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SUSTAINABLE CONSUMPTION
2011 Conference

**Sustainable Consumption,
Production and Communication**

PROCEEDINGS

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**SUSTAINABLE CONSUMPTION 2009
Conference**

**Sustainable Consumption,
Production and Communication**

PROCEEDINGS

**Editors:
Sándor Kerekes
Mária Csutora
Mózes Székely**

INTRODUCTION

Norway has, for many years now, actively contributed to the reduction of social and economic disparities in Europe through the European Economic Area Agreement (EEA). The EEA-agreement is Norway's most important foreign policy agreement, ensuring Norway as an equal partner in the EU internal market. But the EEA, despite its name, entails so much more than just trade and economy. It is also about common values and shared responsibility for Europe's future. This is reflected in our financial contributions through the Norway Grants.

Since the EU enlargement in 2004, Norway has contributed with more than €260 million yearly for the Grant period 2004- 2009 to projects implemented in the newest member states. For the Grant period 2009- 2014 the contribution will be €347 million yearly.

Hungary, as the second largest beneficiary, received some €135 million during the Grant period 2004-2009. During this period, thousands of applications were submitted and about 100 projects and funds were approved in Hungary. Core areas of support included conservation of European cultural heritage, protection of the environment and human resource development. Approximately one third of the Norway Grants went to the sectors academic research, environment and sustainable development. And the project "Sustainable consumption, production and communication" by the Corvinus University of Budapest were one of the projects that were supported.

The Norway Grants are a unique opportunity to strengthen the ties between our two countries. We are therefore very pleased to see that projects like this have encouraged international contact and mobility. In this case, through close cooperation with the Norwegian University of Science and Technology (NTNU). We are pleased that the Grants have contributed to interaction between the two universities.

The way products and services are delivered to our doors have become increasingly more complex, and made knowledge about consumer and production habits, trends, development and influence connected to sustainable development important issues that need to be addressed, researched and disseminated. More information about the way societies produce and consume and how we can make fundamental changes in the areas, are vital to achieve global sustainable development.

The Corvinus project focus on cooperation in several scientific areas. This is crucial to understand the environmental impact on final consumption, as well as to create concrete proposals to move consumption, production and service habits in Hungary in the direction of sustainability. We are pleased that Norway has been able to facilitate research in this field.

In concluding I would like to thank the Corvinus University for years of dedicated work. I wish you all the best with your future work.

To read more about Norway's contributions in Hungary, please visit our web site www.norvegia.hu. In the mean time I hope that you enjoy this publication.

A handwritten signature in black ink, appearing to read 'Siri E. Sletner', written in a cursive style.

Siri Ellen Sletner

Ambassador

Royal Norwegian Embassy

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Changes of the social structure in the Budapest Metropolitan Region

Nóra Baranyai

Centre for Regional Studies of the Hungarian Academy of Sciences, Budapest, Hungary

E-mail: baranyain@rkk.hu

The aim of this presentation is to show the social structure of the Budapest metropolitan region and the main characteristic changes between 2005 and 2010 based on a comparison of the research results of ‘Urban Regions, Spatial and Social Inequalities and Conflicts – Spatial and Social Dimensions of European Competitiveness’ implemented by a consortium formed with the leadership of the Institute of Sociology of the Hungarian Academy of Sciences within the framework of the National Research Development Programme and the ‘The social mechanisms and interests determining territorial consumption models. The model of sustainable consumption.’ elaborated by the Institute of Sociology of the Hungarian Academy of Sciences, which is a part of the research project called ‘Sustainable Consumption, Production and Communication’, supported by the Norwegian Financial Mechanism, and organized by the Corvinus University of Budapest.

The presentation analyzes the changes of the spatial localization of the population, and the main social-demographical characteristics of the different residential areas.

Based on the research results, the hierarchy of the spatial-social structure intensified between the analyzed two periods, and this created a dual social structure core-periphery model. It means, that the socially high-ranked centre with low-ranked periphery has been extended by another scheme of low-ranked centre and high-ranked periphery. This new type of social-spatial patterns was determined by globalization, and the suburbanization and gentrification processes at the same time. The main social differences (f. eg. qualification and income level of the inhabitants, their workplace-status) manifested between the different urban zones, and especially the city and its surrounding area.

Facilitating the production and consumption of local food: the case of the Mezőcsát Micro-Region

Barbara Bodorkós, Bálint Balázs

Department of Environmental Economics, Institute of Environmental and Landscape Management
Szent István University, Gödöllő, Hungary
E-mail: bodorkos.barbara@gmail.com

Our subproject aimed at facilitating the production and consumption of local food products in the Mezőcsát Micro-Region, where we have been involved in a participatory rural development process for the past years.

The Mezőcsát Micro-Region (MMR) is situated in North-East-Hungary, along the Tisza River, in the Borsodi Mezőség Protected Landscape Area. Some of the most important local products are: dairy products (milk, cheese), eggs, fruit schnapps, honey, fruits and vegetables. These are available either on farm or in local markets, and only on a very small scale.

As a first step a participatory research has been conducted. We interviewed key local informants (shop keepers, farmers/smallholders, public canteen operators and potential local coordinators) for exploring the very specific local context and then conducted a local product survey with the help of local young people for being able to build up a virtual market of local products. The survey explored the following data: product name, available quantity, price, product features, and contact details of smallholders. Those answering the questionnaire were offered the opportunity to be part of the virtual local product market (<http://www.jovomeno.org/termekek>)

One of the major challenges which we were facing during the survey was that smallholders for various reasons – such as feeling too old to join such initiatives, not seeing any profitability in stepping into the formal economy or simply already having enough regular customers – insist on staying in the informal/grey economy so as to avoid facing taxing and hygienic regulations. Therefore, only very few farmers were willing to lend their name to this local products database and website. The website was then set up through a cooperation with a corporate social responsibility programme (called Jövő/Menő) of a multinational company (Magyar Telekom).

Another challenge was that no local actor seemed to be taking the lead and responsibility for acting as an intermediary among local consumers and producers, although successful examples of other countries suggest us that they have a key role in connecting consumers and producers.

In order to overcome at least partly these barriers we have organised several workshops for smallholders on the legal conditions of producing and consuming local products inviting successful farmers and experts from related authorities (such as animal welfare) to open face to face discussions. Still, not much progress has taken place.

We have been seeking for cooperation with similar websites in Hungary such as helyipiac.hu or termelotol.hu to connect the local level with the national level.

End of 2010 a local products competition was also launched by the project team to find “Best local product” of the Mezőcsát Micro-Region with the help of a professional jury and to create awareness on the importance of local products. 10 smallholders applied with big variety of local products: dried fruits, jams, pickles, honey and sausages; a short video was designed introducing these products.

An ecotourism guidebook and a so called “green map” of the micro-region is now being developed to present the natural and cultural values and local food products to the wider public and to strengthen eco-tourism in the region.

Materials embodied in international trade – Global material extraction and consumption between 1995 and 2005

Martin Bruckner, Stefan Giljum, Christian Lutz, Kirsten Svenja Wiebe

Sustainable Europe Research Institute (SERI), Vienna, Austria

Institute of Economic Structures Research (GWS mbH), Osnabrück, Germany

E-mail: martin.bruckner@seri.at

Production and consumption activities in OECD countries are increasingly dependent on material and energy resources from other world regions and imply significant economic and environmental consequences in other regions around the world. This substitution of domestic material extraction through international trade is also shifting environmental burden abroad and thus extends the responsibility for environmental impacts as well as social consequences from the local to the global level.

Based on the results of the global multidirectional multi-regional input-output (MRIO) model GRAM (Global Resource Accounting Model), this paper presents the first trade balances of embodied material resources in a time series from 1995 to 2005. The GRAM model includes 53 countries and two regions and distinguishes 48 sectors. It is based on the 2009 edition of the OECD's IO tables and bilateral trade data and is extended by physical data on global resource extraction.

