



FOUNDATIONAL POLICY PAPER

Guidelines to Identify and Incentivize Farmers Practicing Organic Farming and Using Eco-Friendly Fertilizers and Pesticides in Haryana

Submitted by



SDGCAC

SUSTAINABLE DEVELOPMENT GOALS
COORDINATION AND ACCELERATION CENTRE

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Submitted by : Mr. Rishi Raj Sharma, SDG Localization Analyst

Supervised by: Mr. Vikas Verma, Head-SDGCAC

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Towards Sustainable Agriculture: A Policy Framework for Organic Transition in Haryana

Executive Summary

Haryana, a state that has been the backbone of India's Green Revolution and a pillar of the nation's food security architecture, today *is navigating an important transition in agricultural sustainability*. As the second-largest consumer of chemical fertilizers in India¹, the state's intensive input-driven farming model has resulted in severe soil degradation, groundwater contamination, and adverse public health outcomes. Despite its agricultural prowess, Haryana has only 2,925.33 hectares under National Programme for Organic Production (NPOP) organic certification² — one of the lowest figures among major agricultural states in the country — and critically, has scope to expand its participation in Participatory Guarantee System (PGS) clusters under the Paramparagat Krishi Vikas Yojana (PKVY). This presents a significant opportunity for Haryana to strengthen its position in India's growing organic farming movement.

Recognizing this challenge, the Government of Haryana launched the Natural Farming Scheme in 2022 with an initial allocation of Rs 97 crore³. As of June 2025, 1,84,665 farmers have registered 2,73,955 acres on the state's natural farming portal, and 10,550 farmers have been verified as practicing natural farming on 17,087 acres⁴. The state has set an ambitious target of bringing 1 lakh acres under natural farming by 2025-26. Important supporting measures include the reservation of 10% of panchayat land for natural farming, establishment of dedicated training centers, subsidies for desi cow purchase (Rs 30,000) and storage drums (Rs 3,000), and the announcement of dedicated organic mandis at Gurugram and Hisar⁵. At the national level, the launch of the National Mission on Natural Farming (NMNF) in November 2024, with an outlay of Rs 2,481 crore⁶, and the

¹IJEE, Soil Health Card Study, Vol. 6(1) Jan-Mar 2025, <https://www.iseeiari.org/wp-content/uploads/2025/01/4.-IJEE-Vol.-611-Jan-Mar-2025.pdf>

²PIB, Organic Farming Status in India, Feb 2025, <https://www.pib.gov.in/PressReleasePage.aspx?PRID=2100761>

³Haryana Budget Documents, Natural Farming Scheme 2022, <https://agriharyana.gov.in/naturalfarming.aspx>

⁴CMO Haryana, Natural Farming Announcement, June 2025, <https://haryanacmooffice.gov.in/5-june-2025-0>

⁵Global Agriculture, Haryana Organic Pricing Committee, <https://www.global-agriculture.com/india-region/haryana-to-form-committee-to-determine-fair-price-for-natural-and-organic-farmers/>

⁶PIB, National Mission on Natural Farming, March 2026, <https://www.pib.gov.in/PressReleaseDetail.aspx?PRID=2244625>

allocation of Rs 616.01 crore in the Union Budget 2025-26⁷, provide a significant policy tailwind for Haryana's organic transition.

This Foundational Policy Paper outlines a conceptual six-pillar framework covering: (i) farmer identification and registration; (ii) certification and quality assurance; (iii) financial incentives; (iv) eco-friendly fertilizer and pesticide promotion; (v) market linkage and value chain development; and (vi) digital monitoring and accountability. This framework is intended to serve as an evidence-based foundation for discussion at a multi-stakeholder consultation workshop, where specific interventions, institutional mechanisms, financial parameters, and implementation modalities will be deliberated and refined through a participatory process.

The proposed framework is directly aligned with Sustainable Development Goals (SDGs) 2 (Zero Hunger), 3 (Good Health), 6 (Clean Water), 12 (Responsible Consumption and Production), 13 (Climate Action), and 15 (Life on Land)⁸. It contributes to Haryana Vision 2047 by positioning the state as a national leader in sustainable agriculture. The paper draws upon detailed comparative analysis of successful models from Sikkim (India's first 100% organic state), Andhra Pradesh (CMNF/ZBNF), Madhya Pradesh (largest organic area), Himachal Pradesh (PK3Y), Chhattisgarh (Godhan Nyay Yojana), Punjab (blockchain traceability and PAGREXCO), and other states.

The paper recommends a structured consultative process — culminating in a refined policy draft by December 2026 — through which stakeholders will shape the specific design, financial parameters, and implementation roadmap for the Government of Haryana's consideration.

⁷Down to Earth, Budget 2025-26 NMNF, <https://www.downtoearth.org.in/economy/budget-2025-26-major-boost-to-national-mission-on-natural-farming>

⁸SDGCAC, Haryana SDG District Index 2024, <https://sdgcc.in/wp-content/uploads/2024/10/SDGDI2024.pdf>

1. Haryana's Agricultural Baseline and the Case for Transition

Haryana's agricultural sector, while highly productive and integral to India's food security, *stands at a promising inflection point*. The state's reliance on chemical-intensive farming practices — cultivated over decades of Green Revolution legacy — has created a constellation of environmental, health, and economic challenges that *call for a well-considered and comprehensive policy response*. This section provides a data-driven assessment of the current agricultural baseline, establishing the evidence base for the transition to organic and eco-friendly farming practices.

1.1 Chemical Fertilizer Usage Patterns and Transition Opportunities

Haryana ranks as the second-largest user of chemical fertilizers in India, with per-hectare fertilizer consumption significantly exceeding the national average⁹. The state's farmers have historically relied on heavy doses of urea, di-ammonium phosphate (DAP), and muriate of potash (MOP), often in nutrient ratios far removed from the scientifically recommended 4:2:1 (N:P:K) proportion. This imbalanced application pattern has been well-documented in multiple studies and has contributed to progressive soil nutrient depletion and structural degradation across the state's prime agricultural belts.

This over-reliance on chemical inputs has been compounded by the prevailing annual lease-land system in Haryana, which incentivizes short-term yield maximization over long-term soil stewardship¹⁰. Tenant farmers, lacking long-term security of tenure, have little economic incentive to invest in soil health or transition to organic practices that may take 2–3 years to stabilize yields. Despite the nationwide mandate for 100% neem coating of urea since 2015 — covering approximately 340 lakh MT annually¹¹ — and research demonstrating that neem coating increases nutrient efficiency and crop yield¹², the fundamental challenge of excessive and imbalanced chemical input use in Haryana persists. The state's annual fertilizer subsidy burden continues to rise, creating a *fiscal dynamic that underscores the need for alternative approaches*.

1.2 Soil Health Degradation

Decades of intensive chemical fertilizer application have significantly depleted soil organic carbon, microbial diversity, and essential micronutrient content across Haryana's agricultural belts. Research indicates that approximately 146.8 million hectares — representing 30% of India's total land area — suffer from some form of soil contamination¹³, and Haryana's dominant rice-wheat cropping system has been a particularly significant contributor to soil degradation in the Indo-Gangetic plains.

⁹IJEE, Soil Health Card Study, Vol. 6(1) Jan-Mar 2025, <https://www.iseeiari.org/wp-content/uploads/2025/01/4.-IJEE-Vol.-611-Jan-Mar-2025.pdf>

¹⁰IJFMR, Organic Farming in Haryana, 2024, <https://www.ijfmr.com/papers/2024/4/50166.pdf>

¹¹PIB, Neem Coated Urea, 2021, <https://static.pib.gov.in/WriteReadData/specificdocs/documents/2021/sep/Neem%20Coated%20.pdf>

¹²PMC/NCBI, Neem Coated Urea Research, <https://pmc.ncbi.nlm.nih.gov/articles/PMC9156691/>

¹³NEXT IAS, Organic Farming Sector of India, 2025, <https://www.nextias.com/ca/current-affairs/11-01-2025/organic-farming-sector-of-india>

A 15-year longitudinal study published in *Frontiers in Environmental Science* established that organic farming practices demonstrably improve soil resilience in rice-wheat systems¹⁴. Complementary research documented that soil organic carbon increases by approximately 0.4% over three years under organic management¹⁵, a significant finding given that soil organic carbon is the primary indicator of soil health and fertility. The Soil Health Card scheme, while implemented in Haryana, *presents scope for greater adoption*, with farmers citing fears of yield reduction as the primary deterrent¹⁶. Studies suggest that less than 5% of farmers contribute to 95% of biofertilizer usage nationally¹⁷, indicating the enormous potential for scaling up bio-input adoption in states like Haryana.

