

## Research Article

# Evaluating the Impact of Foreign Direct Investment on African Agriculture

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### Article History:

**Received:** 02.03.2025

**Revised :** 14.05.2025

**Accepted:** 14.05.2025

**Published:** 20.07.2025

## Abstract & Keywords:

### Abstract

This paper examines the multifaceted impact of Foreign Direct Investment (FDI) on African agriculture over recent decades. By synthesizing empirical research and numeric trends, the study explores how FDI flows affect productivity, technology transfer, income, and rural livelihoods, while also addressing equity issues and institutional constraints. Using data from eastern and sub-Saharan Africa, this research highlights the opportunities and challenges emerging from FDI's expanding footprint in the sector.

**Keywords:** Foreign Direct Investment (FDI), African agriculture, productivity, technology transfer, rural livelihoods, income, equity, institutional constraints, eastern Africa, sub-Saharan Africa.

## INTRODUCTION

Foreign Direct Investment (FDI) is among the most significant sources of capital for economic growth and development in Africa. In agricultural economies, particularly, FDI can provide the financial resources, technological know-how, and market access necessary to modernize and expand production capabilities<sup>[1]</sup>. As African agriculture remains a principal livelihood for millions, understanding how FDI interacts with the sector's dynamics is critical for policy formulation, poverty alleviation, and sustainable development<sup>[2]</sup>.

### Key questions addressed include:

- How has FDI in African agriculture evolved over time?
- What is the evidence for FDI's effects on agricultural productivity and exports?
- Are there observed benefits or drawbacks for employment, food security, and local development?
- What policy directions can maximize FDI's positive impacts?

## Trends in Foreign Direct Investment in African Agriculture

### Aggregate Patterns

Between 2003 and 2017, FDI in the African food and agriculture sector totaled approximately \$48.7 billion, with flows peaking after the 2008-09 food commodity crises<sup>[3]</sup>. Total FDI inflows to Africa reached \$83 billion in 2021, before falling to \$45 billion in 2022,

following global disruptions such as the COVID-19 pandemic<sup>[2][4]</sup>.

Country	FDI in Agriculture (2003-2017, \$B)
Nigeria	3.98
Egypt	2.91
Cameroon	2.47
South Africa	2.46
Ghana	1.88
Angola	1.48
Ethiopia	1.45

The countries leading in FDI receipts have included Nigeria, Egypt, and Cameroon, reflecting their large populations, agricultural potential, and relatively better-developed investment climates<sup>[3][5]</sup>.

## SECTORAL FOCUS AND MODALITIES

FDI projects in African agriculture often target:

- Large-scale commercial farming (oilseeds, sugar, cotton, biofuels)
- Agro-processing (floriculture, coffee, cocoa, horticulture)
- Upstream linkages (agricultural engineering technology, input supply)<sup>[6][3]</sup>

Investment modalities include greenfield projects, joint ventures, and strategic partnerships with local enterprises

and governments.

## Effects of FDI on Agricultural Productivity and Exports

### Empirical Evidence

Research across eastern and sub-Saharan Africa has predominantly found that FDI exerts a **positive influence** on agricultural output, productivity, and exports<sup>[1][2][7]</sup>.

- **Panel data from Djibouti, Ethiopia, Kenya, Rwanda, and Tanzania (2013–2022):** FDI has a strong, statistically significant correlation ( $r \approx 0.81$ ) with agriculture, forestry, and fisheries value-added. Regression analyses confirm positive, though at times statistically weak, effects on sectoral output<sup>[2]</sup>.
- **Nigeria (1981–2012):** FDI was found to positively impact agricultural development, both in the short and long term, contributing to income diversification and sectoral resilience<sup>[8]</sup>.
- **Africa-wide (2000s–2020s):** Simulation models (e.g., Global Trade Analysis Project) suggest that increasing FDI and improving land productivity could raise Africa's share of global agricultural output and exports, particularly in oilseeds, sugar, and cotton<sup>[7][9]</sup>.

### Graph: FDI in Agriculture by Country (2003–2017)

A chart visualizes the distribution of FDI flows to key African countries, highlighting the magnitude and cross-country variation in investment.

