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## **ENVIRONMENTALLY-FRIENDLY BEHAVIOUR AS A PREREQUISITE FOR SUSTAINABLE DEVELOPMENT IN UKRAINE**

### **1. Introduction**

Sustainable development is mostly a vision in Ukraine and needs to be implemented as an ideology at this time. Environmental-friendly behaviour is one of the main conditions for sustainable development and at the same time it can serve as an effective indicator of sustainable development. The author will concentrate on environmentally-friendly behaviour in general and on environmentally-friendly consumer behaviour in particular. The role of educators and journalists as a strong form of support for changes in attitudes will be examined.

### **2. Sustainable development in Ukraine**

Sustainable development is slowly becoming an accepted goal of society and in Ukraine is a concept that has many local implications. However, sustainable development is mostly a vision in Ukraine and needs to be implemented as an ideology. It is necessary to address this issue so that people can understand and appreciate the importance of sustainability as a foundation of the social, economic, and environmental framework of their life.

The main ideas of sustainable development have already been widely disseminated and promoted by leading international organisations. The United Nations has a goal to ensure environmental sustainability as a component of the Millennium Development Goals. UNESCO announced the Decade of Education in Sustainable Development. This

started in January 2005. The environmental component of the strategy for sustainable development is a part of the Sixth Environment Action Programme of the European Community "Environment 2010: Our Future, Our Choice". Links have been made between the environment and European objectives for growth and competitiveness. The authors of the programme place environmental plans in a broad perspective, especially when considering economic and social conditions.

The changes that have occurred in Ukraine following the collapse of the Soviet system offer an opportunity to change course and proceed with the reform of institutions according to the principles of sustainable development, which are seen by Ukrainian scientists as the only path leading to the twin goals of long-term human and environmental wellbeing [Vovk, 2003]. According to experts, Ukraine has demonstrate significant national potential for accelerating sustainable development during its transition. The basic components of this potential are influenced by qualified specialists. A high general level of public education is needed to perceive the ideas and principles of sustainable development. At the same time, there is a need to organise greater dissemination of public information, as well as to train managerial personnel in the framework of specially designed sustainable development training programmes [National Progress Report, 2002, 36].

Sustainability is difficult to measure because it depends upon the consequences of people's interaction with natural, social and economic spheres that pervade and define society. The progress of Ukrainian society towards sustainable development can be measured with a set of indicators showing an increase in environmentally conscious attitudes and actions. They are closely connected with environmentally-friendly behaviour of all members in the society. As a result, the author sees continuing development of environmentally-friendly behaviour as one of the important prerequisites for sustainable development in Ukraine.

Ukraine needs to create a conceptual framework in the society for enhancing public participation in environmental decision-making promoting sustainable development and widely disseminate the concepts of environmentally-friendly behaviour. We need to make it clear that environmentally-friendly behaviour is one of the main conditions for sustainable development and at the same time it can serve as an effective indicator of it.

The general public could be influenced with the help of target groups that are likely to include stakeholders in making strategy decisions – people in government (central and local), citizens, NGOs and community based organisations, as well as mass media.

Sustainable development can be achieved through the co-operation of all interested stakeholders, especially local authorities according to the principle of subsidiarity. In many cases it can also help shape consumer behaviour in a more environmentally-friendly direction. The author's belief in the success of this co-operation is based on his work experience in the UNDP Urban Environmental Governance Programme in Ukraine during 2003–2004. As the project was aimed at the integration of sustainable development principles in planning and decision-making at local level, a series of awareness-raising workshops and special training courses were conducted in two Western Ukrainian cities for local communities and for each target group (youth groups, women, media and local authorities).

