



PMFBY

PRADHAN MANTRI FASAL BIMA YOJANA
(Prime Minister's National Crop Insurance Scheme)

Smart Risk Protection Programme for
Indian Agriculture

Kathmandu, 24th Oct 2024

PMFBY



About the program

www.pmfby.gov.in

PMFBY Key Features.

Low Farmer Premium

Uniform across the nation; claim paid directly to farmer's account

Comprehensive Risk Coverage

Comprehensive risk coverage against all non-preventable natural risks from pre-sowing to post-harvest stage

RWBCIS

Weather-index-based RWBCIS offered for Crops/Areas where Historical Yield Data is not available



National Crop Insurance Portal (NCIP)

End-to-end auto Administration of the Scheme

Leveraging technology

Apps, Remote Sensing Technology, and other technologies in yield estimation

Voluntary for loanee farmers

Enrolment made voluntary for loanee farmers for first time in history of Crop Insurance

History of Crop Insurance In India

1972-1978

First Scheme

Individual Approach Basis

1979-1984

PCIS

Pilot Crop Insurance Scheme

1985-1999

CCIS

Comprehensive Crop Insurance Scheme

1997-98

ECIS

Experimental Crop Insurance Scheme

2010

MNAIS

Modified National Agriculture Insurance Scheme

2007

WBCIS

Pilot Weather Based Crop Insurance Scheme

1999-2009

NAIS

National Agriculture Insurance Scheme

2013-2015

NCIS

National Crop Insurance Programme

Other Insurance Schemes

- Farm Income Insurance Scheme
- Coconut Palm Insurance Scheme
- Rajasthan Gov Orange Insurance
- Bio-Fuel Tree or Plant Insurance
- Drought Risk Insurance

2016

PMFBY

Pradhan Mantri Fasal Bima Yojana

PMFBY Journey Over Last 8 Years.



Scale of Implementation



17th Crop Season



> 20.6 Bn \$

Total Claim settled in 8 years

27 States/UTs : in one or more seasons



20 Insurers empaneled
(5 PSU & 15 Private players)

> 140 Mn Farmer policies issued Annually



>170K Bank Branches

> 32 Bn \$ Total Annual Sum Insured



>600K Distribution Points



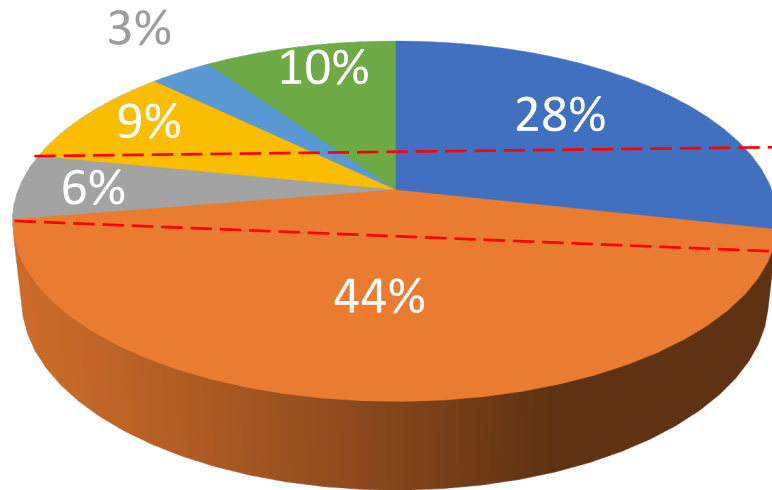
• **Globally largest program** for Crop Insurance in terms of Policies Generated



Growth of Crop Insurance under PMFBY

Erst-while Schemes

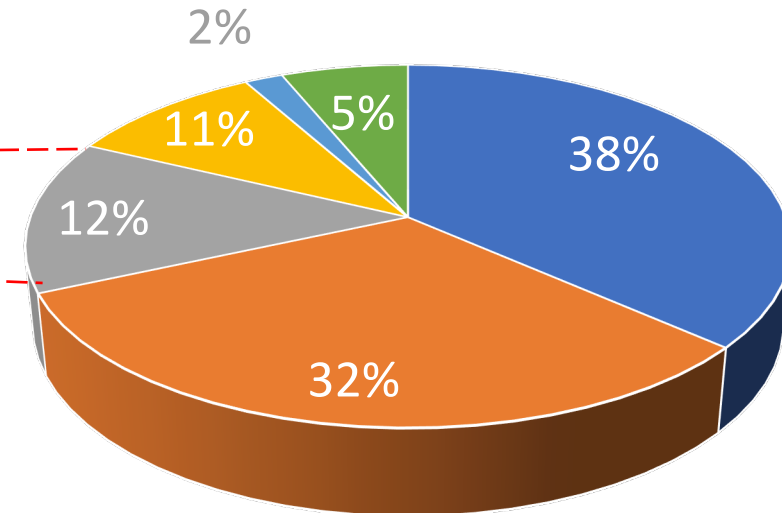
2010-2015



■ Health
■ Crop Insurance
■ Marine
■ Motor
■ Fire
■ Other Misc.

PMFBY

2016-2023



■ Health
■ Crop Insurance
■ Marine
■ Motor
■ Fire
■ Other Misc.



Crop Insurance:
3rd Largest Line of business in the Indian General Insurance Industry
Globally, 3rd Largest Crop Insurance Program in term of GWP

*All Figs for Non-Life Segment-wise Gross Premium

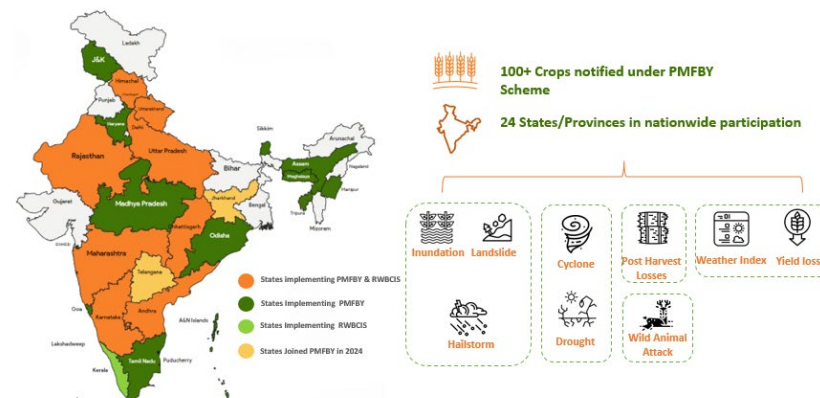


PMFBY Diversification

- Nation Wide Presence
- Agro Climatic Zones Spread

PMFBY: Diversification

Presence across Nation



PMFBY: Diversification

Agro-Climatic Zones



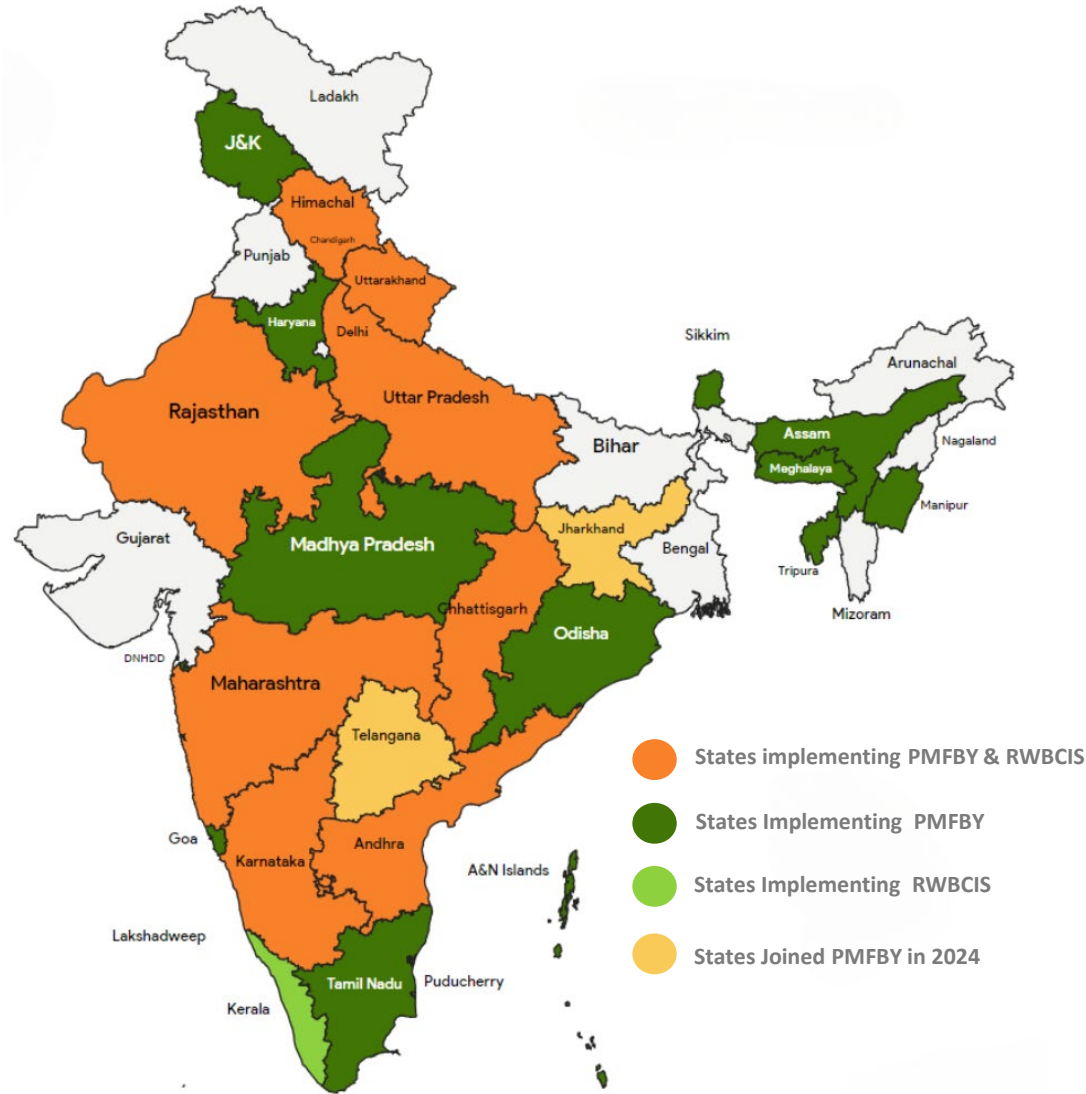
S. No	Agro Climatic Zones	PMFBY Presence
1	Western Himalayan	Yes
2	Eastern Himalayan	Yes
3	Lower Gangetic Plains	No
4	Middle Gangetic Plains	Yes
5	Upper Gangetic Plains	Yes
6	Trans Gangetic Plains	Yes
7	Eastern Plateau & Hills	Yes
8	Central Plateau & Hills	Yes
9	Western Plateau & Hills	Yes
10	Southern Plateau & Hills	Yes
11	East Coast Plains & Hills	Yes
12	West Coast Plains & Hills	Yes
13	Gujarat Plains & Hills	No
14	Wester Dry Region	Yes
15	Islands	Yes

