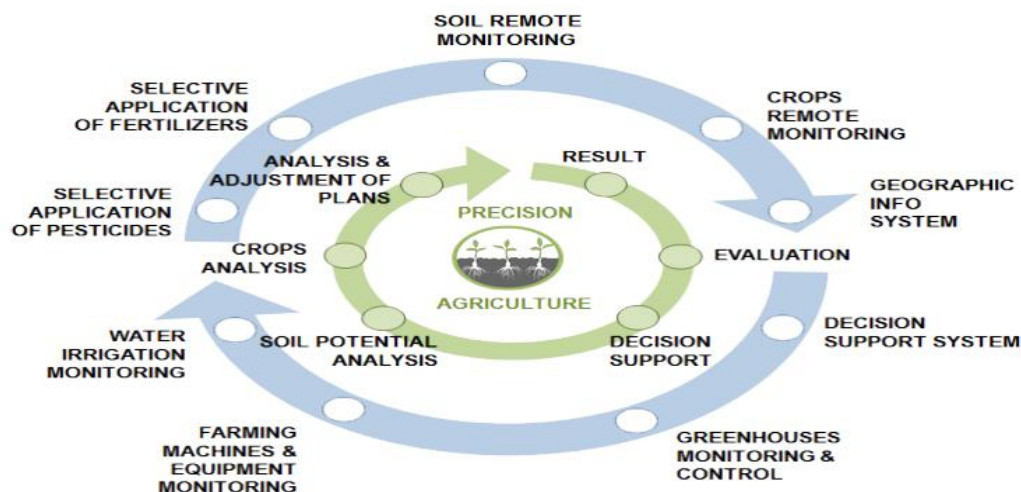# Precision Agriculture in Agri and Food Tech

Precision agriculture (PA), satellite farming or site specific crop management (SSCM) is a farming management concept based on observing, measuring and responding to inter and intra-field variability in crops. The goal of precision agriculture research is to define a decision support system (DSS) for whole farm management with the goal of optimizing returns on inputs while preserving resources. A key component of this farm management approach is the use of information technology and a wide array of items such as GPS guidance, control systems, sensors, robotics, drones, autonomous vehicles, variable rate technology, GPS-based soil sampling, automated hardware, telematics, and software. The goal of precision farming is to improve agricultural yield and reduce potential environmental risks, while benefits are:

1. Monitor the soil and plant physicochemical parameters
2. Obtain data in real time: offer real time data ensuring an updated status of the field and plant parameters at all time
3. Provide better information for management decisions
4. Save time and costs: reduce fertilizer and chemical application costs, reduce pollution through less use of chemicals
5. Provide better farm records essential for sale and succession
6. Can be integrated with farm management softwares, like Agrivi, to make all activities on farm more easy and to improve farm productivity

World- Top 10 world best known Agri Tech companies using Precision Agri

1. Mothive
Making farms visible and predictable for farmers and all actors in supply chain.
url: https://www.mothive.com/
CEO- Brendan Smith

2. CropX
An AG analytics company leading the farmers into the era of connected soil.
url: https://www.cropx.com/
CEO- Tomer Tzach

3. Arable
An an agricultural data and analytics company that offers the world's first IoT-enabled irrigation management tool, weather station, and crop monitor in one, the Arable Mark.
url: https://www. arable.com/
CEO- Jim Ethington

4. Ceres imaging
An aerial spectral imagery company that helps growers optimize their water and fertilizer application.
url: https://www.ceresimaging.net/
CEO- Ashwin Madgavkar

5. Gamaya
Early detection of disease and pests, detection and diagnostics of stress
url: http://gamaya.com/
CEO- Mathieu Hagen

6. Agridata
Digitalizes agriculture by providing farmers with the information they need to manage to their field.
url: https://www.agridatainc.com/
CEO- David Hagert

7. Agrowatcher
Uses computer vision technology to identify and detect water stress, pests, infestation, and diseases.
url: http://ww1.agrowatcher.com/
CEO: Elad Orbach

8 AgEagle
A drone-enabled software company that provides advance imaging analysis for precision agriculture
url: https://www.ageagle.com/
CEO- Michael Drozd

9. PrecisionHawk
Offers an end-to-end solution for aerial data gathering, processing and analysis.
url: https://www.precisionhawk.com/
CEO- James Norrod

10.Aker Technologies Inc
An agriculture data company providing crop intelligence and in-season analytics.
url: https://aker.ag
CEO- Orlando Sae

India Top 5 Indian AgriTech Companies using Precision Agri

1. Trimble
url: https://www.trimble.com/
CEO- Robert Painter

2. Tata Kisan Kendra
url:
CEO-

3. Fasal
url: https://fasal.co/
CEO- Ananda Verma

4. Cultyvate
url: https://www.cultyvate.com/
CEO- Mallesh T M

5. CropIn
url: https://www.cropin.com/
CEO- Krishna Kumar