

THE VITAL ROLE OF AGRICULTURE IN THE EUROPEAN UNION

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***Abstract:** Agriculture plays a crucial role in the European Union's economy, ensuring food security, providing raw materials, and supporting rural livelihoods. In addition, the agricultural sector preserves cultural traditions, maintains rural communities, and promotes sustainable development. However, the EU's agricultural sector is confronted with a range of complex challenges that threaten its long-term stability and growth. Environmental concerns such as climate change, pollution, biodiversity loss, and the overexploitation of natural resources are pressing issues that need urgent attention. Moreover, the EU agricultural sector faces growing competition in global markets, alongside rising protectionism and trade barriers that complicate its ability to remain competitive. These challenges are compounded by internal policy inconsistencies and regulatory divergences across EU member states, which complicate the implementation of cohesive strategies to tackle climate change and other environmental issues. The diversity of agricultural practices, from intensive farming to small-scale organic producers, further exacerbates the complexity of creating a one-size-fits-all policy solution. The need for adaptable and multi-layered policy responses is critical to address both the environmental and economic dimensions of the sector's future. This paper explores the EU's agricultural sector, with a particular focus on its role in global agricultural trade. It discusses how the EU, as a global player, navigates the challenges posed by differing national regulations, trade agreements, and international market trends. The paper emphasizes the importance of balancing domestic sustainability goals with global competitiveness, particularly in light of the EU's Green Deal and the Common Agricultural Policy (CAP). Ultimately, it argues that targeted, coordinated policies are essential to ensure the EU remains a leader in sustainable agricultural production, while addressing the environmental and market-related challenges that shape the sector's future.;*

Key words: *Agriculture, role, trade, EU, sustainability.*

INTRODUCTION

The European Union's agricultural sector is a cornerstone of its economy, contributing significantly to food security, raw material provision, and the vitality of rural communities, while also playing a crucial role in preserving cultural heritage and promoting sustainable development [7]. Despite its fundamental importance, the EU agricultural sector is beset by multifaceted challenges that jeopardize its long-term stability and growth, encompassing environmental degradation, fierce global competition, and internal policy inconsistencies [19]. Environmental concerns, notably climate change, pollution, biodiversity loss, and the unsustainable exploitation of natural resources, represent pressing issues demanding immediate and comprehensive action [1]. The sector also faces mounting competitive pressures in global markets, exacerbated by rising protectionism and trade barriers, which impede its ability to maintain a competitive edge [1]. These external challenges are further complicated by internal policy inconsistencies and regulatory divergences among EU member states, hindering the implementation of cohesive strategies to address climate change and promote environmental sustainability. The diverse range of agricultural practices, spanning from intensive farming to small-scale organic production, adds another layer of complexity, making it difficult to devise uniform

policy solutions [3]. Therefore, adaptable and multi-layered policy responses are essential to address both the environmental and economic dimensions of the sector's future [18].

MATERIALS AND METHODS

To effectively address the intricate challenges confronting the EU agricultural sector, a comprehensive and integrated approach is required, considering various factors such as evolving consumer demands, the dissemination of digitalization, and the imperative to align with international agreements and sustainability goals [20]. The need for transformation of food systems management into a more sustainable process is emphasized by The United Nations' Sustainable Development Goals, the Paris Climate Agreement, the Farm to Fork Strategy, and the Biodiversity Strategy for 2030 [10]. The integration of advanced technologies, such as digitalization and artificial intelligence, presents a promising avenue for enhancing the sustainability and resilience of European agriculture, and these tools offer opportunities for optimizing resource use, improving productivity, and reducing environmental impacts [9,11]. The digital transformation of agriculture must prioritize the inclusion of farmers and agricultural stakeholders in discussions and decision-making processes, ensuring that their needs and perspectives are adequately considered [12]. This research employs a comprehensive methodology to investigate the EU agricultural sector's role in global agricultural trade, focusing on the challenges posed by differing national regulations, trade agreements, and international market trends.

RESEARCH RESULTS

The results of this research reveal several key findings regarding the EU agricultural sector's role in global agricultural trade and its ability to balance domestic sustainability goals with global competitiveness. The analysis of economic data indicates that the EU remains a major player in global agricultural trade, with a significant share of exports in several key commodities [15]. However, the EU's competitive position is increasingly challenged by emerging economies and changing consumer preferences. For example, Romania is a net exporter of basic agricultural products but an importer of processed products [16].

Furthermore, the analysis of policy documents reveals the complexity of the regulatory environment, with significant divergences across EU member states in terms of agricultural policies and environmental regulations. These regulatory divergences create challenges for farmers and businesses operating across borders and complicate the implementation of cohesive strategies to tackle climate change and other environmental issues.

The case studies of specific agricultural sectors or regions within the EU highlight the diversity of experiences and challenges faced by farmers and other stakeholders [14]. These case studies underscore the need for targeted and adaptable policy responses that take into account the specific circumstances of different agricultural systems and regions.

