# EFFECTIVE UTILIZATION OF INVESTMENTS IN AGRICULTURE: INTERNATIONAL EXPERIENCE

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***Annotatsiya.*** *Mazkur maqolada qishloq xo'jaligi sohasida investitsiyalardan samarali foydalanish bo'yicha ayrim rivojlangan va rivojlanayotgan mamlakatlar tajribalari tahlil qilingan. Unda AQSh, Niderlandiya, Xitoy, Hindiston kabi mamlakatlarda investitsiya siyosatining ustuvor yo'nalishlari, davlat-xususiy sheriklik, innovatsion texnologiyalar va moliyalashtirish modellari o'rganilgan. Maqola yakunida O'zbekistonda ushbu tajribalardan foydalanish bo'yicha amaliy tavsiyalar berilgan.*

***Annotation.*** *This article analyzes international experiences in the effective use of investments in agriculture. It explores policies and practices in countries such as the USA, the Netherlands, China, and India, focusing on public-private partnerships, innovative technologies, and financing models. The paper concludes with practical recommendations for Uzbekistan to adapt successful foreign approaches in its agricultural sector.*

***Аннотация.*** *В данной статье рассматриваются международные практики эффективного использования инвестиций в сельском хозяйстве. Проанализированы примеры США, Нидерландов, Китая и Индии, включая аспекты государственной поддержки, партнерства с частным сектором, инновационные технологии и финансовые модели. В завершение предложены рекомендации по применению этих практик в Узбекистане.*

***Keywords:*** *Agriculture, investment, public-private partnership, innovation, sustainable development, international experience, financing.*

## Introduction

Agriculture plays a critical role in ensuring food security, economic stability, and rural development. In the face of climate change, population growth, and evolving global trade patterns, the need for efficient investment in agriculture is greater than ever. Many countries have implemented innovative models to attract and utilize investment effectively. Studying these international practices offers valuable lessons for countries like Uzbekistan seeking to modernize and strengthen their agricultural sectors.

## Main Part

1. United States: Innovation and Agribusiness Synergy

The United States has built a robust agricultural investment ecosystem, largely driven by the synergy between research institutions, agribusiness corporations, and government programs. Through initiatives like the Farm Bill, the government allocates significant funds to support innovation, infrastructure, and insurance schemes. Venture capital is also active in funding agri-tech startups, especially those focusing on precision agriculture, biotechnology, and sustainable farming.

2. The Netherlands: Smart Agriculture and Public-Private Partnerships

Despite its small size, the Netherlands is the world's second-largest agricultural exporter. This success is largely due to its advanced use of technology, high-efficiency farming practices, and strong public-private partnerships. The "Dutch Diamond" model—comprising collaboration among government, academia, and business—is central to its investment strategy. Greenhouses, vertical farming, and water-efficient systems are widely supported through both private and state investment.

3. China: State-Led Investment and Rural Modernization

China has pursued state-led investments to modernize its rural and agricultural sectors. Major projects include building rural infrastructure, mechanization, and digitization of farming operations. Agricultural Development Banks play a crucial role in channeling state funds into strategic projects. In addition, pilot zones and economic clusters have been used to attract foreign direct investment and test advanced technologies.

4. India: Inclusive Investment and Financial Innovation

India has focused on making agricultural investments more inclusive. Through schemes like PM-KISAN and the Agricultural Infrastructure Fund, smallholders receive support for improving productivity and accessing markets. India has also experimented with innovative finance models such as agri-insurance, digital lending platforms, and Farmer Producer Organizations (FPOs) that mobilize investment collectively.

