondents became entrepreneurs or business owners, underscoring the role of skills development in fostering entrepreneurship (Khorn, 2023). However, businesses have identified gaps in five key competencies—communication, teamwork, technical skills, foreign languages, and customer relations—that require further enhancement. Addressing these gaps through collaboration among government ministries, businesses, employees, and civil society groups will be crucial to strengthening Cambodia's TVET program and supporting sustainable economic growth. In Thailand, a UNESCO (2016) study found that most participants surveyed believe TVET graduates now possess the skills necessary to start and manage their own businesses. Additionally, the Thailand 4.0 Initiative emphasizes vocational training to drive economic growth in sectors such as smart agriculture and digital services, directly benefiting rural MSMEs. Programs like the "One Tambon One Product" (OTOP) scheme integrate TVET to improve product quality and branding (Sopadang et al., 2021).
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Program Portfolios on Technical Education and Vocational Training in Rural Areas

Program portfolios for Technical Education and Vocational Training (TVET) in most countries typically focus on addressing specific local needs, enhancing livelihood opportunities, and promoting sustainable development. Future-oriented TVET programs are continually being developed and implemented to prepare beneficiaries for the workforce, the digital revolution, and the global knowledge economy (UNESCO, 2024). Various programs are being developed to support several communities. For example, to support farmers, fisherfolk, and agricultural workers, programs such as smart agriculture and value chain development have been introduced to trainees to increased productivity, adoption of sustainable practices and improved income stability (Mandumbu et al., 2023; Monavvarifard and Alibaygi, 2023; Kang et al., 2024). For construction and infrastructure development, programs have been established to promote the adoption of advanced construction technologies. These include Building Information Modeling (BIM) for improved construction efficiency (Kusuma et al., 2024), wood-based construction methods (Hommel, 2024), and renewable energy solutions such as solar photovoltaic installations (Winber and Hollis-Turner, 2023). Additionally, these programs emphasize the integration of green technologies to support sustainable development (UNESCO, 2013). Moreover, most TVET programs are geared towards the use of ICT tools to improve digital skills, especially in rural areas (Sachith et al., 2017). In addition to common and basic technologies, other ICT tools have been utilized, such as immersive technologies like virtual and augmented reality (Haminuddin et al., 2024), gamification and game-based learning for vocational training (Dahalan et al., 2024), simulation applications (Azid et al., 2024), and other Industry 4.0 technologies (George et al., 2024). Other TVET programs focus exclusively on women and marginalized groups, offering training in areas such as farming (Kilalo et al., 2023), handicrafts (Rid et al., 2014), food processing (Shkabatur et al., 2022), and garment-making (Estrellado et al., 2023), among others. These programs aim to promote gender equity, strengthen local cottage industries, and diversify household incomes. Further, the dual system program in Technical and Vocational Education and Training (TVET) integrates theoretical instruction in classrooms with practical on-the-job training, fostering close collaboration between educational institutions and industry partners to align with labor market needs (Dernbach, 2020; Maitra et al., 2024). This approach enhances employability by equipping trainees with industry-relevant skills and hands-on experience, enabling a seamless transition into the workforce while addressing skill gaps, promoting lifelong learning and strengthening linkages with local industries. Other TVET programs introduced during the COVID-19 pandemic focused on emergency response to improve disaster preparedness, reduce the risks and impacts of natural disasters, and enhance community resilience (Raza et al., 2023). To further enhance the impact of TVET, entrepreneurship development programs have been incorporated to foster innovation, self-reliance, and economic growth (Shkabatur et al., 2022; Buli and Yesuf, 2015). These programs aim to equip trainees with entrepreneurial skills, such as business planning, financial management, and market analysis, empowering them to establish and sustain their own enterprises. By encouraging entrepreneurship, TVET contributes to job creation, addresses unemployment, and supports the development of local economies, particularly in underserved communities (UNESCO, 2024). Despite the wide range of TVET initiatives and programs, comprehensive information on incentives and support mechanisms for MSMEs in rural areas remains limited, particularly in the post-pandemic context. Many small enterprises continue to face financial constraints, limited access to technology, and weak institutional linkages. Investigating available incentives and programs is essential to identifying gaps, proposing policy improvements, and ensuring that MSMEs in rural areas, particularly in the Philippines, receive the necessary support to strengthen their organizational capacities and resilience.

