



***The World's Largest Open Access Agricultural & Applied Economics Digital Library***

**This document is discoverable and free to researchers across the globe due to the work of AgEcon Search.**

**Help ensure our sustainability.**

Give to AgEcon Search

AgEcon Search  
<http://ageconsearch.umn.edu>  
[aesearch@umn.edu](mailto:aesearch@umn.edu)

*Papers downloaded from AgEcon Search may be used for non-commercial purposes and personal study only. No other use, including posting to another Internet site, is permitted without permission from the copyright owner (not AgEcon Search), or as allowed under the provisions of Fair Use, U.S. Copyright Act, Title 17 U.S.C.*

*No endorsement of AgEcon Search or its fundraising activities by the author(s) of the following work or their employer(s) is intended or implied.*

**Árpád Ferencz, Zsuzsanna Deák, Márta Nótari**

*Pallas Athene University, Kecskemét, Hungary*

## **ENVIRONMENTALLY CONSCIOUS CONSUMPTION IN HUNGARY**

### **ŚWIADOMOŚĆ EKOLOGICZNEJ KONSUMPCJI NA WĘGRZECZ**

**Key words:** **consciousness, consumer behaviour, environment, waste, Hungary**

*Slowa kluczowe:* świadomość, zachowania konsumentów, środowisko, odpady, Węgry

*JEL codes:* Q56, D12

**Abstract.** The developed world for decades has been trying to achieve waste management that meets the requirements of sustainable production. It is very important to understand, analyse and predict the individual consumer behaviour, motivations, values and attitudes towards environmental consciousness. Consumers' environmental awareness covers positive attitudes towards the environment supported by values and beliefs. The conclusion of the research is that in the area of environmental awareness Hungary is at the beginning of a long process and it cannot be predicted when will it reach the level of developed countries. A positive trend is that today's young people, who represent the next generation, show more interest towards environmental awareness.

### **Introduction**

The developed world for decades has been trying to achieve the waste management which meets the requirements of sustainable production. To reaching this the focus is on the development of procedures enhancing the recycling and eco-friendly utilization of the produced waste. Achieving high level of recycling of municipal waste efficient selective collection is needed, and its extremely important prerequisite is the public support.

Now it has become absolutely clear that the world is following an unsustainable “development” pattern, shown by the deteriorated condition of the natural environment, a series of environmental problems. Some of the environmental problems are related to the enormous amount of waste generated by humanity, which essentially arises from two sources, partly from production, partly from households as a result of unsustainable consumption patterns. During a short period the consumption has become the central dogma, the principle of life and an essential, decisive factor of the life in developed countries [Náray-Szabó 2006].

In addition to other negative environmental impacts – related to production and transport – of this rapid growth of consumption a serious waste-enhancing effect occurs. According to the results of OECD surveys the amount of per capita waste from households rose by 22% in the '80s and '90s and about 22% increase reported for the volume of household waste in the European Union in 2010 compared to 1995 [Valkó 2009].

Global environmental problems such as pollution, shrinking of natural resources and overpopulation may be the most important challenges facing humanity nowadays. It is very important to understand, analyse and predict the individual consumer behaviour, attitudes, motivations, values and behaviour [Vágási 2009].

## Who is a conscious consumer?

First of all, the term environmentally conscious consumer must be defined because different approaches offer varying definitions.

1. German approach. The German school representatives agree that environmentally conscious consumers are either natural persons or legal entities who have ecological consistency in their purchasing habits, decisions and consumption patterns. Furthermore they are aware that the development, production, distribution, consumption, use and discard of a product present a constant environmentally harmful effects and causes additional costs. They evaluate these effects and extra costs negatively and thus seek to minimize them [Meffert, Kirchgeorg 1993].
2. Anglo-Saxon approach. The Anglo-Saxon school approaches the definition of environmentally conscious consumers differently. From their point of view, environmentally conscious consumers avoid the consumption of products which:
  - can endanger their health or that of others,
  - have negative effects on the environment, during their life-cycle they require excessive energy and other resource usage,
  - result in unnecessary waste production (packaging, short life),
  - made of/by materials of endangered species, environment or exploit and adversely affect people living in underdeveloped countries [Elkington, Hailes 1989, Fisk 2008].
3. Marketing approach. Environmentally conscious consumers form two groups based on their awareness. The “Committed” group implements environmental considerations across all their decisions while the “Selective” group acts so only in some cases [Hofmeister-Tóth 2003].

