



The Role of Data Revolution in Indian Agriculture

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CURRENT AFFAIRS
GS PAPER-II (Section-II)

Background:

- Recently two new significant documents called 'India Digital Ecosystem of Agriculture (IDEA- MoA&FW) and 'Indian Agriculture: Ripe for Disruption' (Bain and Company) were released concerning Agri and Digital Influx in the sector.

India Digital Ecosystem of Agriculture (IDEA)

- Agri-Digital Revolution:** It advocates for need and progress of digital revolution in agriculture field and a sustainable blueprint for “digital farming”.
- Unified and Simple Hub:** Improving the livelihoods of farmers through the close integration of agricultural innovations with zero hassle and the ecosystem of the agricultural industry in agricultural and food systems. This one makes the data available to everyone and open to businesses and farmers.
- Innovative Value-added Services:** Several AgriTech-Industries and startups are an integral part of the IDEA's architecture to boost sustainable and advanced agro-techniques locally.
- Agricultural Laws:** These will provide a national internal market at a national level with much better and inclusive connection between producers and consumers across India. These reforms were described as game changers in the agricultural sector.

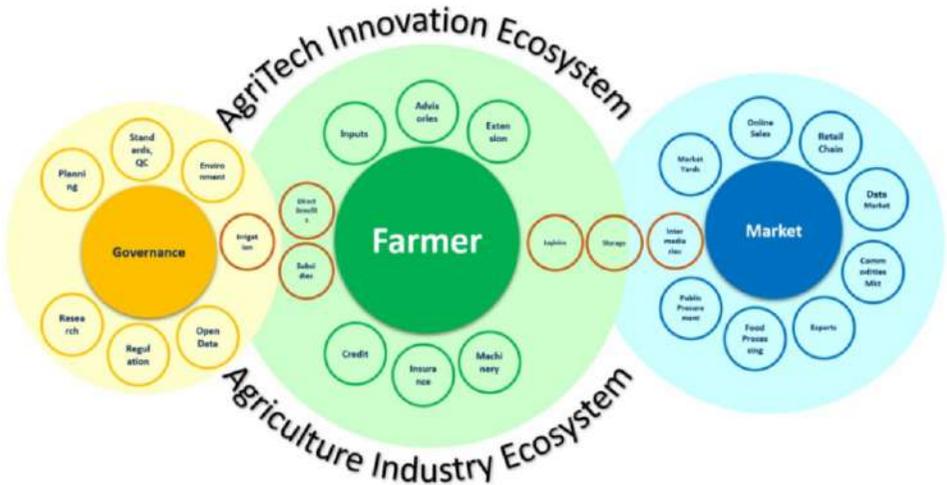
Indian Agriculture: Ripe for Disruption

- Data-driven forecast:** This is showcasing the future possible development and trajectories of agricultural business scenarios for the next 20 years, and anchors itself to the current agricultural setup. It predicts a dramatic increase in investment opportunities by 2025.



- ✎ It is estimated that the agricultural sector (currently \$ 370 billion) will receive additional investment of \$ 35 billion.
- ✎ **Reasons to Invest:** Changes in the regulatory framework. This is due to recent Farm Bills.
- ✎ **Alternatives to Agriculture:** Includes the focus on the production of alternative proteins and food/food cell-based ingredients and the initiation of marine agriculture etc.
- ✎ **A 'Forward Today - Backward Future approach':** Enables the creation of value in the future-oriented vision.
- ✎ **Double Income Targets for Farmers:** By investing heavily in the agricultural ecosystem, this target can be achieved soon.

Focus on VALUE around 5 Personas and 26 Value Nodes

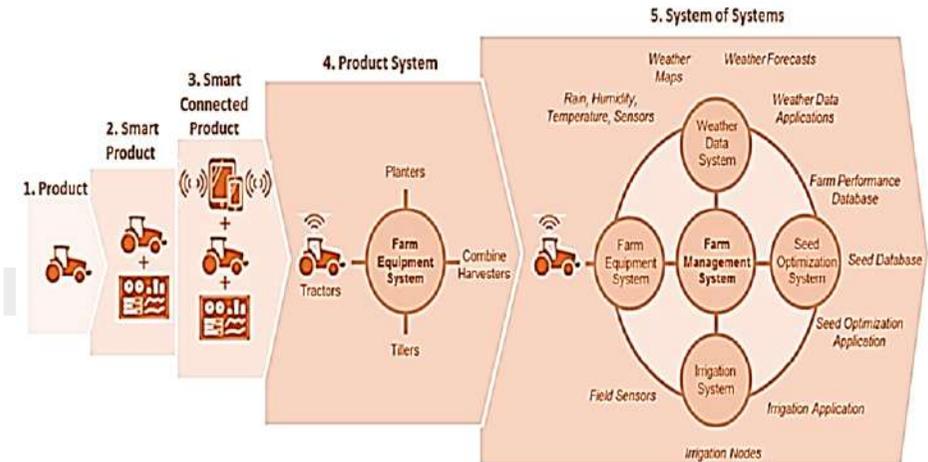


Challenges Ahead:

- ✎ **Data Abuse:** Though creating a unique Farmer ID based on the Aadhaar number is a good Idea and can have many benefits, but there is a serious threat of data abuse of this collected data.
- ✎ **Insufficient Reflection:** Beyond reporting on the prospect of achieving the goal of doubling farmers' incomes; the Bain

and Company report was not widely discussed, at least in public. And still no landless farmers in the new database

- ✎ **Digital Illiteracy Among Farmers:** Both reports relied heavily on digital disruption to improve farmers' livelihoods without discussing how far farmers will be willing to take advantage of these new business environments. The fact is that most small and small farmers are not tech savvy.



Concerns:

- ✎ The IT industry rejects IDEA primarily because of the ethics of creating a unique Farmer ID based on the Aadhaar number, and because of the potential for data abuse.
- ✎ While the report focuses on widespread food production in controlled environments, emissions, energy and other resource footprints, and sustainability issues related to these techniques, which are required to confirm projected trajectories, are not included in the report.
- ✎ Most small and small farmers are not tech savvy. Politically, these two reports ignore the peasants' protest the reforms without seeing it as an obstacle or risk factor leading to the repeal of these new agricultural laws.



Conclusion:-

- Therefore, given that a data revolution in the agricultural sector is inevitable given its socio-political complexity, we cannot simply rely on technological solutions and investments in agribusiness to improve the livelihoods of farmers. Tremendous efforts are required to improve farmers' capacities. In India and everyone involved must contribute.

Q. Discuss the Role of Digital Revolution for the Sustainable Agriculture in India.