Key Principles and Application of Technical Education and Vocational Training

The key principles of Technical Education and Vocational Training (TVET) emphasize aligning training programs with entrepreneurial development to address the dynamic needs of communities and economies. TVET programs are designed to be relevant to local needs, ensuring that they reflect the economic, social, and cultural contexts of the communities they serve (De Asis et al., 2024). For instance, training in sustainable agriculture equips farming communities with techniques to enhance productivity while maintaining environmental balance (Kang et al., 2024). Competency-based learning is central to TVET, focusing on measurable outcomes, such as industry-standard certifications such as in welding (Lukhele and Laseinde, 2024), furniture making (Wignall et al., 2023) or ICT (Sachith et al., 2017), that ensure trainees acquire job-ready skills and to meet industry demands. Inclusivity and accessibility are prioritized, with efforts to reach marginalized groups, including women (Kilalo et al., 2023), marginalized and vulnerable groups (Shkabatur et al., 2022), through initiatives like mobile training units (Hasan et al., 2024). Collaboration with industries further strengthens these programs, creating apprenticeships and partnerships that ensure graduates are equipped for employment (Abdelkarim, 2019). TVET also promotes lifelong learning (Asad et al., 2024), offering online modules to help individuals adapt to emerging technologies like artificial intelligence (Idris et al., 2024) and renewable energy (Winberg and Hollis-Turner, 2023). A strong focus on practical training bridges the gap between theory and real-world application, such as workshops and simulated environments (Dahalan et al., 2023) for various industries such as automotive (Lukhele and Laseinde, 2024), tourism and hospitality (Haminuddin et al., 2024), agriculture (Monavvarifard and Alibaygi, 2023), manufacturing (Mori, 2023) and healthcare (Azizan et al., 2024). Sustainability and environmental awareness are integral, with courses on eco-friendly technologies (Cortez et al., 2022). To maintain relevance and effectiveness, TVET programs must implement robust monitoring and evaluation systems (Hasan et al., 2024), using tools like TVET graduates tracking to measure employment outcomes and refine strategies for greater impact (Hilal, 2012). Through these principles, TVET fosters entrepreneurial development, driving economic growth and community resilience.

Entrepreneurial Development Practices and Models in Rural Areas

Entrepreneurial development practices and models in rural areas aim to empower individuals and communities, foster business growth, enhance livelihoods, and promote resilience. Community-based programs, such as farmer cooperatives, encourage collective entrepreneurship by pooling resources and providing capacity-building and skills training (Raza et al., 2023). These programs help participants gain essential competencies, including the use of e-commerce platforms and emerging technologies (Shkabatur et al., 2022), while enhancing market competitiveness by grouping similar businesses, such as handicraft clusters or agro-processing zones (Danja and Wang, 2024), to achieve economies of scale. Innovative approaches like the One Town, One Product (OTOP) Model also promote regional specialization, strengthening community identity and market differentiation (Ho et al., 2022; Quesada-Valverde and Quesada-Román, 2025).

The Triple Helix Model, which fosters collaboration among academia, government, and industry, plays a key role in rural entrepreneurial development by advancing agricultural and industrial technologies (Srisathan et al., 2023). This model integrates these sectors to drive regional economic growth, knowledge transfer, and technology development. Complementing this, incubator and accelerator models nurture MSME startups by providing training, funding, and mentorship, which reduces risks and fosters innovation through Technology Business Incubators (TBIs) in rural areas (Suradi et al., 2017). These models also connect entrepreneurs with experienced mentors, increasing the commercialization potential of their products. Additionally, social entrepreneurship aims to address social, environmental, or cultural issues while achieving financial sustainability (Salonga et al., 2023). In sustainable agriculture, for instance, social enterprises play a crucial role by promoting eco-friendly farming practices, enhancing food security, and supporting small-scale farmers (Slitine et al., 2024).

The value chain approach strengthens entire production-to-market systems by improving processes like cold chain logistics for perishables to enhance efficiency and competitiveness (Kilalo et al., 2023). This approach links rural entrepreneurs to larger markets, such as initiatives that connect farmers to urban buyers or export markets, boosting profitability (Nandini et al., 2023). To further support MSMEs in rural development through access to financial capital, the Grameen Model—based on Grameen Bank's microfinance model—has been widely replicated by microfinance organizations (MFOs) globally. This model emphasizes microcredit without collateral, group lending, and community accountability, enabling rural communities to establish small businesses (Zainon et al., 2014). The Grameen Model aligns with the Bottom of the Pyramid (BoP) strategy, which addresses the unique financial and social challenges of low-income populations through innovative solutions (Bals et al., 2023). Similarly, partnerships with microfinance institutions offering low-interest loans reduce financial barriers, allowing small-scale enterprises at the BoP to thrive and fostering economic inclusion and sustainable development.