The results confirm a global shift of material welfare from developing and emerging countries to the industrialised world. The United States and Japan are the biggest net importers, followed by Western European countries. The biggest net exporter, i.e. the country with the highest surpluses of exports of embodied materials, is the Russian Federation, followed by China, Indonesia, and Chile.

This shows that resources are shifted (both in the form of raw materials and as materials embodied in products) from resource-rich or economically less developed countries to countries with lower raw material reserves and/or high consumption levels, notably in Europe and North America.

The produced sectoral data are valuable information for LCA studies and can substantially contribute to filling data gaps.

Keywords: *Embodied resource requirements; material flow accounting (MFA); international trade; raw material consumption; multi-regional input-output analysis*

Recent results and potentialities of non-formal education and informal shaping of views to help introduce conscious consumption and production

Katalin Czippán, Mária Kraici Szokoly

Budapest, Hungary

E-mail: czippank@obh.hu

In the talk we are to present the research results and their conclusions which were carried out in the educational sub-project of the project titled 'Sustainable consumption, production and communication'.

The aim of the sub-project was to start planning a communicational and educational program to spread the know-how of sustainable consumption and production

Methods of inquiry applied in the sub-project

After overiewing the written documents about the preparation for sustainability namely sustainable production and consumption and the electronic social media which is taking a major role in informal education nowadays we analysed the contents of the educational programs for sustainable development which were accredited for postgraduate education of teachers and civil servants and in doing so we put special emphasis on examining the different ways of preparation for sustainable production and consumption.

In the form of focus groups we interviewed experts in the field of communication and education about their knowledge and views on sustainability. We outlined the contents of sustainable consumption in the different fields and examined if it was relevant at all. We also looked into direct or indirect initiations in this field.

With the help of on-line questionnaires we asked media students, future teachers, students of human studies about how much they know about sustainable consumption and production and what their opinion is about the ways and means of their preparation for sustainability.

One of the most significant conclusions regarding the educational programs is that the interviewees both in the focus groups and of the questionnaires find it important to involve

professional, civil and business organisations into the programs because based on their tradition and experiences they would be able to help evoking interest and awereness for sustainability and sustainable consumption.

As strategic partners they could share their experiences,

they could particpate in developing the programs

they could enrich the theoratical approach with hands-on experiencies

they could give a venue for practical skills

they could help put communication skills into practice

Winners and Losers- social sustainability trends in urban renewal

Gábor Csanádi

Eötvös Loránd Tudományegyetem, Budapest, Hungary

E-mail: gcsanadi@ludens.elte.hu

The modern concepts of „sustainability” try to integrate other fields of research beside the relation between nature and the human kind. We witness debates about the criteria of sustainability among the representatives of very different practical ideas and theoretical principles. There are strong and interesting arguments, but the common element is, that most of them use normative approaches. Although these are honourable initiatives, our point of view in this presentation differs from them. Our goal is not to show the “right”, or “best” practices of urban renewal which leads to sustainability meant by a certain range of criteria. We try to examine the social conflicts emerging in a city (or neighbourhood) instead. Then we attempt to draw the lessons from these to see how the social aspects of sustainability apply in practice.

We examine the inner city of Pest. There are many factors present on the supply for gentrification. Ornamented houses built at the turn of the 20th century, the special milieu of the courts are consistent with the aesthetics of gentrification. The architecture of the houses is adaptable for flourishing commercial and service industry in the spaces of the ground level. The streets are narrow and dingy with a special romantic feeling. Even artists arrived at some neighbourhoods with their autonomous projects or initiatives with more supporting money and a more commercial approach.

There is also a significant risk in the situation. The real-estate scandals of district VII may remind us of the example of the rent gap theory where owners leave their buildings to their own device, speculating for the turn of the market. The potential real estate value of the Jewish Quarter became so high (before the crisis) that the best way to realise profit seemed to be building hotels, while a significant proportion of the residents was thinking about moving away because of the uncertain situation. The latest trends of the office market are weakening the supply side pressure

for gentrification. If the function of the inner city disappears, the area can lose all hopes, since there would be no reason for the middle class to move into the inner city close to their workplace.

In post-socialist economy, the lack of capital and poverty affected a considerable part of the society. The social differences became wide and there is no strong middle class. Among these circumstances there is a need for strong reflection of the social status: a privately owned detached house and the attitude „my house is my castle” are important tools for that. The new suburban way of life could stay more exclusive for these social groups. This was also facilitated by the system of the real estate subventions, which prefers newly built dwellings, and the real estate projects are also easier to realise in green field projects than in the turbulent inner city. The international examples show that there are different strategies to encourage some social groups for moving to the inner city. The rehabilitation process had similar effects in Budapest but only in very limited areas.

Moving to the inner city can be an alternative for a particular group of the middle class. They could find a better quality life there, and force the rehabilitation of the neighbourhood. Nonetheless the segregation - sometimes in other parts of the city or in the countryside - gets stronger, the falling living standards of the lower status groups could be a high price to pay for a more vital and liveable inner city.

Social sustainability in urban rehabilitation

Adrienne Csizmady

Eötvös Loránd Tudományegyetem, Budapest, Hungary

E-mail: csizmady@ludens.elte.hu

One of the biggest sources for funding city development - and within that urban rehabilitation – is the different forms EU subventions open between 2008 and 2013. There are also tenders for urban rehabilitation which could bring a breakthrough in the field of rehabilitation activities. It is a fundamental change in the course of rehabilitation, as in former years almost exclusively private investors provided financial sources for urban development.

According to sociological research, the result of the processes was, that in spite of local decision makers' all good intentions, market forces and urban planning causes the moving out (displacement or spontaneous mobility) of low status residents from the area . This process could mean a success for local authorities but on the one hand exporting problems is not a real solution, on the other hand it causes more severe tensions that are also more costly to handle for the whole country.

In longer terms it could also strike back to the exporting districts for example with the increase of homelessness in their territory as well. Urban reconstruction, which results in the physical and social sustainability of the area and also keeps low status residents at least partially in the area must meet three conditions. First there should be sources available that explicitly support these kinds of experiments. Second, local society must be made interested in the use of these kinds of resources in a way that solves local problems without the exclusion of certain groups. The third condition is - related to the other two – that stakeholders must be involved in the full range of construction of urban politics and planning strategies and also rehabilitation activities.

The Magdolna Quarter Programme Budapest started in 2005 as a pilot programme of the city of Budapest. The model experiment for urban rehabilitation contains three elements built on each other.

The first priority of the social module is to stop destructive social processes, start processes for reducing segregation in the long run and help those families who could be able to take their life in their own hands.

The first priority among economic goals is naturally helping local residents to get jobs which could decrease the rate of long term unemployment. As a first step towards this goal the access to information about jobs is being improved, local trainings and counselling are being started. In the long run an effort will be made to stimulate local job market by reviving the local small retail and manufacturing traditions.

Environmental goals are the refurbishment of houses and public spaces in the area, making them more cost efficient and liveable. The renovation of public spaces not only makes them more liveable but also improves residents' feeling of safeness.

The complexity of the system of goals specified above means that the project needs large financial investment, it could last for several years and fast realisation is not prospected. The presentation shows the successes and pitfalls of the programme and examines opportunities of change by analysing residents' situation.

The effects of environmental education

Adrienne Csizmady, Péter Varga
Eötvös Loránd Tudományegyetem, Budapest, Hungary
E-mail: csizmady@ludens.elte.hu

The broad objective of environmental education is to encourage students' environmentally conscious behaviour and lifestyle. This could be a tool for the next generations to prevent further escalation of the environmental crisis, preserve nature and build sustainable societies. One of the primary goals of the National Curriculum is to make students responsive to the state of their environment. They have to be able to detect changes in distinctive features and qualities of their environment and to evaluate these on a basic level. It is important to have such expectations about the future that can promote a lifestyle and habits in harmony with nature and a positive attitude towards the environment. Behaviours based on knowledge and responsibility about the environment should be taken as moral standards on the individual and community level as well.

