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# **Remote sensing and its applications in Agriculture**

**LECTURE 8**



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## 8.1 Introduction

- Remote sensing is the science (and to some extent, art) of acquiring information about the Earth's surface without actually being in contact with it. This is done by sensing and recording reflected or emitted energy and processing, analyzing, and applying that information
- In much of remote sensing, the process involves an interaction between incident radiation and the targets of interest



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## 8.2 Components of Remote Sensing

- Energy Source or Illumination
- Radiation and the Atmosphere
- Interaction with the Target
- Recording of Energy by the Sensor
- Transmission, Reception, and Processing
- Interpretation and Analysis
- Application



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## 8.3 Types of Remote Sensing

- **Active Remote Sensing**
- **Passive Remote Sensing**



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## 8.4 Application of Remote Sensing in Agriculture

- Crop Identification
- Detection, diagnosis and control of plant diseases
- Yield estimation
- Soil Analysis
- Soil Mapping
- Land cover mapping



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**Thank You**