

Green Marketing in Agricultural Production in Azerbaijan

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Abstract

This review article examines the evolving interaction of green marketing issues and the agricultural sector of Azerbaijan, which attempts to modernize its agricultural sector, including agri-food systems, but with compliance to global standards of sustainability. This paper presents a systematic review of scholarly articles, policy reports, and cases in order to explore the reality of the green marketing situation in Azerbaijani agriculture and reveal the issues of barriers, enablers, and gaps. It is grounded on applicable theoretical frameworks such as stakeholder theory, environmental and consumer behaviour models. This review reveals that inadequate institutional infrastructure, non-existence of consumer awareness and the lack of eco-certification of schemes are major constraints whereas policy interest, digitalization and export potential are strategic opportunities. Comparative perspective places Azerbaijan in the context of the global marketing environment of the green and points out major incompatibilities as well as the areas of convergence. This paper presents recommendations on the policies such as development of national eco-labelling program, inclusion of the green marketing in the agricultural policies, and more competent stakeholder education and capacity building. This review also adds to body of knowledge on how to achieve sustainable development in post-Soviet regions and provides a pragmatic information that can be useful to the practitioners and policymakers who want to make the agri-food sector in Azerbaijan more competitive and ecologically sound.

Keywords: Green Marketing; Azerbaijan; Agriculture; Digitalisation; Sustainability.

1. Introduction

1.1. Background

Agriculture has always been one of the staples of the Azerbaijani economy, with a large portion of the Azerbaijani rural population depending on the farming sector (Hashimova, 2023). Even though the focus of national development seriously depends on the export of oil and gas, the agricultural industry has become a higher priority in the national development plans because of its potential ability to diversify, ensure food security, and socio-economic stability (Sevda, 2025). The agricultural production of Azerbaijan is diverse and focuses on grains, fruits, vegetables, and livestock, with Ganja-Gazakh lands, Aran, and Lankaran regions being the most important ones (Rzayeva & Rzayev, 2019). Nevertheless, the industry has some underlying environmental issues such as soil erosion, water shortage, and wasteful utilisation of resources, which require transformation to more environmentally sustainable ways (Yang et al., 2023).

Green marketing can be used to advertise environmentally friendly products and materials, ethically produced and sustainable practices (Thakkar, 2021). This is not a niche trend anymore that should be treated as an emergent global necessity, preconditioned by climate change issues, consumer sensibilities, and more restrictive environmental laws. Green marketing in the context of agribusiness includes the application of eco-labels, organic certification, sustainability packaging and transparent value chains (Onder & Nazli, 2023). Countries like Germany, the Netherlands and India have incorporated the green marketing into their state agriculture policy thus shaping production and consumer patterns (Hu et al. 2025).

1.2. Research motivation

Changing from unsustainable marketing to sustainable marketing strategies is both a problem and a chance in developing economies such as Azerbaijan (Gahramanova, 2022). On the one side, green practices are not mainstreamed due to resource constraints, lack of regulations, and poorly developed supply chains (Gawusu et al., 2022). Conversely, the rise in domestic and global market demand of environmentally friendly and ethically marketed agricultural commodities develops a great motivation to change (Savastano et al., 2024). Green marketing

does not only improve the environmental record of agricultural enterprises but it also creates a competitive advantage in overseas markets, especially on the European Union where adherence to sustainability policies is becoming a mandatory requirement (Tomashuk, 2023).

1.3. Aim and scope of the review

This paper seeks to critically analyse the situation in the green marketing of Azerbaijan agricultural production. Its geographical focus is limited to Azerbaijan, paying attention not only to national-level policy and practice, but also regional differences within Azerbaijan. Thematically, the review examines green marketing, stakeholders, regimes, and socio-economic motives involved in making adoption. It also evaluates how the practices of Azerbaijan correspond to international practices and standards. The paper has a more comprehensive scope, including the use of the academic literature, policy papers, and empirical research when it exists.

The analysis shows that most of the studies are conceptual and normative in nature, and empirically substantiated results are limited. In particular, statistical evidence on the impact of green marketing tools (eco-labeling, certification, eco-packaging and communication strategies) on the economic performance of farms is not sufficiently formed. Field studies measuring the effectiveness of models applied in international practice in Azerbaijani conditions are also almost non-existent.

One of the empirical gaps is related to the limited data on consumer behavior. The level of demand for environmentally friendly agricultural products in the local market and the impact of green marketing messages on purchasing decisions are mainly based on theoretical assumptions and have not been confirmed by large-scale, methodologically reliable surveys. In addition, empirical studies measuring the relationship between state support mechanisms and green marketing strategies are rare.

Future empirical studies should be based on the integration of quantitative and qualitative methods in order to eliminate these gaps. The impact of green marketing tools on profitability and market indicators can be assessed by applying regression and panel models based on survey data on farmers. At the same time, studies based on experimental and consumer choice models will allow us to measure the impact of eco-labels and green branding on purchasing behavior. This approach will allow us to strengthen theoretical conclusions with empirical evidence and formulate policy recommendations on a scientific basis.

1.4. Research questions

The review is structured around the following core research questions:

- What are the current green marketing practices in Azerbaijan's agricultural sector?
- What are the key barriers and enabling factors influencing their adoption and effectiveness?
- How do these practices compare to international best practices, particularly in other emerging and developed economies?

1.5. Structure of the paper

The paper commences by providing a theoretical framework by which green marketing can be situated in larger context of sustainability and agricultural development. Afterward, a synthesis of international green agribusiness patterns was provided. The main body of the paper examines the Azerbaijani situation, with respect to current green marketing practices, the role of different stakeholders, and the systemic issues. A critical appreciation and policy-based prescriptions on improving the position of green marketing in green agricultural development in Azerbaijan wrap up the review.

