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Economic Planning and Development in the Agriculture Sector of India in the Last Decade

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Agriculture has historically been the backbone of India's economy, supporting livelihoods, ensuring food security, and contributing significantly to national income. Over the last decade, economic planning in India's agricultural sector has undergone substantial transformation through policy reforms, technological integration, and increased government investment. This research paper examines the development of India's agriculture sector between approximately 2014 and 2024, focusing on planning strategies, policy initiatives, institutional reforms, and their impact on productivity, farmers' income, and rural development. The study analyzes government programs, infrastructural investments, technological adoption, and market reforms designed to strengthen agricultural productivity and sustainability. Major initiatives such as the Pradhan Mantri Kisan Samman Nidhi, Pradhan Mantri Fasal Bima Yojana, Pradhan Mantri Krishi Sinchai Yojana, and the Agricultural Infrastructure Fund are analyzed to evaluate their role in transforming agricultural planning. The research highlights achievements such as rising food grain production, expansion of irrigation coverage, improved credit access, and growth in agri-exports. However, challenges such as climate change, fragmented land holdings, and income disparities among farmers persist. The study concludes that while the past decade has witnessed significant progress in agricultural planning and development, sustainable and inclusive growth will require continued reforms, technological innovation, and stronger institutional frameworks.

Keywords: agricultural development, economic planning, india agriculture policy, farmer welfare schemes, rural development, agricultural infrastructure, sustainable agriculture

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1. Introduction

Agriculture plays a crucial role in the economic and social development of India. Despite the rapid growth of the industrial and service sectors in recent decades, agriculture continues to employ a large proportion of the population and remains the primary source of livelihood for millions of rural households. The sector is not only important for employment but also for ensuring food security, supporting rural development, and contributing to overall economic stability. Because of these factors, agricultural development has always been a central component of economic planning in India.

Historically, the government of India has emphasized agriculture in its development strategies. Since the beginning of planned economic development in 1951, agricultural policies have aimed to increase production, improve farmers' income, and reduce rural poverty. Over time, economic planning has helped modernize farming practices, expand irrigation facilities, introduce high-yield crop varieties, and improve access to credit and agricultural inputs. These efforts have played a vital role in transforming the agricultural sector and strengthening the country's food system.

During the last decade, the government has introduced several policies and initiatives to modernize and strengthen the agricultural sector. The focus of agricultural planning has shifted from merely increasing production to improving sustainability, profitability, and resilience. Policies have aimed at increasing crop productivity, promoting efficient use of water resources, encouraging technological innovation, expanding irrigation infrastructure, and improving farmers' access to markets. In addition, the government has implemented various support programs such as crop insurance schemes, minimum support price mechanisms, digital agricultural platforms, and direct income support to farmers. These initiatives reflect the broader objective of making agriculture more market-oriented, technologically advanced, and environmentally sustainable.

As a result of these policy interventions and planning strategies, India has witnessed significant growth in agricultural production during the past decade. Food grain production, for example, increased from approximately 265 million tonnes in 2014–15 to about 347 million tonnes by 2024–25.

This substantial rise in output indicates improvements in productivity, better resource management, and the effectiveness of government planning and support programs. The expansion of irrigation facilities, improved seed varieties, and greater adoption of modern farming techniques have also contributed to this growth.

However, despite these achievements, the agricultural sector continues to face several challenges, including climate change, small landholdings, market fluctuations, and regional disparities in productivity. Addressing these issues requires continued policy innovation, better infrastructure, and sustainable agricultural practices.

This research paper examines the strategies, policies, and outcomes of economic planning in India's agricultural sector during the last decade. It also analyses the key challenges faced by the sector and explores possible future prospects for achieving sustainable and inclusive agricultural growth.

2. Role of Agriculture in the Indian Economy

Agriculture remains a fundamental pillar of the economy of India. Even with the rapid expansion of industry and services over the past few decades, the agricultural sector continues to play a crucial role in employment generation, food security, and rural development. A large proportion of India's population still lives in rural areas and depends directly or indirectly on agriculture for their livelihood. For this reason, the sector is often considered the backbone of the Indian economy and an essential component of national development.

