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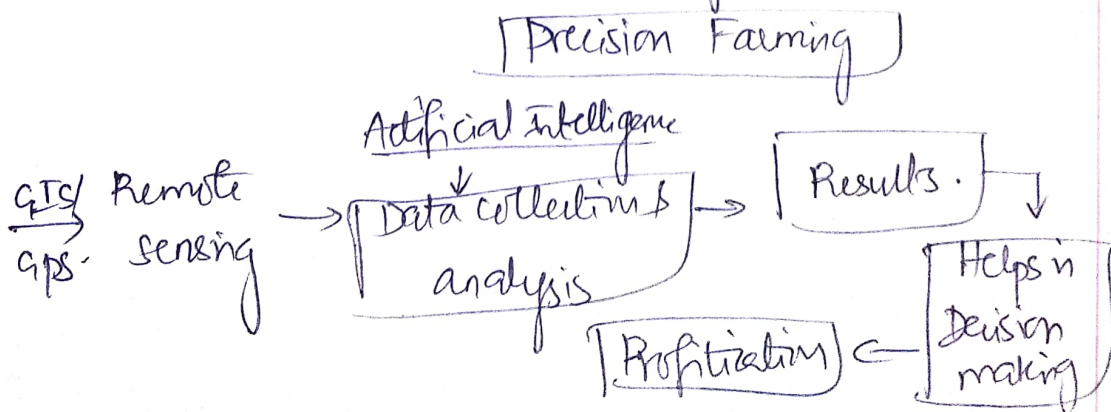
GS-3 - Agriculture

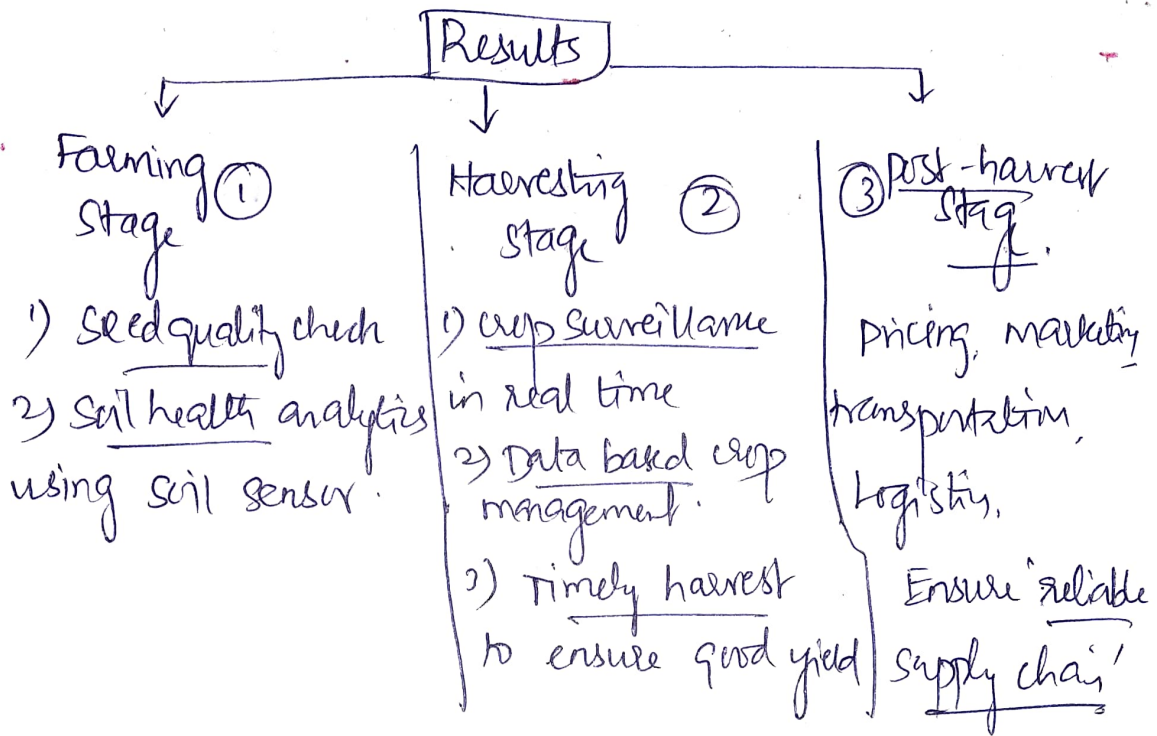
In order to meet the 'growing demand' for food amidst the shrinking land size, there is a need to focus on 'precision farming'. Discuss.

India demand for food is about to grow >500 MT by 2030, amidst shrinking land size. There is a need for Alternative farming which 'precision farming' could satisfy.

Precision Farming and Growing demand - Food

It is site specific crop management concept.
Involves use of Artificial Intelligence, machine Learning, Internet of things tools for data based decision making.





Challenges → Precision Farming.

- 1) ^{Farm}~~Data~~ Digitization → hindered due to fragmented Land Size.
(complicated)
- 2) Cadastral map → not present for many states.
- 3) Disparate data → limiting interoperability and analysis.
- 4) Lack of centralised database.

Way forward

precision farming. to reach its full potential must ensure, measures

Supply side

- 1) Farm digitization.
- 2) Digital infrastructure
- 3) Accessibility of technology at subsidized cost

Demand side

- 1) Encouraging farmers for digital uptake of precision farming.
- 2) Enhanced partnership of all stakeholders to ~~and~~ prevent issue of land fragmentation.

Following measures, if carried out will help precision farming reach potential, to address growing food demand.