2. Methodology

The study conducted a literature review using two different approaches: a narrative review and a systematic review. The narrative review used scholarly sources to interpret the development of the concept of "green marketing," the main theoretical approaches related to its application in agricultural production, and the current situation in Azerbaijan. At this stage, sources were selected primarily based on their relevance to the topic, scientific significance, and explanatory nature, with the goal of the review being to explain the essence of the problem in a broad context.

Unlike the narrative approach, the systematic review followed predefined formal procedures. The search was conducted using the keywords "green marketing," "sustainable agriculture," "agricultural marketing," and "Azerbaijan" in scholarly databases such as Scopus, Web of Science, and Google Scholar. The selected sources included only peer-reviewed scholarly articles from 2010–2024 that addressed green marketing in the agricultural sector from an analytical or empirical perspective. Materials that were not directly related to the topic were repetitive and of a descriptive nature only. (Booth et al., 2021).

2.1. Literature search strategy

The literature search was performed on various academic and grey literature sources such as Scopus, Web of Science, Google Scholar, and sources of the particular institutions (Food and Agriculture Organisation (FAO), World Bank, and Azerbaijan Ministry of Agriculture). The review is targeting the materials published since 2010 until 2024, which is inclusive of the international trends and the national situations.

Key search terms included combinations of:

- "green marketing" AND "agriculture" AND "Azerbaijan"
- "sustainable agriculture" AND "marketing strategies"
- "eco-labels" OR "organic certification" AND "developing economies"

Boolean operators and improved search options were adopted to refine outputs. English, Azerbaijani, and Russian (where necessary translated) publications were admitted to guarantee contextual relevance.

Table 1: Summary of Empirical Studies Related to Green Marketing in Agricultural Production in Azerbaijan

Author (s), year	Research topic	Region/object	Methodological approach	Main findings
Aliyev R. & Mammadov I. (2018)	Consumer attitudes toward environmentally friendly agricultural products	Baku city	Survey method, statistical analysis	Consumers show positive attitudes toward eco-products; however, high prices limit demand
FAO (2019)	Prospects for the development of organic agriculture in Azerbaijan	Nationwide	Analytical report, field observations	Certification improves market opportunities, but marketing mechanisms remain weak
Hajiyev N. (2020)	Sustainable production and market mechanisms in the agricultural sector	Aran economic region	Empirical analysis, survey	Environmentally oriented production creates market advantages, yet marketing strategies are not systematic
World Bank (2021)	Agricultural value chains and market access in Azerbaijan	National level	Document and data analysis	Environmental standards enhance export potential, but green branding is underdeveloped
Guliyev E.A. (2022)	Innovative development and environmentally oriented production in agriculture	Sheki-Zagatala region	Case study	Green positioning increases product recognition in the market

As shown in the table, existing studies mainly address environmentally oriented production and consumer behavior, while systematic empirical research on green marketing instruments (eco-labeling, green branding, and communication strategies) remains scarce. Most studies are local and unevenly distributed across regions, which limits the assessment of the nationwide effectiveness of green marketing strategies. Furthermore, the available evidence is largely descriptive and does not provide robust quantitative estimates of the economic impacts of green marketing tools on farm performance or market outcomes. This highlights the need for comprehensive empirical investigations integrating farm-level data, consumer experiments, and policy evaluation to establish an evidence-based framework for green marketing in Azerbaijan's agricultural sector.

Literature analysis shows that there are a number of scientific contradictions and discussions in this area. First of all, there is no unified position on the economic efficiency of green marketing. While some studies have noted that ecological certification and green positioning increase the competitiveness and price premium of the product, other studies emphasize that these measures increase production costs and create an economic burden, especially for small farms.

The second main controversy is related to consumer behavior. A number of studies suggest that consumers have a positive attitude towards environmentally friendly products and are willing to pay a premium. At the same time, alternative results show that there is a discrepancy between the environmental values declared by consumers and their actual purchasing behavior, and the price factor plays a decisive role.

The third discussion concerns the role of the state. Some authors assess state support as a key condition for the development of green marketing, while others note that excessive tightening of regulatory regulation can weaken market mechanisms. In addition, there is a contradiction in methodological terms: a significant part of the existing research is based on conceptual approaches, while works based on empirical evidence are limited.

Thus, the benefits and costs of green marketing, the real nature of consumer behavior, the role of the state, and the contradictions regarding methodological approaches create a fundamental scientific foundation for deepening critical analysis in the existing literature.

2.2. Inclusion and exclusion criteria

Table 2: Inclusion and Exclusion Criteria

Inclusion Criteria	Exclusion Criteria
Peer-reviewed journal articles, conference papers, and institutional policy reports	Non-academic sources (e.g., blogs, non-reviewed opinion pieces)
Studies focusing on green marketing in agriculture or sustainable agribusiness	Articles not related to agriculture or green marketing
Research with direct relevance to Azerbaijan or comparable developing/post-Soviet economies	Publications lacking methodological clarity or empirical basis
Materials published between 2010 and 2024	Duplicates or outdated studies with no added value

2.3. Data extraction and analysis

The synthesis of the chosen studies was conducted with the assistance of a strict data extraction protocol. Every paper was analysed and coded on the following available parameters: year of publication, name of the author/co-authors, thematic emphasis, geographical coverage, the nature of green marketing strategy, the stakeholders concerned and main conclusions. The data were coded into themes using thematic synthesis, and these core themes were as follows; (1) kinds of green marketing strategies that are being used in agriculture, (2) policy and institutional frameworks, (3) consumer awareness and market demand, and (4) barriers and enabling factors. A cross-comparative exercise was also carried out to compare the practices of Azerbaijan with international practices particularly within the emerging economies. This qualitative research method facilitated the review which was comprehensive but objective thus, offering evidence-based conclusions and policy suggestions.

