

## The halal economy as a strategic driver of sustainable agricultural development in Bulgaria

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### **Abstract**

*The study examines the institutional and market readiness of Bulgarian agricultural producers to adopt halal certification within the framework of the Islamic moral economy and the European Union's sustainability agenda. The growing global demand for halal products has positioned certification as a key driver of ethical and environmentally responsible production; however, in Bulgaria, the absence of a legal framework and national certification authority remains a significant barrier. The research employs a mixed-method approach, combining SWOT analysis of macroeconomic and institutional conditions with a quantitative survey of 126 agricultural holdings proportionally distributed across six NUTS-2 regions. The data were analyzed using Principal Component Analysis (PCA) to identify the underlying determinants of readiness. The results show strong market motivation and environmental compatibility but low institutional trust due to regulatory uncertainty. Three main factors, (1) institutional trust and awareness, (2) market motivation and orientation, and (3) sustainability and ethics, shape the readiness of producers to engage in halal certification. The findings indicate that while Bulgaria possesses favorable geographic, structural, and ecological advantages, the successful integration into the halal economy depends on coordinated institutional efforts, improved policy design, and enhanced stakeholder awareness. The study recommends establishing a national halal certification authority and integrating halal standards into sustainable agricultural programs to strengthen competitiveness and export potential.*

**Keywords:** Halal certification; agricultural economics; institutional readiness; sustainability; Bulgaria

## **Introduction**

The halal economy is among the fastest-growing segments of the global economy and holds strategic importance for the agricultural and food sectors. According to DinarStandard (2024), the global halal market exceeds USD 2.4 trillion in value and is projected to grow at an annual rate of approximately 7% by 2030. In this context, halal certification functions not only as a religious but also as an economic and ethical standard that ensures safety, sustainability, and social responsibility in food production. Within the European Union, halal certification is increasingly regarded as part of the system for sustainable and traceable agriculture. Regulations (EC) No. 178/2002 and (EU) No. 852/2004, together with the Farm-to-Fork Strategy (2020) and the European Green Deal (2019), establish a foundation for integrating halal principles within the framework of sustainable production and ethical economy. These initiatives create synergies between religious requirements and European standards for sustainability and transparency. Bulgaria, however, lags behind in this process. The country lacks a national legal framework and a domestic certification authority for halal products, resulting in an institutional vacuum that hinders agricultural producers' access to halal markets in the EU, the Middle East, and North Africa. Consequently, farmers face higher transaction costs, an absence of certification infrastructure, and weak market integration.

At the same time, Bulgaria possesses substantial structural and geo-economic advantages that position it as a potential regional hub for halal agriculture: favorable climate conditions, fertile land, low production costs, and geographical proximity to major halal markets. The country has long-standing traditions in the cultivation of cereals, fruits, vegetables, and dessert grapes, all of which are compatible with halal standards and can be integrated into global supply chains. Over the past decade, research on halal certification has focused primarily on consumer behavior and regulatory models. Bonne and Verbeke (2020) emphasize that halal certification in Europe is associated with trust,

transparency, and traceability. Alserhan (2016) and Wilson (2019) conceptualize the halal economy as a business model grounded in sustainability and moral responsibility. Asutay (2013) develops the concept of the Islamic moral economy, positing that market efficiency is attainable only in the presence of moral institutions. The DinarStandard (2024) report identifies the agricultural sector as a leading driver of the halal economy, with its success depending on the existence of a clear legal framework and certification infrastructure. Despite these contributions, studies on institutional readiness for halal certification in Southeast Europe and Bulgaria remain limited. Most publications focus on countries with well-established halal systems such as Malaysia, Indonesia, and Turkey (Ahmad, 2019; Samori, 2021). In Bulgaria, however, empirical data on farmers' attitudes and perceptions toward halal practices are lacking. This constitutes a significant scientific and institutional gap that impedes the formulation of a national strategy for the development of the halal agricultural sector.

The present study seeks to address this gap through an empirical analysis of Bulgarian farms' readiness to adopt halal certification. The combination of SWOT analysis and factor analysis (Principal Component Analysis – PCA) allows for the identification of latent determinants of such readiness, namely institutional trust, market motivation, and sustainability. The scientific contribution of the study is twofold. First, it introduces the concept of institutional readiness within the context of EU agricultural economics. Second, it integrates the framework of Islamic moral economy with European sustainable development policies.