13/15 Agro-climatic Zones covered under PMFBY Scheme

PMFBY is available in **80%** of GCA

PMFBY: Diversification

Presence across Nation



100+ Crops notified under PMFBY Scheme



24 States/Provinces in nationwide participation



Inundation



Landslide



Cyclone



Post Harvest Losses



Weather Index



Yield loss



Hailstorm



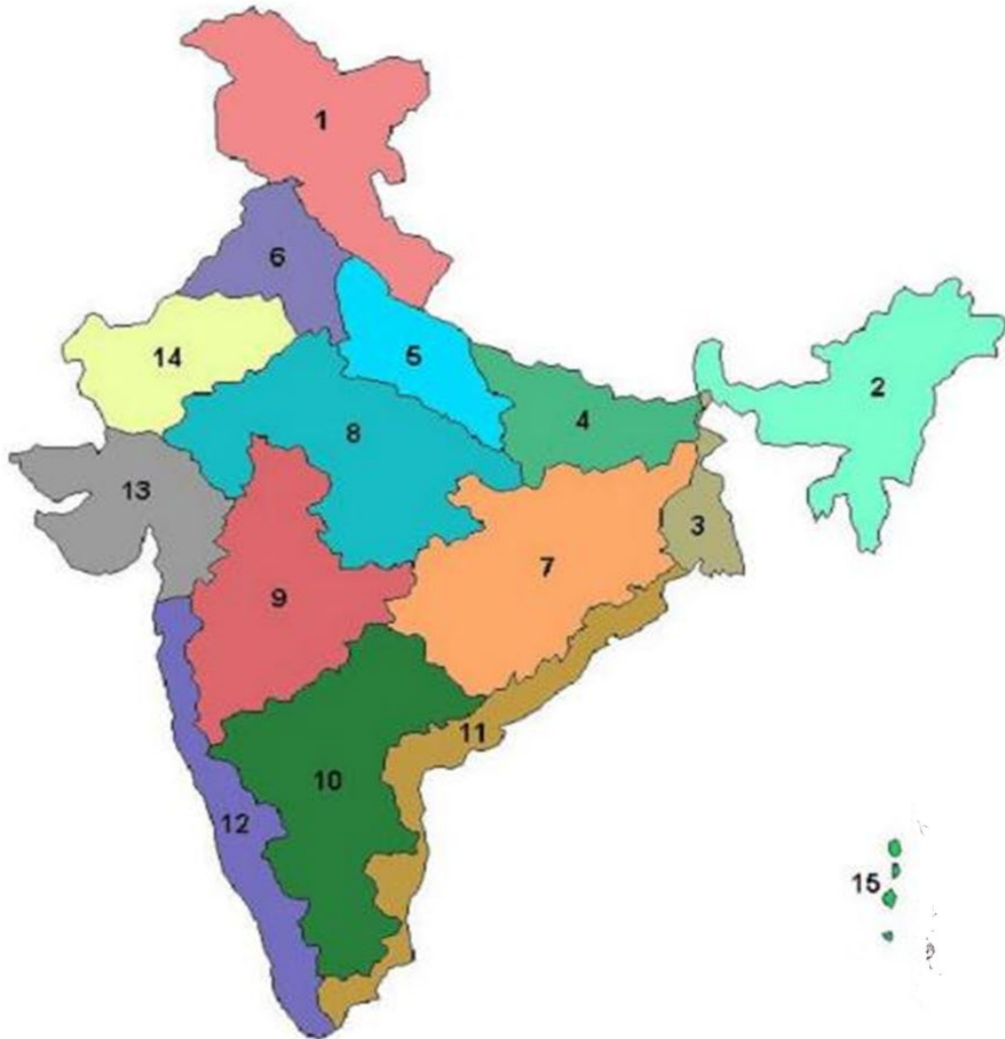
Drought



Wild Animal Attack

PMFBY: Diversification

Agro-Climatic Zones



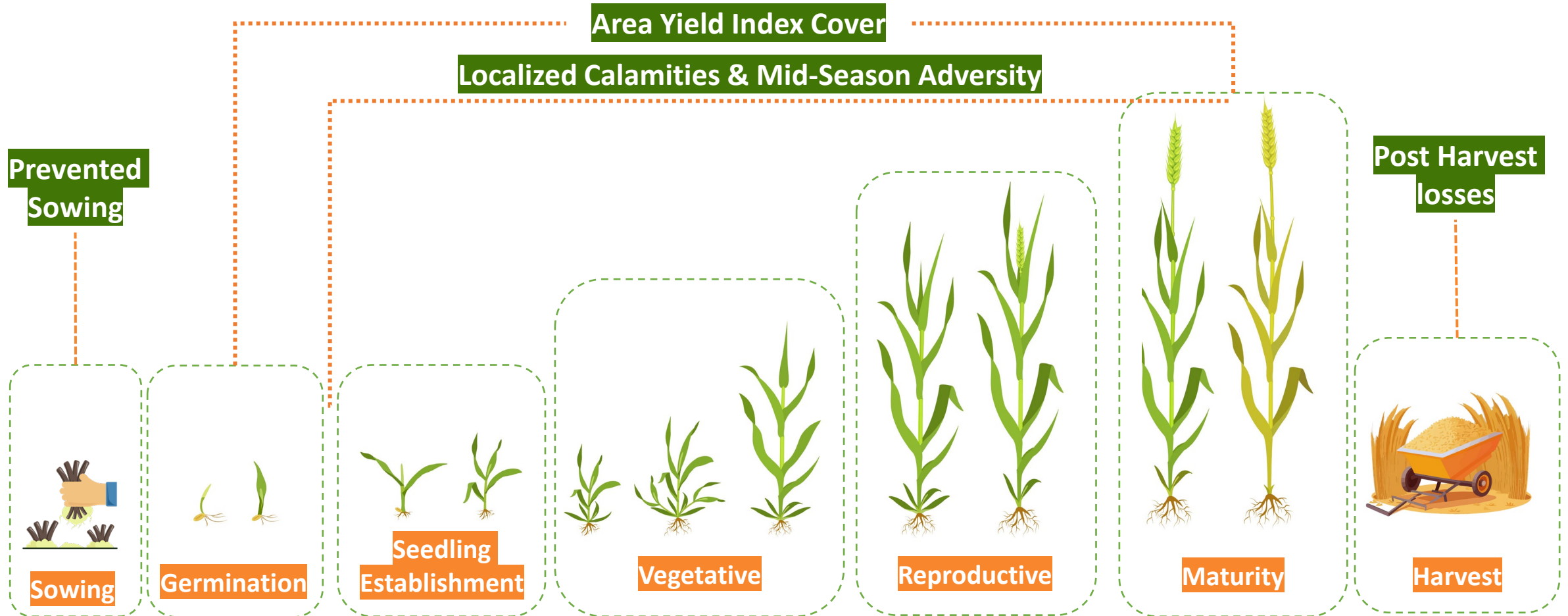
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13/15 Agro-climatic Zones
covered under PMFBY
Scheme

PMFBY is available in **80%** of GCA

PMFBY Product Structure

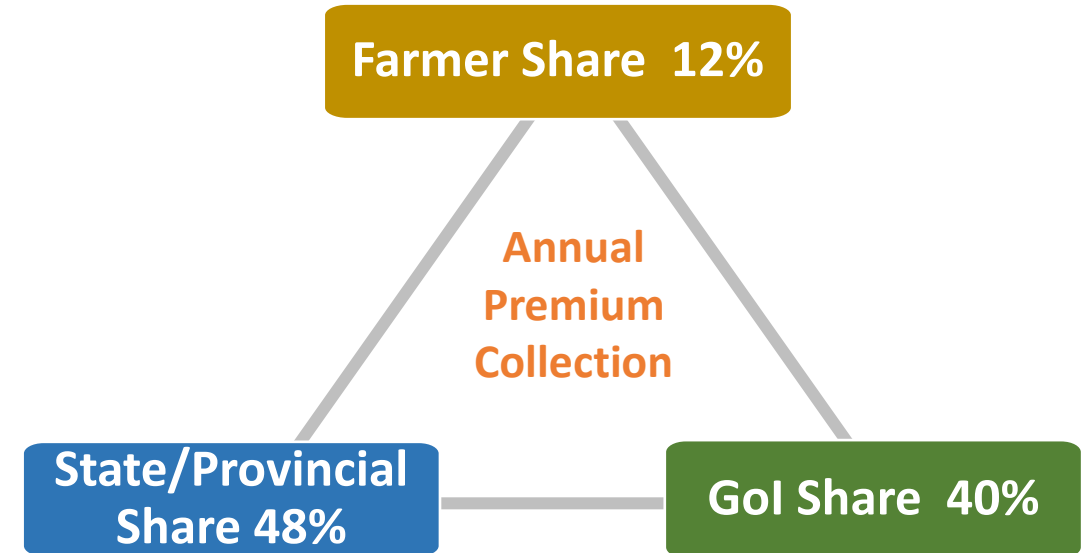
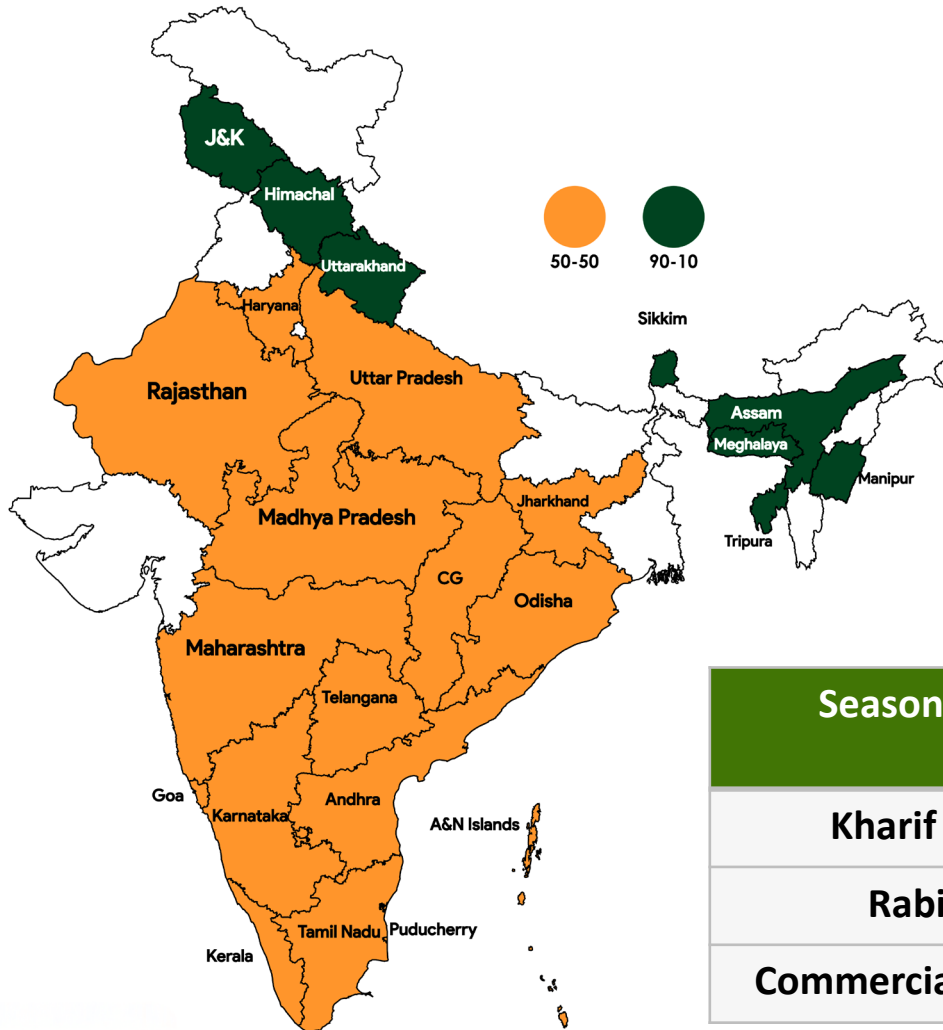
A Comprehensive Insurance Product covering all Stages from Sowing to Harvesting





Premium Rate capping for farmers & Subsidy sharing

Premium Subsidy Sharing Pattern among GoI & States/Provinces



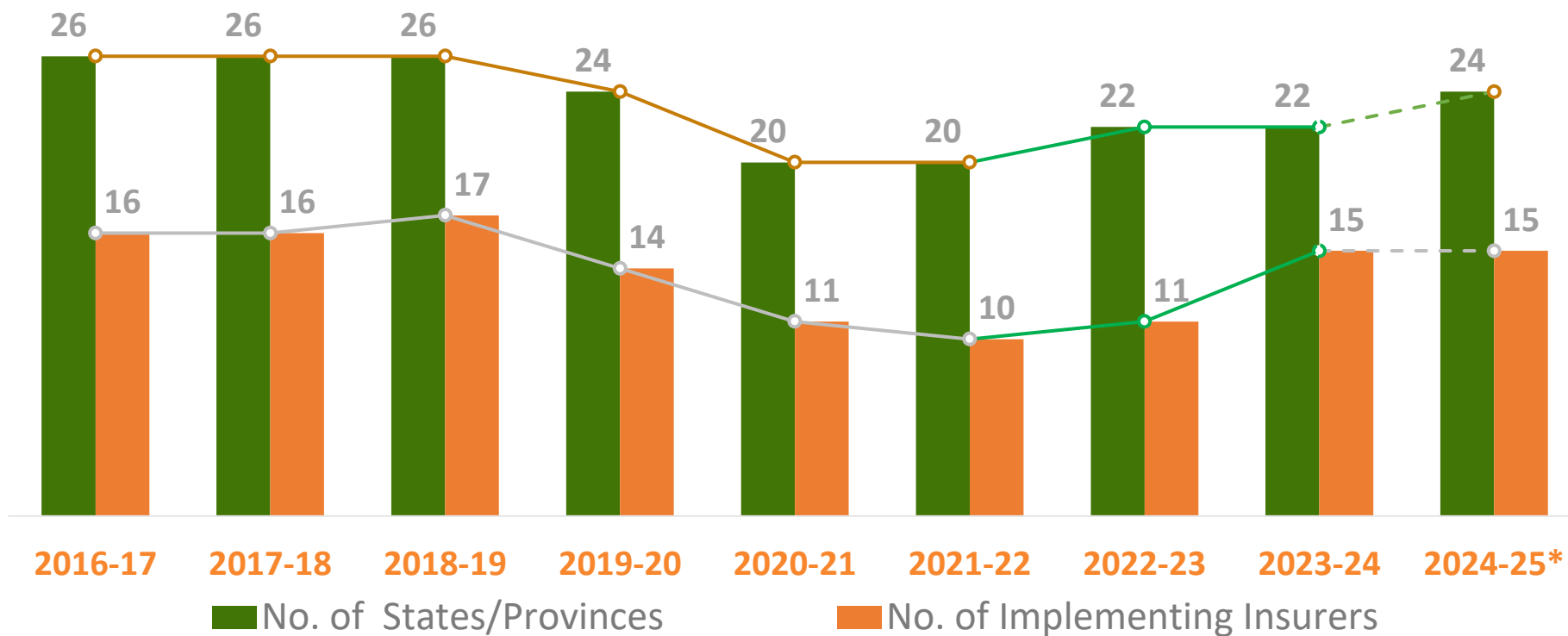
Season – Crop Categories	Premium capping for Farmer Share as part of quoted APR
Kharif (Monsoon) Crops	2.0%
Rabi (Winter) Crops	1.5%
Commercial / Horticulture Crops	5.0%