3. Theoretical Framework

3.1. Concepts of green marketing

Environmental marketing (also called green marketing and sustainable marketing) is the method of creating and advertising commodities and services on the basis of their environmental advantages (Majeed et al., 2022). It gained prominence in reaction to the increase in ecological consciousness, but it has now become a strategic tactic, in which the greenness of the environment is combined with the actions of the consumer, how a brand is positioned and the responsibility of the corporation (Akram et al., 2024).

Aldubai & Develi (2022) mentioned that green marketing entails all the undertakings meant to create and accomplish any exchange aimed at fulfilling human needs or wants, whereby fulfilment of these needs and wants is undertaken with minimal harmful effects to the natural environment.

In agriculture, green marketing also entails marketing of environmentally responsible farming, which includes organic production, less use of pesticide, water conservation, and sustainable packaging and waste reduction (Meena, Meena & Choudhary, 2023). It also consists of

those communication strategies that focus on transparency, traceability and ethical sourcing. In Azerbaijan, green marketing not only help local manufacturing units to match the international standards of sustainability, but also make them more competitive in the export markets that are becoming more environmentally inclined (Khalilov & Eminov, 2024).

Green marketing is viewed as a mechanism to appeal to environmentally conscious customers (Figure 1), nevertheless, it has a bigger impact in terms of generating innovation, compliance regulation, and control of markets (Zhong & Um, 2025). Even in the agriculture, the green marketing practices can also be a way to internalise the environmental costs and help on the long run with the ecological and economic sustainability (Mehrabi & Giagnocavo, 2024).

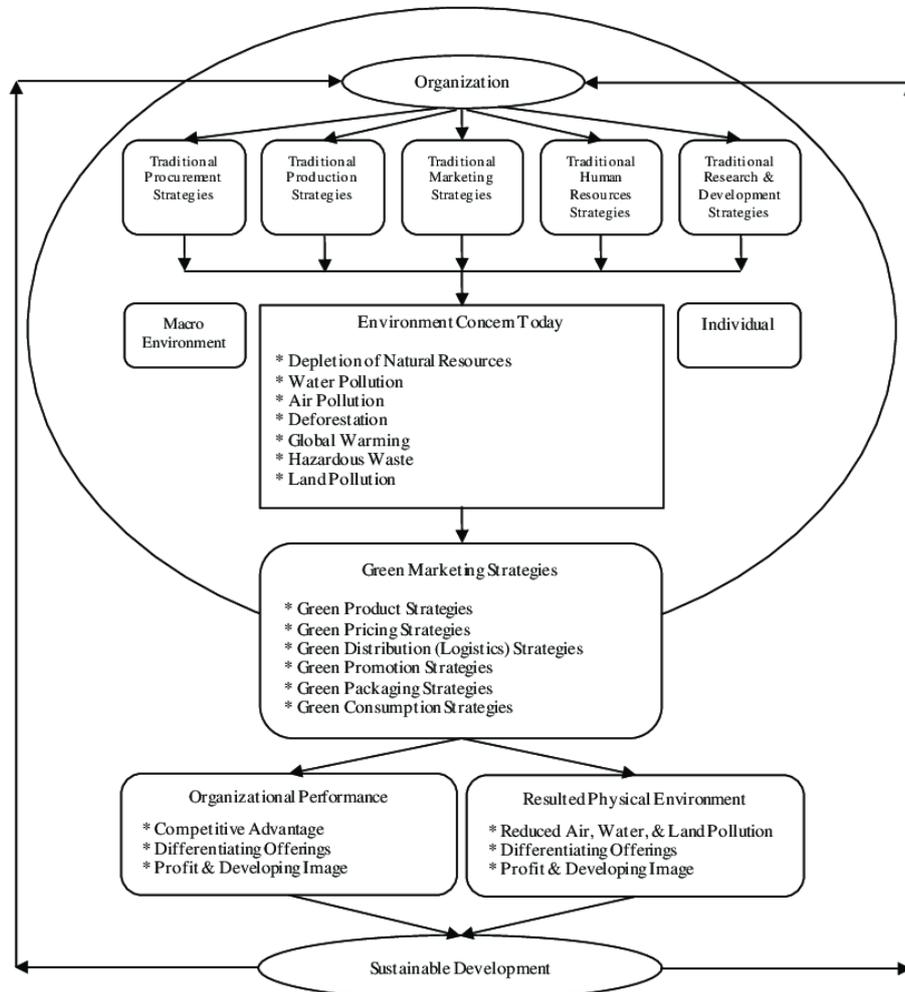


Fig. 1: Conceptual Framework Representing Green Marketing (Source: Peattie, 2016)

3.3. Environmental economics in agriculture

Environmental economics can offer a welcome perspective to evaluate green marketing in agriculture (Agustina et al., 2023). Its main concerns are with efficient environmental resource allocation and pricing of ecological goods and services, as well as the crafting of policies that will rectify market failures like pollution and overuse of resources. Environmental economics is applied in agricultural production to tackle the problems of soil degradation, water scarcity, and extinction of biodiversity because of the traditional practices in the agricultural industry (Geng & Maimaituerxun, 2022).

Green marketing supports the policies of environmental economics as it aims at providing market-based initiatives towards sustainable behaviour (Ofori, 2021). Indicators such as eco-labels and organic certification can be used as examples whereby environmentally responsible producers can use them to distinguish their good products and even attract premium prices (Meis-Harris et al., 2021). On the same note, the government subsidies on environmentally friendly agricultural inputs or carbon offsets as low-emission activity are economic incentives that support green marketing programs (Rakshit et al., 2025).

In Azerbaijan, the implementation of environmental economic principles remains a young process, and little involvement of pricing systems or regulation tools are found to generate sustainability (Muradov & Hajiyeva, 2024). Nevertheless, the establishment of eco-certification systems and quality standards which conform to EU standards indicates that there is an increasing awareness of the necessity to include environmental factors in agricultural markets (Nes & Ciaian, 2021). Learning the nature of interplay between environmental economics and marketing practices can guide policymakers and agribusinesses in coming up with more effective interventions that will reconcile the environmental and market priorities.