1.3 Pesticide Use and Health Impacts

The intensive use of synthetic pesticides in Haryana has been linked to adverse health outcomes in farming communities. Epidemiological studies have documented increased incidence of respiratory disorders, dermatological conditions, neurological symptoms, and long-term chronic diseases including certain cancers among populations with sustained pesticide exposure. The health burden disproportionately affects small and marginal farmers and agricultural laborers who often lack adequate protective equipment and safety training.

The shift to eco-friendly alternatives — including neem-based pesticides, Panchagavya, Jeevamrut, and commercial biopesticides — offers a viable pathway to significantly reduce these health risks while maintaining effective crop protection¹⁸. Karnataka's experience demonstrates that Jeevamrut can be produced at a cost of approximately Rs 900 for 200 liters, sufficient to cover one acre¹⁹, making it an economically accessible alternative for Haryana's farmers.

1.4 Groundwater Contamination

The leaching of chemical fertilizers and pesticides into Haryana's already stressed groundwater aquifers represents a critical environmental concern. The state's groundwater table has been declining at a concerning rate due to the water-intensive rice-wheat cropping pattern, and the chemical contamination of remaining reserves poses serious risks to drinking water quality, ecosystem health, and long-term agricultural viability²⁰. Nitrate contamination from excessive urea application has been detected in multiple districts, exceeding WHO permissible limits in several groundwater samples. This creates a compelling case for transitioning to organic and eco-friendly agricultural inputs that minimize groundwater pollution while simultaneously supporting soil-based water retention capacity.

¹⁴Frontiers in Environmental Science, Soil Health Rice-Wheat, 2022, <https://www.frontiersin.org/articles/10.3389/fenvs.2022.1072394/pdf>

¹⁵IJFMR, Organic Farming in Haryana, 2024, <https://www.ijfmr.com/papers/2024/4/50166.pdf>

¹⁶IJEE, Soil Health Card Study, Vol. 6(1) Jan-Mar 2025, <https://www.iseeiari.org/wp-content/uploads/2025/01/4.-IJEE-Vol.-611-Jan-Mar-2025.pdf>

¹⁷Nature/PMC, Biofertilizer Adoption Study, 2023, <https://pmc.ncbi.nlm.nih.gov/articles/PMC10162982/>

¹⁸MDPI Sustainability, Organic Farming Pan-India Review, 2022, <https://www.mdpi.com/2071-1050/14/22/15057/pdf>

¹⁹India Data Map, State-wise Organic Farming 2025, <https://indiadatamap.com/2025/08/21/state-wise-organic-farming-in-india-2025/>

²⁰ScienceDirect, Soil Health Management Study, <https://www.sciencedirect.com/science/article/abs/pii/S0167198718311152>

1.5 The Economic Case for Transition

Despite the initial challenges of organic transition, the economic evidence strongly supports this shift. Research published in MDPI Sustainability demonstrates that organic farmers achieve 14–19% lower input costs compared to conventional farmers, despite initial yield reductions of 12–18% during the transition period²¹. Significantly, a study on organic basmati rice — Haryana's most valuable export crop — found that organic cultivation is 105% more profitable than conventional rice farming due to premium pricing in domestic and international markets²². India's organic market is projected to reach INR 51,560 crore (approximately \$6,150 million) by 2025²³, and the biofertilizer market is growing at a CAGR of 8.65% for the period 2024–2030²⁴. Haryana, with its proximity to the premium Delhi-NCR consumer market and established basmati trade networks, is uniquely positioned to capture a significant share of this growing organic economy.

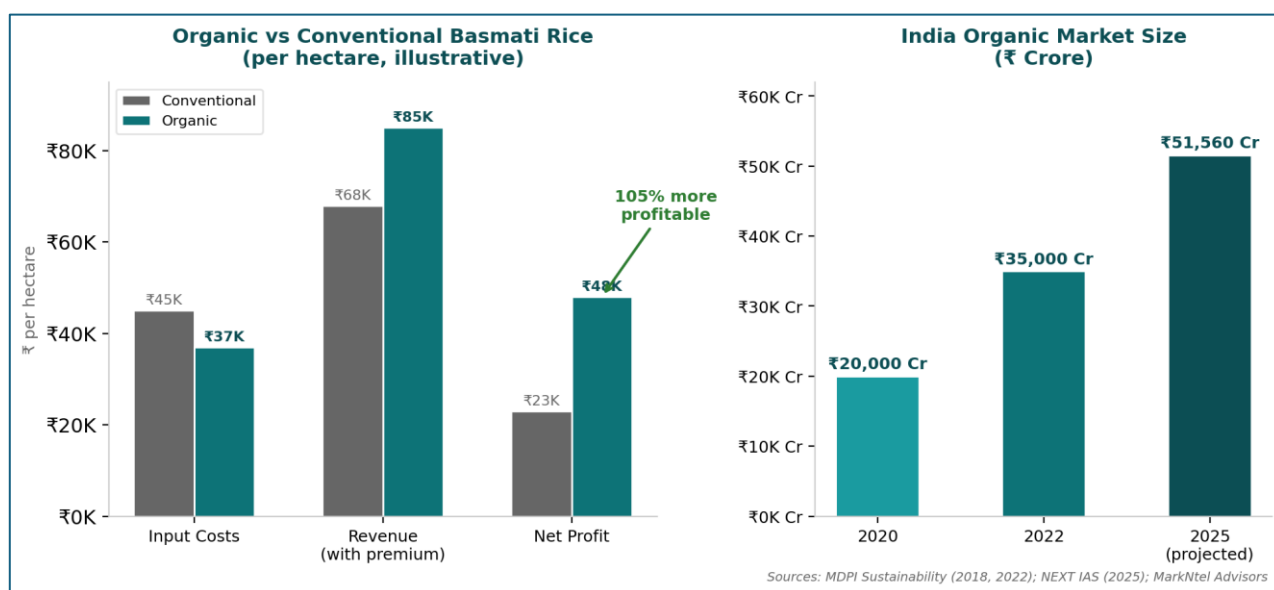


Figure 1: Economic Case for Organic Transition — Basmati Profitability and Market Growth

Table 1: Haryana's Agricultural Input Profile — Key Indicators

Indicator	Haryana	National Average / Benchmark
Chemical fertilizer consumption rank	2nd highest in India	—
Area under NPOP certification	2,925.33 ha	17,64,677 ha (India total)
PGS-India clusters under PKVY	Nil reported	18.84 lakh ha (India total)

²¹MDPI Sustainability, Organic Farming Pan-India Review, 2022, <https://www.mdpi.com/2071-1050/14/22/15057/pdf>

²²MDPI Sustainability, Organic vs Conventional Rice, 2018, <https://www.mdpi.com/2071-1050/10/12/4424/pdf>

²³NEXT IAS, Organic Farming Sector of India, 2025, <https://www.nextias.com/ca/current-affairs/11-01-2025/organic-farming-sector-of-india>

²⁴MarkNtel Advisors, India Bio-Fertilizers Market, <https://www.marknteladvisors.com/research-library/india-bio-fertilizers-market.html>

Soil organic carbon trend	Declining (intensive cropping)	+0.4% with organic transition
Natural farming registrations	1,84,665 farmers (2,73,955 acres)	18.19 lakh (NMNF nationwide)
Verified natural farming area	17,087 acres (10,550 farmers)	8.80 lakh ha (NMNF nationwide)
Organic basmati premium	105% over conventional	Growing domestic + export demand
Biofertilizer market growth	8.65% CAGR (2024-30)	Less than 5% farmers use biofertilizers
India organic market size	INR 51,560 crore (projected 2025)	4th largest organic area globally

