PERCEPTION OF ENVIRONMENTALLY GENERATED CONFLICTS IN THE SOCIETY OF THE SOUTHERN CATCHMENT AREA OF LAKE BALATON

György CSEPELI[1], Gábor MOLNÁR[2], Gergő PRAZSÁK[1]

[1]Eötvös Loránd University, H-1117 Budapest, Pázmány Péter sétány 1/A
[2]Kaposvár University, H-7400 Kaposvár, Guba Sándor u. 40.

ABSTRACT

The paper presents the results of a 2013 survey about how the residents in the southern catchment area of Lake Balaton, Hungary, perceive environmental issues and environment-related social conflicts in their own settlements and their narrower geographical area. In conformity with earlier surveys of the value system of the Hungarian society, we found that the respondents attribute only moderate importance to environmental problems. Concerning the deep structure of their general value-commitment, we detected four groups of respondents: a values-rich, a privacy-minded, a public-minded and a nihilist group. A cluster analysis of the patterns of the respondents' attitudes toward three principal components of satisfaction with the environmental conditions of their settlement (feeling of comfort, condition of the infrastructure and strictly environmental factors), distinguished an urbanized, an uncritical, an idealist, and a complaining group. In general we can say that the inhabitants' assessment of the environmental condition of their settlements lacks dramatic elements. They do not perceive significant environmental issues and conflicts, only isolated cases of putting the natural environment at risk. They are generally content with their settlement and do not consider the state of Lake Balaton endangered either. The only sphere where they detect problems is the lack of employment opportunities. They do not believe, however, that developing tourism alone could offer a solution to this problem in the long run.
Keywords: environmental sociology, perception of local environmental issues, attitudes towards environmental issues, conflict perception, Lake Balaton

INTRODUCTION

Ever since the human species appeared on Earth, society and its natural environment have been connected by a great multiplicity of unbreakable ties. For an immensely long period the dominant partner in this relationship was inevitably nature. Whether they wanted it or not, whether they acknowledged it or not, humans had to obey nature's dictates. Modernization, however, has changed this unilateral, puppet-like relation of human society to its natural environment. Nowadays, humanity appears to be having the upper hand – even if by tricking nature into submission, following Bacon's wisdom of *parendo vincitur* ["Nature to be commanded must be obeyed"]. But humans, confined to their tight present, seem unable to escape from their self-fabricated traps. One consequence of their short-sighted choices is the deterioration

of the natural environment, a process which, once started, is very hard to bring to a stop (*Lányi*, 2001).

Is this really an immutable necessity? Are modern societies inevitably doomed to demolish their natural environment and perish together with it? Let us put it differently: if, as we hope, a distinctive feature of modern societies is an increased ability to learn and adapt to new circumstances, is it really impossible for them to escape from this trap of self-destructive victory over nature?

Thirty years ago, in 1986 – the year of the Chernobyl Nuclear Power Plant disaster – German social theorist Niklas Luhmann published a book under the title *Ökologische Kommunikation* [Ecological Communication] (*Luhmann*, 1986; 1989). The book investigates the above problem from a systems theory point of view and gives a rather pessimistic answer. As *Luhmann* (1989, 116) states, due to their differentiation into function systems such as Economy, Politics, Science etc., modern societies can bring "too little resonance into play for the exposure to ecological dangers." Resonance is a key term for Luhmann in this work. It is the capability of a system to respond to its environment in ways rendered possible by the inner structure of the system. The capability of social systems to respond to their natural environment is highly selective. Society can perceive, pay attention to, and respond to environmental dangers if and only if they pass through the specific code- and program-based filtering mechanisms of one or some of its function systems. What cannot be coded in the specific codes of a function system and driven through its specific programs will necessarily remain imperceptible by this system and consequently cannot elicit response. And only exceptional cases of irritation by the non-social environment can set society in motion. "From the evolutionary point of view one can even say", Luhmann points out, "that sociocultural evolution is based on the premiss that *society does not have to react to its environment*" (*ibid.,* 16; emphasis in the original).

