Journal of Environment and Sustainable Development

Book Review

https://doi.org/10.55921/MFEW2818

MOHAMED IRFAAN ALI (2025). ACHIEVING GLOBAL FOOD SECURITY. THE CARIBBEAN EXPERIENCE AND BEYOND. SINGAPORE: WORLD SCIENTIFIC PUBLISHING.

Received: 10 June 2025

Vashti Singh

Published: 30 September 2025

Accepted: 15 August 2025

Abstract

Achieving Global Food Security. The Caribbean Experience and Beyond is authored by the President of the Co-operative Republic of Guyana, Dr. Mohamed Irfaan Ali. The book makes a timely and distinctive contribution to intensify efforts towards the "Zero Hunger" United Nations Sustainable Development Goal (SDG) 2 by 2030. This erudite work consisting of six interrelated chapters guides regional and global leaders in harnessing their collaborative potential to make agri-food systems more efficient, inclusive, resilient and sustainable. Chapter One briefly introduces the ordeal of global hunger (pp. 1-2); Chapter Two presents the global food security crisis (pp. 3-9); Chapter Three provides a focused analysis at the regional level (pp. 11-22) and Chapter 4 deepens the analysis from a country-level perspective (pp. 23-79). Policy recommendations to address the current regional food crisis are underscored in Chapter 5 (pp.81-100). Immediate action is deemed imperative for a Caribbean Community (CARICOM) cross-border agri-food investment Strategy and the establishment of a regional agro-tech campus. Hence, a key recommendation is Research and Development to eliminate knowledge barriers, create new technologies and develop environmentally resilient islands that can withstand challenges of food insecurity across the region. Chapter 6 shares some of the works already in the pipeline in Guyana and the way forward (pp. 101-112). Dr. Ali's book convincingly illustrates that amidst initiatives for national food production, human security and sustainable development, leaders can leverage technology for effective communication and stay connected with each other to end the global hunger crisis.

Keyword: Global food security, Inclusive, Resilient, Sustainable

^{1*} Department of Research and Graduate Studies, University of Guyana,

^{*}Corresponding author:

Book Review

Sustainable The United **Nations** Development Goal (SDG) 2 was formulated in 2015 with a focus on policies, legislation and interventions to ensure all people have access to safe, nutritious and sufficient food by 2030. Yet towards the end of the 21st century first quarter, undernourishment continued to increase globally. The annual report (2024) emerging from context of the G20 Global Alliance against Hunger and Poverty Task Force Ministerial Meeting in Brazil, admonished that the world is far behind in achieving SDG 2. According to the Food and Agriculture Organization of the United Nations et al (ibid), globally trends varied considerably: the percentage of the population grappling with hunger increased in Africa (20.4 percent), remained stable in Asia (8.1 percent) but presented a serious challenge as the accommodates over half of the people facing hunger worldwide —and indicated progress in Latin America (6.2 percent). From 2022 to 2023, hunger intensified in Western Asia, the Caribbean, and most African subregions. Hence, it is imperative to combat stagnation in the progress of global food security.

The book, Achieving Global Food Security: The Caribbean Experience and Beyond (2025) authored by the President of the Cooperative Republic of Guyana, His Excellency, Dr. Mohamed Irfaan Ali makes a timely and profound contribution to accelerate the achievement of Zero Hunger, as outlined in (SDG) 2. In the global context of a humanitarian call to action, the book highlights that food insecurity remains a critical challenge to nations of the Global South, including the Caribbean and its many Small Island Developing States (SIDS).

Through a powerful blend of the president's focus on leadership responsibility and practical concerns for human survival, the book commands the attention of world leaders and their governments to transform agri-food systems by making them more

efficient, inclusive, resilient and sustainable. Beyond that, the book significantly impacts the social responsibility of diverse professions, including agriculturists, environmentalists, scientists, technologists, small farmers, entrepreneurs, teachers and students. spanning across international organisations to every ordinary citizen around the globe who can play a role in sustainable food production.

A unique feature of scholarly impactful research is the use of statistics to analyse quantitative data and derive meaningful inferences in a precise manner for operative applications (Singh & Jassie, 2023). The book under review presents statistics and current trends at national and regional levels in key areas such as food production imports, investments in agriculture, government debts, and the impacts of the climate crisis on food security vulnerability. The tables, figures, charts, and graphs help readers to understand findings presented in a simple manner. These visual tools engage and sustain their interest in processing contextual information in relation to data analysis. The presentation of quantitative findings enables readers to understand characteristics, distribution, relationships between data and draw inferences to enhance deeper learning and implementation of policy recommendations.