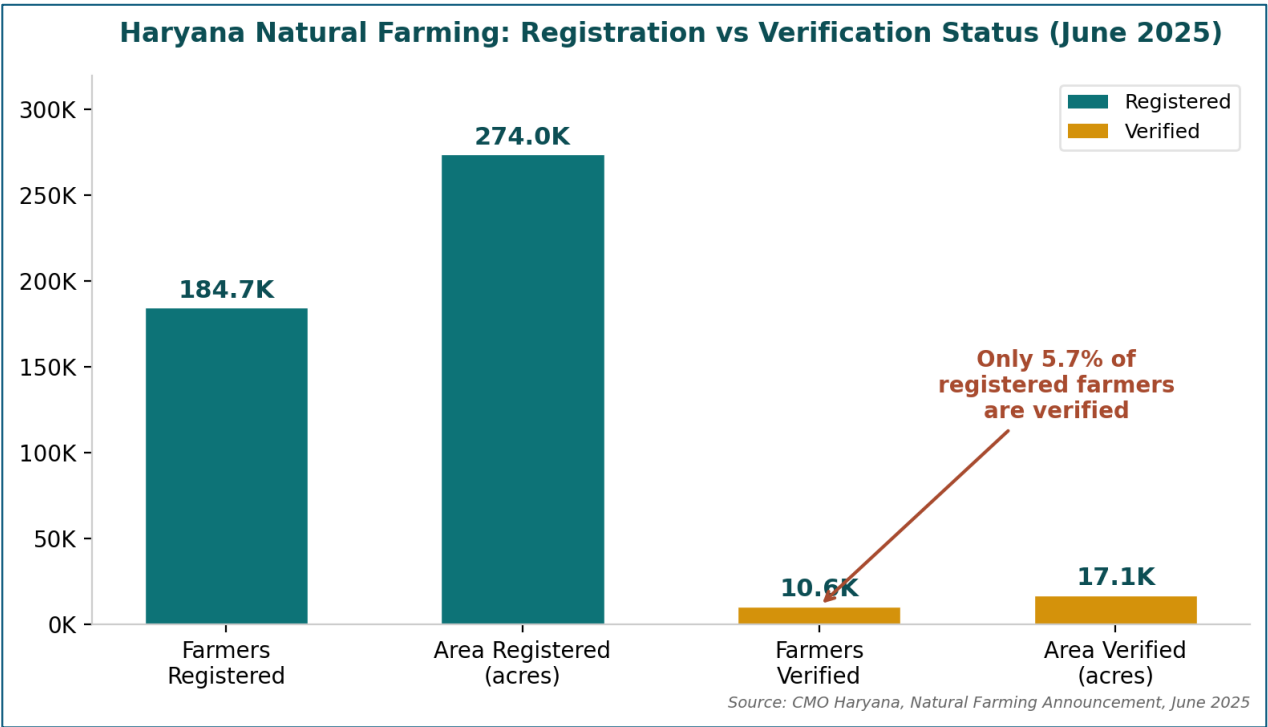


Figure 2: Haryana Natural Farming — Registration vs Verification Gap (June 2025)

 Key Indicators — The Opportunity for Transformation:

Chemical Dependency: Haryana is the 2nd largest chemical fertilizer user in India, yet has only 2,925 ha under organic certification — less than 0.05% of India's total organic area of 59.74 lakh ha

Organic Gap: No PGS clusters reported under PKVY — Haryana has significant room to expand its role in India's growing organic movement despite being a top agricultural producer

Verification Gap: While 1,84,665 farmers registered for natural farming, only 10,550 (5.7%) have been verified — indicating scope for strengthening monitoring and validation processes

Economic Opportunity: Organic basmati commands 105% premium over conventional; India's organic market projected at INR 51,560 crore by 2025

Soil Health: 30% of India's soil contaminated; Haryana's rice-wheat system among worst affected; organic transition shown to increase SOC by 0.4% in 3 years

2. Current Policy and Institutional Landscape

A comprehensive understanding of the existing policy architecture — both central and state-level — is essential for designing an effective framework that builds upon current strengths while addressing identified gaps. India's policy ecosystem for organic and natural farming has evolved significantly since 2015, with multiple overlapping schemes at central and state levels. This section provides a systematic audit of these instruments and their relevance to Haryana.

2.1 Central Government Schemes

National Mission on Natural Farming (NMNF)

Launched on November 25, 2024, as a standalone Centrally Sponsored Scheme, NMNF represents the most significant policy commitment to natural farming in India's history. With a total outlay of Rs 2,481 crore — comprising Rs 1,584 crore from the Central Government and Rs 897 crore from states — for a three-year period²⁵, the mission provides an output-based incentive of Rs 4,000 per acre per year for two years, limited to 1 acre per farmer. The Union Budget 2025-26 allocated Rs 616.01 crore for NMNF, a massive increase from Rs 100 crore in the Revised Estimates of 2024-25, representing a 516% increase²⁶. As of March 2026, the mission has formed 18,786 clusters, enrolled 18.19 lakh farmers, and covered 8.80 lakh hectares nationwide. NMNF is structured around cluster formation, champion farmer training, and community-based natural farming adoption. NMNF provides a significant financial foundation; the consultative process will determine how state resources can best complement central support.

Paramparagat Krishi Vikas Yojana (PKVY)

Operational since 2015-16, PKVY is the primary central scheme for organic farming promotion. It provides Rs 31,500 per hectare over three years, distributed as: Rs 15,000/ha for on-farm and off-farm organic inputs (disbursed via DBT), Rs 4,500/ha for marketing, packaging, and branding, Rs 3,000/ha for certification and residue analysis, and Rs 9,000/ha for training and capacity building²⁷. Nationally, PKVY has covered 18.84 lakh hectares and benefited 33.93 lakh farmers as of December 2025²⁸. The total organic area in India under NPOP and PGS combined stands at 59.74 lakh hectares. Haryana's participation in PKVY has been limited to 13 clusters in the Hisar region, with no PGS clusters reported — a significant underutilization of available central resources.

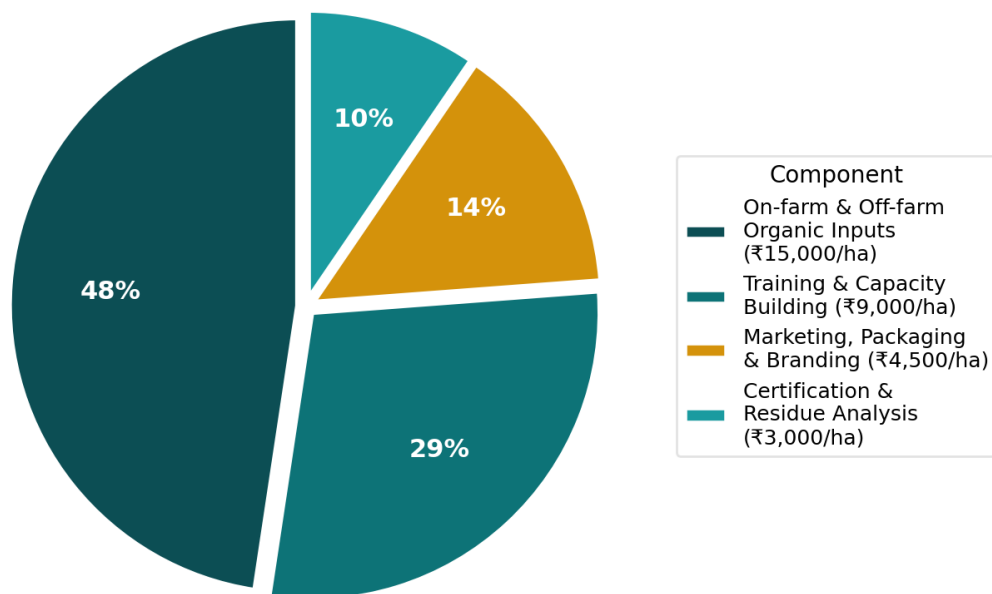
²⁵ PIB, National Mission on Natural Farming, March 2026, <https://www.pib.gov.in/PressReleaseDetail.aspx?PRID=2244625>

²⁶ Down to Earth, Budget 2025-26 NMNF, <https://www.downtoearth.org.in/economy/budget-2025-26-major-boost-to-national-mission-on-natural-farming>

²⁷ PIB, Organic Farming Status in India, Feb 2025, <https://www.pib.gov.in/PressReleasePage.aspx?PRID=2100761>

²⁸ Sansad Data, PKVY Status, https://sansad.in/getFile/annex/268/AU2261_bH1i00.pdf

PKVY Fund Allocation per Hectare (₹31,500 over 3 Years)



Source: PIB, Organic Farming Status in India, Feb 2025

Figure 3: PKVY Fund Allocation Structure (₹31,500 per Hectare over 3 Years)

PM-PRANAM

This innovative scheme incentivizes states to reduce chemical fertilizer consumption by providing 50% of the subsidy savings as grants to the state government — with 95% allocated for state use and 5% for monitoring, IEC, and research²⁹. PM-PRANAM promotes the adoption of organic, bio, and nano fertilizers as alternatives to conventional chemical fertilizers. However, as of March 2026, no incentives have been disbursed to any state under the scheme³⁰. This presents a strategic opportunity for Haryana to be among the first states to demonstrate measurable fertilizer subsidy savings and claim PM-PRANAM benefits, creating a self-reinforcing fiscal incentive for the organic transition.

Neem Coated Urea Policy

Since 2015, 100% of urea manufactured in India is mandatorily neem-coated, covering approximately 340 lakh MT annually. Research published in peer-reviewed journals demonstrates that neem coating increases nitrogen use efficiency by 5–10%, reduces urea application rates, improves crop yield, and enhances soil health by inhibiting nitrification³¹. While neem-coated urea

²⁹ PIB, PM-PRANAM Scheme, March 2026, <https://www.pib.gov.in/PressReleasePage.aspx?PRID=2239623>

³⁰ IBEF, PM-PRANAM Scheme Details, <https://www.ibef.org/government-schemes/pm-pranam>

³¹ PMC/NCBI, Neem Coated Urea Research, <https://pmc.ncbi.nlm.nih.gov/articles/PMC9156691/>

is not organic, it represents an intermediate step toward reduced chemical dependency and can serve as a transitional measure for farmers moving toward full organic practice³².