The primary objective of the research is to assess the degree of readiness among Bulgarian agricultural producers to implement halal certification and to identify the key factors influencing their institutional and market integration. In doing so, the study contributes both to the academic literature on agricultural economics and Islamic finance and to the formulation of a national strategy for halal agriculture that harmonizes European sustainability standards with the moral principles of the Islamic economy.

## Literature review

According to Asutay (2013), the halal economy represents an integral part of the Islamic moral economy, a system founded on the balance between the material and the spiritual, in which economic efficiency is subordinated to moral values. He argues that sustainable development can be achieved only through institutions that promote social justice and restrict speculative behavior. In the same vein, Wilson (2019) defines the halal economy as an “economy of trust,” where certification acts as a moral guarantee connecting producers and consumers through transparency and traceability. Alserhan (2016) complements this perspective by viewing halal certification as a competitive instrument in the global economy, grounded in ethical and sustainable business practices. From an institutional perspective, North (1990) formulates the view that economic institutions determine the “rules of the game” that shape the behavior of market participants. In the absence of institutional clarity, transaction costs increase and market efficiency declines. Acemoglu and Robinson (2012) further develop the concept of inclusive institutions, those that ensure equal access to economic opportunities and foster innovation and sustainable growth. Applied to the halal economy, this implies that an effective institutional framework for certification is not merely an administrative tool but a prerequisite for market integration and trust.

Building upon this theoretical foundation, Georgiev (2024) emphasizes that legal and institutional changes directly affect economic behavior and transaction costs, demonstrating that modifications in legislative frameworks and governance mechanisms can either enhance or constrain institutional efficiency in agriculture. His empirical analysis of land governance in Bulgaria shows that institutional reforms based on clear legal norms reduce uncertainty and strengthen market coordination, aligning with North’s argument that stable institutions are essential for economic performance.

Bulgarian scholars have also made substantial contributions to the development of these theoretical foundations. Bachev (2010, 2022) argues that the sustainable development of agriculture in Bulgaria requires the establishment of a complex institutional architecture that ensures effective management of resources, risks, and market relations. He highlights that institutional “failures”, such as the absence of rules, control mechanisms, and certification systems, impede the effective participation of farms in international markets. Similarly, Ivanov (2025) develops the concept of institutional capacity in the agricultural sector, asserting that the ability of administrations and organizations to design and implement policies is a key factor for competitiveness and compliance with European standards.

Within the context of the European green transformation, Petrov (2025) analyzes the strategic prospects of Bulgarian agriculture through a SWOT framework derived from the European Green Deal. He argues that Bulgarian agriculture possesses substantial internal strengths, favorable natural conditions, fertile soils, and competitive production costs, that position it as a potential leader in sustainable production in Southeast Europe. At the same time, Petrov (2025) identifies major weaknesses linked to institutional deficiencies: the lack of strategic vision, the absence of integrated certification mechanisms, and weak linkages between science, business, and public administration. These insights are directly relevant to the present study, as halal certification can be understood as a mechanism that helps overcome such weaknesses by promoting sustainability, trust, and export potential.

From the perspective of economic efficiency, Ahmad (2019) conceptualizes halal certification as an intangible asset that creates value through trust and reputation. According to Ali (2020), certification functions as a market signal that facilitates farmers’ access to new, high value-added markets. These authors emphasize that, within the European Union, halal standards can be integrated with the principles of the Farm-to-Fork Strategy (2020) and the European Green

Deal (2019), where sustainability, ethics, and food safety are regarded as interdependent objectives. Rahman and Kusuma (2021) expand this perspective by proposing a dual certification model, the Halal–Green Label, which combines religious and environmental requirements. This approach is viewed as key to building an integrated European certification system that simultaneously meets consumer expectations and EU regulatory standards. Bonne and Verbeke (2020) contribute to this debate by demonstrating that European consumers perceive the halal label not merely as a marker of religious identity but also as a symbol of quality, traceability, and ethical assurance. Meanwhile, the concept of sustainable agriculture formulated by Elkington (1997) through the triple bottom line framework provides an analytical perspective for understanding halal certification as part of a broader model of economic, social, and environmental sustainability. Rahman (2020) and Dimitrova (2023) note that environmental and organic farming practices in Bulgaria are already consistent with halal principles, particularly regarding production traceability and ethical food safety standards. This confirms that the Bulgarian agricultural sector possesses preliminary structural conditions conducive to integration into the halal market.

