

## **Agricultural Initiatives and their Implementation**

For Prelims: Agriculture, Kisan Credit Card (KCC) Scheme, Modified Interest Subvention
Scheme, PMFBY, RWBCIS, Sub Mission on Agricultural Mechanization (SMAM), RKVY, Digital
Public Infrastructure (DPI), FPOs, Formation and Promotion of 10,000 FPOs Scheme, PMKMY,
PDMC, Meghdoot and Mausam Mobile Apps, AIF, Horticultural Crops, Millet, Swarna-Sub1 Rice

**For Mains:** Agricultural initiatives and their status of implementation, Concerts associated with agriculture and way forward.

#### **Source: PIB**

## Why in News?

The Ministry of Agriculture and Farmers' Welfare has initiated and is implementing a number of initiatives for promotion of <u>agriculture</u>.

## What are the Various Initiatives for Promotion of Agriculture?

- KCC Scheme: The <u>Kisan Credit Card (KCC) scheme</u> was expanded in 2019 to include animal husbandry, dairying, and fisheries.
  - As of March 2024, India has 7.75 crore operational KCC accounts with a loan outstanding of Rs 9.81 lakh crore.
  - KCC provides farmers with easy access to credit for their agricultural needs.
- Crop Insurance Schemes: The number of farmer applications under <u>PMFBY</u> and <u>RWBCIS</u> has grown by 35.12% and 27.50% year-on-year during 2022-23 and 2023-24.
  - PMFBY covers risks from pre-sowing to post-harvest losses, while RWBCIS addresses weather-related risks.
- Agricultural Mechanization: Under the <u>Sub Mission on Agricultural Mechanization (SMAM)</u>
   Farm Machinery Training & Testing Institutes (FMTTIs) provide skill training on equipment selection, operation, maintenance, and energy management.
- Rashtriya Krishi Vikas Yojana (RKVY): RKVY allows states to choose their own agriculture and allied sector development activities as per the district/state agriculture plan.
  - RKVY is an **umbrella scheme** that supports the holistic development of agriculture and allied sectors.
- National Research Centre for Makhana (NRCM): It has developed machines for Makhana processing, such as seed washers, graders, and roasting machines.
  - It has supported **24 enterprises**, including Mithila Naturals, to boost Makhana industries and the agricultural economy.
- Project VISTAAR: Project VISTAAR (Virtually Integrated System To Access Agricultural Resources) aims to create a unified digital agriculture ecosystem, enhancing scalability, accessibility, inclusivity, and enabling two-way communication with farmers.
  - It supports <u>Digital Public Infrastructure (DPI)</u> for agricultural extension, and integrates <u>AI chatbots and Agristack</u> for real-time farmer support and feedback.

- Paramparagat Krishi Vikas Yojana (PKVY): PKVY has covered 14.99 lakh hectares through clusters, benefiting over 25 lakh farmers since 2015-16.
- Farmer Producer Organizations (FPOs): As December 2024, 9268 <u>FPOs</u> have been registered under the <u>Formation and Promotion of 10,000 FPOs scheme</u> for sourcing inputs, accessing credit, and marketing for farmers.
- Pradhan Mantri Kisan Maandhan Yojana (PMKMY): As of November 2024, 24.66 lakh farmers are enrolled under PMKMY, providing a minimum pension of Rs 3,000 per month after reaching 60 years of age.
- Per Drop More Crop (PDMC): The Government provides financial assistance of 55% to the small and marginal farmers and of 45% to other farmers of the project cost for installation of drip and sprinkler systems under the <u>PDMC</u>.
- Gramin Krishi Mausam Sewa (GKMS): 130 Agromet Field Units (AMFUs) disseminate weather and crop-related information through multiple channels, including SMS, radio, and social media.
  - Meghdoot and Mausam mobile apps also help farmers get weather information.
- Agriculture Infrastructure Fund (AIF): <u>AIF</u> aims to enhance <u>post-harvest infrastructure</u>, reduce losses and intermediaries, and enable farmers to <u>sell directly</u> to consumers at better prices.
  - Interest rate for loans capped at **9%**, with a **3% subvention for loans** up to Rs 2 crore.
- Skill Development Initiatives:
  - Skill Training of Rural Youth (STRY): Offers 7-day short-term skill training in agriculture and allied sectors for self-employment.
  - Krishi Vigyan Kendra (KVK): Provides training in agriculture, horticulture, livestock, and allied sectors to strengthen rural skills.
  - Agriculture Technology Management Agency (ATMA): Delivers decentralized extension services to update farmers on new technologies and practices.
  - Student READY Programme: Focuses on skill development and hands-on learning through training, rural awareness, internships, and projects.