Soil Health Card Scheme

Provides farmers with cycle-based reports on soil nutrient status and crop-specific fertilizer recommendations. In Haryana, while awareness of the Soil Health Card program is reasonably high, actual adoption of its recommendations remains low. A study published in the International Journal of Environment and Education found that the primary barrier is the annual lease-land system, which disincentivizes soil health investments by tenants³³. Integration of Soil Health Card data into the proposed organic farmer identification system would enable evidence-based monitoring of soil health improvements under organic management.

2.2 Haryana's Existing Initiatives

The Government of Haryana has initiated several programs to promote organic and natural farming, building a foundation — albeit still limited in scale — for a more comprehensive intervention:

- **Natural Farming Scheme (2022):** Launched with Rs 97 crore allocation, this scheme targets 1 lakh acres under natural farming by 2025-26. Training centers have been established at four locations across the state: Gurukul Kurukshetra, Hameti Jind, Mangiana Sirsa, and Gharaunda Karnal. Since its launch, 720 farmer seminars and 22 specialized workshops have been organized³⁴
- **Farmer Registration and Verification:** The state has developed an online natural farming portal (agriharyana.gov.in/naturalfarming.aspx) where 1,84,665 farmers have registered 2,73,955 acres. Of these, 10,550 farmers have been physically verified as practicing natural farming on 17,087 acres — a verification rate of approximately 5.7%³⁵
- **Input Subsidies:** Rs 30,000 subsidy for desi cow purchase (total Rs 1.23 crore disbursed); Rs 3,000 for purchasing storage drums (Rs 75 lakh distributed to 2,500 farmers); Rs 20,000 per farmer for branding, packaging, and value addition³⁶
- **Market Infrastructure:** Dedicated organic markets (mandis) announced for Gurugram and Hisar. A committee has been constituted under the Haryana Kisan Kalyan Pradhikaran to determine fair pricing for natural and organic produce³⁷

³²Vikaspedia, Neem Coated Urea, <https://en.vikaspedia.in/viewcontent/agriculture/agri-inputs/inorganic-inputs/neem-coated-urea>

³³IJEE, Soil Health Card Study, Vol. 6(1) Jan-Mar 2025, <https://www.iseeiari.org/wp-content/uploads/2025/01/4.-IJEE-Vol.-611-Jan-Mar-2025.pdf>

³⁴Haryana Agriculture Portal, Natural Farming, <https://agriharyana.gov.in/naturalfarming.aspx>

³⁵CMO Haryana, Natural Farming Announcement, June 2025, <https://haryanacmoffice.gov.in/5-june-2025-0>

³⁶CMO Haryana, Natural Farming Announcement, June 2025, <https://haryanacmoffice.gov.in/5-june-2025-0>

³⁷Global Agriculture, Haryana Organic Pricing Committee, <https://www.global-agriculture.com/india-region/haryana-to-form-committee-to-determine-fair-price-for-natural-and-organic-farmers/>

- **Institutional Provisions:** Free testing laboratories for natural/organic produce as announced by the Chief Minister; 10% reservation of panchayat land for natural farming; PKVY implementation with 13 clusters operational in the Hisar region³⁸
- **Draft Organic Farming Policy:** The state has developed a draft policy focusing on establishing organic corridors along the Yamuna and Ghaggar river basins, leveraging the ecological sensitivity of these zones to drive organic transition³⁹

2.3 Areas for Strengthening and Enhancement

Building on these commendable initiatives, several areas present opportunities for further strengthening in Haryana's organic farming ecosystem that this paper seeks to address:

- Absence of a unified farmer identification and certification system that links organic practice verification with existing state digital databases (Parivar Pehchan Patra, Meri Fasal Mera Byora, Soil Health Card)
- No PGS-India clusters operational under PKVY in Haryana — indicating potential for fuller utilization of central resources and scope for joining the national organic certification ecosystem
- Limited financial incentive structure compared to leading states; no state top-up on NMNF central incentives, unlike states such as Himachal Pradesh
- Wide gap between registration (1,84,665 farmers) and verification (10,550 farmers) — suggesting scope for strengthening monitoring and field-level validation
- Emerging market infrastructure with scope for expansion — only two organic mandis announced but not yet fully operational; no state organic brand; no e-NAM integration for organic produce
- Evolving digital monitoring with opportunities for integration — no integrated dashboard for tracking organic farming adoption, scheme utilization, certification progress, and market outcomes
- No dedicated state legislation for organic farming promotion and facilitation, unlike the models emerging in other progressive states
- PM-PRANAM benefits remain unclaimed — zero disbursement to any state presents a first-mover opportunity for Haryana

Table 2: Review of Existing Policy Frameworks

Scheme/Initiative	Scope	Key Provision	Haryana Status	Gap Identified
NMNF (2024)	National; natural farming	Rs 4,000/acre/yr; 2 yrs	Enrolled; early stage	No state top-up

³⁸CMO Haryana, Natural Farming Announcement, June 2025, <https://haryanacmoffice.gov.in/5-june-2025-0>

³⁹IJFMR, Organic Farming in Haryana, 2024, <https://www.ijfmr.com/papers/2024/4/50166.pdf>

PKVY (2015)	National; organic certification	Rs 31,500/ha; 3 yrs	13 clusters (Hisar)	No PGS clusters
PM-PRANAM	National; fertilizer reduction	50% subsidy savings	Not activated	Zero disbursement
Soil Health Card	National; soil testing	Free nutrient testing	Aware but low adoption	No organic integration
Neem Coated Urea	National; urea efficiency	100% neem coating	Implemented	Not a full alternative
NF Scheme HR	State; natural farming	Rs 97 cr; training/subs.	1.84L registrations	10,550 verified only
Organic Mandis HR	State; market access	Dedicated organic mandis	2 announced	Not yet operational
Draft Organic Policy	State; policy framework	Organic corridors	Under development	Not yet notified

National Mission on Natural Farming (NMNF) — Key Details for Haryana:

Total Outlay: Rs 2,481 crore (Centre: Rs 1,584 cr; States: Rs 897 cr) for 3 years

Per-Farmer Incentive: Rs 4,000/acre/year (output-based) for 2 years, up to 1 acre per farmer

Budget 2025-26 Allocation: Rs 616.01 crore — a 516% increase from Rs 100 crore in RE 2024-25

National Coverage (March 2026): 18,786 clusters | 8.80 lakh ha | 18.19 lakh farmers enrolled

Strategic Implication: NMNF provides the financial backbone; Haryana can layer state resources to create a comprehensive per-acre package

PM-PRANAM Opportunity: Zero states have claimed benefits — Haryana can be the first mover and demonstrate fiscal savings from organic transition

3. Comparative Analysis — State-Level Best Practices

Learning from the diverse approaches adopted by Indian states provides Haryana with a rich repository of proven strategies that can be adapted to its unique agro-climatic, socio-economic, and institutional context. This section examines ten state models in detail and extracts transferable principles for Haryana's organic farming framework.

3.1 National Models

Sikkim — India's First 100% Organic State

Sikkim's organic journey represents the most comprehensive state-level organic transformation globally. The state declared its intent to go fully organic in 2003, launched the Sikkim Organic Mission in 2010, and achieved 100% organic status by 2016 — a 13-year journey. The transformation involved a complete ban on chemical fertilizers and pesticides, establishment of 100 model organic villages, and systematic farmer training programs. Agricultural production increased from 200,000 MT (2003) to 700,000 MT (2016), agriculture GDP grew by 26% (compared to Punjab's 13% in the same period), and 66,000 farming families were economically uplifted. Over 75,000 hectares are now under certified organic farming⁴⁰. The Sikkim model demonstrates that state-level commitment, phased chemical reduction, and comprehensive support systems can achieve full organic transition even in resource-constrained settings.

Andhra Pradesh — Community Managed Natural Farming (CMNF)

Andhra Pradesh's CMNF program, launched in 2018 with UNEP support and targeting 6 million farmers, represents the world's largest agroecology initiative. The program operates on four core principles: Bijamrita (seed treatment), Jivamrita (soil enrichment), Achhadana (mulching), and Whapasa (water management). CMNF has covered 1,81,600 hectares directly, with 3,60,805 hectares under PGS certification and 63,678.69 hectares under NPOP⁴¹. AP's model is particularly relevant to Haryana because it demonstrates how community-based approaches can achieve scale rapidly without relying solely on government-driven certification systems.