Participants of training courses and seminars in Rivne acquired new knowledge and systematised the knowledge they already had regarding sustainable development, opportunities and mechanisms of institutionalisation. The second pilot city – Ivano-Frankivsk – already had a strategic plan for city development (developed in 1999). At the preliminary meeting, the community decided to analyse the implementation of the plan and to study major obstacles encountered during implementation and update the plan in accordance with the principles of sustainable development. Since Ivano-Frankivsk is intended to be the major tourist centre in Prycarpattia, the city community, together with the local authorities, came to an agreement that one of the pending city problems is the problem of domestic waste management.

The city community considers that in order to solve this problem it is necessary to establish a system for the separation of solid domestic waste. This idea was supported by private business, which can provide equipment for recycling PET-bottles. The launch of the programme for separation of solid domestic waste and recycling of PET-bottles was announced in the local newspaper "Galychyna". After a bidding process, the best private companies were selected to implement the PET-bottle recycling program.

Establishment of efficient partnerships between the local authorities, community and private sector in Ukraine has reached a new level. This has been achieved by the willingness of municipalities to actively collaborate in this direction and contribute funds to the implementation of projects [Byelyakov, 2004]. At the same time, the author's experience of work in the UNDP Programme in Ukraine shows a lack of environmentally-friendly behaviour from the general public, who are supposed to be on the front line of local environmental action.

### 3. Environmental-friendly behaviour

In this part the author will concentrate on environmentally-friendly behaviour in general and on environmentally-friendly consumer behaviour in particular.

Consumer behaviour theory is based on the study of the processes of how individuals, groups or organisations select, secure, use and dispose of products, services, experiences or ideas to satisfy their needs. The following are applications of consumer behaviour: marketing strategy, public policy, social marketing. Consumer behaviour involves services and ideas, as well as tangible products. Some consumers tend to accept new products more quickly than others, based on several factors: modernity, homophily, physical distance, opinion leadership.

Scientists study the impact these processes have on consumers and society. Aggressive marketing by MacDonal'd's in Ukraine, together with their food which is high in fat, may negatively influence nation's health and especially children's health. Consumer behaviour involves the use and disposal of products, as well as the study of how they are purchased. Since many environmental problems result from product disposal (*e.g.* garbage piling up at landfills, or motor oil being poured into sewage systems to save the recycling fee) this is also an area of interest. [see Perner, 2005].

Development of environmentally-friendly behaviour in the general public requires significant efforts and depends on various factors. People, who demonstrate responsible environmental behaviour over a broad range of problems, possess knowledge of relevant environmental concepts, problems and issues, as well as knowledge of action strategies that may be used for solving these problems. They also are concerned about the quality of the environment, commitment to take action and belief that their action can make a difference [see Howe and Disinger, 1988].

The author assumes that the percentage of the population who fulfil all these criteria is very low in Ukraine compared to other countries. Most of these individuals are members of environmental NGOs, 'green' parties or enthusiasts. However, this seems to be typical of countries in transition. Eastern European countries are behind Western Europeans in these issues. For example, "the average score on environmentally-friendly consumer behaviour is lower in Poland than in Belgium." [Roozen and Pelsmacker, 2000, 19].

Environmentally-friendly behaviour is sometimes associated with 'alternative' lifestyles in certain groups (youth, women, etc.). Young people, especially those who get their education abroad, are more sensitive to

global environmental issues. A very interesting group is presented by workers who have spent plenty of time abroad and returning immigrants [Pfeffer et al., 2002, 64]. They often follow rules and expect standards that they saw abroad. Such individuals are likely to be engaged in environmentally-friendly behaviour that their relatives and friends find new and very unusual. However, environmentally-friendly behaviour is not related to a certain lifestyle in Ukraine.

At the same time, the author sees a strong correlation between the development of a healthy life style among Ukrainian citizens and potential for the future development of environmentally-friendly behaviour amongst individuals who care not only about human health.

Environmentally-friendly behaviour has a good chance to be introduced by professionals, educators and journalists as an advanced level of care about human health. We need to emphasise that the state of the Earth directly influences humans and our daily quality of life.

