

## Chapter - 3

### Organic Farming: A Way to Achieve Agricultural Sustainability

Sagar Maitra and Jnana Bharati Palai

#### Abstract

In the middle of twentieth century AD, the most important challenge in India was production of enough to meet the demand of its vast population. To manage the situation, Green revolution was initiated in the mid-sixties of the previous century which helped to become self-sufficient in production of food grains. The prolonged and over usage of chemicals during previous decades resulted in human and soil health hazards along with degradation of natural resources and environmental pollution. The country witnessed the deterioration of soil fertility and land degradation, loss of soil flora and fauna, genetic erosion, ecological unbalance, yield plateauing and associated insecurity in livelihood of the farmers. Now creation of environment friendly agriculture and sustainability of agriculture production are of important concerns to the scientists and policy makers. In this regard, organic agriculture may be considered as one of the best possible ways to achieve agricultural sustainability as it assures exclusion of all chemical and synthetic inputs, maintains biological cycles and ecosystem services.

In this chapter the impact of organic agriculture has been studied towards achieving agricultural sustainability for the future.

#### Introduction

Agriculture is vital to human survival as it provides food, natural fiber and fuel along with ecosystem services and is the most important source of livelihood that plays a very crucial role in economic development of a developing nation like India. Agriculture is, however, also a major source of environmental degradation, contributing to emission of greenhouse gasses and thus triggering climate change. Moreover, conventional agriculture is depleting freshwater resources, degrading soil fertility and polluting the environment through man-made practices like over exploitation of natural resources, non-judicious use of chemical fertilizer and pesticide and other