

# Small and Medium Enterprises and Their Role in Achieving Sustainability The Case of Al-Ahsa Governorate, KSA

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Small and Medium Enterprises (SMEs) are considered drivers and engines for economic growth in almost all economies. In addition, SMEs have played a critical role in the field of sustainability. It is therefore crucial to discuss opportunities that SMEs provide in achieving sustainability. Therefore, the study aimed to test the role of SMEs in sustainability. For this purpose, data was collected from 100 owners of SMEs using a survey questionnaire from the Al-Ahsa region in the Kingdom of Saudi Arabia to investigate the various opportunities provided by SMEs in sustainability. Descriptive results show that SMEs play an integral role in the development of three sustainability practices namely environmental, social and governance perspectives in Saudi Arabia. The results academically imply that SMEs in Saudi Arabia becomes a key driver of sustainable development through promoting environmental, social, and governance (ESG) practices which is highlighting their strategic role in advancing sustainability structures. The results of the study will be significant to practitioners and policymakers, the SME sector, SME stakeholders, and other researchers in the field. The study also recommended taking strategies and policies for SMEs in KSA with specific reference to Al-Ahsa region could increase the development of economic and competitive advantage in the global village.

**Keywords:** Small and Medium Enterprises (SMEs), development, Sustainability, Preserving the Environment.

## Introduction

Sustainability is an important concept in modern business and its importance has grown exponentially in recent years (Charfeddine & Umlai, 2023). This is a broad concept that encompasses environmental, social, and economic factors, and includes managing resources in a way that provides long-term benefits for future generations (Pascual et al., 2023). In essence, sustainable development focuses on present needs and the ability of future generations to meet their own needs, healing natural resources (Broccardo et al., 2023). In this sense, sustainability consists of meeting the current needs of the organizations without compromising the future effects which will promote social equity and economic growth (Ruggerio, 2021). The need for sustainability is crucial for organizations because it attempts to conserve natural resources, reduce pollution, and mitigate climate change which could increase the social life of the individuals (Raihan, 2024b). Sustainable practices are key to building resilient systems that support current and future generations of people, planet, and prosperity (Pascual et al., 2023). This approach is essential for long-term well-being and the well-being of future generations (Charfeddine & Umlai, 2023). Based on previous studies, sustainability becomes an area of concern for the current study.

Sustainability has become a major area of concern for different organizations. Among those, Small and Medium Enterprises (SMEs) have gained significant global recognition and attracted the attention of both public and private sectors due to their contributions to the national economies of developing and developed countries alike (Melo et al., 2023). Consequently, SMEs have been highly

recommended for these nations to enhance financial development and growth (Ramli, 2023). Numerous studies provided evidences that SMEs create new employment opportunities, increase innovation and creativity which helps to increase the financial growth, and alleviate poverty across various countries (Bhatti et al., 2023; Karmaker et al., 2023). Given their global recognition and demonstrable positive impacts on national economies, SMEs are increasingly promoted as the engines of economic development and growth (Karmaker et al., 2023). Therefore, SMEs become important for the growth of any economy.

The existing literature indicates that access to finance, procedural complexity, managerial skills, education, inadequate capacity building, and marketing challenges are significant obstacles for the SMEs sustainability (Irawan et al., 2023). Additionally, the absence of comprehensive macroeconomic policies, along with various regulatory and legal issues, compounds the barriers faced by SMEs (Lwesya & Mwakalobo, 2023). The sustainability of the SMEs becomes a major area of concern for economic diversification, social development, and global competitiveness. Through the development of sustainable practices, SMEs become more resilient, innovative, and attractive to investors and international markets. With strong government support, access to finance, and alignment with sustainable vision of SMEs which are poised to drive long-term growth, create jobs, and contribute to national and global sustainability goals (Kuteesa et al., 2024). Their role in enhancing employment, reducing reliance on oil, and adopting innovation makes them essential for the future of Saudi Arabia. In Saudi Arabia, SMEs encounter numerous challenges and constraints that adversely impact their

growth and sustainability (Khanzode et al., 2021). These previous studies have shown that when SMEs have access to various resources it could contribute to sustainability. Therefore, this study focused on testing the role of SMEs in the sustainability of owners.

While a great attention on sustainability from various perspectives, there is little focus on the specific role of SMEs in promoting sustainability despite their important contribution to economic development and social development (Raihan, 2024a; Wasiq et al., 2023). Furthermore, Bhandari et al. (2022) conducted a study on the impact of environmental and social governance on sustainability. They found that environmental and social governance has a positive and significant impact on sustainability. They also concluded that further research could be explored in other contexts and other countries, especially on SEMs for sustainability. Furthermore, Rane et al. (2024) demonstrated that strong corporate governance mechanisms contribute to sustainability by promoting ethical decision-making and responsible resource use. Further, Saha and Khan (2024) revealed a positive relationship between ESG integration and corporate financial performance, indicating that sustainability-oriented companies tend to outperform their peers in the long term. These previous studies have little attention on the role of SMEs on sustainability.