The starting point of the theory about environmental education is always the education about sustainability for all mankind. According to the theory of environmental education this could be done by changing people's behaviour and thinking.

More and more schools have become eco-schools recently but environmental education is still not widespread and high-level enough to reach the goals set up in the NC. Thus, environmental education should be an integrated part of the curriculum. Students should be part of the efforts to preserve and extend the values of their environment. Respect for the nature, responsible behaviour and prevention of environmental damages should be an important part of their lifestyle.

In our research we follow the environmental explorations of students groups of primary and secondary schools in different types of settlements. We try to understand how tensions between didactical principles and contradicting real life experiences influence students' thinking. We examine the possible conflicts between the declared didactical principles of the schools and experiences in the family or local society and also the possible didactical processing of these tensions. In our research we collect data relevant for questions of environmental education:

Students' background
Environmental attitudes
Views about environmental hazards
Views about reasons of pollution
Views about their own role in decreasing pollution
Activities respect to environmental protection
Ecological knowledge

With the help of our survey we first examine students' eco-consciousness in the classroom then we repeat it after they have attended extracurricular activities. We will compare our results of the level of eco-consciousness with a former research from 2000-2001.

In the course of these experimental extracurricular activities students get acquainted with current processes that led to environmental crisis. They can realise positive and negative environmental consequences of social and economical modernisation. During field-work activities they can get personal experience about cooperation as well as about the treatment and resolution of environmental conflicts.

From attitude to action. The carbon footprint of „green” and „brown” consumers

Mária Csutora

Department of Environmental Economics and Technology, Corvinus University of Budapest, Budapest, Hungary
E-mail: maria.csutora@uni-corvinus.hu

Better sustainability policy is supposed to lead to better sustainability performance. Nonetheless, recent research predicts further growth of the ecological footprint and stable ecological deficit in Europe and North America despite their impressive policy efforts (Lenzen et al. 2007). Similarly, individual strategies result in somewhat reduced load for committed consumers, but this reduction cannot offset the total impact of the socio-economic configuration: consumers in higher income countries tend to pollute more. Committed consumers „offset“ a part of their environmental load by carrying out green purchases. A radical change assumes a change in lifestyles (Shove, 2004).

The study aims at measuring the significance of attitude elements as compared to the significance of the socio-economic system on the ecological footprint in various income groups. Our hypothesis suggests that conscious consumption behaviour is able to keep the ecological footprint within the limits of bio-capacity mainly in the mid-income social groups in the mid-income countries. Environmental attitude in itself is insufficient to control ecological impacts in high income groups: the impact of the socio-economic system offsets the gains of environmentally conscientious behaviour. Thus education and awareness raising have limitations when they are not accompanied by changes in the infrastructure, economic policy, etc.

At the first stage of our research we have calculated the ecological footprint of consumption by income deciles using the environmentally extended Leontief model as proposed by Wiedmann et al., 2005 and others. It relies on industrial input-output tables and published ecological footprint data. This model is able to capture the direct as well as indirect ecological footprint impacts in consumption of various product groups. The impacts were compared to the biocapacity per capita.

The results showed high theoretical potential for reducing ecological footprint by conscientious purchasing in mid-income groups and less potential in high income groups. The survey phase, based on a 1000 elements representative sample, studies how much this potential is actually exploited by different clusters of the society. It aims at measuring the impact of the socio-economic system as compared to the individual attitude in defining the ecological impact of consumption. It also searches for social clusters with sustainable lifestyles and a high level of life satisfaction. The survey phase will be completed by the end of January.

Sustainable consumption in Travel and Tourism Industry- Ecotourism

Anudari Ganbaatar

Department of Environmental Science, Central European University, Mongolia

E-mail: ganbaatar_anudari@student.ceu.hu

The highlights of the research work:

- *Growth of the travel and tourism industries worldwide*
- *Positive and negative impacts in terms of economy, environment and socio-cultural aspects, especially in case of developing countries*
- *Ideas of ecotourism as the sustainable consumption in sense of world tourism trade*
- *Ecotourism market analysis*
- *Potentials to develop ecotourism in developing countries*

Travel and tourism industry is becoming one of the main commercial activities in the world. According to World Tourism Organization's (UNWTO) statistics 880 million people involved in international tourism and generated nearly 10% of world Gross Domestic Products (GDP), furthermore it provided employment to 22 million people 2009. Due to the fact it can be assumed that a person of out of every eight people world population is somewhat consumer of the world tourism trade.

The countries could be divided into two groups based upon their involvement in international tourism as tourist generator countries and destination countries. The generator countries tend to be developed countries while the developing countries are struggling to attract tourists from those well-off countries. Due to some potential economically positive outcomes of tourism developing countries get involved in it quite much, however at the same time potential consequences of negative impacts of tourism are quite severe, particularly in developing countries. Tourism has already created severe negative impact on many developing regions of the world in

terms of economic unprofitability due to leakage, environmental degradation and socio-cultural damages.

Ecotourism is one of the primary ideas that developed as a consequence of the notion of responsible and sustainable tourism trade.* There are several types of sustainable tourism that are distinguished by their primary priorities by aforementioned aspects. The ecotourism closely considers environmental sustainability.

According to the study of SNV (2008) the main markets for ecotourism are considered to be USA, Canada, Germany, Netherlands, Spain and UK. Demographically average age is 43; well educated, physically active nature lovers, who tend to prefer ecotours (SNV 2008). Nature-based tourism is expected to increase at least as fast as or faster than the 5% annual growth rate of world tourism as a whole (CBI 2008). This is due in part to a growing number of urban dwellers who crave contact with nature and “authentic experiences,” such as viewing wildlife in natural habitats as opposed to at the zoo. Further, many tourists seek the adventure of visiting distant or exotic intact habitats as well as exploring rare and endangered species. There is also a strong and growing “see-it-before-it's-gone” niche within ecotourism. Somehow ecotourism demonstrated the fastest growing trend in worldwide tourism (Hawkins 1994).

Developing countries have strong potential to develop ecotourism due to the fact that those countries have mainly traditional culture and unspoiled natural heritage. On the other hand there is higher risk to face some challenges of unplanned and irresponsible tourism development for those, who are still vulnerable in terms of environment and culture due to the lack of mature resilience in system. Thus, it's essential to adapt socio-economic (e.g buying local food and products, appreciating authenticity of the respected culture etc.) and environmental (organizing tours without interruption to wildlife, considering the carrying capacity etc.) norms into tourism development policy on both national and business levels. Consumer awareness and education also play prominent role in ecotourism development. It's been observed that responsible social marketing strategies are implemented in international tourism market. These strategies motivate customers' philanthropic and humanitarian perception by offering what is good for the host culture, unlike the traditional marketing strategies that offer what the customer wants to have.

*The concept of ecotourism is designated before the terminology of sustainable tourism, however, the definition now refers to sustainable tourism. But the terminology of ecotourism is still actively used to determine the overlap of responsible tourism and nature based tourism.

The effect of large retail chains on employment, on the environment and local economies

Emese Gulyás, Marianna Kopasz
Association of Conscious Consumers
Corvinus University of Budapest, Budapest, Hungary
E-mail: emese@tve.hu

Consumption patterns are determined by infrastructures to a large extent. The sustainability of consumption depends on whether infrastructures provide access to sustainable products and services (e.g. is green energy accessible) but also on the sustainability of the infrastructure itself. Our research focuses on the latter criteria when measures the effect chains on employment, on the environment and local economies.

Why retail chains? On one hand the significance and the market share of retail chains has been increasing, the retail of fast moving consumer goods is becoming centralised to these institutions. At the same time the number of economic organizations that operate retail shops is decreasing, and while the operating concentration is progressively growing, the market share of independent small shops, which are not part of a chain, is rapidly decreasing (2003: 22%, 2005: 18%) (KSH, 2004; Orbán, 2004).