In summary, the existing literature delineates three main interpretative dimensions. The first, the moral-ethical dimension, represented by Asutay (2013), Wilson (2019), and Alserhan (2016), emphasizes social justice and trust as the foundations of market stability. The second, the institutional dimension, grounded in the works of North (1990), Acemoglu and Robinson (2012), Bachev (2010, 2022), Georgiev (2024), Ivanov (2025), and Petrov (2025), views institutional infrastructure, legislation, and governance as key determinants of competitiveness and agricultural sustainability. The third, the economic-practical dimension, advanced by Ahmad (2019), Ali (2020), and Rahman and Kusuma (2021), interprets halal certification as a strategic instrument for market access and sustainable growth.

The present study positions itself at the intersection of these three dimensions. It integrates the moral-ethical principles of Islamic economics, the institutional theories of North, Bachev, and Georgiev, and the strategic insights of Petrov (2025) to construct a model of institutional and market readiness of Bulgarian agriculture for halal certification. Based on this review, two research hypotheses are formulated: first, that the absence of an institutional and certification framework constrains farmers' readiness; and second, that the sustainable practices and geo-economic advantages identified by Petrov (2025) can be transformed into a competitive advantage when supported by effective institutional mechanisms.

### **Research methodology**

This study employs a mixed research design that integrates qualitative and quantitative analytical methods to provide both strategic and empirical insights into the institutional and market readiness of Bulgarian agricultural holdings for halal certification. As argued by Creswell (2014) and Bachev (2022), mixed-method approaches are particularly appropriate for exploring complex socio-economic and institutional phenomena because they enable data triangulation and ensure higher analytical validity. The methodological framework is grounded in the institutional economics paradigm (North, 1990) and the concept of institutional capacity in agriculture (Ivanov, 2025), which view institutions as key determinants of market efficiency and adaptability. Two principal methods are applied: the SWOT analysis and the Principal Component Analysis (PCA). Together, they aim to construct a comprehensive Institutional and Market Readiness (IMR) Model for assessing the potential of Bulgarian agriculture to integrate into the halal economy.

The SWOT analysis identifies the macroeconomic, institutional, and environmental preconditions for introducing halal certification in Bulgaria's agricultural sector. As highlighted by Petrov (2025) and Bryson (2018), this method is essential for strategic diagnostics under uncertainty and institutional ambiguity,

conditions characteristic of Bulgaria's current lack of halal legislation. It provides a structured framework to systematize internal and external factors that influence readiness for certification. Formally, the relationship can be expressed as:

$$P_{halal} = f(S_i, O_j, W_k, T_i) \tag{1}$$

where  $P_{halal}$  represents the potential for halal certification development, and  $S_i, O_j, W_k, T_i$  denote the respective vectors of strengths, opportunities, weaknesses, and threats.

The Principal Component Analysis (PCA) complements the SWOT framework by providing a quantitative assessment of the latent determinants of readiness. Following Hair et al. (2019) and Sharma (1996), PCA is the most suitable method for dimensionality reduction and identification of latent structures when the dataset consists of interrelated indicators, as in this case. The model can be represented as:

$$X = LF + \epsilon \tag{2}$$

where:  $X$  is the vector of observed variables,  $L$  is the factor loading matrix,  $F$  - the vector of latent factors, and  $\epsilon$  the residual term. The factorization process follows four main stages:

(1) Data suitability testing through the Kaiser–Meyer–Olkin (KMO) index and Bartlett's Test of Sphericity, ensuring sampling adequacy and correlation homogeneity:

$$KMO = \frac{\sum_{i \neq j} r_{i,j}^2}{\sum_{i \neq j} r_{i,j}^2 + \sum_{i \neq j} p_{i,j}^2} \tag{3}$$

where:  $r_{i,j}^2$  are observed correlations and  $p_{i,j}^2$  - partial correlations.

(2) Extraction of components using the Principal Components Method, determining eigenvalues ( $\lambda$ ) and eigenvectors of the correlation matrix ( $R$ ):

$$| R - \lambda I | = 0 \tag{4}$$

(3) Varimax rotation, maximizing the variance of squared loadings within each factor for improved interpretability:

$$V = \sum_{j=1}^m \left[ \frac{1}{p} \sum_{i=1}^p (l_{i,j}^2 - l_{i,j}^{-2}) \right] \tag{5}$$

(4) Identification of factors:  $F_1$ : Institutional trust and awareness;  $F_2$ : Market motivation and economic orientation;  $F_3$ : Ecological sustainability and ethical engagement.

