Preface

Sustainable agriculture is farming in sustainable ways meeting society's present food and textile needs, without compromising the ability for current or future generations to meet their needs. It can be based on an understanding of ecosystem services. There are many methods to increase the sustainability of agriculture. When developing agriculture within sustainable food systems, it is important to develop flexible business process and farming practices. Agriculture has an enormous environmental footprint, playing a significant role in causing climate change (food systems are responsible for one third of the anthropogenic greenhouse gas emissions), water scarcity, water pollution, land degradation, deforestation and other processes; it is simultaneously causing environmental changes and being impacted by these changes. Sustainable agriculture consists of environment friendly methods of farming that allow the production of crops or livestock without damage to human or natural systems. It involves preventing adverse effects to soil, water, biodiversity, surrounding or downstream resources—as well as to those working or living on the farm or in neighboring areas. Elements of sustainable agriculture can include permaculture, agroforestry, mixed farming, multiple cropping, and crop rotation.¹

In the present book, twelve typical literatures about sustainable agriculture published on international authoritative journals were selected to introduce the worldwide newest progress, which contains reviews or original researches on sustainable agriculture. We hope this book can demonstrate advances in sustainable agriculture as well as give references to the researchers, students and other related people.

ⁱ https://en.wikipedia.org/wiki/Sustainable_agriculture