Achievements



PMFBY Implementation Partners



Quick Statistics

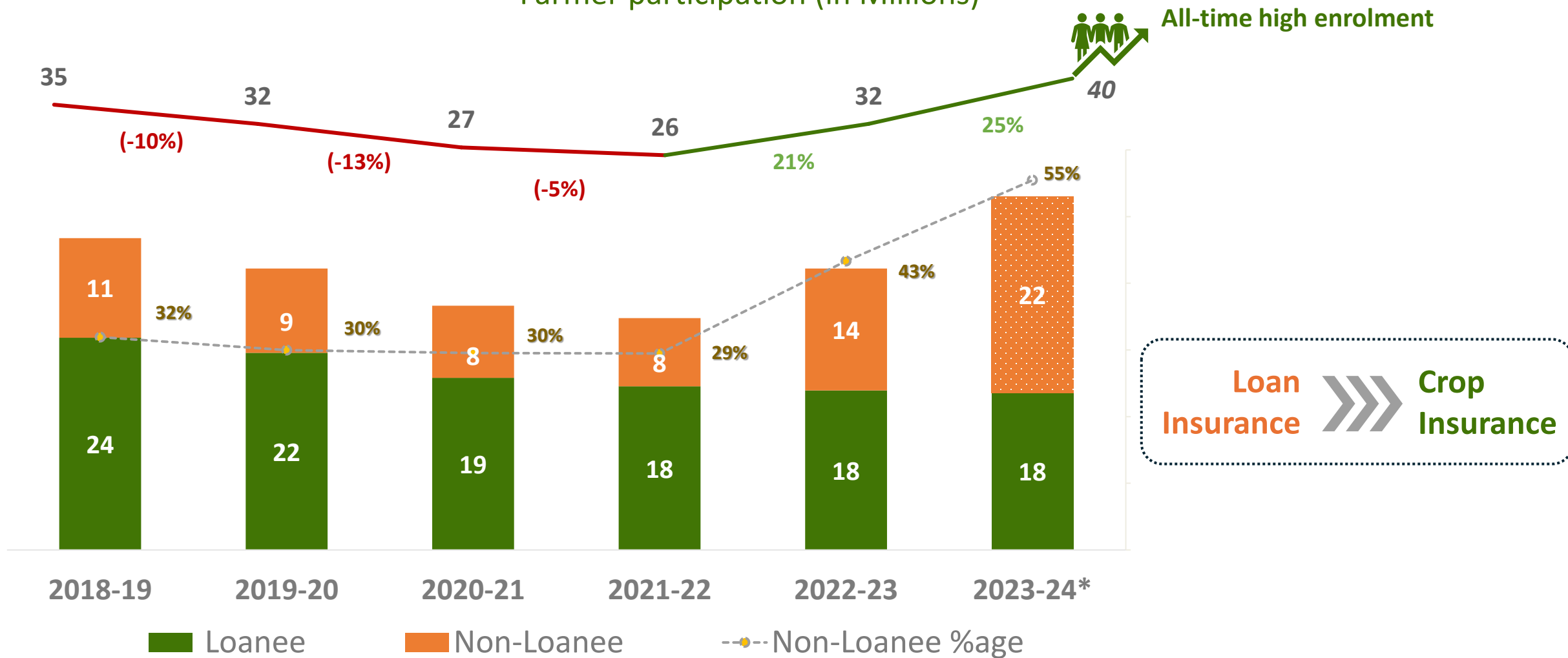
- 15 Empanelled Insurance companies implementing PMFBY
- 24 States/Provinces currently implementing the Programme

2024-25* : Upcoming FY



PMFBY: Enrolment (Year long)

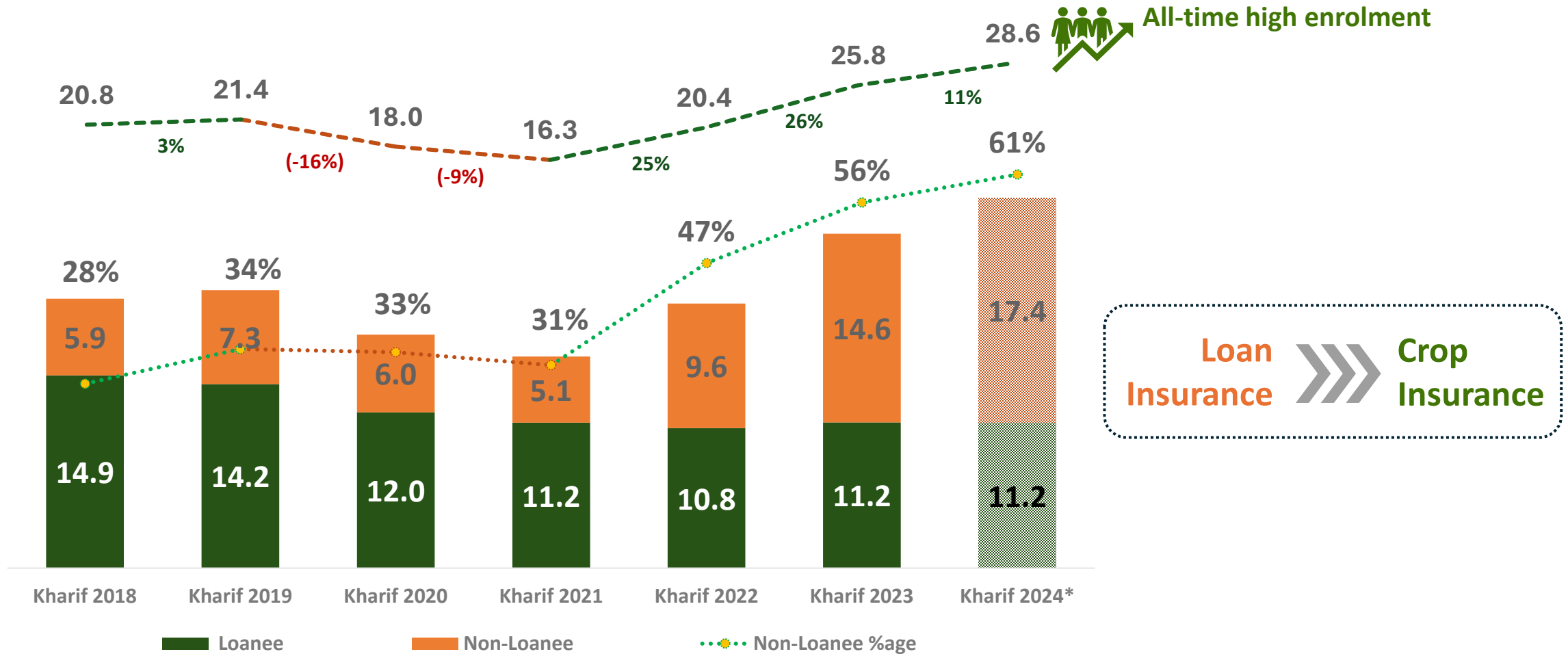
Farmer participation (in Millions)





PMFBY: Enrolment trend Kharif

Farmer participation (in Millions)

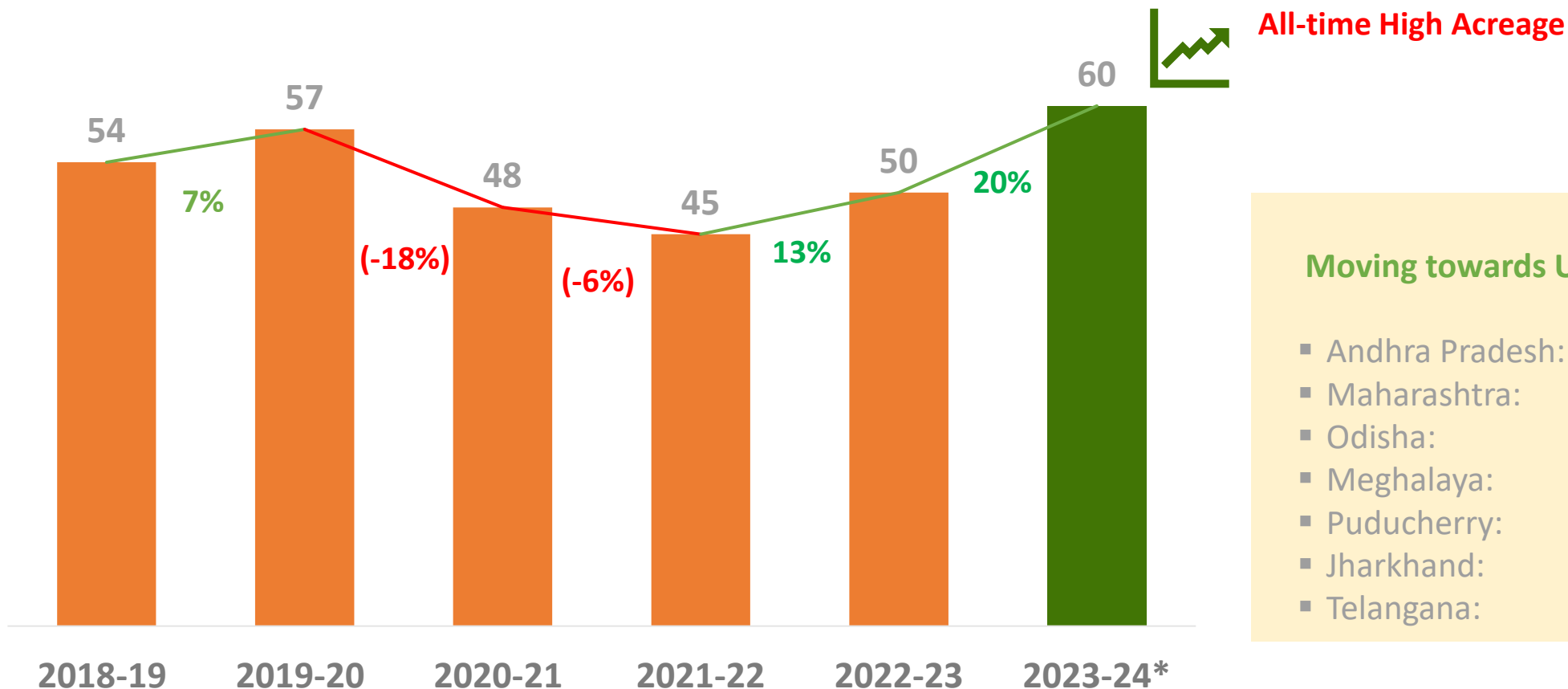


Kharif 2024 – Current season figures (as per enrolment trends)*



PMFBY: Area Insured for last 5 years

(Insured Area in Million hectares)