Identified Areas of Training for TVET

Further, in relation with entrepreneurial development and TVET programs, the Philippine Development Plan 2023-2028 (NEDA, 2023), argued that the programs must be designed and implemented in a future-ready to prepare trainees for the world of work, Fourth Industrial Revolution, and the global knowledge economy. Training design must be developed in response to emerging trends or demands in the labor market, particularly within the agricultural and industrial sectors, which are vital to rural areas (Shkabatur et al., 2022). By aligning training programs with the specific needs of rural communities, we can ensure that individuals in these areas are equipped with the skills required to meet evolving market demands and contribute to local economic growth. Additionally, strengthening collaboration with industry boards and industry associations in TVET can help ensure that training programs are relevant, up-to-date, and directly aligned with industry needs and standards, further enhancing employment opportunities and economic development in rural regions (Ahmed and Khan, 2018).

Moreover, providing targeted entrepreneurship and business development training is essential for empowering rural entrepreneurs (Ho et al., 2022). This includes business planning and management, financial literacy and accounting, marketing and branding strategies, supply chain and logistics management, and microenterprise development (Suradi, 2017). These skills are crucial for encouraging self-employment and supporting local economic growth by enabling individuals to successfully establish and manage businesses. Incorporating innovation-related training, such as the design thinking approach, helps entrepreneurs develop creative solutions to business challenges, fostering a culture of innovation (Ramirez Molina et al., 2024). Design thinking enables participants to better understand customer needs, prototype new ideas, and iterate on solutions, contributing to sustainable business models and the overall development of rural communities (Pande and Bharathi, 2020). However, it remains unclear how these training programs specifically address the development needs of MSMEs in rural areas in the Philippines. While alignment with labor market trends and industry collaboration is emphasized, the extent to which these initiatives translate into practical solutions for rural enterprises is not well defined. Without a clearer framework for adapting training to the unique economic and infrastructural challenges of rural communities, their effectiveness in fostering MSME sustainability and growth remains uncertain. This study aims to investigate how educational programs, including technical and vocational training, respond to the development needs of MSMEs in rural areas.

Methodology

This study utilized case study research as an approach. It focused on micro and small enterprise models of the MSME sector. Labor productivity and business continuity served as perspectives of the research using organizational development framework on human capital development as operational framework with four phases of data collection and analysis:

Phase 1: Parallel review of data from NGAs and select MSME models

Phase 2: Survey Questionnaire on the samples

Phase 3: Key Information Interviews and Focus Group Discussions

Phase 4: Validation Session (Workshop)
A survey in the basic profile of MSMEs was conducted using the targeted sectors and regional groups. Results on the survey were consolidated and then presented during the virtual key informant interview/ focus group discussion. Majority of the questionnaires of the KII/FGD were adopted from the study conducted by the proponent on Social Entrepreneurship and Community Development. The process helped validate insights to contextualize responses obtained from the results of the survey.

Respondent Criteria

Purposive sampling (a form of Non-Probability Sampling) was used in the study. Purposive sampling is widely used in qualitative research for the identification and selection of cases related to the phenomenon of interest (Lune and Berg, 2017). More specifically, this research utilized a stratified purposive sampling as the respondents were identified based on specific groups and considered by a given set criteria.

Table 2 outlines the inclusion criteria of our interview respondents during the Data Collection phase. This was selected to be consistent with the criteria of DTI on MSME based on asset size and number of employees. Moreover, data on poverty incidence parallel with the number of existing TVET programs/facilities will be considered in the selection process. Only respondents from the top and bottom regions (MSME count, poverty incidence, and existing TVET programs) will be considered for this study. Other types of respondents will be selected based on their roles in the MSME, organization size, portfolio/expertise, and structure as indicated in the table below and aligned with key elements on value proposition, inclusive participation, scalability, and sustainability. Selection of participants will be strictly based on the indicators/criteria and specified in table 2. Any deviation shall only be considered in areas where the number of MSMEs are limited (bottom 3) and whose category fall under the micro enterprise level.

TABLE 2
MSME Stakeholders

Stakeholders	Criteria	Indicators
MSMEs	Organization Size	▪ With at least 20 regular employees ▪ With office/site established in the community
	Organization	▪ With a clear organizational structure ▪ With SE business plan ▪ Willingness to provide pertinent documents of the SE
	Legitimate Business (Enterprise)	▪ With registration and secured government permits ▪ Preferably with official receipts ▪ With updated financial records
Entrepreneurs/Business Owners	Role	▪ Owner/founder/manager ▪ With at least 2 years of involvement in the business ▪ Involve in the operation and management aspects of the business

Aside from the survey questionnaire and focus group discussions, a review and analysis of existing data from the Department of Trade and Industry, Technical Education and Skills Development Authority, and Philippine Statistical Authority was undertaken. Available secondary data will be gathered through the official website of these agencies or through the assistance of the Education Commission II. Sectors that were prioritized include agriculture, manufacturing, and service industries, as specified by Education Commission II. Existing communication channels (NGA, LGU, and NGOs) were utilized in order to facilitate a smooth coordination and in due consideration of cultural/community contexts.

