

# **India Agriculture Engines Market, By Fuel Type (Diesel, Petrol), By Power (5 - 75 HP, 76 - 350 HP, 351 - 750 HP, Above 751 HP), By End Use (Tractors, Pumpset, Power Tillers, Rotavator, Thresher, Others), By Region, Competition, Forecast & Opportunities, 2021-2031F**

<https://marketpublishers.com/r/IDF8282D785CEN.html>

Date: May 2025

Pages: 86

Price: US\$ 3,500.00 (Single User License)

ID: IDF8282D785CEN

## **Abstracts**

### **Market Overview**

India Agriculture Engines Market was valued at USD 2.07 Billion in 2025 and is expected to reach USD 3.01 Billion by 2031 with a CAGR of 6.81% during the forecast period.

Agricultural engines are specialized engines designed to power various machinery and equipment used in farming and agricultural activities. These engines provide the necessary mechanical energy to operate tractors, irrigation pumps, harvesters, threshers, and other farming tools, enhancing productivity and efficiency in agriculture. Typically, agricultural engines are robust, durable, and built to withstand harsh outdoor conditions, including dust, moisture, and temperature variations.

Most agricultural engines run on diesel or gasoline, chosen for their fuel efficiency and ability to deliver high torque at low speeds, which is essential for heavy-duty farming tasks. The design of these engines focuses on simplicity and reliability to ensure easy maintenance and long service life in rural areas where technical support may be limited. Some modern agricultural engines also incorporate advanced technologies such as electronic fuel injection and emission control systems to meet environmental standards and improve fuel economy.

In essence, agricultural engines are the heart of mechanized farming, driving equipment that reduces manual labor, increases crop yield, and supports large-scale food production. Their development has significantly transformed agriculture by enabling faster land preparation, planting, and harvesting, which ultimately contributes to food security and economic growth worldwide.

## Key Market Drivers

### Increasing Mechanization in Indian Agriculture

India's agricultural sector has historically been labor-intensive, with a large portion of the population engaged in farming using traditional tools and manual labor. However, the gradual shift towards mechanization is one of the primary drivers boosting the demand for agricultural engines in the country. Mechanization enhances productivity, reduces dependency on manual labor, and speeds up farming processes such as plowing, sowing, irrigation, and harvesting.

Farmers, especially in regions with larger landholdings, are increasingly adopting tractors, power tillers, and irrigation pumps that rely on efficient engines. These engines provide the necessary power and durability to handle rigorous farm work. The government's push through various schemes and subsidies to encourage farm mechanization has also played a vital role in increasing the adoption of agricultural machinery. Furthermore, the rising cost and unavailability of farm labor during peak seasons have accelerated the switch to machines powered by reliable engines. Small and marginal farmers are also gradually adopting low-cost engines and machinery, recognizing the benefits of mechanization in reducing time and labor costs. As mechanization grows, the demand for fuel-efficient, durable, and easy-to-maintain agricultural engines also increases, propelling the market forward. The mechanization level in India has increased from around 40% in the early 2000s to over 55% by 2023, indicating more farmers are adopting machinery.

## Key Market Challenges

### High Initial Cost and Affordability Issues for Small Farmers

One of the significant challenges facing the agricultural engines market in India is the high initial cost of purchasing mechanized equipment powered by engines. While mechanization offers clear benefits in terms of efficiency and productivity, the upfront

investment required to acquire tractors, power tillers, and irrigation pumps can be prohibitively expensive for many small and marginal farmers.

In India, a large proportion of farmers own small landholdings, often less than two hectares, which limits their capacity to invest in costly machinery. Despite subsidies and government schemes, the overall affordability remains a barrier, especially in economically weaker rural regions. Many small-scale farmers depend on informal credit or moneylenders, which charge high-interest rates, making it difficult to finance such investments sustainably. Moreover, the cost of fuel and ongoing maintenance adds to the financial burden, discouraging farmers from purchasing or even maintaining engine-powered machinery. Diesel and petrol prices fluctuate frequently, creating uncertainty in operating costs. For many small farmers, the risk of investing in expensive machinery without assured financial returns can be daunting.

