CARISCA Centre for Applied Research and Innovation in Supply Chain – Africa

RESEARCH REPORT

June 2021 - October 2025



Introduction

This report provides information on the topics, volume, and quality of CARISCA's research publications since its inception (2021–2025). These publications are defined as papers published in peer-reviewed outlets (journals and edited book chapters) by affiliates and/or direct beneficiaries of CARISCA. The affiliates include the Center's research faculty, as well as the faculty and research students of the Supply Chain and Information Systems (SCIS) department of KNUST, who were the primary targets of, and directly involved in, CARISCA's research and publication capacity development initiatives - many of the Center's research faculty are also members of the SCIS department.

The 2021–2024 data were drawn from the Center's regular monitoring and evaluation activities, which required the CARISCA team

(i.e., faculty and affiliates) to report their research publications and provide relevant identifiers (e.g., title and DOI). The 2025 data, covering the period from the last monitoring and evaluation exercise in October 2024 to October 1, 2025, were compiled manually by the Center's Research Lead. These data were obtained from the Google Scholar pages of the Center team, with checks on publication dates and adjustments to avoid double-counting, as some publications were co-authored by two or more CARISCA team members. The 2025 data was then shared with the monitoring and evaluation team for verification before being analyzed together with the 2021–2024 data.

The remainder of this report is organized into four sections: the first covers the subject scope of the publications; the second addresses the volume of publications; the third focuses on their quality; and the final is a concluding remark.





2 Research Themes

An analysis of the publication titles suggests nine broad research themes of interest to CARISCA including: (1) general logistics and supply chain, (2) environmental sustainability, (3) disruptions, risks, and resilience, (4) technology, (5) entrepreneurship, (6) agriculture and agribusiness, (7) marketing, (8) institutional contexts and management, and (9) healthcare and pharmacy. Exemplary topics under each theme are shown in Figure 1.

The **first theme** focuses on economic performance outcomes and conventional topics in logistics and supply chain management, such as collaboration, integration, information sharing, supplier involvement, quality management, and competitive priorities. The second theme addresses environmental sustainability in supply chains, including green manufacturing, sustainable products, green purchasing, eco-innovation, reverse logistics, and the circular economy. The third theme concerns how firms manage disruptions and risks in supply chains to build resilience. The fourth theme examines both the application of basic and advanced technologies in supply chains, with publications addressing issues such as technology adoption, digitalization, and artificial intelligence.

The **fifth theme** covers entrepreneurship and innovation within and beyond supply chains. These studies investigate entrepreneurial and innovation capabilities and orientations, and their related outcomes. The **sixth theme** addresses agricultural and agribusiness issues, such as storage, food safety, technology adoption, and value chains, which have broad implications for logistics and supply chain management. The **seventh theme** highlights marketing and customer management, including customer experience and value, and their

interfaces with logistics and supply chain management. The **eighth theme** examines the institutional contexts of logistics and supply chain management, the governance of such contexts, and the competences or practices required to navigate them. The **ninth theme** addresses healthcare and pharmaceutical issues, including drugs and therapeutics, healthcare technologies (e.g., drones, digitality), agri-health and eco-friendly practices, and food safety.

Overall, these themes demonstrate the diversity and interdisciplinary scope of CARISCA's research outputs and publications.

3 Publication Volume

The Center has published 140 articles to date: 25 in 2021, 21 in 2022, 17 in 2023, 30 in 2024, and 47 in 2025. The last two years (2024–2025) reflect a steady increase in publication output, rising from an average of 21 articles per year between 2021 and 2023 to an average of 38.5 articles between 2024 and 2025, representing an 83.3 percent growth.

To contextualize these outputs, it is essential to reflect on the yearly targets initially set based on the CARISCA team's potential, and subsequently revised in Years 4 and 6. The original target was three publications per year for the first three years, which was revised upward to six in the fourth year, and then revised downward to three in the sixth year, primarily due to disruptions associated with the change in CARISCA's research funding source (i.e., USAID). A comparison of these targets with the actual publication record indicates that CARISCA has substantially exceeded its expected capacity to produce high-impact research outputs.

Specific and contextualized logistics and supply chain topics

Disruptions, risks, and resilience topics

- Disruption orientation
- Flexibility
- Attention
- Improvisation
- · Managerial interpretations
- · Strategies (e.g., buffers and bridges)
- Risk management
- Humanitarian operations

Environmental sustainability topics

- · Green production/manufacturing
- Green products
- Green innovations
- Green purchasing
- Circular economy
- Reverse logistics
- End-of-life management

General logistics and supply chain topics

- Performance (e.g., financial, market)
- Integration, collaboration, supplier involvement
- Competitive priorities (e.g., efficiency, responsiveness, flexibility)
- · Relational assets (e.g., trust, commitment)
- Quality management
- Procurement audit
- Strategic purchasing (e.g., purchasing recognition)



Technology topics

- Electronic product adoption (e.g., mobile phones, self-services, drones)
- Digitalization
- Artificial intelligence
- Gamification

