

## **ENVIRONMENTAL ATTITUDES AND ACTUAL BEHAVIOR OF BULGARIAN CITIZENS**

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**Abstract:** In recent years, environmental issues are becoming a serious concern for citizens. Data from Eurobarometer surveys show that the vast majority of Europeans are aware of the environmental issues and realize their importance for the quality of life and socio-economic system as a whole. At the same time individual environmentally friendly behaviour is not widespread. This study investigates Bulgarian citizens' opinions on whether environmental protection is a personal responsibility of each individual or a political task, thus highlighting discrepancies between what individuals say and what they really do. The survey was conducted during the months of April-May 2013 and it involved 1011 adults, citizens of the Republic of Bulgaria. The study shows a high level of support from respondents for measures and actions aimed at environmental protection in Bulgaria. Despite a high degree of environmental consciousness, behaviour seems to follow the traditional line of action, and everyday experience points to obvious inconsistencies between verbal claim and actual behaviour. It was established that highly approved environmental models of individual behaviour rarely motivate and direct the daily activities of Bulgarian consumers.

Keywords: environmental attitudes, self-reported environmental behaviour, Bulgaria

### **Introduction**

In recent years, numerous studies have been conducted to establish the relationships between consumer attitudes and behaviour towards the environment. Initial studies in this area had sought to determine how various demographic and economic factors such as age, gender, place of residence, income and education influenced the environmental attitudes and behaviour.

The predominant approach in research today is based on the assumption that the increase in users' information about the problems leads to awareness and the adoption of "friendly" attitude to the environment (Torjusén, Sangstad, O'Doherty Jensen & Kjærnes 2004; Thøgersen 1998). Different approaches to the study of the mechanisms leading to the perception of the problem or the attitude towards such behaviour can be distinguished. They cover a wide range - from

purely educational approaches aimed at the role of training for gaining information and knowledge to achievement of personal involvement with environmental issues. Some approaches emphasize the role of value orientation (personal characteristics) of the consumer while others focus more on the role of his/her beliefs or attitudes toward problems (Finger 1994). There are such socio-psychological approaches that examine the intentions as factors that best predict consumer behaviour (Fischbein & Ajzen 1975; Ajzen & Fishbein 1980).

One of the more vexing problems associated with environmental attitude research, however, continues to be the relationship between environmental attitude and actual behaviour (Ewert & Galloway 2004). In this case, much less consistency has been found between environmental concern and environmental behaviour (Kraus 1995). That is, individuals expressing high levels of environmental concern and pro-environment attitudes often display behaviours and actions that have low levels of congruency with their expressed views. Moreover, many of the variables that show some consistency with respect to environmental attitudes, display weak or inconsistent relationships to environmental behaviours (Olli, Grendstad & Wollebaek 2001; Diekmann & Preisendorfer 1998).

The aim of this work was to investigate the environmental attitudes of Bulgarian citizens and their intentions for ecological behaviour and actual personal behaviour. We start from the premise that research efforts should be primarily interested not in attitudinal factors such as environmental awareness or environmental concern, but in actual behaviour of people in the context of their daily life. In line with numerous previous studies we will show that environmental attitude and behaviour are indeed inconsistent in many respects.

In connection with the accomplishment of these aims the following tasks have been defined:

- To collect information on the attitudes of citizens towards environment protection.
- To establish the primary intentions for ecological behaviour and the actual personal behaviour.

## **Material and methods**

Empirical study was conducted with 1011 adult citizens of the Republic of Bulgaria. The sample was formed from the official population database (electoral rolls) on the basis of two-stage random cluster sample (100 clusters).

The survey was conducted in April - May 2013. Information was collected through direct personal face-to-face interviews with the persons included in the surveyed group. The socio-demographic characteristics of the participants are summarized in Table 1. Characteristics of surveyed group.