The resulting factors form the Institutional and Market Readiness (IMR) Model, expressed as:

$$IMR = \alpha_1 F_1 + \alpha_2 F_2 + \alpha_3 F_3 + \mu \quad (6)$$

where:  $\alpha_1, \alpha_2, \alpha_3$  are regression coefficients and  $\mu$  the stochastic term reflecting unobserved institutional effects. This model provides an empirical framework to evaluate how institutional and market structures influence the halal readiness of agricultural producers.

The empirical survey included 126 agricultural holdings, selected through stratified purposive sampling to ensure representativeness across economic structures and regions. Distribution was proportional across the six NUTS-2 (*a European Union statistical regional classification used for regional policy and funding distribution*) regions of Bulgaria: Northwestern (BG31) – 19 respondents; North Central (BG32) – 22; Northeastern (BG33) – 20; Southwestern (BG41) – 18; South Central (BG42) – 25; and Southeastern (BG34) – 22. The sample covered holdings producing halal-compatible crops, grains, fruits, vegetables, and table grapes, excluding alcohol-related or non-permissible products. The survey was conducted online via individual email invitations between March and June 2025, following Dillman et al. (2014), who emphasize the effectiveness of digital surveys among professional agricultural respondents.

All responses were measured on a five-point Likert scale (Likert, 1932): 1 – strongly disagree; 2 – somewhat disagree; 3 – neutral; 4 – somewhat agree; 5 – strongly agree. The questionnaire consisted of four thematic blocks with 22 total questions, structured as follows: Block (1): General Information Your age group (18–30, 31–45, 46–60, over 60); Your gender; Your level of education; Your economic sector of activity; The region where you live or work. Block (2): Economic Potential and Attitudes Bulgaria has the potential to develop a competitive halal

industry; Halal certification can enhance Bulgaria's export opportunities; The halal industry can improve Bulgaria's image on international markets; Investment in halal production is economically justified in the long term; Access to halal markets can increase employment in the food sector; Bulgaria could become a logistics hub for halal products in Southeastern Europe; Enterprises are ready to adapt their technologies to halal standards; Lack of information prevents businesses from entering the halal market; The halal economy can become a source of sustainable growth.

Block (3): Institutional Trust and Regulatory Perceptions Bulgarian legislation allows for the implementation of halal standards; State institutions have the capacity to certify halal production; A national halal certification authority is necessary; Institutional ambiguity hinders business development; The EU regulatory framework is compatible with halal market requirements; The government should offer financial incentives for halal certification; Halal standards align with circular economy and sustainable agriculture policies; Public-private partnerships are an effective mechanism for halal sector development; Trust in state institutions is high enough to ensure halal business success.

Block (4): Cultural and Social Acceptance Halal products are part of the European economic and cultural landscape; Bulgarian society would perceive the halal industry as an economic rather than a religious initiative; Halal certification represents a mark of quality, not religious affiliation; Halal products can be successfully marketed in Bulgarian retail chains; Lack of information contributes to prejudice against the halal industry; The Bulgarian media environment is neutral toward Islamic economic topics; Halal tourism can contribute to Bulgaria's economic development; Consumers would buy halal products if they meet higher quality standards; The halal economy can exist without religious contradictions in a secular context; The halal economy can serve as a tool for social integration; Trust between religious and secular communities is crucial for halal industry success; Would you support a public campaign to raise awareness of halal products?

## Results and discussion

### *Descriptive results and sample structure*

The empirical survey covered 126 agricultural holdings across Bulgaria's six statistical regions (NUTS-2), selected through stratified purposive sampling to ensure structural representativeness. The territorial and production distribution of the sample is presented in Table 1.

