


# Chapter 1

## Sustainable Agriculture and the SDGs: A Convergence Approach


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### 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*

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*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.

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