Q10

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).

UPSC Civil Services Mains 2016 · GS III · 12 marks · Crops, Irrigation and Marketing

Major crops - cropping patterns in various parts of the country; different types of irrigation and irrigation systems; storage, transport and marketing of agricultural produce and issues and related constraints; e-technology in the aid of farmers.

Core demand of the question

- State why crop insurance is needed given monsoon and disaster risk
- Bring out the salient features of Pradhan Mantri Fasal Bima Yojana
- Contrast briefly with earlier schemes where it clarifies PMFBY

Revision summary

Indian farming is exposed to monsoon failure, floods, hail and pests, so households and crop loans need a rule-based risk cover.

Ad hoc calamity relief is too slow and uneven to replace insurance.

PMFBY (kharif 2016) charges low farmer premiums with the balance shared by governments.

It uses area-yield assessment, with farm-level cover for specified local and post-harvest losses, including prevented sowing.

Technology and a claim timeline were meant to fix delays that plagued NAIS and MNAIS.

Introduction

Indian agriculture still depends on the **monsoon**, and on local floods, drought, hail and pests. A bad season wipes out seed, credit and household consumption. **Crop insurance** socialises that yield risk so the farmer can borrow and plant again. **Pradhan Mantri Fasal Bima Yojana (PMFBY)**, launched for **kharif 2016**, is the Union's redesigned, cheaper, area-based cover after the National Agricultural Insurance Scheme and the modified NAIS.

Body

Need for crop insurance

- **Rainfed farms** are a large share of area; delayed or failed monsoon cuts output with little irrigation buffer.
- Climate variability has raised **extreme rainfall, unseasonal showers at harvest, and pest outbreaks**, which ordinary savings cannot absorb.
- Formal **crop loans** need a risk cover; without insurance, default and distress sale of land or cattle follow a failed year.

- Calamity relief from the State is **ad hoc and delayed**. Insurance, if it pays on a measured yield shortfall, is a rule-based safety net.
- Small and marginal farmers cannot self-insure across plots and years. Pooling risk at **village or block** scale is the public answer.
- Earlier schemes suffered **high premium, delayed claims, narrow crop lists and basis risk**. That history is why a new product was required, not why insurance itself was unnecessary.

Salient features of PMFBY

- **Low farmer premium:** 2 per cent of sum insured for kharif food and oilseeds, 1.5 per cent for rabi food and oilseeds, and 5 per cent for annual commercial and horticultural crops; the rest is shared by Union and State.
- **No capping** of sum insured in the original design, so cover can match the scale of finance rather than a truncated older formula.
- **Area-yield approach** for widespread calamities, using notified areas (village panchayat as the unit where possible) and crop-cutting experiments; **localised calamities** (hail, landslide, inundation) and **post-harvest** losses for specified crops can be assessed at the farm or individual level.
- Cover from **pre-sowing to post-harvest** (including prevented sowing and mid-season adversity) for notified crops in notified areas.
- **Use of** technology**:** smartphones, remote sensing and online portal for faster yield data and claim processing, with a stated timeline for payout.
- **Compulsory** for loanee farmers in notified areas in the original 2016 design; optional for others; implemented by empanelled insurance companies with banks as the main enrolment channel.
- Aims at **higher enrolment, faster claims and less distortion** than NAIS/MNAIS, where premiums were high and delays common.

Cautions

- **Basis risk** remains if the panchayat yield is good and one farmer's plot is not.
- Success needs timely **crop-cutting**, State premium share, and awareness so non-loanee smallholders also enrol.

Flow diagram

Monsoon disaster risk -> Need for crop insurance

Need for crop insurance -> PMFBY 2016

PMFBY 2016 -> Low farmer premium

PMFBY 2016 -> Area yield plus local calamity

PMFBY 2016 -> Technology timely claims

Technology timely claims -> Sow again with credit

Conclusion

Vulnerability to nature makes crop insurance a development tool, not a luxury. PMFBY cut the farmer's premium, widened the risk window, and promised technology-based, quicker claims. It will meet the need only if enrolment is real, experiments are honest, and payouts arrive before the next sowing.

Facts & figures

PMFBY
Pradhan Mantri Fasal Bima Yojana, launched for kharif 2016, replacing NAIS/MNAIS as the flagship yield-risk scheme.

Farmer premium
2 per cent kharif food and oilseeds, 1.5 per cent rabi food and oilseeds, 5 per cent annual commercial and horticultural crops.

Area-yield approach
Claims for widespread calamity rest on notified-area yield versus a threshold, usually via crop-cutting experiments.

Prevented sowing
PMFBY can compensate when adverse weather stops sowing in a notified area, not only when a standing crop fails.

NAIS / MNAIS
National Agricultural Insurance Scheme and Modified NAIS: earlier Union products with higher farmer cost and slower claims.