

# Precision Farming

Jabir Hussain

February 6, 2017

Q: What is precision farming and why is it so important?

A: Precision agriculture is a modern farming practice aimed to make production more efficient. Having software that keeps track of the field[s] reduces the mishandling of products and increases the crop and farm efficiency. Such software should record:

- Weather patterns
- Soil temperature
- Humidity
- Growth

They rotate crops to improve variety, and monitor irrigation rates so that salts do not accumulate. Precision agriculture techniques are used to apply nutrients, water, seed and other agricultural inputs to grow more crops in other soil environments. If precision agriculture software is implemented in farms, it would help farmers know how much and when to apply these inputs.

Global positioning systems (GPS) and GPS-computer aided tractors and harvester can be used. Other geo-referenced precision agriculture practices may include:

- electromagnetic soil sampling
- soil sample collection
- aerial imagery
- crop yield data collection
- soil types and characteristics
- drainage level
- potential yields
- crop or soil color index maps