**Table 1.** Territorial distribution of the sample by NUTS-2 regions

Region	Code	Main agricultural profile	Number of holdings	Percentage
Northwestern	BG31	Cereals, industrial crops, livestock	19	15.1
North Central	BG32	Cereals, fruits, oilseeds	22	17.5
Northeastern	BG33	Cereals, vegetables, oil crops	20	15.9
Southwestern	BG41	Fruits, vegetables, table grapes	18	14.3
South Central	BG42	Mixed farming, fruits, industrial crops	25	19.8
Southeastern	BG34	Cereals, fruits, vegetables, table grapes	22	17.5
Total	,	–	126	100

Of the surveyed farms, 36.5% were small, 28.6% medium-sized, and 34.9% large or industrial. Over 70% of respondents hold higher education degrees, and 81% apply sustainable practices under the EU Common Agricultural Policy (CAP). This confirms that the surveyed producers are strategically active and knowledgeable economic agents.

### *SWOT Analysis – Strategic positioning of halal certification potential*

The SWOT analysis identified key internal and external determinants influencing the readiness of Bulgarian agriculture to integrate halal certification. The strategic profile is summarized in Table 2.

**Table 2.** SWOT analysis of the prerequisites for halal certification in Bulgarian agriculture

<b>Strengths</b>	<b>Weaknesses</b>
1. High agroecological quality and crop diversity.	1. Lack of national halal regulation and certification authority.
2. Geographic proximity to major halal markets (Turkey, Middle East).	2. Limited awareness and low institutional trust.
3. Low production costs and competitive prices.	3. Insufficient administrative capacity and technical expertise.
4. Compatibility with EU sustainability principles and the Green Deal.	4. Underdeveloped market infrastructure for traceability and certification.
<b>Opportunities</b>	<b>Threats</b>
1. Expansion of exports to halal supply chains.	1. Public sensitivity to Islamic terminology.
2. Attraction of foreign investment through "Halal-Green" hybrid models.	2. High initial certification costs.
3. Potential for public-private partnerships in certification.	3. Competition from established halal producers (Malaysia, Turkey, France).
4. Access to EU green and ethical finance funds.	4. Inconsistencies between national and EU regulations.

The SWOT profile indicates a positive external-to-internal ratio ( $O/T = 1.6$ ), meaning that external opportunities outweigh threats. This finding supports Hypothesis 1 ( $H_1$ ): the lack of national regulation is the key institutional barrier, but the macroeconomic and environmental potential remains favorable.

The strategic trends observed in the SWOT analysis are quantitatively validated in the following section through factor analysis, revealing the latent structure of institutional and market readiness.

*Empirical survey results – Institutional and market readiness*

The online survey, conducted between March and June 2025, included four thematic blocks. All responses were measured on a five-point Likert scale. Table 3 summarizes the main descriptive statistics of the responses.

**Table 3.** Summary of survey results

Survey Block	Key Indicators	Mean	Standard Deviation
Block 2: Economic potential and attitudes	Bulgaria's potential for halal industry	4.21	0.73
	Halal certification improves exports	4.16	0.81
	Halal enhances Bulgaria's market image	4.09	0.77
	Halal markets increase employment	3.95	0.69
Block 3: Institutional trust and regulation	Current legislation allows certification	2.11	1.03
	Need for a national certification authority	4.58	0.48
	State administration is competent	2.34	0.96
	Institutional ambiguity hinders business	4.27	0.66
Block 4: Cultural and social acceptance	Halal is an economic, not religious, label	3.89	0.74
	Society can accept halal industry	3.64	0.81
	Halal aligns with sustainable agriculture	4.32	0.58

Results reveal strong market optimism and moderate social acceptance, but weak institutional trust. Over 78% of respondents believe halal certification could strengthen exports, while only 22% consider the current legal framework adequate. These findings empirically validate  $H_1$ , confirming that the absence of legal structure significantly reduces readiness for certification.

**Factor analysis results – Institutional and Market Readiness (IMR Model)**

The suitability of data for factor analysis was tested using Kaiser–Meyer–Olkin (KMO) and Bartlett’s Test of Sphericity, confirming strong sampling adequacy:  $KMO = 0.79$ ;  $\chi^2 = 1354.26$ ;  $df = 210$ ;  $p < 0.001$ .

Three principal components explain 68.3% of total variance, as shown in Table 4.

**Table 4.** Extracted factors and factor loadings (Varimax rotation)

Indicator	F <sub>1</sub> : Institutional trust & awareness	F <sub>2</sub> : Market motivation & orientation	F <sub>3</sub> : Sustainability & ethics
Knowledge of halal standards	0.812	0.214	0.142
Institutional trust	0.731	0.228	0.211
Perception of administrative capacity	0.784	0.231	0.116
Willingness to certify	0.288	0.842	0.153
Export orientation	0.195	0.804	0.203
Perceived economic benefits	0.171	0.778	0.209
Sustainable practices	0.278	0.289	0.767
Ethical compatibility	0.199	0.244	0.755

F<sub>1</sub> (Institutional trust and awareness) explains 32.6% of variance and highlights the impact of weak institutional confidence and insufficient knowledge on readiness levels.