One of the most significant contributions of agriculture is employment generation. The sector provides work opportunities for millions of farmers, agricultural laborers, and individuals engaged in allied activities. Although the share of agriculture in the country's Gross Domestic Product (GDP) has gradually declined due to structural transformation and the expansion of the industrial and service sectors, it still supports a substantial portion of the workforce. In many rural regions, agriculture remains the primary source of income and livelihood, making it vital for maintaining social and economic stability.

Agriculture also plays a major role in supporting rural development. The growth of the agricultural sector leads to increased income for farmers, which in turn stimulates demand for goods and services in rural areas. This helps promote the development of local markets, small industries, transportation, and other economic activities. As a result, improvements in agriculture often have a multiplier effect on the broader rural economy. Government initiatives that focus on irrigation development, access to credit, improved seeds, and modern technology have further strengthened agricultural productivity and rural income.

In recent years, the agriculture and allied sector in India has demonstrated considerable resilience. Between 2017 and 2023, the sector recorded an average annual growth rate of around 5 percent in terms of Gross Value Added (GVA). This steady growth highlights the importance of agriculture as a stabilizing force during periods of economic uncertainty. Even during times when other sectors face slowdowns, agricultural production often continues to support overall economic performance and rural livelihoods.

Agriculture is also an important component of India's export economy. Agricultural and food products are exported to many countries around the world, contributing significantly to foreign exchange earnings. In recent years, India's agri-food exports have reached approximately USD 46 billion. Major export items include rice, spices, tea, coffee, sugar, and marine products. These exports strengthen India's position in global agricultural trade and provide additional income opportunities for farmers and agribusinesses.

Another critical role of agriculture is ensuring national food security. The sector produces essential food grains and crops needed for domestic consumption. Staple crops such as rice, wheat, pulses, and oilseeds form the foundation of the country's food system. Adequate production of these crops is necessary to meet the nutritional needs of India's large population and to maintain stable food supplies across the country.

In addition to crop production, allied agricultural activities have become increasingly important for rural livelihoods. Sectors such as dairy farming, fisheries, and poultry provide additional sources of income and employment for rural households.

These activities help diversify farmers' income and reduce their dependence on traditional crop farming, which can often be affected by weather conditions and market fluctuations.

Therefore, effective economic planning in agriculture is essential for achieving sustainable development in India. Proper planning can improve productivity, enhance farmers' income, strengthen food security, and promote inclusive growth. By continuing to invest in agricultural infrastructure, technology, and market reforms, India can ensure that agriculture remains a strong and reliable foundation of its economy.

3. Economic Planning in the Agricultural Sector

Economic planning refers to the systematic process through which governments allocate resources and design policies to achieve specific economic and social objectives. In the context of India, economic planning has played a significant role in shaping the development of the agricultural sector since independence. Given the importance of agriculture for employment, food security, and rural livelihoods, policymakers have consistently prioritized agricultural development in national economic strategies. Over time, planning efforts have aimed to increase agricultural productivity, improve farmers' income, strengthen rural infrastructure, and ensure sustainable use of natural resources.

Historically, agricultural planning in India focused primarily on increasing food production to meet the needs of a rapidly growing population. Government policies emphasized the expansion of irrigation facilities, the adoption of high-yield crop varieties, and improved access to fertilizers and agricultural inputs. These measures contributed significantly to the transformation of the agricultural sector and enabled the country to achieve greater food self-sufficiency. In recent decades, however, the objectives of agricultural planning have expanded beyond production growth to include sustainability, resilience, and income enhancement for farmers.

During the last decade, agricultural planning in India has been guided by several key priorities. One major objective has been to increase agricultural productivity through the adoption of modern farming techniques, improved seed varieties, and better resource management.

Technological innovations such as precision agriculture, digital advisory services, and soil health monitoring systems have been promoted to enhance crop yields and improve farm efficiency.

Another important goal has been to increase farmers' income and strengthen rural livelihoods. Government policies have introduced income support schemes, improved access to institutional credit, and enhanced crop insurance coverage to reduce financial risks faced by farmers. Programs such as Pradhan Mantri Kisan Samman Nidhi provide direct income support to farmers, while Pradhan Mantri Fasal Bima Yojana offers protection against crop losses caused by natural disasters. These initiatives aim to improve economic stability for farmers and encourage investment in agricultural activities.