Existing platforms using the internet such as zoom, gmeet, and messenger were also utilized if necessary, as a mechanism to improve the communication channels. Filipino and English were utilized as languages of communication. Assistance from the locals may be secured if needed, through the research associate.

	Top 3 Regions	Bottom 3 Regions
Agriculture	3 entrepreneurs/MSMEs per region	3 entrepreneurs/MSMEs per region
Manufacturing	3 entrepreneurs/MSMEs per region	3 entrepreneurs/MSMEs per region
Service	3 entrepreneurs/MSMEs per region	3 entrepreneurs/MSMEs per region
Total	27 entrepreneurs/MSMEs	27 entrepreneurs/MSMEs

Based on the available information of the Department of Trade and Industry on the registered MSME, each enterprise size (micro, small, and medium) was represented in the study based on asset value and number of employees as assessed by DTI.

Objective	Methodology	Remarks
Objective 1: Enablers and Barriers	Level 1: Survey Questionnaire and Review of programs based on NGAs data Level 2: Focus Group Discussions/Key Informant Interview Level 3: Thematic Analysis and Validation Workshop	Basic profiling and identification of enablers and barriers
Objective 2: Organizational Development	Level 1: Survey questionnaire, Review of programs based on NGAs data Level 2: Focus Group Discussions/Key Informant Interview Level 3: Validation Workshop	Identification and validation of gaps
Objective 3: Forms of Support	Level 1: Review of programs based on NGAs data Level 2: Focus Group Discussions/Key Informant Interview Level 3: Validation Workshop	Mapping out of available resources (capacity, resource, and organization)
Objective 4: Incentives and Programs	Level 1: Review of programs based on NGAs data Level 2: Key Informant Interview Level 3: Validation with stakeholders	Identification of incentives and programs for alignment

Objective	Methodology	Remarks
Obj 5: TVET and Development Needs	Level 1: Survey questionnaire, Review of programs based on NGAs data Level 2: Focus Group Discussions/Key Informant Interview Level 3: Validation with stakeholders	

From there, presence of the technical and vocational facilities will also be considered in the selection areas for the focus group discussion in order to properly align on both skills and capacities trends. The table below shows the indicators based on four key variables in development (Salonga, 2019).

Variables	Indicators
Scalability	▪ Number of community members directly/indirectly involved in the operations ▪ Number of community members who hold management positions ▪ Number of trainings and capacity building conducted in the last three years (leadership, skills-development, business operations, and organizational development) ▪ Value of improvement in per capita income of community members (quantitative: old versus new) ▪ Improvement in the spending pattern of community members (enumeration of new items in the budget list e.g., outing and recreation) ▪ Enterprise total net-worth and profit ratio (quantitative value) ▪ Scale of Market-base in terms of area (number of communities being served)
Sustainability	▪ Creation of a phase-out or exit strategy of entrepreneurs in the community (indicators agreed upon by key stakeholders) ▪ Community Development and Enterprise Development Roadmap (for the enterprise and its community) ▪ Clear ownership structure of the social enterprise (community members/ entrepreneurs) ▪ Existence of partnerships with key stakeholders and specific roles/functions (formal and informal agreements e.g., barangay/village, church, etc.) ▪ Creation of formal (e.g., business operations manual/ community development plan) / informal systems (culture/ norms) ▪ Financial Status (ratio/percentage for social and economic activities)
Value Proposition	▪ Unique value of product/services to customers, consumers, suppliers, and other stakeholders ▪ Valuation of community counterpart (monetary and nonmonetary) ▪ Business Model and/or development framework ▪ Indicators for financial, social, and/or environmental
Inclusive Participation	▪ Number of community-led projects initiated or ideas contributed to the enterprise (by or in collaboration with community members) ▪ Male/female in the business operation and content of job descriptions ▪ Involvement of youth/senior citizen/PWD/LGBT, poorest of the poor in the business operation

Afterwhich, key informant interviews and focus group discussions were facilitated in order to gather more information about sustainability practices/models and validate the initial assessment and/or trend of the data/insights captured using the survey questionnaire.

The study involved respondents that represent the sectors of agriculture, manufacturing, and service industry, specifically those from the bottom and top regions based on the count of Micro, Small, and Medium (MSME) enterprises.

MSME's Profile

Items	Frequency	Percentage
Region:		
Central Luzon (Region 3)	23	33.83%
CALABARZON (Region 4-A)	6	8.82%
MIMAROPA (Region 4-B)	20	29.41%
CARAGA (Region 13)	14	20.59%
BARMM	3	4.41%
NCR	2	2.94%
Gender:		
Male	18	26.47%
Female	50	73.53%
Age:		
25-39	13	19.12%
40-55	36	52.94%
56-Above	19	27.94%

This study examined the demographic characteristics of 68 MSME owners and operators across six regions in the Philippines. The participants were distributed as follows: Central Luzon (34.85%), MIMAROPA (30.30%), CARAGA (21.21%), CALABARZON (9.09%), BARMM (4.55%), and the National Capital Region (2.94%).