Luhmann devotes separate chapters to each of the relevant function systems of modern society (Economy, Law, Science, Politics, Religion, and Education), showing why the particular system is unsuitable for a really adequate response to environmental dangers. Although Science, for instance, can detect ecological problems and dangers in great abundance, their practical evaluation, the selection of the important problems from a practical point of view as well as the decision making of how to respond to them are beyond its competence – these tasks fall to other systems. The political function system can receive the warning signals of the scientific one, but these inputs have to compete in the political decision making process with several others coming from other systems (transmitting other kinds of needs) as well as the internal needs of the political system. Whereas the natural environment can elicit too little resonance in a social system, other social systems can bring about too much resonance. As Luhmann sees, the education system (the function of which is to establish attitudes and abilities for other function systems to use) offers perhaps the best chances for promoting adequate responses to ecological dangers. However, here again he seems somewhat pessimistic concerning the possibilities of introducing "new attitudes, evaluations and sensibilities" to other systems through education and thereby changing radically the "well-coded,

programmatically organized daily life" of modern societies (*ibid.* 104). And Luhmann is still more skeptical about the potentials of non-expert ("au trottoir") communication, everyday moral thinking and the new ecological movements. His solution is, however, not abandoning the project of modernization. In order to respond adequately to environmental dangers, "greater rather than less competence for intervention has to be developed" (*ibid.,* 14).

In the very same year another German sociologist, Ulrich Beck also published a book, *Risikogesellschaft* [Risk Society] (*Beck* 1986; 1992) about the same problem, in several points with similar insights and conclusions. „In advanced modernity", he states, "the social production of wealth is systematically accompanied by the social production of risks," and, consequently, new problems and conflicts arise „from the production, definition and distribution of techno-scientifically produced risks" (*Beck*, 1992, 19). The concept of risk society expresses the realization that late modern societies can no longer control the dangers that are produced precisely by themselves, by the successful, triumphant process of modernization and industrialization (*Beck*, 2007, 8). This inability "cannot be overcome by more and better knowledge, more and better science; rather precisely the opposite holds: it is the *product* of more and better science" (*ibid.*, 115; emphasis in the original). We witness regularly that new knowledge produced by science, purported to transform unpredictable risks into calculable ones, gives rise to new unpredictabilities and that interventions to mitigate dangers and risks lead to new forms of risk. Similarly to Luhmann, Beck sees the modern scientific, legal, and political systems as incapable of preventing, managing, or even finding responsible agents to, the manufactured ecological risks produced at large by modern economy. His proposed solution – somewhat more optimistic than Luhmann's – is a "cosmopolitan political realism" that enables not only transnational cooperation in dealing with globalized risks but at the same time communications between different systems "without reducing them to the logic of one system only" (*ibid.*, 198 and 207ff.). Beck is also a bit more optimistic than Luhmann regarding the strength and potential of the ecological movements, civil society, the public sphere, and the moral courage of individuals, although he is aware of the difficulties e. g. of overcoming the "everyday cultural blindness" towards latent risks and side effects. And he warns that it would be self-delusion to think that individuals could accomplish by themselves "what states, sciences and economic enterprises are unable to achieve" (*ibid.*, 46). So, it seems, system and lifeworld powers equally have their task cut out if we want to avoid ecological meltdown in our global risk society.

In 2013 we conducted an environmental sociological research in the southern catchment area of Lake Balaton. The goal of our research was to survey the perception of, and attitudes towards, economic and social conflicts stemming from ecological problems in the society of a geographically well-defined micro-region.

Five groups of agents present on the area were surveyed by five different (agent-specific) but coordinated questionnaires: the residential population, the mayors or municipal clerks of the local governments, the top management representatives of the local enterprises (mostly small and medium-sized ones), the holiday cottage owners and the tourists visiting the area during the summer tourist season.

The present article publishes results of the survey of the residential population of the area. The survey took place in the summer of 2013 on a sample of 500 adult people representative of the population of the southern catchment area of Lake Balaton. The interviews were conducted face-to-face.

COGNITIVE-AFFECTIVE BACKGROUND

Table 1 shows the respondents' ranking of values.

Table 1

Ranking of values by the population of the southern catchment area of Lake Balaton (measured by a five-graded scale, where 1 = not important at all, 5 = very important)

Family	4.95
Money	4.36
Friends	4.24
Free time	4.19
Job	4.07
Natural and environmental protection	3.69
Religion	2.92
Local public affairs	2.90
Politics	1.86

On the evidence of the table, we can tell that the value system of the inhabitants of the area agrees with the typical Hungarian value system, which has – ever since we have data (that is, since the early 1980s) – been characterized by an emphatic primacy of private life over public issues. Similar tendencies were reported by *Füstös and Szakolczai* (1994), who summarized the results of the longitudinal survey of values conducted under Elemér Hankiss' leadership. Neither were divergent the tendencies observed by *Varga* (2003), adopting different methods for measuring value systems.

