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The Impact of Food Labeling on Consumer Choices in Latvia

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***Abstract*— Food labelling plays a crucial role in promoting sustainable consumer behaviour by providing essential information on product origins, environmental impact, and ethical standards. This study aims to evaluate the influence of food labelling on consumer purchasing decisions and sustainability awareness in Latvia. A comparative analysis and synthesis of secondary data sources, including academic literature, policy documents, and market surveys, were conducted. Findings show that while food labels enhance product credibility and consumer trust, there remains a significant gap between awareness and actual purchasing behaviour. Barriers such as label complexity, higher prices, and inconsistent regulatory enforcement reduce the effectiveness of sustainability labels. These insights highlight key factors shaping consumer trust in food labelling and offer recommendations for improving sustainable consumption practices in Latvia.**

Keywords*— *Consumer behaviour, food labelling, regulatory framework, sustainability.

I. Introduction

In recent years, food labelling has become widely recognised as an important tool for helping consumers choose more sustainable products by clearly showing a product's environmental and ethical features. The European Union (EU) has continuously updated its regulatory framework for food labelling to improve transparency and help consumers make informed decisions about sustainable and healthier food options [1]. Nonetheless, the practical effectiveness of these labels, particularly in smaller markets such as Latvia, remains uncertain. This paper synthesises recent academic research from 2020 to 2025, focusing specifically on how food labelling influences consumer behaviour in Latvia. The analysis includes a comparative perspective, evaluating Latvian consumer responses against trends observed in other Baltic states and the broader EU context, addressing both the potential and limitations of sustainability labels [2].

Sustainability labels on food are intended to inform consumers and encourage eco-friendly choices. In the European Union (EU), food labelling regulations have evolved to guide consumers towards healthier and more sustainable diets. In recent years, academic interest in the effectiveness of food labels as tools for promoting sustainability among consumers has grown significantly. According to Cook et al. [3], although consumers generally respond positively to sustainability labels, the actual impact of these labels on purchasing behaviour remains limited. This limited effect mainly occurs because consumers often do not fully understand what the labels mean, making it harder for them to turn their environmental concerns into actual buying choices. Consumers demonstrate some willingness to pay a premium for sustainably labeled products, particularly for items certified as organic. Trust also plays a crucial role in this context—labels backed by government bodies or independent certification agencies are perceived as significantly more reliable than those issued directly by manufacturers. In addition, labels that use simple visuals like colours or easy-to-understand symbols are usually better at helping consumers make sustainable choices.

Several academic case studies focus on country-specific dynamics. In Latvia, Naglis-Liepa et al. [4] conducted a representative survey (n=1000) to examine consumer support for "prosocial" foods (local and eco-friendly options). The study revealed strong pro-environment attitudes: most Latvian consumers agreed that it is important for food to be produced in an environmental friendly way. On a scale from 1 ("agree") to 4 ("disagree"), the average response was around 1.8, showing strong overall support for sustainable food choices. Interestingly, even people with lower education and those living in rural areas expressed strong support. However, when posed a

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tougher choice – would you give up a favourite product if it is not sustainable? – respondents were less certain, with the average response closer to 2.2 ("somewhat agree"). This indicates that although consumers generally support sustainability in principle, they hesitate when it means changing their personal buying habits.

At the EU level, researchers have also analysed market trends in labelling. Nes et al. [5] examined sustainability claims on new food products across 19 European countries. They found a steady increase of labelled product launches – an annual growth of 2.8% in the share of new products with sustainability labels from 2005 to 2021. Environmental claims, like "eco-friendly" or "organic," make up about 68% of all labeled new food products, while purely social claims, such as "Fairtrade," account for just 4%. The remaining labels include both environmental and social aspects. This shows that companies mostly focus on environmental labels because that is what consumers demand most. However, the wide variety of labels used today (over 200 different kinds in Europe) can confuse consumers, even though they are meant to help people make sustainable choices.

