

GST in Agriculture: Harvesting Opportunities and Facing Challenges

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ABSTRACT

The introduction of **GST 2.0** in India (effective 22 September 2025) marks a significant overhaul of the indirect tax framework, aiming to simplify tax rates, reduce costs, and benefit various sections of the economy, especially farmers. Under the old GST regime, agricultural inputs, farm machinery, and allied sectors often attracted **12% or higher GST rates**, increasing farmers' cost burden. The new regime slashes many of these rates to 5%, abolishes several tax slabs, and rationalizes the structure to just two main ordinary slabs (5% and 18%) plus a high "sin or luxury" slab. Crucially, it slashes GST on farm machinery, fertiliser raw materials, drip irrigation equipment, dairy products, and allied sector goods from 12–18% to 5%. This reform is expected to save farmers nearly 6–7% in equipment and input costs while making modern technology more accessible. This article compares the old vs. the new GST in agriculture: identifying what has changed, how farmers stand to benefit (and where challenges may remain), and what the broader implications are for farming costs, adoption of mechanization, sustainability, and rural livelihoods. It highlights the changes in tax rates across machinery, inputs, and allied sectors, explains how these changes translate to ground-level benefits, and discusses the remaining challenges, such as awareness gaps, persistence of higher tax rates on some inputs, and implementation delays. For rural India, this reform is more than just a tax policy; it represents a potential turning point in making agriculture more affordable, competitive, and sustainable.

Keywords: GST, Sustainable Agriculture, Rural livelihoods, Tax policy.

Introduction:

The **Goods and Services Tax (GST) reforms** introduced in **September 2025** represent a landmark step in **reshaping India's taxation system to serve the aspirations of its youth better**. These reforms are designed to create an enabling environment for entrepreneurship, job creation, and affordable living by simplifying tax structures, reducing rates across key industries, and addressing long-standing anomalies. Sectors with high youth participation—such as **education, automobiles, technology, handicrafts, footwear, healthcare, food processing, and textiles** have been prioritized to lower costs, boost competitiveness, and encourage innovation. Beyond reducing the financial burden on households and businesses, the reforms strengthen India's vision of inclusive growth, sustainability, and empowerment of the next generation.

On the eve of the GST rate reductions taking effect, Prime Minister Narendra Modi addressed the nation and remarked, *"From September 22, coinciding with the first day of Navratri, the Next Generation GST reforms will officially come into force."* In India, over **55% of the population** is directly or indirectly dependent on

agriculture. Farming is not just about growing crops but balancing rising input costs with uncertain returns. Every bag of fertiliser, every litre of pesticide, every spare part for a tractor, and every truck used for transporting produce comes with a tax component. Even a few percentage points of taxation can push up costs significantly, especially for small and marginal farmers who already work with thin profit margins.

When the **Goods and Services Tax (GST)** was rolled out in 2017, it promised simplicity by unifying multiple indirect taxes. While industries and traders welcomed the reform, farmers soon realised that many essentials in agriculture were taxed at **12% or even 18%**, making farming equipment and inputs costlier than before. This led to debates: Was GST truly farmer-friendly? Fast forward to **September 2025**, and the government launched **GST 2.0**, a simplified structure to reduce costs and promote growth. Farmers now stand at the center of this tax reform, with many of their everyday needs moved into the lowest slab of 5%.

The 56th GST Council meeting has announced important updates with changes effective from 22nd September 2025. GST on agricultural machinery (including fixed-speed diesel engines, hand pumps, nozzles, sprinklers, and tractors with engine capacity ≤ 1800 cc) has been reduced from 12% to 5%. Harvesting machinery, self-loading trailers, composting machines, and hand-propelled or animal-drawn vehicles also saw a reduction in GST from 12% to 5%.

The Old GST Regime: A Costly Harvest

Before the September 2025 reforms, the GST regime was structured across multiple slabs: **0%, 5%, 12%, 18%, and 28%**, with some products facing additional cess. While basic food grains and unprocessed farm produce were exempt (0% GST), the inputs and machinery that powered modern agriculture were not.

1. Farm Machinery:

- Tractors, power tillers, harvesters, and irrigation pumps attracted **12% GST**.
- Spare parts, tyres, and hydraulic equipment often faced **18% GST**, adding to maintenance costs.