3.4. Stakeholder and institutional theories

Stakeholder and institutional theories can help to gain the complementary perspective on what drives green marketing adoption and what constrains it (Thomas, Scandurra & Carfora, 2022). According to the stakeholder theory, companies have to consider the interest of all those parties that are impacted by the business operations (Figure 2), not only the interest of shareholders but also those of all consumers,

regulators, employees and communities (DesJardine, Zhang & Shi, 2023). In the agricultural sector, they are represented through farmers, suppliers of farm inputs, distributors, consumers and also the environmental advocacy groups. Institutional theory, by contrast, has focused on how formal and informal institutions, e.g. laws, norms and industry conventions influence organisational behaviour (Piperopoulos et al., 2021). In Azerbaijan, there is changing institutional environment where the government is trying to reform to be able to modernise farming, provide food safety and encourage sustainability (Duisenbekuly et al., 2024). Nevertheless, the presence of failings of enforcement, poor infrastructure, and value chains are some of the hindrances that plague the power of green marketing.

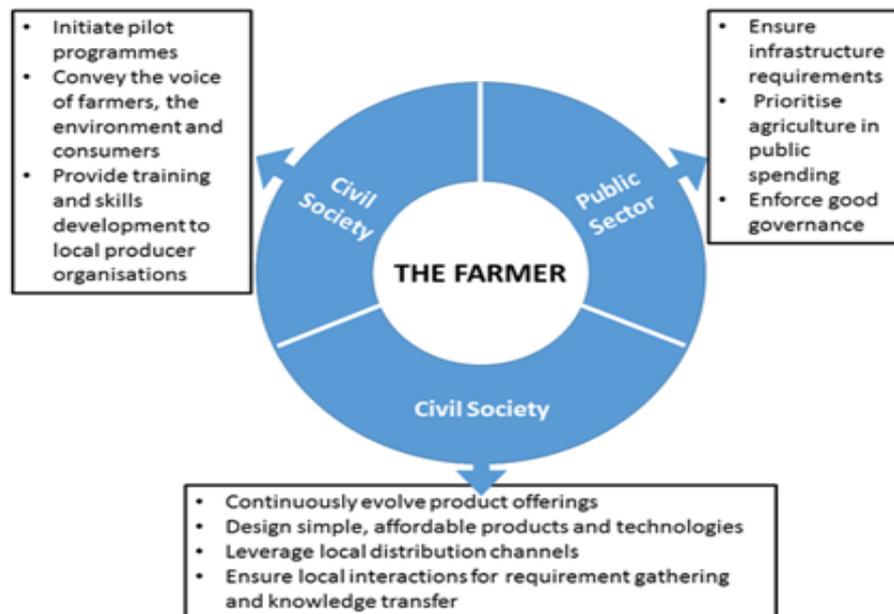


Fig. 2: Interaction between Stakeholder Roles in Green Agribusiness (Source: Li et al., 2019).

3.5. Models of consumer behaviour in eco-agricultural products

Consumer understanding is the key to effective green marketing. Theory of Planned Behaviour (Ajzen, 1991) or the Value-Belief-Norm (VBN) theory discuss the impact of personal values, social norms, and our perceived behavioural control on eco-friendly purchasing behaviour. According to Lazaroiu et al (2019), consumers are more likely to purchase green agricultural products when they believe the claims made, when environmental issues are salient, and when price and availability do not create much of a burden.

In Azerbaijan, awareness of eco-labels and sustainability is still low relative to developed markets and growing (Mammadli, 2023). There is also a lack of a single certification system, which stalls trust in green claims, and a mix in labelling practices (Table 2). When using behavioural models, it is possible to establish the psychosocial and situational issues that affect consumer decision-making processes and guide the development of strategies to boost the demand of eco-agricultural products (Zhang & Wang, 2024).

Table 3: Overview of Sustainability Initiatives in Azerbaijan's Agriculture

Initiative	Year Launched	Focus Area	Lead Institution	Marketing Element Present?
State Program for the Development of Organic Agriculture	2020	Promotion of organic farming	Ministry of Agriculture of the Republic of Azerbaijan	Limited – marketing not central
National Action Plan on Climate Change and Agriculture	2016	Climate resilience and sustainable farming	Ministry of Ecology and Natural Resources	No – focus is environmental only
Azerbaijan Agricultural Subsidy Reform	2019	Subsidy support for sustainable inputs	Agricultural Subsidy Council	Indirect – potential for green branding
FAO-Azerbaijan Partnership Programme (FAPP)	2016	Capacity building, sustainable value chains	Food and Agriculture Organisation (FAO) & Govt.	Partial – includes branding support
EU Twinning Project on Organic Certification	2022	Alignment with EU organic certification	EU Delegation to Azerbaijan	Yes – certification for market access
Green Agro Parks Initiative	Pilot: 2021	Eco-friendly agro-industrial clusters	Azerbaijan Investment Company (AIC)	Emerging – eco-labelling under development
Sustainable Forest and Pasture Management Project	2018	Land use, afforestation	World Bank & Ministry of Ecology	No – not market focused
AgroHackathon and Innovation Programs	Since 2019	Agri-tech for sustainability	Ministry of Agriculture / Agrarco	Partial – includes digital marketing pilots

4. Green Marketing Trends in Global Agriculture

Green marketing in agriculture has no longer been considered as a niche activity in farming, but has become a mainstream business and policy concern worldwide (Olagunju, Angioloni & Canavari, 2025). It is a representation of the increasing enlightenment of stakeholders, including producers to consumers, in the disposition of environmental patrimony, ethical practices and sustainable consumption.