F<sub>2</sub> (Market motivation and orientation) explains 23.7%, showing that farmers perceive halal certification as a source of export expansion and long-term profitability.

F<sub>3</sub> (Sustainability and ethics) accounts for 12.0%, confirming that halal standards are compatible with EU sustainability policies such as the Farm to Fork Strategy.

The results of the SWOT and factor analyses reveal strong internal coherence between the identified determinants. Macroeconomic strengths, such as agroecological resources, logistics, and low production costs, correspond to Factor 2, while institutional weaknesses align with Factor 1. The overlap between halal principles and sustainability practices reflected in Factor 3 reinforces the positive strategic opportunities identified in the SWOT profile. These relationships empirically confirm both hypotheses: the absence of halal legislation reduces institutional trust and readiness ( $r = 0.68, p < 0.01$ ), and Bulgaria's geo-economic and ecological advantages enhance competitiveness when supported by effective institutional regulation ( $r = 0.74, p < 0.01$ ). Overall, the integrated results indicate that Bulgaria has the institutional, market, and environmental capacity to become a regional hub for halal-certified agriculture, provided that appropriate legal and organizational frameworks are established. Key policy recommendations include the creation of a national halal certification authority, capacity-building programs for producers, and the integration of halal principles into CAP and export promotion mechanisms. The findings demonstrate that the halal model can function as both an ethical and economically efficient approach within the European agricultural context, contributing to a more sustainable and competitive regional economy.

### *Discussion*

The identification of three principal factors, institutional trust and awareness, market motivation and orientation, and sustainability and ethics, through Principal Component Analysis validates the theoretical frameworks proposed by North (1990) and Asutay (2013) regarding the foundational role of institutions in economic behavior. The finding that institutional trust constitutes the primary determinant of readiness aligns with North's seminal argument that clear institutional frameworks reduce transaction costs and enable market participation (North, 1990). In the Bulgarian context, the absence of a national halal certification authority creates what Bachev (2022) characterizes as an "institutional

failure,” wherein the lack of formal rules and control mechanisms undermines producers’ confidence and willingness to engage with halal standards.

This institutional deficit stands in stark contrast to the well-established certification systems documented in Malaysia and Indonesia by Ahmad (2019) and Samori (2021). In these countries, comprehensive legal frameworks and government-backed certification bodies have fostered an environment of institutional trust that facilitates market entry and reduces perceived risks for agricultural producers. The Malaysian Halal Certification Authority, for instance, operates under explicit legislative mandates and benefits from decades of refinement, thereby serving as a credible market signal that Ahmad (2019) identifies as an intangible asset generating both trust and economic value. Bulgarian producers, lacking such institutional scaffolding, face higher uncertainty costs, a dynamic that directly confirms Georgiev’s (2024) empirical observation that institutional reforms grounded in clear legal norms are prerequisites for market efficiency in agricultural contexts.

The prominence of market motivation as a second determinant reflects what Wilson (2019) conceptualizes as the “economy of trust” inherent in halal certification. Producers who perceive halal certification as a gateway to high-value export markets demonstrate an entrepreneurial orientation consistent with Ali’s (2020) characterization of certification as a market signal. This finding resonates with Rahman and Kusuma’s (2021) proposal for integrated Halal–Green labeling in Europe, which recognizes that sustainability and ethical production standards are increasingly valued by consumers across religious boundaries. Bulgarian producers’ alignment with sustainability principles, evidenced by the third factor, suggests latent compatibility between existing organic and environmental practices and halal requirements, as noted by Dimitrova (2023) in her analysis of Bulgarian organic agriculture.

However, the paradox of high market motivation coexisting with low institutional trust underscores a critical policy gap. While farmers recognize

economic opportunities, the regulatory vacuum inhibits actualization of this potential. This disjunction echoes Acemoglu and Robinson's (2012) distinction between extractive and inclusive institutions: in the absence of inclusive frameworks that ensure equitable access to certification mechanisms, even highly motivated producers remain marginalized from global halal value chains. The Bulgarian case thus exemplifies how institutional deficits can constrain entrepreneurial agency, a dynamic that Ivanov (2025) attributes to insufficient institutional capacity within agricultural administrations.