It follows from the very nature of value commitments that they can only been recognized reliably in limit situations when the individual is forced to act (*Váriné*, 1987). Therefore, to test our above simple value survey, we wanted to know the degree of the respondents' willingness to go into conflict situations when personal, religious, political, environmental, future-, or health-related values are at stake.

Measuring the answers by a five-graded scale again, we found that the respondents are most willing to engage in conflicts in defence of their families and least willing if something or somebody is threatening their political convictions (*Table 2*). These results reinforce the previous ones concerning value ranking.

The value of family occupies the first place in the ranking. It is especially noteworthy that the values of environment and future are close to each other in the middle and we find religious and political values in the last places of the hierarchy.

Table 2

Willingness to engage in conflict for different values
(on a five-graded scale ranging from 1 to 5, averages)

Health of the family	4.37
Future of descendants	3.47
Nature	3.33
Cleanliness of environment	3.24
Religious conviction	2.44
Political conviction	2.02

Values are one of the most important determining factors of the individual's general feeling of wellness. It is also within this space of values that the feeling of contentment or discontent with regard to living in a particular settlement arises in a person's mind. In our survey we inquired about 11 possible sources of satisfaction. The greatest level of satisfaction was brought about by the beauty of the natural environment, followed by the accessibility of the settlement. The greatest level of discontent, on the other hand, was elicited by the employment opportunities offered by the settlement. The rank order of the 11 sources of satisfaction was as follows (*Table 3*):

Table 3

Ranking of the sources for the satisfaction with the habitat
(measured by a five graded scale)

Beauty of the natural environment	4.46
Settlement accessibility	4.36
Popularity of the settlement	4.19
Beauty of the built environment	4.03
Educational and cultural opportunities	3.68
Health care provision	3.65
Public security	3.53
Quality of relationships between the inhabitants	3.43
Entertainment and recreation opportunities	3.17
Proportion of overhead costs	2.41
Employment opportunities	2.17

The quite informative results of *Table 3* show that the respondents in general like their settlement, they feel well or are content about the town or village they live in, and they are especially fond of its natural beauty. They are, however, less satisfied with the facilities offered by society, especially with the lack of working opportunities and the high rate of overheads.

Beside their evaluation of the present situation, we wanted to inquire about the respondents' expectations concerning the future as well. The data in Table 3 above show that they are least satisfied with their economic circumstances. In light of this, the answers concerning the respondents' expectations about their future economic situation (10 years from now) are interesting. They agreed mostly with the statement that "the settlement and its area will not change substantially; the circumstances will remain the same." Their answers, accordingly, were neither optimistic nor pessimistic. The answers to our questions about the probabilities of either development or decline averaged around 3, that is, the middle of the five graded scale. They are highly sceptic about larger future investments in the settlement or its environs; they do not believe that multinational companies would settle in the region. They hope instead that services based on the natural assets of the area will appear in the town or village.

In the respondents' general cognitive-affective background, critical and affirmative elements are present at the same time. However, we received strong affirmative answers to the question "If you were free to choose, where would you like to live?" The options given were: "I would remain in my present settlement." "I would move to another settlement in the Lake Balaton area." "I would move to another region outside the Lake Balaton area."

80% of the respondents are not willing to give up their residence in the area and refuses to move to another region. The overwhelming majority (71% of the 80%) of those who do not want to leave the area are not even inclined to move to another settlement in the Balaton region.

The minority who wish to get away primarily want to move in hope of gaining better living conditions (employment, subsistence).

The deep structure of the cognitive-affective background

A multivariable analysis of value choices discriminated two types. To borrow a conceptual distinction introduced by *Habermas* (1981), the first type prefers what can be termed "systems values," whereas the other, "life-world values." However, the separation of these two types of choices is not complete. Based on the possible combinations of the two sets of values, we can distinguish between four groups of respondents (*Table 4*).

Table 4

**The ratio of groups displaying the four possible combinations
of values commitments (%)**

The values-rich (both systems and life-world values)	36
The privacy-minded (life-world values)	29
The public-minded (systems values)	20
The nihilists (none)	25

As can be seen, the relative majority identifies with both sets of values, however the percentage of those preferring life-world values is higher than that of committed to systems values and a comparatively high percentage (25%) of respondents can be characterized as anomic, or nihilist, persons rejecting both the life-world and the systems values.