The European Commission, recognising the proliferation of green claims, has been working on tightening and harmonising labelling rules. The Farm to Fork Strategy (2020) explicitly commits the EU to introduce a Sustainability Labelling Framework by the end of 2024 to empower consumers towards sustainable choices [6]. This new framework is envisioned to integrate nutritional, climate or environmental, and social information into a coherent labelling approach. In theory, such a holistic EU sustainability label could simplify the landscape – one label to cover carbon footprint, fair trade, animal welfare, etc., rather than dozens of different logos. The Ecodesign for Sustainable Products Regulation (ESPR), which came into force on July 18, 2024, aims to enhance product sustainability in the EU by improving circularity, energy efficiency, recyclability, and durability [7].

Despite the comprehensive approach, this study has certain methodological limitations. Since the analysis relies exclusively on secondary data, it does not include direct consumer observations or experimental data. Consequently, while the synthesis of existing research, policy reports, and surveys provides valuable insights into consumer behaviour and attitudes, the findings should be interpreted with caution when assessing actual purchasing behaviours in Latvia.

II. Materials and Methods

This applied research relied on diverse secondary data sources to examine food labelling and sustainable consumer behaviour in Latvia. The information was gathered from recent peer-reviewed studies on food labelling, sustainability, and consumer behaviour provided empirical findings and theoretical context; policy documents and official reports from the EU and Latvia were reviewed to understand regulatory frameworks and national context; findings from industry surveys and market research to capture consumer trends and behaviour in real-world markets; comparative regional data comparing consumer behaviour across the Baltic and the EU to put Latvia's situation in context.

Using the above sources, comparative analysis was conducted a to highlight similarities and differences between Latvia and other regions in terms of sustainable consumer behaviour and food labelling impacts. Key indicators were identified for comparison – such as consumer awareness levels of sustainability labels, trust in those labels, willingness to pay a premium for eco-labeled products, effectiveness of labels in changing behaviour, and the strength of related policies.

To ensure a comprehensive analysis, an integrative interpretation process was applied, combining data from multiple sources. Insights from reports, surveys, and academic literature were cross-validated, comparing findings to identify consistent trends and explain discrepancies. Quantitative data (e.g., statistics and survey results) were analysed for consistency, while qualitative insights (case studies, interviews, and narratives) were examined for recurring themes. For example, research on Latvian consumers indicated an increasing willingness to pay more for local and environmentally friendly products [4], aligning with international studies reporting a 10% price premium for sustainability [8]. When multiple sources confirmed similar patterns, these were interpreted as strong evidence of food labelling influencing purchasing behaviour. By synthesising quantitative trends with qualitative context, the study constructed a cohesive narrative on how food labelling impacts consumer choices in Latvia.

There are three key consumer-response dimensions that determine the effectiveness of food labelling in promoting sustainable consumption: awareness, trust, and willingness to pay. Awareness reflects how well consumers recognise and understand sustainability labels, with EU-wide data showing that 56% of Europeans identify the organic logo, providing a benchmark for Latvia [9]. Trust in labels depends on their perceived credibility, as excessive labelling schemes have been found to create confusion and skepticism, reducing their effectiveness [10]. Finally, willingness to pay assesses whether consumers are ready to spend more on sustainably labeled products, with international surveys indicating around 10% premium for such goods, a trend also observed in Latvian market studies [8].

III. Results and Discussion

An EU-wide survey indicates that taste, food safety, and price are the top factors for shoppers, whereas environmental impact ranks much lower [11].

Awareness of sustainability labels among Latvian consumers is growing, but it still lags behind Western Europe in some areas. EU survey data show that 56% of Europeans recognise the EU organic farming logo, making it the most recognised quality label in Europe [9]. In contrast, less than one in five Europeans recognise the EU's geographical indication logos (PGI/PDO), which suggests that organic is the flagship sustainability label capturing the

public's attention. While country-specific awareness levels vary, newer member states like Latvia tend to have lower recognition of EU labels due to shorter exposure. For example, a few years after joining the EU, only about 40% of Baltic consumers recognised the organic logo, according to earlier studies [12]. This number is higher now in Latvia, but still under the EU average. Local initiatives exist – Latvia has its national quality label (the "Green Spoon" or "Zaļā karotīte") to denote food made in Latvia according to high-quality standards.