Sustainability has also become a central theme in recent agricultural planning. Policymakers have increasingly emphasized environmentally friendly farming practices that conserve natural resources and protect ecosystems. Initiatives promoting organic farming, efficient water management, and climate-resilient agriculture are being implemented to ensure the long-term sustainability of the agricultural sector. Programs such as Pradhan Mantri Krishi Sinchai Yojana focus on improving irrigation efficiency and expanding water resources for agriculture.

Strengthening agricultural infrastructure has been another key focus area. Investments in storage facilities, cold chains, transportation networks, and rural markets help reduce post-harvest losses and improve farmers' access to markets. The government has also introduced the Agriculture Infrastructure Fund to support infrastructure development in the agricultural sector. These initiatives aim to enhance supply chain efficiency and ensure that farmers receive better prices for their produce.

In addition to these policy measures, government expenditure on agriculture has increased significantly over the past decade. Budgetary allocations for irrigation projects, rural infrastructure, agricultural research, and farmer welfare programs have grown substantially. This increase in public investment reflects the government's strong commitment to strengthening rural development and ensuring national food security.

Overall, economic planning continues to play a crucial role in shaping the development of the agricultural sector in India. Through coordinated policy initiatives, technological innovation, and increased investment, agricultural planning aims to promote sustainable growth, improve farmers' livelihoods, and enhance the resilience of the agricultural economy.

4. Major Agricultural Policies and Schemes in the Last Decade

4.1 Income Support Programs

One of the most important initiatives introduced in recent years is the **Pradhan Mantri Kisan Samman Nidhi (PM-KISAN)**. Launched in 2019, the scheme provides direct financial assistance to farmers to support their agricultural activities and household expenses.

Under this program, eligible farmers receive direct income support through bank transfers. The scheme has benefited more than 110 million farmers and has distributed several lakh crore rupees to rural households. The program has played a significant role in stabilizing farm incomes and improving rural consumption.

4.2 Crop Insurance and Risk Management

Agricultural production is highly vulnerable to climate risks such as droughts, floods, and pest attacks. To protect farmers against crop losses, the government introduced the **Pradhan Mantri Fasal Bima Yojana (PMFBY)**.

This scheme provides crop insurance coverage at affordable premium rates and compensates farmers for crop losses due to natural disasters. The program has paid large claim amounts to farmers and has become one of the largest crop insurance programs in the world.

4.3 Irrigation Development

Water availability is one of the most critical factors affecting agricultural productivity. To expand irrigation coverage, the government launched the **Pradhan Mantri Krishi Sinchai Yojana (PMKSY)**.

The scheme focuses on improving water use efficiency and expanding irrigation through initiatives such as micro-irrigation systems and watershed development.

Under the "Per Drop More Crop" component, nearly 97 lakh hectares of farmland have been brought under micro-irrigation systems including drip and sprinkler irrigation.

4.4 Agricultural Infrastructure Development

Improving agricultural infrastructure has been a major focus of recent economic planning. The government introduced the **Agricultural Infrastructure Fund to support investment in storage, cold chains, warehouses, and post-harvest management facilities.

Thousands of infrastructure projects have been approved under the scheme, strengthening supply chains and reducing post-harvest losses. Improved infrastructure also enhances farmers' ability to access markets and receive better prices for their produce.

4.5 Agricultural Market Reforms

Market access is essential for improving farm incomes. In recent years, digital platforms and market reforms have been introduced to strengthen agricultural marketing systems.

The **e-NAM (National Agriculture Market) platform connects hundreds of agricultural markets across India and allows farmers to sell their produce online. By integrating markets digitally, the platform improves price transparency and competition.

5. Technological Innovation in Agriculture

Technological innovation has become a major driving force in the modernization and development of agriculture in India. Over the past decade, the adoption of advanced technologies and digital tools has significantly transformed farming practices, enabling farmers to improve productivity, enhance resource efficiency, and manage agricultural activities more effectively. As agriculture faces increasing challenges such as climate variability, resource scarcity, and rising production costs, technological innovation plays a crucial role in ensuring sustainable agricultural growth.

One of the most significant developments in recent years is the adoption of precision agriculture. Precision agriculture involves the use of advanced technologies such as sensors, geographic information systems (GIS), and data analytics to monitor crop conditions and manage farm inputs more efficiently. By applying fertilizers, water, and pesticides in precise quantities based on soil and crop requirements, farmers can reduce input costs while increasing crop yields. This approach not only improves productivity but also minimizes environmental damage caused by excessive use of agricultural chemicals.