On the other hand in the past decades there has been a growing concern about the environmental, economic and social sustainability effects of large retail networks. Social movements all around the world and in Hungary claimed that retail chains have harmful effects the environment by generating extra traffic and by increased logistical needs (see Beliczay, 1997) and on the long term have negative effects on employment (Gregory, 1991; Klein, 1999; Wright and Lund, 2003). Others are worried about the decreasing vitality and viability of central urban areas (Ravenscroft, 2000) or accuse retail chains with making the food processing industry bankrupt and destroying the traditional local agriculture (see the communication of the former Ministry of Agriculture and Rural Development in Hungary).

Although these are serious claims, they are rarely supported by statistical data and trend analysis. Therefore our research first mapped the main concerns about the issue through the analysis of the relevant international and Hungarian academic literature and civil society organisation publications. Second we elaborated a set of indicators for the measurement and for the monitoring of the sustainability effects of retail chains, more precisely of hypermarkets (area above 2500 square meters and at least 30 per cent non-food assortment). Indicators are based on the triple-bottom-line approach to sustainability and measure the effects of retail chains on employment (representing the social aspects), on the environment and on the local economy. Due to the lack of public data and to their poor accessibility the research applied a case study method, choosing the city of Kiskunhalas as a case. Kiskunhalas is a middle sized city where the first and still the only large scale retail unit opened in 2004, that made possible a pre-test, post-test design for the case study. For measuring the indicators data was gathered from state authorities, from the local government and from a survey among the local citizens. The survey was conducted by the Gallup institute in October and November in 2010.

Authors are still evaluating data from the research, the conference would be the first occasion to present and discuss the results.

The paper will introduce the main concerns and findings from the literature, explain the elaboration of the indicator set and will discuss its plausibility, and – by that time – discuss the conclusions of the research.

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Cooperation between NGOs and the Corporate Sector towards sustainable development

Gábor Harangozó, Gyula Zilahy

Department of Environmental Economics and Technology, Corvinus University of Budapest, Budapest, Hungary
E-mail: gabor.harangozó@uni-corvinus.hu, gyula.zilahy@uni-corvinus.hu

Our previous research shows that the role of the civil sector is continuously improving regarding sustainable development. This current piece of research focused on the opportunities in cooperation between the civil organizations and companies to improve their sustainability performance. Cooperation strategies are distinguished from confrontation strategies also applied by NGOs in order to achieve results in the greening process of the corporate sector (boycotts, protests, participation in legislation etc.).

Based on a literature review, two questionnaire-based surveys among civil and corporate professionals, as well as panel discussions and a workshop with participants from NGOs and companies, aims and success factors of cooperation tried to be highlighted as well as the perception of the both parties on the opportunities of cooperation was intended to be analyzed.

Results show that both NGOs and companies believe that cooperation can play an important role, although most of them have no or little practical experience and they do not regard Hungarian practice too much forward in this sense.

As one of the outputs of the research project, a guideline for practitioners has been also completed focusing on the aims, objectives, advantages and risks of cooperation, highlighting the main steps, success factors and potential pitfalls supplemented by practical examples from the international and Hungarian scene.

Environment related consumer behavioral patterns of the Hungarian society

Ágnes Tóth Hofmeister, Kata Kelemen, Marianna Piskóti

Department of Marketing Research and Consumer Behavior Corvinus University of Budapest, Budapest, Hungary
E-mail: agnes.hofmeister@uni-corvinus.hu, kata.kelemen@uni-corvinus.hu, marianna.piskoti@uni-corvinus.hu

One of the basic requirements of sustainable consumption at the individual level is environmental consciousness and the achievement of individual responsibility in the given society. The aim of the present article is to show the environment-related consumer behavioral patterns of the Hungarian society based on the results of a representative research. The authors' empirical study focused on determining the consumers' environmental awareness and mapping out the differences between their behavioral intent and actual actions. The authors present the results of the quantitative part of the research. The NEP (New Ecological Paradigm) scale used in the frame of the study made possible the multidimensional analysis of the consumers' environmental behavior.

Based on the results of the study the authors differentiated four consumer segments: the skeptics, the indifferent, the sensitive and the egocentrics. After a detailed presentation of the four segments, the authors also discuss how the results of the study can be applied in practice.

Keywords: *environmentally conscious consumer groups, environmental consciousness, NEP, Hungary*

Research into public participation

Benedek Jávor, Ildikó Kiss

Pázmány Péter Catholic University, Economic and Environmental Law Department, Budapest, Hungary

E-mail: bjavor@jak.ppke.hu

In our research, we wanted to get an answer to the following questions: how public participation works in our country, what the legislative measures and practical elements concerned are, and whether the direction of changes is indicative of a positive or negative tendency? We divided our research into three parts, and we added a questionnaire after summing up the initial findings, sent it to different social organisations, and, based on the received answers we prepared the statistics reflecting our findings about to what extent public participation is regulated in Hungary.

The elements of participatory democracy are present in Hungary, and work in a controversial way. The legal framework ensures several possibilities for citizens, as well as for organisations, to take an active part in public affairs. Nevertheless participation often happens at a superficial level, not really working in a meaningful way. There are several reasons for that, the most important of which are historical: the nature of the socialisation process itself, evolving through historical periods, which has almost never been beneficial towards building public participation, and 15 years that have passed since the „change of the regime” in 1989, which has nevertheless been unable to ease the intense distrust so much present in Hungarian society. The citizens and the civil organisations are not prepared and properly trained to practice their rights, and the power/authorities are only willing to meet their obligations as set out in laws, they are not initiating participation, and are not open towards the society.

The question may rise: what present tendencies can be observed that may result in changes in the future? Is the weight of civil organisations increasing? Will they have more say in public affairs in the future? How is the attitude of the authorities/the power changing towards public participation? International trends, an expected economic recovery in Hungary and the strengthening of democracy will hopefully have a positive effect on this process, and may ease the

social distrust mentioned earlier. The accession to the EU in theory is expected to strengthen the local and regional levels of decision making, which may also have a positive effect on public participation, since common interests at local levels can be more easily recognised by both parties. No fundamental change can, however, be expected to happen before citizens and civil organisations are capable of practising their rights on the one hand, and the authorities /political decision makers are sincerely committed to ensuring the principles and enforcing laws and regulations on public participation. This is a long process, and a serious task awaits the whole society: a given accepted social system is constituted not only of its institutions ensured by law, but also of the principles and ideas that the social consensus is based on. Building up a system of training citizens in „civil rights”, making all this accessible for them is of basic importance, as well as training the authorities, a social task that civil organisations have an important role to play in. In Hungary, the possibility of actually taking part in decision making is often weak and ad hoc. In the past years, several instances in legislative changes can be seen in which former rights ensured „on paper” have been reduced, and also, it has become everyday practice that conciliatory forums, consulting procedures and legal redressing means take place only at a superficial level, only mocking real participation. It would be worth considering that widening further the range of participatory rights for the citizens, as well as their true enforcement could improve efficiency in decision making enormously, and could indirectly improve the state of the society and the environment itself. We can state that the legislative framework for public participation is using concepts that are imprecise and not defined properly. What is missing: it does not cover the whole „life cycle” of civil organisations, ceasing is not regulated properly. What is not differentiated properly: there is no distinction made between civil organisations whose yearly turnover is only a few hundred thousand forints, and those who have tens of million forints a year. Transparency is not guaranteed: state money and state functions are involved in the third sector – more publicity and, at certain points, more restrictions are needed, and also a clear separation of civil and state sectors. What is controversial and not consistent: regulations changing every three months concerning courts and the tax authority. What is not proper incentive is the maximum deductible amount after donations given to civil organisations (it has not changed since 1997: the amount being 50 000 Fts/year. It does not give any guarantees for citizens to be involved in decision making: there is no guarantee for law enforcement in every area concerned, either in the constitution or in the laws concerned.

