United International Journal of Multidisciplinary Research (UIJMR)
An International Peer-Reviewed and Refereed Multidisciplinary Journal
ISSN: 3048-6726 | Impact Factor: 6.934 (SJIF)
Volume 3, Special Issue -IX, 2026; Website: www.uijmr.in

Goods and Service Tax (GST) Reforms: Boost for Agriculture and Allied Activities

Dr. G. Eswara Reddy,
Lecturer in Economics,
Government Degree College,
Yerraguntla,
YSR Kadapa District, AP.
DOI:10.37854/UIJMR.2026.3.3.9.122

Abstract

For many years, Indian farmers struggled with numerous problems like high costs of tractors, tools, and fertilizer inputs. Again, adding taxes to this burden again making modern farming expensive and cutting into profits. To eliminate this pressure, the Government of India, in the 56th GST Council Meeting 2025 chaired by the Union Finance Minister, announced GST 2.0 reforms. The new GST rates 2025 came into effect on 22nd September 2025, directly reducing the cost of essential agricultural products and inputs. Earlier, GST on agricultural equipment and GST for agricultural machinery ranged from 12% to 18% on tractors, spare parts, irrigation systems, and harvesting tools. This meant that every purchase from a tractor, tyre to a set of sprinklers became costlier. For medium as well as small farmers these high rates often lead to delayed investments or dependence on manual labour. Now, with reduced 5% GST, farming has become more affordable. This new GST benefit really helps farmers to save money, to invest in better agricultural equipment, and improve productivity.

Key Words: Goods and Service Tax, Agriculture, Food Processing, Agricultural Machinery, Fertilisers.

1. Introduction

Agriculture continues to be the backbone of the Indian economy, accounting for 18 percent of the country's GDP and employing approximately 45% of the labour force. Millions of people depend on this industry for their living, particularly in rural areas, and it is essential to the nation's large population's food security. Despite its significance, agriculture has structural problems such dispersed landholdings, reliance on monsoons, and restricted access to contemporary technology. Additionally, the industry is strongly

associated with related industries that boost rural incomes, such as dairy, fishery, and poultry. The government has implemented a number of reforms throughout the years to improve market access and agricultural output.

September 2025 GST reforms in India significantly boosted agriculture by slashing tax rates on essential machinery (tractors, sprinklers, harvesters) from 12-18% down to 5%. These changes reduce operational costs, promote mechanization, encourage food processing, and lower prices for fertilizers and bio-pesticides, ultimately boosting rural incomes and productivity.

2. Objectives of the Study

The primary objectives of this research paper are:

- To analyse the impact of GST on agricultural inputs such as seeds, fertilizers, pesticides, and farm machinery.
- To assesses the boost of Food Processing Industry under the GST regime and how it affects value addition.
- To examine pre-GST and post-GST tax structures to determine the net benefit or burden on stakeholders.

3. Methodology

This study adopts a descriptive and analytical research design based on secondary data. Data Sources: Information has been gathered from the Ministry of Agriculture & Farmers Welfare, Central Board of Indirect Taxes and Customs (CBIC) notifications, Economic Surveys, and GST Council meeting minutes.

4. Review of Literature

Kumar et al. (2018) examined the impact of GST on agriculture, dairy, and food processing sectors in India. The study observed that most agricultural services remain exempt, reducing direct tax burden on farmers. However, taxes on agro-processing equipment increased, raising capital costs. The authors found that GST indirectly affects cost of cultivation through input price changes. The dairy sector experienced mixed outcomes due to taxation on value-added products. The study also highlighted the role of GST in encouraging technological adoption. While efficiency in the supply chain improved, sectoral imbalances persisted. The paper emphasized differential impacts across subsectors. It concluded that GST has both positive and negative implications. Overall, the reform was beneficial but uneven in its outcomes.

Patel and Shah (2019) analyzed GST as a comprehensive reform affecting Indian agriculture. The study highlighted agriculture's significant contribution to GDP and employment. GST simplified the indirect tax structure by replacing multiple taxes. The

authors identified both positive and negative impacts on farmers' income and production costs. Input costs, especially machinery prices, were notably affected. The study found improved transparency in agricultural trade and better compliance. Export competitiveness increased due to tax uniformity. However, small and marginal farmers faced adaptation challenges. The study pointed out institutional gaps in implementation. It concluded that GST has transformative but uneven effects across farm groups.

