# Barriers to the Development of Consumption Sustainability: the Consumers' Perspective on the Food Markets

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Abstract. This publication aims to present barriers to the development of sustainable food consumption from the perspective of consumers. The purpose of the research was to use the results of own research and other authors, supplemented with the knowledge and experience of the author, using the method of desk research. The information gathered by the author (based on own research) on the risks resulting from the implementation of a sustainable consumption model allowed to identify barriers to the development of sustainable consumption from the perspective of consumers and to categories them. The study shows that the development of sustainable consumption is associated with a number of barriers, such as 1) economic barriers (higher prices, supply-related costs), 2) time barriers (higher time expenditure for balancing the consumption model in relation to conventional consumption, in conjunction with the preparation of meals on the farm domestic and self-supply issues and as a result of searching for appropriate products), 3) organisational barriers (need to involve new rules, selfcontrol), 4) social barriers (dissatisfaction of the household, new fashion, refusing pleasure), 5) barriers resulting from market imperfections (difficult access to products, narrow range, insufficient information). The results obtained are useful for government institutions, production and trade companies operating in the agri-food sector as well as pro-environmental and prosocial organisations that, knowing what constitutes a barrier to balancing consumption, these forms of behaviour, can design strategies to achieve positive results in areas related to the environment, economy and society.

Keywords: Consumption-Sustainability, Consumers', Barriers, Development.

## 1 Introduction

The interest in the issue of sustainable consumption has been observed at the beginning of the 1990s on the international arena and resulted from the concept of sustainable development [19, 20]. Domestic and international research on understanding and defining sustainable consumption emphasises the following: 1) stressing that it takes different positions regarding the extent to which sustainable consumption refers to consumerism, lifestyle and consumer behaviour, thereby pointing out that consumer

activity and consumer behaviour are an area of interest, 2) focusing on production processes and consumer products, stressing that balancing consumption is mainly achieved through more efficient production of sustainable products, and 3) consciously combining these issues [6, 11, 12, 14, 17, 18, 21, 22].

The concept of sustainable consumption and production assumes that the development of societies is based on the principles of justice in the social dimension, respect for existing resources, and care for future generations. This idea collides with the reality of the modern world, within which the diversity of the standard of living is promoted by increasing consumption and production, thereby bringing adverse effects on the environment. The market with a significant impact on the environment is among others the food market, which is characterised by market imbalance, excess food production, uneven food consumption (i.e., with about 20% of the population realising food expenses below the minimum subsistence income) in Poland. The level of expenditure on food, alcoholic beverages and tobacco in total household expenses was just over 24% in 2017 in Poland and is characterised by low dynamics [8].

The agri-food sector in Poland offers consumers goods produced by various industries to meet their current and future needs and to provide satisfaction to consumers. The consumption model in Poland is becoming to assemble the consumption model of Western countries. Consumerism is developing intensively and, in opposition to it, alternative directions of changes in consumption, among others rationalisation of consumption, sharing, de-consumption, eco-consumption, thereby moving towards the sustainable consumption, emerging under the influence of globalisation and being a consequence of its dynamic socio-economic changes [6, 21, 22].

Sustainable consumption is described as a favourable and versatile trend. Earlier results of the author's research indicate, however, that many consumers still identify sustainable consumption with greening, which narrows the concept. Often, the awareness of this concept is not related to consumer behaviours, which are in line with the trend of sustainable food consumption. This element is the result of, among others, economic coercion and still strong consumerism. The perspectives of balancing consumption depend on the ability to raise the level of innovation of consumers, as well as enterprises, scientific and governmental institutions [15]. Creating an environment conducive to the creation and development of innovative behaviours aimed at balancing consumption requires bringing together academic communities, industry, government and civil society organisations to jointly design interventions that facilitate progress towards a more sustainable future. In the context of this issue, it is essential to know the opportunities and threats and the barriers to balancing consumption. This issue can, therefore, be considered from different perspectives:

- Consumers: e.g. the degree of acceptance of the sustainable consumption model,
- Enterprises: e.g. incentives to develop products and provide services aimed at implementing a sustainable consumption model,
- Local authorities and other entities of a regional or local nature: for example, ensuring sustainable consumption through products and services for the benefit of local and regional communities, and

• Countries: for example, economic policy tools that ensure the effective functioning of the sphere of consumption and production.

