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Consumer attitudes in the light of the concept of sustainable consumption in Lubuskie voivodeship against the background of trends in consumption in Poland

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Consumer attitudes in the light of the concept of sustainable consumption in Lubuskie voivodeship against the background of trends in consumption in Poland

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Keywords: *consumers' behaviours, sustainable consumption, trends in consumption, Lubuskie voivodeship*

Abstract

Research background: The article has address the issue of sustainable consumption which is becoming increasingly important on account of the adverse social and environmental consequences caused by the development and growth of societies. Sustainable consumption encourages to make rational choices and take responsibility for one's choices. Consumers take a number of decisions every day that affect not only themselves, but also cause externalities. There are many studies that indicate that consumers when buying goods and services are driven by environmental and ethical considerations.

Purpose of the article: Changes occurring in the environment affect consumer behavior leading to multiplicity of attitudes and changes in consumption trends. The article has shown consumer behavior in line with the concept of sustainable development against the background of trends in consumption in Poland.

Methodology/methods: The basis for the discussion in the article will be: literature studies, available empirical studies and our own results of the survey among respondents in Lubuskie voivodeship. Surveys using questionnaires were directed at 541 respondents. The number of correctly completed questionnaires was 500, and the figures contained in them were subjected to further analysis.

Findings: Respondents in their purchasing choices are not guided by the influence of the consumption on the natural environment. However, in their behaviors we can notice some environmental measures, which stem from different reasons, depending on the socio-economic conditions.

Introduction

Consumption is an inseparable part of our lives. Products which we consume have a greater or lesser impact on the natural environment. Rational, from the perspective of permanent sustainability appropriate approach to purchase products can reduce the progressive degradation of the natural environment. Reducing the negative impact of human activity on the environment is possible through the implementation of the principles of sustainable consumption. A higher level of environmental awareness contributes to take environmental actions, and thus reduce the negative impact on the natural environment resulting from unbalanced (excessive) consumption. On the one hand, consumption is regarded as a factor of socio-economic development, on the other, the way we consume has more or less impact on the environment. If consumption is done in an excessive, unbalanced way in an extreme case at negative marginal utility it contributes to a greater extent to the environmental problems, such as, pollution and global warming (the greenhouse effect). Sustainable consumption refers to consumer goods and services and the use and disposal of them. It relates to consumer behavior and lifestyles.

Sustainable consumption means the method of using the goods and services, which corresponds to meeting the needs of bringing a better quality of life, but on two conditions completed at the same time (Jastrzębska-Smolaga, 2000, p. 73):

- the realisation of these objectives will be accompanied simultaneously by dramatical reduction of the consumption of natural resources and energy, reduction of waste emissions and pollution of the environment and the stop of using toxic materials,
- obtaining a better quality of life by the present generation will not become an obstacle to satisfying realisation of the needs of future generations.

Sustainable consumption plays an important role in minimizing the negative environmental impact resulting from the processes of mass unsustainable consumption. Striving to achieve sustainable development depends on both the behavior of consumers as well as producers.

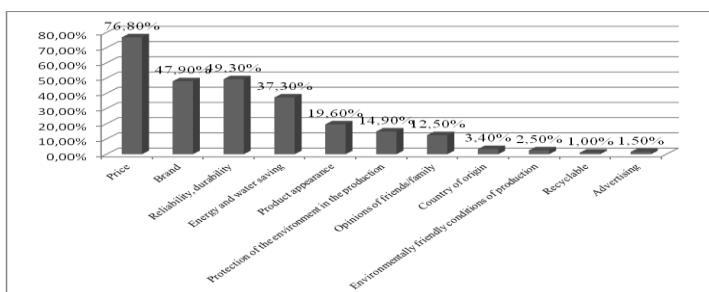
The aim of the article is to show the consumer behavior in line with the concept of sustainable development against the background of trends in consumption in Poland. Furthermore, the objective is to get to know the opinion of the respondents concerning the assessment of the state of the

environment where they live, as well as measures to improve the environment in Lubuskie voivodeship. An attempt has also been made to identify the activities related to the implementation of environmental solutions by households in relation to sustainable development and the factors motivating them to this type of solutions.