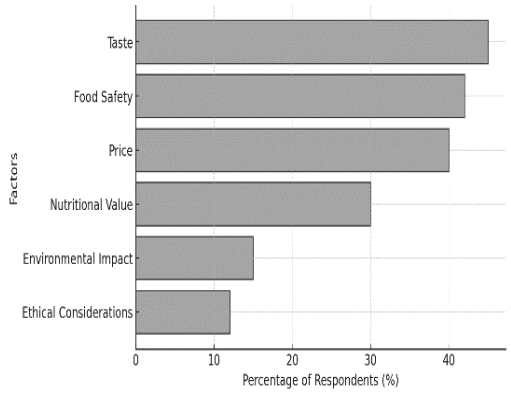

Fig. 1. Consumers' priorities when buying food in the EU. Source: European Commission, "Special Eurobarometer 505: Europeans, Agriculture and the CAP," 2020. Available: https://data.europa.eu/data/datasets/s2241_505_eng?locale=en [20].

Yet, a 2023 survey conducted by the Centre for Sociological and Political Studies (SKDS) uncovered that many Latvians overestimate their ability to identify local products from packaging alone. Over 40% believed they could tell if a product is Latvian just by the package, but when tested, only 9.8% actually correctly identified certain imported items' origins [12]. This discrepancy points to label confusion: people think they recognise local or eco labels, but in practice they are often misled by branding. As a result, 60% of Latvian respondents said the country should introduce a special label for Latvian-made products to make them easier to spot and support. This reflects a strong consumer desire for clearer origin labelling as a component of sustainability (supporting local farmers, reducing "food miles").

Latvian and Baltic consumers report high trust in labels that have official or third-party backing. A comparative study by Liobikienė & Brizga (2022) found that in Latvia and Lithuania, "confidence in green products" (i.e. trust that eco-labelled goods truly meet environmental standards) significantly influenced green purchasing behaviour [13]. In Estonia, by contrast, personal values played a slightly bigger role than trust in determining purchases. This implies that building trust in labels is especially critical in Latvia – consumers need to believe the label claims are credible.

Retail market analyses by McKinsey show that in Europe, products making environmental or social claims have seen faster sales growth than those without such claims [14]. Over a recent five-year period, goods with ESG (environmental, social, governance) labels grew about 28% in sales versus 20% for conventional products, accounting for 56% of total market growth in food and beverages. These labeled products now make up almost half of retail sales in their categories, indicating that consumer demand is gradually shifting toward sustainability. In Latvia, one can observe the increasing shelf space for organic dairy, free-range eggs, and fair-trade coffee in supermarkets, suggesting that a segment of consumers is actively seeking out and buying labelled sustainable goods. Especially among younger, urban Latvians and higher-income groups, there is a growing cohort for whom certifications like organic certifications (often referred to as "BIO" in retail markets), Fair Trade label, or Rainforest Alliance label add value to a product.

Another crucial factor is the role of retailers in integrating sustainability labels into everyday shopping practices. While consumer awareness of sustainability labels has grown significantly, the visibility and accessibility of eco-labelled products largely depend on decisions made by retail chains. In recent years, major Latvian retailers such as Rimi and Maxima have started to allocate dedicated shelf space for organic and environmentally certified products, simplifying consumer choices.

While interest in sustainable food is rising, several barriers hinder Latvian consumers from consistently choosing eco-labeled products. A significant barrier is the economic constraint arising from the combination of relatively high prices for sustainably labeled goods and comparatively low household income levels. Latvia's GDP per capita is still below the EU average, and food budgets are tight for many households [15]. Another barrier is the lack of clear information or confusion caused by the excessive number of sustainability labels available on the market. The European Court of Auditors (ECA) in 2024 reported that consumers are "exposed to a growing number of labels, logos and schemes" that are not systematically tracked [16]. A single food item might carry multiple labels (organic, fair trade, carbon footprint, etc.), which can overwhelm or confuse shoppers. Closely related is the issue of limited understanding of what labels signify. Neither the EU Commission nor Latvian authorities currently provide regular public education on sustainability labels. The ECA audit found that there is no systematic monitoring or education about consumer understanding of food labels in EU member states. As a result, many consumers do not fully grasp the significance of labels. In Latvia, older generations who did not grow up with these concepts may be unsure how e.g. a "Rainforest Alliance" label relates to their purchase.

