



ROLE OF E-COMMERCE IN PROMOTING RURAL MICRO, SMALL AND MEDIUM ENTERPRISES (MSMEs) IN DAKSHINA KANNADA DISTRICT

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ABSTRACT

In the era of globalization and rapid digital transformation, e-commerce has emerged as a significant driver of business expansion by enabling producers and sellers to access markets beyond geographical boundaries. Micro, Small and Medium Enterprises (MSMEs), which contribute nearly 40 percent to India's GDP and rank as the second-largest source of employment after agriculture, play a pivotal role in promoting inclusive economic growth. In Karnataka, particularly in Dakshina Kannada district, MSMEs constitute the backbone of rural industrialization and employment generation. This study examines the role of e-commerce in promoting rural MSMEs in Dakshina Kannada district and further analyzes how digital platforms enhance market access, improve price realization, encourage women-led entrepreneurship, and foster financial inclusion. The major findings indicate that e-commerce has significantly expanded market reach, strengthened rural producer networks, and generated new employment opportunities through digital engagement and supply chain integration.

The study concludes that e-commerce represents a transformative instrument for rural economic development in Dakshina Kannada. With coordinated support from government agencies, digital platforms, and local institutions, rural MSMEs can leverage digital markets to achieve sustainable growth, enhance competitiveness, and contribute more effectively to regional and state economic development.

KEY WORDS: E-commerce, MSMEs, Dakshina Kannada, and Karnataka.

1. INTRODUCTION

In the globalisation era, from the last decade, e-commerce has become a major driver of business expansion, offering digital marketplaces where producers and sellers can reach consumers beyond their local geography. Micro, Small and Medium Enterprises (MSMEs) are a cornerstone of India's economy. The contribution of MSME sector to the GDP of the country is about 40% and the MSME sector is the 2nd largest employer after agriculture (Karnataka Economic Survey, 2021-22). Many MSMEs are located in rural and semi-urban areas, where they support livelihoods, local production (e.g., handicrafts, agri-products), and traditional crafts.

Karnataka is the home for more than 8.5 lakh Micro, Small and Medium Enterprises (MSMEs) and provided employment to over 55 lakh people with a substantial portion in smaller towns and rural zones; In Karnataka over the last 5 years, about Rs. 4 lakh crores have been invested and the state stands in 5th place in the country in industrial growth (Karnataka Economic Survey-2021-22). MSMEs play an important role in economic growth by fostering entrepreneurship and generating large employment opportunities. MSMEs provide support to large firms as suppliers of input goods and services, thereby contributing to industrial development. These enterprises play an essential role in Karnataka's industrial sector, contributing significantly to the state's economy. As of December 2024, a total of 17.48 lakh MSME units have been registered on the Udyam portal, comprising 17.09 lakh Micro Enterprises, 35,906 Small Enterprises, and 2,941 Medium Enterprises. These registrations have collectively generated employment opportunities for 167.73 lakh individuals. women also run a noteworthy share of these enterprises, especially in sectors such as food processing, garment making, machine parts, and farm-related goods.

While initially concentrated in urban hubs, e-commerce's influence is increasingly felt in rural districts such as Dakshina Kannada in Karnataka, where Micro, Small, and Medium Enterprises (MSMEs) form the backbone of local economies. However, these enterprises often face limited market access, infrastructure gaps, low digital



adoption, and skill constraints challenges, this would give more scope for the development of e-commerce in the present situation so as to overcome these challenges.

This study explores how digital platforms are enabling rural MSMEs in Dakshina Kannada district to expand markets, increase incomes, and integrate into broader supply chains-thereby boosting employment and socio-economic development.

2. OBJECTIVES OF THE STUDY

The main aims of this study are as follows:

1. To define e-commerce and rural MSMEs with a regional focus.
2. To analyze the role and impact of e-commerce on rural MSMEs in Dakshina Kannada.
3. To examine the opportunities, challenges, and district-level initiatives related to digital market access.
4. To suggest practical recommendations for strengthening the adoption of digital platforms by rural MSMEs.

3. SOURCES OF DATA AND INFORMATION

This study is mainly based upon secondary data and information. The relevant data have been collected from various sources such as:

- District Industrial Profile of Dakshina Kannada, Ministry of MSMEs, Govt. of India.
- Dakshina Kannada District at a Glance: 2022-23.
- Economic Survey of Karnataka Reports (2017-18 to 2024-25).
- Books, journals, research articles, magazines, and official websites of Govt. Departments & Ministries.

Internet sources have also been extensively used for collecting updated statistical and policy-related information.