The types of environmental actions influence the purchase decision process including the pre- and post-purchase activities. These habits are deeply ingrained in the individuals, changing them requires a lot of energy. An individual's environmental consciousness is primarily determined by the surrounding culture of the country in which they live. The examples, ideas, opinions and behaviours that they are exposed to on a day to day basis have the greatest impact

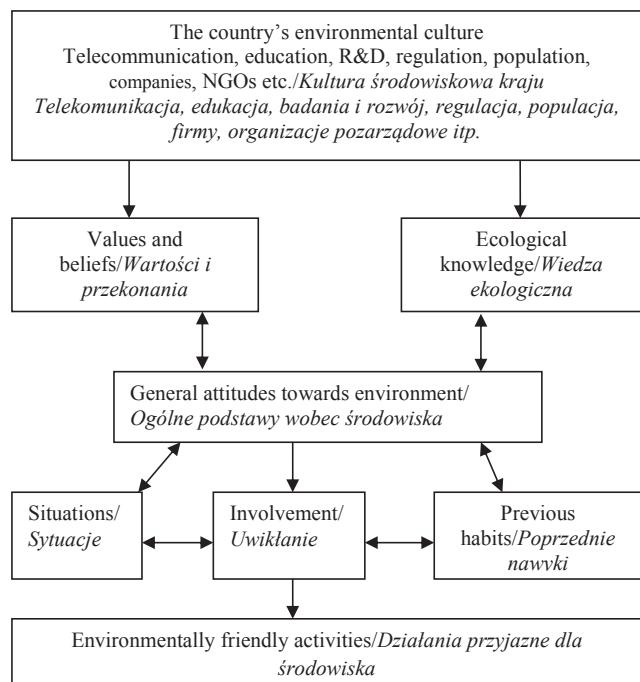


Figure 1. Model of internal factors affecting consumer awareness  
Rysunek 1. Model wewnętrznych czynników wpływających na świadomość konsumentów

Source/Źródło: [Schafferne Dudás 2008]

on their attitude (fig. 1). Consumers' environmental awareness covers positive attitudes towards the environment supported by values and beliefs. This awareness means a particular consumer behaviour aimed at reducing environment usage, and focusing on the following key principles: eco-friendly purchases, selective waste collection, energy saving, active information seeking on the environment and on environmental issues [Nagy 2012].

## Material and methods

We have started our research with a back-ground data collection of the already available information on eco-conscious consumers in Hungary. Our research was focused on waste, eco-friendly packaging and product logos to evaluate the general awareness and purchase decisions of Hungarians. Selective waste collection is relatively new in Hungary. Selective waste pilot projects were launched in the '70s in Western Europe, the first initiatives started 20-30 years later in Hungary and we are still lagging behind. Currently the population disposes off only about 20 percent of packaging waste materials into the designated colour-coded waste containers installed at waste collection points on the streets. This rate is 70-80 percent in case of the greenest EU Member States (Belgium and Germany). A huge increase is expected when the domestic selective waste collection system will fully cover the cities in Hungary.

Our primary research was performed in Kecskemét, the hometown of our University, where we questioned university and high school students as members of a new generation who already grew up with selective waste management. We wanted to know their attitude towards environment and waste.

## Results

In the first part we wanted to gauge the current knowledge on the waste management system of the city. Although the local company supplied everyone with handouts and the local television and radio advertised the planned improvements 13% of the respondents was not aware that the system was up and running (fig 2). Fig. 3. shows that people like to collect those materials (paper, plastic, metal) that require the least effort. These can be disposed at waste collection points located at many parts of the town and they do not need to take them to a specifically appointed collection point (e.g. pharmaceutical or hazardous waste).