On the other hand, existing literature has mainly focused on the sustainability practices of other countries (Raihan, 2024a) with limited attention on the role of SMEs on sustainability. While study by Prasanna et al. (2019) examined the adoption of sustainable practices through SMEs and found that small businesses could also contribute significantly to sustainability by reducing waste and materials. These studies emphasized that SMES growth not only increases sustainability but it also increases financial resilience and stakeholders' trust. These previous studies have little attention in the context of Saudi Arabia. This gap in the literature highlighted the need for further research on the role of SMEs in improving sustainability, especially in developing countries like Saudi Arabia. Therefore, study focused on the role of SMEs on the sustainability in the context of Saudi Arabia. The significance of this study is to address the gap in the existing literature on the role of SMEs in sustainable development, particularly in the context of Saudi Arabia. Although, SMEs are globally recognized economically and socially contribution to sustainable development their unique impact, especially in such as Saudi Arabia. Previous studies have little attention in the context of Saudi Arabia, therefore, this study contributed to fill this gap by investigating how Saudi SMEs can provide environmentally, economically and socially sustainable products. Furthermore, given the country's sustainable development goals visions into mind which emphasizes diversity, innovation and sustainability, current study researchers explore the ways in which SMEs contribute to sustainable development which could help to policy makers, business leaders, and researchers for Saudi Arabia's economy and business owners. Furthermore, this study also contributed to the global discourse on

sustainable business practices through providing empirical evidence of the impact of SMEs in fast-growing, resource-based economies. The study further divided into four chapters, literature review where literature discussed from both of theoretical and practical perspectives. Research methodology where discussed about the main data collection procedure and research design. Data analysis and results where, discussed the main findings of the study. Lastly, consisted of discussion where discussed the main findings of the study and implications of the study.

## Literature Review

In the modern environment, sustainability becomes an integral concept for the development of the business and for their growth from recent several years (Charfeddine & Umlai, 2023). Broadly, sustainability has been encompasses from three elements environmental, social and economic factors which provided a significant ways for the organizations to gain a long term benefits for the future generations (Pascual et al., 2023). In essence, sustainable development focuses on present needs and the ability of future generations to meet their own needs, healing natural resources (Broccardo et al., 2023). Corporations play an important role in sustainable development goals, and small and medium enterprises (SMEs) are no exception (Raihan, 2024a). SMEs, which represent a significant portion of business worldwide, have the potential to make a significant contribution to sustainable development (Oyewole et al., 2024). While large corporations tend to dominate the sustainability conversation, SMEs have a unique opportunity for leadership in areas such as innovation, resource efficiency, and social responsibility due to their agility, flexibility, and strong ties to the community (Oyewole et al., 2024).

The role of SMEs in sustainable development is complex and although they have significant economic, environmental, and societal impacts (Lopez-Torres, 2023). Their contributions are often underappreciated SMEs make important drivers of economic growth, especially in developing countries such as Saudi Arabia, where job creation is practiced, to diversify the economy by providing subsidies innovation, and poverty reduction (Al-Shaikh & Hanaysha, 2023). They play an important role in building economic resilience, especially in creating employment opportunities for marginalized populations and youth (Ur Rehman et al., 2024). Research has shown that SMEs are important and have created jobs locally, contributed to local GDP, reduced unemployment, and also supported economic recovery potential, which is especially important in areas where larger companies may not have the same level of engagement with local consumers (Aslam et al., 2023). Furthermore, ability of SMEs to innovate and respond quickly to market changes are important factors in sustainable economic growth (Aslam et al., 2023).

Among the environmental sustainability, it is linked with large organizations but it is also important for the While environmental sustainability is often associated with large corporations, it is equally important for SMEs (Al-Shaikh & Hanaysha, 2023). Such types of business have

the potential to reduce the environment bad impact on the energy efficiency practices, waste reduction and conservation (Melo et al., 2023). Studies have shown that SME types tend to adopt sustainable practices when considering long-term economic benefits, such as the energy efficiency or cost savings from waste reduction (AlZayani et al., 2024). Imperiale et al. (2023) showed that SMEs adopting green technologies achieve reduced energy consumption and operating costs. Furthermore, SMEs are more flexible and quicker to adopt environmentally friendly practices compared to larger organizations, which may face more difficult managerial barriers (Mwenda et al., 2023). Furthermore, equipping SMEs with green products and services plays an important role, which Supporting the sustainable use of resources (Udeagha & Ngepah, 2023). This shift has been evidenced in various countries where SMEs is becoming areas that encourage green practices that help the grow the economies through reducing the proportion of reliance on oil exports (Oyewole et al., 2024).