Contribution of local ecological entrepreneurship to cultural landscape conservation, case study of the *Huerta de Valencia*, Spain

Gerda Jonasz
Central European University
E-mail: gerda.jonasz@mespom.eu

My study aims to assess how discourses promoting small-scale local organic agriculture are perceived to contribute to the construction and defense of traditional cultural landscapes. The case study of the *Huerta de Valencia*, Spain, is a case of a unique agrarian urban-fringe with an ancient irrigation system, occupying about 10-15km radius around the city of Valencia. Several initiatives aim to reconnect the *Huerta* with the city of Valencia through promoting the consumption of its products. Increasing the *Huerta's* economic viability is viewed to contribute to the protection of all of those values it stands for. These initiatives were found to be embedded in a set of ideologies, such as organicness and local fair trade.

By assessing the perceived importance of certain prioritized social aspects of ecological entrepreneurship in this given peri-urban setting, my research aims to provide insight into the barriers, challenges and opportunities of strengthening the role of such production system by combined analysis of diverse views on its role in the conservation of the *Huerta*.

Besides participant observation, I have conducted over 60 semi-constructed in-depth interviews based on open-ended questions with stakeholders representing different stakeholders working with the *Huerta*. Presently a discourse analysis is conducted, where the main themes and their interrelatedness are identified as an input to the construction of a theoretical framework applying grounded theory.

I found that all social aspects quoted by the informants are related to two major phenomena, both creating space for action. The first phenomenon is identified as “pressure on the *Huerta*”, which creates context for the other phenomena, labeled as “recognized opportunities in the *Huerta*”, which besides calling for action responds to the first phenomenon. “Pressures on the *Huerta*” are perceived to be in consequence of urbanization (changing land use, limited access to agrarian land

due to speculation), growing infrastructural network (land fragmentation, degraded agrarian accessibility), lack of viability of conventional agrarian production and sales systems, forgotten and undervalued patrimony and lifestyle of the *Huerta*. While the “recognized opportunities in the *Huerta*” are perceived to be its fertile lands with rich agrarian tradition (UNESCO recognized irrigation system governance), presence of close urban markets (spatial embeddedness), potential in engaging consumer groups with different levels and themes of consciousness (social embeddedness).

Action is manifested simultaneously through civic movements for the protection of the *Huerta* and local ecological entrepreneurship initiatives, aiming to keep the *Huerta* alive. Ecological entrepreneurs are “key actors [who] begin to construct and sustain networks, retro-innovate and relate to the new emerging consumer markets” (Cloke et al. 2006). The interaction with conscious consumer and citizen groups is found to be key in valuing and supporting the efforts of the farmers cultivating the *Huerta*. Such social embeddedness is eventually positioning their enterprises as unspoken local fair trade initiatives, expected to allow entrepreneurs to make a living in line of their beliefs, voluntarily safeguarding an endangered culture with dignity. Still its financial recognition remains problematic, alleviated only to a certain extent by the differentiated market position of organics. My study mapped a range of prioritized and deeply interconnected themes on the social aspects of small scale local organic entrepreneurship.

Happiness, environmental protection and market economy

Sándor Kerekes

Corvinus University of Budapest, Budapest, Hungary

E-mail: sandor.kerekes@uni-corvinus.hu

The manufacturing sector is leaving the West for Asia's low wages and good working culture. Europe would be better off keeping these manufacturing activities, slowing down wage inflation and what is more, letting a young, cheaper workforce from the East settle down within their borders. This would aid in preserving the diverse economic structure which has been characteristic for Europe.

Beside the economic growth there are two more concepts which have turned into the “holy cows” of economics during the last fifty years. One is the need to constantly improve labor productivity and the other is increasing competitiveness of nations. The high labor productivity of some countries, induces severe unemployment in the globalized world. In the other hand it is high time we understood that it is not competition, but cooperation that brings more happiness to humanity.

Should we still opt for “happiness” and “sanity”, it is quite obvious that we all should, in economists' terms, define our individual welfare functions corresponding to our own set of values, staying free from the influence of media, advertisements and fashion. The cornerstone to all this is the intelligent citizen who prefers local goods and services.

Keywords: *labor productivity, quality of life*

Pioneers of sustainability in Hungarian rural development

András Lányi

Eötvös Loránd Tudományegyetem, Budapest, Hungary

E-mail: lanyi.andras@ufsgroup.hu

Our research group, organised by “Our Common Heritage Research Group” at the Eötvös Loránd University of Budapest has been engaged to investigate the conditions in the Hungarian countryside that make sustainable agriculture and rural development possible or not. We visited rural regions differing in many ways to be able to understand and compare local experiences. These research sites, however, were common in having sensible and valuable ecosystems. Our targeted issues were landscape farming and community building experiments. We focused especially at the motives of the participants and the social reception of their enterprises, but it became clear that the success of individual strategies mostly depend on the social and economic conditions and their historical context.

Actually, sustainable production requires a shift in technology – a shift from massive, large scale interventions of maximal efficiency to human scale economy based on an optimal use of local resources, both natural and cultural, with a special regard to their capacity to regenerate. It cannot be achieved without a parallel change in the way of coexistence and its institutions.

As a result of our observations we concluded that the conditions needed for an environmentally more friendly way of development are not given in Hungary at the very moment but they don't seem to be inaccessible. Actors and means of revitalization are present in our villages but they are scattered or isolated and cannot reach the critical mass required for successful cooperation and reasonable enterprise. The lack of willingness to cooperate or even to communicate between both individuals and social groups is a crucial impediment itself.

Hungarian village society had lost its middle classes, and mostly its capacities, too, to run individual enterprises, together with the actual institutional and financial basis of local autonomy. All these are the results of extremely violent historical processes and brutal political interventions

from outside during the lifetime of the last two or three generations. It is not a surprise that their influence is still present, and the victims have lost their confidence both in reforms and innovations of any kind as well as in each other (and in themselves, too).

Village population consists three social groups: commuters (working in cities far from their homes and having a very limited interest in the local affairs of the later), new inhabitants (led by environmental or financial motives and becoming part-time or full-time villagers), and last but not least the natives who remained in their villages but in a lack of legal jobs, with a growing share of the old in the population. For good reasons, neither of those three groups can exercise an effective control on the local government or public affairs.

Large scale agricultural enterprise succeeded to get rid of human labor by automatization and chemicalization and concentrates on mass production with cheap products of small added value with the devastating impact of monocultural production on the local natural environment. Small scale farming once especially successful in this country lost its markets, and became perfectly defenseless in its relations either to processing industry or market chains, each being monopolized by transnational companies. Finally, irrational restrictions by the agricultural government policies in the last decade made them give up everything, or at least their market ambitions, and retreat to self-supply and local grey economy. They are – or better, they were – the kind of enterprise that meets much more the criteria of sustainable agriculture and landscape economy.

Recent changes in the regulation more friendly for family farming cannot generate significant changes in the attitude of the population concerned, I am afraid, because of the loss of agricultural expertise and market competences during the last decades that are impaired with a lack of capital, credit, technology. Last but not least I would mention the lack of social appreciation for agricultural work and life in the countryside that makes the youth plan to escape from their native villages even in these days when industrial work and urban settlements don't offer them jobs and better livelihood anymore.

Towards 'strong sustainable consumption'

Sylvia Lorek

Germany

E-mail: sylvia.lorek@t-online.de

Achieving sustainable consumption patterns is a crucial step on the way towards sustainability. But practical observation shows: The scientific knowledge used to decide which priorities to set and how to enforce them has to converge with societal, political, and economic initiatives on various levels: from individual household decision-making to agreements and commitments in global policy processes. They sometimes try to support the sustainability of consumption but more often oppose it.

One of the major challenges sustainable consumption is that it is not in line with the current political mainstream: that is, the belief that economic growth can cure all our problems. So, the proponents have to battle against a strong headwind. Their motivation however is the conviction that there is no alternative. Efforts have to be taken on multiple levels by multiple actors. And all of them are needed as they constitute the individual strings that together make up the rope.