This publication aims to present barriers to the development of sustainable food consumption from the perspective of consumers. This study is a theoretical introduction, based on a review of the subject literature and presents the result of the author's analysis.

## 2 Data and Methods

The purpose of the research was to use the results of own research and other authors, supplemented with the knowledge and experience of the author, using the method of desk research. Primary materials came from a survey. As part of our own research, primary materials were used from a questionnaire study carried out using direct interview technique in the Department of Economics and Economic Policy in Agribusiness at the Poznań University of Life Sciences, in 2017. The survey was carried out among the citizens of Greater Poland. Respondents were selected by quota and purposive sampling method. This approach enabled to build the sample structure so that it could correspond with the structure of citizens in Greater Poland per age and sex. There were 433 interviews conducted in total.

Out of all age thresholds, 18.54% of them were women, and 46% were men. The interview was representative as it encompassed similar numbers of respondents of both sexes concerning latest demographic data of the Polish Central Statistical Office (pol. Główny Urzad Statystyczny), that show that the population of women in Poland is higher compared to men and amounts to 51.50%. Most of them were respondents from the age group 35-44 (over 19%, with 52% of them being women and 48% being men). The next ones, regarding the number, were three age groups: 18-24, 25-44 and 55-64, each of them having ca. 16.40% share in the surveyed group. The group "65 and more" was slightly smaller (15.90%). In the sex structure, the most distinguishing was the first age bracket- 59% of women and 41% of men. These differences did not have any negative impact on the results of the conducted surveys. They also did not vary from other commonly available surveys. Both for women and men, the average age amounted to 44 years with some minor differences. The survey was conducted in 74 locations; the largest group were citizens of Poznań (43%). People with higher education prevailed (33%). 45% of respondents claimed they had an average standard of living in that they can afford every-day living expenses, but they have to save money for more expensive items.

The study was one of many studies leading to a deeper understanding of the issue under consideration in the related project and analysis of consumer behaviour in the context of sustainable consumption. For the purpose of preparing the presented publication, the answer to questions regarding consumer awareness on the concept of sustainable consumption and threats related to the adoption of such a consumption model within own households was used, among others with the following question: "How can you describe what the concept of sustainable food consumption means?", "What do you think are the risks of adopting sustainable consumption in your

household?". Respondents identified the main risks of sustainable consumption. Then, the author identified barriers to sustainable consumption on the basis of the material collected.

There were open- and closed-ended questions. Closed-ended questions are used when a researcher wants to diagnose respondents' attitudes to selected categories (units). Open-ended questions enable the respondent's freedom of expression. The method used for the examination of the research question was a content analysis used for surveying, e.g., press articles, posts on Internet forums, etc. An important element of content analysis is the creation of the system of statement categorisation (so-called key), which is used for assigning respondents' statements into a suitable category. This analysis enabled the quantitative analysis of an open-ended question. The key was created using a new technique, in which categories are created only from collected empirical data created by respondents' spontaneous statements, and the final key contained the set of categories. The unit of analysis was a respondent's statement that contained an answer to the question mentioned above. For example, in one statement a respondent could disclose more than one risk caused by changing into sustainable consumption in a household (question with multiple answers). Subsequently, the answers were subject to a factual analysis using the elements of a content analysis developed by Berelson [1].

## 3 Results and Discussion

Based on the collected research material and knowledge about the market, barriers to balancing the model of food consumption from the consumers' perspective have been formulated (Table 1). As part of the research, respondents were asked to specify the main threats related to the implementation of a sustainable consumption model and based on the collected material, barriers to the course were identified, the possibility of balancing consumption within households, in extreme cases even preventing them. These barriers are an expression of the real problems of many members of society.