The respondents' choices of the possible reasons for undertaking conflicts did not discriminate the sample into two distinct parts. The answers produced a contiguous set, which in turn shows as a thermometer the differences between the four groups, formed according to values commitment, concerning their readiness to undertake conflicts. We found significant correlation between the variables of value-commitment and willingness to engage in conflicts (*Table 5*).

Table 5

The four value-commitment groups' readiness to engage in conflicts

The values-rich (both sets of values)	+0.39
The public-minded (systems values)	+0.06
The privacy-minded (life-world values)	−0.22
The nihilists (none)	−0.44

The individuals in an anomic state will understandably refrain from engaging in conflicts because there are no values in defence of which they feel they should mobilize themselves. On the other hand, it is also easy to see why the willingness to undertake conflicts is very high among the values-rich individuals. People committed mainly to life-world values are more similar to those in an anomic state although their reluctance to take part in conflicts is less intensive. Finally, the individuals committed to systems values are closer to values rich people in this regard.

A factor analysis of the reasons for satisfaction yielded two types that are not entirely independent of each other but rather distinct. The popularity of the settlement, the lack of employment opportunities and the high rate of overheads became eliminated during the analysis because in these questions the respondents were unanimous. The remaining reasons fall in two types. One comprises the reasons related to infrastructure (education, public security, accessibility), whereas the reasons of "pleasantness" (entertainment and recreation opportunities, the quality of relationships between the inhabitants, the beauty of the natural as well as built environment) constitute the other type.

The quality of future expectations was measured by a simple indicator: the number of pessimistic answers out of the five questions. According to this indicator our respondents cannot be regarded pessimistic. 58% of them gave pessimistic answers to none of the questions (*Table 6*).

The procedure can be carried out in the reversed direction as well, by counting the optimistic answers (*Table 7*).

Table 6

The respondents' pessimism concerning their settlement of residence (%)

Lack of pessimism	58
Minimal pessimism	23
Small degree of pessimism	11
Medium degree of pessimism	6
High degree of pessimism	2

Table 7

The respondents' optimism concerning their settlement of residence (%)

Lack of optimism	57
Minimal optimism	33
Small degree of optimism	7
Medium degree of optimism	2
High degree of optimism	1

These two tables corroborate our conclusions at the original analysis of the respondents' expectations about the future, namely that they as a rule do not anticipate either favourable or unfavourable changes in the next 10 years. The majority is prepared only for the *lack of change*, which makes them defenceless against possible future challenges that may elicit impacts, and not necessarily advantageous ones, on their lives.

SETTLEMENT OF RESIDENCE

As we have seen, the respondents are generally satisfied with their settlement and even though not optimists about the future, they are not pessimists either. Their opinion about the economic conditions and potentials of the settlement was surveyed through the respective degrees of their agreement with 8 statements (*Table 8*). The respondents agreed the most with the statement that the local government has to create incentives for the settling down of not only touristic enterprises but other forms of economic activities as well. The least accepted statement was that "In high seasons the lakeside settlements in the Balaton region are practically not liveable (because of over crowdedness, noise, litter, price level etc.)."

According to *Table 8*, it is a generally accepted opinion among the residents of the southern catchment area that, although tourism is a very important source of subsistence, the region needs other forms of economic activities as well. The respondents are less sure whether the lake itself could provide the entire population of the area with a sufficient basis for earning a good living. What seems to be uncontested, however, is that the socio-economic impacts of the touristic attraction of Balaton are not in conflict with the residents' demands.

Table 8

The respondents' judgements about the economic conditions
and potentials of their settlement (on a five-graded scale)

Besides touristic ones, the local government should encourage the settling down of other economic enterprises as well	4.2
Tourism should be the leading industry of the settlement	3.7
Only the lakeside settlements enjoy the advantages of Lake Balaton	3.6
In order to secure its economic situation, the settlement should cooperate with the neighbouring settlements	3.6
The settlement should find its own take-off route by its own because the neighbouring settlements are its competitors	3.3
It is Lake Balaton that provides a living and attraction for the settlement	3.3
The entire lakeside of Balaton has become a „paying area" therefore the residents cannot enjoy the benefits of living in the proximity of the lake	2.7
In high seasons the lakeside settlements in the Balaton region are practically not liveable	2.7

The respondents' general satisfaction with their settlement is, as we have seen, rather high. Compared to this, we detected less satisfaction with regard to the environmental conditions. The average in this question was 3.7, which is not low but not very high either.