Another important technological advancement is the use of mobile-based advisory services for farmers. With the rapid expansion of mobile phone usage in rural areas, digital advisory platforms now provide farmers with timely information related to weather conditions, pest management, crop diseases, and market prices. Mobile applications and messaging services enable farmers to access expert agricultural advice directly on their phones. These digital tools help farmers make informed decisions regarding crop selection, planting schedules, and input usage, thereby improving farm management practices.

The introduction of digital soil health cards has also contributed significantly to scientific farming practices. Under this initiative, farmers receive detailed information about the nutrient status of their soil and recommendations for appropriate fertilizer use. Soil testing helps farmers understand the specific nutrient deficiencies in their fields, allowing them to apply fertilizers more efficiently and avoid excessive usage. As a result, soil health card programs help improve soil fertility, enhance crop productivity, and promote sustainable agricultural practices.

Advancements in satellite-based weather forecasting have further strengthened agricultural planning and risk management. Satellite technology allows scientists and meteorological agencies to monitor weather patterns, rainfall distribution, and temperature changes with greater accuracy. Farmers can access weather forecasts through digital platforms and mobile applications, enabling them to plan agricultural activities such as irrigation, sowing, and harvesting more effectively. Accurate weather information helps reduce risks associated with unpredictable climatic conditions and improves overall farm productivity.

In recent years, the application of artificial intelligence (AI) and machine learning in agriculture has opened new possibilities for improving crop management. AI-based tools can analyze large volumes of agricultural data to identify patterns related to crop growth, soil conditions, pest infestations, and climate factors. These technologies help farmers detect plant diseases early, optimize irrigation schedules, and predict crop yields more accurately. Machine learning algorithms are also being used to develop smart farming solutions that improve decision-making and resource management.

Digital platforms have further strengthened the integration of technology in agriculture by providing farmers with real-time information on crop prices, government schemes, and market opportunities. For example, the National Agriculture Market enables farmers to access a nationwide electronic trading system that connects agricultural markets across the country. By improving price transparency and market access, such platforms help farmers obtain better returns for their produce.

Overall, technological innovation has played a transformative role in India's agricultural sector. The adoption of modern technologies has enhanced productivity, improved resource management, and strengthened farmers' ability to cope with environmental and market challenges. Continued investment in research, digital infrastructure, and farmer training will be essential for ensuring that technological advancements reach a larger number of farmers and contribute to sustainable agricultural development in the future.

6. Growth in Agricultural Production and Exports

One of the most notable achievements of agricultural planning in the past decade has been the substantial growth in agricultural production in India. Government initiatives aimed at improving irrigation infrastructure, promoting technological innovation, and strengthening farmers' access to financial support have significantly contributed to increasing agricultural output. As a result of these efforts, the country has witnessed a remarkable rise in foodgrain production, which plays a crucial role in ensuring food security and economic stability.

Over the last ten years, India's foodgrain production has grown steadily.

According to official agricultural statistics, total foodgrain production increased from approximately 265 million tonnes in 2014–15 to around 347 million tonnes by 2024–25. This increase reflects improvements in agricultural productivity, better farm management practices, and the expansion of irrigation facilities. The adoption of improved seed varieties, modern farming techniques, and digital agricultural services has also contributed to higher crop yields. In addition, government support programs and increased investment in agricultural research have strengthened the overall productivity of the sector.

Another important factor contributing to agricultural growth is the expansion of irrigation coverage across different regions of the country. Improved irrigation infrastructure has helped farmers reduce their dependence on rainfall and maintain stable crop production even during periods of irregular weather conditions. Government programs designed to promote efficient water management have also encouraged the use of micro-irrigation systems such as drip and sprinkler irrigation, which help conserve water while improving crop yields.

In addition to increased production, the government has strengthened price support mechanisms for farmers through the Minimum Support Price (MSP) system. The MSP policy ensures that farmers receive a guaranteed minimum price for certain agricultural commodities, thereby protecting them from sudden market price fluctuations. Over the past decade, MSP levels for major crops such as rice and wheat have increased significantly. This policy has provided farmers with greater financial security and encouraged them to invest more in agricultural production. The increased procurement of crops by government agencies has further strengthened the effectiveness of the MSP system and ensured stable income for many farmers.