## What Plagues Indian Agriculture Despite Several Initiatives?

- Fragmented Land: The average farm size decreased from 2.3 hectares in 1970-71 to 1.08 hectares in 2015-16.
  - **86.1%** of farmers have **less than 2 hectares** that limits productivity, mechanization, and access to credit.
- Innovation Gap: Low adoption of modern technology like <u>precision farming</u>, <u>drones</u>, and <u>Al</u> contributes to lower yields.
- Post-Harvest Losses: Postharvest losses in India are estimated at 10-25%, with only 11% of produce stored in cold storage, causing distress sales and lower income.
- Diversification Dilemma: Indian agriculture is mainly focused on rice and wheat, with just 17% of land used for horticultural crops, despite millet promotion efforts.
- Irrigation Challenges: Over-reliance on monsoons and inefficient irrigation hinder productivity, with 52% of land irrigated by 2022-23.
  - Climate change may cut agricultural incomes by 15-18%, with heat waves damaging crops.

## Way Forward

- Boosting Productivity: Precision agriculture using GPS-guided machinery, <u>loT sensors</u>, and data analytics can optimize resources, boost crop yields, and save millions of liters of water.
- Crop Diversification: Encouraging <u>crop diversification</u>, like the government's push for millets, can enhance income, soil health, and nutritional security.
- **Strengthening FPOs:** Strengthening **FPOs** can boost farmer incomes by **25-30%** through collective bargaining and direct market access.
- Agri-Tech Startups: Supporting agri-tech startups like DeHaat can and speeding up tech adoption through funding and incubation.
- Climate-Smart Agriculture: Promoting drought and flood resistant crops
   (e.g., <u>Swarna-Sub1 rice</u>), and water conservation can boost farming sustainability and resilience.

#### **Drishti Mains Ouestion:**

What are the key initiatives launched by the Government of India to promote agriculture?

## **UPSC Civil Services Examination, Previous Year Question (PYQ)**

#### **Prelims**

## Q. In the context of India's preparation for Climate -Smart Agriculture, consider the following statements:

- 1. The 'Climate-Smart Village' approach in India is a part of a project led by the Climate Change, Agriculture and Food Security (CCAFS), an international research programme.
- 2. The project of CCAFS is carried out under Consultative Group on International Agricultural Research (CGIAR) headquartered in France.
- 3. The International Crops Research Institute for the Semi-Arid Tropics (ICRISAT) in India is one of the CGIAR's research centres.

#### Which of the statements given above are correct?

- (a) 1 and 2 only
- (b) 2 and 3 only
- (c) 1 and 3 only
- (d) 1, 2 and 3

#### Ans: (d)

# Q. In India, which of the following can be considered as public investment in agriculture? (2020)

- 1. Fixing Minimum Support Price for agricultural produce of all crops
- 2. Computerization of Primary Agricultural Credit Societies
- 3. Social Capital development
- 4. Free electricity supply to farmers
- 5. Waiver of agricultural loans by the banking system
- 6. Setting up of cold storage facilities by the governments

#### Select the correct answer using the code given below:

- (a) 1, 2 and 5 only
- (b) 1, 3, 4 and 5 only
- (c) 2, 3 and 6 only
- (d) 1, 2, 3, 4, 5 and 6

#### Ans: (c)

## Mains

**Q.** Explain various types of revolutions, took place in Agriculture after Independence in India. How have these revolutions helped in poverty alleviation and food security in India? (2017)

**Q.** Given the vulnerability of Indian agriculture to vagaries of nature, discuss the need for crop insurance and bring out the salient features of the Pradhan Mantri Fasal Bima Yojana (PMFBY). (2016)

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