Social sustainability is another important area in which SMEs have a significant impact. Small businesses are generally more closely connected to their communities, and consequently better responsive to local social issues (Mady et al., 2023). SMEs contribute to social development by providing fair wages, providing services to marginalized groups, and improving the quality of life in local communities. SMEs enterprises also provide low-cost goods and services, which they engage in CSR (Nawaser et al., 2023) where businesses play a role in reducing poverty and promoting social inclusion. Braun et al. (2024) also further concluded that SMEs tend to engage in socially responsible practices due to their proximity to the communities in which they operate these projects generally in terms of their economic objectives.

While SMEs are important in promoting sustainability, the direct impact of these businesses on sustainable development has not been widely studied (Lopez-Torres, 2023). Existing literature has focused primarily on the sustainability practices of large corporations, with limited attention given to SMEs (Al-Mutawa & Al Mubarak, 2023). However, recent studies have started to explore how SMEs can contribute to sustainable development, particularly through innovative business models and practices that emphasize environmental and social responsibility (Setyaningsih et al., 2024). Kurniasari et al. (2023) examined the adoption of sustainable practices by SMEs and found that even small businesses could make substantial contributions to environmental sustainability by reducing waste and improving resource efficiency. Another study by Kuteesa et al. (2024) highlighted that SMEs are increasingly adopting sustainability strategies, especially when incentivized by government policies, customer demand for green products, and access to financial resources.

Despite the importance of SMEs in sustainable development, the direct impact of these sectors on sustainability has not been well studied. Existing literature has mainly focused on the sustainability practices of large corporations, with little attention paid to SMEs (Raihan,

2024a). However, recent research has begun to explore how SMEs can contribute to sustainable development, particularly through innovative business policies and practices that emphasize environmental and social responsibility. For example, Prasanna et al. (2019) examined the adoption of sustainable practices through SMEs and found that small businesses could also contribute significantly to environmental sustainability by reducing waste and materials and implementing improved efficiency.

Sustainability research has shown that businesses that embrace sustainability have a greater chance of long-term profitability and growth. For example, a study by Olazo (2023) found that companies that adopt sustainable practices can deliver shared value, which benefits their business and society. Sustainable business practices increase productivity, reduce waste, and enhance brand reputation, leading to improved profitability. Similarly, Baldassarre et al. (2020) found that sustainability initiatives can help businesses reduce costs, increase customer loyalty, and improve employee satisfaction. For SMEs, this advantage may be more pronounced because SMEs tend to have more flexibility to innovate and respond more quickly to trends (Olazo, 2023).

Despite the importance of the sustainability, still studies in the context of SMEs are still limited particularly the role of SMEs on the sustainability. Alraja et al. (2022) conducted study and found that SMEs contributed in the growth. In other study found that, SMEs face high start-up costs, long-term encounters challenges in implementing development practices due to benefits and lack of awareness (Ijomah et al., 2024). This gap in the literature highlights the need for further research on the role of SME types play in improving sustainability, especially in developing countries like Saudi Arabia. Further empirical studies also conducted in the field of sustainability but still have been conducted in other contexts. Bhandari et al. (2022) conducted study on the impact of environmental and social governance on sustainability. They found that environmental and social governance has positive and significant impact on sustainability. They also concluded that further research could be explored in other contexts and other countries, especially on SEMs for sustainability. Furthermore, Rane et al. (2024) demonstrated that strong corporate governance mechanisms contribute to sustainability through promoting ethical decision-making and responsible resource use. Further, Saha and Khan (2024) revealed a positive relationship between ESG integration and corporate financial performance, indicating that sustainability-oriented companies tend to outperform their peers in the long term. Corporate governance plays a critical role in embedding ESG principles into organizational strategies, as effective boards ensure compliance with environmental and social regulations, enhancing the firm's sustainability (Chiu & Fong, 2023). These studies emphasized that ESG practices and corporate governance not only increase environmental and social governance but also increase financial resilience and stakeholders' trust. These previous studies have little attention in the context of Saudi Arabia. This gap in the



literature highlights the need for further research on the role SME types play in improving sustainability, especially in developing countries like Saudi Arabia. As SMES plays an important role in the sustainability of any economy from both of social and economic perspectives but previous studies have little attention on SMEs especially in the context of Saudi sustainability. Keeping previous gaps in mind, this study focus on the impact of SMEs in the growth of sustainability.