A notable gender disparity appeared in the survey results, with women comprising 73.53% of respondents compared to 26.47% men. The age distribution revealed that middle-aged entrepreneurs (40-55 years) formed the majority at 52.94%, followed by older business owners (56 years and above) at 27.94%. Younger entrepreneurs (25-39 years) accounted for 19.12% of participants, while the sample included no respondents below 25 years of age.

These findings present a specific snapshot of the surveyed MSME operators at the time of data collection. The regional distribution, gender composition, and age ranges reflect only the characteristics of these respondents, without implying broader patterns across all Philippine MSMEs.

MSMEs, Number of Employees, Age Range, Salary Range Number of Management team, HR Department Existence

Items	Frequency	Percentage
Number of Employees		
1	17	25.37%
2-9	29	43.29%
10-99	21	31.34%
More than 99	0	0%
Number of Management Team Members		
No management team	6	8.96%
1	21	31.34%
2-3	19	28.35%
4-5	11	16.42%
6-7	6	8.96%
8+	4	5.97%
Salary Range of Employees (Monthly)		
<P5000	4	7.41%
P5,000 - P9,999	19	35.19%
P10,000 - P14,999	14	25.93%
P15,000 - P19,999	11	20.37%
>= P20,000	4	7.41%
HR department presence		
No	52	85.25%
Yes	9	14.75%

The study surveyed 68 businesses. Almost all (67) reported their staff numbers and management team sizes, while financial and operational data had slightly lower but still good response rates (62 responses for salary data and 59 for the presence of the HR department). The employee count distribution among surveyed MSMEs reveals a sector dominated by small-scale operations. Solo enterprises (1 employee) represented 25.37% (17/67) of respondents, while the plurality (43.29%, 29/67) employed 2-9 workers - typical of micro and small business classifications. Midsized operations (10-99 employees) accounted for 31.34% (21/67), with no respondents exceeding 99 employees. Management structures revealed that 31.34% (21/67) relied on a single manager, with 28.35% (19/67) utilizing small management teams of 2-3 members. Mid-sized teams were less common, with 16.42% (11/67) maintaining 4-5 members. Only 14.93% of businesses had larger teams (8.96% with 6-7 members and 5.97% with 8+), while 8.96% (6/67) lacked any formal management structure.

Analysis of 54 valid responses revealed that the majority (61.12%, 33/54) earned between ₱5,000-₱14,999 monthly, with peak concentration in the ₱5,000-₱9,999 bracket (35.19%, 19/54). Only 27.78% (15/54) reached salaries above ₱15,000, while equal minorities (7.41%, n=4 each) represented both the lowest (<₱5,000) and highest (≥₱20,000) tiers.

Regarding HR infrastructure, data from 61 respondents showed that only 14.75% (9/61) maintained a dedicated HR department, with the majority (85.25%, 52/61) operating without formal HR personnel.

MSMEs' provision of training to their employees

Items	Frequency	Percentage	Sample Responses
Provides Training (yes)	49	72.06%	"Through the initiative of the LGU", "Good Manufacturing Practices", "Seminars through DTI and LGU", "GMP, food safety, and customer service", "leadership and technical", "agriculture, communication and finance"
No Training	19	27.94%	"He already knew the job", "Only I, as the owner, underwent training.", "Lack of assistance", "No time", "Because my employees were already trained back in the 1980s when my business started.", "home-based only", "do not have an internal training program in place"

The survey findings indicate that 72.06% of participating MSMEs (49 out of 68 respondents) provide some form of training to their employees. These training initiatives predominantly fall into three key categories: compliance and safety programs (particularly Good Manufacturing Practices and food safety handling), technical skill development (such as baking, weaving, and beverage production), and business management training (including bookkeeping, digital marketing, agriculture, communication and financial management). Notably, many of these training opportunities appear to be facilitated through government agency initiatives, with frequent mentions of programs offered by the Department of Trade and Industry (DTI), Local Government Units (LGUs), and the Cooperative Development Authority (CDA). This suggests that public sector support plays a crucial role in enabling workforce development for many small and medium enterprises, particularly in meeting regulatory requirements and maintaining industry standards.

