



# SNS COLLEGE OF TECHNOLOGY

(An Autonomous Institution)

COIMBATORE-35.



Accredited by NBA – AICTE and Accredited by NAAC – UGC with  
'A+' Grade

Approved by AICTE, New Delhi & Affiliated to Anna University,  
Chennai.

## DEPARTMENT OF AGRICULTURAL ENGINEERING

23AGT101 – INTRODUCTION TO AGRICULTURAL ENGINEERING  
I YEAR- II SEMESTER

# Impact of Green Revolution on Food production



# Introduction

- The Green Revolution was a period that began in the 1960s during which agriculture in India was converted into a modern industrial system by the adoption of technology, such as the use of high yielding variety (HYV) seeds, mechanised farm tools, irrigation facilities, pesticides, and fertilizers.



# Definition of Green Revolution!

The great improvement in the production of food grains and other agricultural produce during the period 1960-80 is described as Green Revolution in Indian agriculture. It is known as the Golden Era of Indian agriculture.



# History of Green Revolution

- The Green Revolution in India was first introduced in Punjab in late 1966-67 as part of a development program issued by international donor agencies and the Government of India.




# History of Green Revolution

1. Norman Borlaug is known as the father of green revolution in the world, but in India Dr. M.S. Swaminathan is known as father of green revolution.
2. Green revolution that increased agricultural production worldwide, particularly in the developing world, beginning most markedly in the late 1960




# REASONS OF GREEN REVOLUTION IN INDIA



 **Bengal famines**




 **Lack of finance**




 **Conventional &  
Traditional Approach**



 **Low productivity**



 **Disease pest infestation**



# Advantages of Green Revolution

**Reduces greenhouse gas emission:** As the high yield methodology influences the carbon cycles via the atmosphere, it vastly reduces greenhouse gas emissions and emissions-free environments.

**Increase in food production:** It uses various technologies and results in an increase in food production. It is a choice from the conventional method of agriculture.

**Low food prices:** The whole market relies on the demand and supply process. As the yields are continuous, they meet the demand, and the supply becomes easy. High-yield varieties produce more food items and lower the food prices for all consumers globally.

**Increases Afforestation:** As the demand for food increases, deforestation also increases. Thus, introducing a green revolution meets food needs and increases afforestation.

**Continuous Yield:** It also offers a constant yield of crops irrespective of seasons.



## Disadvantages of Green Revolution

**Quality of Soil:** It encounters and reduces soil quality because the repetitive usage of the same crops on the land results in soil nutrient depletion.

**Health problems:** Consuming foods produced using pesticides and fertilisers will significantly impact health-related issues.

**Lack of biodiversity:** Creates more significant exposure to the food chain and leads to the loss of beneficial hereditary attributes produced in conventional farming.

**Seed Sterility:** Introducing new technologies leads to the prevention of future crop growth by composing seeds from mature plants.

**Monocropping:** Green revolution promotes monocropping patterns, which causes various problems and reduces the production of high yield crops.



A green marker is shown writing the words "THANK YOU" on a white card. The word "THANK" is written in green, and "YOU" is written in red. The card is placed on a background of lush green foliage, with a small white flower visible on the right side.

THANK  
YOU