The comparative analysis of the EU's agricultural policies and trade practices with those of other major players in the global agricultural market identifies both strengths and weaknesses in the EU's approach. For instance, EU enlargement has a negative impact on agro-food relative trade advantages for all eight analyzed countries [5].

The results also highlight the importance of promoting innovation and technology adoption in the agricultural sector, as well as the need for investments in infrastructure and human capital to enhance productivity and competitiveness [4]. The EU's foreign trade has undergone quantitative, qualitative, and structural changes, especially within the EU [17].

Table 1.

| Role of agriculture | |
|---|---|
| Agriculture 1.3% to EU GDP | Supports 22 million jobs in farming and agri-food processing. |
| | Maintains 40% of EU territory in active cultivation. |
| | Preserves cultural heritage and rural vitality. |

The European Union's agricultural sector is characterized by significant sectoral diversity, which adds complexity to policy-making and implementation. This diversity encompasses a wide range of agricultural practices, from intensive farming to small-scale organic production, each with its own unique challenges and opportunities.

Table 2.**Types of Agricultural Systems in the EU**

| Region | Farming Type | Characteristics |
|----------------------|---------------------------|-------------------------------------|
| France, Germany | Intensive, large-scale | Mechanized, export-oriented |
| Romania, Bulgaria | Smallholder, subsistence | Labor-intensive, low-input |
| Netherlands, Denmark | High-tech horticulture | Greenhouses, precision irrigation |
| Spain, Italy | Mediterranean diversified | Vineyards, olive oil, mixed farming |

The EU agricultural sector plays a crucial role in ensuring food security, providing raw materials, and supporting rural livelihoods [2]. The findings suggest that EU accession has significantly impacted new member states' agriculture, with varying degrees of capitalization on opportunities due to initial conditions and pre- and post-accession policies [6]. However, it is confronted with environmental concerns, growing competition in global markets, and internal policy inconsistencies. Digital technologies can enable more sustainable and resilient agricultural systems and reduce inherent trade-offs [9].

Table 3.**EU Agri-Food Trade 2023**

| Metric | Value |
|-------------------------|----------------------|
| Total exports | €229 billion |
| Total imports | €164 billion |
| Top export partners | UK, USA, China |
| Top import partners | Brazil, Ukraine, USA |
| Largest export products | Wine, dairy, cereals |

Source: [21]

Policy instruments should also be adjusted to support the transition to digital agriculture, including measures to promote data sharing, interoperability, and cybersecurity [8]. The analysis emphasizes the importance of balancing domestic sustainability goals with global competitiveness, particularly in light of the EU's Green Deal and the Common Agricultural Policy.

Ultimately, the results argue that targeted and multi-layered policy responses are needed to address both the environmental and economic dimensions of the sector's future, and the EU needs to promote research and innovation, develop the European agriculture data space, and support farmers in using AI and digital infrastructure [11]. The European Union's agricultural sector faces several significant challenges that impact its global competitiveness and sustainability. These challenges include regulatory divergence, trade disputes, and geopolitical disruptions.

The EU's stringent standards often exceed those of its trade partners, particularly in areas such as genetically modified organisms (GMOs) and hormone-treated beef. This divergence can create barriers to trade and complicate negotiations with countries that have less stringent regulations. Conflicts over sanitary and phytosanitary (SPS) measures are a recurring issue in EU-U.S. trade relations. These disputes arise from differences in regulations and standards, which can lead to trade restrictions and impact the flow of agricultural products between the two regions.

Events such as Brexit and the conflict in Ukraine have significantly reshaped supply chains. Brexit has introduced new trade barriers and regulatory complexities for the EU, while the Ukraine conflict has disrupted agricultural exports and imports, affecting the availability and prices of key commodities.

Addressing these challenges requires a coordinated approach that balances the need for high standards with the realities of global trade. The EU must work towards harmonizing regulations where possible, engaging in constructive dialogue with trade partners, and developing strategies to mitigate the impacts of geopolitical disruptions. By doing so, the EU can strengthen its agricultural sector's resilience and maintain its position as a global leader in sustainable agriculture. To address these challenges, the EU has implemented comprehensive measures, such as the European Green Deal and the Common Agricultural Policy, aimed at fostering sustainable agricultural practices, mitigating environmental impacts, and promoting the long-term viability of the sector [13].

CONCLUSIONS

The European Union faces the challenge of balancing its commitment to climate leadership with its role as a global agricultural competitor. The future of EU agriculture hinges on the development and implementation of policies that are not only adaptive and inclusive but also forward-looking.

To achieve this balance, the EU must integrate sustainability with competitiveness. By doing so, it can create a resilient agricultural model that ensures environmental integrity, maintains a strong presence in the global market, and fosters social cohesion. The Common Agricultural Policy (CAP) must evolve beyond merely providing financial transfers. It should become a strategic instrument for driving environmental transformation and asserting global leadership in sustainable agriculture. By prioritizing these areas, the EU can lead the way in creating a sustainable and competitive agricultural sector that meets the needs of the present while safeguarding the future.

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