Social and cultural factors also play a role as barriers. Interestingly, surveys have shown that Latvians (and Estonians) report slightly lower concern about climate change than the EU average, yet they exhibit some higher climate-friendly behaviour [13]. This paradox may be due to ingrained habits (e.g. home gardening, picking wild berries, which are sustainable by default but not driven by "green" ideology). As sustainable consumption gains popularity, peer influence and societal norms act as

incentives. In Estonia and Latvia, researchers found that subjective norms (perceived social pressure or encouragement) significantly influence green purchasing. If friends, family, or media in Latvia emphasise buying seasonal local produce or avoiding plastic packaging, individuals are incentivised to conform to these emerging norms.

A study on eco-label use found that consumers choose a label mostly because of the attributes it signifies (e.g. better quality, no harmful chemicals) and secondarily because of the label's reputation or credibility [17]. This means that a well-known label can serve as a shorthand for "better product" in the consumer's mind. As more Latvians become familiar with labels like Fairtrade or MSC (sustainable fisheries), these can increasingly tip the decision in favour of the labelled product, even at a slight price premium. Making labels simple and informative is a key incentive. When an eco-label is easy to understand at a glance, it can nudge even those who are not actively looking for it. For example, a "traffic light" style eco-score (rating a product's environmental impact A–E with colours) is being tested in some European markets and has shown promise in guiding choices subconsciously. In Latvia, products with such labelling can already be found on the shelves of major retail chains, including Lidl, Sky, and Rimi, where eco-certified and organic goods are increasingly promoted as part of their sustainability commitments.

Enforcement of labelling rules in Latvia falls to national authorities (primarily the Food and Veterinary Service, along with consumer rights protection centres). According to the ECA's audit, all EU member states have control systems in place for food labelling compliance. In 2024 Latvia was highlighted as one of a few countries that had not updated its multi-annual food labelling control plan as of the audit (along with Denmark, Malta, Slovenia) [18]. The European Commission followed up with Latvia on this issue, while Latvia implements EU labelling laws, there may be gaps in monitoring and enforcement capacity (possibly due to limited resources or administrative delays).

This review reveals several gaps in current research on food labelling and sustainable behaviour, especially relevant to Latvia and similar markets. First, there is a lack of country-specific consumer research in the Baltic context. Much of the literature aggregates EU consumers or focuses on larger countries. Latvia's unique cultural and economic context – such as the patriotic preference for local food and the lower purchasing power – means consumer responses to labels may differ from the EU average. There is a need for more real-world observational research on how labels actually impact behaviour (as opposed to stated preferences). Many existing studies rely on surveys or lab experiments. The 2023 review emphasised that further research should occur in real purchasing environments with representative populations [3] to capture genuine behaviour. This is especially pertinent in Latvia, where little field data exists on, for example, how the introduction of a new label or a change in label design affects sales of a product.

There is also a research gap in the interaction of multiple labels and messages. We know from broader studies that too many labels can confuse consumers, but it remains unclear how best to present multi-faceted sustainability information. It is vital to understand should environmental, social, and health information be combined into one label, or do consumers prefer separate messages. The EU is moving toward integrated labelling, yet little research has been done on how consumers in Latvia or the Baltic would react, for instance, to a single sustainability score versus separate organic and fair-trade logos.

With digital advancements, digital labelling and information access are becoming increasingly relevant, yet research in this area remains limited. In Latvia, younger consumers are likely to use smartphone apps to scan QR codes for detailed product information, as some companies already provide links to sustainability reports. Investigating whether Latvian consumers actively engage with digital sustainability information and how it influences their trust and purchasing decisions would contribute to understanding this emerging trend [19].

Finally, a critical gap highlighted by policy auditors is the lack of systematic monitoring of consumer needs and understanding [18]. This is not just a policy gap but a research opportunity.The lack of continuous data on how well consumers comprehend labels, both at the EU and Latvian levels, highlights a critical research opportunity.

