


Chapter 1

Sustainable Agriculture and the SDGs: A Convergence Approach


Muhammad Asim

*University of Agriculture, Faisalabad,
Pakistan*

Aamir Raza

 <https://orcid.org/0009-0001-1867-2660>
*University of Agriculture, Faisalabad,
Pakistan*

Muhammad Safdar

 <https://orcid.org/0009-0006-1779-6967>
*University of Agriculture, Faisalabad,
Pakistan*


Mian Muhammad Ahmed

*University of Agriculture, Faisalabad,
Pakistan*

Amman Khokhar


*University of Agriculture, Faisalabad,
Pakistan*

Mohd Aarif

 <https://orcid.org/0000-0001-9986-4818>


Global Research Network, Noida, India

Mohammed Saleh Al Ansari

 <https://orcid.org/0000-0001-9425-0294>

University of Bahrain, Bahrain

Jaffar Sattar

 <https://orcid.org/0009-0006-6107-9156>

*Khawaja Fareed University of
Engineering and Information
Technology, Rahim Yar Khan, Pakistan*

Ishtiaq Uz Zaman Chowdhury

North South University, Bangladesh

ABSTRACT

This chapter explores the connection between sustainable agriculture and the Sustainable Development Goals (SDGs). It discusses various practices like conservation agriculture, organic farming, agroforestry, and precision agriculture, and how they contribute to various SDGs. It focuses on SDG 2 (Zero Hunger), SDG 6 (Clean Water and Sanitation), SDG 15 (Biodiversity Preservation), and SDG 1 and

DOI: 10.4018/979-8-3693-2011-2.ch001

8 (Rural Development). The chapter also discusses barriers to widespread adoption, including economic, technological, and sociocultural factors. It uses case studies to illustrate successful models and offers policy recommendations, emphasizing national policies aligning with sustainable agriculture, fostering international cooperation, and investing in education and capacity building. The chapter provides valuable insights for policymakers, researchers, and practitioners in agriculture, sustainability, and development.

1. INTRODUCTION

1.1. Background and Significance

The Sustainable Development Goals (SDGs) provide a comprehensive and inclusive appeal for collective efforts to eradicate poverty, safeguard the environment, and secure universal peace and prosperity by the year 2030. The agricultural sector plays a crucial role in the attainment of these objectives, with a particular emphasis on SDG2, which seeks to “End hunger, achieve food security and improved nutrition, and promote sustainable agriculture”. Sustainable agriculture is an agricultural approach that prioritizes the cultivation of crops and livestock over an extended period, with the aim of minimizing environmental impact. The concept entails the effective administration of agricultural resources to meet evolving human demands, while simultaneously preserving or improving environmental quality and conserving natural resources (Paroda and Joshi, 2019). In this context, the convergence method pertains to the amalgamation of sustainable farming practices with the goals and objectives outlined in the SDGs. This approach acknowledges the interconnectedness between several objectives, such as promoting sustainable agriculture, empowering small-scale farmers, advancing gender equality, eradicating rural poverty, promoting healthy lifestyles, addressing climate change, and other topics encompassed by the 17 Sustainable Development Goals.

1.2. Objectives of the Chapter

The main objectives of this chapter are:

- To understand the concept of sustainable agriculture and its significance in the context of the SDGs.
- To explore various sustainable agricultural practices and their potential to contribute towards achieving the SDGs.

24 more pages are available in the full version of this document, which may be purchased using the "Add to Cart" button on the publisher's webpage: www.igi-global.com/chapter/sustainable-agriculture-and-the-sdgs/341686

Related Content

The Potential of Traditional Leafy Vegetables for Improving Food Security in Africa

Praxedis Dube, Wim J. M. Heijman, Rico Ihleand Justus Ochieng (2018). *Establishing Food Security and Alternatives to International Trade in Emerging Economies* (pp. 220-243).

www.irma-international.org/chapter/the-potential-of-traditional-leafy-vegetables-for-improving-food-security-in-africa/186450

Economic Growth and Climate Change: An Exploratory Country-Level Analytics Study

Wullianallur Raghupathiand Viju Raghupathi (2020). *Environmental and Agricultural Informatics: Concepts, Methodologies, Tools, and Applications* (pp. 906-924).

www.irma-international.org/chapter/economic-growth-and-climate-change/232995

Sustainability, Environmental Sustainability, and Sustainable Tourism: Advanced Issues and Implications

Kijpokin Kasemsap (2020). *Environmental and Agricultural Informatics: Concepts, Methodologies, Tools, and Applications* (pp. 1669-1687).

www.irma-international.org/chapter/sustainability-environmental-sustainability-and-sustainable-tourism/233035

The Use of Antibiotics in Dairy Farming: Main Challenges and Alternative Approaches

Wendell Queiroz Leite, Mariane de Freitas Genari Severinoand Eduardo Festozo Vicente (2023). *Cases on Managing Dairy Productive Chains* (pp. 138-166).

www.irma-international.org/chapter/the-use-of-antibiotics-in-dairy-farming/320904

Current State of Fish Production on Carp Farms in Serbia

Stevan anak, Jonel Subiand Marko Jelonik (2015). *Agricultural Management Strategies in a Changing Economy* (pp. 80-99).

www.irma-international.org/chapter/current-state-of-fish-production-on-carp-farms-in-serbia/125986