Madhya Pradesh — India's Largest Organic Area

With 11,48,236.07 hectares under NPOP certification — the largest in India — and an additional 74,960 hectares under PGS-PKVY, Madhya Pradesh's total organic area of approximately 12.23 lakh hectares demonstrates the potential for scaling organic certification in large agrarian states⁴². MP's success lies in systematic support for third-party NPOP certification and leveraging its tribal and forested regions for organic wild collection alongside cultivated organic agriculture.

Himachal Pradesh — Prakritik Kheti Khushhal Kisan Yojana (PK3Y)

⁴⁰ Forbes, How Sikkim Became Fully Organic, May 2025, <https://www.forbes.com/sites/indrabatilahiri/2025/05/18/how-sikkim-in-india-became-the-worlds-first-fully-organic-state/>

⁴¹ Future of Food, AP Zero Budget Natural Farming, <https://futureoffood.org/publication-library/andhra-pradeshs-zero-budget-natural-farming/>

⁴² PIB, Organic Area Under PKVY/NPOP, Feb 2025, <https://www.pib.gov.in/PressReleasePage.aspx?PRID=2100761>

Launched in 2018-19, PK3Y has enabled 2.23 lakh farmers to adopt chemical-free farming practices, achieving coverage of 99.3% of panchayats⁴³. The scheme provides a 50% subsidy up to Rs 25,000 for desi cow purchase and has brought 19,915 hectares under natural farming, with 9,334.28 hectares under NPOP and 18,748 hectares under PGS⁴⁴. HP's panchayat-level penetration strategy and cow-based input promotion are directly transferable to Haryana's context.

Uttarakhand — State Organic Certification Model

Uttarakhand has pioneered the concept of a state organic certification agency through USOCA (Uttarakhand State Organic Certification Agency), the first national government agency accredited by the National Accreditation Body for organic certification⁴⁵. With 1,01,820.39 hectares under NPOP, 1,40,740 hectares under PGS, and 3,900 PKVY clusters⁴⁶, Uttarakhand's model of a dedicated state certification body reduces the cost and complexity of organic certification for farmers — a model Haryana should replicate.

Chhattisgarh — Innovative Input Supply Chain

Chhattisgarh's NGGB Model (Narwa, Garuwa, Ghuruwa, Badi) and the Godhan Nyay Yojana (launched 2020) represent one of India's most innovative approaches to organic input supply chain development. The state procures cow dung at Rs 2/kg from farmers and converts it into vermicompost, creating 6.5 lakh compost pits, 96,386 vermicompost tanks, and producing 26 lakh quintals of vermicompost⁴⁷. This model creates a dual benefit: supplementary income for cattle-owning farmers and a reliable supply of organic inputs. Haryana, with its significant cattle population, is ideally suited to replicate and scale this model through MGNREGA convergence.

Punjab — Green Revolution Heartland Embracing Organic Transition

Punjab, often referred to as the "Granary of India," shares deep agricultural parallels with Haryana — both states were at the forefront of the Green Revolution and subsequently developed highly intensive, chemical-dependent farming systems. Punjab's experience with organic farming offers particularly relevant lessons for Haryana given the shared agro-climatic conditions, cropping patterns (rice-wheat dominance), and socio-economic context.

Current Status (NPOP Data 2024-25): Under the National Programme for Organic Production (NPOP), Punjab has 3,659.80 hectares of certified organic area and 7,398.36 hectares under conversion, totaling 11,058.16 hectares — ranking 27th among states and UTs. For wild harvest collection, Punjab has 63,879.73 hectares (ranked 4th nationally). Organic farm production stands at approximately 6,801.79 metric tons⁴⁸.

PKVY Implementation: Under PKVY, 200 clusters were sanctioned during 2017-18 to 2019-20 and 100 clusters during 2018-19 to 2020-21. A total of 6,000 farmers adopted organic practices under

⁴³Shoolini University, Organic Farming in Himachal, 2025, <https://shooliniuniversity.com/blog/organic-farming-in-himachal-a-boon-for-agriculture-students/>

⁴⁴Farmizen, PK3Y Scheme Details, <https://www.farmizen.com/schemes/himachal-prakritik-kheti-khushal-kisan>

⁴⁵USOCA, Uttarakhand Organic Certification, <https://www.usoca.org>

⁴⁶Uttarakhand Agriculture Dept, Organic and Natural Farming, <https://agriculture.uk.gov.in/scheme/organic-and-natural-farming/>

⁴⁷IJNRD, Chhattisgarh Organic Farming Study, 2025, <https://ijnrd.org/papers/IJNRD2512234.pdf>

⁴⁸APEDA, NPOP Organic Certification Data 2024-25; PIB, Organic Farming in Punjab, April 2022; Punjab Agro, Organic Farming Programme, <https://npop.apeda.gov.in/organic-certification-data-under-npop-2024-25>

PKVY in Punjab. However, fund utilization has been a challenge — of Rs 1,864.94 lakhs released during 2018-21, only Rs 298.38 lakhs were utilized⁴⁹.

Punjab Agro (PAGREXCO): Punjab Agro Export Corporation plays a pivotal role in promoting organic farming through:

- Mobilizing a base of 2,000 farmers covering 5,000 acres under organic certification
- Blockchain-based traceability system for organic produce
- Farmer registration through a digital traceability app with geo-tagging
- Training of Trainers on bio-input units, soil sampling, QC, and internal control systems
- Annual inspection by APEDA-accredited certification agencies
- Marketing under the 'Five Rivers' brand in domestic and international markets
- Weekly organic produce markets in different districts
- Organic huts for retail sales⁵⁰

Kheti Virasat Mission (KVM): A pioneering civil society initiative that introduced the concept of organic farming in Punjab in the late 1990s. KVM has established over 100 "Kudrati Kheti Schools" (Natural Farming Schools) across the state for hands-on farmer training. KVM's outreach programs have influenced the conversion of 20 farms to natural/organic farming, with another 200 under conversion and over 500 growing organically for self-consumption⁵¹.

PAU Bio-Fertiliser Research: Punjab Agricultural University (PAU) is leading research on bio-fertilisers as eco-friendly alternatives to chemical fertilizers, producing and making available bio-fertilisers at nominal prices through KVKs and Kisan Melas⁵².

 Punjab's experience demonstrates that states with deeply entrenched Green Revolution legacy face unique challenges in organic transition — particularly low PKVY fund utilization and the difficulty of shifting away from high-input rice-wheat systems. Punjab's blockchain traceability model (through PAGREXCO) and civil society engagement (through KVM) offer practical, transferable approaches. The proximity and shared context make Punjab's experiments directly relevant as peer learning opportunities for Haryana.

Kerala — SHG and Kudumbashree Model

Kerala's approach to organic farming through the Kudumbashree women's self-help group network and the Subhiksha Keralam program has achieved 44,263.91 hectares under NPOP and 94,480

⁴⁹PIB, Organic Farming in Punjab, April 2022, <https://www.pib.gov.in/PressReleaseFramePage.aspx?PRID=1812442>

⁵⁰Punjab Agro, Organic Farming Programme, <https://punjabagro.gov.in/organic-farming/>

⁵¹Kheti Virasat Mission, Organic Farming in Punjab, <https://khetivirasatmission.org/organicfarming/>

⁵²The Tribune, Bio-fertilisers Way Ahead for Eco-friendly Farming, Dec 2025, <https://www.tribuneindia.com/news/ludhiana/bio-fertilisers-way-ahead-for-eco-friendly-farming/>

hectares under PGS, totaling approximately 1.38 lakh hectares⁵³. The SHG-led cluster farming model is particularly relevant for ensuring women's participation in Haryana's organic farming transition.