The author's position can be traced back to the theory of the hierarchy of human needs proposed by American scientist Abraham Maslow. He intuitively suggested that humans must satisfy their most basic needs before they start to look for something else. Psychological needs were placed at the primary level. These were followed by the need for shelter or a safe place to live. Care about health was recognised as a necessity only if these two needs had been satisfied. The next steps are love, belonging, self-actualization.

If we apply this theory to Ukrainian reality, a varied approach to the public is needed. The poor part of population will think about basic needs, so these people usually buy the cheapest food or other goods. Wealthier members of the public can afford products that have higher quality and are safer. Demand for healthy goods is rising in correlation with the increase of income. However, high income is not a sufficient condition for the development of a healthy life style.

We need to remember some other factors such as age, whether someone lives in an urban or rural area, gender, etc. The importance of gender has already been stressed in one of the studies in Ukraine. The Agency of Marketing Technologies conducted a survey during April-June 2004, in which one of the focus groups was men of medium-sized Ukrainian towns.

The experts put forward some very controversial findings. Although men fully comprehend their own responsibility for their health, the majority does nothing to preserve their health. Men did not even attempt to hide their passive attitude to health hazards resulting from both their own behaviour and the environment. In particular, respondents recognised their inability to get rid of hazardous habits. One of the reasons

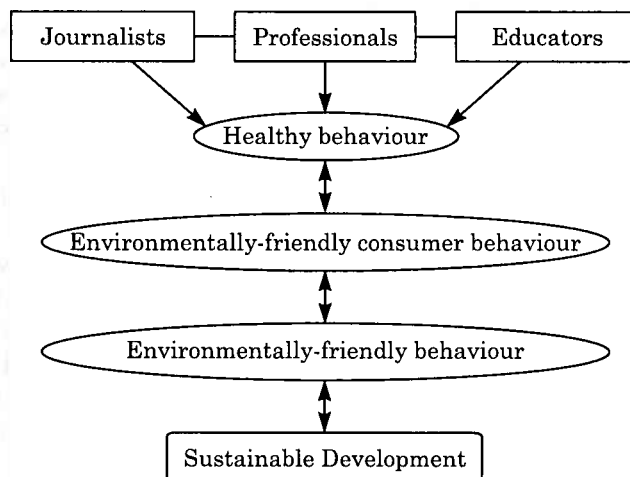


Fig. 1. Stakeholders' influence on environmentally-friendly behaviour

Source: Author's own elaboration.

that men in small towns do not care about themselves is that Ukrainians do not have a healthy way of life as a cultural habitat. Even though the situation is almost paradoxical, most men noted that only a serious illness could make them adopt a more responsible attitude towards their health.

There are factors that may contribute to increased responsibility of men towards their health, such as an improvement in one's financial situation, getting more free time, increasing stability. Creating a culture of a healthy way of life should be fostered early in a person's life by his parents and educational institutions and maintained throughout the entire life-span. Men are expecting some encouragement and approval on the part of their environment to sustain their attempts to lead a healthy life. Respondents said that being involved in a group of like-minded people could help them adopt a healthy way of life [Agency of Marketing Technologies, 2004]. A theory of gender-based consumerism of healthy production may also be applied to consumers of environmentally-friendly products, but appropriate research is needed.

There are many reasons why consumption of environmentally-friendly products is not yet on the agenda in Ukraine. One of them is a slow rate of reducing poverty. The average Ukrainian citizen still faces serious difficulties due to the economic and political transition. A power change in 2004, which was made famous as the Orange Revolution, has set the ground for citizens to become more involved in determining the future of the society. At the same time, the political crisis caused inflation, so

most Ukrainians feel insecure and are concerned with price increases, especially for agricultural products.

For example, the public actively compares prices of most popular products from March 2004 and 2005 (Table 1). Prices were compared in Ukrainian Hrivnas (1 USD = 5.30 UAH on 15th March 2005) for 1 kilo of the product according to data from the local press [Gadsinskaya and Mazur, 2005, 2].