Economic barriers - related to the source of financial power of the household and its level, as well as the changeability of socio-economic conditions. Income and finances of households are the most important economic factors affecting the quantity and quality of food consumed. Occurrence of increased ("too high") costs of consumption, due to its balancing (e.g., determined by lower earnings of persons with a lower level of education). High costs of such consumption as a result of searching for, purchasing and consuming better products of higher quality (including health-related products, organic food), where households characterised by a better financial situation show a higher tendency to introduce such changes. Such products should exceed common goods regarding quality, functionality, user attributes and innovation. New solutions often interfere with earlier, developed ways of planning and organising supply processes, entailing incurring higher costs resulting from the method of supply. In this context, lack of willingness of consumers to incur higher costs for purchasing products from sustainable production should be emphasised.

**Table 1.** Barriers to the development of sustainable consumption from the perspective of consumers and their categorisation.

Economic barriers	Time barriers	Organisational barriers	Social barriers	Barriers resulting from market imperfections
Higher prices	Higher expenditure of time for balancing the consumption model in relation to conventional consumption	The need to be involved in the implementation of new rules	Unhappy family members	Difficult access to products
Costs related to procuremen	Higher time expenditure as a result of searching for appropriate products	The necessity for self-control	New fashion	Narrow assortment
	Higher expenditure of time in connection with the preparation of meals within the household and the issue of self-help		Refusing of pleasure	Insufficient information

Time barrier – is related to the need to incur higher time expenditure in shaping consumption (e.g., at the expense of free time). Following the idea of balancing of consumption, the consumer prepares and consumes meals composed from relevant products, with high participation of own work, in the right place and time. This approach generates the occurrence of higher time expenditure for the balancing of the consumption vis-a-vis the traditional consumption. It may require a reorganisation of activities of its members. Due to the time-consuming nature of such processes, consumers may not want to get involved (for example, the time (cost) of recognition, related to the study of various markets to determine the scope of possibilities that the buyer will be able to include for consideration). Taking more time out of searching for the right products may require from consumers the identification of essential features of these products (including type, composition, authenticity, functionality, durability, ecological or natural character). The method of satisfying the needs of consumers (prevailing food freedom) within the household is continually changing (mainly qualitatively) that would also have to be included in the process of balancing consumption. In turn, higher expenditure of time in connection with the preparation of meals within the household and the issue of self-supply may result from the use of goods manufactured by the consumer for his own needs (as a consumption excluding the market). Using the means of consumption supplemented in the household as part of its production and service activities require more time than its members have at their disposal. Location in the city (and not in the countryside) may additionally affect the relatively low share of self-supply in the household.

Organisational barriers - occur for consumers due to the need to be involved in the implementation of new rules, including related to meeting environmental, ethical,

ecological standards, care for the natural environment, etc. Consumers need to consider how to increase the share of products from organic production and how to proceed according to the rules and methods of waste recycling. In addition, they have to search for information, track messages on the Internet, television, buy only those dishes that will be consumed in the household. The necessity of self-control, among others, concerning the method of making purchases (e.g. making purchases based on and shopping list), choosing the selection, using them, the way of getting rid of, wastage are essential barriers to support the idea of sustainable food consumption.

Social barriers – relate to the appearance of dissatisfaction of household members to undertake new, additional activities for the benefit of the household and the need to balance consumption. In this regard, there is a need to change personal habits and those of family members. As a consequence, consumers may not achieve the tangible effects of balancing consumption within the household due to the lack of commitment of all members. Lack of social ability (balancing consumption) associated with greater selfcontrol and rupture (change) of previous habits is associated with conscious refusing of pleasure (following the principle of "here and now" or waiting for future effects). By taking the form of a microtrend, it can exhibit opposite, abolishing, and synergistic tendencies towards the desired consumption model. An important issue is the direction and method of its development (e.g., that waste phenomenon not grow in the sphere of consumption). Sustainable food consumption includes two critical aspects: 1) the need to pay attention to insufficient food consumption, and 2) the growing consumer group and their very high level of consumption. Actions for a high quality of life and balancing the consumption of food are the desired direction of change. However, the required change in society must be based on increasing the knowledge of consumers and other market participants about sustainable food consumption.