Agricultural exports have also grown significantly during this period, contributing to India's foreign exchange earnings and strengthening its position in the global agricultural market. Indian agricultural products are now exported to a large number of countries, reflecting the increasing competitiveness of the sector. Major export commodities include rice, spices, tea, coffee, sugar, marine products, and processed food items. The export of basmati and non-basmati rice, in particular, has played a major role in boosting agricultural exports.

The growth in agricultural exports has been supported by improvements in supply chain infrastructure, transportation networks, and post-harvest management facilities. Investments in storage, cold chains, and food processing industries have helped reduce post-harvest losses and improve the quality of agricultural products. Government initiatives aimed at promoting agricultural trade and market access have also encouraged farmers and agribusinesses to participate more actively in international markets.

Overall, the growth in agricultural production and exports during the last decade reflects the positive impact of economic planning and policy reforms in the agricultural sector. Continued investment in infrastructure, technology, and market development will be essential to sustain this growth and ensure long-term prosperity for farmers in India.

7. Challenges in Agricultural Development

Despite significant progress in recent years, the agricultural sector in India continues to face several structural and institutional challenges. While government policies and technological advancements have contributed to increased productivity and improved rural livelihoods, various constraints still limit the overall growth and sustainability of the sector. These challenges include small and fragmented land holdings, climate change, low farm income, and inadequate rural infrastructure. Addressing these issues is essential for ensuring long-term agricultural development and improving the economic conditions of farmers.

7.1 Small and Fragmented Land Holdings

One of the most significant challenges in Indian agriculture is the prevalence of small and fragmented land holdings. A large proportion of farmers in India operate on very small plots of land, often less than two hectares. Over time, land fragmentation has increased due to population growth and the division of land among family members through inheritance. As a result, many farmers cultivate scattered and irregularly shaped plots, which reduces the efficiency of agricultural operations.

Small landholdings make it difficult for farmers to adopt modern farming techniques and mechanized equipment. Large agricultural machines such as tractors, harvesters, and irrigation systems are often not economically viable for farmers with limited land area. Consequently, many small farmers rely on traditional farming methods, which can limit productivity and increase labor requirements. In addition, fragmented land holdings often restrict farmers' ability to invest in improved technologies and infrastructure, thereby affecting overall agricultural efficiency.

7.2 Climate Change

Climate change has emerged as another major challenge for the agricultural sector. Agriculture is highly dependent on climatic conditions such as rainfall, temperature, and seasonal patterns. Changes in these factors can significantly affect crop production and farm incomes. Rising global temperatures, irregular rainfall patterns, and increased frequency of extreme weather events have created new risks for farmers.

Unpredictable monsoon patterns, prolonged droughts, floods, and heatwaves can damage crops and reduce agricultural productivity. Many regions in India are particularly vulnerable to these climate-related risks. For instance, irregular rainfall can delay sowing and harvesting periods, while extreme weather events can destroy standing crops. As climate variability increases, farmers face greater uncertainty and financial risks, which makes agricultural planning more challenging.

7.3 Low Farm Income

Although agricultural production has increased in recent years, many farmers still experience relatively low income levels. Several factors contribute to this problem, including high input costs, fluctuating market prices, and limited bargaining power for farmers. Expenses related to seeds, fertilizers, pesticides, irrigation, and labor have increased significantly over time, reducing farmers' profit margins.

In addition, agricultural markets often experience price volatility due to changes in supply and demand conditions. When crop production increases significantly, market prices may decline, reducing farmers' earnings. Small farmers are particularly vulnerable to such price fluctuations because they often lack storage facilities and are forced to sell their produce immediately after harvest at lower prices.

As a result, improving farmers' income remains a major policy challenge for agricultural development.

7.4 Infrastructure Gaps

Inadequate rural infrastructure also poses significant challenges to agricultural development. Although considerable progress has been made in expanding irrigation systems and rural connectivity, many regions still lack adequate storage facilities, transportation networks, and cold chain infrastructure. These limitations lead to significant post-harvest losses and reduce the overall efficiency of agricultural supply chains.