The Introductory chapter of the book briefly contextualizes critical reflections on the following quotation. War is tipping a fragile world towards mass hunger. Fixing that is everyone's business (The Economist, 2022). Chapter 2 unfolds with a global perspective of food security in crisis. Chapter 3 moves the discussion to the Caribbean region with macroeconomic overview of food insecurity amidst a complex system of economic environmental and vulnerabilities. Chapter 4 covers an in-depth analysis from a country-level perspective. Of immense value, Chapter 5 provides

policy recommendations for the current food crisis in the region. In Chapter 6, President Ali presents works already in the pipeline in Guyana and a way forward to join with the Caribbean region to fix the burning issue of mass hunger. The book's development for action and intervention at national and regional levels is meant to have a decisive impact on how countries can come together to achieve global food security and forge ahead with progress already happening.

Against the brief backdrop of increasing global food insecurity and hunger in Chapter 1, the book effectively begins to develop an integrated people-centered approach to eliminate social and economic inequalities. Chapter 2 draws focused attention to the combined and interlinked effects of the Covid-19 pandemic, the Ukraine war, disruptions to global food supply chains, inflation and deepening inequalities. High-risk regions identified were South Asia, Africa, Latin America and the Caribbean. The supply chain turmoil is described as "one of the greatest threats to the growth of companies and countries' economies, even greater than the pandemic, war and labor shortage" (McKinsey survey, 2022 cited in Chapter 2, p.8). The second chapter illustrates extenuating circumstances such as the global energy crisis and climate change which have led to higher inflation and constrained economic growth. Reference to factual information with specific details appeals to everyone's concern about serious consequences that negatively affect vulnerable populations, mainly, poverty, unequal standards of living and malnutrition.

Chapter 3 is titled the Regional Picture which piques the reader's interest. It encapsulates the food security environment within the Caribbean region from a macroeconomic standpoint. It informs readers that Caribbean countries remain volatile in terms of their geographic and demographic characteristics, economic

structure, income levels, financial debt and agricultural development. Therefore, high levels of inflation in the Caribbean are likely to prolong as a critical challenge to many countries, particularly SIDS, due to heavy reliance on food imports and inadequate diversification. A key issue is well elucidated in the context of the book's central goal to achieve global food security. Achieving SDG 7- 'to end hunger' is directly correlated to building climate resilience (Tidemann et al., 2022) towards inclusive equitable, and sustainable agriculture. This is clearly understood as a significant development process involving farming communities, households, and individuals in system-wide productivity to prevent, mitigate, or cope with climate and other environmental risks, while adapting to change and recovering from global shocks.

In Chapter 4, in his dual role as President of Guyana and the Caribbean Community (CARICOM) Lead Head of Government with responsibility for agriculture and food (2021- present), Dr. Mohamed Irfaan Ali, provides a cross-cutting perspective of contextual realities across the entire Caribbean and on-the-ground knowledge for achieving food security. Investment in the agricultural sector in the Caribbean has been traditionally low due to a lack of access to affordable capital. The chapter reinforces that initial problems have been compounded by the Covid-19 pandemic. It turned into a severe global economic crisis with inherent vulnerabilities of food security provision and global inflation which increased the food import bill throughout the region. Many countries were affected as follows: Antigua and Barbuda, the Bahamas, Barbados, Belize, Dominica, Grenada, Guyana, Jamaica, St. Kitts and Nevis, St. Lucia, St. Vincent and the Grenadines, Haiti, Suriname and Trinidad and Tobago. A unique strength of this book lies in its inclusivity. While all countries have been sensitised to economic conditions and food security, each can now develop a deeper level of awareness and response to improve and transform food systems regionally.

Chapter 4 further evaluates factors affecting food dependency within the Caribbean region as follows: unavailability of applied technology, limited access to human resources, a lack of market opportunities, and low levels of public investment in critical infrastructure towards mitigating the harmful effects of climate change. The "Agriculture chapter underscored. production has remained volatile due to the frequency of climate related events" (p.77). This speaks to recurrence of hurricanes, drought, floods, and landslides with major setbacks for food production agricultural exports in several countries, notably Antigua and Barbuda and Jamaica. A core issue of the book for readers to reflect upon, is that increases in debt burden which can arise from a variety of aforementioned factors, could potentially expose countries to elevated levels of food insecurity in the future. Notably, Guyana aims to "utilize the increased fiscal space from a lower debt burden and from oil production and the sale of carbon credits to bolster the resilience of its food production system" (p.49). Readers recognise that only when food systems are resilient, they can then become more equitable, inclusive and sustainable.

The 5th chapter of the book is titled Strategic **Policy** Recommendations. President Ali made recommendations in support of an actionable, pragmatic and innovative approach to food production in the Caribbean region, namely: a CARICOM Cross-Border Agri-Food Investment Acceleration of Strategy, the Facilitation Reform Process for CARICOM, an Agricultural Catastrophe Fund and an Integrated Water Resources Management for each country. Of strategic value, the book emphasises the role of Research and Development (R&D) as the cornerstone for rapid progress. Accordingly, the President recommended that a Regional Agro-Tech

Campus (RATC) will promote translational research and experimental development of agriculture to become the leading institute of technology for food and environmental science.