IV. Conclusions

Food labelling plays a critical role in shaping not only consumer choices but also broader industry practices and public policy. In Latvia and the Baltic region, the growing prevalence of sustainability labels reflects a wider movement towards greener consumer behaviour. Although taste and price remain the primary drivers of food purchases, clear and credible labels have the potential to gradually shift consumer priorities toward sustainability.

The findings of this study show that food labels are effective only when they are easily understandable, trustworthy, and supported by proper certification. In Latvia, the strong cultural support for local products and increasing environmental awareness offer a unique opportunity to promote responsible consumption through sustainability labelling. However, barriers such as high prices, label confusion, and limited consumer education still inhibit the full impact of these initiatives.

Importantly, food labelling should be seen as more than just an informational tool — it acts as a catalyst for responsible and sustainable consumer behaviour. Well-designed labelling can bridge the gap between consumer values and actual purchasing decisions, motivating individuals to make choices that align with environmental, ethical, and social goals. Therefore, making food labels a truly effective tool for sustainable consumer behaviour, it is essential to build trust through strict regulation, simplify labelling schemes to reduce consumer confusion, and invest in public education efforts.

Future research should prioritise studying real-world purchasing behaviour and testing integrated labelling strategies in the Latvian context. By strengthening the link between labelling practices and sustainable consumption, policymakers and businesses can foster a more responsible, environmentally conscious consumer culture.

REFERENCES

[1] European Court of Auditors, "Food Labelling in the EU: Consumers Can Get Lost in the Maze of Labels", Special Report 23/2024, Luxembourg: Publications Office of the European Union, 2024. [Online]. Available: https://www.eca.europa.eu/en/publications?ref=SR-2024-23 [Accessed: Jan. 11, 2025].

[2] B. Stancu, M. Jakobsen, and K. Larsson, "Sustainability Labels and Consumer Behavior in the Baltic States," in Sustainability and Consumer Behaviour, A. Kasim, Ed. Basel, Switzerland: MDPI, 2022. [Online]. Available: https://doi.org/10.3390/books978-3-0365-4957-6 [Accessed: Feb. 12, 2025].

[3] B. Cook, J. Costa Leite, M. Rayner, S. Stoffel, E. van Rijn, and J. Wollgast, "Consumer Interaction with Sustainability Labelling on Food Products: A Narrative Literature Review," Nutrients, vol. 15, no. 17, p. 3837, 2023. [Online]. Available: https://doi.org/10.3390/nu15173837 [Accessed: Feb. 12, 2025].

[4] K. Naglis-Liepa, L. Paula, L. Janmere, D. Kaufmane, and L. Proskina, "Local Food Development Perspectives in Latvia: A Value-Oriented View," Sustainability, vol. 14, no. 5, p. 2589, 2022. [Online]. Available: https://doi.org/10.3390/su14052589 [Accessed: Feb. 12, 2025].

[5] K. Nes, F. Antonioli, and P. Ciaian, "Trends in Sustainability Claims and Labels for Newly Introduced Food Products Across Selected European Countries," Agribusiness, vol. 40, no. 2, pp. 371–390, 2024. [Online]. Available: https://doi.org/10.1002/agr.21894 [Accessed: Feb. 10, 2025].

[6] N. Gokani, "Policy Developments on Labelling for a More Sustainable Food System," European Journal of Public Health, vol. 33, Supplement 2, 2023. [Online]. Available: https://doi.org/10.1093/eurpub/ckad160.078 [Accessed: Feb. 10, 2025].

[7] European Commission, "Ecodesign for Sustainable Products Regulation", 2024. [Online]. Available: https://commission.europa.eu/energy-climate-change-environment/standards-tools-and-labels/products-labelling-rules-and-requirements/ecodesign-sustainable-products-regulation_en [Accessed: Jan. 26, 2025].