2. Fertilisers and Inputs:

- Urea was placed at 5%, but raw materials such as **ammonia, nitric acid, and sulphuric acid** faced **18% GST**, indirectly increasing fertiliser costs.
- Micronutrients and bio-pesticides were taxed at 12–18%, discouraging sustainable practices.

3. Allied Sectors:

- Dairy products like butter and ghee, when packaged, attracted 12–18% GST.
- Beekeeping products, fisheries equipment, and forest produce often fell under higher slabs.

4. Transport and Logistics:

- Trucks, commercial vehicles, and even freight insurance services were subject to 18% GST. This raised the cost of moving produce from farm to market, adding to price inflation.

For farmers, this meant: **higher costs, reduced affordability of machinery, and limited adoption of modern practices.** A farmer thinking of buying a ₹5 lakh tractor would pay an additional ₹60,000 under 12% GST, not including the 18% for spare parts later. These extra burdens discouraged mechanisation and innovation in rural farming systems.

The New GST 2.0: A Farmer-Friendly Turn

The **GST 2.0 reform**, effective **22 September 2025**, brought sweeping changes with farmers in focus.

- **Simplified Structure:** Only two main slabs—**5% and 18%**, plus a 40% slab for luxury/sin goods (like tobacco). This reduces confusion.
- **Farm Machinery & Irrigation:** GST on tractors, harvesters, drip irrigation systems, and sprinklers was cut from **12–18% to 5%**.
- **Fertiliser Inputs:** Tax on raw materials like **ammonia, sulphuric acid, nitric acid** reduced from 18% to **5%**, expected to lower fertiliser prices.
- **Dairy & Allied Sectors:** Butter, ghee, milk cans, and certain fisheries/beekeeping equipment moved to **5%**, making them more affordable.
- **Spare Parts & Maintenance:** Tyres, hydraulic pumps, and tractor components now taxed at 5%, cutting recurring costs.
- **Logistics:** Lower taxes on freight vehicles and insurance reduce the cost of transporting crops to markets.

For farmers, this means a **direct cost saving of 6–7% on machinery and inputs**, according to Ministry estimates. For example, a ₹5 lakh tractor now attracts only ₹25,000 GST instead of ₹60,000, saving ₹35,000 upfront.

GST Overview and Its Impact on Agriculture

The introduction of GST has brought several advantages to the agricultural sector, particularly in the form of exemptions on essential farm produce.

Staple commodities like cereals, fresh fruits, and vegetables are kept outside the GST net to ensure affordability for consumers while shielding farmers from tax on their primary outputs. At the same time, once these items undergo processing or value addition, they may be taxed under higher GST categories, reflecting their transition from raw produce to processed goods.



GST Rates on Agricultural Commodities in India:

GST rates on agricultural commodities vary based on their level of processing. Below is a breakdown of the applicable GST rates for different categories of agricultural goods:

S.No	Product Category	GST Rate	Examples
1.	Raw agricultural produce (unprocessed)	0% (Exempt)	Fresh fruits, vegetables, grains, pulses, milk
2.	Processed and packaged food	5%	Sugar, edible oils, frozen vegetables, Ultra High Temperature (UHT) milk
3.	Branded and packaged products	12%	Branded dry fruits, packaged paneer, butter, and ghee
4.	Processed foods & snacks	18%	Sauces, jams, pickles, packaged snack foods
5.	Luxury and sin products	28%	Aerated beverages, tobacco products

GST Rates on Agricultural Inputs and Machinery:

S.No	Inputs Description	GST Rate	Examples
1.	Seeds for sowing	0%	All seeds for cultivation
2.	Farm equipment (manual)	0%	Tools such as ploughs, sickles, and shovels
3.	Farm machinery	12%	Power-driven machinery like tractors and harvesters
4.	Fertilisers	5%	Most chemical fertilisers
5.	Pesticides	18%	Agrochemicals such as pesticides and herbicides

Practical Implications of GST for Farmers

- **Better Market Integration:**

The rollout of GST has made interstate trade much easier by replacing older levies like CST and octroi with a unified tax structure and the e-way bill system. This shift has streamlined the transport of goods across state borders, cutting delays and reducing logistics hurdles.

- **Removal of cascading Taxes:**

Before GST, agricultural commodities were often taxed multiple times at different stages, which increased costs for farmers and traders. By merging these taxes into one system, GST has removed this overlapping burden, bringing down overall expenses.