We measured the satisfaction with the environmental state of the settlement by an extensive set of questions. We enumerated 27 possible reasons for satisfaction and the respondents had to tell in each case how satisfied or unsatisfied they are with it (measured in a five-graded scale). *Table 9* shows the results.

The satisfaction with the specifically environmental factors (air, water, noise, and cleanliness) is noticeably high. No average is below 3, which suggests that the perception of environmental issues by the residents in the southern catchment area is free from dissonance. There are no critical, conflicting elements in their vision of environmental conditions. The only real problem for them, as mentioned earlier, is the shortage of employment opportunities. The magnitude of dissatisfaction with this issue is clearly show by the fact that it only received an average grade of 2. This problem, however, is not connected with the perception of environmental issues.

As for the developmental priorities deemed necessary by the respondents, it is significant that none of the possible priorities in the list prepared by us was said to be lacking importance. Some also mentioned another priority as very important that was not present in the list: public security (*Table 10*).

Table 9

**The respondents' satisfaction with their settlement
from an environmental point of view (on a five-graded scale, averages)**

Air quality	4.3
The state of the landscape	4.3
The water quality of Lake Balaton	4.2
Drinking water supply	4.0
Noise level	4.0
Animal keeping	4.0
Waste removal	4.0
The appearance and condition of buildings	3.9
Selective waste collection	3.8
Street cleansing	3.8
Cycling infrastructure	3.8
Environmental education	3.7
The water level of Lake Balaton	3.7
Inland drains in the outer areas of settlements	3.6
The orderliness of public places	3.6
Local and intercity public transport	3.6
Public bathing facilities	3.6
Street storms drains	3.6
The residents' environmental awareness	3.5
Waste water treatment	3.5
Allergenic weed control	3.5
Abandoned sites and barracks	3.2
Mosquito destruction	3.1
The technical condition of roads and pavements	3.1
Landfill sites	3.1

Table 10

Developmental priorities (on a five-graded scale, averages)

Health care	4.6
Sewerage system	4.6
Environmental protection and nature conservation	4.5
Drinking water supply	4.5
Social and child care	4.5
Public employment	4.5
Waste management	4.5
Nursery care, schools	4.4
Tourism development	4.2
Street cleansing	4.2
Culture and sports	4.1

The deep structure of satisfaction with the settlement from an environmental point of view

The causes of the satisfaction with the settlement form an environmental point of view were explored by principal component analysis. We found that three types could be distinguished.

In the first type, we find the factors determining the **feeling of comfort** (cleanliness of public places, sewerage system, mosquito destruction, public bathing facilities, the water quality of Balaton, cycling facilities, and the residents' environmental awareness).

The answers related to the evaluation of the factors of **infrastructure** belong to the second type (the technical condition of the roads and pavements, street storm drains, inland drains in the outer areas of settlements, drinking water supply, local and intercity public transport, selective waste collection).

The third type contains, basically, the reactions to **environmental factors** (air, noise, landscape and waste removal).

Based on these three principal components, we carried out a cluster analysis. Four groups of respondents were separated (*Table 11*).

Table 11

**Groups of respondents distinguished on the basis of satisfaction
with environmental conditions of the settlement
(percentages of all respondents)**

Group	%
Urbanized	34
Uncritical	18
Idealist	16
Complaining	15
Missing answer	17

The largest among the groups enumerated in *Table 11* is the "urbanized" one, the members of which consider the feeling of comfort as well as infrastructure important in their settlement from an environmental angle. The group of "uncritical" ones are satisfied with all three types of causes. The "idealists" as opposed to the "urbanized" ones are satisfied with the environmental factors and see the factors belonging to the types of comfort and infrastructure as potential sources of danger. The group of "complaining" ones are the opposites of the "uncritical" respondents. They see the current situation in all three dimensions as obstacles to environmental protection.

COMMUNICATION AND THE LOCAL GOVERNMENTS

Participation in public communication about environmental issues was surveyed through four questions.