Among the 27.94% of MSMEs (19 respondents) that do not provide employee training, qualitative responses reveal several underlying reasons. Some business owners reported relying on employees' pre-existing skills ("he already knew the job") or their own expertise as sole proprietors ("only I, as the owner, underwent training"). Others cited practical constraints such as limited time, resources, or assistance. A portion of respondents indicated that their business model (e.g., home-based operations) or long-established workforce (with training dating back to the 1980s) reduced the need for current training initiatives. These findings suggest that while many MSMEs engage in training, particularly when supported by government programs, significant barriers remain for certain enterprises, especially very small or informal operations. The data highlights both the importance of institutional training support and the need for tailored approaches that address the diverse circumstances of micro-enterprises.

List of agencies from which the surveyed MSMEs obtained training

Agencies	Frequency
Department of Trade and Industry (DTI)	26
Other private organizations	10
Department of Science and Technology (DOST)	10
Technical Education and Skills Development Authority (TESDA)	8
Local Cooperatives, Unions, Federations and Associations (e.g., NATCCO, PCEDO)	6
Local Government Unit (LGU)	5
Department of Agriculture (DA)	5
Department of Agrarian Reform (DAR)	5
Cooperative Development Authority (CDA)	5
Schools and other State Universities	4

In-house/Internal	2
Agricultural Training Institute (ATI)	1
Department of Social Welfare and Development (DSWD)	1
Department of Tourism (DOT)	1
Department of Information Communication Technology	1
BARMM Ministry of Trade, Investments, and Tourism	1
Other family members	1

The data on training programs accessed by the surveyed MSMEs from various public and private agencies reveals distinct patterns in institutional support. The Department of Trade and Industry (DTI) was the most frequently cited agency, with 26 enterprises reporting training engagements, representing the largest single provider in this sample. Other notable sources included private organizations and the Department of Science and Technology (DOST), each mentioned by 10 respondents. Several government agencies - TESDA, local cooperatives/unions, LGU, DA, DAR, and CDA - clustered in the mid-range of utilization, with 5-8 enterprises reporting their use. In-house training (internal organizational training) was reported by 2 respondents. Educational institutions and smaller agencies like ATI, DSWD, DOT, DICT, and BARMM's trade ministry appeared less frequently, each cited by only 1-4 respondents. One enterprise reported receiving training from family members. These frequencies reflect only the specific experiences of the surveyed MSMEs and do not imply broader trends about agency effectiveness or availability. The distribution suggests varied institutional partnerships among respondents, with heavier reliance on certain national agencies like DTI and more limited engagement with specialized or local entities. The data does not indicate whether these patterns correlate with enterprise size, sector, or geographic location within the survey sample. All percentages should be interpreted relative to the total number of respondents who provided information about training sources.

Training Modality Preferences Among MSMEs

Items	Frequency	Percentage
Modality of Training		
Face-to-Face	47	69.12%
Online	9	13.25%
Hybrid	12	17.65%

The data on training modalities reveals specific patterns among the surveyed enterprises. Face-to-face training emerged as the most common format, with 47 out of 68 respondents (69.12%) indicating they use this traditional approach. Online training was less prevalent, reported by 9 enterprises (13.25%), while a hybrid combination of face-to-face and online methods was utilized by 12 respondents (17.65%).

Appropriate Design of Technical Education and Skills Development Program

Technical education and skills development programs are found to be more effective when integration and localization are in place between national government agencies and local government units. The integration of the program allows MSME owners to access the necessary support from agencies through the facilitation of local government, especially when facilities are located in the same areas. What is pressing as a concern, specifically for those that are part of the bottom 3 regions are the phases of programs at various stages of the development cycle of their enterprise. Majority of participants believe that market linkage at the local, regional, and national levels as well as the availability of appropriate design of training in this particular area is crucial in the growth of both the enterprise and the entrepreneurs. It was noted that most of the training that respondents have accessed so far are basic concepts and skills training. Intermediate and advanced training are needed in order to improve the individual and organizational capability of MSME owners. Both DTI and TESDA were credited for providing access and support to these trainings and skills development.

Intensive Market Linkage in Rural Areas

The study revealed that while marketplace and showcase facilities of the DTI provide the necessary exposure for the products of MSMEs, more linkages to actual market channels and segments are still needed in order to improve the latter's sales and revenue generation activities. This is crucial especially for those MSMEs located in the bottom 3 regions. The top regions on the other hand require support for increasing production capacity. Support from the private sector and grants from select national government agencies were particularly mentioned to be helpful in this area.

On the part of government agencies, monitoring the actual sales and revenue generation of MSMEs for marketplaces are more crucial over the monitoring of the actual participating MSMEs per event. The latter's strategy is more appropriate on the curation of product showcases, which in the long run can boost sales if strategically managed. This involves proper planning and allocation of spaces based on actual sales or performance of participating MSMEs. It was noted that there is a limitation in terms of the number of facilities combined with technical education and entrepreneurial development programs/services.