To be successful however, everyone must ensure that they are pulling in the same direction. But the analysis of sustainable consumption research, policy and activity shows that this is lacking. What is mingled under the term sustainable consumption can be the promotion of sustainable consumer procurement to support more sustainable products for a green growth. On the other and it can be a degrowth path focusing on the patterns and levels of consumption.

The approach I like to argue for is the latter one. To distinguish it from the weak optimization tries just toward smarter products I call it 'strong sustainable consumption'. It takes as a starting point for argumentation the concerning ecological and social problems humanity face; not the economic system. Based on my research I identify 5 main strategies how to work towards strong sustainable consumption.

(1) It might be useful to apply a carrot and stick strategy to stimulate public debate. The stick in this case is to create a sense of urgency of our environmental problems, from global

warming to peak everything. The carrot would be to articulate better the message to the public that a shrinking of the economy is not as much of a disaster as mainstream economics tends to suggest. (2) In parallel to this it is necessary to demand that governments take responsibility for governance. The dominant strategy is still information provision. But there is ample evidence that hard policies like regulatory instruments and economic instruments are most effective. (3) As for Civil Society Organizations it is recommended that they overcome the habit of promoting Sustainable (in fact green) Consumption by using marketing strategies and instead foster public debate in values and well-being. This includes appreciating (4) the potential of social innovation. A countless number of such initiatives are on the way but their potential is still insufficiently explored. Beyond the question of how to multiply such approaches, it is also necessary to establish political macro structures to foster them. (5) Finally, as sustainable consumption is a typical field where success depends on activities on all levels of governance this advantages of multi-level governance has to be better utilized. The challenge is to ensure a proper exchange between these levels.

From environmental product declarations to product development in SMEs

Annik Magerholm Fet

Department of Industrial Economics and Technology Management, Norwegian University of Science and Technology,
Trondheim, Norway
E-mail: annik.fet@iot.ntnu.no

Industrial actors are faced with a steadily increasing demand for environmental information about their products. Several procurement guidelines exist, making the information demand vary from customer to customer, and from country to country. The extent of the demand varies from customer to customer, and from country to country. Meeting this demand is an especially demanding task for small and medium sized enterprises (SME), as producing environmental information is a resource intensive task. One solution is to use Environmental Product Declarations (EPD) to provide verified product documentation. A main objective of the ISO 14025 scheme for EPDs is to “provide information for assessing the environmental aspects of products over their full life cycle” (ISO 2004).

The documentation of the environmental performance of a product is a necessary first step towards product improvement and development. However, the many dimensions of sustainability make it difficult to compare products and product variants. As customers are using EPDs to compare products, the same information should also be used for product development. Three questions arise in this regard:

1. How are customers using environmental information to differentiate between competing products?
2. How can industrial actors use EPD-information to improve their products?
3. Are customers choosing the best products with regard to sustainability?

The presentation will discuss these questions and enlighten them with examples based upon the Norwegian EPD-system.

On the road of sustainable consumption and lifestyle through environmental education Survey findings in Hungarian higher education and high schools

Zsuzsanna Marjainé Szerényi, Ágnes Zsóka, Anna Széchy, Tamás Kocsis

Department of Environmental Economics and Technology,

Corvinus University of Budapest, Budapest, Hungary

E-mail: agnes.zsoka@uni-corvinus.hu

Environmental education is expected to have significant influence on environmental awareness, everyday lifestyle and consumer behavior of the participants. Our paper aims to explore how content, intensity and ways of environmental education reflect in the knowledge, values, attitudes and actual behavior of university students and high school students in Hungary. Two questionnaire-based surveys were conducted by the Department of Environmental Economics and Technology at Corvinus University of Budapest (CUB), supported by the EEA and the Norwegian Financial Mechanism. The results give space to a wider comparative study both among universities representing different professions and between higher education and secondary education level.

Results show that higher intensity of environmental education gradually increases the environmental knowledge of involved students – at both analyzed education levels but the motives behind information seeking seem totally different. Environmental knowledge at secondary education level was definitely higher than expected; the results at higher education level were not surprising in this sense. Environmental awareness, however, depends rather on commitment reflected in the choice of an environmental specialization at the university level. This phenomenon is more complicated at secondary school level as there is no similar specialization there.

Consumer behavior is even more complex; the impact of environmental education is only one reason behind. However, the focus of environmental education is very important in the attitudes toward reducing consumption. Respondents are classified into clusters according to their consumer behaviour, environmental awareness and attitude to consumption. Interestingly, university students reported to be significantly more conscious about the negative environmental impacts and the

necessity of lifestyle change than respondents from secondary schools. With the help of multidimensional scaling our aim is to show an overall picture about behavioral features of students.

Keywords: *Environmental education, sustainable consumption, environmental awareness, consumer behavior*

Corporate social responsibility in small and medium sized Enterprises

Simon Milton

Department of Environmental Economics and Technology,
Corvinus University of Budapest, Budapest, Hungary
E-mail: simon.milton@uni-corvinus.hu

The recent plethora of literature relating to the different aspects of Corporate Social Responsibility (CSR) has tended to neglect the question of what relevance various CSR perspectives (strategic, normative, social capital, etc.) have to Small and Medium Sized Enterprises (SMEs). It has long been a subject for debate whether SMEs operate in an intrinsically ‘more responsible’ way than their multinational counterparts, simply due to their organisational characteristics.

‘Internal’ CSR issues such as employee working conditions and employee benefits and training, as well as ‘external’ CSR issues such as managing environmental impacts and contributing to the local community and society in the form of donations, sponsorships or/and as-per-regulation tax payments may all be important questions for the smaller organisation - even if they differ in scope or nature from the usual challenges which larger organisations face. What is more, SMEs, predominantly as suppliers, are increasingly being called on to respond to supply chain demands originating from larger organisations concerned to provide customers with ‘more responsible’ products and services

A recent research project undertaken by Corvinus University of Budapest looked at existing literature within the field of SMEs and corporate responsibility and based on this review implemented an empirical electronic survey in order to collect a wide range of data on the CSR performance of Hungarian SMEs. Questions were designed to capture data about SME owner-manager opinions about CSR and information available to SMEs regarding social responsibilities, in addition to data collection sections on motivatory factors for implementing CSR relevant measures and identifying barriers to a more widespread use of CSR tools.

Initial findings from the empirical survey will be presented which include results from the use of cluster and factor analysis techniques to provide a typology of CSR activities employed at SMEs, and a proposed clustering of SME types, described through explanatory organisational and attitudinal variables.

Sustainable consumption and production in business: Where should responsibility reside?

John Morelli, Lisa Greenwood, Kelley Lockwood, Portillo Clemente
Rochester Institute of Technology; Civil Engineering Technology; Environmental Sustainability, Health and Safety
Rochester, New York, USA
E-mail: llgcem@rit.edu, kml8504@rit.edu, john.morelli@rit.edu

Business organizations are consumers as well as producers. It is reasonable to assert that the nature of their sustainability-related consumption and production initiatives is influenced by where within the organization (i.e. in which functional units) responsibility resides for moving the organization toward a more sustainable future. A marketing department for example is likely to approach sustainability differently than would a product design team or a purchasing unit. Thus determining where in a particular organization such responsibility resides is important in predicting its related consumption and production outcomes. More importantly, however, and potentially much more useful, would be an understanding of how to most effectively allocate that responsibility among the organization's functional units and the professions they represent.

On October 6, 2010, the U.S. Federal Trade Commission (FTC) proposed significant revisions to its *Guides for the Use of Environmental Marketing Claims* also known as its “*Green Guides*,” which exists to help marketers avoid making deceptive claims under Section 5 of the FTC Act.¹ The proposal lists five terms that will not be addressed by the *Guides*. Number one on that list is the term “sustainable.” The reasons were provided for this interesting decision included claims that there is no clear understanding of the term among experts, that the term cannot be defined, and that there are no accepted criteria with supporting test methods to measure it.