As for the sources where the respondents seek for information, the most mentioned source was television and the least mentioned were technical books and

popular science lectures. Beside television, one-fourth of the respondents use the Internet, radios or the printed press as sources of information in environmental questions. The ratio of information coming from the local government is insignificant (appr. 6% mentioned).

The picture is very similar in case of general knowledge. The respondents are usually not able to distinguish sharply between knowledge and information. Personal conversations about environmental matters are more frequent in the closer or wider family circle or among friends and they come up the least during workplace conversations.

We inquired how well the respondents knew the elected municipal leaders and representatives. The degree of their familiarity with the local politicians is not very high, on average 3.5 in case of the leaders and 3.2 in case of the representatives. The respondents are even less familiar with the local development plan, the conceptions for investment policy and hardly a person mentioned the local government's program for environmental protection and nature conservation.

According to the majority of the respondents, the local government mainly inform them through the local newspaper. *Table 12* shows the channels of local government communication in the order of access by the citizens.

Table 12

**The channels of communication used by the local governments,
ranked according to the frequency of access by the citizens
(based on the respondents' answers; %)**

Local newspaper	62
Local television	38
Public announcements	31
Information sheets	17
Local radio	4
Online newsletters	4

The form of informing the inhabitants clearly follows last-century patterns (only the megaphone and the town crier are missing).

Regardless of the channels of information, according to the recollection of 17% of the respondents, the local government regularly asks the citizens' opinion about the developmental plan of the settlement. The majority of the interviewees, however, states that this only happens rarely (47%) or never at all (26%).

As for the opposite direction of communication between the local government and the inhabitants, the respondents mentioned residential forums as the most frequent form of communication (*Table 13*).

All in all, according to our survey, 59% of the residents living in the southern catchment area of Lake Balaton are satisfied with their local government. Only 11% of them bring up against the politicians that they serve party interests and 19% suspects their being in the service of some private interests.

Table 13

**The reverse ways of communication from the citizens
towards the local governments (% of mentioning)**

Residents' forum	40
Official forum	33
Questionnaires sent to the residents	12
Open meeting of the elected representatives	12
Online forum	5

When we asked what stakeholder groups the local governments serve in their view, the respondents gave rather indiscriminate answers. According to them, the local governments are ready to promoting the interests of practically all the groups asked about (*Table 14*).

Table 14

**The groups served by the local government
(on a five-graded scale, averages)**

Potential investors	3.7
Residents	3.6
Local entrepreneurs	3.6
Tourists	3.4
Season cottage holders	3.1

Surprisingly, the group of holiday cottage holders are at the end of the list.

The interviewees think that the local agents are the most responsible for the environmental problems in their settlements. *Table 15* shows the groups of agents in the order of decreasing responsibility attributed to them.

Table 15

**Different groups' degree of responsibility for, and readiness to solve,
environmental problems according to the respondents
(on a five-graded scale, averages)**

	Responsibility	Readiness to solve the problems
Residents	3.9	3.4
Local enterprises	3.9	3.2
Local governments	3.7	3.3
Tourists	3.6	2.3
Holiday cottage owners	3.4	2.5
Civil organizations	3.1	3.0
Governments	3.1	2.5
European Union	2.5	2.2

As for the commitment to solving these problems, its attribution to different agent groups gives the same ordering, however with lower averages in all cases.

We also asked about the degree of different agent groups' responsibility for polluting Lake Balaton and their capability of averting the damages caused by it. Here we witnessed that the local groups (especially the residents and the local governments) came in less prominent places (*Table 16*).

One of the most important questions in our questionnaire inquired whether the respondents know of conflicts that broke out over environmental problems between different types of actors in their settlements. *Table 17* displays the distribution of answers.

Table 16

**Different groups' degree of responsibility for, and capability to avert
the negative effects of, the pollution of Lake Balaton, according
to the respondents (on a five-graded scale, averages)**

	Responsibility	Capability to avert dangers
Tourists	3.9	2.5
Local entrepreneurs	3.9	3.2
Holiday cottage owners	3.8	3.0
Residents	3.8	3.5
Local governments	3.5	3.3
Civil organizations	3.1	3.1
Government	3.1	2.5
European Union	2.4	2.2

Table 17

**Perception of conflicts between different groups of actors
based environmental problems in the settlements of the respondents
(on a five-graded scale, averages)**

Between the residents and the tourists	1.7
Between those living near, and those living farther, from the lake	1.7
Between the residents and local governments	1.6
Between different groups of residents	1.6
Between the residents and the holiday cottage holders	1.5
Between residents living in different parts of the settlement	1.5
Between entrepreneurs having opposite interests	1.5
Between local entrepreneurs and the local government	1.5
Between the residents and the enterprises	1.4
Between the residents and environmental activists	1.4
Between the local entrepreneurs and environmental activists	1.4
Between the local government and environmental activists	1.3
Between the local government and other settlements' government	1.3

Only 5% of the interviewees responded to our open-ended question concerning specific conflicts in their settlement. Most of them mentioned illegal waste dumping and the role of the local militia in combatting this activity.