Comparative Analysis and Implications for Uzbekistan

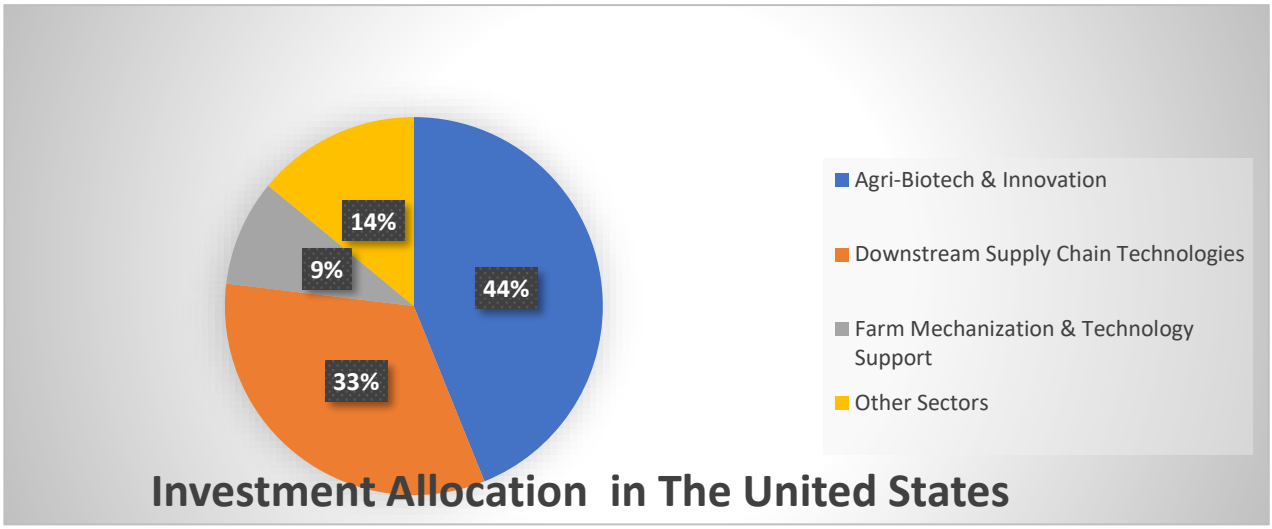
Uzbekistan, undergoing significant agrarian reform, stands to benefit from adopting aspects of these international models. For instance:

From the US: Encouraging private investment in agri-tech and building a venture capital environment.

From the Netherlands: Promoting cooperative clusters and integrating sustainable practices.

From China: Strengthening state investment in infrastructure and digitization.

From India: Enhancing access to finance for small farmers and fostering collective farming units.



Key to success will be ensuring institutional coordination, establishing transparent regulatory frameworks, and promoting knowledge-sharing between sectors.

**2023 Agricultural Investment Breakdown by Country and Sector.**

**The United States:**

Total Agricultural Investment: $ 16.6 billion

Investment Allocation:

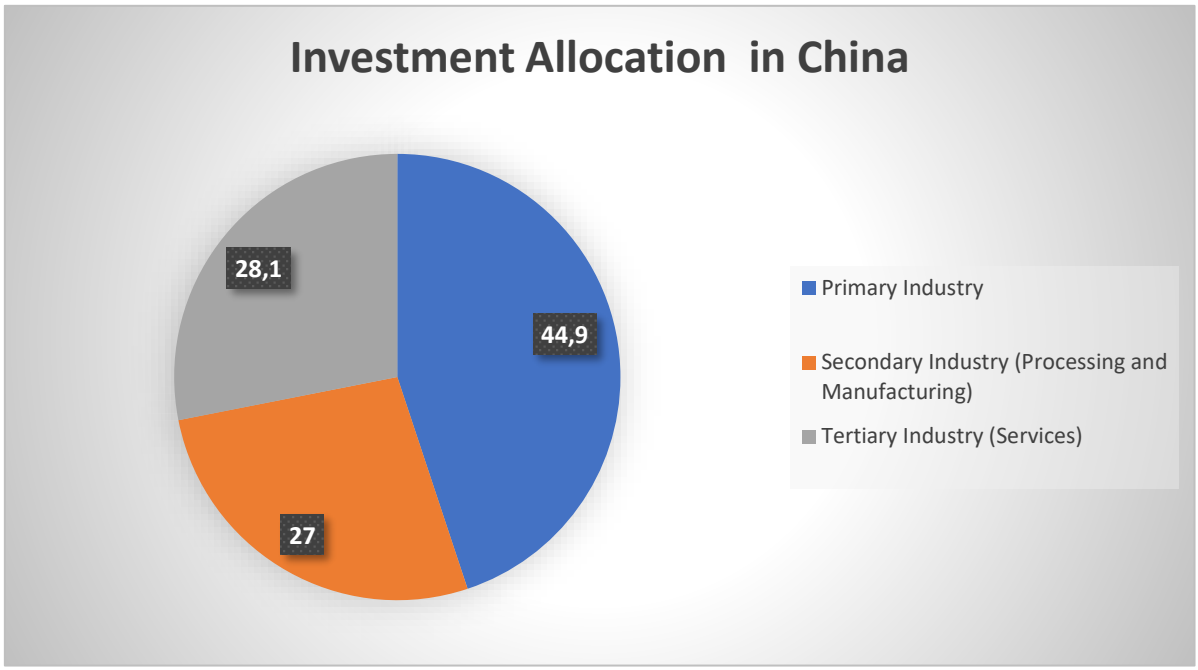
Agri-Biotech & Innovation: 43.9% ( $ 7.29 billion)