4.1. Developed countries (EU, USA)

Green marketing has been institutionalised in developed economies, especially European Union and the United States, in terms of these countries having sophisticated regulatory systems, consumer participation, and technological advancement (Sacchi, Romanello & Canavari, 2024). European Union dominates the international agenda in sustainable farming with some of its policies being the European Green Deal, and the Farm to Fork Strategy, among others, to ensure food systems are more resilient and sustainable (Kiran, Prasad & Mohan, 2023). Such efforts are not solely of regulatory nature but rather marketing tools to define the image of agricultural products that is marketed in the environmentally friendly fashion to the conscious consumer (Sheth & Parvatiyar, 2021). Quality, traceability, and ethical production signs are displayed with the help of eco-labels EU Organic, Fair Trade, and Protected Designation of Origin (PDO), which allows the consumer to make the conscious decision (Erraach et al., 2021).

The USDA Organic Certification has been the staple ingredient of green marketing in the United States (Dimitri & Nehring, 2022). Those producers that comply with a high standard of organic production at the USDA can label their products as such and go to a growing market of consumers (both health and eco-minded). Also, the efforts of marketing are directed more at regenerative agriculture, non-GMO products, and carbon-neutral farming with the preference of digital platforms and storytelling in order to present sustainable activities of farmers (Lorenz, Kaljonen & da Silva, 2024).

4.2. Emerging economies (India, China, Brazil)

Developing nations are quickly moving towards implementation of green marketing techniques, but their development is determined by other social-economic and institutional processes (Hariram et al., 2023). Green marketing in India, as an example, is a policy priority as well as grass root movement. The National Programme for Organic Production (NPOP) offers its certification services and organises the trade of organic products both world-wide and inside the country (Sajeesh, 2021). The state of Sikkim has become the first totally organic state in the world and it has used this in the national and international branding.

The government in China has gone to an extent of promoting green agriculture by instituting several certifications including; green food, organic food, and pollution-free agricultural products (Yang, Huang & Wang, 2024). Such certifications are controlled by Green Food Development Centre, and are increasingly being endorsed by blockchain traceability programs. Even with these initiatives, a problem as significant as consumer trust is faced because consumers lack confidence in food systems because of historic food safety scandals and fraud certifications (Wu et al., 2021). Therefore, there is massive investment in digital authentication tools and government regulation as a way of building confidence with the consumers again.

Brazilian case is an interesting illustration of how to include environmental conservation in agricultural marketing. Brazil is a significant exporter of soybean, coffee, and beef; thus, it is under international pressure to check deforestation and emissions (Molossi et al., 2023). In this regard, green marketing has targeted certifications such as Rainforest Alliance, UTZ and Fair Trade and supply chains which can be traced to ensure buyers that the sustainability standards will be met (Opoku, 2024).

The Agroecology Policy Framework in Brazil also promotes family farming and the conservation of biodiversity as producers sell their products as socially and environmentally aware (Levidow, Sansolo & Schiavinatto, 2021). Although this has led to accrual with these gains, there are times at which political changes and enforcement loopholes dent credibility.

4.3. Best practices and benchmarks

Across both developed and developing economies, several best practices in green marketing have emerged that are highly relevant for countries like Azerbaijan seeking to modernise their agricultural sectors:

- **Eco-labelling and Third-party Certification:** There are systems such as EU Organic, USDA Organic, and Fair Trade, which give credible environmental certificates to consumers and allow the producers to reach high-value markets (Morath, 2023). These certifications even promote supply chain transparency and establish the minimum criteria of sustainability.
- **Digital Green Marketing Platforms:** The countries are now incorporating QR codes, blockchain, and mobile applications in trying to make information about the origination of a product, farming practices, and certification aspects in real-time (Tegeltija et al., 2022). This enhances consumer confidence and gives competitive edge in the local as well as in the foreign markets.
- **Public Private Partnership (PPP):** Alliances between the government, non-governmental organisations and agribusiness establishments facilitate the expansion of green marketing. For instance, Germany GIZ cooperates with Third World economies and develops their capacity in sustainable agriculture and marketing, whereas such organisations as World Bank finance traceability and certification systems in low-income economies (Clodoveo et al., 2021).
- **Consumer Education and Engagement Campaigns:** There has been successful campaign on engagement and education of consumers through national campaigns that have been carried out in France, Sweden, and New Zealand among others, and in most cases the school programs, advertising, and retail partnerships have been employed.
- **Integration and Clustering in Value Chains:** Sustainable agricultural clusters like organic districts developed in Italy or dairy cooperatives in Denmark combine green marketing of several levels organisers in producer, processor and retailer (Teuber & Jensen, 2021). This gives unity in the messages and efficiency of scale in marketing.

5. Agriculture in Azerbaijan: Contextual Overview

Agriculture is considered the backbone of the economy and rural development of the country because it provided the main source of employment and local stability in Azerbaijan (Hashimova, 2023). Although the sector has lost its previous GDP share during the post-Soviet period, especially with the appearance of export of hydrocarbons, it continues to play an irreplaceable socioeconomic role, especially in relation to the rural populations who rely on agriculture to survive and earn their livelihood (Sevda, 2025).

This country provides a substantial landmass with a wide array of agro-climatic regions with high agricultural potential with a variety of agricultural products such as wheat, cotton, pomegranates, grapes, vegetables and livestock (Rzayeva & Rzayev, 2019; Figure 3). However, the issue of the environmentally-degraded and inefficiently structured industries is gaining pressure as well; therefore, the economics of sustainability and implications of green marketing are not only topical in this context, but crucial (Gahramanova, 2022).

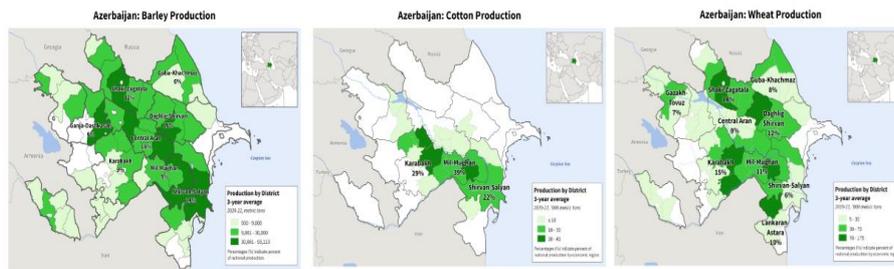


Fig. 3: Azerbaijan Agricultural Production (Source: Foreign Agricultural Services, 2025).