The inability to afford agricultural engines often forces small farmers to continue relying on manual labor or traditional methods, which are less efficient and limit productivity gains. This divide between large-scale farmers who can mechanize and small farmers who cannot creates disparities in income and output.

To overcome this challenge, there is a growing need for affordable financing options, innovative leasing or rental models, and more cost-effective engine technologies tailored to small-scale farming. Encouraging cooperative ownership of machinery or community-level rental services can also help increase access. Without addressing these affordability issues, the potential of agricultural engines to transform Indian agriculture may remain limited for a substantial portion of the farming population.

## Key Market Trends

### Shift Towards Sustainable and Fuel-Efficient Engines

A prominent trend shaping the Indian agricultural engines market is the increasing focus on sustainability and fuel efficiency. As environmental awareness grows globally and within India, farmers and manufacturers alike are moving towards engines that consume less fuel and emit fewer pollutants. This trend aligns with stricter government regulations on emissions and rising fuel prices, pushing the market toward cleaner, more efficient technologies.

Traditionally, many agricultural engines in India have been diesel-powered, known for their power and durability but also for higher emissions and fuel consumption. In

response, manufacturers are investing in developing engines that incorporate advanced combustion technologies, electronic fuel injection systems, and better air-fuel management. These improvements enable engines to deliver the required power while significantly reducing fuel use and harmful exhaust emissions.

This shift also reflects the broader move towards sustainable farming practices. Farmers are increasingly conscious of the environmental impact of their operations and are adopting mechanized solutions that help minimize carbon footprints. The government supports this transition through policies promoting cleaner fuels and incentivizing energy-efficient machinery. In addition, there is a growing interest in alternative power sources for agricultural equipment. Although still at a nascent stage in India, electric and hybrid engines are beginning to attract attention. The potential benefits include zero emissions, lower operating costs, and quieter operation—features especially appealing for smaller farms and horticultural applications.

This trend also influences after-sales services and product innovation. Manufacturers provide maintenance programs aimed at optimizing engine performance and fuel use, while training farmers on eco-friendly operation techniques. As a result, agricultural engines that meet sustainability criteria are gaining a competitive edge in the market.

### Key Market Players

Cummins Inc.

Caterpillar Inc.

Deere & Company

AGCO Corporation

Mahindra & Mahindra Limited

Kubota Corporation

Yanmar Co., Ltd.

Escorts Limited

## Report Scope:

In this report, the India Agriculture Engines Market has been segmented into the following categories, in addition to the industry trends which have also been detailed below:

### India Agriculture Engines Market, By Fuel Type:

Diesel

Petrol

### India Agriculture Engines Market, By Power:

5 - 75 HP

76 - 350 HP

351 - 750 HP

Above 751 HP

### India Agriculture Engines Market, By End Use:

Tractors

Pumpset

Power Tillers

Rotavator

Thresher

Others

### India Agriculture Engines Market, By Region:

South India

North India

West India

East India

### Competitive Landscape

Company Profiles: Detailed analysis of the major companies present in the India Agriculture Engines Market.

### Available Customizations:

India Agriculture Engines Market report with the given market data, TechSci Research offers customizations according to a company's specific needs. The following customization options are available for the report:

### Company Information

Detailed analysis and profiling of additional market players (up to five).

## Contents

### 1. PRODUCT OVERVIEW

- 1.1. Market Definition
- 1.2. Scope of the Market
  - 1.2.1. Markets Covered
  - 1.2.2. Years Considered for Study
- 1.3. Key Market Segmentations

### 2. RESEARCH METHODOLOGY

- 2.1. Objective of the Study
- 2.2. Baseline Methodology
- 2.3. Formulation of the Scope
- 2.4. Assumptions and Limitations
- 2.5. Sources of Research
  - 2.5.1. Secondary Research
  - 2.5.2. Primary Research
- 2.6. Approach for the Market Study
  - 2.6.1. The Bottom-Up Approach
  - 2.6.2. The Top-Down Approach
- 2.7. Methodology Followed for Calculation of Market Size & Market Shares
- 2.8. Forecasting Methodology
  - 2.8.1. Data Triangulation & Validation

