



Kisan Drones

For Prelims: Drone Technology.

For Mains: Doubling farmer's income by 2022, Uses of drone technology in agriculture & their advantages.

Why in News?

Recently, the Prime Minister has **flagged off 100 Kisan drones** in different cities and towns of India to spray pesticides in farms across India.

- He also flagged off "**Drone Kisan Yatra**" to promote **chemical-free farming in India**.
 - The initiative was first announced in [Budget, 2022](#) to ensure inclusive drone development.
- Earlier, the government [banned the import of drones](#) to encourage their manufacturing in India (**Drone Shakti Scheme**).
- In January, 2022 revised guidelines of the "[Sub-Mission on Agricultural Mechanization](#)" (**SMAM**) scheme was issued in a move aimed at making [drones](#) more accessible to the farmers.

What are Kisan Drones?

- The Kisan drone will have an **unmanned tank filled with insecticides and nutrients**.
- The drones are expected to have a **high capacity of 5 to 10kg**.
- The drone will **spray the same amount of pesticide** on about one acre of land in just 15 minutes.
 - It will save time, will **require less effort and spraying will be done uniformly**.
- They will also be **used to carry vegetables, fruits, fish**, etc to the markets from the farms.
 - These items will be **supplied directly to the market with minimal damage**, consuming lesser time, resulting in more profits to farmers and fishermen.

How the use of Kisan Drones is a Significant Step?

- Kisan Drones will be **used to boost the agricultural sector** in the country.
- The use of Kisan Drones will be **promoted for crop assessment, digitization of land records** and spraying of insecticides and nutrients.
- It will usher in a **new edge revolution as high capacity drones** will be used to carry vegetables, fruits, fishes to the market directly from the farms.
- The development of the drone market in India will **generate fresh employment and new opportunities for the youth**.

What are the Associated Challenges?

- Experts in the agricultural sector are **skeptical about the benefits of drones** and how they will increase farmers' income.

- There is not any sign of the government meeting its earlier promise of **doubling farmers' income by 2022**.
- The spraying of pesticides and fertilizers **may help in production, but it is the industries that will profit the most**.

How Drones Emerged in Recent Times?

- Until recently, there was a conception that drones were meant for **armed forces and fighting enemies**.
 - However, the **Kisan Drone Suvidha** has added a new chapter in the farming sector and it will prove to be a milestone for drone technology.
- **Garud aerospace** has set a goal of developing one lakh drones, which are being used for diverse purposes.
- Under the **"SWAMITVA scheme"**, land records are being documented through drone technology. Also medicines, vaccines are being supplied to various parts of the country and it is also being used for sprinkling pesticides etc on crops.

[Source: TH](#)

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