- **Input Tax Credit (ITC):**

Enterprises linked to agriculture, such as input suppliers or agribusiness firms, benefit from ITC on items like fertilisers, pesticides, and farm equipment. This helps lower their operating costs. However, individual farmers selling exempt crops—like unprocessed grains, fruits, or vegetables—are not eligible to claim ITC, limiting direct benefits for them.

Challenges

Although GST has introduced several advantages for agriculture, it has also created certain difficulties that farmers continue to grapple with.

- **Rising input costs:**

Even though many essential farm inputs are either exempt from GST or fall under lower tax brackets, items such as machinery and pesticides are still charged at higher rates of 12% and 18%. This adds to the financial strain on cultivators, particularly those investing in modern tools and crop protection measures.

- **Compliance hurdles:**

Small farmers who are not registered under GST often struggle with system requirements. Since they cannot claim Input Tax Credit (ITC) on purchases like fertilisers or machinery, transactions with registered dealers can put them at a disadvantage.

- **Effect on smallholders and agri-businesses:**

While small producers selling unprocessed crops remain largely unaffected, the challenge grows when processing, packaging, or value addition comes into play. Larger agricultural enterprises engaging in these activities may find the system complex and the compliance costs relatively high.

HIGHLIGHTS:

- **Fertilisers**
- Ammonia, sulfuric acid, nitric acid: GST reduced from 18% to 5%.
- Reduction in rates will correct the inverted duty structure for fertiliser production.
- **Bio-Pesticides and Micronutrients**
- 12 bio-pesticides and several micronutrients: GST cut from 12% to 5%.
- Bio-based inputs made more affordable, promoting eco-friendly and sustainable agriculture.
- Encourage farmers to shift from chemical pesticides to bio-pesticides, improving soil health and crop

quality.

- Direct benefit to small organic farmers and FPOs under the government's National Mission on Natural Farming
- **Fruits, Vegetables and Food Processing**
 - Prepared/preserved vegetables, fruits, nuts: GST reduced from 12% to 5%.
 - Boost to cold storage, food processing, and value addition.
 - Reduction in wastage of perishables, ensuring farmers get better prices.
 - Promoting export of processed food, strengthening India's position as an agri-export hub.
- **Dairy Sector**
 - No GST on milk and cheese.
 - GST on butter, ghee, etc., cut from 12% to 5%.
 - Dairy farmers' products made more competitive
 - Milk cans (iron/steel/aluminum) now at 5% instead of 12%.
 - Boost to indigenous dairy products.
- **Aquaculture**
 - GST on 'prepared or preserved fish' reduced from 12% to 5%.
 - Likely to encourage aquaculture and fish farming nationwide.
- **Honey**
 - GST reduced on natural honey, benefitting beekeepers, tribal communities, and rural SHGs.
 - GST on artificial honey (whether blended with natural or not) cut from 18% to 5%.
- **Solar-Powered Equipment**
 - GST on solar-powered devices reduced from 12% to 5%.
 - Affordable solar equipment will lower irrigation costs, helping farmers.
- **Tendu Leaves**
 - GST reduced from 18% to 5%.
 - As tendu leaves are a key source of income for farmers and tribals in Odisha, Madhya Pradesh, and Chhattisgarh, this cut will strengthen livelihoods in these states.

Conclusion:

The implementation of the Goods and Services Tax (GST) has brought both opportunities and challenges to the agricultural sector. On one hand, GST has streamlined taxation, reduced cascading taxes, and created the potential for a more transparent supply chain, which can benefit farmers indirectly by lowering inefficiencies in marketing and distribution. However, the sector still faces significant hurdles, including increased costs for certain inputs like machinery and pesticides, compliance challenges for small-scale farmers, and limited access to input tax credits (Sharma & Singh, 2022).

To strengthen the rural economy under the GST regime, it is essential to enhance awareness and capacity-building among farmers regarding tax compliance and digital transaction systems. Support mechanisms, such as simplified GST filing procedures for small farmers and exemptions for critical agricultural inputs, can mitigate adverse impacts while encouraging formalization in agricultural trade (Kumar, 2021). Ultimately, the effectiveness of GST in agriculture will depend on the continuous monitoring of its impacts, the adaptability of policies to local realities, and the integration of farmers' perspectives in policy planning. A balanced approach can ensure that GST contributes to both the modernization of agricultural markets and the economic empowerment of rural communities.

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