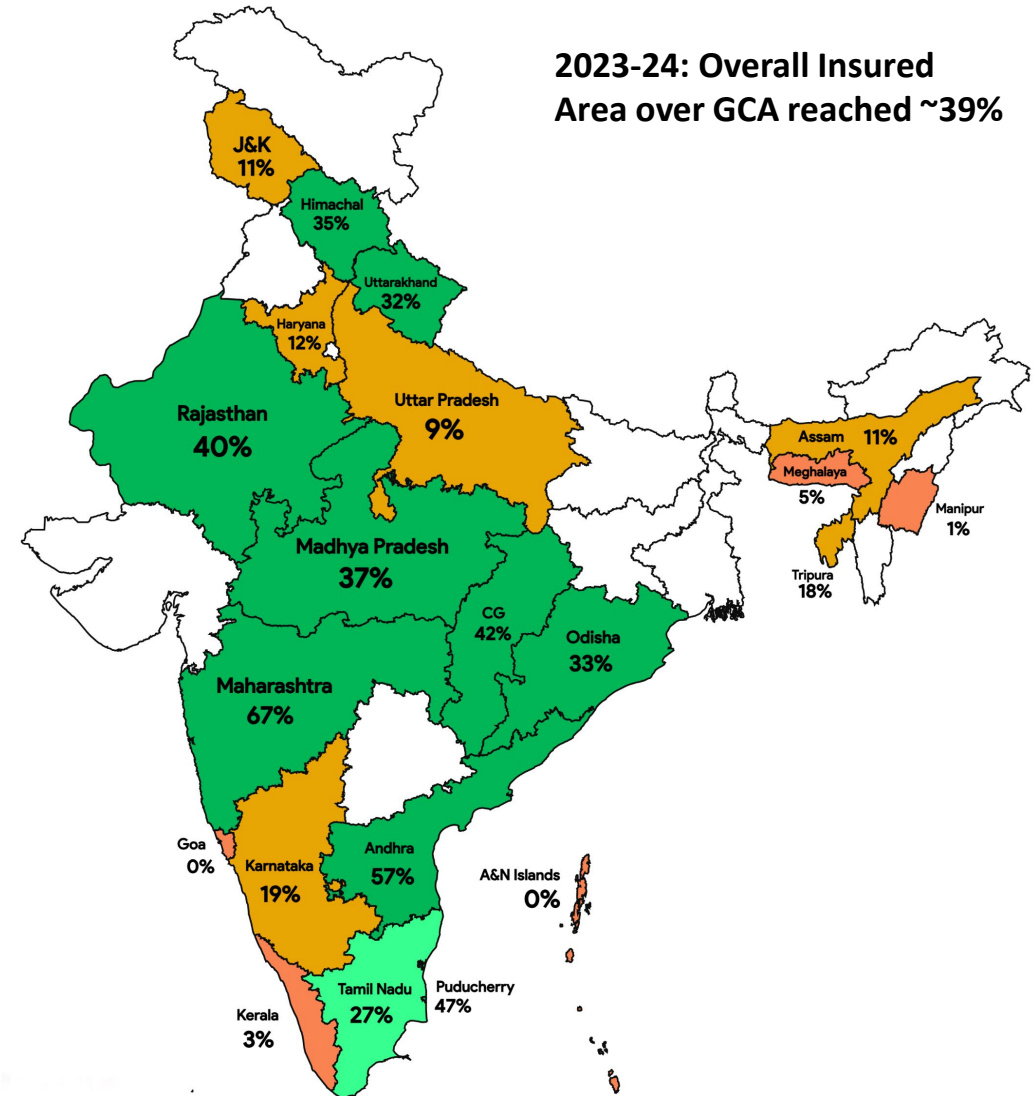
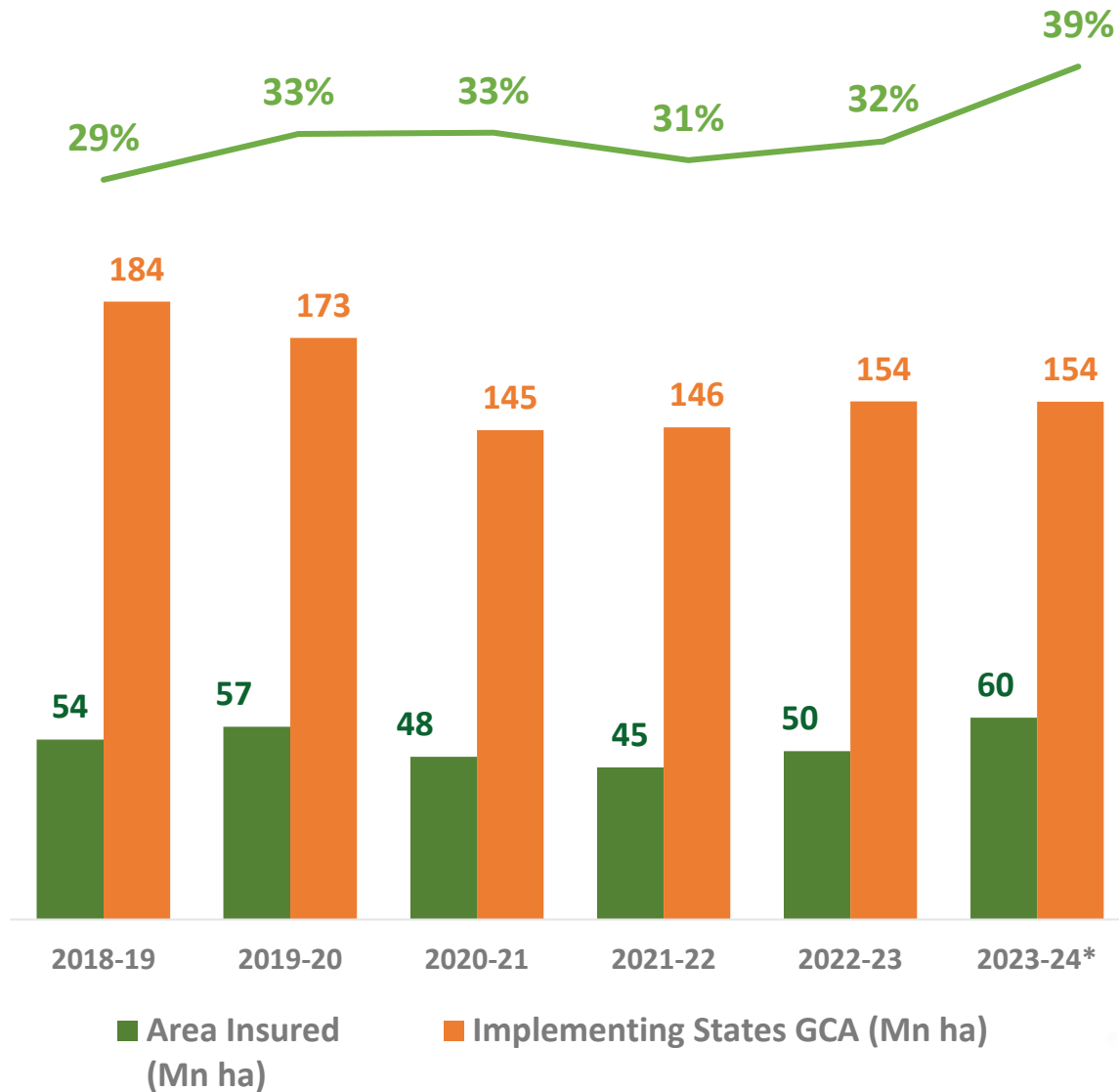


Moving towards Universalization

- Andhra Pradesh: Full Univ
- Maharashtra: Re 1 (FS)
- Odisha: Re 1 (FS)
- Meghalaya: Re 1 (FS)
- Puducherry: Re 1 (FS)
- Jharkhand: Re 1 (FS)
- Telangana: Re1 (FS)

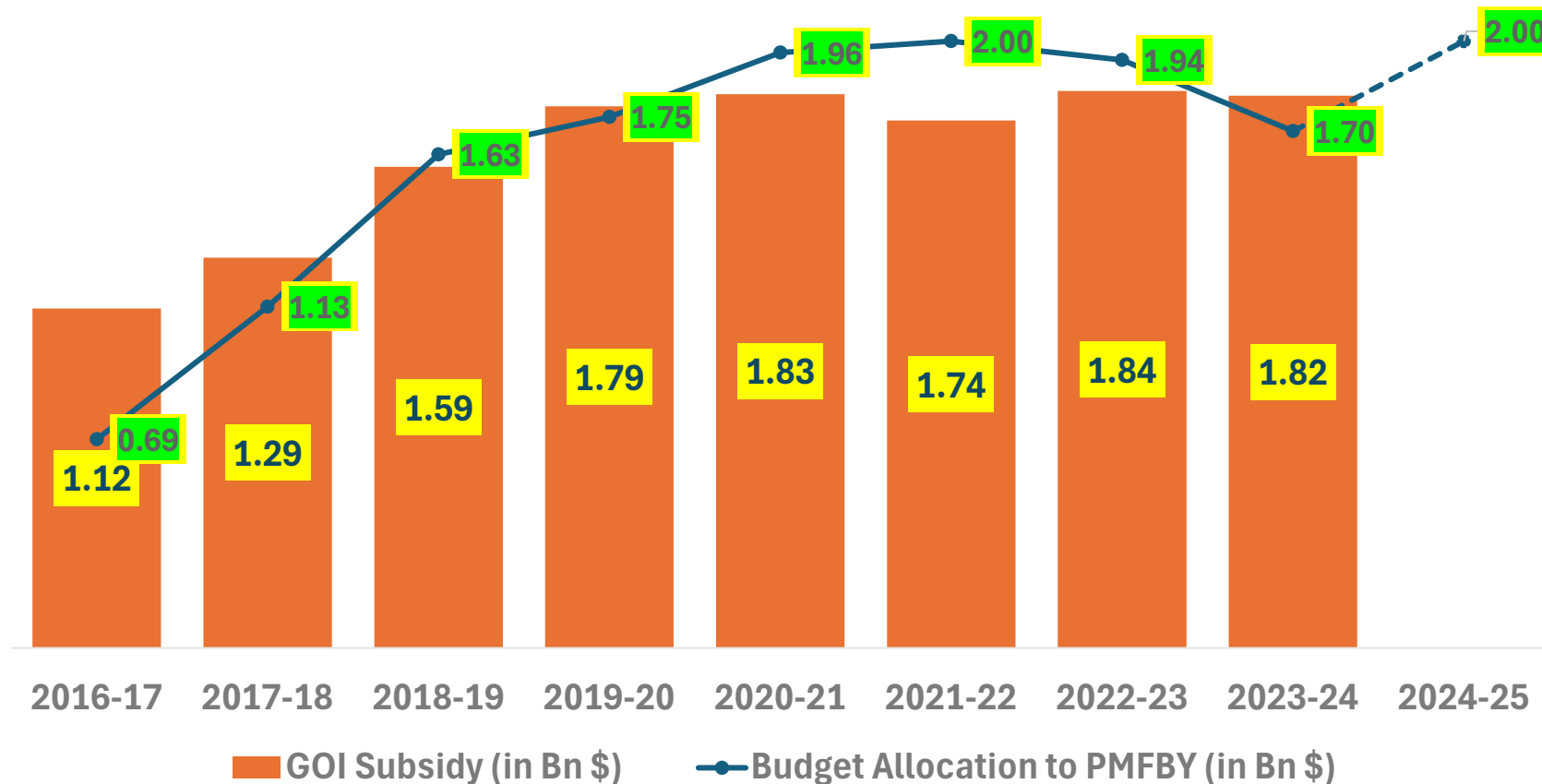


Insured Area Coverage over Gross Cropped Area



Central Govt. Budget Allocation & Utilization

(Central Budget Allocation & Utilization -- PMFBY (in Bn \$))



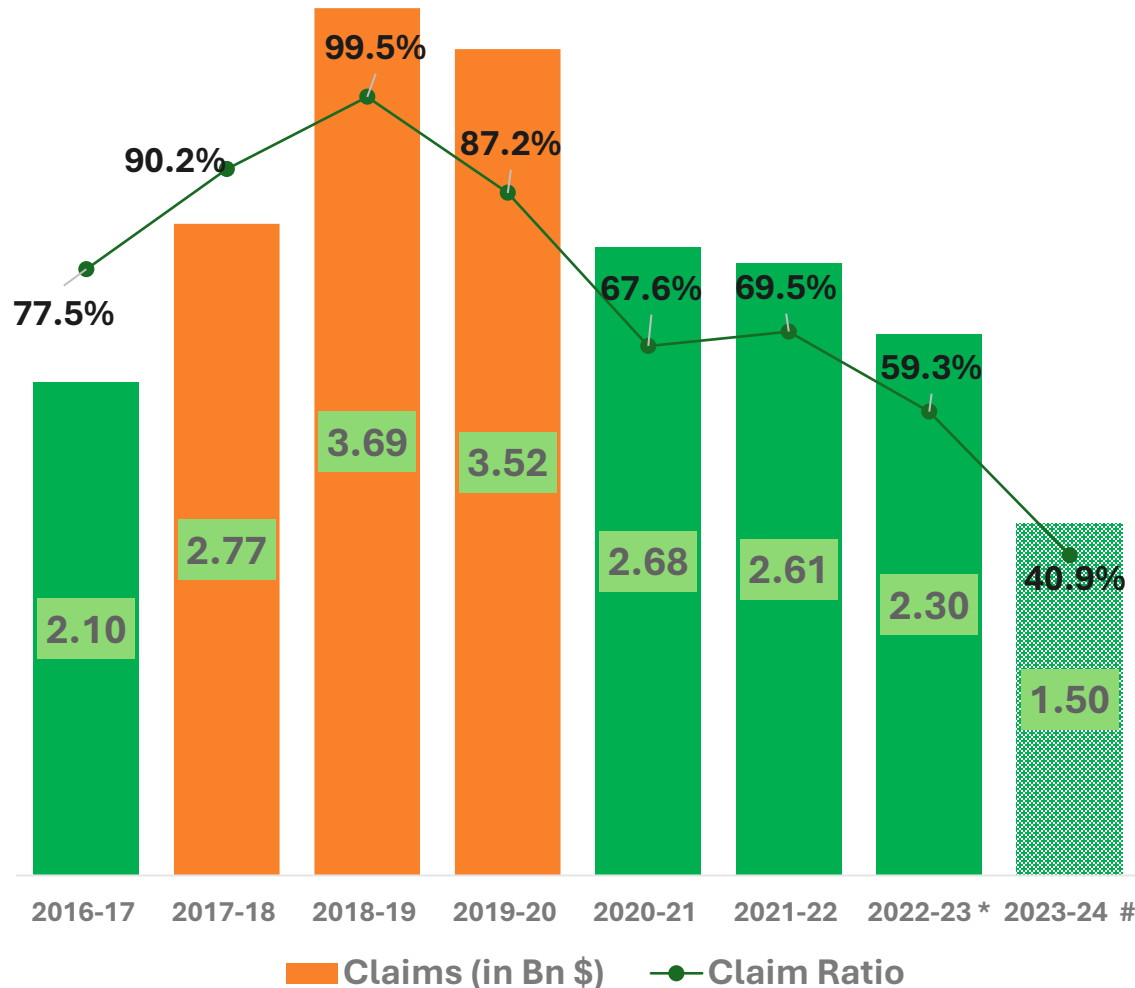
3rd Largest Program of
Agriculture Ministry