[8] PwC, "Consumers willing to pay 9.7% sustainability premium, even as cost-of-living and inflationary concerns weigh: PwC 2024 Voice of the Consumer Survey," May 15, 2024. [Online]. Available:https://www.pwc.com/gx/en/news-room/press-releases/2024/pwc-2024-voice-of-consumer-survey.html [Accessed: Feb. 02, 2025].

[19] [G. Torma and J. Thøgersen, "Can a Meta Sustainability Label Facilitate More Sustainable Consumer Choices?", Business Strategy and the Environment, vol. 33, no. 2, pp. 283–306, Feb. 2024. [Online]. Available: https://doi.org/10.1002/bse.3488 [Accessed: Feb. 10, 2025].

[9] European Commission, "Public opinion on the common agricultural policy," 2024. [Online]. Available: https://agriculture.ec.europa.eu/common-agricultural-policy/cap-overview/cap-glance/eurobarometer_en [Accessed: Jan. 26, 2025].

[10] E. Boonen and H. Borgers, "Guiding through 'the maze of food labelling' – The most recent European Court of Auditors 'special report," Bird & Bird, Dec. 20, 2024. [Online]. Available: https://www.twobirds.com/en/insights/2024/netherlands/guiding-through-the-maze-of-food-labelling--the-most-recent-european-court-of-auditors-special-repor [Accessed: Jan. 17, 2025].

[11] Euroseeds, "Europeans prioritise taste, food safety and cost over sustainability concerns when purchasing food," Dec. 17, 2020. [Online]. Available: https://euroseeds.eu/news/europeans-prioritise-taste-food-safety-and-cost-over-sustainability-concerns-when-purchasing-food/ [Accessed: Jan. 11, 2025].

[12] Latvian Agricultural Organisations Cooperation Council (LOSP), "SKDS Survey: 60% of Residents Want Clear Labelling of Food Products Regarding Their Country of Origin", Oct. 25, 2023. [Online]. Available: https://www.losp.lv/post/skds-p%C4%93t%C4%ABjums-60-iedz%C4%ABvot%C4%81ju-v%C4%93las-skaidru-mar%C4%B7%C4%93jumu-p%C4%81rtikas-produktiem-par-to-izcelsmes-valsti [Accessed: Feb. 02, 2025].

[13] G. Liobikienė and J. Brizga, "Sustainable Consumption in the Baltic States: The Carbon Footprint in the Household Sector," Sustainability, vol. 14, no. 3, p. 1567, 2022. [Online]. Available: https://doi.org/10.3390/su14031567 [Accessed: Feb. 10, 2025].

[14] McKinsey & Company, "Consumers care about sustainability—and back it up with their wallets," 2024. [Online]. Available: https://www.mckinsey.com/industries/consumer-packaged-goods/our-insights/consumers-care-about-sustainability-and-back-it-up-with-their-wallets [Accessed: Feb. 02, 2025].

[15] European Commission, "Economic Indicators for Latvia," 2024. [Online]. Available: https://ec.europa.eu/eurostat [Accessed: Jan. 26, 2025].

[16] European Court of Auditors, "The complexity of food labelling schemes," 2024. [Online]. Available: https://www.eca.europa.eu/ECAPublications/SR-2024-23/SR-2024-23_EN.pdf [Accessed: Jan. 30, 2025].

[17] O. Tiboni-Oschilewski, A. Gatti, A. Romanelli, E. Guarino, and M. Nobile, "Strengths and Weaknesses of Food Eco-Labelling: A Review," Frontiers in Nutrition, vol. 11, 2024. [Online]. Available: https://doi.org/10.3389/fnut.2024.1381135 [Accessed: Feb. 10, 2025].

[18] European Court of Auditors, "Official Controls Regulation," 2024. [Online]. Available: https://www.eca.europa.eu/ECAPublications/SR-2024-23/SR-2024-23_EN.pdf#:~:text=analysis,%20complaints,%20and%20ad%20hoc,The%20Official%20Controls%20Regulation [Accessed: Jan. 30, 2025].

European Commission, "Special Eurobarometer 505: Europeans, Agriculture and the CAP," 2020. [Online]. Available: https://data.europa.eu/data/datasets/s2241_505_eng?locale=en [Accessed: Jan. 26, 2025].