Downstream Supply Chain Technologies: 33.0% ($5.48 billion)

Farm Mechanization & Technology Support: 9.1% ( $ 1.51 billion)

Other Sectors: 14.0% ( $ 2.32 billion)

Note: These percentages are based on private market investment trends in the U.S. agricultural sector.




**China:**

Total Investment in Primary Industry (Agriculture, Forestry, Animal Husbandry, and Fishery): 1,008.5 billion yuan ( $ 146.7 billion)

Value Added in Agriculture and Related Industries: 19.8534 trillion yuan ( $ 2.89 trillion)

Investment Allocation:

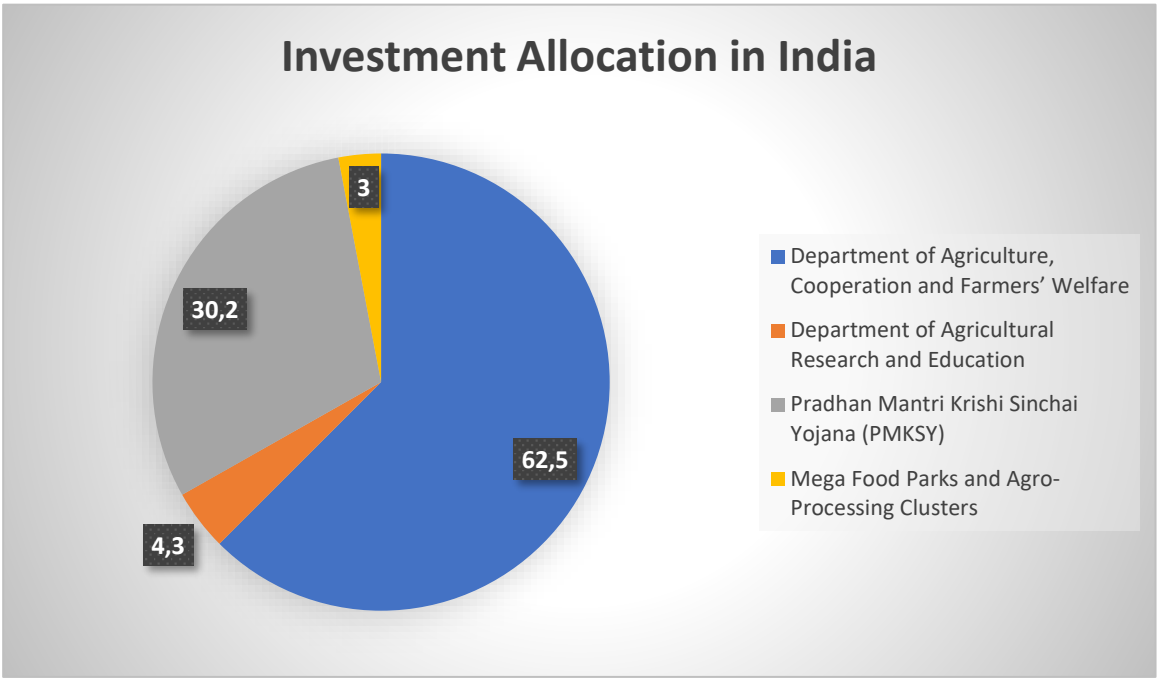
Primary Industry: 44.9% ( $ 1.30 trillion)

Secondary Industry (Processing and Manufacturing): 27.0% ( $ 0.78 trillion)