Reddy (2020) discussed GST's role in restructuring agricultural taxation. The study emphasized exemptions for basic agricultural produce to protect farmers. It highlighted differential tax rates on processed and unprocessed goods. Machinery and pesticides were taxed at higher rates, increasing production costs. The research found that GST benefits organized agribusiness more than small farmers. Lack of Input Tax Credit (ITC) emerged as a major issue. Compliance challenges in rural areas were also noted. The paper pointed out classification problems between raw and processed goods. It stressed the need for awareness among farmers. The study concluded that GST improves efficiency but requires supportive policies.

Singh and Kaur (2021) analyzed the effect of GST on farmers' income using primary and secondary data. The study found that farmers are indirectly taxed through inputs like fertilizers and machinery. Increased input costs led to reduced net farm income. The inability of farmers to claim ITC was identified as a major drawback. The research observed increased income variability post-GST implementation. Market fluctuations further influenced farmer earnings. The study highlighted the vulnerability of small farmers. It recommended subsidies and policy support mechanisms. The authors emphasized the need for inclusive tax reforms. The study concluded that GST has a negative short-term impact on farm income.

Sharma (2022) provided a practical overview of GST's impact on agriculture. The study explained GST rates on key inputs and machinery. It highlighted reductions in GST rates on agricultural equipment. Improved logistics and supply chain efficiency were major benefits identified. GST eliminated cascading tax effects and improved interstate trade. The study also noted policy reforms by the GST Council. However, high GST on pesticides remained a concern. The research indicated that GST supports modernization in agriculture. Short-term challenges were acknowledged. The study concluded that long-term benefits outweigh initial difficulties.

Mehta (2018) examined GST as a tool for economic integration. The study highlighted agriculture's contribution to national income. GST exemptions for small farmers and unprocessed goods were discussed. It emphasized the creation of a unified national market. Transparency in taxation improved significantly. Trade barriers between

states were reduced. The study also noted improved credit flow in agribusiness. However, compliance burden affected larger enterprises. Policy clarity issues were identified. The study concluded that GST supports long-term agricultural growth.

Gupta (2017) conducted a pre-implementation review of GST's expected impact. The study highlighted agriculture's economic importance. It predicted that GST would reduce inflation and price distortions. A unified national market was expected to emerge. The study emphasized improved tax efficiency. Multiple taxation issues were expected to decline. Agricultural trade efficiency was predicted to increase. However, concerns about rising input costs were noted. The study anticipated mixed outcomes. It concluded that GST would be a major structural reform in agriculture.

Rao et al. (2022) conducted a survey-based study involving 400 farmers. The study analyzed GST's impact on agricultural markets. Integration through e-NAM was highlighted. GST facilitated free movement of goods across states. Farmers experienced both benefits and challenges. Input cost changes influenced production decisions. Behavioural responses of farmers were studied in detail. Awareness levels were found to be low. The study recommended policy reforms for better implementation. It concluded that GST has mixed but significant impacts.

As noted by Gulati & Narayanan (2018), the shift to GST created a fiscal paradox for the primary producer. While the tax system is now more transparent, the "effective" cost for a small farmer has often risen because the farmer sits at the end of the value chain without the ability to claim Input Tax Credit (ITC). Since raw agricultural produce (like grains and vegetables) is exempt from GST, farmers cannot "offset" the taxes they pay on essential inputs. For instance, the transition of drip and sprinkler irrigation from low state VAT (approx. 5%) to a 12% GST slab represents a direct increase in the capital required for sustainable farming. Similarly, the 5% GST on fertilizers, while seemingly low, is complicated by an "Inverted Duty Structure" where raw materials like Ammonia are taxed at 18%, leading to higher production costs that eventually trickle down to the farmer.

The observation by Rao & Kumar (2019) regarding the "exempt-to-taxed" transition is a cornerstone of GST's success in the food processing industry. In the pre-GST era, a manufacturer producing branded fruit juice faced a "broken" tax chain: they paid taxes on packaging, machinery, and branding, but because the raw fruit was exempt from VAT, they often lost the ability to claim credits on those secondary expenses. Under the unified GST framework, the processing sector can now claim full credit for all taxes paid on inputs and services, regardless of the state of origin. This has incentivized the shift from the unorganized to the organized sector, effectively lowering the "hidden tax" embedded

in processed foods and making Indian agri-exports more price-competitive on the global stage.