~ **12%** of total annual
Agriculture Budget

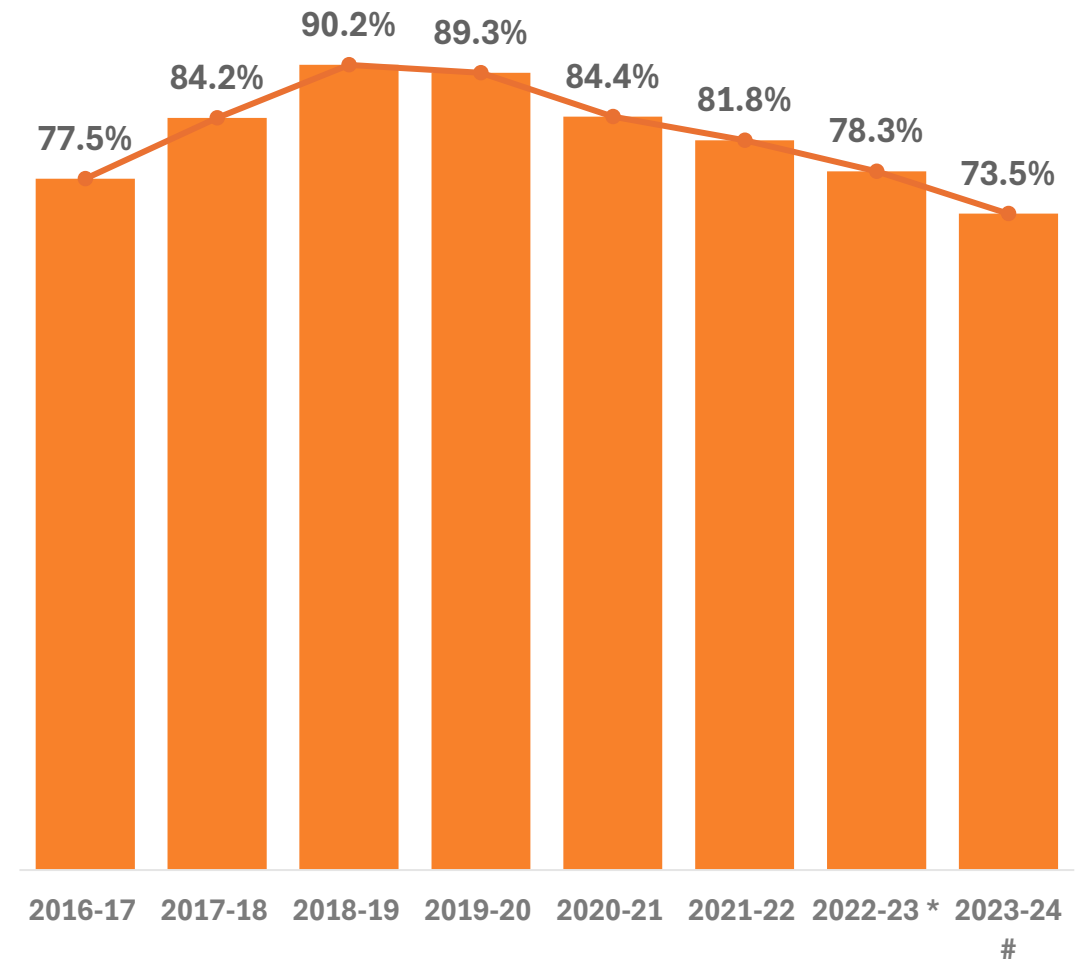
Commitment of GoI to
fund the Program for FRA

Claim Experience over last 8 years

Year Wise Trend

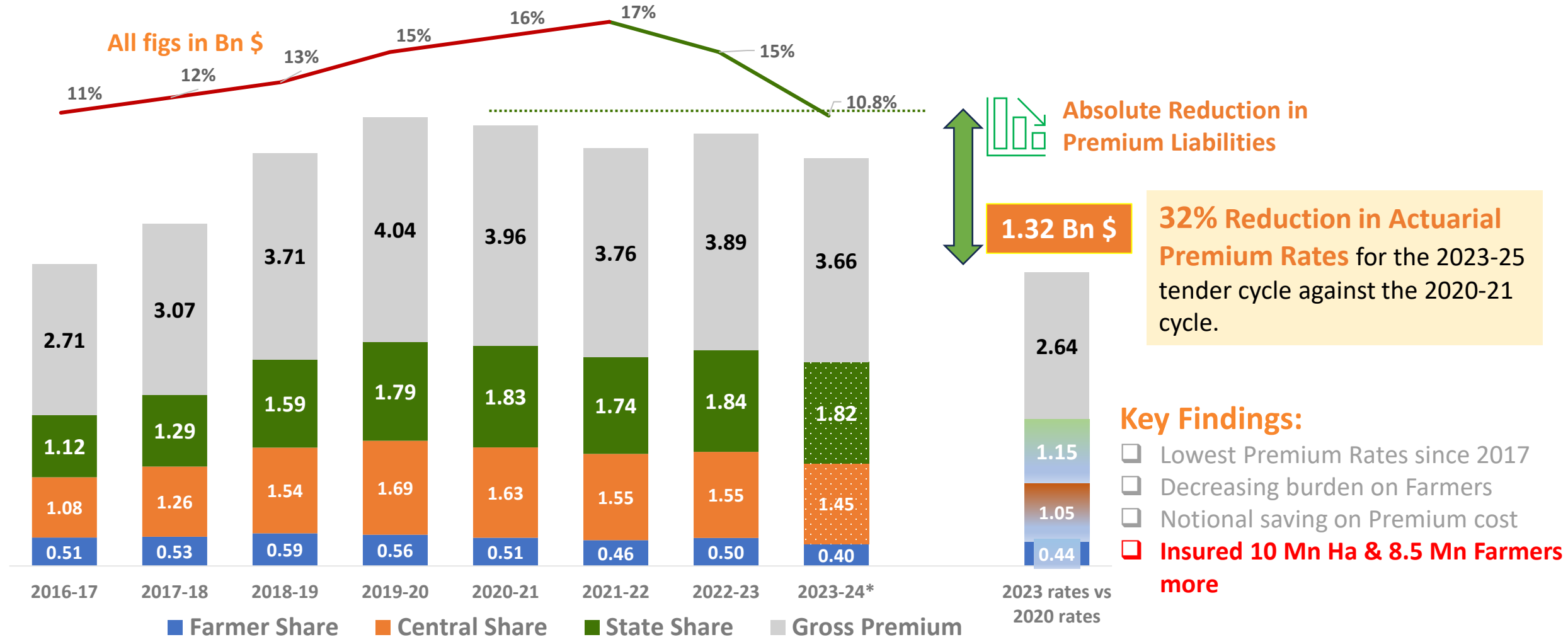


Cumulative Claim Ratio Trend





PMFBY: Rationalization of Premium Rates





Technology Interventions





YES-TECH: Automation of Yield Estimation



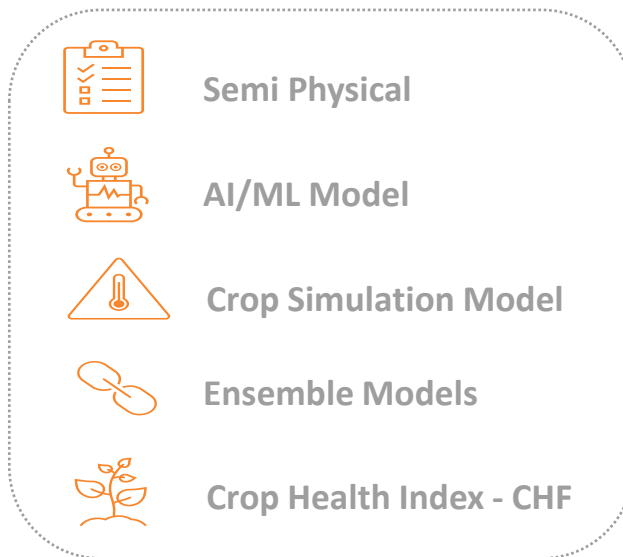
Key Partners / Collaborators



Pilot Studies in
100 Districts



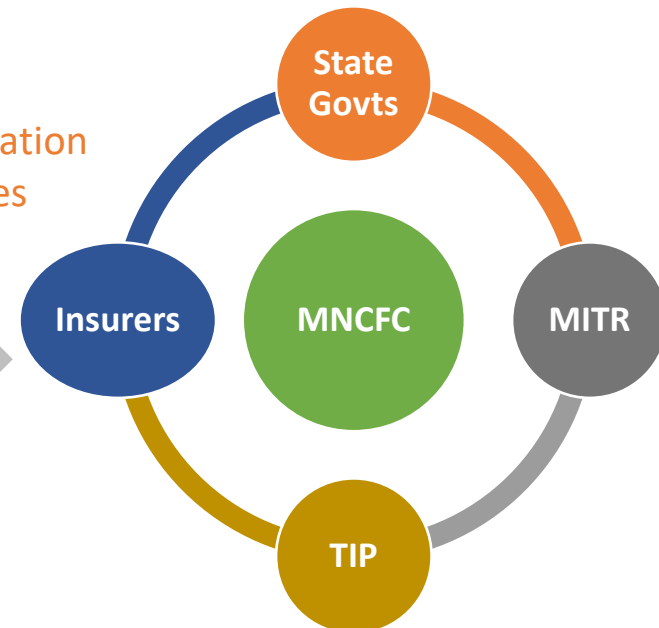
Models recommended by Expert Committee



Implementation
by States



YES-Tech Framework



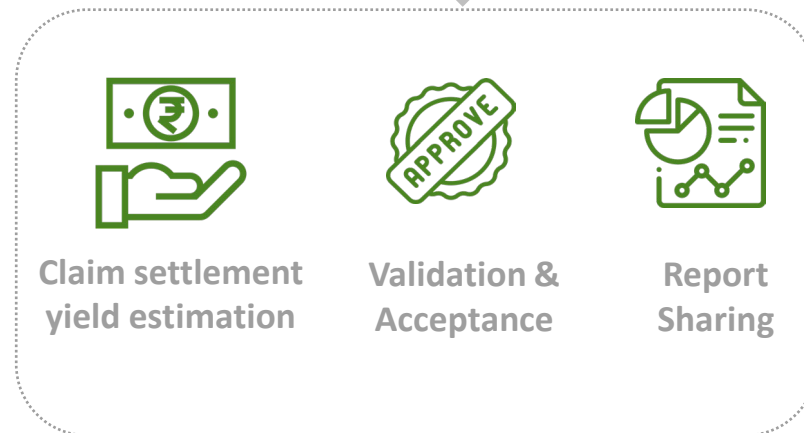
Applications / End Uses



Key Parameters & Milestones

- Blended approach: **Min. 30%** for Tech Yield +70% traditional CCEs
- 3 Major Crops** Covered: Paddy, Wheat & Soyabean (Pilots for Cotton)
- >65% insured** crops Acreage

