किसान सहयोग विमर्श

भारतीय कृषि की पुनर्कल्पना: विकसित भारत-2047

Kisan Sahyog Vimarsh

Reimagining Indian Agriculture Viksit Bharat 2047

From Agricultural Self-Reliance to Entrepreneurship

Present scenario, challenges, responses and the way forward

Dr. Gopal Lal
Joint Director, ICAR–NAARM, Hyderabad

27 October 2026 • Lok Bhavan, Patna



ICAR–NAARM

कृषि और विकसित भारत-2047

Agriculture and Viksit Bharat 2047

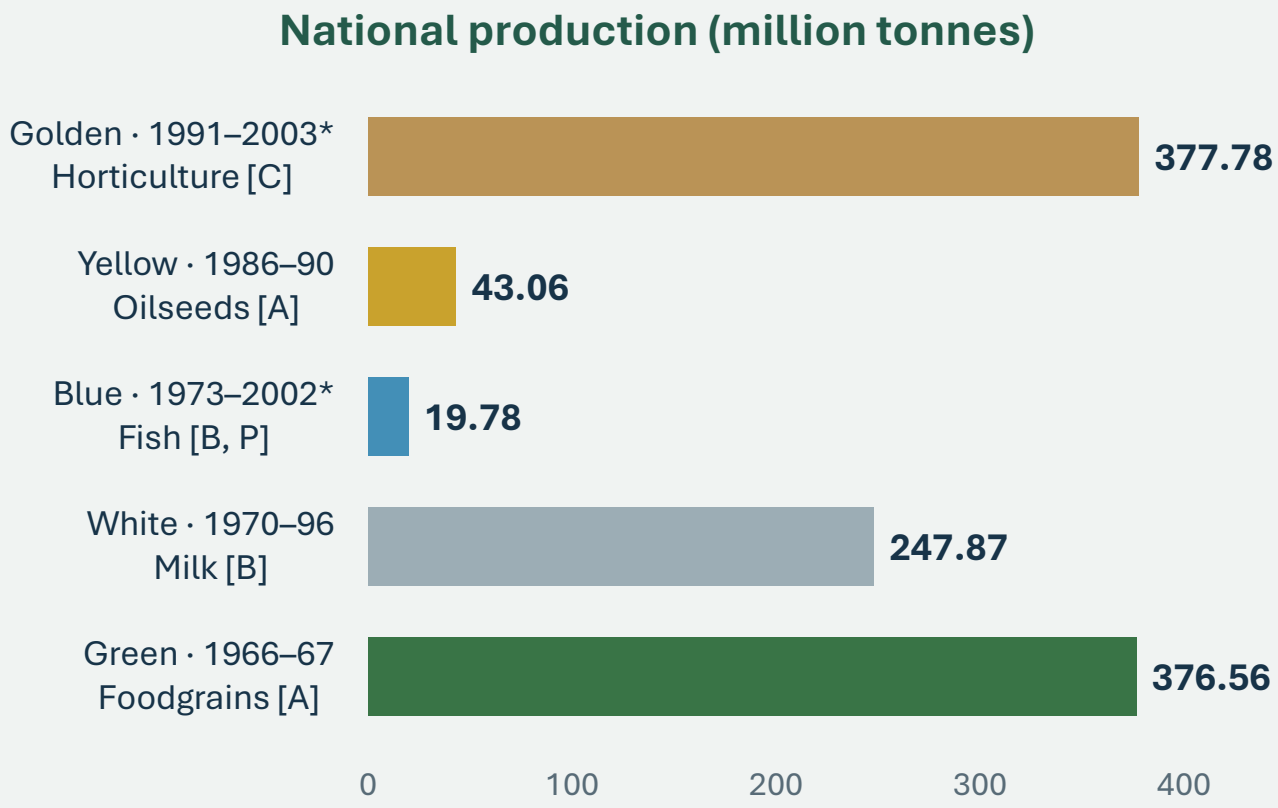
- Agriculture supports India's food security, rural livelihoods and economic development.
- Viksit Bharat 2047 calls for stronger farm incomes and sustainable use of soil and water.
- Kisan Sahyog Vimarsh connects farmers' experiences with opportunities for rural entrepreneurship.



From Agricultural Self-Reliance to Entrepreneurship

कृषि क्रांतियाँ और राष्ट्रीय उत्पादन

Agricultural revolutions and national production



Other revolutions	Period*	National output
Round: potato	1965–2005	59.89 Mt [C]
Pink: onion†	c.1970	30.74 Mt [C]
Red: meat†	c.1980	10.50 Mt [B]
Golden fibre: jute	c.1990	9.18m [A]
Silver: eggs	c.2000*	149.11bn [B]
Silver fibre: cotton	c.2000*	29.02m [A]
Grey: fertilisers	1960s–70s	Urea 30.67 Mt [B]
Sweet: honey	2020	Honey mission
Brown	Undated	Leather / cocoa†

Evergreen, Rainbow and Protein are cross-sector concepts.
Black refers to petroleum.