Analysts have also compared average prices in Kyiv and Warsaw. According to their study, prices in Kyiv are higher than in Warsaw, especially for cabbage, potatoes cost a little more and the prices of pork are similar [Gadsinskaya and Mazur, 2005, 2]. The price difference between tomatoes from Turkish and local farmers is about 5–6 UAH (about 1USD), which makes Ukrainian tomatoes unattractive to buyers. Such a situation makes the Ukrainian market more attractive to foreign agro-industry, but creates additional difficulties in the development of Ukrainian entrepreneurship. The import of agro-products especially from neighbouring countries will raise the general standards of agro-production in the country. Imported organic food will also motivate local farmers to pay more attention to the competition on the market.

**Table 1.** Development of prices of agricultural products (per kg., in Ukrainian Hryvna)

Agroproducts	March 2004	March 2005	Price increase in%
Cabbage	0.8	3	280
Tomatoes	7	13	86
Potatoes	0.8	1.3	63
Pork	17	25	47
Beef	16	22	38
Chicken	9.5	11.5	21

Source: Gadsinskaya and Mazur, 2005, 2.

Citizens are more concerned with low income, high inflation and increasing unemployment than with pro-environmental behaviour. The minimum monthly salary in Ukraine is expected to reach a level of only 332 UAH (about 63 USD) in September 2005. In this case, environmentally-friendly consumerism is simply not a priority for low income Ukrainians.

However, even in this situation, one can find optimistic examples. A few years ago, food from soya beans was relatively expensive on the Ukrainian market, as the majority of products were imported from Po-

land, Germany and Asian countries. Ukrainian entrepreneurs saw a demand for soya products not only among people who care about health and fitness, but also by those who fast and are vegetarians. Most markets and shops started to sell inexpensive soya products of good quality. Experts speak about a 'soya boom' in Ukraine [Korneshova, 2005, 68].

Today, there is a huge difference between the salaries of residents in the capital, regional cities and the Ukrainian provinces. We also need to remember about differences in a buyer's approach to people and organisations.

As a result, consumers are more concerned with price increases than with their needs for environmentally-friendly production. Environmentally-friendly consumer behaviour is absolutely not a priority for people at a time of inflation. The decrease in public interest in environmental activities is limiting the impact of citizens' involvement in 'green' consumerism, which should otherwise promote active pro-environmental behaviour.

The expected changes in behaviour are slow and usually time-consuming. Responsibility for the environment seems to be a very conscious behaviour that cannot be achieved by the general public in Ukraine in only a few years.

An analysis of advertisements in the Kyiv press shows that environmentally-friendly products are becoming more and more popular and are oriented at consumers with more than average income level and organisations. Especially high demand exists for environmentally-friendly products for house-building. At the same time, such products are used very selectively, mostly for elite houses and buildings in Kyiv.

Most construction companies across the country are not very open to the idea of using environmentally-friendly materials instead of conventional building materials. Some of these materials have higher prices, since they are imported into Ukraine. The lack of information about environmentally-friendly materials plays a destructive function. The conservatism of the management of construction companies is also influential, because the introduction of environmentally-friendly materials needs the wide involvement of 'green' technologies in the building sector. The Ukrainian economy is slowly developing the market for environmentally friendly goods.

The author became interested in issues of sustainable environmental management and implementing green technologies during his stay at the University of California at Berkeley, USA, 2001–2002. David Zilberman, Professor of the Department of Agricultural & Resource Economics, the University of California at Berkeley, gave a commentary about not only problems, but possibilities: "Companies may not adopt



'green' technologies even when they seem to make economic sense (they seem to be profitable) for several reasons. First, credit constraints: they may not have their own money to finance investment and banks may not wish to loan them the necessary money. Sometimes it is important to educate the banks about the economics of 'green' technology. Second, there exists uncertainty and a lack of trust. People suspect claims about a new product, they like to let others take risks. What if claims about cost savings are exaggerated? People need concrete proof that the savings are concrete and apply to their situation. Sometimes it is worth providing insurance for some claims – warranties or money back guarantees. This may not work in the case of housing, but the sellers or contractors may promise to pay a penalty, if some claims do not hold.