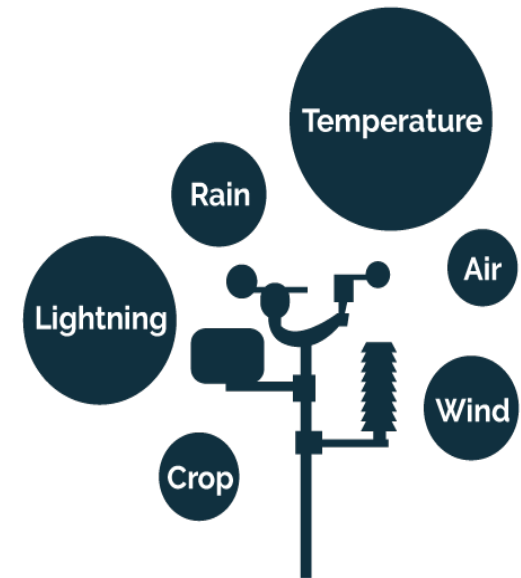
Process Outlined





WINDS

Weather Information Network & Data System



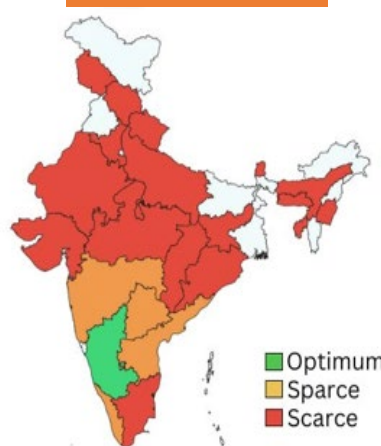


WINDS: One Nation One Weather Data Pipeline

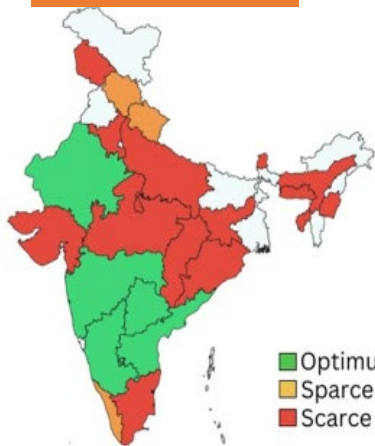


States/UTs wise ARGs and AWS across India

ARG Distribution



AWS Distribution



	Existing Network	Requirement
AWS	20,000	3,500
ARGs	13,000	160,000



Need for Hyper Local Weather Data for Precision Advisories & Use for Risk Protection & Assessment

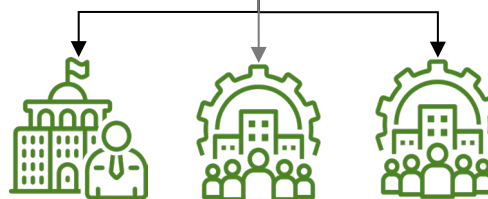
Hyper-local Weather Data



Collaboration with Indian Meteorological Department



WINDS Committee



State Govt

WIP

QAP

Implementation & Applications/Uses



1 AWS: Every 10 KM
1 ARG: Every 2 KM



Data sharing with Stakeholders & Ministries



WINDS Portal



Yield estimation



Food production



Crop Insurance



Disaster management

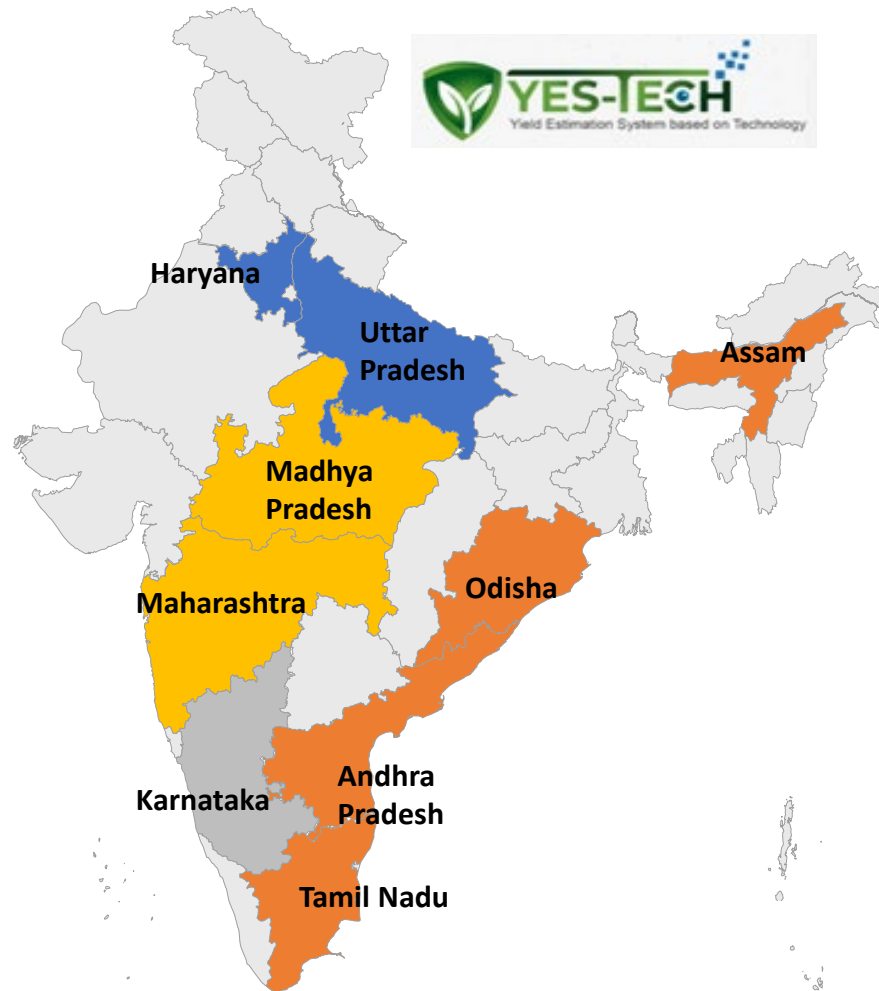
End Uses



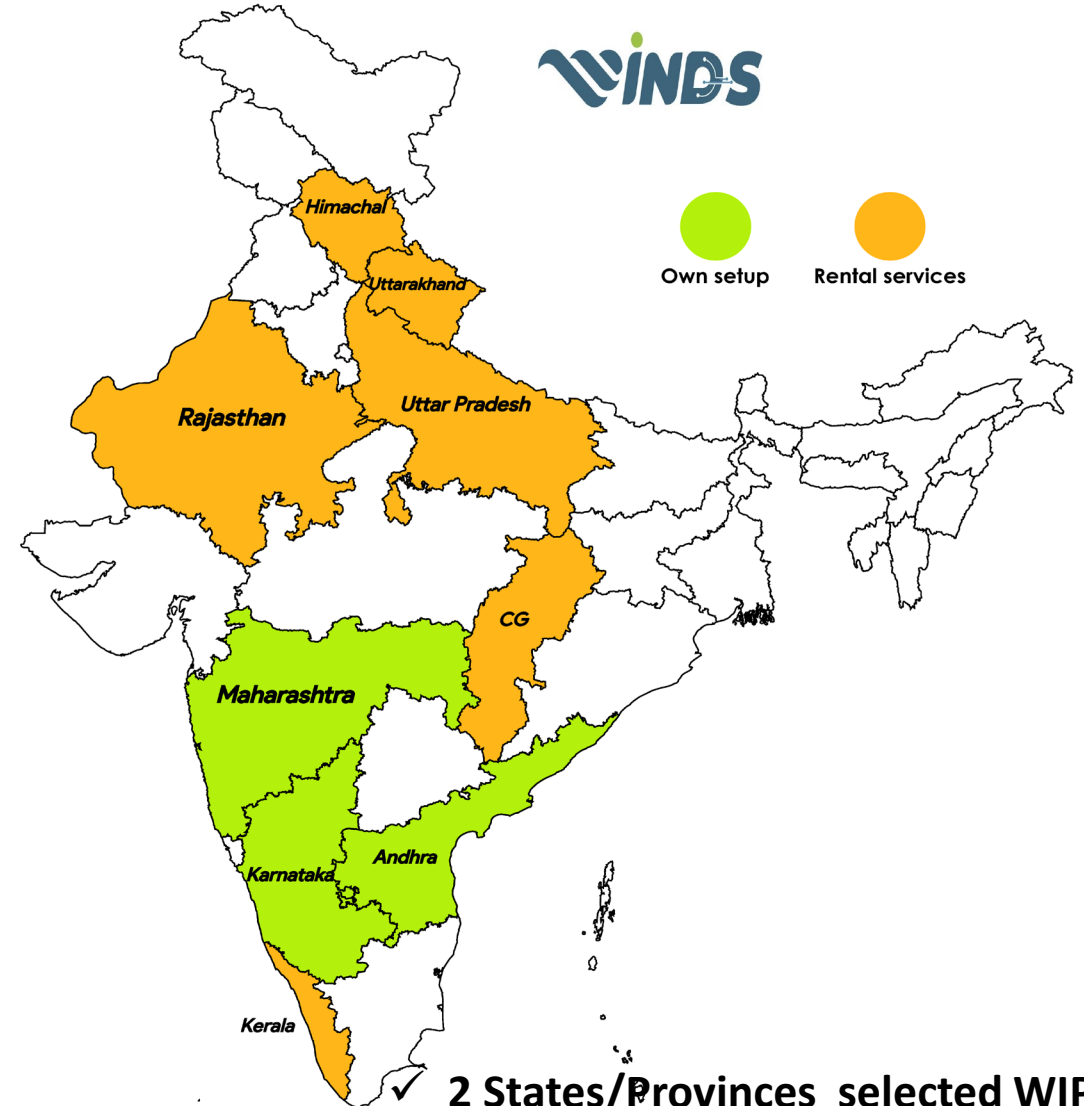
Implementation Status: YES-TECH & WINDS



■ Paddy +Wheat ■ Paddy ■ Paddy +Soyabean ■ Paddy +Soyabean+Wheat



● Own setup ● Rental services



- ✓ Kharif 2023—all 7 states/Provinces paid claims
- ✓ Rabi 2023-24--9 states/Provinces implementing,

Powered by Bing
© GeoNames, Microsoft, TomTom

- ✓ 2 States/Provinces selected WIPs,
- ✓ 7 states/Provinces in process



Collection of Real Time Observations & Photographs of Crops



CROPIC : Photo-Analytics for Crop Loss Assessment

Major Challenges faced In Loss Intimations



Crop & Peril
Identification



Higher number of
Physical Loss Surveys



Higher TAT for Claim
Payment



Capital intensive



Moral Hazards,
Political sensitization

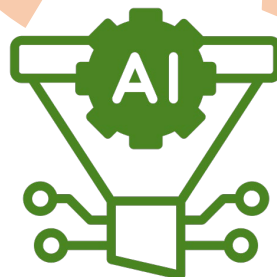
Technology leveraging Photo Analytics & Modelling



Geo-tagged, Time
Stamped photographs



Data pooling through
crowdsourcing &
Repository



AI ML model for
Automating Crop
Loss Assessment

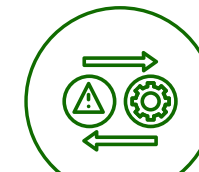
Process flow, Data Validation & Applications



Data Flow into
National Portal



Insurer to validate
and Accept



Risk
Identification



Timely Claim
Disbursement

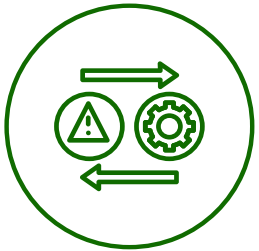
Key Actionables

- ❖ Nationwide Pilots underway
- ❖ Training basis on samples collected
- ❖ Crop Sown Acreage & Damage Severity assessment

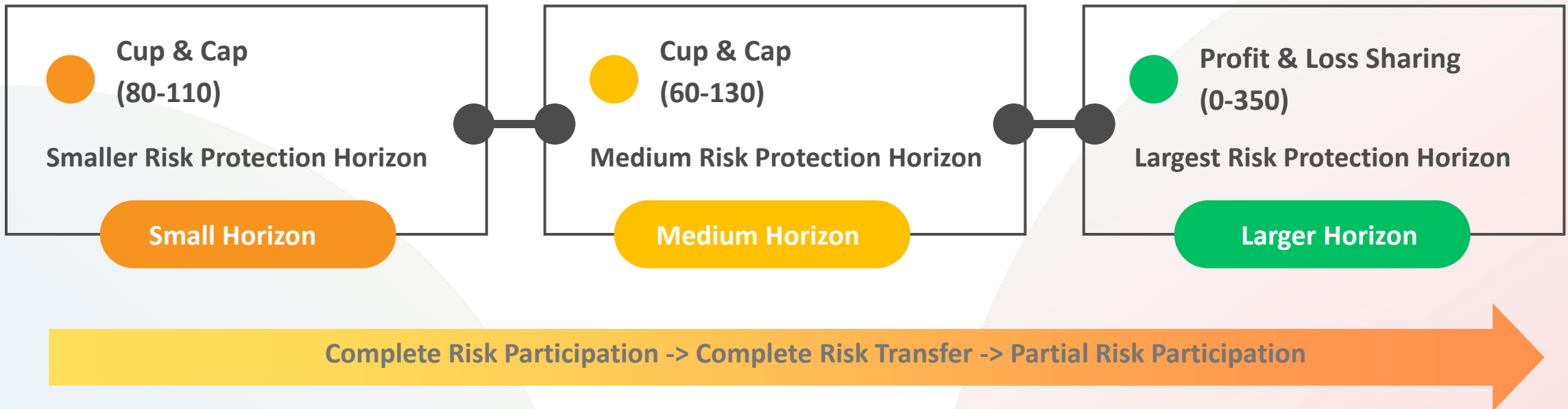


ARTM

Alternate Risk Transfer Mechanisms



A mix of Risk Transfer & Participation



Innovation for: **Financial & Perception** Management





Krishi Rakshak Helpdesk & Portal

Single nation-wide Toll-Free number

TOLL-FREE



Features



Up to 500 Agents

9 local language

Integrated Tracking

Defined TAT/SLA

Status of KRPH Operations:

Values In '000

- KRPH Calls Answered: 50,00
- Grievance Received: 450
- Grievances Resolved: 405
- Loss Intimation Received: 435

95% Grievance Resolution Achieved



Learning Management System

For Insurance and Credit Schemes

40+

COURSES OFFERED

85,000+

REGISTERED USERS

16,564+

CERTIFICATIONS
ISSUED

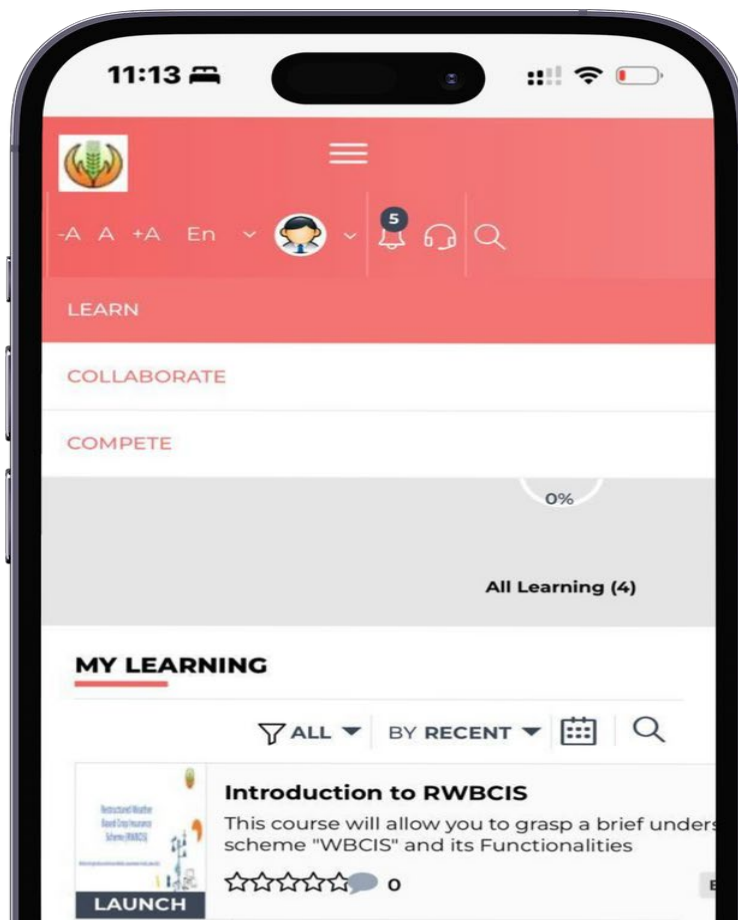
RESOURCE LIBRARY

DISCUSSION FORUMS

ASSESSMENT & CERTIFICATION

USER PROFILING & TRACKING

INTERACTIVE COURSE MODULES



LIVE WEBINARS & EXPERT
SESSIONS

MOBILE APP ACCESSIBILITY

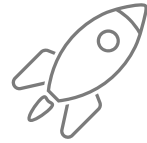
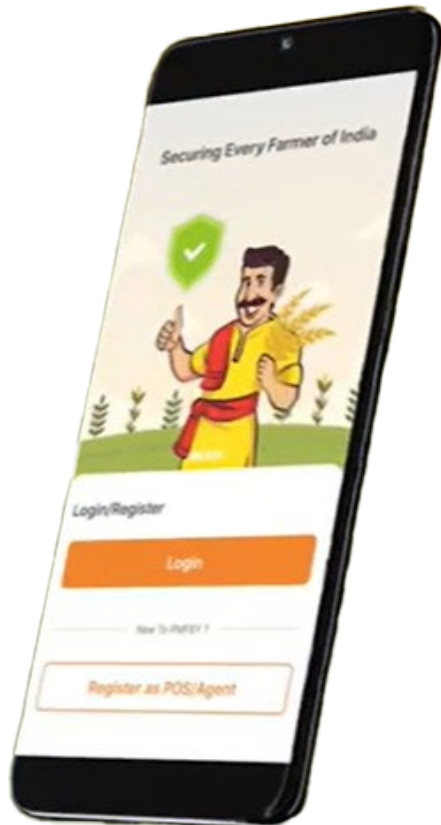
PROGRESS TRACKING

INTEGRATION WITH GOVT PORTALS

FEEDBACK MECHANISM



Smartphone App for Subscription-AIIDE



**Launched in
Summer 2023**



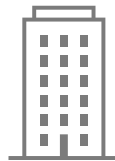
**1.4+ Million
applications enrolled**



**0.8+ Mn Ha
Area insured**



600,000 Partners



12 Insurers



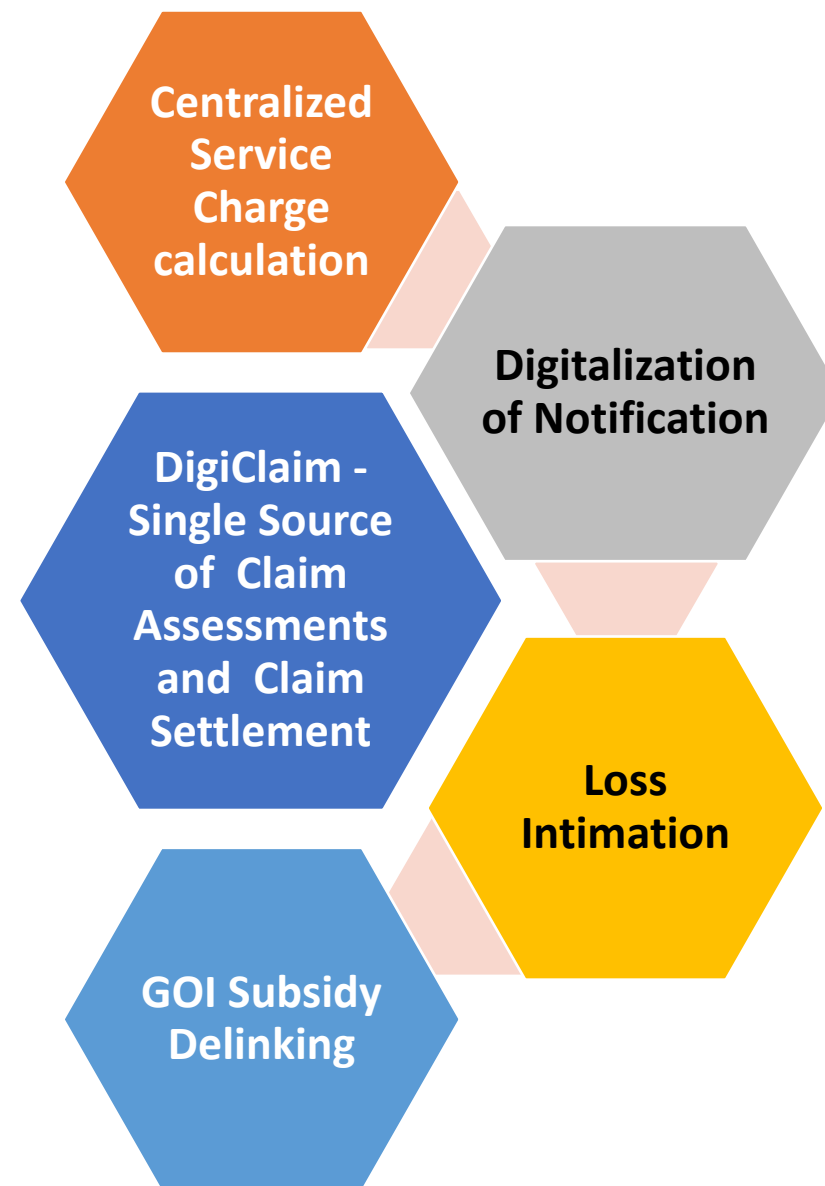
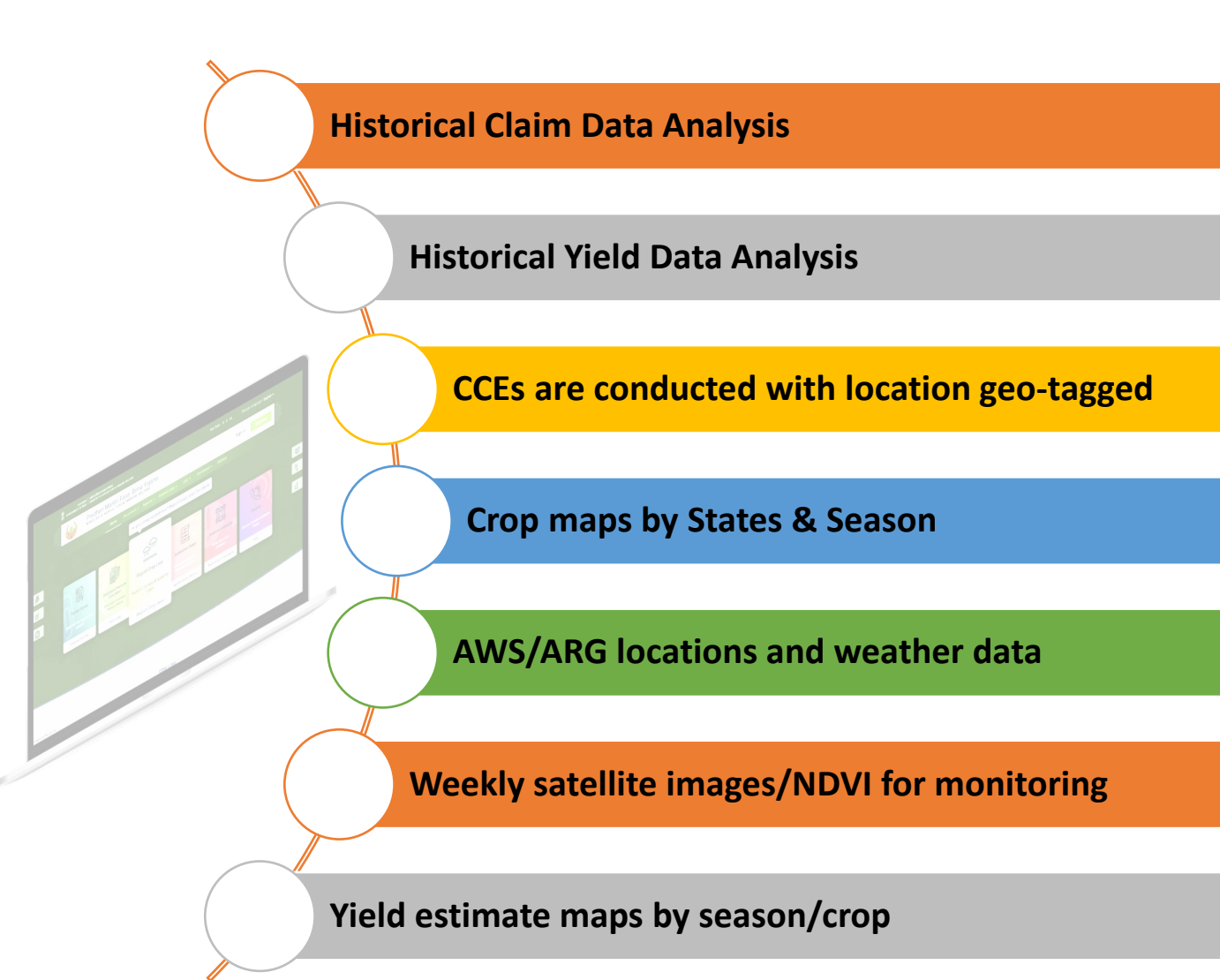
12 States/Provinces