Chapter 5 creates an enlightening strategic path for regional universities and education systems in R&D to overcome knowledge barriers and offer innovative solutions to complex problems. It aims to enhance a sustainable biological and synthetic system as a means of confronting key challenges in agriculture while ensuring the protection of the environment and innovation for the bioeconomy. Three main areas for capacitybuilding are focused on development of programs training to support entrepreneurship, expansion of R&D in life science and technologies, and improved quality of education and research in partnering academic institutions. Together, regional universities and the RATC can leverage strategic relationships and close linkages with key international partners to promote innovation across the ecosystem through evidence-based research. What makes the book exceptional is its strategic path with heavy reliance on the higher education sector to revolutionise the Caribbean food and agriculture industry.

Chapter 6 is focused on "Works in the Pipeline and Way Forward: Guyana." President Ali emphasized the book's overarching goal to build a more prosperous through innovation and transformative investments for the diversification of agricultural productivity. The commitment to self-sufficiency is apparent in following three growing sectors in Guyana: The Corn and Soya Bean Pilot Project; Horticulture and Livestock; and Investment in Agro-Processing Facilities. Guyana's blueprint of an inclusive and sustainable development -The Low Carbon Development Strategy (LCDS) 2030 is comprehensively explained as an essential pathway to preserve the country's forest and simultaneously develop its economy fivefold over the next 10 years. The LCDS will ensure protection against climate-related events and biodiversity loss through resilient agriculture for sustainability. This intensive task coherently extends to the strengthening of coastal infrastructure, the protection of mangroves and climate risks assessment and insurance. These are insightful proactive measures which the book shares for building resilience to counteract risks and the severity of climate-related shocks to food systems.

This final chapter of the book also reaffirms Guyana's commitment to bilateral partnerships with prime attention directed to investment in a Regional Food Hub, regional aquaculture and agriculture tourism towards a sustainable agri-food system in collaboration with CARICOM member states (CARICOM Vision 25 by 2025 plan).

Achieving Global Food Security. The Caribbean Experience and Beyond (2025) places the onus on Caribbean leaders to explore policy and priority actions aligned with the goal of SDG 2 of Zero Hunger. President Ali, called for regional leaders to through international cooperation. regional integration, and multi-sectoral actions involving all stakeholders of the Agri -food system. His book makes a compelling call for committed leadership of the region to explore policy options aimed at sustaining the quest for food security. The matter of urgency is for smaller countries of the world to take determined action, if they must eliminate dependence on extraregional food imports and strengthen food production and nutrition security.

This book is simple but authored from the viewpoint of a regional leader, it has profound impact and lasting significance. It provides a solid foundation to develop healthy food habits essential for success in the production and consumption of food for people from all walks of life. Future researchers in the field of agriculture can

use the information presented in each of the country briefs (Chapter 5) to further examine cross-comparative challenges and successes for equity in food security within the Caribbean region.

In summation, President Ali's book presents a decisive new research and policy agenda for inclusivity to end global hunger. He provides implementable options towards resilience, socio-economic progress, sustainable development and food security for the Caribbean Region with lessons for the Global South and the wider global community. Achieving Global Security. The Caribbean Experience and Beyond (2025) is not only a testimony of a president's unwavering commitment to developing Guyana through food sustainability but his deepening collaborative initiatives to end hunger for human survival beyond.

References

Caribbean Community (2024). Vision 25 by 2025 CARICOM Initiative. CRFM.

FAO, IFAD, UNICEF, WFP & WHO (2024). The State of Food Security and Nutrition in the World 2024 – Financing to end hunger, food insecurity and malnutrition in all its forms.

Rome. https://doi.org/10.4060/cd1254en

The Economist (2022). The Coming Food Catastrophe. February 13th, 2023. https://www.economist.com/leaders%20/2022/05/19/the-coming-food-catastrophe

Government of Guyana (2022). Guyana's Low Development Carbon Strategy https://lcds.gov.gy/

Singh, D. P.& Jassi, J. (2023). Exploring the Significance of Statistics in Research: A Comprehensive Overview Section A -Research paper. *European Chemical Bulletin*. 12(Special Issue 2): 2089-2102.

Tidemann, J., Piatkov, V., & Prihardini, D., Benitez, J.C., & Zdzienicka, A. (2021). Meeting the Sustainable Development Goals in Small Developing States with Climate Vulnerabilities. Cost and Financing. IMF Working Paper: Fiscal Affairs Department.

Bibliographical note

Vashti Singh is currently a Senior Lecturer and Head of the Department of Research and Graduate Studies, at the Faculty of Education and Humanities, University of Guyana, Guyana, South America. She was awarded a research scholarship by the Indian Council for Cultural Relations (ICCR), Government of India and graduated with a PhD in Sociology of Education from Jawaharlal Nehru University, New Delhi, India in 2006. Her research interests include education development in postcolonial contexts and the interplay of complex historical and contemporary factors influencing democratic governance and policy reforms.