Consumer behavior towards sustainable consumption

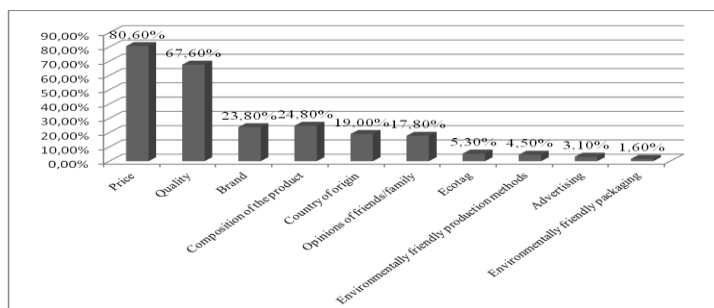
Recently a lot of changes and new trends in consumer behavior have been seen. According to the report of the Institute for Sustainable Development entitled: Environmental awareness of Poles - sustainable development (Bołtromiuk, 2009, p. 4) consumers are guided primarily by the price of purchased products for both food (Fig. 1), and industrial products (Fig. 2). Therefore, what dominates are the typical microeconomic stimuli conditioned by market structure. This can reduce the importance of sustainable consumption because of the cost of current consumption. Thus, ignoring the intertemporal choice for the consumer in the current period in accordance with the marginal calculation, it will be preferable to refer to lower economic costs, often associated with products negatively affecting the environment. Noteworthy is the fact that a larger percentage of respondents draw attention to environmental selection criteria for the purchase of industrial products than in the case of purchasing food products. However, in both cases, environmental protection criteria are important for a small percentage of the respondents.

Figure 1. Selection criteria for food products



Source: Bołtromiuk, 2009, p. 4

Figure 2. Selection criteria for industrial products



Source: Boltromiuk, 2009, p. 4

Research on consumer behavior has shown that consumers today are guided by more ethical and environmental issues in the choice of purchased goods and services (Gutkowska & Batóg, 2016, p. 28). Ethical consumption means buying products that have been produced with respect for fundamental human rights and the environment (Gutkowska & Batóg, 2016, p. 28). It is also worth noting that the issue of building a single market for environmentally friendly products has been the subject of public opinion surveys in 28 countries of the European Union on behalf of the European Commission in 2012 (Flash Eurobarometr 367...2012, p. 1). The results show that consumers are convinced of the rightness of the use of environment-friendly products, that with these products state of the environment can be improved. Respondents were also convinced that buying environmentally friendly products will be conducive to positive patterns to follow. This is, however, in conflict with previously presented results of studies which showed low significance of environmental conditions on consumer purchasing behavior. Thus arises a kind of gap between the aspirations of consumers and their actual choices on the market.

The research by S. Bamberg and G. Mösera (2007, pp. 14-25) and J. M. Hines, H. R. Hungerford, and A.N. Tomer (Hines *et al.*, 1986/87, pp. 1-8) on the ecological behavior of consumers showed that the ecological consumer behavior is determined by internal factors, and is manifested to the greatest extent by young people as well as people with higher education and higher income.

The report on The study of consciousness and behavior of ecologic Polish population conducted in 2014 by TNS Poland for the Ministry of Environment shows that, on the one hand, consumers are confident about the individual responsibility for the environment, and on the other hand, the

popularity of consumer behavior supporting environmental protection is still limited (*Badanie świadomości i ...2014*, p. 10).

Materials and methods of research and the characteristics of the research sample

Empirical research using the method of questionnaires were conducted from May to September 2016 among the inhabitants of the Lubuskie voivodeship. The selection of respondents was random using the method of layer selection. In the research proceedings a total of 541 questionnaires were collected, including the correctly filled amounted to 500, and the figures contained in these questionnaires were subjected to further analysis. The characteristics of the study sample are presented in Table 1.

Table 1. Characteristics of the research sample

| Specification | Respondents | |
|--------------------|-------------|---------|
| | Number | Percent |
| Sex | | |
| Female | 318 | 63.6 |
| Male | 182 | 36.4 |
| Place of residence | | |
| City | 238 | 47.6 |
| Village | 262 | 52.4 |
| Education | | |
| Vocational | 14 | 2.8 |
| Secondary | 226 | 45.2 |
| Higher | 260 | 52.0 |

Source: own calculations based on the research

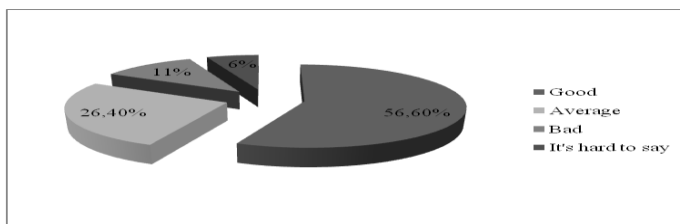
In the group of 500 respondents about 64% were women, and more than 36% men. Of the 500 respondents over 47% were residents of the city, and the rest inhabited villages. Considering education, more than half of the respondents (52%) declared higher education, more than 45% - secondary education, and the rest - vocational education (about 3%).