Generally we can say that in the residents' perception the conflicts generated by environmental problems in the local society of the southern catchment area of Lake Balaton are rather insignificant. The perceived conflicts potential in none of the 13 pairs of agents reached the average of 2 (which is a very low level in the 1-to-5 scale).

LAKE BALATON

As we have seen, the respondents are content with the water quality of Lake Balaton. They are slightly concerned, however, about the fluctuation of the water level. We listed 11 environmental problems regarding the lake and asked the interviewees whether they regard them as induced primarily by human activity, or instead as the results of natural causes, beyond the scope of human influence. A five-graded scale was offered, where values 1 and 2 referred to the primacy of human-induced causes, whereas values 4 and 5 referred to the decisive role of natural factors independent of human activity (*Table 18* and *Table 19*).

Table 18

**The primarily human-induced problems of Lake Balaton
according to the respondents (on a five-graded scale, averages)**

Building up of the shoreline of Balaton, shore protection works	2.0
Problems with the fish stock (bighead carp, eel)	2.6
Soil erosion	2.8
Invasion of alien species	2.8
Siltation of beaches and ports	2.8
Deterioration of the reeds	2.9

Table 19

**The primarily nature-induced problems of Lake Balaton
according to the respondents (on a five-graded scale, averages)**

Low water level, drought	3.5
Climate change	3.4
Algal invasion	3.4
The appearance of new pests	3.0

The problems related to the ecological state of Lake Balaton fall into two categories: those that, according to the interviewees, are the results of human (economic, tourism-related) activities and those that they see as stemming from natural causes beyond human control. However, no dramatic worsening is perceived in either case.

The summer tourist season imposes an exceptionally heavy ecological burden on Lake Balaton because the population being present on the southern lakeside becomes multiplied several times. We asked the respondents to evaluate 6 possible environmental consequences of the tourist season. *Table 20* shows the results.

Table 20

Potential environmental damages caused by the tourist season according to the respondents (on a five-graded scale, averages)

Littering	2.8
Noise pollution	2.7
Traffic jam	2.4
Water pollution	2.4
Air pollution	2.4
Soil pollution	2.3

We also queried about the potential ecological impacts of the festivals (*Table 21*).

Table 21

Potential environmental damages caused by the festivals held in the lakeside of Balaton according to the respondents (on a five-graded scale, averages)

Littering	3.7
Noise pollution	3.5
Traffic jam	3.1
Water pollution	3.1
Soil pollution	3.1
Air pollution	3.0

The respondents' distribution between the four possible groups formed on the basis of how disturbing they find, environmentally, the tourist season and the festival season is shown in *Table 22*.

Table 22

Groups of respondents formed on the basis of their attitudes towards the disturbing environmental factors produced during either the tourist or the festival season (%)

Both seasons are disturbing	18
Only the tourist season is disturbing	32
Only the festival season is disturbing	24
Neither of the seasons is disturbing	26

As can be seen, the greatest number of respondents belongs to the group that feels disturbed by the tourist season whereas those who are disturbed by both seasons are the fewest.

ENTERPRISES

To the question whether they can mention major enterprises in their settlement, 28% of the respondents could not give a positive answer. Only a small fraction of the interviewee was able to enumerate enterprises the activity of which involved environmental pollution. Their examples were water pollution, inadequate sewage disposal, crop spraying, and air pollution. Finally, no more than 1% of the respondents were aware of recent corporate investments that had deteriorating effects on the state of natural environment. They mentioned unfinished constructions, an asphalt mixing plant, a pig farm as examples. However, they considered the polluting impact of these investments very severe (4.4 in a five-graded scale).