4. CONCEPTUAL FRAMEWORK

• E-commerce

Digital retail platforms, often referred to as “E-commerce platforms”, Have alter the way consumers shop and business operate. These platforms allow people and companies to buy and sell products and services online, Eliminating the need for a physical storefront. The emergence of these platforms has been propelled by technical advancements, heightened internet and smartphone accessibility, changing consumer behaviours, and Favourable governmental policies.

In India, Platforms like Amazon India, Flipkart, Myntra, Ajo, Snapdeal, Nykaa and Meesho have revolutionised the retail landscape. From groceries to electronics, clothes to medicines, practically every retail landscape is now accessible online, providing customers with unparalleled accessibility and variety.

➤ Factors Contributing to the Increase of Digital Retail Platforms:

a. Internet and Smartphone Penetration:

India has the second largest internet user base globally, over 850 million people and continuous to grow. The economic affordability of smartphones and reduced data costs, facilitated by telecom providers have expanded digital connectivity to rural towns and villages. This digital connectivity has democratised e-commerce by enabling even novice users to engage in online shopping.

b. Growth of Logistics and Delivery Services:

A strong logistics infrastructure including third-party delivery networks and regional warehouses has facilitated platforms in providing same day or next day delivery, even in non-metropolitan regions.

c. Digital Payment Integration:

Digital payment systems, including UPI, RuPay, Bharat QR & mobile wallets have streamlined the checkout process. Secure instantaneous transactions together with features such as EMI options, ‘Buy Now Pay Later’ (BNPL) and subscription-based payments have enhanced the user experience and fostered confidence in online shopping.

d. COVID-19 Pandemic Acceleration:

The lockdowns imposed during the covid-19 pandemic significantly accelerated digital adoption. Online grocery shopping, telemedicine, e-pharmacies and home delivery of necessities saw significant expansion.

e. User-friendly Interfaces and Personalisation:

Modern platforms such as Flipkart, Amazon, Myntra and BigBasket use user-friendly mobile applications with regional language support, voice search capabilities and AI-driven recommendations. Personalisation



algorithms adjust information, pricing and offers based on individual user behaviour enhancing engagement and customer satisfaction.

f. Government Support and Digital India Initiative:

Initiatives like digital India, Pradhan Mantri Gramin Digital Saksharata Abhiyan (PMGDISHA) and the creation of Common Service Centres have significantly contributed to digital literacy and internet accessibility. The Open Network for Digital Commerce (ONDC) is a significant initiative to democratise e-commerce and empower small businesses.

g. Rise of Regional and Vernacular Platforms:

Startups such as Meesho, JioMart and ShopClues have focused on Tier II-IV cities by providing items in local languages, affordable goods and convenient return policies. These platforms are designed for the price-sensitive and culturally varied Indian customer base.

• **Rural MSMEs**

MSMEs are businesses with defined investment and turnover criteria under Indian policy, including manufacturing, service, and trade enterprises. In rural areas, MSMEs include agri-units, food processors, artisans, craft producers, and small household businesses.

E-commerce connects these rural producers to urban or national markets, creating new economic opportunities and employment.

5. RURAL MSME LANDSCAPE IN DAKSHINA KANNADA

Dakshina Kannada, a coastal district of Karnataka, combines both urban centres like Mangaluru and a broad rural hinterland with agriculture, fisheries, food processing, handicrafts, and MSME clusters. In Dakshina Kannada district, traditional industries such as tile manufacturing, beedi rolling, cashew kernel processing, coconut oil extraction, and food and beverage production have historically maintained a significant presence. In addition, manufacturing activities involving rubber and plastic goods, wooden products, and related items have contributed to the district's industrial profile. However, the tile industry has experienced a steady decline due to the scarcity of quality clay and firewood, coupled with labour shortages and the growing public preference for concrete structures in the modern era. The beedi rolling industry continues to function as one of the principal home-based industries in the district. Furthermore, the establishment of the sea port at Mangalore in the 1970s accelerated the pace of industrialization in the region. The emergence of large and mega industrial units has subsequently stimulated the growth of numerous micro and small enterprises across the district.

Traditional local enterprises often struggled with limited market reach, informal channels, and price volatility. E-commerce provides these enterprises broader visibility and direct access to customers.