## Methodology

### Questionnaire Development Process

The questionnaire was developed based on the systematic process which ensures the reliability and validity of the construct. In the first face, the questionnaire content was designed based on the extensive literature review to ensure that constructs covered the main area of investigation (Hair

et al., 2019). In the pre-testing process involved the field experts, subject expert, and English translator to assess the relevance, clarity, and wording of the items. Feedback from experts led to revisions that improved the accuracy and readability of the questionnaire (DeVellis, 2016). Following content pre-testing, a pilot test was conducted with a small 20 sample of participant's representative of the target population. The pilot test aimed to identify potential issues, such as ambiguous wording, item redundancy, or response bias (Saunders, 2023). Based on pilot test feedback, necessary adjustments were made to enhance the clarity and reliability of the instrument. The final version of the questionnaire was then subjected to exploratory factor analysis (EFA) to assess the factor loadings of 13 key items, ensuring that all items loaded significantly onto their respective constructs which is demonstrating the validity of the construct. The pilot testing results are presented in Table 1 below,

**Table 1: Pilot Test Results**

Dimensions	Question	Factor Loading	Alpha
Environmental	SMEs have mechanisms to preserve the environment.	0.782	0.873
	SMEs contribute to producing green goods and services.	0.823	
	SMEs play a role in rationalizing energy use.	0.763	
	Incentives encourage SMEs to engage in environmental preservation.	0.843	
Economic	Financial incentives promote environmental sustainability in SMEs.	0.842	
	SMEs play a role in increasing employee income.	0.772	
	SMEs contribute to increasing GDP in the region.	0.833	
	SMEs provide products at remunerative prices to consumers.	0.729	
	SMEs play a role in ensuring family stability.	0.835	
	SMEs contribute to reducing unemployment and creating jobs.	0.831	
	SMEs play a role in employing youth and reducing unemployment.	0.728	
Social	SMEs contribute to social responsibility.	0.822	
	SMEs play a role in reducing poverty and supporting the solidarity economy	0.844	

### Sources and Methods of Data Collection

The study objective was to test the impact of SMEs on sustainability in the context of Saudi Arabia. For this purpose, quantitative deductive approach was employed using self-administered questionnaire. This research design is considered to be good when the data is collected through survey instrument (Lazaraton, 2002). In addition, study employed descriptive researcher design. The descriptive study lies in their ability in providing a comprehensive indication of a phenomenon, offering detailed insights into its characteristics, patterns, and relationships (Nick, 2007). This approach facilitates hypothesis generation and informs future research or policy decisions. A sample of SME owners is selected for the study. Both primary and secondary data serve as the principal sources of information. Primary data are collected from a randomly selected sample using a structured questionnaire administered in 2022. Secondary data are gathered from existing published literature on the subject. Additionally, the study utilizes the questionnaire method to collect primary data, which was distributed to a group of SMEs in collaboration with the Al-Ahsa Chamber of Commerce.

The kingdom eastern area is situated in the country east part which situated in the eastern part of the country which is extended between latitudes 29.3 degrees north and 23.3 degrees south. It is bounded to the east by a longitude 51 degrees and to the west by longitude 54 degrees. This

region has a triangular shape, with the Arabian Gulf forming its eastern boundary, the southern border adjacent to the Sultanate of Oman and the Republic of South Yemen, and the northern border adjacent to the Riyadh Region. The main urban centers include Hofuf and Al-Mubarraz, both of which rank among the ten largest cities in the Kingdom, along with four other significant cities and 22 villages. According to 2017 statistics, Al-Ahsa had the highest population in the Eastern Region, with approximately 1,041,863 residents. Seeking the major covering area, study focused on this area for the collection of data. The collected data was analyzed in the descriptive statistics using the SPSS software.

### Data Analysis

#### Distribution of the Sample

Table 2 predicted results show the demographic profile of the study. Among the respondents of the study, in the gender representations, there were 93% of owners were men and only 7% were women. This gender disparity reflects the relatively recent inclusion of women in the SME sector, which has been driven by women's empowerment initiatives under Vision 2030. This strategic policy aims to increase female participation in various economic sectors, including SMEs. Age distribution indicates that a substantial portion of SME owners (42%) are 40 years or younger, with an additional 27% aged 40 to less than 50 years. This youthfulness underscores the

sector's modernity and its capacity for development, as younger entrepreneurs tend to be more adaptable, innovative, and open to leveraging new business models and technologies. Furthermore, 59% of SME owners possess a university degree or higher, with 48% holding a bachelor's degree and 11% having postgraduate qualifications. These findings show that most of the respondents have master's degrees which shows SMES owners are well-educated and are engaged in innovations that can drive the growth and competitiveness of the SME sector.

Further findings show that SMEs represent 73% of the total enterprises, 15% reflect the service sector, 7 % represent the industrial sector, and the agricultural sector shows 5%. This is also a concentration that is aligned with the region of socio-economic context, where commercial enterprises are more feasible due to lower capital requirements and faster return on investment. The distribution of project age indicates that 89% of SMEs are less than 10 years old, with 48% of them operating for 6 to 10 years. s. The predominance of self-financing (63%) as the main source of funding for SMEs suggests a reliance on personal or family resources rather than formal financial institutions. However, only 21% of projects are bank-financed, while 8% receive support from government

funds and banks. These results show the need for greater awareness and utilization of the formal financial support system that could help to boost social and economic development.