Available incentives are mostly provided to existing enterprises instead of investing entrepreneurial intentions to individuals requiring skills development and enterprise development support.

The data on training programs accessed by the surveyed MSMEs from various public and private agencies reveals distinct patterns in institutional support. The Department of Trade and Industry (DTI) was the most frequently cited agency, with 26 enterprises reporting training engagements, representing the largest single provider in this sample. Other notable sources included private organizations and the Department of Science and Technology (DOST), each mentioned by 10 respondents. Several government agencies - TESDA, local cooperatives/unions, LGU, DA, DAR, and CDA - clustered in the mid-range of utilization, with 5-8 enterprises reporting their use. Educational institutions and smaller agencies like ATI, DSWD, DOT, DICT, and BARMM's trade ministry appeared less frequently, each cited by only 1-4 respondents. However, the majority of these support only touch based on existing enterprises. More is needed on investment to improve entrepreneurial intentions among prospects or potential entrepreneurs. One area that can be strengthened is the ability of MSME to access innovative financing models such as levy-grant schemes, blended finance, or TESDA Development Fund allocation for MSME-linked TVET. These financing models will help MSME to improve their capacity in expanding their market and volume of production.

Limited number and access to facilities with combined technical education and entrepreneurial development programs/services.

The study suggests varied institutional partnerships among respondents, with heavier reliance on certain national agencies like DTI and more limited engagement with specialized or local entities. The data does not indicate whether these patterns correlate with enterprise size, sector, or geographic location within the sample.

Fortunately, several modalities have enabled enterprises to improve their access to training. The data on training modalities reveals specific patterns among the surveyed enterprises. Face-to-face training emerged as the most common format, with 46 out of 66 respondents (69.70%) indicating they use this traditional approach. Online training was less prevalent, reported by 9 enterprises (13.63%), while a hybrid combination of face-to-face and online methods was utilized by 11 respondents (16.67%).

It was also noted that the bottom three regions based on MSME counts are the same regions where poverty and unemployment rates are higher (BARMM, MIMAROPA, and CARAGA). Likewise, the same areas have the least access to programs and services of the government in terms of TVET facilities. Moreover, limited infrastructure directly affects the ability of MSMEs to access market and supply channels, therefore, limiting their resource and income generation, particularly on the expansion of support systems to MSMEs with TVET components.

Conclusion

The growth of the Micro, Small and Medium Enterprises can be attributed to the availability of support programs from various national government agencies, combined with the learned skills and organizational capacities of MSME owners. The support of the private sector programs on coaching and mentoring also serves as an enabler on the aspect of capacity building. However, areas that are needed to be improved for the MSME growth to be sustained include market linkage, integration into major supply/value chains through partnerships, more alignment of programs across national government agencies with components of monitoring and evaluation, and advanced capacity building efforts. Likewise, coaching and mentoring programs across sizes of enterprises and sectors must be intensified, requiring the involvement of more private sectors (medium and corporation levels) to serve as mentors for micro and small enterprises. This can potentially enhance entrepreneurial mindset not only on the MSME owners but also their employees, therefore promoting organizational development.

The existing policies on MSME at the national and local levels provide the basic support services to operational needs of entrepreneurs. However, components on digital resilience and business continuity are still at the early stage of implementation, hence, effectiveness of programs are not yet established. It is also crucial for the government to intensify efforts related to monitoring of MSMEs, specifically the ones that accessed and participated in government programs. While incentives are provided to MSMEs, the limited infrastructure and funding still pose a major barrier in scaling MSMEs in the sectors of agriculture, service, and manufacturing, both on volume of production and market. Hence, measures and programs on competitiveness (product quality and price points) and organizational capability must be prioritized sector-wide.

Policy Discussion and Recommendations

Government agencies such as TESDA, DTI and DOLE are recommended to align their efforts on technical education (skills development), entrepreneurial development (MSME growth), and livelihood framework (unemployment). Although these agencies have designed their program around their areas of expertise and responsibilities, it is more strategic if the convergence across programs is further streamlined. The design should include streamlining of processes on business incubation, capacity building, market linkage, and acceleration. For the pilot areas, the bottom 3 regions for the basic sectors are recommended, consistent with the result of study which suggests a more intensive approach on capacity building (basic to advanced) and market linkage (business to business and business to customers) in order to address business continuity and sustainability issues of MSME.

The study suggests that the expansion of mentoring programs in partnership with the private sector should include mindsetting and entrepreneurial intentions.

The majority of challenges as confirmed by the respondents are related to the inability of primary entrepreneurs (founders/co-founders) to train their employees to have an entrepreneurial mindset which directly affects the productivity of the enterprise. Moreover, on the part of entrepreneurs, it is evident that management skills are effectively learned when a combination of experience and training (learning by doing) is practiced either through own experience or mostly with assistance of the mentor-entrepreneurs. Through the DTI and TESDA, a combined mentoring program that captures skills development and mindsetting is proposed to be implemented at both the early (incubation) and sustained (acceleration) stages of the enterprises. The focus should be touch-based more on the entrepreneur's capability before the further development of enterprises.

