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# **Emerging Technology Report**

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## Introduction

The role of Emerging Technology in the field of Agriculture is becoming inevitable in this modern era and which is growing at a rapid rate and beyond our imagination. The report is discussing the possibilities and effective application of emerging technologies and emerging practices in the field of Agriculture benefitting RegenTech.

## Sources of Information

The sources for information used in this report are all from genuine resources and from different information channels like Search Engines, Tech Talks, YouTube videos on emerging technology advancements and social media pages on technologies and IT.

## Emerging Technologies relevant to RegenTech

* Drone Technology
* IoT -Internet Of Things
* Satellite Imaging

### Drone Technology

Drone technology is a fast and easily affordable type of emerging technology that are being introduced in the field of agriculture a lot lately. Drones are Unmanned Aerial Vehicles (UAV) that can be operated remotely with communication systems attached to it. Drones are navigated and piloted by a person with a remote control.

### IoT

IoT stands for Internet of Things. It’s a network of things that are connected using wireless sensors and this can transmit information to a destination without human interaction. Hence, this emerging technology can be successfully introduced in agriculture by RegenTech where they can automate things like irrigation timings and liquid fertilizer systems which will help to reduce farm labour costs.

### Robotics

Robotics Technology use Robots as machines that can be programmed to collect and process data, measure, observe the changes, and monitoring at regular times. The information gathered by robots can be used for further data analysis and metrics that will help the farmers to know better about their farm statistics and also helps to identify the potential risk and avoid any kind of productivity loss.

## Emerging Practices relevant to RegenTech

### Drone Technology: Drones

As part of emerging Drone technology, RegenTech can benefit from Drones being introduced in the farms in many ways. RegenTech can provide a more detailed and visualised solution to the farmers with the data gathered using Drones at reduced costs and with the help of Augmented Reality being cooperated effectively. Also, this is a solution for the farmers who cannot access RegenTech ‘s free short course that is running at RegenTech HQ.

### IoT: Soil Sensors

Another popular emerging technology in IoT is the usage of Soil Sensors in the farm landscapes. Soil sensors are designed for sensing soil moisture and fertilizer levels in the farmlands. RegenTech can introduce this practice to their farmers as they are looking for a long-term solution for automated irrigation and fertilising system at their farmlands. This will allow farmers to use their water more efficiently and sustainably without any wastage.

### Robotics: Robots

RegenTech can introduce the concept of Robots with Artificial Intelligence concepts into the farms for data gathering purposes like recording weather measurements, taking soil samples or measure crops. Robots will be storing these data in its memory and sending to the RegenTech systems to analyse it further for data statistics and reports to send to the farmers on time.

## References

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