3.2 Key Transferable Principles

Analysis of these diverse state models yields several key principles that should inform Haryana's framework design:

- Long-term, phased commitment with clear milestones — Sikkim took 13 years from intent to full organic; Haryana must plan for 2026–2047
- Community-managed, bottom-up approaches with strong farmer ownership — AP's CMNF demonstrates scale through community engagement
- Convergence of multiple schemes and departmental budgets to create substantial per-farmer support packages
- Innovative organic input supply chains that create economic opportunities — Chhattisgarh's cow dung economy model
- State organic branding and premium pricing mechanisms to ensure market viability
- Dedicated state certification infrastructure to reduce cost and complexity — Uttarakhand's USOCA model
- Panchayat-level saturation strategy — Himachal Pradesh achieved 99.3% panchayat coverage through PK3Y
- SHG/FPO-led implementation ensuring women's participation and community ownership — Kerala's Kudumbashree model
- Peer learning from neighbouring states with shared agro-climatic and cropping contexts — Punjab's blockchain traceability and civil society engagement models

Table 3: State Comparison Matrix — Organic Farming Models

State	Key Mechanism	Area Covered	Key Results	Relevance to Haryana
Sikkim	Full organic transition; ban on chemicals; 100 model villages	75,000+ ha	Agri GDP +26%; 66K families uplifted	Model villages; phased chemical reduction
Andhra Pradesh	CMNF/ZBNF with UNEP; 4 principles; community approach	1,81,600 ha direct	World's largest agroecology program	Community-managed clusters; peer learning
Madhya Pradesh	Largest NPOP area; systematic third-party certification	12.23 lakh ha total	Highest certified organic area in India	Scale-up NPOP certification; tribal zones

⁵³Taylor & Francis, Kerala Organic Farming Review, 2025, <https://www.tandfonline.com>

Himachal Pradesh	PK3Y; cow subsidy; panchayat saturation strategy	19,915 ha NF	99.3% panchayats practice natural farming	Cow-based inputs; panchayat engagement
Uttarakhand	USOCA state certification; 3,900 PKVY clusters	2.42 lakh ha total	First state organic certification body	Dedicated state certification cell model
Kerala	Kudumbashree SHG clusters; Subhiksha Keralam	1.38 lakh ha total	Women-led organic cluster farming	FPO/SHG linkage; women-led clusters
Rajasthan	Systematic NPOP + PGS certification; desert agriculture	7.29 lakh ha total	4th largest organic area in India	Desert-adapted organic protocols
Karnataka	Jeevamrut production at scale; grassroots promotion	91,985 ha total	Low-cost bio-input model at Rs 900/acre	Block-level bio-input production units
Chhattisgarh	NGGB model; Godhan Nyay Yojana; cow dung at Rs 2/kg	71,000 ha	26 lakh quintals vermicompost produced	Cow dung procurement; MGNREGA convergence
Punjab	PAGREXCO organic program; 'Five Rivers' brand; blockchain traceability; KVM civil society model	11,058 ha (NPOP) + 63,880 ha (wild)	6,000 PKVY farmers; blockchain traceability system	Peer learning; traceability model; civil society partnership

Table 4: Organic Area Comparison — NPOP and PGS Certification (Select States)

State	NPOP Area (ha)	PGS Area (ha)	Total (ha)	Key Feature
Madhya Pradesh	11,48,236	74,960	~12,23,196	Largest NPOP area
Rajasthan	5,80,092	1,48,500	~7,28,592	4th largest organic
Uttarakhand	1,01,820	1,40,740	~2,42,560	State certification body
Andhra Pradesh	63,679	3,60,805	~4,24,484	CMNF + PGS dominance
Kerala	44,264	94,480	~1,38,744	SHG cluster model

Karnataka	71,086	20,900	~91,986	Jeevamrut production
Himachal Pradesh	9,334	18,748	~28,082	Panchayat-level NF
Sikkim	75,000+	—	75,000+	100% organic state
Punjab	3,660	(data limited)	~11,058	Blockchain traceability; Five Rivers brand
Haryana	2,925	Nil	~2,925	Significant scope for expansion

State-wise Total Organic Area (NPOP + PGS Combined)

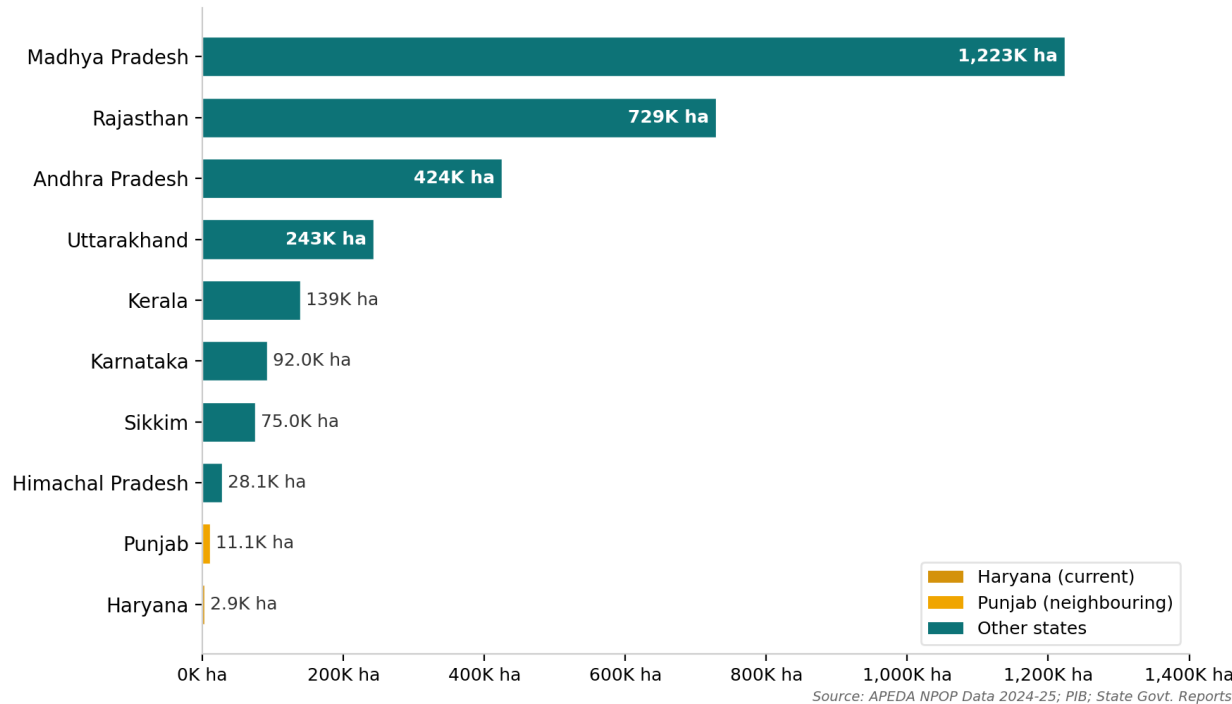


Figure 4: State-wise Total Organic Area Comparison (NPOP + PGS)



Haryana's Position in the National Organic Landscape:

Current Status: With 2,925 ha under NPOP certification, Haryana has substantial scope to expand its organic footprint among major agricultural states

Registration vs Reality: The gap between registration (2.73 lakh acres) and verified practice (17,087 acres) highlights the opportunity for a robust identification and certification framework

Comparison: Madhya Pradesh has 12.23 lakh ha organic — over 400 times Haryana's certified area. Even smaller states like Himachal Pradesh and Uttarakhand far exceed Haryana

Opportunity: Haryana's strong agricultural infrastructure, proximity to Delhi-NCR markets, and existing scheme architecture create a powerful foundation for rapid scaling

4. Proposed Framework — A Six-Pillar Conceptual Framework for Organic Farming in Haryana

This section presents the core conceptual contribution of this Foundational Policy Paper: a six-pillar framework that identifies the key thematic areas requiring coordinated policy attention for Haryana's organic farming transition. The framework draws upon the evidence base established in the preceding sections — Haryana's agricultural baseline, the existing policy landscape, and the comparative analysis of ten state models — to outline the broad contours of each pillar.

Importantly, the specific design of interventions, financial parameters, institutional mechanisms, and implementation modalities under each pillar is intended to be developed through the multi-stakeholder consultation process outlined in the Next Steps section. This paper presents conceptual architecture; the consultative process will translate it into an actionable policy instrument for the Government of Haryana's consideration.



Figure 5: Comprehensive Six-Pillar Framework for Organic Farming in Haryana

PILLAR 1: FARMER IDENTIFICATION AND REGISTRATION

Rationale

The current gap between registration (1,84,665 farmers) and verification (10,550 farmers) in Haryana underscores the need for a systematic, multi-tier approach to identifying and verifying farmers who practice organic and natural farming. An effective identification system is the foundation upon which all other pillars — certification, incentives, market access, and monitoring — depend.

Key Themes for Consultation

- **Digital Registration:** Leveraging Haryana's existing digital infrastructure — including the Parivar Pehchan Patra (PPP), Meri Fasal Mera Byora, and the natural farming portal — to create a unified registration platform for organic farmers
- **Field Verification:** Developing standardized verification protocols involving physical field inspections, peer group verification (drawing on Andhra Pradesh's CMNF model), and GPS-based documentation
- **Technology-Assisted Monitoring:** Exploring the potential of satellite-based tools (NDVI analysis, remote sensing) to complement field verification and identify farming practice patterns at scale
- **Database Integration:** Linking farmer profiles across existing databases — land records, crop declarations, soil health data, and scheme beneficiary lists — to create a single, comprehensive organic farmer record
- **Eligibility Criteria:** Defining clear, fair, and verifiable criteria for identifying organic and natural farmers — including the minimum operational holding, transition period requirements, and documentation standards

Key Questions for the Consultation Workshop

1. What should be the minimum eligibility criteria for organic farmer identification, and how should tenant farmers be accommodated?
2. How can the verification rate (currently 5.7%) be significantly improved while maintaining rigour?
3. Which existing digital platforms should serve as the backbone for the registration system?
4. What role should peer farmer groups play in the verification process?