Yet, there have been efforts by others to give meaning to the term within the context of their respective professions. Callicott and Mumford, for example, develop the meaning of the term

¹ Federal Trade Commission, *16 C.F.R. Part 260: Guides for the Use of Environmental Marketing Claims: Request for Public Comment on Proposed, Revised Guides, FTC File No. P954501*, Federal Register Notices, Oct. 15, 2010. <http://www.ftc.gov/os/fedreg/2010/october/101006greenguidesfrm.pdf>

“ecological sustainability” as a useful conservation concept for conservation biologists;² Foy expounds on the meaning of “economic sustainability,”³ Goodland explored the concept of “environmental sustainability” and related aspects of growth and limits;⁴ McKenzie explained “social sustainability,”⁵ and others attempt to capture its use for those in business⁶ and in agriculture⁷.

In spite of more than a decade of struggle with the relevance of the term by individuals in various professions, even less progress appears to have been made by the organizations that employ them. This is evidenced most obviously in recent employment advertisements for sustainability managers or directors. In their analysis of posted job descriptions associated with employment opportunities for sustainability managers in US corporations, Greenwood and Bliss reported great diversity in expectations regarding the associated scope of duties.⁸ The descriptions varied in emphasis from not much more than straightforward accounting to the almost evangelistic extreme of sustainability championing.

This work examines where within business organizations responsibility for sustainability is most appropriate. Professionals were surveyed working in a dozen different functional areas, including: legal affairs, environmental management, occupational health and safety, purchasing, product design, manufacturing, operations, production, facilities management, marketing, communications, human resources, and risk management. The premise of the survey was that the leadership of the organization had announced its intention to move the organization toward a more sustainable future and asked all its professional members to assess 45 action items and identify for which and to what extent they believe they are prepared to take responsibility. The action items

² J. Baird Callicott and Karen Mumford, “Ecological Sustainability as a Conservation Concept,” *Conservation Biology*, pp. 32 – 40, Vol. 11, No. 1, February 1997.

³ George E. Foy, “Economic Sustainability and the Preservation of Environmental Assets,” *Journal of Environmental Management*, Vol. 14, No. 8, pp. 771-778.

⁴ Robert Goodland, “The Concept of Environmental Sustainability,” *Annual Review of Ecological Systems*, Vol. 26, pp. 1-24, 1995.

⁵ Stephen McKenzie, “Social Sustainability: Towards Some Definitions,” *Hawke Research Institute Working Paper Series*, No 27, 2004.

⁶ Matthew W. Tueth, *Fundamentals of Sustainable Business: A Guide for the Next 100 Years*, World Scientific, 2009.

⁷ Timothy E. Crews, Charles L Mohler and Alison G. Power, “Energetics and ecosystem integrity: The defining principles of sustainable agriculture,” *American Journal of Alternative Agriculture*, Vol. 6, No. 3, 1991.

⁸ Lisa Greenwood and Alexis Bliss, “An exploration of disparate missions served by the sustainability manager,” Workshop, Sixth Environmental Management Leadership Symposium: From Environmental to Sustainability Management, Leuphana University, 23 March 2010. RIT EHS Management MS program, 6 Nov. 2009.

were constructed by consolidating representative elements of the 220 action items in the proposed ISO26000 Social Responsibility standard. The goal of this paper is to provide a better understanding of which professionals and functional units within an organization are most appropriately prepared and positioned to contribute to the various elements of an organization's sustainability and social responsibility efforts.

Public participation in nature conservation: Hungarian experiences

György Pataki, Veronika Fabók
Szent István University, Gödöllő, Hungary
Corvinus University of Budapest, Budapest, Hungary
E-mail: gyorgy.pataki@uni-corvinus.hu

International conservation policy and practice have undergone a significant transformation during the last decades. The new conservation approach comprises public participation as an essential element of biodiversity policy. Public participation resolves some controversies that have been raised by traditional exclusionary conservation policy and practice. Public participation makes the implementation of biodiversity policies more legitimate and effective, and helps the resolution of conflicts over conservation issues as it diminishes the effects of unfair distribution of rights and responsibilities. Furthermore, it contributes to the resilience of social-ecological systems. Community-based conservation, collaborative or co-management, stakeholder advisory bodies and other forms of public participation and engagement constitute an important element of the biodiversity policies internationally as well as at the European level. In our study, we had been seeking for public participation processes in Hungarian biodiversity policy and practice through scrutinising cases from the history of Hungarian conservation. The controversial process leading to the foundation of the Órség National Park (S-W Hungary), the movements that were organised in support and against the Zemplén National Park (N-E Hungary) and the consultation process of developing management plans in twenty Natura 2000 sites constitute our empirical case studies. We found that however there's a change in conservation professionals' willingness to involve stakeholders into decision-making, the lack of appropriate institutions (conventions, norms and formal rules) and the overwhelmingly natural science based theoretical background of conservation practice constrains the realization of genuine public participation. The hybridisation of formal socialist and present democratic institutions facilitates the dominance of the top-down mechanisms in policy processes, instead of bottom-up initiatives. In addition, the prevailing approach and attitude of preservation ethics which gives priority to nature over people, thus supporting the

exclusion of local people from protected areas does not provide an adequate base for the public participation.

Air quality indexes of sustainable development and environmental accounting –Evidence from Iran (case study municipality of: Tehran)

Hejazi Rezvan, Mahbobe Mesripoor
Accounting Department, Alzahra University of Iran, Iran
E-mail: hejazi33@yahoo.com

Sustainable development is the development that meets the needs of the present without compromising the ability of future generations to meet their own needs (Brundtland Report, 1987). Achieving sustainable development is one of the long term goals of the world and lots of countries. Sustainable development has three dimensions, economic, social and environmental. To achieving sustainable development, should meet all three dimensions, but achieving one lead to destroying the other. For having a sustainable society we have to balance between dimensions. There is a famous sentence that “things that not been measured, cannot be managed”. So, managing sustainable development requires measuring its dimensions. In this paper we have focused on environmental and economic dimensions. First we have studied about environmental accounting as a tool for measuring environmental effects in organization, national and international levels; and discussed on the role of environmental accounting in preparing useful information for environmental decision making and sustainable development indexes.

As Air pollution is one of the most important problems of Tehran, the focus of this paper is on air quality. At the end, this paper suggests some indexes for measuring air pollution prevention and elimination expenses and contingency revenues. And start an environmental accounting system in municipality of Tehran.

Keywords: *sustainable development, environmental accounting*

Building index cost of environment: Soil (case study municipality of: Tehran)

Hejazi Rezvan, Mandana Taheri
Accounting Department, Alzahra University of Iran, Iran
E-mail: hejazi33@yahoo.com, taherim66@gmail.com

This paper is exploring the environment building index in soil segment in Iran for the first time; however, the results could be generalized to the other countries considering the environmental conditions. This paper has tried to extract index of calculated cost of environmental soil with the review procedures and methods of create pollution and preventing or expulsion of soil pollution. Result concluded with offering comprehensive model which could be environmental costs of soil anywhere in the world with regard to model variables, calculate and presenting the form of financial reports to give users information .

In this paper, firstly, soil pollution creation and expulsion of soil pollution prevention methods have been classified. Later, with the use of charge Tehran municipality information, want to find standards would cost of these classes. Based on findings, this paper tries to extract required variables for the presented environmental indicators in which presenting the model calculated the environmental costs of soil. This model can be applied in determining the cost and environmental reporting.

Examining the gap between energy saving installations and energy saving activities

Milan Ščasný

Charles University Environment Center, Prague, Czech Republic
E-mail: milan.scasny@czp.cuni.cz

Objectives

The main purpose of this paper is to propose and test two hypothesis that explain the gap between frequency of energy-saving installations in households and energy-saving habitual behavior of household members.

Theoretical background

Some empirical data show that there is a gap between different energy-saving activities of households, namely the gap between energy-saving installations and energy-saving everyday habitual behavior (see Barr et al. 2005 for detailed discussion).