5.1: Status of Existing Industries in the Dakshina Kannada District:

There are 24,072 registered MSMEs units with total investment of 894.53 crores, employing 1,06,148 persons in the district. There are 17 large scale industries and 3 Mega industries have been operating with wide production and marketing networks which absorbs Rs.10,589.81 crores investment and offers only about 7,294 employment to the people and it is shown in Table-1. The district exhibits a dual industrial structure, characterized by a strong presence of Micro, Small and Medium Enterprises (MSMEs) alongside a limited number of large and mega industries. Moreover, MSMEs provide nearly 93.6% of total industrial employment, whereas large industries provide only about 6.4% employment, despite massive investment which accounts over 92% of total industrial investment. MSMEs generate high employment relative to investment, showing strong labour absorption capacity. MSMEs are the backbone of employment generation in the district. They promote inclusive growth, rural industrialization, and entrepreneurship. Lower capital intensity makes MSMEs more suitable for decentralized development.

Table-1: Industry at a Glance in Dakshina Kannada

Sl. No	Particulars	No. of Units
1	Registered MSMEs	24,072
2	Large & Mega Scale Industrial Units	20
3	Total Employed in MSMEs	1,06,148
4	Total Employed in Large & Mega Industries	7,294
4	No. of Industrial Area	07
5	No. of Industrial Estate	06
6	Total Investment in MSMEs (Rs. in Lakhs)	89453
7	Total Investment in Large & Mega Scale Industries (Rs. in Crores)	10,589.81

(Source: DIC, Mangalore. As on 31-03-2016)

Table-2: Year-wise Trend of MSMEs Units Registered under Udyam Portal in Dakshina Kannada District (From 2020-21 to 2023-24)

Year	Micro	Small	Medium	Total MSMEs	Total Employment
2020-21	2940	12	---	2952	21779
2021-22	25420	727	41	26188	190369
2022-23	48356	1178	100	49634	333027
2023-24	68502	1367	106	69975	590657

(Source: Karnataka Economic Survey Reports:2020-21 to 2024-25)

The above Table-2; clearly reveals that, a remarkable expansion of MSMEs in Dakshina Kannada district over the four-year period. The number of MSMEs increased from 2,952 units in 2020–21 to 69,975 units in 2023–24. This represents an extraordinary rise, particularly after 2020–21. The most significant surge occurred between 2020–21 and 2021–22, indicating post-pandemic recovery and possibly improved Udyam registration. However, MSME sector offers more employment to the people in the region which increased from 21,779 persons in 2020–21 to 5,90,657 persons in 2023–24. This represents nearly 27 times growth in employment within four years. The sharp rise in 2023–24 indicates large-scale job creation through MSME expansion.

➤ Employment Elasticity

The employment growth is highly elastic relative to the increase in number of enterprises, suggesting:

- Labour-intensive nature of micro and small units.
- Growth of service-oriented and manufacturing MSMEs.
- Improved formal registration leading to better employment reporting.

6. ROLE OF E-COMMERCE IN PROMOTING RURAL MSMEs

1. Increased Market Access & Visibility

E-commerce platforms allow rural MSMEs to showcase their products beyond local markets-to statewide, national, and even global audiences. This *market expansion* is crucial for small enterprises that previously relied on local trade. Digital storefronts and listing tools make it possible for small producers to receive orders directly online.

2. Inclusion of Women-Led Rural Enterprises

Women's Self-Help Groups (SHGs) in Dakshina Kannada are being integrated into e-commerce markets. For example, food products made by SHG members are now being prepared for online sale through digital platforms after branding and capacity-building initiatives led by local authorities and rural livelihood missions.

This helps rural women transition from subsistence activities to entrepreneurial ventures.

3. Expansion of Rural Producer Networks

Digital platforms are facilitating farmer producer companies and collectives to engage with e-commerce ecosystems. For example, Gramajanya Farmers' Producer Company in Puttur saw a significant surge in online orders through the ONDC MyStore platform after being highlighted publicly, signalling how online presence directly impacts demand.

4. Cost Efficiency and Ease of Entry

Starting an online business requires comparatively less expenditure in contrast to launching a physical retail outlet; E-commerce systems provide seller-centric onboarding procedures, including product listing assistance, logistics integration & training.

5. Digital Empowerment and Skill Development

Digital retail has facilitated the digital empowerment of MSMEs by equipping them with tools, platforms and training for online operations. This has facilitated the narrowing of the digital divide and fostered entrepreneurship across India.

6. Financial inclusion and Credit Access

Engaging in E-commerce enhances the financial transparency of MSMEs by creating digital transaction records and sales histories. These data may be used by banks and fintech firms to evaluate creditworthiness and provide loans without conventional collateral.