Creation of a menu of engagements and convergence initiatives from skills development to market linkage is an area where DTI, DOLE, and TESDA can work together. This is for both the design and monitoring of engagements across agencies, guiding the direction of interventions on skills development and market linkage for MSME. One concrete strategy is to institutionalize the inclusion of low-and moderate-income populations for rural MSMEs. This can be done in partnership with PESO, TESDA, and DTI.

While marketplace initiative (showcase and trade fairs) is currently in place through the Department of Trade and Industry, the study reveals an important area of improvement. A number of sites/facilities in the bottom 3 regions are designed for the purpose of showcasing the products instead of selling them. However, considering the limitation of entrepreneurs on both resource and time availability, more strategic sites for selling have to be explored further in order to facilitate sustenance and eventually higher level of income for entrepreneurs participating in the marketplaces. Therefore, more collaborations with the private sector are needed in order to address the said gap.

On organizational development, the capacity building and monitoring program for registered MSMEs is recommended to be facilitated by DTI in coordination with TESDA. While the national government agencies are able to provide and implement support programs for MSMEs, monitoring of the impact of these interventions is crucial in the development and improvement. These insights are relevant both on the planning process of NGA and program development of the private sector based on their sector's needs while working with MSMEs for their supply/value chains.

Mobilize the available resources of Negosyo Centers for market linkage and product development. The public-private partnership is evident particularly in business mentoring, based on key informants' sharing of their appreciation for the support services and mentorship. Considering the nature and trajectory of growth of MSME in the country, it is crucial to provide more mentorship/coaching on business operation/management with active involvement of entrepreneurs as mentors with business continuity and digital resilience components. This will not only improve the capacity and skills of participating entrepreneurs but will also create a good networking opportunity for potential market linkage and support services to MSMEs. Clear communication and implementation plans between TESDA and Negosyo centers can also improve the quality and level of participation of MSMEs in major value chains. The following steps are recommended in order to improve the current practice: (1) Alignment of menu of training and skills development based on both training needs assessment and market demand by industry/sector; (2) Facilitation of marketing training as part of the skills development program of TESDA; (3) Inclusion of monitoring and evaluation (includes strategies and targets that are not limited to sales) as a requirement of enrolment in the Negosyo Center; (4) Annual performance review by sector to be jointly facilitated by Negosyo Center and TESDA Center, or even PESO (if needed/applicable).

Pursue sustainability reporting and monitoring for Micro, Small, and Medium Enterprises (MSMEs). At present, the concept of sustainability reporting is designed for publicly-listed companies as part of the regulatory mechanism of the Securities and Exchange Commission (SEC). Considering the contributions of MSME particularly on the employment and livelihood of the most vulnerable sectors, allowing them to participate in sustainability reporting will allow them to appreciate their contributions to economic, social, and governance, as well as areas of improvement. Develop co-working and market spaces for specific industries in key rural areas for market and supply channels. Creating more spaces for collaboration and engagement will improve communication lines for potential partnership in areas of product/ service innovation, market linkage, and capacity building.

Research Implication

The insights from this study provide academic institutions the opportunity to reflect on the design and structure of their academic programs, particularly their alignment with MSME needs and challenges, as a growing sector. The study also highlights their role on skills development and capability building for both technical and non-technical areas. In the areas of research and social engagement, the academe may prioritize research and engagement that are focused on institutionalizing programs that offer practical approaches based on industry needs and sector specific. Likewise, research related to skills development are recommended to be prioritized as potential inputs for existing program enhancement.

Highlights

- Several government executive branches have developed various programs to support the growth and development of MSMEs in the country, across sectors. However, the bottom three regions based on MSME counts are the same regions where poverty and unemployment rates are higher (BARMM, MIMAROPA, and CARAGA).

- Alignment of programs at national and local levels will facilitate the scaling of market, linkage, and impact of MSMEs

- Limited number and access to facilities with combined technical education and entrepreneurial development programs/services.

- Available incentives are mostly provided to existing enterprises instead of investing entrepreneurial intentions to individuals requiring skills development and enterprise development support.

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The Second Congressional Commission on Education (EDCOM II) is a national Commission established through Republic Act No. 11899, tasked to undertake a comprehensive national assessment and evaluation of the performance of the Philippine education sector, and to propose transformative solutions, from 2023 to 2025. It is composed of lawmakers from both the Senate and the House of Representatives, and is guided by an Advisory Council, and assisted by the Technical Secretariat.

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