Tertiary Industry (Services): 28.1% ( $ 0.81 trillion)

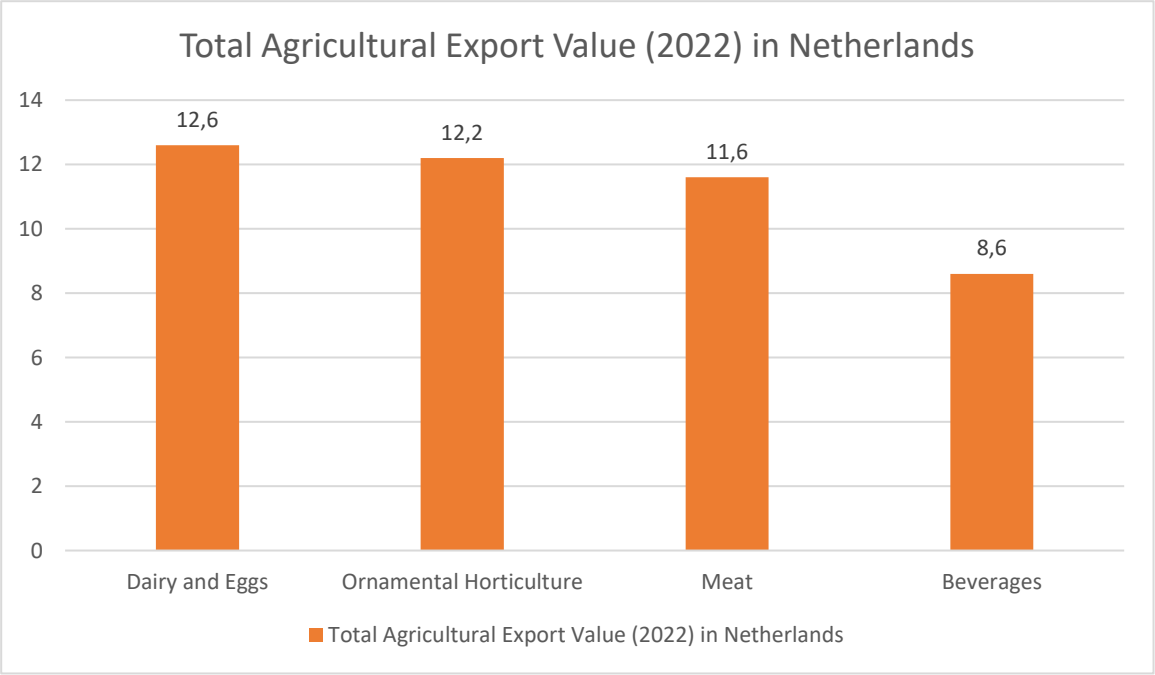
Note: The value-added figures represent the contribution of each sector to the GDP, not direct investment amounts.

**In India:**




Total Agricultural and Allied Sector Allocation (2024-25 Budget):
Investment Allocation: Rs.1.52 lakh crore ($18.26 billion)
Department of Agriculture, Cooperation and Farmers' Welfare: Rs.1.24 lakh crore ($15.9 billion)
Department of Agricultural Research and Education: Rs.8.514 crore ($1.1billion)
Pradhan Mantri Krishi Sinchai Yojana (PMKSY): Rs.50.000 crore ($7.7 billion)
Mega Food Parks and Agro-Processing Clusters: Rs.6,000 crore ($729 billion)
Note: Some allocations may overlap across different schemes.

**In Netherlands**:



Total Agricultural Export Value (2022): €79.8 billion ($84.5 billion)
Key Export Categories:
Dairy and Eggs: € 11.9 billion ( $12.6 billion)
Ornamental Horticulture: € 11.5 billion ( $ 12.2 billion)
Meat: € 11 billion ( $11.6 billon)
Beverages: € 8.1.billion ($ 8.6 billion)

**Conclusion**

International experience underscores that successful agricultural investment strategies are multifaceted, combining state support, private initiative, technological advancement, and inclusive policies. For Uzbekistan, aligning its agricultural investment framework with these principles can significantly enhance productivity, sustainability, and rural livelihoods. Future progress depends on adaptive policymaking, long-term vision, and integrated implementation.

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