**Table 1 Characteristics of surveyed group**

	Surveyed Group, %	For the country, Statistical Data <sup>1</sup> , %
<b>Gender</b>		
Men	44,1	48,7
Women	55,9	51,3
<b>Total</b>	<b>100,0</b>	<b>100,0</b>
<b>Age</b>		
18 – 29	11,3	16,3
30 – 39	18,5	18,0
40 – 49	15,2	16,8
50 – 59	18,1	17,3
60 – 69	19,3	15,9
70+	17,5	15,8
<b>Total</b>	<b>100,0</b>	<b>100,0</b>
<b>Education<sup>2</sup></b>		
University	23,4	19,6
Secondary	55,3	43,5
Primary or lower	21,3	36,9
<b>Total</b>	<b>100,0</b>	<b>100,0</b>
<b>Social Group</b>		
Students	2,8	-
Employed	48,8	-
Unemployed	11,6	-
Pensioners	34,5	-
Other	2,4	-
<b>Total</b>	<b>100,0</b>	
<b>Place of residence</b>		
Sofia	16,8	16,5
District Town	32,7	33,2
Smaller town	22,7	22,7
Village	27,8	27,5
<b>Total</b>	<b>100,0</b>	<b>100,0</b>
<b>Ethnic group</b>		
Bulgarians	87,7	85,5
Turks	5,1	8,9

<sup>1</sup> National Statistics Institute, 2012

<sup>2</sup> The data for the country are for the population aged 7 years and over

Roma	6,3	4,9
Others	1,0	0,7
<b>Total</b>	<b>100,0</b>	<b>100,0</b>
<b>Personal monthly income (levs)</b>		
No income	7.3	-
Up to 200	18.2	-
201-500	51.6	-
501-1000	20.7	-
Over 1000	2.2	-
<b>Total</b>	<b>100,0</b>	

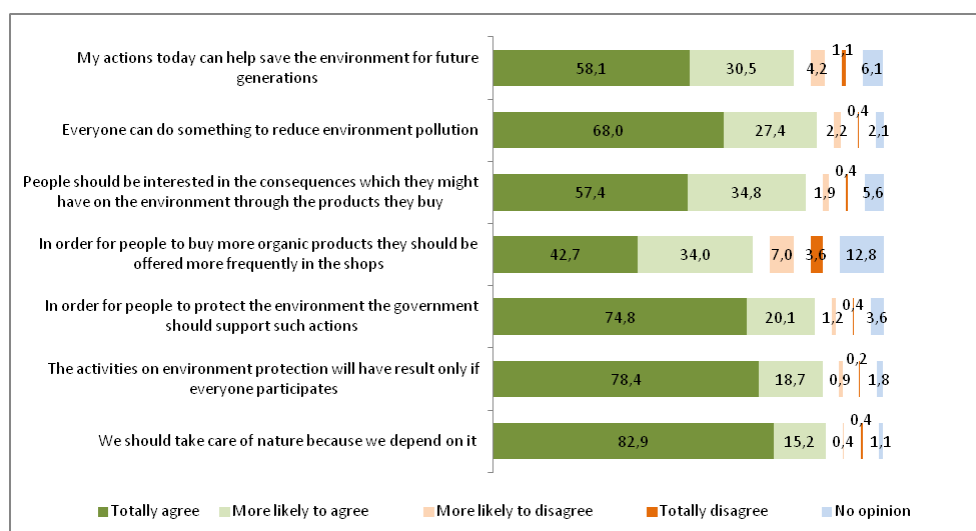
### ***Questionnaire***

The survey was conducted by using questionnaire. In structural terms, the questionnaire consists of four parts. In the Introductory part the aims of the research and examples of how to fill in the questionnaires were presented briefly. The questions in the First part examined the attitudes of citizens towards environment protection. The Second part examined the fundamental attitudes towards environmental behaviour, intentions for environmental behaviour and actual personal behaviour. The Third (identification part) contained questions about the demographic and social characteristics of the respondents.

## **Results and discussion**

### ***Attitudes towards environment protection***

The study shows a high level of support for measures and actions aimed at protecting the environment. About 98 % of the respondents agree that special care should be taken of the environment as people are dependent on it. The effectiveness of these actions requires cooperation between citizens and institutions for 97% of the respondents. Environmental behaviour of citizens should be purposefully supported and encouraged by politicians and government institutions through the creation and implementation of appropriate legislation. Moreover, the proportion of people who speak strongly about these ideas is extremely high - between 75-80 % (Figure 1. Attitudes towards action on environment protection).