PILLAR 2: CERTIFICATION AND QUALITY ASSURANCE

Rationale

Haryana currently has no PGS (Participatory Guarantee System) clusters under PKVY and only 2,925 hectares under NPOP certification. Establishing a credible certification infrastructure is essential for building consumer trust, enabling market access, and unlocking premium pricing for organic produce.

Key Themes for Consultation

- **Dual-Track Certification:** Exploring a two-pronged approach — PGS-India certification for domestic market access (cost-effective, community-managed) alongside NPOP certification for export and premium retail markets (third-party, APEDA-accredited)
- **Quality Assurance Infrastructure:** Assessing the need for testing laboratories, mobile soil testing units, and residue analysis facilities — building on the Chief Minister's announcement of free testing laboratories for organic produce

- **State Certification Capacity:** Evaluating the feasibility of a dedicated state organic certification cell or agency, drawing on Uttarakhand's USOCA model, to reduce costs and streamline certification processes
- **Traceability:** Examining the potential of blockchain-based traceability systems — as demonstrated by Punjab's PAGREXCO — for ensuring produce authenticity from farm to consumer

Key Questions for the Consultation Workshop

1. What is the realistic target for PGS cluster formation across Haryana's 23 districts, and which districts should be prioritized?
2. Should the state invest in a dedicated certification body (on the USOCA model) or rely on existing accredited agencies?
3. How should certification costs be shared between the state, central schemes, and farmer groups?
4. What traceability standards should Haryana adopt, and is blockchain-based tracking feasible at scale?

PILLAR 3: FINANCIAL INCENTIVES

Rationale

The transition from chemical-intensive to organic farming typically involves 2–3 years during which yields may decline by 12–18% before stabilizing. Research shows that organic farming subsequently achieves 14–19% lower input costs, and crops like organic basmati rice command premiums of up to 105%. A well-designed financial incentive structure — combining central scheme resources with complementary state support — is essential to sustain farmers through this transition period.

Key Themes for Consultation

- **Leveraging Central Schemes:** Optimizing the utilization of existing central resources — NMNF (Rs 4,000/acre/year for 2 years), PKVY (Rs 31,500/ha over 3 years), and PM-PRANAM (50% of fertilizer subsidy savings) — which Haryana has so far underutilized
- **State Complementary Support:** Deliberating the nature, quantum, and duration of additional state-level incentives (top-up payments, input subsidies, performance bonuses) to supplement central scheme support during the transition period
- **Transition Period Support:** Examining mechanisms to protect farmer incomes during the yield transition — including yield guarantee instruments, insurance products, and credit linkage at concessional rates
- **Convergence Approach:** Mapping potential convergence across departments (Agriculture, Rural Development/MGNREGA, Animal Husbandry, Horticulture) and schemes (NABARD,

FPO formation, PMFBY) to create a comprehensive per-farmer support package without creating parallel structures

Key Questions for the Consultation Workshop

1. What is the appropriate quantum and duration of state top-up incentives on NMNF support, given fiscal constraints?
2. How should the transition yield risk be managed — through a state fund, insurance products, or other mechanisms?
3. What convergence opportunities exist across departmental budgets to create a comprehensive support package?
4. How can PM-PRANAM benefits be activated for Haryana as a fiscal self-reinforcing mechanism?

PILLAR 4: ECO-FRIENDLY FERTILIZER AND PESTICIDE PROMOTION

Rationale

Currently, less than 5% of Indian farmers account for 95% of biofertilizer usage. India's biofertilizer market is growing at 8.65% CAGR (2024–2030), indicating significant demand potential. For the organic transition to succeed, farmers need reliable, affordable, and locally accessible alternatives to chemical fertilizers and pesticides — including biofertilizers, vermicompost, neem-based preparations, Jeevamrut, and Panchagavya.

Key Themes for Consultation

- **Decentralized Production:** Assessing the viability of block-level and village-level bio-input production units — drawing on Karnataka's Jeevamrut model (Rs 900/200 liters for 1 acre) and Chhattisgarh's Godhan Nyay Yojana (cow dung procurement and vermicompost production)
- **Supply Chain Development:** Building a reliable supply chain for biofertilizers (Rhizobium, Azotobacter, PSB, VAM cultures), neem-based pesticides, and organic preparations through cooperatives, FPOs, and village-level entrepreneurs
- **Quality Assurance:** Establishing quality testing and certification protocols for bio-inputs — potentially through CCS Haryana Agricultural University (CCS HAU), Hisar
- **MGNREGA Convergence:** Exploring the use of MGNREGA labour days for establishing vermicompost pits, bio-input storage infrastructure, and compost units at the village level — as successfully demonstrated in Chhattisgarh
- **Phased Chemical Reduction:** Discussing a phased approach to progressively reducing chemical fertilizer dependence, with reduction milestones to be determined through baseline assessment and stakeholder deliberation

Key Questions for the Consultation Workshop

1. What is the most viable model for decentralized bio-input production in Haryana — block-level units, village-level micro-units, or FPO-managed production centres?
2. How can Haryana leverage its cattle population for a cow dung-based organic input economy (on the Chhattisgarh model)?
3. What role should CCS HAU play in quality control, R&D, and extension for bio-inputs?
4. What should be the phased targets for chemical fertilizer reduction, and how should they be monitored?

PILLAR 5: MARKET LINKAGE AND VALUE CHAIN DEVELOPMENT

Rationale

The economic viability of organic farming depends critically on farmers receiving remunerative prices that compensate for the transition costs and reflect the higher quality of their produce. Organic basmati rice commands a 105% premium, and India's organic market is projected at INR 51,560 crore. Haryana's proximity to the Delhi-NCR consumer market and established basmati export networks offer a significant market access advantage.

Key Themes for Consultation

- **Dedicated Market Infrastructure:** Operationalizing the organic mandis announced for Gurugram and Hisar, and deliberating the phased expansion of dedicated organic market spaces across the state
- **Electronic Trading:** Integrating organic produce with the e-NAM platform through a dedicated 'Organic' category for transparent price discovery and inter-state trade
- **Farmer Producer Organizations:** Facilitating the formation of organic farming FPOs for aggregation, primary processing, grading, packaging, and collective marketing
- **State Organic Brand:** Developing a 'Haryana Organic' certification mark and brand identity for domestic and international markets, backed by credible traceability
- **Premium Pricing Mechanisms:** Deliberating fair pricing mechanisms for organic produce — building on the work of the committee already constituted under the Haryana Kisan Kalyan Pradhikaran
- **Export Facilitation:** Exploring APEDA-linked export channels for NPOP-certified produce, particularly organic basmati rice, leveraging Haryana's existing trade networks

Key Questions for the Consultation Workshop

1. What is the realistic timeline for operationalizing the Gurugram and Hisar organic mandis?
2. How should the 'Haryana Organic' brand be positioned, and what institutional arrangements are needed?

-
3. What pricing mechanism will best balance farmer income assurance with market sustainability?
 4. How can FPOs be incentivized to focus on organic value chain aggregation and marketing?

PILLAR 6: DIGITAL MONITORING AND ACCOUNTABILITY

Rationale

Haryana's existing strengths in e-governance — Parivar Pehchan Patra, Antyodaya SARAL, Meri Fasal Mera Byora — provide a strong foundation for building a digital monitoring ecosystem for the organic farming transition. An integrated digital platform would enable transparent tracking, evidence-based policy refinement, and public accountability.

Key Themes for Consultation

- **Integrated Dashboard:** Conceptualizing a Haryana Organic Dashboard (HOD) that integrates data across registrations, verifications, certification status, incentive disbursements, production volumes, and market transactions
- **Satellite Monitoring:** Leveraging NDVI and remote sensing tools — through collaboration with ISRO and the Bhuvan geo-portal — for periodic verification of organic farming practices at scale
- **GIS Mapping:** Developing spatial mapping of organic farming clusters, bio-input production centres, and organic market infrastructure for evidence-based planning
- **Public Transparency:** Designing citizen-accessible dashboards for district-wise organic farming progress, building on Haryana's existing transparency frameworks
- **Research and Evidence:** Establishing protocols for systematic evidence generation — including soil health monitoring, yield comparisons, and economic impact assessment — to continuously refine the policy framework

Key Questions for the Consultation Workshop

1. Which existing state IT platforms should the HOD be built upon, and what are the integration requirements?
2. What level of satellite/remote sensing monitoring is technically and financially feasible?
3. What data should be publicly accessible, and what governance frameworks are needed for data quality assurance?
4. How should research and evidence generation be institutionalized for ongoing policy refinement?