From the answers given to question 4 (fig. 4) it can be surmised that Hungarians are still less environmentally conscious than their Western European counterparts. Students can easily be motivated, but you need the active participation of the family as well. There are always some

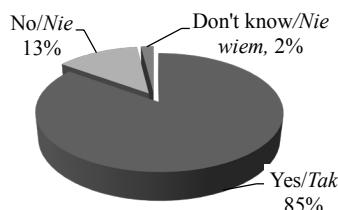


Figure 2. Has selective waste collection been introduced in Kecskemét?  
*Rysunek 2. Czy w Kecskemét wprowadzono selektywną zbiórkę odpadów?*

Source: own study  
*Źródło: opracowanie własne*

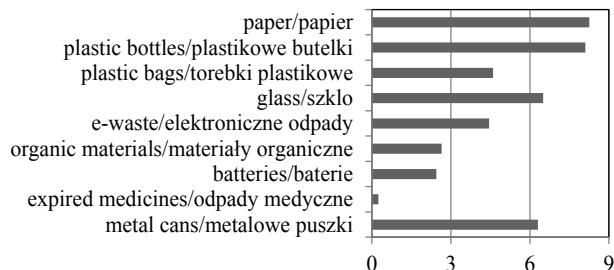


Figure 3. What do you prefer to collect separately?  
*(1 = least, 9 = most)*

*Rysunek 3. Co wolisz zbierać osobno? (1 = najmniej, 9 = najbardziej)*

Source: own study  
*Źródło: opracowanie własne*

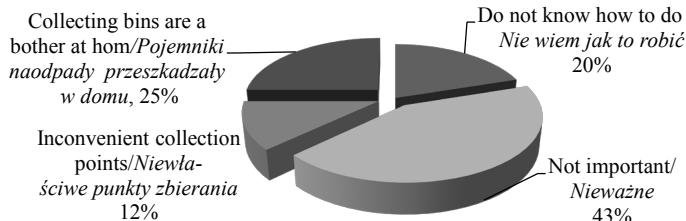


Figure 5. How can people be convinced to collect separately (1 = least effective 6 = most effective)

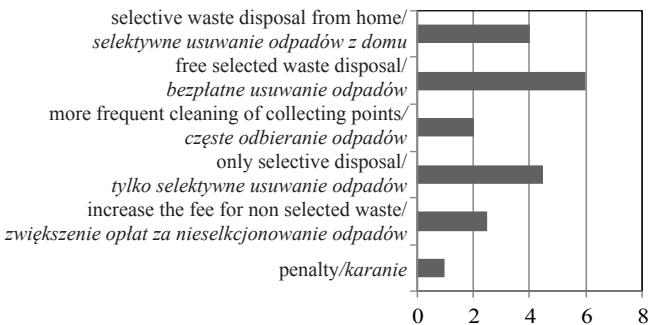
Rysunek 5. W jaki sposób można przekonać ludzi do selekcjonowania odpadów (1 = najmniej skuteczny (6 = najbardziej skuteczny))

Source: own study  
Źródło: opracowanie własne

Figure 4. Why do you refuse selective waste collection?

Rysunek 4. Przyczyna odmowy selektywnej zbiórki odpadów

Source: own study  
Źródło: opracowanie własne



people who cannot accept or understand the importance of environment. The best incentive according to the respondents (fig. 5) would be if the waste company would dispose the selected waste from the households for free while a fee would be charged for mixed waste. At the same time a penalty is not considered an appropriate tool. The second best option is to offer only the selective method so people would be forced to do so.

In developed countries growing attention is paid to the factors influencing purchase decisions. The fundamental question is what fundamentally motivates decisions? The primary condition for sustainable consumption is that sustainable products should be available at affordable prices to the average consumers. Additional tools for increasing consumers' awareness are providing adequate consumer information and supplying sustainable consumption patterns.

In our survey the vast majority of the respondents had a positive attitude towards environmentally friendly products and would be willing to pay extra (92%). It is important to emphasise however that even though in the questionnaires Hungarians are always supportive, in practice they are extremely price sensitive.

In the next part of the questionnaire we examined how important the environment-friendly nature of the product, including its environmental burden, was for the consumers at the time of purchase (fig. 6). Returnable packaging is the most valued attribute although the return-

Figure 6. In your purchasing decisions do you consider...?