7. Boost to Innovation and Niche Markets

MSMEs frequently function in specialised marketplaces, providing distinctive or culturally relevant items that attract particular consumer demographics. E-commerce allows firms to identify and cater to their ideal customers through focused marketing and customised buying experiences.



8. Contribution to Export Growth

E-commerce is progressively serving as a mechanism for export enhancement, enabling MSMEs to market their products internationally with little expense. This has enabled Indian MSMEs to enhance their presence in markets, contributing to increased export revenue and global brand recognition.

9. Support from Government & Local Agencies

Government-linked programs, such as market access training, packaging support, and rural digital literacy initiatives, are helping MSMEs adopt e-commerce. Digital onboarding, workshops, and collaborations with platform providers offer pathways for small producers to list and sell online, thereby earning higher income and creating jobs.

7. BENEFITS FOR RURAL MSMEs IN DAKSHINA KANNADA

Benefit	Impact
Wider Market Reach	Rural products find customers beyond local markets
Better Price Discovery	Less dependence on intermediaries
Employment Generation	New tasks like order fulfilment, packaging, marketing
Skill Development	Digital literacy increases through platform use

8. CHALLENGES IN ADOPTION OF E-COMMERCE

Despite opportunities, several obstacles persist:

1. Digital Literacy & Awareness

Many rural entrepreneurs lack the digital skills required for online selling, platform navigation, and digital marketing. Training programs are needed to bridge this gap.

2. Infrastructure and Logistics

Reliable internet access and logistics for last-mile delivery remain challenges in remote gram panchayats. Although platforms and postal networks are expanding, delivery costs and logistics coordination can hinder seamless e-commerce fulfilment.

3. Trust & Payment Issues

Rural MSMEs may hesitate to adopt digital payments and online financial transactions due to trust concerns, limited financial literacy, and fear of fraud.

9. MAJOR RECOMMENDATIONS

To enhance the role of e-commerce for rural MSMEs in Dakshina Kannada: following recommendations have been made;

- Digital Training Programs** – Conduct regular skill-building workshops in rural hubs to teach digital marketing, listing creation, and online customer service.
- Infrastructure Enhancement** – Improve rural broadband connectivity and mobile internet quality to ensure reliable e-commerce access.
- Collaborations with E-commerce Platforms** – Partnerships between district bodies and online marketplaces can reduce onboarding costs and provide support services.
- Local Logistics Integration** – Strengthen logistics solutions through collaboration with postal networks and local delivery partners.
- Promotion of Local Brands** – District export and marketing campaigns should highlight unique rural products to wider audiences.

10. CONCLUSION

The MSME sector in Dakshina Kannada district has experienced rapid and transformative growth between 2020–21 and 2023–24. The dominance of micro enterprises reflects a strong base of grassroots entrepreneurship, while the steady rise of small and medium enterprises indicates industrial maturation. The significant increase in employment highlights MSMEs as a critical pillar of inclusive economic development in the district.

E-commerce provides a transformative avenue for rural MSMEs in Dakshina Kannada to expand markets, increase incomes, and create employment opportunities. By addressing infrastructure, literacy, and trust challenges, rural producers can leverage digital platforms to compete nationally and sustainably grow their businesses. With targeted interventions from government bodies, local organisations, and digital platforms, e-commerce can become a cornerstone of rural economic development in the district.



REFERENCES

1. Agarwal, S., & Prasad, J. (2018). Role of e-commerce in MSME development in India. *International Journal of Research in Economics and Social Sciences*, 8(3), pp 45-52.
2. Kumar, R., & Ayedee, N. (2021). Technology adoption in MSMEs and its impact on performance. *Journal of Small Business and Enterprise Development*, 28(6), pp 1003-1022*. <https://doi.org/10.xxxx/jsbed.xxxx>.
3. Chaffey, D. (2019). *Digital marketing: Strategy, implementation and practice (7th ed.)*. Pearson.
4. Jagadisha T (2025), *Dynamics of Digital Economy in India*, AG Publishing House, Bhopal, 114-119.
5. India Brand Equity Foundation. (2023). E-commerce industry in India. <https://ibef.org>
6. Confederation of Indian Industry. (2022). Digital transformation of MSMEs in India. CII Publications.
7. *District Industrial Profile of Dakshina Kannada (2016)*, Ministry of MSME, Govt. of India.
8. Ministry of Micro, Small and Medium Enterprises. (2023). Annual report 2022-23. Government of India. <https://msme.gov.in>
9. News on SHG food products in Dakshina Kannada being prepared for online sales, *Times of India* (2022). *The Times of India*
10. *Economic Survey of Karnataka reports*, GOK.