The "20% reduction in transit time" highlighted by Nayar (2020) is perhaps the most tangible victory of GST for the agricultural supply chain. Before 2017, the movement of perishable goods was hampered by state-level check posts and Octroi, where trucks would idle for hours for tax verification, leading to significant spoilage of temperature-sensitive produce. The abolition of these barriers has transformed India into a single geographical warehouse. Logistics companies have moved away from maintaining small, inefficient godowns in every state (built previously just to avoid Central Sales Tax) and have instead invested in large-scale, technologically advanced "Mother Warehouses" and high-speed cold chain corridors. This consolidation reduces post-harvest wastage and ensures that the "farm-to-fork" journey is both faster and more cost-effective.

5. GST Reforms in Agriculture: Old vs. Present GST Rates

The government's GST changes in agriculture show its focus on farmers' welfare and rural growth. The reform cuts costs for farmers and helps cooperatives and FPOs (Farmer Producer Organisations). Cheaper fertilisers and farm machines will raise productivity. Support for cold storage and food processing will reduce wastage and give farmers better returns. Dairy, honey and other allied activities will also become more profitable. These steps will make Indian farming stronger and more self-reliant, in line with the vision of Atmanirbhar Bharat.

GST on agricultural machinery reduced from 12 percent to 5 percent (Table 1). Modernizing a farm requires heavy investment in mechanization. Most tractors and high-end harvesters fall under the 12% or 18% slabs. The reduction in tax rates from 12% to 5% on small-capacity agricultural machinery such as fixed-speed diesel engines (up to 15 HP), harvesting and threshing equipment, and composting machines is expected to significantly benefit the agricultural sector. This measure lowers the overall cost of essential farm tools commonly used by small and marginal farmers, improving their affordability and accessibility. It also promotes the adoption of efficient and water-saving irrigation systems like drip and sprinkler technologies, supporting sustainable agricultural practices. By making modern equipment more attainable, the initiative enhances productivity and operational efficiency in key farming activities such as sowing, irrigation, and harvesting. Overall, it plays a crucial role in accelerating farm mechanisation and strengthening the rural economy.

GST on Sprinklers, Drip Irrigation, Harvesting Machinery reduced fro 12 percent to 5 percent. The reduction in tax rates from 12% to 5% on fixed-speed diesel

engines (not exceeding 15 HP), along with harvesting, threshing, and composting machinery, is set to provide significant relief to the agricultural sector. This measure will lower the cost of essential farm equipment widely used by small and marginal farmers, thereby improving affordability and access. It also encourages the adoption of water-efficient irrigation methods such as drip and sprinkler systems, promoting sustainable agricultural practices. By making modern tools more accessible, the initiative is expected to enhance productivity and operational efficiency in key farming activities like sowing, irrigation, and harvesting. Overall, it will support increased farm mechanisation and contribute to the modernization of agriculture.

GST on Ammonia, Sulphuric Acid, Nitric Acid came down by 5% from 18 percent. The reduction in tax rates on major raw materials used in fertiliser production helps correct the inverted duty structure (IDS), providing relief to manufacturers and improving cost efficiency. This measure ensures the timely availability of affordable fertilisers, which is crucial for farmers, especially during peak sowing seasons. By lowering input costs, it reduces the burden on fertiliser companies, preventing them from passing on price increases to farmers. As a result, fertilisers remain reasonably priced, supporting consistent demand and contributing to agricultural stability and productivity.

GST on bio-pesticides, bio-pesticides, preserved vegetables, fruits, nuts, butter, ghee, milk cans, preserved/ prepared fish and solar power based devices came down from 12 percent to 5 percent. Commercial goods vehicles GST also reduced from 28 percent to 18 percent.

While the service of cold storage for fruits and vegetables is exempt, the creation of the facility is expensive. Essential components like refrigeration units, insulation panels, and structural steel are taxed at 18–28%. Since the storage service itself is exempt, the warehouse owner cannot claim ITC on these construction costs, making the "break-even" point for cold-chain startups further away.