The absence of proper storage and processing facilities often forces farmers to sell their produce immediately after harvest, when market prices are typically low. Similarly, inadequate transportation infrastructure can make it difficult for farmers to access larger markets where they could obtain better prices for their products. Cold storage facilities are especially important for perishable commodities such as fruits, vegetables, and dairy products. Without adequate cold chain systems, a substantial portion of these products may spoil before reaching consumers.

Overall, addressing these challenges will require coordinated policy efforts, increased investment in rural infrastructure, and the promotion of sustainable agricultural practices. Strengthening institutional support and encouraging technological innovation can help overcome these obstacles and ensure long-term agricultural development in India.

8. Future Prospects for Agricultural Planning

The future of agricultural development in India will largely depend on the adoption of sustainable, innovative, and inclusive planning strategies. As the agricultural sector faces growing challenges such as climate change, population growth, and resource constraints, policymakers must focus on long-term solutions that enhance productivity while protecting natural resources. Effective agricultural planning in the coming years will require integrated approaches that combine technological innovation, institutional reforms, and improved resource management.

One of the most important priorities for future agricultural planning is the promotion of climate-resilient agriculture.

Climate variability, irregular rainfall patterns, and extreme weather events have increased the vulnerability of farmers and agricultural production. To address these challenges, the development and adoption of drought-resistant crop varieties, improved irrigation practices, and climate-smart farming techniques will be essential. Encouraging farmers to adopt sustainable practices such as crop rotation, organic farming, and efficient water use can also help improve resilience against environmental risks.

Another key area requiring attention is the expansion of irrigation and water management systems. Although irrigation coverage has improved in recent years, many agricultural regions still depend heavily on rainfall. Expanding irrigation infrastructure and promoting micro-irrigation systems such as drip and sprinkler irrigation can improve water efficiency and ensure more reliable crop production. Government initiatives like Pradhan Mantri Krishi Sinchai Yojana play an important role in strengthening irrigation facilities and improving water use in agriculture.

Agricultural diversification is also essential for enhancing farmers' income and reducing risks associated with traditional crop farming. Encouraging farmers to diversify into horticulture, livestock farming, fisheries, and agro-processing activities can create additional sources of income and employment in rural areas. Diversification can also improve the nutritional security of the population and reduce dependence on a limited number of crops.

Strengthening Farmer Producer Organizations (FPOs) is another important strategy for improving the economic position of farmers. By organizing farmers into collective groups, FPOs can help improve access to credit, agricultural inputs, and markets. Collective marketing through FPOs can increase farmers' bargaining power and enable them to obtain better prices for their produce.

Finally, greater investment in agricultural research, innovation, and digital technologies will be essential for future growth. Scientific research institutions and universities must continue developing improved crop varieties, advanced farming techniques, and digital agricultural solutions. By integrating modern technology with traditional farming knowledge, India can further strengthen its agricultural sector and ensure long-term food security and rural prosperity.

9. Conclusion

The last decade has witnessed significant progress in the economic planning and development of India's agricultural sector. Government initiatives aimed at improving farmers' income, expanding irrigation infrastructure, strengthening agricultural markets, and promoting technological innovation have contributed to increased productivity and rural development.

Programs such as PM-KISAN, PMFBY, and PMKSY have provided financial support, risk protection, and irrigation infrastructure to millions of farmers. Investments in agricultural infrastructure and digital marketplaces have also improved market access and supply chain efficiency.

However, several challenges remain, including climate change, small land holdings, and income inequality among farmers. Addressing these challenges will require sustained policy reforms, technological advancements, and stronger institutional frameworks.

Overall, the transformation of India's agricultural sector during the last decade demonstrates the importance of effective economic planning in achieving sustainable development and rural prosperity.

References

1. Government of India. (2025). Agricultural *sector achievements and initiatives*. Press Information Bureau.

2. Ministry of Agriculture & Farmers Welfare. (2024). *Agricultural growth and policy initiatives in India*. Government of India.

3. Drishti IAS. (2025). *Agricultural growth and exports in India*.

4. The Week / PTI. (2025). *Agricultural sector transformation and productivity growth in India*.

5. Millennium Post. (2025). *India's agricultural sector transformation in the last decade*.

6. Roy, A., Shukla, A., & Tripathi, A. (2025). *Trends in open access academic outputs of state agricultural universities in India*. arXiv.