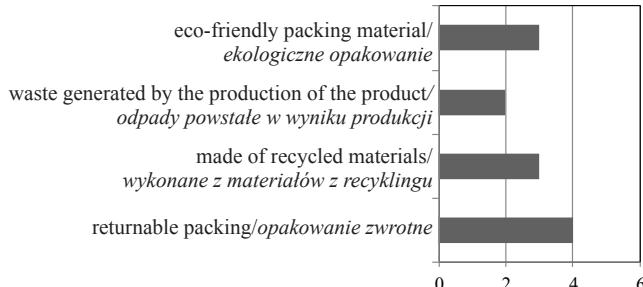
(1 = never 5 = always)

Rysunek 6. Na co zwracasz uwagę podczas zakupów?

(1 = nigdy 5 = zawsze)

Source: own study

Źródło: opracowanie własne



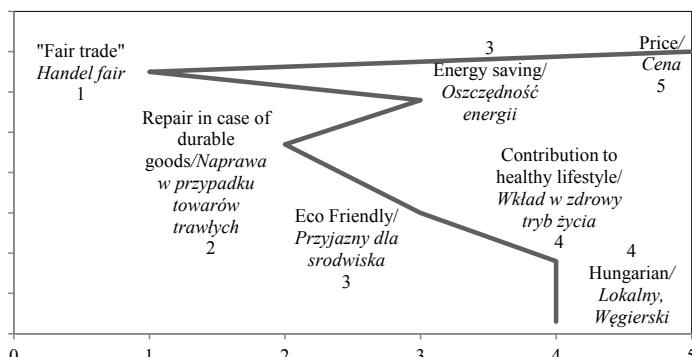


Figure 7. How important are the following factors in your purchase decision? (1 = least, 5 = most)

Rysunek 7. Jakie czynniki są ważne przy podejmowaniu decyzji o zakupie? (1 = najmniej, 5 = najbardziej)

Source: own study  
Žródło: opracowanie własne

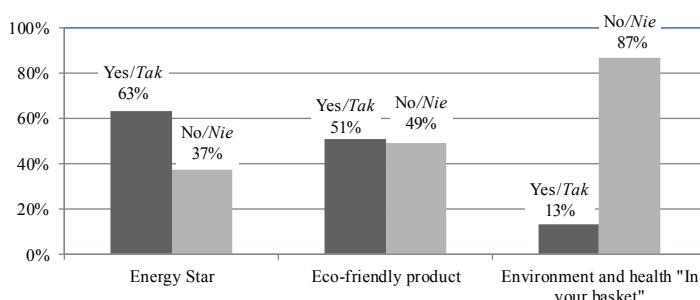


Figure 8. Are you familiar with the following logos and their meaning?

Rysunek 8. Czy znasz nas tąpujące logo i ich znaczenie?

Source: own study  
Žródło: opracowanie własne

scheme for glass bottles, once a wide spread system, is fast going out of use. The answers of the respondents suggest environmental awareness. It seems that ecological criterion is growing in preference by considering eco-friendly, recyclable materials during purchasing decisions.

Figure 7 shows that the most important product related information is still price then the place of origin followed by health attributes. These two features (Hungarian or locally made and healthy) have been the buzzwords of the last decades and are often used as a marketing tool in logos and trademarks. In Hungary, price issues have particular importance as consumers are highly price sensitive. Decisions related to price are the most delicate and difficult question for both consumers and businesses. The vast majority of low-priced products however cannot meet the energy-saving, environment-friendly and recyclable requirements.

Today, the use of indicators, trademarks and logos is increasing as marketing communication tools because they help buyers access information on the products. During the survey (fig. 8.) the Energy Star logo turned out to be the best known. Even though, this is the most widely used eco-related logo on durable household goods and electronic tools, only about the half of the respondents knew it. The vast majority have never met with the third trademark ("in you basket"). Currently eco-friendly products and related logos do not seem to be very inviting for consumers. These labels may have a lot of information which should be taken into account in purchasing decisions, yet, according to our survey, their effectiveness as marketing and communication tools do not reach the appropriate level among Hungarian consumers.

## Conclusions

Marketing is often made out to be a scapegoat. It should, however, be considered instead as a tool by which environmentally beneficial behaviour patterns can be stimulated. Focus should be given to environmentally useful goals, strategies and practices.