Indicators of Governance Efficiency

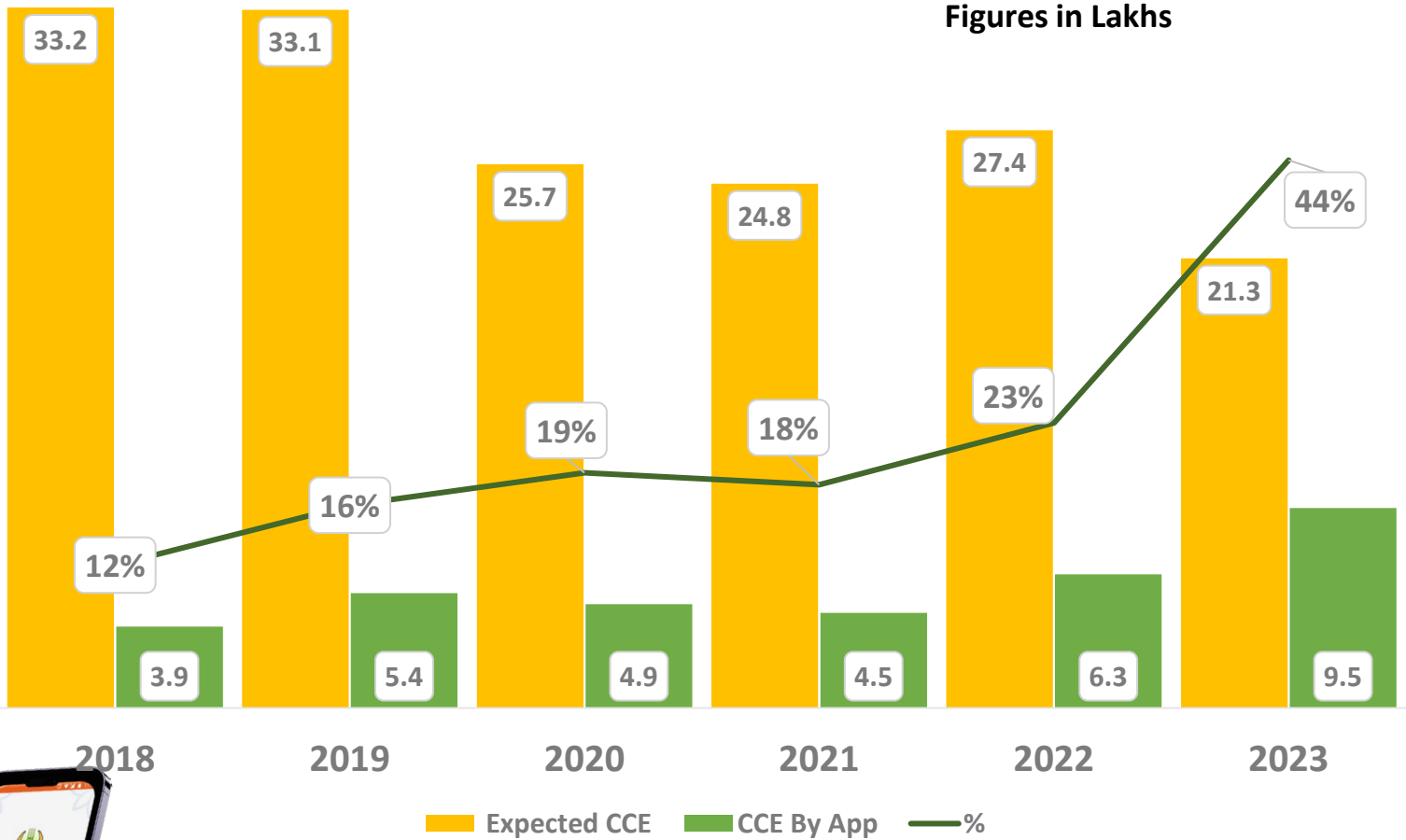


NCIP Portal- A Single Source of Truth

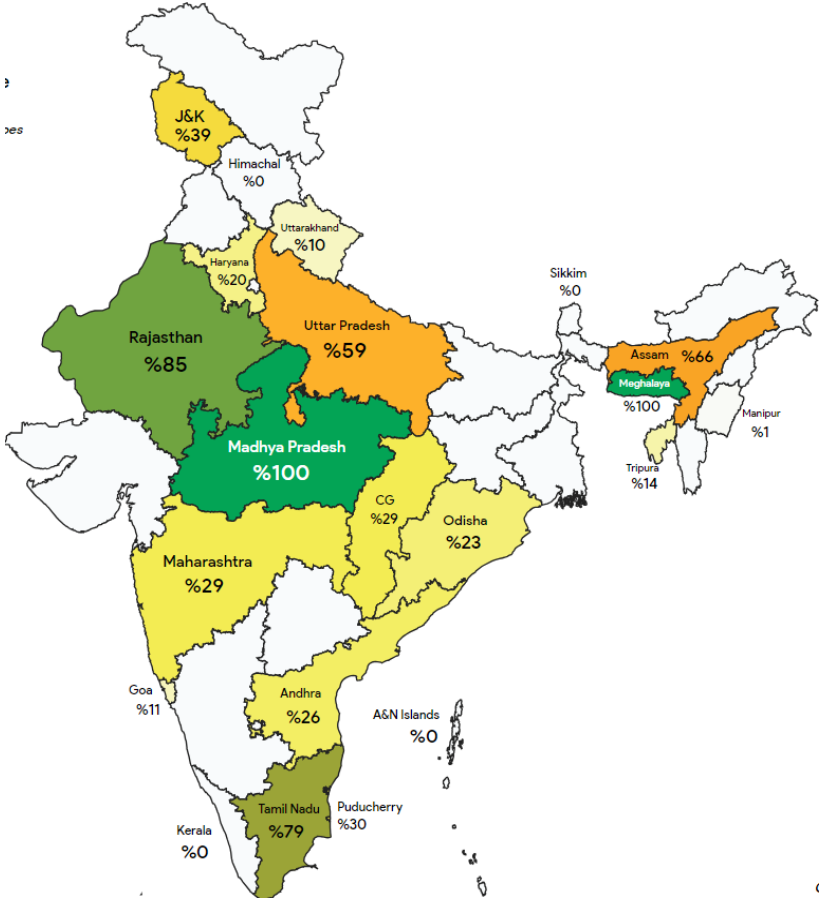




CCE Agri App--Objective Assessment of Crop Yield



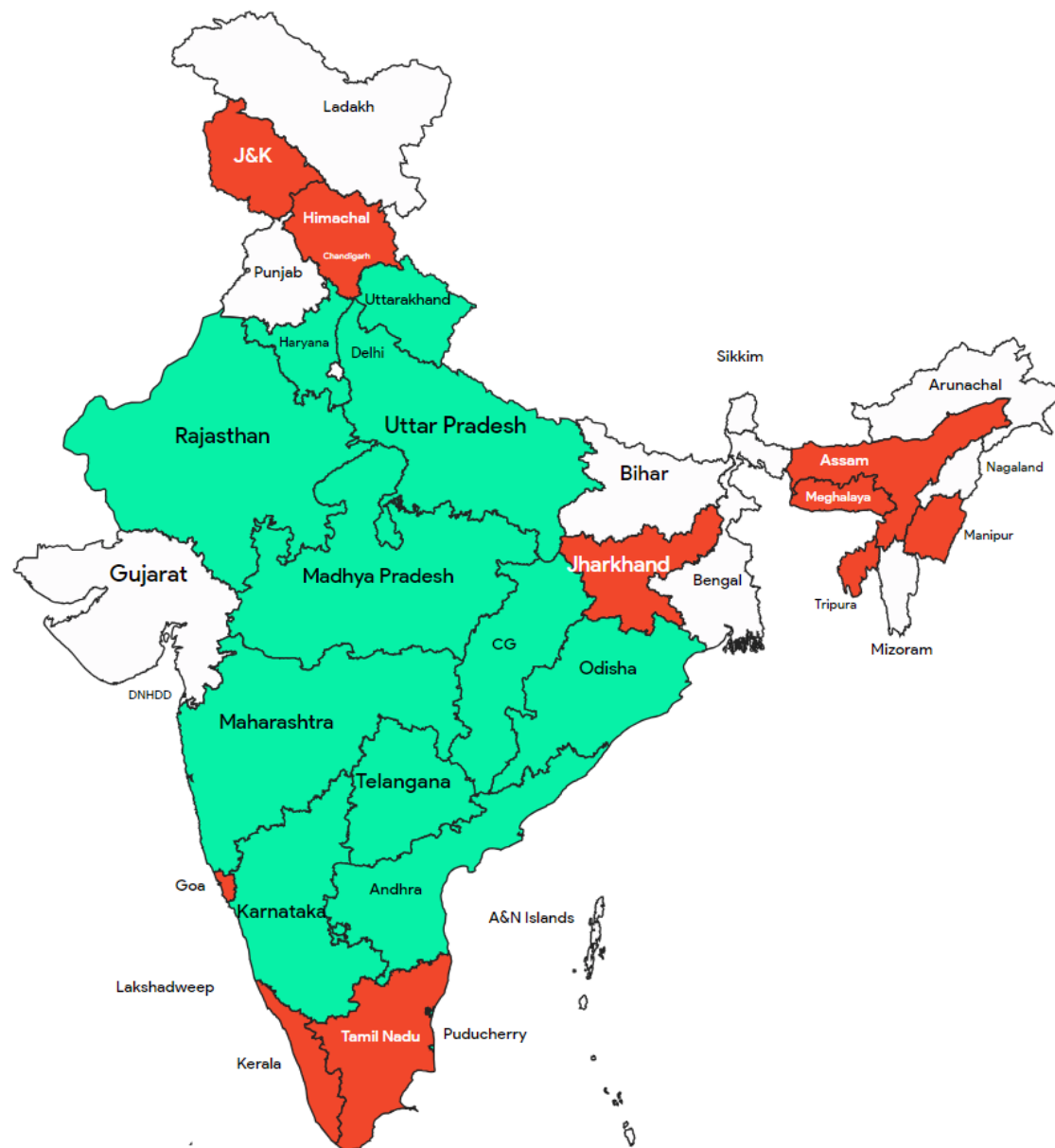
State/Province Wise Implementation of CCE Mobile App



During 2023 -24 - 44% of the total CCE conducted are through CCE AGRI App across 22 States/Provinces



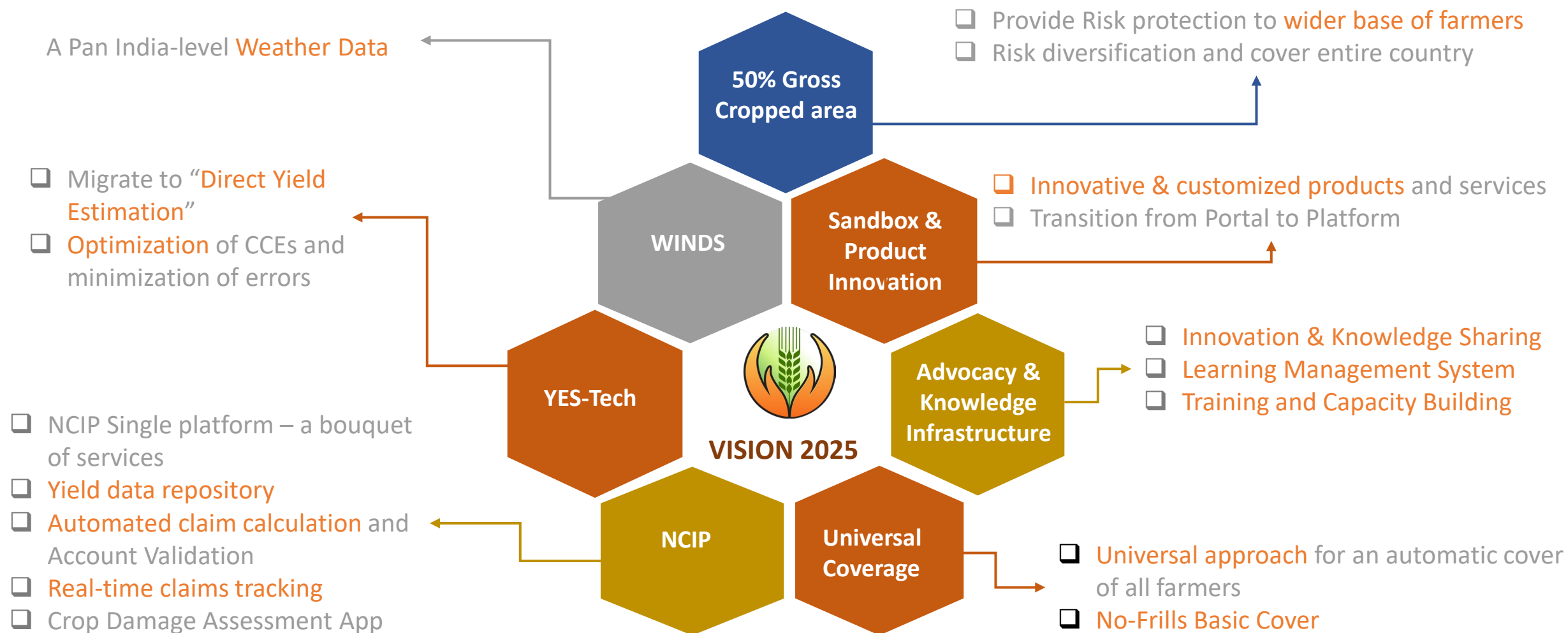
Digitized Land Record Validation



>95% of Insured Areas being pre-validated through digital e-land records (10 major implementing States/Provinces)



Vision 2025– A Universal & Comprehensive Risk Protection





www.pmfby.gov.in

THANK YOU

Email id: ajay.k.singh@nic.in
ajaykaran.singh@undp.org