Azerbaijani agriculture is increasingly under question of environmental sustainability. Inefficient land allocation, lack of efficient irrigation, excessive use of agrochemicals, and climate variability have been identified as threats to productivity and food security with long-term impacts (Mihrete & Mihretu, 2025). The Kura-Araz lowland has been plagued by increasing salinity and erosion, as well as insufficiently modernized irrigation practices and inefficient fertilizer practices (Suleymanov, 2024). This trend towards environmental problems is not an exception, but is symptomatic of a larger institutional gap or lack of comprehensive environmental planning in the context of agricultural policy.

No substantive efforts have been directed at meshing environmental sustainability into the process of agricultural modernisation despite the introduction of strategic documents, which include the Strategic Roadmap to Agricultural Development and the State Program on Food Safety (Agarwala, Jemaneh & Kassie, 2022). Additionally, the consumer dynamic in Azerbaijan is assuming a challenge and an opportunity. The demand of eco-certified agricultural products is inhibited by price sensitivity and mistrust of labels although urban consumers are becoming more aware of the issues of health and sustainability (Megale, 2021).

Essentially, Azerbaijan is at a cross-road. Its farming is highly endowed with natural and human resources, yet is environmentally sensitive and structurally limited (Nikoghosyan et al., 2021). A strategic adoption of green marketing can act as a catalyst between the sustainability requirements and economic growth. However, this issue necessitates total consideration that encompasses environmental policy, institutional change, consumer participation and international coordination (Adanma & Ogunbiyi, 2024). The reform of Azerbaijan agriculture and engineering into a green-marketed, sustainable system becomes important to guarantee long-term food security, rural resilience, and international competitiveness of the country.

6. Green Marketing Practices in Azerbaijan Agriculture

The practice of green marketing as a type of strategy combining the concepts of environmental sustainability with consumer value propositions is at its developmental stage in the context of the Azerbaijani agriculture (Khalilov & Eminov, 2024). Regardless of the visibility of the environmental issue on the policy agenda, the actual translation of the environmental concern to the marketable agricultural projects has been minimal and piecemeal. This segment discusses the situation of green marketing in the agricultural industry in Azerbaijan in terms of producer efforts, government assistance systems, organisational and institutional barriers.

6.1. Current initiatives by agricultural producers

Green marketing has slowly entered into the lifecycle of Azerbaijani agricultural producers, although on a small scale and only in the sphere of niche market participants. Certain producers particularly those of highly priced crops like pomegranates, saffron, grapes have begun using environmentally sustainable farming processes such as the use of pesticides, soil conserving farming practices, and drip irrigation systems (Raimondo et al., 2025). The main drivers of the change are market motives and not enforcement, and numerous producers aim the environmentally aware markets like European Union (Boermans et al., 2024). For instance, the Goychay region whereby the cooperatives have started branding their organic pomegranates to the international health-conscious consumers (O'Connell & Hradzsky, 2018). Furthermore, some tea manufacturers and vineyards in Lankaran and Shamakhi areas have begun incorporating sustainability in the way they produce, emphasising water utilisation and organic purchases (Banerjee & Tyagi, 2025).

Nonetheless, green marketing in Azerbaijan is not structured formally and is not employed widely yet despite the early developments. National certification systems of organic or eco-friendly products are weak or do not exist, thus many producers base their informal sustainability claims on. In the absence of official certification and third-party certification, producers cannot use their environmental activities to gain marketing leverage (Nygaard, 2023). This ad hoc strategy compromises consumer confidence, and controls the exposure of green products, locally or in international markets. Therefore, as much as there are some emerging sustainability practices at production level, sustainability practice integration into coherent and strategic marketing is yet to take off.

6.2. Government and institutional support for green marketing

Government initiatives in promoting green agriculture and other related forms of marketing efforts have been popular over the past years but are still undeveloped (Chen & Gao, 2025). The sustainability is defined in the strategic focus of the production and the processing of agricultural products as a roadmap that provides a strategy in the eco-conscious development of the agricultural industry (Chen, 2024). Equally, the so-called State Program on Development of Organic Agriculture (2022-2025) indicates the increasing institutionalised concern to stimulate the development of green farming (Manzoni, 2024). Some of these programs are funding of various modern irrigation systems, subsidies in the items of organic fertilizers and training programs to enhance environmental awareness among farmers (Alawode, 2025). Nonetheless, various programs tend to put a focus on efficiency of production and climate resilience, but they do not focus on marketing and branding of green agricultural goods.

At the institutional level, the Ministry of Agriculture and the related agencies have collaborated with the FAO and the GIZ to facilitate sustainable agriculture practices by conducting pilot projects and knowledge transfer (Woltering et al., 2024). Even the Food Safety Agency of Azerbaijan (AFSA) currently acts towards the enhancement of the food quality standards and traceability. However, these organisations lack coordination and clash with most of their mandates thus making it difficult to come up with a streamlined framework governing green marketing (Deshmukh & Tare, 2024). Most importantly, there is no single (standardised) body in Azerbaijan that gives eco-labels or

certifications that can enable producer profiles to ensure credibility of environmental sustainability of their products. Without such regulatory certainty, access by green products to the market, particularly outside the country is not very high.

6.3. Barriers to effective green marketing implementation

There is a chain of interdependent structural, institutional, and behavioural impediments that ensure the adoption of green marketing in the Azerbaijani agriculture (Ahmadi, 2025). The lack of national eco-labelling system and credible easily available certification services is one of the most urgent ones. The issue of low consumer awareness weighs in especially in the domestic markets where environmental issues seem to be treated as second priority after price issues and ignorance towards product claims (Parvatiyar & Sheth, 2023). As a result, the demand of eco-labelled goods is not sufficiently developed, which restricts the motivation of producers to invest in sustainability.