### Broader Economic and Social Effects

#### Technology and Knowledge Transfer

- FDI accelerates the diffusion of modern agricultural technologies (e.g., improved crop varieties, irrigation systems, precision farming), raising yields and farm efficiency, especially where national research capacity is limited<sup>[1][6]</sup>.
- Multinational enterprises facilitate managerial skills and adherence to international standards, improving smallholder integration into global value chains<sup>[6][3]</sup>.

#### Employment and Skills Development

- Wage employment linked to FDI projects provides opportunities for unskilled and marginalized rural populations, especially women<sup>[3]</sup>.
- There is evidence of increased demand for skilled labor and technical roles, enhancing workforce development in local communities<sup>[10][3]</sup>.

#### Food Security and Rural Incomes

- FDI's contribution to expanding crop production and agro-processing capacity supports national and regional food availability<sup>[1][2][11]</sup>.
- Positive impacts have been observed on farm and labor income, particularly where investments target staple crop production and food sector linkages<sup>[3][10]</sup>.

However, the distribution of benefits is often uneven. Criticisms include:

- Concentration of investment in capital-intensive regions or sectors
- Displacement risks for smallholder farmers due to large-scale land leasing
- Limited direct benefits for the poorest, unless explicit inclusion measures are adopted<sup>[6][10]</sup>

### Factors Mediating FDI's Impact

#### Policy and Regulatory Context

- Clear land tenure regulations, infrastructure, stable macroeconomic policies, and investment promotion agencies strongly influence FDI's location, scope, and sustainability<sup>[10][6]</sup>.
- Some studies caution that without adequate legal frameworks, FDI may exacerbate inequity or create adverse environmental impacts<sup>[6][3]</sup>.

#### Complementary Public and Private Investment

- Synergies with domestic public expenditure on infrastructure, research, and extension services enhance returns to FDI<sup>[2]</sup>.
- The most transformative outcomes occur when FDI is aligned with smallholder inclusion, rural credit programs, and local content requirements<sup>[1][10][7]</sup>.

## CASE STUDIES

### Technological Modernization in Morocco and Uganda

- In Morocco: Foreign investors introduced advanced irrigation (drip/fertigation), doubling vegetable yields over 15 years<sup>[6]</sup>.
- In Uganda: Multinationals helped disseminate high-yield rice varieties; some cases saw dependencies develop on foreign seed suppliers, raising seed cost concerns<sup>[6]</sup>.

### Mali: FDI and Agricultural Productivity

- \$1 million increase in FDI inflows associated with a measurable, though modest, increase in agricultural total factor productivity. However, structural bottlenecks (infrastructure, human capital) constrained impacts, highlighting the importance of complementary reforms<sup>[12]</sup>.

## CHALLENGES AND RISKS

- **Land Rights and Social Inclusion:** Unclear land acquisition processes and limited stakeholder consultation can result in land disputes or marginalization of local communities<sup>[6]</sup>.
- **Sustainability and Food Security:** Not all FDI improves food security universally. Some investment models may focus on export crops at the expense of local food staples<sup>[1][6][11]</sup>.
- **Equitable Growth:** Returns from FDI can be skewed toward wealthier landowners, unless policy actively targets inclusive growth<sup>[10][3]</sup>.

- **Political Instability:** Political disruptions and policy reversals can deter FDI or limit its long-term effectiveness<sup>[8]</sup>.

## POLICY RECOMMENDATIONS

Based on current evidence, the following policy directions can maximize the positive impact of FDI in African agriculture:

- Strengthen institutional frameworks: Clear laws for land tenure, environmental protection, and investment procedures.
- Foster partnerships: Encourage ventures that integrate smallholders and develop rural infrastructure.
- Improve sector data: Transparent tracking of FDI flows and impact measurement.
- Align public investment: Direct government spending to complement FDI in technology, research, and smallholder support.
- Safeguard inclusivity: Ensure stakeholder consultations, benefit-sharing agreements, and social impact assessments prior to project approvals.

## CONCLUSION

FDI in African agriculture holds substantial potential for accelerating productivity, modernizing supply chains, generating employment, and supporting food security. However, its impact is mediated by institutional, structural, and policy factors. With appropriate governance, transparency, and inclusiveness, FDI can be an effective catalyst for agricultural transformation and rural prosperity on the continent<sup>[1][2][10][7][3][9][12][11]</sup>.

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