### 3. EXECUTIVE SUMMARY

- 3.1. Overview of the Market
- 3.2. Overview of Key Market Segmentations
- 3.3. Overview of Key Market Players
- 3.4. Overview of Key Regions/Countries
- 3.5. Overview of Market Drivers, Challenges, and Trends

### 4. VOICE OF CUSTOMER

### 5. INDIA AGRICULTURE ENGINES MARKET OUTLOOK

- 5.1. Market Size & Forecast

#### 5.1.1. By Value

### 5.2. Market Share & Forecast

#### 5.2.1. By Fuel Type (Diesel, Petrol)

#### 5.2.2. By Power (5 - 75 HP, 76 - 350 HP, 351 - 750 HP, Above 751 HP)

#### 5.2.3. By End Use (Tractors, Pumpset, Power Tillers, Rotavator, Thresher, Others)

#### 5.2.4. By Region (South India, North India, West India, East India)

#### 5.2.5. By Company (2025)

### 5.3. Market Map

## 6. SOUTH INDIA AGRICULTURE ENGINES MARKET OUTLOOK

### 6.1. Market Size & Forecast

#### 6.1.1. By Value

### 6.2. Market Share & Forecast

#### 6.2.1. By Fuel Type

#### 6.2.2. By Power

#### 6.2.3. By End Use

## 7. NORTH INDIA AGRICULTURE ENGINES MARKET OUTLOOK

### 7.1. Market Size & Forecast

#### 7.1.1. By Value

### 7.2. Market Share & Forecast

#### 7.2.1. By Fuel Type

#### 7.2.2. By Power

#### 7.2.3. By End Use

## 8. WEST INDIA AGRICULTURE ENGINES MARKET OUTLOOK

### 8.1. Market Size & Forecast

#### 8.1.1. By Value

### 8.2. Market Share & Forecast

#### 8.2.1. By Fuel Type

#### 8.2.2. By Power

#### 8.2.3. By End Use

## 9. EAST INDIA AGRICULTURE ENGINES MARKET OUTLOOK

### 9.1. Market Size & Forecast



- 9.1.1. By Value
- 9.2. Market Share & Forecast
  - 9.2.1. By Fuel Type
  - 9.2.2. By Power
  - 9.2.3. By End Use

## **10. MARKET DYNAMICS**

- 10.1. Drivers
- 10.2. Challenges

## **11. MARKET TRENDS & DEVELOPMENTS**

- 11.1. Merger & Acquisition (If Any)
- 11.2. Product Launches (If Any)
- 11.3. Recent Developments

## **12. POLICY AND REGULATORY LANDSCAPE**

## **13. INDIA ECONOMIC PROFILE**

## **14. COMPANY PROFILES**

- 14.1. Cummins Inc.
  - 14.1.1. Business Overview
  - 14.1.2. Key Revenue and Financials
  - 14.1.3. Recent Developments
  - 14.1.4. Key Personnel/Key Contact Person
  - 14.1.5. Key Product/Services Offered
- 14.2. Caterpillar Inc.
- 14.3. Deere & Company
- 14.4. AGCO Corporation
- 14.5. Mahindra & Mahindra Limited
- 14.6. Kubota Corporation
- 14.7. Yanmar Co., Ltd.
- 14.8. Escorts Limited

## **15. STRATEGIC RECOMMENDATIONS**

## 16. ABOUT US & DISCLAIMER

## I would like to order

Product name: India Agriculture Engines Market, By Fuel Type (Diesel, Petrol), By Power (5 - 75 HP, 76 - 350 HP, 351 - 750 HP, Above 751 HP), By End Use (Tractors, Pumpset, Power Tillers, Rotavator, Thresher, Others), By Region, Competition, Forecast & Opportunities, 2021-2031F

Product link: <https://marketpublishers.com/r/IDF8282D785CEN.html>

Price: US\$ 3,500.00 (Single User License / Electronic Delivery)

If you want to order Corporate License or Hard Copy, please, contact our Customer Service:

[info@marketpublishers.com](mailto:info@marketpublishers.com)

## Payment

To pay by Credit Card (Visa, MasterCard, American Express, PayPal), please, click button on product page <https://marketpublishers.com/r/IDF8282D785CEN.html>