It takes some time for any new concept or technology to be adopted. At the beginning only a small group of individuals get involved and others follow the outcome and imitate them if they are successful. It is important to identify potential buyers of a new technology carefully and work hard to sell them the product, because if they buy and are happy with the outcome, many more will follow [Zilberman, 2002]."

Changes in consciousness also depend on 'green' products themselves. Some studies argue that the extent to which consumers adopt 'green' products is much less than would be indicated by opinion polls concerning public attitudes towards environmentally-friendly consumption. Scientists stress that there are several theories concerning the discrepancy between consumers' environmental concerns and purchasing actions, which need further testing – there is a mis-specification of 'green' products in relation to consumers' needs; there are barriers to the perceptions of the environmental impact of 'green' products and consumers free ride due to individual self-interest [see Wong et al., 1996].

Despite the existing difficulties and need for improvements, experts are optimistic about the growth of demand for environmentally-friendly products and development of 'green' consumerism. Ukraine is following this world-wide tendency and can use the experience of other countries that have already achieved results in this field.

American scientists see a more efficient way in the development not only of environmentally-friendly behaviour, but also in promoting eco-economic principles: "Building an eco-economy quickly depends on a broad change in our public priorities and our private behaviour, not only as consumers but, more importantly, as eco-economy activists. People change their behaviour because of new information or new experiences. Our goal is to realise the necessary changes in the economy through providing new information, for if this fails, the inevitable adjustment could be painful [Brown, 2001, 259]." Environmentally-friendly behaviour and building of

an eco-economy are emerging additional perspectives for sustainable development. However, a wide promotion of these ideas in society is needed. In this case, the role of educators and journalists is greater as their strong support can speed up changes in attitudes.

#### 4. The role of education and the mass media

A very important role in the development of environmentally-friendly behaviour belongs to ecological education. It has been developing especially fast since 1992, when courses in the Basics of Ecology became mandatory in Ukrainian schools of higher education. Ecological education provides knowledge that is increasingly considered as a foundation for environmentally-friendly behaviour creating a growing awareness of environmental issues.

Some models by Swedish scientists for behavioural change describe such a process in several steps from habitual non-environmentally-friendly behaviour to environmentally-friendly behaviour. Their research supported the hypothesis that general factors such as environmental values and a sense of responsibility for the environment will be more influential in the early stages rather than in later ones in changing established habits regarding *e.g.* purchases of detergents. Furthermore, at a later phase of transition, specific beliefs about particular products will affect the testing and evaluation of new behaviour [see Dahlstrand and Biel, 1997].

As a result, scientists stress the necessity of starting environmental education much earlier – in kindergarten. Increasing the opportunity for the younger generation to be involved in proenvironmental activities will “establish behaviour that would be difficult to ignore in adulthood [Hamid and Cheng, 1995, 689].” Individuals who previously demonstrated acts of environmentally-friendly behaviour are likely to perform other environmentally-friendly acts. A public that consists of existing and potential ‘green’ consumers could play a significant role in the future promotion of environmentally-friendly life. A start could be made by disseminating the concepts of ‘green’ consumption, which motivate growing demand for goods that improve our health and at least do not destroy environment.

The Ukrainian population is growing older. Middle-age people have a serious lack of environmental knowledge. People of 65 years and over are considered as a generation unexposed to pro-environmental education. These groups can be accessed through media.

Journalists have a significant role in education. This tendency has a world-wide impact: “given this constraint of time, the world is neces-

sarily dependent on the communications media to raise public awareness. Only the media have the capacity to disseminate the needed information in the time available. The communications media have an extraordinary ability to raise public understanding of issues, for example their role in raising awareness of smoking and health issues in recent decades. A global environmental educational effort would rely heavily on the world's major news organisations [Brown, 2001, 259]."