Table 4: Barriers and Enablers of Green Marketing in Azerbaijan’s Agricultural Sector

Category	Barriers	Enablers
Policy and Regulation	- Lack of specific green marketing regulations - Limited enforcement of sustainability standards	- Existing programs on organic agriculture - Opportunity to integrate green marketing into future policy reforms
Market Access	- Limited access to premium/export markets - Weak certification infrastructure	- Growing demand for organic and eco-labelled products - Potential for EU market alignment
Producer Capacity	- Low awareness among smallholders - High certification and technology costs	- FAO and government training programs - Increasing digital literacy in rural areas
Consumer Awareness	- Limited public understanding of green products - Low willingness to pay premium	- Potential for school-based sustainability education - Increasing urban eco-consciousness
Technology and Innovation	- Lack of infrastructure for traceability and eco-packaging - Limited digital marketing channels	- Government-backed innovation initiatives (e.g., Agro-Hackathon) - Mobile and e-commerce platform growth
Financial and Institutional Support	- Insufficient green financing mechanisms - Weak cooperative structures	- International donor support (EU, FAO, World Bank) - Potential for eco-finance development

Besides, the agricultural value chain in Azerbaijan is very fragmented presenting low logistics, storage and management processes (Figure 4). These wastages reduce the capacity of green products to be of reasonable quality and traceability along the farm to market chain. Another barrier is technical capacity (Nicastro et al., 2024). Majority of farmers and mostly the smallholders do not have the training or advisory services that they could use to communicate and embrace the sustainable practices. Moreover, the process of learning green transitions is capital-intensive that involves investing in emerging technology, input, and certification activities (Owen, 2021). Nevertheless, funding opportunities are still limited, and customised financial tools are not numerous that would facilitate the green agricultural innovation aspects.

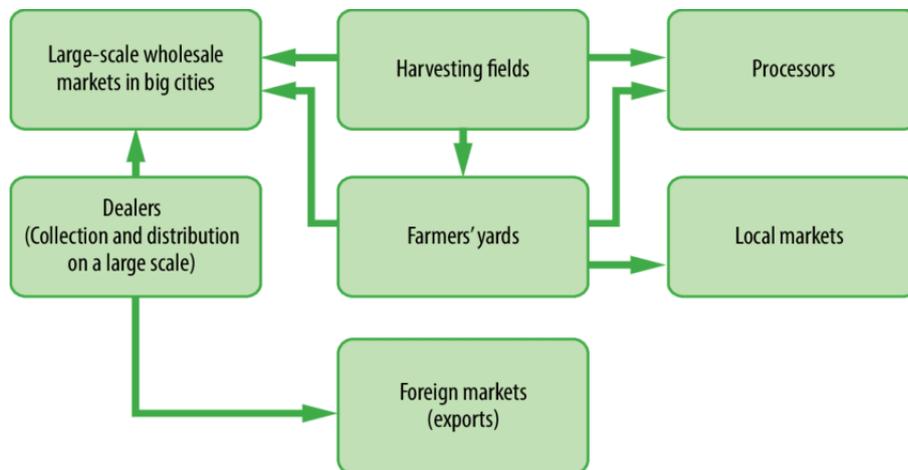


Fig. 4: Value Chain for Agricultural Products in Azerbaijan (Source: Aksoy et al. 2018).

7. Implications, Recommendations, and Conclusion

7.1. Implications for policy, practice, and research

The outcomes of the review reveal some important gaps and opportunities in the process of integrating green marketing in the agricultural industry in Azerbaijan. Policies-wise, the absence of a unified institution structure of green agriculture and eco-labelling is a barrier to Azerbaijani competitiveness at environmentally aware export markets. Although national development plans are generally conducive to modernising and sustainability of agriculture, they do not have a marketing aspect, which subsequently gives producer broad neglect on green branding or consumer interaction.

To the practitioner of agriculture, principally on the small and middle scale producers, the implication is twofold. On one hand, the sustainability converts do not have the ease of cashing in on their environmental-friendly actions because of a lack of certification and consumer recognition as well as local demand of green-labelled products. Conversely, it is an unexploited market that will grow as international demand increases on eco-agricultural products- particularly building the right support structures.

In terms of research, this survey has demonstrated that there is an imperative lack of empirical evidence as regards the customer preference, producer behaviour, and the question of the economic effect of green marketing within Azerbaijan. Longitudinal studies and market analysis are urgently required to inform evidence-based policymaking, particularly, in adaptation of green marketing to local socio-economic realities.

7.2. Strategic recommendations

Azerbaijan needs to implement a set of well-coordinated strategic steps aimed at policy and implementation in order to make a transition towards competitive and green marketing-based sector in the agriculture industry (Figure 5). The first and most urgent is the necessity to work out and establish nationwide eco-labelling. A system of this kind could offer the producers a transparent, easy to use and globally recognised certification system that will certify that their products are environmentally friendly. By following the principles of global eco-labelling systems and making the green agricultural produce available at affordable prices to the smallholders, Azerbaijan provides the chance of the country to gain trust in its eco-friendly agricultural produce and opens wide gates to the high-valued market inside and outside of the country.

At the same time, green marketing should be incorporated completely into the agricultural policy of the country. Existing programs, including the “State Program for the Development of Organic Agriculture” serve as a natural basis but they should be extended so that provisions of marketing would be specifically addressed. This needs to be in form of government directed facilitation to eco-brand, enhanced market accessibility and the development of partnerships between the government and the industry player realms in form of public-private arrangements that will grace the entry of sustainable producers to local markets as well as export-oriented distribution channel.