[A] 2025–26, 3rd advance estimate [B] 2024–25 [C] 2025–26, 2nd advance estimate
P: provisional. Mt: million tonnes. Fibre: million bales. Periods* are indicative. † Sector definitions vary across sources.

भारतीय कृषि: आर्थिक भूमिका (Indian agriculture: Economic role)

National GVA share (%)



4.4% औसत वार्षिक वृद्धि

Five-year average: Economic Survey 2025–26

Crops, horticulture, livestock and fisheries support income and rural employment.

GVA: FY2025–26, current prices. Rounded share. Other sectors = remainder.

भारतीय कृषि की पुनर्कल्पना

ICAR–NAARM

Reimagining Indian agriculture



Profitable farm businesses

Diversified income and decisions based on net returns



Resilient production

Locally suitable crops, healthy soils and secure water



Value retained by farmers

Collective marketing, quality assurance and processing



Accessible opportunities

Affordable services and enterprises led by youth and women

The 2047 objective: rising real farm incomes with food security and responsible resource use

चुनौतियां और व्यावहारिक प्रतिक्रियाएं

ICAR–NAARM

Challenges and practical responses

Challenge		Practical response
Climate and water	→	Resilient varieties, drainage and efficient irrigation
Small holdings	→	FPO aggregation and shared machinery
Losses and prices	→	Storage, grading and buyer agreements
Finance and skills	→	Working capital, training and mentoring

शमन: जलवायु, मृदा और जल

ICAR–NAARM

Mitigation: climate, soil and water

Constraint	Practical response	Evidence to track
Heat, flood and dry spells	Suitable varieties, advisories, drainage and contingency seed	Yield stability and recovery after shocks
Water stress	Irrigation scheduling, micro-irrigation where suitable and rainwater storage	Water used per unit of saleable output
Soil and input imbalance	Soil-test recommendations, organic matter and integrated pest management	Input cost, soil health and crop quality
Energy and residue costs	Efficient pumps, machinery services and locally viable residue use	Cost per hectare and residue utilisation

Local suitability and farm economics determine the package

मूल्य श्रृंखलाएं: निवेश और बाजार संपर्क

ICAR–NAARM

Value chains: investment and market linkages



Aggregation

FPOs combine lots and grade produce



Processing

Processing to buyer standards



Logistics

Storage, chilling and timely delivery



Markets

Reliable buyers and timely payment

Investment conditions

- Demand before infrastructure
- Professional operators
- Working capital

बिहार के परिप्रेक्ष्य में: फसल विविधीकरण और उद्यम

ICAR–NAARM

Bihar: crop diversification and enterprises

Crop group	Examples	Enterprise opportunities
Field crops	Maize, rice, wheat, pulses and oilseeds	Drying, storage, starch and feed
Fruits	Litchi, mango, banana and guava	Nurseries, packhouses and processing
Vegetables	Potato, tomato, cauliflower, okra and gourds	Grading, aggregation and cold logistics
Spices	Chilli, turmeric, coriander, ginger and garlic	Drying, grinding and packaging

Maize: 66.03 lakh tonnes (2024–25)

Makhana

Bihar's speciality crop



60,000 tonnes (2025–26 estimate)

Popping, quality control and branding

Crop clusters need local suitability, consistent quality and identified buyers

बिहार के परिप्रेक्ष्य में: कृषि-संबद्ध क्षेत्र और कृषि-उद्यमिता

ICAR–NAARM

Bihar: allied sectors and agripreneurship

Milk: 133.98 lakh tonnes (2024–25) | **Fish: 8.73** lakh tonnes (2023–24)

Production priorities



Community aquaculture, Bihar

Dairy: Fodder, animal health and hygienic chilling

Fisheries: Quality seed, water checks, flood planning and ice

Other livelihoods: Poultry, small ruminants and women-led processing

Enterprise support



Women-led food processing, Telangana

Participation: Rural youth, women and farmer groups

Support: Skills, incubation, credit and buyers

Proposed NAARM role: Enterprise training and FPO management

Partners: farmer groups, KVKs, banks, incubators and industry

Viable enterprises need biosecurity, affordable feed and reliable buyers

भारतीय कृषि:2047 के लिए रणनीतिक कार्ययोजना

ICAR–NAARM

Indian agriculture: roadmap to 2047

Viksit Bharat 2047: proposed phased pathway

2026–2030
Demonstrate locally



- Map resources, farmer priorities and demand
- Test crop and allied-sector cluster pilots
- Connect inputs, advice, finance and buyers
- Compare net returns, risks and operating costs

Milestone: viable models and credible baselines

2031–2040
Expand viable enterprises



- Expand models with repeat demand
- Add processing and logistics where viable
- Strengthen FPO management and transparency
- Improve access to services and technology

Milestone: reliable services and better market returns

2041–2047
Sustain farmer prosperity



- Assess income gains after costs and inflation
- Improve water productivity and soil health
- Limit weather, disease and market losses
- Sustain enterprise roles for youth and women

Milestone: durable incomes and resource security

2047 goal: higher real farm incomes, food security and responsible resource use

ICAR–NAARM

Thank You

Towards Viksit Bharat 2047

Empowering farmers through knowledge, collaboration and enterprise