Further findings show that the vast majority (88%) of SMEs are located in urban areas, reflecting the central role of urban centers in driving commercial and service-oriented enterprises. This urban concentration highlights the role of cities as hubs of economic activity and access to markets. Only 10% of SMEs are located in rural areas, and 2% in desert regions, which points to the need for targeted investment in rural development through incentives for agricultural and industrial enterprises. The marital status of SME owner's reveals that 78% are married, indicating a connection between entrepreneurship and family stability. SMEs play a crucial role in supporting family well-being by generating income to meet essential needs, such as healthcare, education, and housing. This connection aligns with the broader socio-economic contributions of SMEs to community well-being and national development. Together, these demographic characteristics highlight the growth potential of the SME sector, its role in economic diversification, and its alignment with national policy objectives. Above results are predicted in [Table 2](#)

**Table 2: Demographic Characteristics**

Demographic Variable	Category	Frequency	Percentage (%)
Gender	Male	93	93%
	Female	7	7%
Age	20 to less than 30	24	24%
	30 to less than 40	18	18%
	40 to less than 50	27	27%
	50 or more	31	31%
Project Type	Commercial	73	73%
	Services	15	15%
	Industrial	7	7%
	Agriculture	5	5%
Educational Qualification	General education (secondary or less)	28	28%
	Diploma	13	13%
	Bachelor's Degree	48	48%
	Postgraduate Degree	11	11%
Project Age	Less than 1 year	28	28%
	1 to 5 years	13	13%
	6 to 10 years	48	48%
	More than 10 years	11	11%
Marital Status	Married	78	78%
	Unmarried	22	22%
Residence Area	Urban (City)	88	88%
	Rural (Village)	10	10%
	Hijra (Desert)	2	2%
Type of Project Financing	Bank financing (private sector)	21	21%
	Self-financing (project owners)	63	63%
	Collective investment (crowdfunding)	4	4%
	Blended finance	4	4%
	Government funds & banks	8	8%

### ***The Role of Small and Medium Enterprises in Preserving the Environment***

The [Table 3](#) results shown the result of on impact SMEs on sustainability. These findings shown that SMEs played an important role to increase the sustainability of the organizations. Further results shown that majority of the respondents are on point of agreed and strongly agreed point with the statement that SMEs have mechanisms to preserve the environment, accounting for 95% (63%

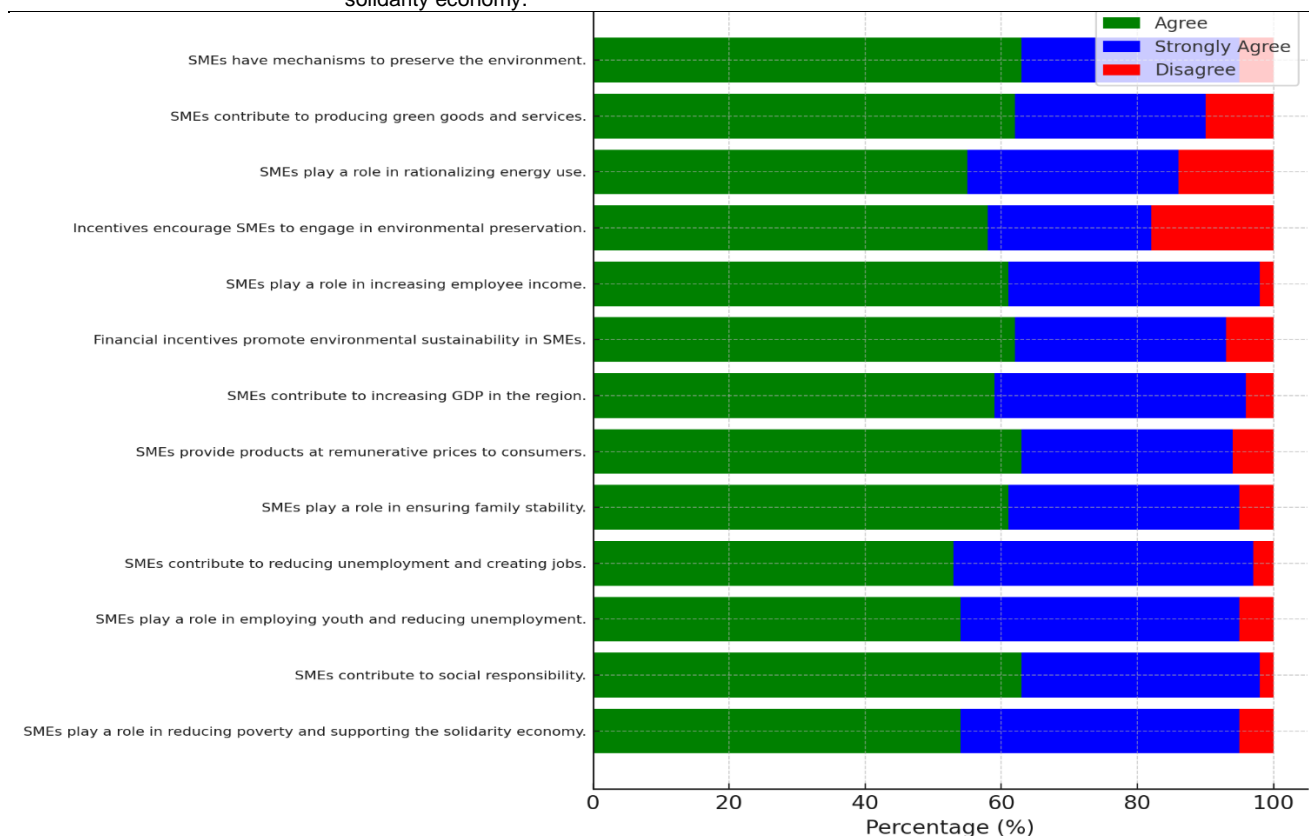
Agree, 32% Strongly Agree) of total responses. This suggests that SMEs are actively adopting environmentally friendly practices. A similar trend is observed in the production of green goods and services, where 90% of respondents (62% Agree, 28% Strongly Agree) affirmed the role of SMEs in green production. Moreover, 86% of respondents acknowledged that SMEs contribute to the rationalization of energy use, highlighting the growing awareness of energy efficiency within these enterprises. Further results also emphasized that SMEs also contribute