Only 4% of the respondents have heard of enterprises that paid attention to the state of the natural environment. They mentioned as good examples the local forestry public company as well as companies that solved the problem of waste materials transportation and created tidy and clean premises. Very few respondents (1%) were able to mention definitely environment-friendly investments. Their examples were silt dredging, reed cutting, building bicycle paths, and waste tire pyrolysis in reactor.

To our question about the forms of Corporate Social Responsibility (CSR) activity of the local enterprises, the relative majority (30%) of the respondents mentioned sponsorship, 24% mentioned expressly environmentally conscious CSR activity, 21% knew about charity activities and 15% about financial or material help.

Lastly, we wanted to know the marketing value of different CSR activities in the eye of the respondents. We enlisted seven activities and asked the respondents what impetus they felt to purchase the company's products or services if they knew that the company pursued that CSR activity (*Table 23*).

Table 23

The marketing value of different CSR activities
(on a five-graded scale, averages)

Environmentally conscious corporate behaviour	2.5
Improvement of local public areas (landscaping, building playgrounds etc.)	2.5
Sponsoring charity foundations	2.2
Sponsoring cultural organizations and events	2.2
Sponsoring educational institutions	2.4
Public communications campaigns about social problems	2.2
Sponsoring sports clubs	1.9

As can be seen in *Table 23*, the respondents rated most highly environmentally conscious corporate behaviour, the CSR campaigns related to environmental protection whereas sponsoring sports-related organizations and events was the least highly valued CSR activity.

SUMMARY

Surveying the environmental awareness of the inhabitants of the southern catchment area of Lake Balaton as well as the social and economic conflict potential generated by environmental matters, we found that the importance of preserving and protecting our natural environment is definitely present in the population's value system. The values of nature and future are connected to each other in the minds of the respondents and they take precedence over religion and politics. The inhabitants' assessment of the situation, however, lacks dramatic elements. They do not perceive significant conflicts, only isolated cases of putting the natural environment at risk. They are generally content with their settlement and do not consider the state of Lake Balaton endangered. There is only one area where they can see conflicts: in the sphere of employment opportunities – or rather, the lack thereof. They do not believe, however, that developing tourism alone could offer a solution to this problem in the long run.

ACKNOWLEDGEMENT

REFERENCES

Beck, U. (1986): Risikogesellschaft. Auf dem Weg in eine andere Moderne. Frankfurt a. M.: Suhrkamp. [English translation: Risk Society. Towards a New Modernity. Translated by Mark Ritter. London–Newbury Park–New Delhi: Sage Publications, 1992.]

Beck, U. (2007): Weltrisikogesellschaft. Auf der Suche nach der verlorenen Sicherheit. Frankfurt a. M.: Suhrkamp. [English translation: World at Risk. Translated by Ciaran Cronin. Cambridge: Polity Press, 2009.]

Füstös L., Szakolczai Á. (1994): Értékek változásai Magyarországon. [Changes of Values in Hungary. (In Hungarian.)] Szociológiai Szemle. I. 77–90

Habermas, J. (1981): Theorie des kommunikativen Handelns. Bd. 2: Zur Kritik der funktionalistischen Vernunft, Frankfurt am Main. [English translation: Theory of Communicative Action, Volume Two: Lifeworld and System: A Critique of Functionalist Reason. Translated by Thomas A. McCarthy. Boston, Mass.: Beacon Press, 1987.]

Lányi A. (szerk.) (2001): A szag nyomában. Környezeti konfliktusok és a helyi társadalom. [After the smell. Environmental Conflicts and Local Society. (In Hungarian.)] Budapest: Osiris-ELTE.

Luhmann, N. (1986): Ökologische Kommunikation: Kann die moderne Gesellschaft sich auf ökologische Gefährdungen einstellen? Opladen: Westdeutsches Verlag GmbH. [English translation: Ecological Communication. Translated by John Bednarz, Jr., The University of Chicago Press, 1989.]

Varga K. (2003): Értékek fénykörében. [In the Halo of Values. (In Hungarian.)] Budapest: Akadémiai Kiadó.

Váriné Szilágyi I. (1987): Az ember, a világ és az értékek világa. [Man, World and the World of Values. (In Hungarian.)] Budapest: Gondolat.

Corresponding author:

György CSEPELI
Eötvös Loránd University,
H-1117 Budapest, Pázmány Péter sétány 1/A.
Tel.: + 36 30 9890-735
e-mail: csepeli.gyorgy@tatk.elte.hu