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Proposed New Seed Act: Strengthening Seed Regulation, Farmer Protection and Traceability in India

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Recent Developments:

- On **10 September 2026**, Union Agriculture Minister **Shivraj Singh Chouhan** consulted around **20 farmer organisations** from almost all States on the proposed new Seed Act, aimed at curbing fake and substandard seeds, improving traceability and fixing accountability across the seed supply chain.
- The government had invited suggestions on the **Draft Seeds Bill, 2025** during November–December 2025 and received around **18,000 suggestions** from farmers and farmer organisations. The consultation has now been resumed, and the Minister has stated that there is **no haste or fixed deadline** for finalising the legislation.
- The proposed legislation is intended to replace the **Seeds Act, 1966** and the **Seeds (Control) Order, 1983**, which together form the core of India's existing seed-quality regulatory framework.

Background and Need for a New Seed Law:

Limitations of the Existing Framework:

- The **Seeds Act, 1966** was enacted nearly six decades ago to regulate the quality of specified seeds offered for sale, while the **Seeds (Control) Order, 1983** subsequently strengthened regulation of seed dealers and licensing arrangements.
- Indian agriculture has since experienced major changes, including expansion of private seed markets, technological advances, development of new varieties and increasing movement of seed and planting material through complex commercial supply chains.
- According to the Agriculture Minister, around **70% of seeds currently fall outside the ambit of the existing Seed Act**, while seed-related procedures also vary across States, creating gaps in quality control and accountability.

Problem of Fake and Substandard Seeds:

- Fake or poor-quality seeds can cause **germination failure, crop loss, reduced farm income and indebtedness**, while weak traceability can make it difficult to identify the producer, dealer or other responsible actor.
- The existing penalty structure has been considered inadequate as a deterrent against deliberate violations and large-scale sale of spurious seeds.
- The proposed framework therefore seeks to combine **quality regulation, registration, traceability, stronger penalties and farmer compensation** within a common national system.

Key Features of the Proposed Seed Act:

Mandatory Registration and Digital Traceability:

- The proposed legislation would require **all seeds and planting material sold in the market** to be registered in a national register, while unregistered seeds would not be permitted for commercial sale.
- Each seed packet would carry a **QR code** enabling traceability of its origin, manufacturer, laboratory clearance and movement through the supply chain.
- Such end-to-end traceability can help establish responsibility when seeds fail and can strengthen regulatory surveillance against counterfeit products.
- The draft also proposes registration of commercial actors such as seed producers, processing units and dealers, along with plant nurseries, thereby extending accountability beyond the seed packet itself.

Protection of Farmers' Seed Rights:

- The proposed law would continue to protect farmers' rights to **use, exchange and sell traditional and farmers' varieties**, and registration of traditional seeds would not be mandatory.
- Farmers producing seed for **personal use, village-level distribution or even for a company** would not be required to undertake digital registration under the proposed provisions.
- This approach is consistent with the broader legal recognition of farmers' seed rights under the **Protection of Plant Varieties and Farmers' Rights Act, 2001**, which recognises farmers as users, conservers and breeders of plant varieties.

Stronger Penalties and Accountability:

- The proposed framework divides violations into **three categories** to distinguish minor non-compliance from deliberate and serious offences.
- **Minor violations:** A warning for the first offence and a penalty of up to **?50,000** for the second offence.
- **Deliberate violations:** Failure to affix a QR code, incorrect branding or failure to provide required information could attract **?1 lakh** for the first offence and **?2 lakh** for the second offence.
- **Serious offences:** Sale of fake seeds, operating without registration or deliberate fraud could attract a penalty of up to **?30 lakh and imprisonment**.
- The proposed penalty structure follows a **proportionate enforcement model**, distinguishing procedural non-compliance from conduct that can cause substantial agricultural losses.

Greater Role for State Governments:

- State governments would receive greater authority to release new seed varieties on the recommendations of **State-level committees**, while nationally determined standards would continue to apply.
- This arrangement seeks to combine **national quality standards with regional agro-climatic requirements**, allowing States to introduce varieties better suited to local farming conditions.
- All varieties would be recorded in a **single national online register** accessible to both the Centre and States, reducing duplication and improving regulatory coordination.

Seed Security Fund and Farmer Compensation:

- The proposed law provides for a **Seed Security Fund in every State**, with penalties and recoveries collected under the proposed framework being deposited into these funds.
- In cases of verified seed failure or consequent farmer losses, a verification committee would facilitate **compensation within 15 days**.
- Farmers would also retain the right to seek compensation under the **Consumer Protection Act**, providing an additional legal remedy.
- The proposed mechanism is significant because it attempts to connect **regulatory enforcement with farmer compensation**, rather than treating punishment and farmer relief as separate processes.

Institutional and Technological Dimensions:

SATHI and Seed Traceability:

- The Draft Seeds Bill, 2025 envisages mandatory onboarding on the **SATHI portal**, a digital platform intended to strengthen traceability across the seed supply chain.
- Digital traceability can help regulators track seed movement from production and processing to distribution and sale, improving the ability to identify the source of quality failures.
- The system can also generate better regulatory data for **risk-based inspections, laboratory testing and enforcement**, provided that digital records remain reliable and accessible.

Seed Testing and Quality Infrastructure:

- Effective regulation requires more than registration and digital tracking; **seed-testing laboratories, trained inspectors, seed-health laboratories and DNA fingerprinting facilities** are essential for scientifically establishing seed quality and identity.
- The Government has stated that financial assistance is being provided to States and implementing agencies for strengthening seed-quality testing infrastructure, including laboratory upgradation and accreditation.
- Therefore, the success of the proposed law will depend significantly on **institutional capacity at the State and district levels**, not merely on the strength of statutory provisions.