According to Ukrainian studies, television, press and radio are the most accessible sources of information for the majority of respondents. The most popular are printed publications, which may be kept and re-read, if necessary [Agency of Marketing Technologies, 2004].

Lack of awareness, knowledge and action concerning environmental issues is still observed among the public, including key leaders in business and government not only in Ukraine, but even in developed countries such as USA. Promoting the economic and social benefits of environmental protection and management is essential if political and financial support is to be forthcoming for environmentally-related efforts. Some scientists [see Tyson, 2001] have already clearly illustrated how to conduct campaigns to influence environmental behaviour. Changes in public knowledge, attitudes, and behaviour concerning environmental issues could be implemented with the support of environmental communication campaigns.

The author has already identified and examined the mechanisms of the influence of the Ukrainian mass media on the environmental activity of the state. Suggestions were outlined on improving environmental communication, easy access to environmental information and enhancing the role of environmental policy in previous publications [see Byelyakov, 2001].

Positive changes in environmental coverage occurred after the 4th Pan-European Conference 'Environment for Europe' in Denmark, in 1998. The main principles of public access to environmental information were declared in the UN Convention on access to information, public participation and access to justice regarding environmental issues. Ukraine was the second country to ratify the Convention. The 5th Ministerial Conference was held in Ukraine, in 2003. Its agenda included public involvement in decision-making on environmental issues at the international level and environmental education.

The author took part in the development of a strategy and mechanisms for active public participation in environmental decision-making, public access to environmental matters, as well as the development of environmental journalism [see Byelyakov, 2003].

Belief that environmental journalists can contribute to raising environmental awareness and extending environmentally-friendly behaviour

is based on the author's journalistic experience. Green consumption was among the actively promoted topics during the 1990s. The author was responsible for consumer rights coverage in the "Club of Consumers" of the daily national newspaper "Robitnycha Gaseta" 1993–1997. These issues attracted high attention from readers.

Although the Ukrainian mass media is actively covering consumer issues, they pay less attention to 'green' consumerism than might be expected. There is still no programme on TV or radio on ecological issues. Neither are there any specialised magazines such as "Organic Style" or "Organic Gardening", as in other countries. As a result, the Ukrainian media have audiences who want to do the right thing, but do not have the answers they need from journalists. This situation shows a perspective for mass media to discover new possibilities.

The role of educators and journalists is expected to increase during the next few years. The main contribution could follow from the Bologna process and globalisation in the mass media, which will together promote the environmental education of Ukrainians, raising of their environmental awareness and extending environmentally-friendly behaviour. As a result, all these factors will be influential for sustainable development in Ukraine.

## 5. Conclusions

The public, government and business lack awareness, knowledge and action concerning sustainable development in Ukraine. Progress in this field can be reached by concentrating on determined indicators of sustainable development.

Environmentally-friendly behaviour is one of them. It has a very good chance of being introduced as an advanced form of care about human health resulting from healthy and environmentally-friendly consumer behaviour in particular. However, such behaviour is not at all a priority for people with a low level of income, especially at a time of high inflation. The decrease in public interest with respect to environmentally friendly activities is limiting the impact of citizens' involvement in environmental consumerism, which should otherwise promote proactive pro-environmental behaviour. As a result, raising the quality of life is necessary. Ukraine needs to make up the lee-way in economic development and eradicate poverty.

The expected changes in behaviour are slow and usually time-consuming. Responsibility for the environment seems to be conscious behaviour. Educators and journalists could provide stronger support to speed up

changes in attitudes. Media and schools are by far the most important sources of information about pro-environmental behaviour.

Global changes, European integration, future membership of Ukraine in the World Trade Organisation, increased exports of Ukrainian goods to the world market and the need to raise environmental standards will improve national awareness of the environment and contribute to extending environmentally-friendly behaviour. As a result, all these processes will be a significant contribution to sustainable development in Ukraine.

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