The six-pillar framework presented above outlines the key thematic areas that a comprehensive organic farming policy for Haryana should address. The specific design of interventions, financial parameters, institutional mechanisms, implementation timelines, and measurable targets under

each pillar will be developed through the multi-stakeholder consultation process described in the Next Steps section. This approach ensures that the eventual policy recommendations are grounded in broad stakeholder ownership, technically validated, fiscally realistic, and tailored to Haryana's specific institutional and agro-climatic context.

 Key Performance Indicators:

Specific Key Performance Indicators (KPIs) and measurable targets for each pillar will be defined through the multi-stakeholder consultation workshop proposed in the Next Steps section, ensuring broad ownership and realistic target-setting based on baseline assessments.

5. SDG Alignment

The proposed organic farming framework directly contributes to multiple Sustainable Development Goals (SDGs) and aligns with Haryana's long-term development vision.

The economic case for organic farming in Haryana is compelling and multi-dimensional. Research demonstrates that organic farmers achieve 14–19% lower input costs despite initial yield reductions of 12–18%⁵⁴, with yields stabilizing and profitability improving over 3–5 years. Significantly, organic basmati rice — Haryana's premium agricultural product — commands a 105% price premium over conventional rice⁵⁵. India's organic market, projected to reach INR 51,560 crore by 2025⁵⁶, represents a substantial economic opportunity. The biofertilizer market's 8.65% CAGR growth⁵⁷ further indicates that the organic input economy itself is a significant source of rural employment and enterprise development. Globally, India ranks 4th in certified organic area and 1st in number of organic producers⁵⁸, demonstrating the nation's competitive advantage in this growing global market.

Table 6: SDG Mapping Matrix — Organic Farming Framework to SDG Targets

SDG	Specific Target	Relevant Pillars	Expected Outcome for Haryana
SDG 2: Zero Hunger	2.4: Sustainable food production	Pillars 1, 2, 4	Soil health restoration; resilient crop systems; reduced input dependency
SDG 3: Good Health	3.9: Reduce illness from chemicals	Pillars 4, 5	Reduced pesticide exposure for farmers and consumers; safer food supply
SDG 6: Clean Water	6.3: Reduce pollution; water quality	Pillars 4, 6	Reduced nitrate/pesticide contamination of groundwater aquifers
SDG 8: Decent Work	8.2: Economic productivity	Pillars 3, 5	Premium pricing; organic value chain employment; FPO enterprise development
SDG 12: Responsible Production	12.2: Sustainable resource mgmt.	Pillars 2, 4, 5	Certified organic supply chains; eco-friendly input substitution

⁵⁴MDPI Sustainability, Organic Farming Pan-India Review, 2022, <https://www.mdpi.com/2071-1050/14/22/15057/pdf>

⁵⁵MDPI Sustainability, Organic vs Conventional Rice, 2018, <https://www.mdpi.com/2071-1050/10/12/4424/pdf>

⁵⁶NEXT IAS, Organic Farming Sector of India, 2025, <https://www.nextias.com/ca/current-affairs/11-01-2025/organic-farming-sector-of-india>

⁵⁷MarkNtel Advisors, India Bio-Fertilizers Market, <https://www.marknteladvisors.com/research-library/india-bio-fertilizers-market.html>

⁵⁸IFOAM, World of Organic Agriculture 2022, <https://www.ifoam.bio>

SDG 13: Climate Action	13.2: Climate measures in policy	Pillars 1, 4, 6	Carbon sequestration in soil; reduced GHG from fertilizer production
SDG 15: Life on Land	15.3: Combat desertification	Pillars 4, 6	Soil biodiversity restoration; organic carbon improvement of 0.4% in 3 years
SDG 17: Partnerships	17.14: Policy coherence	All Pillars	Central-state-community convergence; development partner coordination

SDG Alignment — Strategic Significance:

Direct SDG Impact: This framework addresses SDGs 2, 3, 6, 12, 13, and 15 — six of the seventeen goals, making organic farming a high-leverage SDG accelerator

Indirect Impact: Employment generation (SDG 8), institutional partnerships (SDG 17), gender inclusion through women-led FPOs and SHGs (SDG 5), and poverty reduction through premium incomes (SDG 1)

Measurement Framework: The Haryana SDG District Index 2024 provides a baseline; the proposed Haryana Organic Dashboard will enable real-time tracking of SDG-relevant organic farming indicators at district level

Vision 2047 Nexus: Sustainable agriculture is foundational to Haryana's aspirations for inclusive, resilient, and green growth — this framework is a cornerstone of the Vision 2047 agricultural transformation agenda

6. Next Steps

This Foundational Policy Paper is the first step in a structured, consultative process designed to translate evidence-based analysis into an actionable policy framework. SDGCAC under overall coordination from SJHIFM will facilitate the following process, culminating in submission of a refined policy draft to the Government of Haryana by December 2026.

Step 1: Internal Circulation and Departmental Feedback (April–May 2026)

This paper will be formally circulated for review and written feedback to the relevant departments and institutions of the Government of Haryana (existing list of 10 departments to be retained). Each department will be requested to provide written feedback within 21 working days, focusing on: (a) convergence opportunities with existing departmental schemes; (b) implementation feasibility within current institutional and human resource capacity; (c) resource requirements and budget implications; and (d) suggested modifications or additions to the proposed framework. The SDGCAC at SJHIFM will compile and synthesize all departmental inputs for integration into the revised framework.

Step 2: Multi-Stakeholder Consultation Workshop at SJHIFM, Panchkula (June–July 2026)

Existing stakeholder list and workshop structure to be retained. The workshop will include: (a) presentation of this Foundational Policy Paper and departmental feedback synthesis; (b) sector-wise breakout group discussions on each of the six pillars; (c) field visits to existing organic farming clusters in the Panchkula–Ambala–Yamunanagar region; and (d) deliberation on specific interventions, financial parameters, institutional mechanisms, and implementation priorities for each pillar.

Step 3: Expert Review and Validation (August–September 2026)

Based on stakeholder consultation outcomes, the SDGCAC will: compile and synthesize all inputs received; commission expert review of the draft framework by domain specialists in organic farming policy, agricultural economics, and institutional design; define proposed Key Performance Indicators (KPIs) and monitoring parameters for each pillar; and prepare a draft convergence budget mapping resources across NMNF, PKVY, PM-PRANAM, MGNREGA, NABARD, and state budget provisions.

Step 4: Submission of Refined Policy Draft (October–December 2026)

The SDGCAC at SJHIFM will prepare and submit a Refined Policy Draft incorporating all consultative inputs. This document will include: the finalized six-pillar framework with specific interventions as agreed through consultation; proposed KPIs and pillar-wise targets; a phased implementation roadmap with convergence budget estimates; recommended institutional arrangements and governance structure; and suggested legislative and administrative actions for the Government of Haryana's consideration.

The Refined Policy Draft will be submitted to the Agriculture & Farmers Welfare Department and the HLTF, Foreign Cooperation Department for the Government of Haryana's consideration regarding further action — including potential new schemes, incentive structures, pilot programs, legislative initiatives, and institutional establishment.

Next Steps Timeline

Step	Timeline	Key Activities	SDGCAC Deliverable
1	April–May 2026	Internal circulation to 10 departments; written feedback	Departmental response compilation; convergence mapping
2	June–July 2026	Multi-stakeholder workshop at SJHIFM, Panchkula	Consultation proceedings; consolidated stakeholder inputs
3	Aug–Sep 2026	Expert review; KPI development; convergence budget	Validated framework with proposed KPIs and budget map
4	Oct–Dec 2026	Drafting refined policy incorporating all inputs	Refined Policy Draft submitted to Govt. of Haryana

The transition from chemical-intensive to organic and natural farming in Haryana is both an agricultural advancement and a strategic investment in the state's environmental resilience, public health, long-term economic competitiveness, and intergenerational equity. The six-pillar framework proposed in this paper provides a conceptual, evidence-based foundation for this transition, drawing upon the experience of ten Indian states and the latest research on organic farming economics and sustainability.

This Foundational Policy Paper — together with the consultative process outlined above — represents SDGCAC's contribution to building an informed, evidence-based platform for policy deliberation. The SDGCAC at SJHIFM will facilitate the stakeholder engagement process and submit a Refined Policy Draft by December 2026 for the Government of Haryana's consideration regarding how best to take this agenda forward through appropriate schemes, incentives, institutional mechanisms, and legislative action.

India is already the world's largest producer of organic farmers and 4th largest in certified organic area. The opportunity for Haryana to strengthen its position in this national movement has never

been stronger. The convergence of NMNF funding, PM-PRANAM potential, growing consumer demand, and premium pricing advantage creates a favourable environment for a well-designed organic transition — one that the consultative process envisioned in this paper will help shape.

APPROACH NOTE



SDGCAC

SUSTAINABLE DEVELOPMENT GOALS
COORDINATION AND ACCELERATION CENTRE