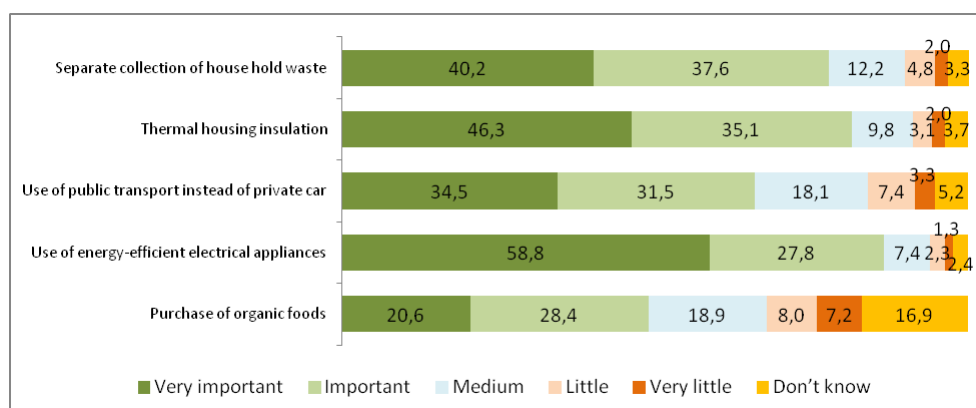
**Fig. 1. Attitudes towards action on environment protection (% Respondents)**

Source: own research.

The same strong approval we found when considering these broad principles at individual level. About 90-95% of respondents support the view that individual behaviour is important for environment protection, including through selection of purchased goods. Here, however, the support is clearly less and is moving from 60% to 70%.

Eurobarometer surveys conducted in 2007 (European commission 2008) and 2011 (European commission 2012) in the 27 member states of the European Union gathered information about the attitudes of European citizens towards the environment. This enables us to compare data Eurobarometer and our research. According to the Eurobarometer almost all European citizens recognize the importance of environmental protection. On the whole, 95% of EU citizens (-1 point since 2007) feel that protecting the environment is important to them personally. Bulgaria, Greece, Slovenia and Sweden return "important" scores of 98% (European commission 2012).

The respondents in our study were proposed to assess the ecological importance and the effect of different individual activities (Figure 2. Assessment of the environmental importance of individual activities). Among them the purchase and use of energy-efficient appliances was mentioned most often as an action which facilitates the protection of the environment. According to about 87% of the respondents this has a great or very great ecological importance.



**Fig. 2. Assessment of the environmental importance of individual activities (% Respondents)**

Source: own research.

Next in place came another way of reducing individual energy costs - thermal housing insulation and separate collection of household waste. About 80% of the respondents agree that these are ways to provide a great or very great help to the environment.

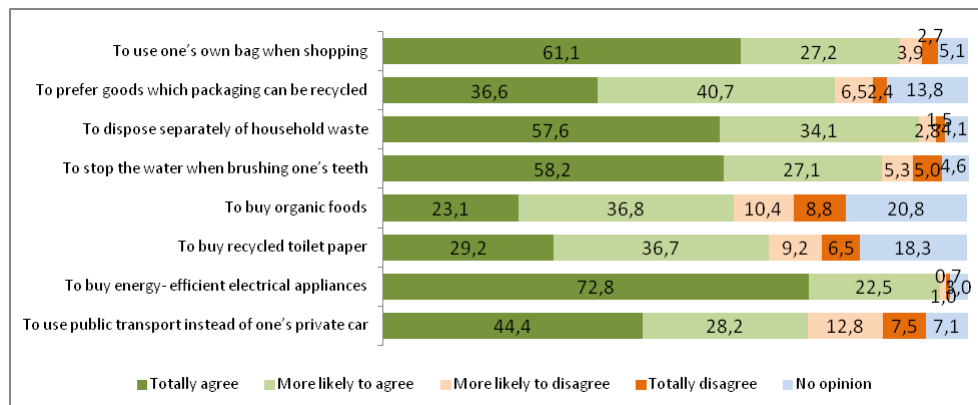
The most common are the reservations regarding the environmental importance of the exchange of the private car use for the public transport and the purchase and consumption of organic foods. About 66 % and about 49% of the respondents advocate the view that such behaviour has significant environmental results. Most fluctuations and weak support are demonstrated in regard to the reduction of the negative impact on the environment through the purchase of organic foods. Only about 20% of the respondents are of the opinion that the choice of such foods is of great importance for nature conservation.

According to the Eurobarometer about 55% of Bulgarians believe that recycling of waste and energy conservation should be activities with the highest priority for environment protection (European commission 2012). It is important to note that the motivations behind the reduction of energy consumption could be based on financial reasons due to rising energy costs instead of real pro-environmental issues. The lowest level of positive responses was given to the purchase of goods labelled as environmentally-friendly. This was followed by reducing car use (European commission 2012).

### ***Intentions for ecological behaviour and actual personal behaviour***

By examining previous literature on this subject, we can see that there is not necessarily a connection between individual opinions and actual pro-environmental actions (Pirani & Secondi 2010).