Institutional contexts and management

- · Political interference
- Institutional support
- Political relationships
- Governance mechanisms
- Stakeholder engagement

Entrepreneurship topics

- Entrepreneurial and innovation capabilities
- Innovation (e.g., social, business model, product, and process innovations)
- Strategic orientations (e.g., innovation, learning, and entrepreneurial orientations)
- Entrepreneurial wellbeing

Marketing topics

- Marketing capability
- Customer integration
- Customer value
- · Customer experiences
- Brand awareness
- · Word-of-mouth behavior

Agriculture and agribusiness topics

- Storage
- Pest and disease management
- · Value chains
- Food trade
- Digitalization
- Safety practices
- Postharvest (e.g., loss reduction)

Healthcare and pharmaceutical topics

- Neuropharmacology and phytochemical therapeutics
- Experimental pharmacology and drug discovery models
- · Digital Health and Genomic Medicine
- Healthcare technology and drone-based delivery systems
- Food safety and public health
- Agri-health intersections (pesticides, eco-friendly practices))

Cross-disciplinary topics



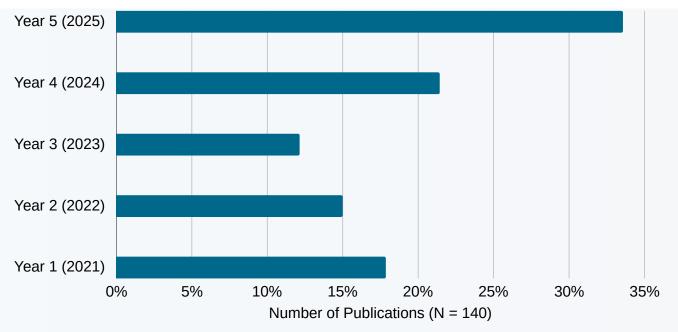
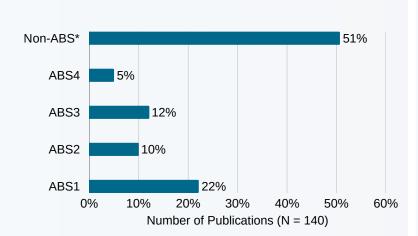
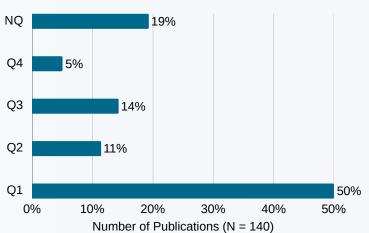


Figure 2. Publications by year



Note: * Non-ABS includes all publications that were not ranked by ABS because they are either not related to business and management or were book chapters.

Figure 3. Publications appearing in ABS journals



Note: NQ represents publications not ranked by SJR; They are book chapters or articles not indexed in SJR.

Figure 4. Publications appearing in SJR journals

4 Publication Quality

To assess the quality of the Center's research outputs, we considered internationally recognized metrics: SJR and ABS. Figures 3 and 4 show publications in ABS and SJR journals, respectively. As shown in Figure 4, 49% of the publications appeared in ABSranked journals (business and managementrelated journals). The majority of the non-ABS publications were in Scopus-indexed journals. Specifically, seven publications appeared in ABS4 journals (one of which was an ABS4* publication), 17 in ABS3 journals, 14 in ABS2 journals, and 31 in ABS1 journals. Also, as shown in Figure 4, 50% of the Center's publications appeared in SJR Q1 journals, indicating that the CARISCA team was able to publish the majority of its research outputs in the top 25% of prestigious journals. These results confirm that the majority of CARISCA research publications meet high standards recognized by multiple international journal quality systems.

5 Conclusion

This document has offered insights into CARISCA research publications from June 2021 to October 2025. It highlighted nine themes that the publications focus on, extending beyond general logistics and supply chain management topics to other disciplines, such as entrepreneurship, marketing, healthcare and pharmacy, and agriculture and agribusiness. In all, the Center has published 140 peer-reviewed works. About half of the publications appeared in top 25% prestige journals or ABS-ranked journals.

In conclusion, this report shows that, in its first five years, CARISCA's research activities through capacity development and the provision of necessary funding have produced commendable research outputs in both quantity and quality. The volume of output far exceeds targets, and the quality levels indicate that the CARISCA team largely possesses the necessary human capacity to conduct research and publish in key academic journal outlets.

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¹ First was the SCImago Journal Rank (SJR), which measures a journal's prestige based on both the number of citations it receives and the prestige of the journals from which those citations originate. SJR classifies journals into four quartiles: Q1 represents the top 25% of journals (highest prestige), Q2 the next 25%, Q3 the following 25%, and Q4 the bottom 25%. Next is the Chartered Association of Business Schools (ABS), which ranks journals in business, management, and related fields based on multiple criteria, including expert reviews, journal citations, and impact indices (e.g., SJR). ABS classifies journals into five categories: ABS4* (journals of distinction), ABS4 (best executed), ABS3 (well executed and highly regarded), ABS2 (acceptable standard), and ABS1 (modest standard).