Analysis of the results of the research

The state of the environment is affected by everyday consumer behavior. It is necessary to get to know the opinion about the assessment of the overall state of the environment in the place of residence of the respondents and about the actions conducive to its improvement, as well as to identify the key factors that influence consumers to make implementation of environmentally friendly solutions towards sustainable consumption.

Respondents' opinions regarding the assessment of the state of the environment at their place of residence are shown in Figure 3.

Figure 3. Respondents' opinions regarding the assessment of the overall state of the environment at their place of residence



Source: own study

According to data contained in the figure, more than half of the respondents (about 57%) assess the state of the environment at their place of residence as good. The percentage of people indicating the average state of local environment was about 27%. 11% of respondents perceive the environment as bad, and 6% did not have their own opinion on the subject. This is a social assessment. However, it is a basis to purchasing decisions. Such a high evaluation of the environment may to some extent explain the lesser importance of environmental conditions on the purchasing decisions identified in previous studies. Despite this positive assessment of the surrounding environment, respondents see the need for a wide range of measures to improve it (Table 2).

Among the activities that should be pursued to improve the environment in the Lubuskie voivodeship, the most important were those associated with support for greater use of green energy projects (biofuels, solar, wind energy, etc.), secondly, those that lay the foundation for the modern municipal waste management, providing an increase in the recovery of waste, and thirdly, environmental education (Table 2).

Table 2. Opinions of respondents on measures to improve the environment in the Lubuskie voivodeship

| Specification | Number of indications | Indications percentage [%] | Percentage of respondents [%] (n=500)* |
|--|-----------------------|----------------------------|--|
| Support for the projects, greater use of green energy (biofuels, solar, wind energy, etc.) | 383 | 11.3 | 76.6 |
| Creating the basis for a modern municipal waste management, providing an increase in the recovery of waste | 319 | 9.4 | 63.8 |
| Environmental education | 313 | 9.2 | 62.6 |

| | | | |
|---|------|-------|------|
| | | | |
| Construction and modernization of the sanitary sewage system | 283 | 8.3 | 56.6 |
| Increasing the level of recovery of industrial waste | 261 | 7.7 | 52.2 |
| The introduction for all residents of the need to segregate waste | 249 | 7.3 | 49.8 |
| Elimination of uncontrolled discharges and discharges of untreated sewage from cities and industrial plants | 248 | 7.3 | 49.6 |
| Promoting the production and distribution of energy from renewable sources | 239 | 7.1 | 47.8 |
| Conversion of existing heating systems in public buildings to more environmentally friendly, in particular the reduction of „low emission” | 238 | 7.0 | 47.6 |
| Introduction of modern technologies in the industry and energy in order to reduce the water-holding capacity, material consumption, waste generation and energy intensity of production and the reduction of emissions to the environment | 228 | 6.8 | 45.6 |
| Construction and modernization of the sanitary sewage wastewater treatment plant | 226 | 6.6 | 45.2 |
| The modernization and development of urban heating systems in the public domain in order to reduce emissions and improve energy efficiency | 161 | 4.8 | 32.2 |
| Promoting energy efficiency and use of renewable energy sources in enterprises | 127 | 3.8 | 25.4 |
| The necessity to refrain from unjustified use of groundwater for industrial purposes | 116 | 3.4 | 23.2 |
| Total | 3391 | 100.0 | - |

Comments: *The share of respondents did not add up to 100%, respondents could give more than one answer

Source: own calculations based on the research

It is worth noting that it may appear surprising that environmental education ranks third among the activities, which the respondents think should be pursued to improve the environment in the Lubuskie voivodeship. An important task of environmental education is to gain environmental knowledge, but above all, a change of consumer behavior, their lifestyles.

The table shows the actions that are implemented by the respondents in favor of sustainable development, which is inseparable from sustainable consumption (Table 3).

This stimulates a change in the structure of consumption in terms of energy, the composition of the products, their packaging and technologies used in their production. Some of these activities mean the need to increase current costs for consumers which contributes to the reduction of social and environmental costs, both current and future.