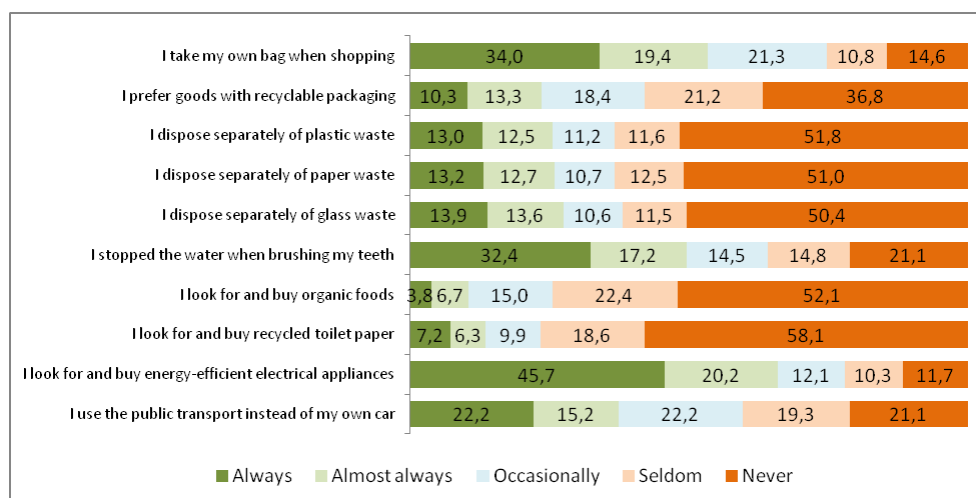
The survey results show a big difference between strong support for environmentally oriented models of individual behaviour and significantly less likely following of these patterns in everyday life.



**Fig. 3. Attitudes toward models of individual behaviour for environment protection (% Respondents)**

Source: own research.

Approval for environmentally oriented patterns of behaviour range from about 95 % for the purchase of energy-efficient appliances to 60 % for the targeted search, purchase and consumption of organic food (Figure 3. Attitudes toward models of individual behaviour for environment protection). However, when it comes to conscious and consistent daily action the share of environmentally oriented respondents falls from 2 to 5 times (Figure 4. Personal behaviour towards environment protection). As an example, while about 74 % of the respondents strongly approved the purchase of appliances of high energy efficiency class only about 46% make that choice when buying an appliance themselves.



**Fig. 4. Personal behaviour towards environment protection (% Respondents)**

Source: own research.

About 58 % of the respondents categorically approve of separate disposal of household waste but only 13 % state that they separate paper, plastic and glass waste in their own households.

These data were confirmed by Eurobarometer survey in 2011 - about 55 % of the respondents approve of separate waste collection but only 19 % state that they had done that a month before the survey (European commission 2011).

In the present study, about 23% state categorical approval of buying and eating organic foods, but only 4% define themselves as regular users of such foods. In the whole series of questions, the study showed a discrepancy between approval of environmental models and personal, everyday behaviour of respondents.

In some of the cases external factors which constrain the orientation of individual behaviour towards approved ecological models can be sought: the price of electrical appliances, the lack of waste bins for separate disposal of household waste or the larger financial cost that accompanies the incorporation of organic products in the food diet. However, the same picture is observed in cases where actions depend solely on personal choice - for example, the use of own reusable bag when shopping or stopping the water while brushing the teeth where the difference between approval and actual action is nearly twice.

## Conclusions

The study shows a high level of public support for the measures and actions aimed at environment protection in Bulgaria. This support is manifested more strongly in more abstract general principles and less so when it comes to individual actions.



Almost all respondents agree that the environment should be taken special care of both by the citizens and government institutions. Participants in the survey support the view that individual behaviour is important for environment protection, including through the selection of purchased goods where approval is weaker.

Consumers appreciate the environmental significance and effect of the various individual activities such as:

- the use of energy-efficient appliances;
- thermal housing insulation;
- separate collection of household waste.

The most common are the reservations regarding the environmental importance of the exchange of the private car use for the public transport and the purchase and consumption of organic foods.

The survey results warrant the conclusion that strongly approved environmental models of individual behaviour rarely motivate and direct the daily activities of consumers.

These results confirm the general profile of EU citizens, who in general are highly worried about global environmental problems, but only mildly worried about issues that are directly linked to their own behaviour (Pirani & Secondi 2010).

## **Acknowledgments**

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