Another vital element is to increase awareness among people and educate the consumers on the importance of a sustainable environmental based farming. There is little prospect of a change in domestic consumption without the condition of specific campaign which encourages environmental friendly lifestyles. Integrating sustainability education into the school curriculums and engaging the national media platforms can be critical in the process of triggering long-term changes in the mindset and the purchasing behavior of the consumers, especially among younger groups.

Moreover, some of the financial support that Azerbaijan ought to seek to facilitate the growth of green market include technological innovation and digital marketing. Transparency in the production and supply processes can be achieved by adopting the use of traceability technologies, including blockchain systems, which will boost consumer confidence. On the same note, green packaging and online selling systems can boost the exposure of green agricultural goods and hence their competitive advantages in local and international markets.

Finally, capacity should be established amongst producers and priority players in the value chain of agriculture. Smallholders and many farmers do not have the knowledge, tools, and institutional capacities that they need in order to make the shift toward green marketing. By increasing the accessibility of training programmes, models of cooperation, and advisory services, businesses will help producers to engage in good practices and convey their environment-related value in a proper way. Special schemes addressing small-scale producers can make the process of green transition inclusive and with equal participation in Azerbaijan.

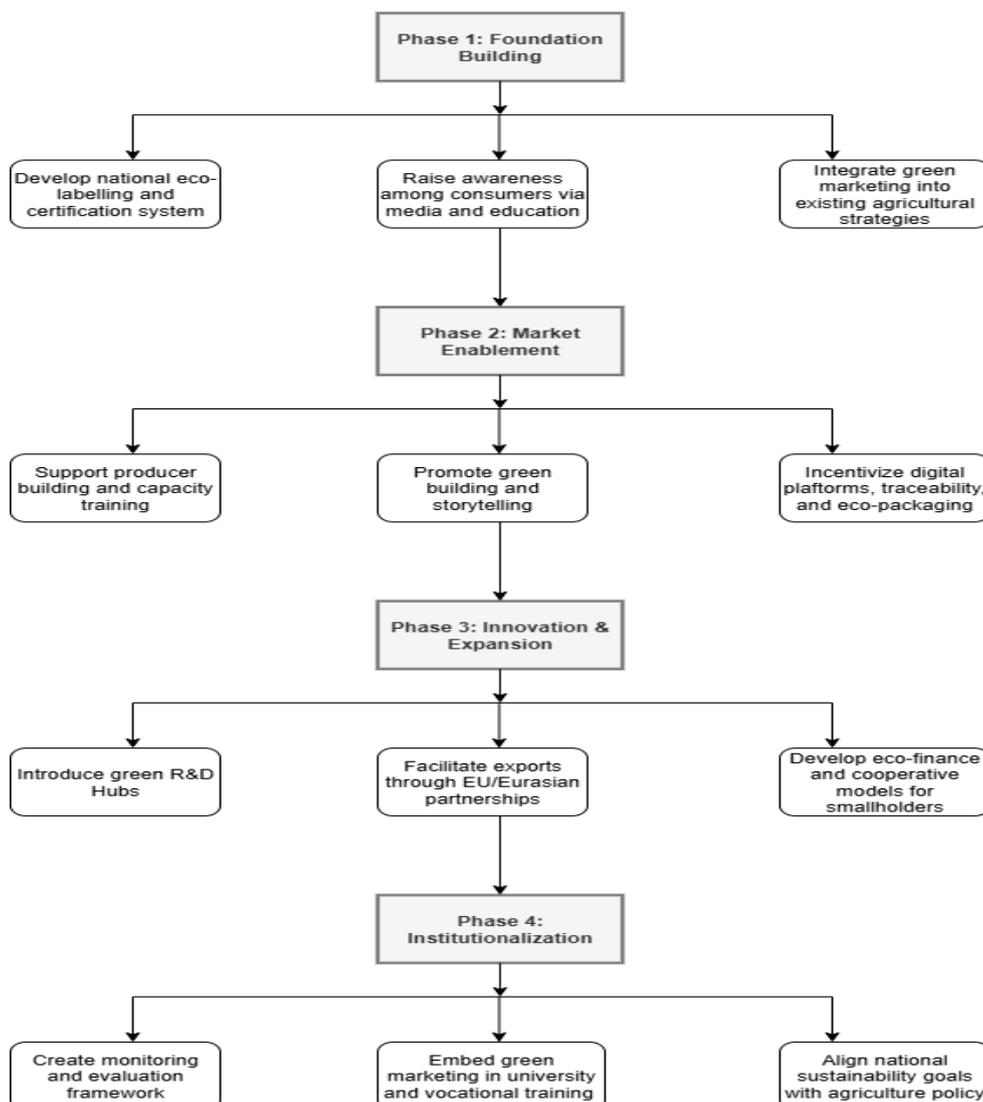


Fig. 5: Strategic Roadmap for Enhancing Green Marketing in Azerbaijan's Agricultural Sector.

7.3. Conclusion

Green marketing opens a promising direction in terms of which Azerbaijan has an opportunity to bring its agricultural sector closer to global sustainability requirements and promote an increase in the economic competitiveness of the country. The existing situation however can be characterised by small scale activities, institutional constraints and a lack of tapping the market potential. This review reveals that although there are producers working towards sustainability, lack of a formal certification, demand by consumers, and lack of combined marketing strategies work against sustainability.

The evidence obtained through comparative analysis of the world leaders in green farming shows that Azerbaijan needs to take rapid and detailed measures in order to cover its margin. It takes more than environmental stewardship within a farm to transform the transition, the transformation needs a national ecosystem in which trust, transparency and innovation link the producers, the consumers, the institutions and international markets.

With the introduction of the proposed policy, practice, and research recommendations, Azerbaijan stands a chance of rebranding itself as a foresight in the realms of green agribusiness. Green marketing is not just a branding equation but one of the solutions to concerted efforts toward sustainable development, food security, and rising environmental and market crises all over the world.

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