Table :1 GST Rates on Agricultural Inputs: Old vs. Present

Sector/Product	Agricultural Inputs	Old GST	New GST

		Rate %	Rate %
Farm Mechanisation	Tractors below1800cc	12	5
	Tractor Tyres and Tubes	18	5
	Sprinclers, Drip Irrigation, Harvesting Machenery	12	5
	Diesel Engines, Harvesting Thressing Compressor	12	5
Fertiliser Inputs	Ammonia, Sulphuric Acid, Nitric Acid	18	5
Bio-pesticides and Micronutrients	Bio-pesticides	12	5
	Micronutrients	12	5
Food Processing and Perishables	Preserved Vegetables, Fruits, Nuts	12	5
Dairy Sector	Butter, Ghee	12	5
	Milk Cans	12	5
Aquaculture	Preserved/ Prepared Fish	12	5
Renewal Energy	Solar Power Based Devices	12	5
Forest Produce	Kendu Leaves	18	5
Logistics and Transport	Commercial Goods Vehicles	28	18
	Third party Insurance of goods carriage	12	5

Source: Ministry of Agriculture

6. Conclusion

New GST 2025 rates are boon to farmers. Taxes are reduced on tractors, irrigation equipment, bio-pesticides, harvesting machinery, and solar devices, farmers can now access better technology at reduced costs. This reform not only encourage the financial burden but also supports farm mechanization, sustainable agriculture, water conservation, and renewable energy adoption. It is obvious indication of the Government's commitment to Empowering farmers and building a future-ready agriculture sector.

GST reforms 2025 in India provided a strong push to the agriculture sector by reducing tax rates on essential farm machinery such as tractors, sprinklers, and harvesters from 12–18% to 5%. These measures help lower operational expenses, support greater mechanization, promote food processing activities, and reduce the cost of fertilizers and bio-pesticides, thereby enhancing rural incomes and overall productivity. Key changes include making mechanization more affordable by cutting GST on tractors (below 1800 cc), spare parts, and irrigation equipment to 5%, with a 35 HP tractor expected to cost about ₹41,000 less; reducing GST on bio-pesticides and micronutrients from 12% to 5% and on major fertilizer inputs like ammonia, sulphuric acid, and nitric acid from 18% to 5%; encouraging dairy and agri-processing by lowering taxes on related machinery and processed foods such as preserved fish and fruits; improving logistics efficiency through reduced taxes on commercial vehicles, which lowers transport costs and improves market access; and supporting Farmer Producer Organizations (FPOs) and small processors by easing their overall tax burden.

References

Kumar, A., Singh, R., & Pandey, S. (2018), India: Reflections from food and agriculture. Agricultural Economics Research Review, 31(Conference Issue),1–10. Indian Council of Agricultural Research (ICAR).

Patel, D., & Shah, M. (2019), Impact of GST on Indian agriculture sector. Journal of Gujarat Research Society, 21(10), 45–52.

Reddy, K. V. (2020), Impact of GST on agricultural products and services in India. Agriculture Institute Journal, 5(2), 12–18.

Singh, P., & Kaur, G. (2021), Analysis of impact of GST on farming income in India.

International Education & Research Journal (IERJ), 7(6), 120–124.

Sharma, V. (2022), Impact of GST on agricultural sector in India: A practical approach. ClearTax Research Insights / Policy Analysis Report.

Mehta, R. (2018), A study on impact of GST in agricultural sector. International Journal of Research and Analytical Reviews, 5(3), 233–240.

Gupta, S. (2017), Impact of GST on agriculture: A review. International Journal of Applied Research, 3(7), 215–218.

Rao, P., Ramesh, K., & Naidu, V. (2022), Assessing impact of GST on agriculture: Evidence from farmer survey. International Journal of Scientific Research in Engineering and Management (IJSREM), 6(5), 1–6.

Central Board of Indirect Taxes and Customs. (2023). GST rates on agriculture: A

ready reckoner. Ministry of Finance, Government of India.

Department of Agriculture & Farmers Welfare. (2024). Annual Report 2023-24. Government of India.

Gulati, A., & Narayanan, K. J. (2018). The Impact of GST on Indian Agriculture. Indian Council for Research on International Economic Relations (ICRIER).

Ministry of Food Processing Industries. (2025). Opportunities in Food Processing under the GST Regime.

Nayar, R. (2020). Logistics and Supply Chain Management in Rural India. Oxford University Press.

Rao, M. G., & Kumar, S. (2019). Goods and Services Tax in India: Progress, Performance and Prospects. Journal of Economic Policy Reform, 22(3), 212-228.