to the economic development. The findings shown that 98% of the respondents are agreed on point that SMEs play a role in increasing employee income, with 61% agreeing and 37% strongly agreeing. Additionally, 96% of respondents recognized the role of SMEs in providing products at remunerative prices, which reflects their contribution to consumer welfare. In terms of employment, 97% of respondents indicated that SMEs help reduce unemployment and create jobs, while 95% affirmed that SMEs contribute to youth employment. These responses indicate that SMEs are a vital source of employment, income generation, and overall economic development in their respective regions. Further, findings shown that SMES also plays in promoting the social welfare of the

people. The findings shown that respondents are tremendously which shown the role of SMEs in enhancing family stability (95%) and supporting social responsibility (98%). Further findings shown that contribution of the SMEs also playing an integral role in reduction of the poverty which shown 95% of respondents recognizing this role. The data suggests that SMEs are perceived as essential players in promoting social well-being and reducing poverty. These findings highlighted that SMEs playing an integral role in the sustainability from three perspectives environmental, social and economic development perspectives which is making a critical pillar of sustainable development in society. The above results are predicted in Following [Table 3](#) below,

**Table 3: The Role SMEs in Economic, Social, and Environmental Development**

Dimension	Question	Agree (Frequency)	Strongly Agree (Frequency)	Disagree (Frequency)	Total (Frequency)	Total (%)
<b>Environmental</b>	SMEs have mechanisms to preserve the environment.	63	32	5	100	100%
	SMEs contribute to producing green goods and services.	62	28	10	100	100%
	SMEs play a role in rationalizing energy use.	55	31	14	100	100%
	Incentives encourage SMEs to engage in environmental preservation.	58	24	18	100	100%
	Financial incentives promote environmental sustainability in SMEs.	62	31	7	100	100%
<b>Economic</b>	SMEs play a role in increasing employee income.	61	37	2	100	100%
	SMEs contribute to increasing GDP in the region.	59	37	4	100	100%
	SMEs provide products at remunerative prices to consumers.	63	31	6	100	100%
	SMEs play a role in ensuring family stability.	61	34	5	100	100%
	SMEs contribute to reducing unemployment and creating jobs.	53	44	3	100	100%
<b>Social</b>	SMEs play a role in employing youth and reducing unemployment.	54	41	5	100	100%
	SMEs contribute to social responsibility.	63	35	2	100	100%
	SMEs play a role in reducing poverty and supporting the solidarity economy.	54	41	5	100	100%