In the area of environmental awareness Hungary is at the beginning of a long process and we cannot predict when we will reach the level of developed countries. Environmentally conscious purchases are less prevalent as the active will is still missing from purchasing decisions. Currently eco-friendly products and related logos are not inviting for consumers as they are not well known among the Hungarian population and they are not yet identified with their benefits. A positive development is that today's young people, who represent the next generation, show more interest towards environmental awareness.

Widely understandable information on eco-friendly products, characteristics and environmental benefits should be provided to everyone with the message of money saving opportunities as the Hungarian consumers are quite price sensitive.

## Bibliography

Elkington John, Julia Hailes. 1989. *The green consumer guide*. London: Victor Gollanz.

Fisk George. 1998. Green Marketing: Multiplier for Appropriate Technology Transfer? *Journal of Marketing Management* 4: 657-676.

Hofmeister-Tóth Ágnes. 2003. *Fogyasztói magatartás* (Consumer behavior). Budapest: Aula Kiadó.

Meffert Heribert, Manfred Kirchgeorg. 1993. *Marktorientiertes Umweltmanagement* (Market orientation of environmental management). Stuttgart: Grundlagen und Fallstudien, Schäffer-Poeschel Verlag.

Nagy Szabolcs. 2012. Környezettudatos egyéni magatartás (Environmentally conscious individual behavior). *Munkakaleidoszkóp* 125-138.

Náray-Szabó Gábor. 2006. *Fenntartható fejlődés* (Sustainable development). Budapest: Akadémia Kiadó.

Schafferer Dudás Katalin. 2008. *A környezettudatosság többszintű értelmezése és a környezettudatos fogyasztói magatartás vizsgálata* (Multilevel understanding of environmental awareness and environmentally conscious consumer behavior). Ph.D. dissertation. Pécs: University of Pécs, Hungary.

Vágási Mária. 2009. *Környezettudatos marketing* (Environmentally conscious marketing). [In] XV MOK Conference. Kaposvár, Hungary.

Valkó László. 2009. *Fenntartható, környezetbarát fogyasztás és a magyar lakosság környezeti tudata* (Sustainable, environmentally friendly consumption and the environmental consciousness of the Hungarian population). Essay: Corvinus University of Budapest.

## Streszczenie

*Kraje wysoko rozwinięte od dziesięcioleci starają się wprowadzić zarządzanie odpadami, które spełnia wymagania zrównoważonego rozwoju. Bardzo ważne jest zrozumienie, analizowanie i przewidywanie indywidualnych zachowań konsumentów, ich motywacji, wartości i postaw wobec środowiska przyrodniczego. Świadomość ekologiczna konsumentów obejmuje pozytywne nastawienie do otoczenia wspierane przez wartości i przekonania. Celem artykułu jest określenie czynników wpływających na ekologiczną konsumpcję. Badanie przeprowadzono na podstawie wywiadów z wykorzystaniem kwestionariusza ankiety w uniwersyteckim mieście Kecskemét na Węgrzech. Stwierdzono, że w obszarze świadomości ekologicznej Węgry są na samym początku długiego procesu i nie można przewidzieć, kiedy osiągnie poziom krajów wysoko rozwiniętych. Pozytywną tendencją jest to, że dzisiejsi młodzi ludzie, którzy reprezentują następne pokolenie, wykazują większe zainteresowanie świadomością ekologiczną.*

## Correspondence address

Árpád Ferencz Ph.D. ([orcid.org/0000-0001-5379-4463](http://orcid.org/0000-0001-5379-4463))  
 Zsuzsanna Deák Ph.D. ([orcid.org/0000-0001-5074-6765](http://orcid.org/0000-0001-5074-6765))  
 Pallas Athene University, Faculty of Horticulture  
 Mészöly Gyula tér 1-3, 6000 Kecskemét, Hungary  
 e-mail: [ferencz.arpad@kfk.kefo.hu](mailto:ferencz.arpad@kfk.kefo.hu), [deak.zsuzsanna@kfk.kefo.hu](mailto:deak.zsuzsanna@kfk.kefo.hu), [notari.marta@kfk.kefo.hu](mailto:notari.marta@kfk.kefo.hu)