Table 3. Implementation of environmental solutions by households and the purchase of food as well as eating habits in relation to sustainable development

| Specification | Number of indications | Indications percentage [%] | Percentage of respondents [%] (n=500)* |
|--|-----------------------|----------------------------|--|
| Using reusable bags | 396 | 21.9 | 79.2 |
| Segregating of waste | 342 | 18.9 | 68.4 |
| Equipment of houses/flats in energy-efficient lighting | 316 | 17.4 | 63.2 |
| Buying products that are produced in an environmentally friendly way (organic products) | 302 | 16.7 | 60.4 |
| Economical water use | 167 | 9.2 | 33.4 |
| Turning off the phone chargers, computers and other equipment when not in use | 165 | 9.1 | 33.0 |
| Equipment of houses/flats in household appliances that guarantee less consumption of electricity | 123 | 6.8 | 24.6 |
| Total | 1811 | 100.0 | - |

Comments: *The share of respondents did not add up to 100%, respondents could give more than one answer

Source: own calculations based on study

The study shows that more than 79% of respondents when making purchases use reusable bags, and more than 68% segregate waste. Almost every second equips their houses/homes in energy-efficient lighting, and more than 60% buy organic food products. Almost every third person declares to use less water. More than 33% turn off phone chargers, computers and other equipment when not in use.

Of significant importance are the purchase reasons for the choice of implementation of environmental solutions by households (Table 4).

Table 4. Motives for the implementation of environmental solutions by households

| Specification | Number of indications | Indications percentage [%] | Percentage of respondents [%] (n=500)* |
|---|-----------------------|----------------------------|--|
| Economising (economic factor) | 421 | 55.5 | 84.2 |
| Concern for the environment | 171 | 22.6 | 34.2 |
| Influence of other people (family/friends/ environment) | 121 | 16.0 | 24.2 |
| Environmental campaigns | 45 | 5.9 | 9.0 |
| Total | 758 | 100.0 | - |

Comments: *The share of respondents did not add up to 100%, respondents could give more than one answer

Source: own calculations based on study

Analyzing the motives of the implementation of environmental solutions by households it can be seen that more than 84% implement them due to economic factors. Almost every third person pointed to environmental concerns, while one in four take such action under the influence of others.

In contrast, various types of environmental campaigns are not a key argument for the implementation of environmental behaviour. Only a small percentage of people (9%) indicated that under the influence of campaigns do they show concern for the environment. Thus, this indicates the importance of incentives of an economic nature on the shaping of purchasing attitudes of individual consumers in reaching sustainable consumption. This is consistent with the initial test results indicating, on the one hand, the interest in factors, and on the other, the dominance of the microeconomic pricing mechanism conditioned by price-profitable factors. At the same time it points to the importance of conscious economic policy operating with economic incentives which contribute to the change in the balance of consumer's marginal calculation.

Conclusions

It is undoubtable that year by year the negative impact of the processes of mass consumption on the environment increases. An important step is to realize the needs of consumers and the need to protect the environment. Gaining knowledge in this field and forming a sense of responsibility among consumers for the natural environment in the face of today's threats seems to be insufficient. It is necessary to engage consumers in joint activities and projects that would arise in cooperation with them. Undoubtedly, an important informative value for companies, state and local authorities is to identify the factors contributing to the interest in sustainable consumption. As is often indicated by the results of the research dealing with these problems the main motivator for action on sustainable consumption is the economic incentive that contributes to modify consumers' behavior. The test results should not be surprising, because the determinants of consumer behavior are: the amount of income that consumers have and the prices of goods and services, that is, economic factors. Also of note is the fact that under the influence of the growing environmental awareness, consumers are increasingly guided by more ethical and environmental issues in the choice of purchased goods and services.

It is worth noting that the described behavior, though resulting largely from economic reasons bring tangible benefits not only to test takers and their families, but also the whole of society, thus contributing to environmental protection. Therefore, it is particularly important to build environmental awareness among society so that the actions taken by them do not result to a significant extent only from the financial aspect, but also out of concern for the environment, and for present and future generations.

It is important that consumers realize that the quality of life and human health depends on the environment in which they live.

It is necessary, above all, to use the appropriate, from the point of view of sustainable consumption, socio-economic policy operating with economic incentives at the present stage of economic development. The market mechanism operating with pricing conditions remains the main platform of consumer choice in the domestic market. In influencing it of importance are income-tax mechanisms affecting the size of the price that the individual consumer pays.

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