**Figure 1: Response distribution for SMEs contribution**

## Discussion

Small and Medium Enterprises (SMEs) play an important role in improving environmental, economic and social development in Saudi Arabia. The findings of this study provide valuable insights into how SMEs contribute to key areas of growth. This shown that SMEs played an integral role in protecting the environment which is promoting to the sustainability of any sector. Based on previous discussion, the study provides a comprehensive understanding of the role of SMEs in Saudi Arabia's goals of sustainability, economic diversification and the achievement of social welfare. The findings from the environmental perspectives shown that SMEs in the Saudi Arabia are becoming actively associated for the protection of the environment through the proper formulating the strategies which helps to the impact the natural resources of the organizations and country. Further results also shown that SMEs also playing an important in the formulation of the strategies for the management of the waste, recycling, and sustainable manufacturing practices. These measures are in line with global sustainable development trends and in line with Saudi Arabia's commitment to reduce its environmental footprint. Through adhering to environmental protection policies, SMEs contribute to reducing pollution, conserving natural resources, and supporting the broader goal of environmental sustainability. In addition, SMEs also play an integral role in the production of green products and services. SMEs in Saudi Arabia adopt environmentally friendly production methods, produce environmentally friendly products, and provide sustainable services. Increased awareness of climate change and growing demand for sustainable products have spurred the green shift. As consumers become more environmentally conscious, the market for green products continues to grow. These findings emphasize that SMEs play an important role in supporting these projects, producing environmentally friendly products, and ensuring sustainable products come to market. On the other hand, further results also highlighted that SMEs also play an important role in producing energy-efficient products like energy storage devices, energy efficiency management systems, and manufacturing efficiencies. By reducing energy consumption, SMEs not only reduce costs but also contribute to the country's broader goal of reducing its dependency. The above results are consistent with the following studies where they also found that SMEs play an integral role in the enhancement of sustainability of the organizations (Akande et al., 2023; Nick, 2007).

Further results show that SMEs also play an integral role in the enhancement of the economic development of the organization. The SMEs increase the environment of economic development in the context of employment, market competitiveness, and GDP contribution. The findings show that SMEs through providing job opportunities for individuals are increasing the opportunities for the Job which is reducing unemployment in Saudi Arabia. A stable income allows workers to fulfill their financial obligations, provide for their families, and

improve their quality of life. These contributions are important in a country like Saudi Arabia, where income stability plays an important role in promoting economic prosperity and family well-being. Further results show that SMEs also increase the culture of market competitiveness by providing proper products a competitive prices in the market. This is providing proper products and goods to the customers in the range of their affordable products. By maintaining stable prices, SMEs encourage consumer spending and support the local market, reducing their dependence on imports. The ability to supply at competitive prices reinforces the role of SMEs as key players in the local supply chain. This promotes the growth of the internal market and promotes economic freedom. Furthermore, SMEs enable small manufacturers and suppliers to compete with larger firms, creating a more balanced market structure. Furthermore, findings shown that SMEs also playing an integral role in increasing eh contribution in the GDP of the country which is considered to big contribution in economy after the oil sector. SMEs by contributing to local manufacturing, increased productivity and local resources suppliers supporting their role in GDP growth directly affects economic performance Production, sales, services etc. continue to grow through the ability to operate at sectors, which are critical to economic transformation Given the Saudi government's commitment to reduce oil dependency, the contribution of SMEs to GDP is critical to long-term economic growth.

Further results shown that SMEs also playing an integral role in creating economic diversification through providing the opportunities of entrepreneurship and development in their existing business. Because the SMEs increase the culture of entrepreneurship through enabling to the individuals to their own business which helps to create a new ideas. This entrepreneurial spirit is critical to building a dynamic and competitive economy. By facilitating innovation, SMEs support innovation and technological development. Their role in economic transformation is critical to reducing the country's dependence on oil exports and promoting the growth of a knowledge-based economy. The findings highlight how SMEs provide diversification schemes, encourage local production, and contribute to a highly resilient economy. On the other hand, results predicted that SMEs also played an important role in the enhancement of social welfare of people in Saudi Arabia. These findings show that SMEs played an integral role in the stability of the family by providing proper employment opportunities and a stable source of income. The findings also indicated that SMEs also increase the culture of family well-being and stability. When individuals are employed, they are better able to meet family needs such as education, health care, and housing. Strong family group. These findings show that SMEs played an important role in the enhancement of economic development. The results are supported by the findings of (Atichasari & Marfu, 2023; Manzoor et al., 2021), who also found that SMEs played a significant role in increasing economic deployment.

Further results show that SMEs are also important for the social sustainability of organizations and individuals. The