Comparing these findings with extant literature reveals both convergences and divergences that illuminate the specificities of the Bulgarian context. The centrality of institutional trust in shaping certification readiness parallels Bonne and Verbeke's (2020) findings regarding Muslim consumers' trust in European halal systems. Their study demonstrates that trust in control mechanisms is paramount for both consumers and producers, a principle that transcends cultural and religious boundaries. However, while Bonne and Verbeke examined consumer perceptions in contexts with functioning certification infrastructure, the present study addresses a pre-institutional phase where producers face foundational uncertainties. This distinction is consequential: whereas established systems must maintain trust through oversight and transparency, emerging systems must first establish legitimacy through credible institutional design.

In contrast to the Southeast Asian cases documented by Samori (2021), where state-led halal authorities enjoy high legitimacy and operate within supportive policy ecosystems, Bulgaria's institutional landscape is characterized by fragmentation and ambiguity. Samori identifies institutional coherence, manifested through clear legal mandates, standardized procedures, and governmental commitment, as the cornerstone of successful halal economies. The Bulgarian situation represents an inverted scenario: structural advantages (favorable geography, competitive costs, organic farming traditions) exist alongside institutional voids. This suggests that while Petrov's (2025) SWOT

analysis correctly identifies Bulgaria's potential as a regional hub for sustainable agriculture, the actualization of this potential is contingent upon deliberate institution-building efforts.

Moreover, the integration of sustainability and ethics as a discrete factor finds empirical support in Rahman's (2020) work on ethical food standards in Southeast Europe, yet extends it by demonstrating producers' intrinsic alignment with these values rather than mere compliance-driven behavior. This distinction is theoretically significant: it suggests that Bulgarian farmers may possess an embedded ethical orientation compatible with Asutay's (2013) concept of Islamic moral economy, wherein economic activity is inherently subordinated to moral imperatives. Such alignment creates a favorable ideational foundation for halal certification, reducing potential cultural resistance and enhancing prospects for authentic integration rather than superficial adoption.

## **Conclusion**

The results of the study clearly indicate that the Bulgarian agricultural sector possesses significant economic and institutional prerequisites for the development of halal-certified production. However, this potential remains only partially realized due to the absence of a clear legislative framework and a coordinated national policy.

Empirical evidence confirms that most farmers perceive halal certification not as a religious symbol but as an economic tool for enhancing competitiveness, export capacity, and the sustainability of their farms. Nevertheless, limited institutional trust and the absence of a specialized certification authority remain major barriers to the practical implementation of halal standards. The analysis shows that when institutional clarity is supported by market motivation and awareness, farmers' readiness for certification increases significantly. A clear connection is also evident between the sustainable production practices promoted under European green policies and the ethical principles embedded in the halal

economy. This alignment suggests that the introduction of halal standards can naturally fit within the broader context of sustainable agriculture and the European green transformation. Based on the analysis, it can be concluded that Bulgaria does not yet hold a fully developed position but rather a favorable combination of geographic, agroecological, and market advantages, which, if supported by appropriate institutional mechanisms, could enable the establishment of a specialized halal-certified agricultural sector. Achieving this goal requires the creation of a national certification authority, improved institutional coordination, and the integration of halal principles into the Common Agricultural Policy and sustainable finance programs.

From a practical standpoint, the findings highlight the need for active information campaigns and producer training aimed at fostering better understanding of the standards and building trust in the certification process. Although the study provides convincing evidence of the sector's potential, it is limited by its reliance on online surveys and a relatively small sample size, which may affect the generalizability of the results. Moreover, the analysis is static and does not account for dynamic changes in the institutional and market environment. These limitations open avenues for future research focused on longitudinal analyses and comparative studies between Bulgaria and other countries in the region.

In conclusion, Bulgarian agriculture can be described as being in a stage of emerging institutional readiness, where the key factors, market orientation, sustainability, and awareness, are already present. However, success will ultimately depend on the ability of public and private stakeholders to establish a stable and transparent framework that transforms halal certification into a sustainable and ethical model of agricultural development, combining economic efficiency, social responsibility, and alignment with European environmental objectives.

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