Major Concerns and Challenges:

Risk of Over-Regulation:

- Mandatory registration and digital compliance could increase administrative and financial burdens for **small seed producers, community seed systems and local enterprises** if procedures are complex or costly.
- Regulation should therefore distinguish between large commercial seed businesses and small-scale farmer-based seed systems while maintaining minimum quality and traceability standards.

Digital Divide:

- QR-based traceability can improve transparency, but farmers with limited **digital literacy, smartphone access or internet connectivity** may not be able to independently use digital information.
- Physical labelling, local agricultural extension services and accessible grievance mechanisms should therefore complement digital systems.

Centre–State Coordination:

- Agriculture is primarily a **State subject**, while seed quality regulation involves significant central legislation and nationally determined standards.
- The proposed system must therefore maintain a balance between **uniform national quality standards and State-specific agro-climatic requirements**.
- Greater State participation in variety release can improve responsiveness, but effective coordination will be necessary to avoid fragmented implementation.

Protection of Traditional Seed Diversity:

- India possesses extensive **indigenous, traditional and climate-resilient seed diversity**, which contributes to agro-biodiversity and local adaptation.
- Excessive standardisation could unintentionally disadvantage varieties that are locally important but not commercially dominant.
- The explicit protection of farmers’ and traditional varieties is therefore important for maintaining **seed sovereignty, agro-biodiversity and community seed systems**.

Implementation and Accountability:

- A strong law will remain ineffective if **seed testing, inspections, laboratory capacity, evidence collection and grievance redressal** remain weak.
- Compensation also requires clear procedures for determining seed failure, establishing causation and preventing fraudulent claims.

Broader Significance for Indian Agriculture:

Agricultural Productivity and Food Security:

- Quality seeds are a critical agricultural input because **seed quality directly influences germination, yield potential, crop uniformity and resilience**.
- Reducing the circulation of fake and substandard seeds can therefore support productivity, farm incomes and national food security.

Seed Industry and Innovation:

- A predictable regulatory system can encourage legitimate private investment, research and development while improving farmers' access to improved varieties.
- The draft also seeks to facilitate **seed imports and access to global varieties**, while maintaining national quality and regulatory safeguards.
- The regulatory framework should consequently balance **innovation and investment with farmer protection and seed sovereignty**.

Cooperative Federalism:

- The proposed national register and common standards, combined with greater State authority over local variety release, represent an attempt to strengthen **cooperative federalism in agricultural regulation**.
- This model can provide national consistency without completely disregarding India's diverse agro-climatic conditions.

Way Forward:

Adopt a Farmer-Centric Regulatory Model:

- The proposed law should follow a **farmer-centric and risk-based approach**, applying the strongest regulatory scrutiny to high-risk commercial activities while avoiding unnecessary burdens on traditional and community seed systems.
- Farmer organisations, seed producers, agricultural scientists, State governments and consumer groups should remain part of the consultation process before finalisation.

Strengthen Physical and Digital Infrastructure:

- QR-based traceability should be supported by **adequate laboratories, trained seed inspectors, reliable databases and interoperable digital systems**.
- Digital systems should remain simple enough for farmers and local officials to use without creating additional exclusion.

Ensure Effective Compensation:

- The proposed **15-day compensation mechanism** should have clearly defined verification procedures, adequate funding and transparent timelines.
- The Seed Security Fund should remain financially sustainable so that compensation does not depend entirely on the unpredictable volume of penalties collected.

Protect Seed Diversity and Farmer Autonomy:

- The regulatory framework should preserve farmers' established rights under the **Protection of Plant Varieties and Farmers' Rights Act, 2001** and ensure that traditional seed exchange is not unintentionally treated as commercial seed trade.
- Conservation of indigenous varieties should be integrated with **agro-biodiversity, climate-resilient agriculture and sustainable farming** policies.

Conclusion:

- The proposed new Seed Act represents an attempt to modernise India's seed regulation by combining **mandatory registration, digital traceability, stronger penalties, State participation and farmer compensation**.
- Its central challenge will be to strengthen commercial seed accountability without imposing excessive regulatory burdens on farmers and traditional seed systems.
- A successful framework should therefore combine **scientific quality control, digital transparency, cooperative federalism, accessible grievance redressal and strong protection of farmers' seed rights**.
- Since the legislation remains under consultation, incorporating evidence-based suggestions from farmers and other stakeholders will be essential for creating a regulatory framework that improves seed quality while preserving India's agricultural diversity.

Value Addition for UPSC:

Key Legal Framework:

- **Seeds Act, 1966:** Existing central legislation regulating the quality of specified seeds offered for sale.
- **Seeds (Control) Order, 1983:** Provides regulatory mechanisms for seed dealers, including licensing, inspection, sampling and enforcement.
- **Protection of Plant Varieties and Farmers' Rights Act, 2001:** Protects the rights of farmers and plant breeders while recognising farmers' contribution to conserving and developing plant genetic resources.
- **Consumer Protection Act:** Farmers would continue to retain the right to seek compensation through consumer-protection mechanisms under the proposed framework.

Prelims Facts:

- **Seeds Act:** 1966.
- **Seeds (Control) Order:** 1983.
- **Draft Seeds Bill:** 2025.
- **Public suggestions received:** Around 18,000.
- **Recent farmer organisations consulted:** Around 20.
- **Current regulatory gap cited by the Agriculture Minister:** Around 70% of seeds fall outside the existing Seed Act's ambit.
- **Maximum proposed penalty for serious offences:** ?30 lakh plus imprisonment.
- **Proposed compensation timeline after verification:** 15 days.
- **Proposed Seed Security Fund:** One in every State.
- **Key digital mechanism:** National registration and QR-based seed traceability.