Therefore, one should look for solutions for mitigating barriers and developing practices and behaviours that help preserve the natural resources we manage. Based on the available literature, the author has formulated barriers related to the balancing of consumption, including the financial situation, in the scope of specifying the concept of "sustainable consumption", seasonality of production and products, the lack of knowledge and awareness of consumers about sustainable products. The financial barrier associated with a higher subjective assessment of the financial situation is conducive to the interest in sustainable consumption. Better financial situation increases consumers' willingness to spend more money on organic products and local food. Positive consumer opinions on the financial situation are critical, as consumers may be more likely to buy premium food products in the future [11].

Solutions should be sought for mitigating barriers and developing practices and behaviours that allow us to preserve the resources we manage. The review of the bibliography related to the issue of barriers to consumption balance entitles us to state that the authors attempt to explain the incoherence observed in consumer behaviour in the area of sustainable consumption due to threats to its development. They propose a conceptual framework that takes into account different attitudes and barriers and explains how they are related to sustainable consumption behaviour. For example, among the barriers affecting decision-making regarding sustainable consumption, the following are mentioned: personal, behavioural and socio-cultural [4, 5, 10].

The subject of consideration is also the review of sustainable consumption as a subject of policy and research, drawing attention to the challenges associated with the development of communication campaigns that will motivate a wide range of society to engage in a more sustainable lifestyle [12, 13].

The size of the concept of sustainable consumption as well as the complexity of the phenomenon itself, make researchers also identify other barriers related to the balancing of consumption. For example, by including barriers relating to the financial situation, how to specify the concept of "sustainable consumption", the seasonal nature of production and products, lack of knowledge and awareness of consumers about sustainable products, lack of acceptance of sustainable consumption [2, 3, 6, 9, 11, 12, 13, 17, 23].

The process of balancing consumption requires effort to improve efficiency, change consumption patterns and reduce consumption. Both domestic and foreign surveys confirm that these difficulties result from increased consumption, environmental impact, demonstrative effects of developed countries and consumerism [12].

## 4 Conclusion

The results of research on the development of sustainable consumption from the perspective of consumers allow formulating several conclusions. Consumers in their environment observe the existence of barriers to the balancing of the model of food consumption within households. From the consumers' perspective, the following barriers limit the development of the sustainable food consumption model:

- Economic barriers higher prices, costs related to supplies;
- Time barriers higher expenditure of time in connection with the preparation of
  meals within the household and the issue of self-supply, higher expenditure of time
  as a result of searching for appropriate products;
- Organisational barriers the need to engage in the implementation of new rules, the need for self-control;
- Social barriers dissatisfaction of household members, new fashion, refusing pleasure;
- Barriers resulting from market imperfections restricted access to products, narrow range, and insufficient information.

These results are useful for governmental institutions, production and trade companies operating in the agri-food sector as well as pro-environmental and prosocial organisations that, knowing what constitutes a barrier to balancing consumption, these forms of behaviour, can design strategies to achieve positive results in areas related to the environment, economy and society.

The material presented above is a fragment of the author's broader research, seeking to evaluate the direction of changes in consumption, and is a research challenge raising a significant issue within the framework of economic and social sciences. Consumers in their environment perceive the existence of barriers related to the adoption of a sustainable consumption model while displaying a different level of knowledge on this

topic. As part of the article (due to the limited number of pages), no analysis was provided to identify the most critical barriers from the consumers' perspective. This element requires additional verification of the collected material taking into account the number of indications, assessment of the importance of barriers and will contribute to the next publication.

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