results show that SMEs significantly contribute to the social welfare of the economy by providing social responsibility actions. The findings show that SMEs in Arabia are actively involved in CSR activities that provide benefits to local communities and improve society's welfare. These projects include supporting local charities, funding community development projects, and participating in environmental protection activities. Through CSR, SMEs foster strong ties with local communities, enhance their public image, and build trust with stakeholders. Such measures are important in meeting social challenges and promoting community well-being. The role of socially responsible SMEs is also crucial to achieving the social sustainability goals, as they increase the resilience of communities, and encourage and promote ethical business practices and a culture of sustainability. On the other hand, further results show that SMEs play an integral role in the reduction of poverty and are significantly contributing to social development. These findings emphasize that SMEs play an integral role in creating jobs and encouraging entrepreneurship, SMEs provide economic opportunities for marginalized and low-income individuals. The Solidarity Economy model, which emphasizes community-based support, is reinforced by the role of SMEs. SMEs support the livelihoods of low-income groups by employing people from the community and promoting local production. This, in turn, contributes to poverty reduction and economic inclusion, creating income opportunities for vulnerable groups. The role of SMEs in poverty reduction in Saudi Arabia is critical, as it is in line with the Kingdom's broader efforts to promote inclusive growth and reduce socio-economic inequalities. The above results are line with previous studies where they found that (Belas et al., 2021; Esposito De Falco et al., 2021; Malesios et al., 2021). The study findings highlighted that SMEs playing a crucial role in increasing the sustainability of the organization and individuals. These findings emphasized the important contribution of SMEs in the sustainability which is supporting to the sustainable development goal of 2030 vision of Saudi Arabia.

### Implications and Future Directions

This study is the first to examine the role of SMEs in promoting environmental, economic and social development in Saudi Arabia and provides important theoretical contributions to how businesses and manufacturing also play central role in the environment challenges the traditional view that environmental efforts are primarily confined to large corporations and governments. The study also advances the theoretical model of economic growth as SMEs contribute not only to GDP growth but also to fair value mechanisms, increasing labor income, which is key to growing the economic fabric of the country and also, the role of SMEs in social development. Expands understanding, their activities. Family stability, poverty reduction, youth employment, and social responsibility are related. This contribution enables the theoretical framework for SMEs and sustainable development, especially in developing countries, and is aligned with Saudi Arabia's Sustainable

Development Goals (SDGs). The study helps to execute gaps in the academic literature on how SMEs have been able to achieve both economic growth and social equity and could become major players, positioning them as key actors in shaping the country's sustainable future. The study could also help the researchers to conduct their research with the extended contributions to know the changes in findings.

From a practical perspective, the study provides actionable insights for policymakers, industry entrepreneurs, and SME managers in Saudi Arabia. It argues that government agencies such as the Saudi Ministry of Environment and Monsha'at should support SMEs by promoting green practices, and providing financial incentives and favorable market conditions for sustainable growth. Policymakers can support SMEs through targeted policies, access to green technologies and better financing mechanisms to enhance their contribution to economic growth while enforcing non-consumptive practices to encourage the environment. Furthermore, SMEs through corporate social responsibility (CSR) programs, youth employment programs, and family support programs could also be encouraged to enhance social welfare, and contribute to national goals such as reducing unemployment and poverty etc. These practical outcomes identify policy and support mechanisms that can lead to sustainable development Contributions. By integrating environmental sustainability into the business plans of SMEs, the government can encourage more robustness and promote economic stability, social cohesion, and equitable development. This study provides a roadmap for SMEs to not only contribute to the economic development of the region but also to actively participate in a sustainable, socially responsible, and environmentally responsible future for Saudi Arabia.

The study still has various gaps that could be tested in future studies. Firstly, the study was limited to SMEs and ignored panel data or longitudinal studies which limited the scope of the study. Therefore, future studies could explore panel data and add more than one country to know the variations in the findings. Secondly, the study was also limited to descriptive research and ignored the regression model which limited the scope of the study. Further research could be explored on the regression model to test the cause and effect of the variables. Thirdly, the study was only conducted on a survey instruments while ignoring the interview method which is qualitative. Further research could be explored on quantitative and qualitative mix study to increase the scope of the study.

### Conclusion

Small and medium enterprises in Saudi Arabia playing an important role in the development economy from both social and economic perspectives which could derive the economic development. This could support environmental preservation through CSR, green production, and energy conservation. SMEs enhance financial income, living standards, and essential sectors like agriculture and services. Furthermore, they reduce unemployment, alleviate poverty, and foster a solidarity-based economy.



Therefore, the study aimed to test the role of SMEs in sustainability. For this purpose, data was collected from 100 owners of SMEs using a survey questionnaire with primary data from the Al-Ahsa region in the Kingdom of Saudi Arabia to investigate the various opportunities provided by SMEs in sustainability. Descriptive results show that SMEs play an integral role in the development of three sustainability practices namely environmental, social and governance perspectives in Saudi Arabia. The results academically imply that SMEs in Saudi Arabia becomes a key driver of sustainable development through promoting environmental, social, and governance (ESG) practices which is highlighting their strategic role in advancing sustainability structures. The results of the study will be significant to practitioners and policymakers, the SME sector, SME stakeholders, and other researchers in the field. The study also recommended taking strategies and policies for SMEs in KSA with specific reference to the Al-Ahsa region could increase the development of economic and competitive advantage in the global village. The research limitations and future directions were also tested at the end of the study.

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