There are several possible theoretical explanations for existence of this gap. One possible explanation is so called rebound effect. Direct rebound effect is caused by improved energy efficiency that decreases the effective (marginal) price of energy services and leads consumers to increase their consumption of that service. In such a situation, also the frequency of everyday energy-saving activities is likely to decrease. Empirical evidence concerning the existence of rebound effect is quite plentiful (for review see Greening et al., 2000 and Dimitropoulos & Sorrell, 2007). Indeed, rebound effects due to efficiency installations are non-negligible and can lead to increase of energy consumption in the order of 2% (Alberini, Gans and Velez 2010).

Alternative explanation for the existence of the energy-saving gap is provided by Barr et al. (2005) who claim that there are, in fact, various groups of energy-savers who differ by their motives for energy-saving. Basically, only the group of environmentalists, that is people who are strongly motivated in the energy-saving by environmental concerns, do consistently perform both energy-saving activities and also adopt energy-saving installations. Other groups are less likely to do both

types of energy-saving simultaneously because energy-saving is not for them a goal in itself but rather, a means of achieving other goals (e.g. financial savings).

The purpose of the present paper is to test empirically implications of these two theoretical models.

Data and method

The data for this study come from a survey conducted in 10 OECD (Australia, Canada, Czech Republic, Canada, France, Italy, South Korea, Mexico, Netherlands, Norway, and Sweden) in 2008. In each country a representative sample of adult population (N=cca 1000 in each country) has filled out a questionnaire that contained, among others, questions on energy-saving activities of households, energy-saving retrofits in households, stated motivation for energy saving, and environmental concerns.

The data are analyzed using structural equation modeling. Two hypotheses are specifically tested using SEM:

H1: Energy-efficient installations have negative effect on frequency of everyday habitual energy-saving activities.

H2: People who are more concerned about the environment and whose motivation for energy-saving is related to environmental protection are more likely to perform consistently both energy-saving activities and install energy-saving durables.

Results

First, results of our analysis suggest that energy-saving installations do not have, in general, negative effect on energy-saving behaviors. However, we can observe this negative effect for the most costly efficiency installations. Second, our results also suggest that those who are motivated in their energy-saving by environmental concerns are also more likely to adopt both energy-saving habitual behaviors and adopt efficient installations.

In another, words, results of our study suggest that environmental motivation tends to increase consistency across various energy saving activities of households.

Return to the city or out-migration from the cities? The principal characteristics of migration directions and their causes in the Budapest Metropolitan Region

Julia Schuchmann

Regional Environmental Center for Central and Eastern Europe (REC), Country Office Hungary
E-mail: s.juliet82@gmail.com

In the last two decades similarly to the current Western European urban development trends we can observe a huge urban sprawl phenomenon in the Budapest Metropolitan Region. This urban sprawl phenomenon was characterized by a strong out-migration of a certain part of the citizens from the city to the outskirts of Budapest. The article presents these urban sprawl phenomena based on an empirical survey analysis involving 1000 people living in Budapest and four selected, and different suburban settlements. The main aim of the study is to investigate the current characteristics of the migration processes of the population in the Budapest Metropolitan Region.

The results of this paper are based on the research results titled: „*The social mechanisms and interests determining consumption models. The model of sustainable consumption*” supported by the Norwegian funds, coordinated by the Institute of Sociology Hungarian Academy of Sciences, and organized by the Corvinus University. Firstly the paper analyzes the main social and demographical characteristics of the investigated population located in the outskirts of the Budapest Metropolitan Region, while showing the main social and demographical differences between the analyzed suburban settlements and the city centre as well.

The paper especially concentrates on examining firstly the residential intentions of different social groups located in the outskirts settlements in the context of local territorial conditions and the social, demographical positions of the population, and secondly the main determining factors of the residential intentions. The goal is also to reveal the residential intentions of the investigated social groups not only now but in the future as well to predict the expected urban sprawl processes in the Budapest Metropolitan region. To get a significant answer it is necessary to compare these residential intentions with the aspirations of the population of Budapest as well. The presentation

summarizes the most important changes based on the comparison of migration trends between Budapest and the outskirt areas between 2005-2010. This comparison is based on the database of an implemented research coordinated by the Institute of Sociology of Hungarians Academy of Sciences, titled: *Urban Regions, Spatial, and Social Inequalities and Conflicts” Spatial and Social dimensions of European Competitiveness.”*

Values and culture of sustainable consumption

Mózes Székely, Emese Polgári, Szabolcs Takács

Eötvös Loránd Tudományegyetem, Budapest, Hungary
E-mail: mozes@ludens.elte.hu, polgaremese@gmail.com

This project was primed to find different subgroups of society as focuses of intervention to increase sustainability in our consumption. The previous scientific experience is a Hungarian value and life-style research in 2004 (Székely – Gyene – Pörzse – Takács 2008) based on the Cultural Creative Survey (Ray 2000) in accordance with the European Cultural Creative Inquiry (2002). Ray recognized a new social stratum and a new way of thinking in the USA (beside the Moderns and Traditionalists). This new group was named Cultural Creatives, which would be a new subculture with greater responsibility for ecological sustainability, social and political activities, civil rights, moreover even the attitude of their mind is different from the thinking of most people in society. But the members of this group do not know each other which is the reason why we cannot define it as a genuine subculture.

Our study had two aims: (i) develop the items of the former survey (2004) and acquire a sophisticated tool which fits much more for the Hungarian social environment; and (ii) examine the life-style and consumption behavior of Cultural Creatives. Based on 5 focus groups and 26 interviews (personal questioning) with Modern (Materialistic) and Cultural Creative persons the qualitative research items had been revised, and the representative survey was carried out. According to the result of the statistical methods (cluster analysis) we found some functioning indexes (e.g. materialism, social activity, spiritualism, woman's values, investing money in environment protection), which arranged subjects to three clusters: (A) Cultural Creatives 35,1 %, (B) Materialists 45,7 %, (C) Aimless nihilists 19,2 %. Public policy design and regulations of sustainable consumption should be prepared by this segmentation of population

Keywords: *Values, life-style, sustainable consumption, cluster analysis, Cultural Creatives*

Territorial consumption issues of urban sprawl in the large Hungarian Urban Regions, especially in the Budapest Metropolitan Region

Viktória Szirmai

Urban and Environmental Sociological Research Department, Institute of Sociology of the Hungarian Academy of Sciences, Budapest, Hungary
E-mail: szirmai@socio.mta.hu

The paper focuses on the territorial consumption issues due to urban sprawl phenomena in the large Hungarian urban regions and especially in the Budapest metropolitan region. According to the statements of the relevant international literature, European urban sprawl processes create several unsustainable territorial consumption issues. These issues limit urban regional competitiveness. That is why the concept and consequently the research hypotheses of the project titled 'The social mechanisms and interests determining territorial consumption models' (conducted by the Institute of Sociology of Hungarian Academy of Sciences) concentrated on the territorial consumption issues of the urban sprawl phenomena.⁹

The analyses and the evaluations of the paper are based on two representative empirical surveys. The first survey was carried out in 2005 in the large Hungarian urban regions, among them in the Budapest metropolitan region.¹⁰ In this survey 5248 people were questioned, including 1000 people in the Budapest region. The second representative survey was executed in 2010 in the Budapest region, where 1000 people were interviewed.

The research results clearly underline the significance of the research problem and verified the hypotheses, urban sprawl issues constitute an important part of the sustainable consumption

⁹ The project was developed in the framework of the large project titled 'Sustainable Consumption, Production and Communication' supported by the Norwegian funds, coordinated by the Corvinus University of Budapest. The research is led by Viktória Szirmai. The participants of the research are Nóra Baranyai, Szilvia Kovács, Júlia Schuchmann and Zsuzsanna Váradi.

¹⁰ The project titled 'Urban Areas, Socio-spatial Inequalities and Conflicts – The Socio-spatial Factors of European Competitiveness' was funded by the Hungarian National Research-Development Programmes in consortia cooperation.

problem. Modern (European and Hungarian¹¹) urban sprawl induced a lot of territorial consumption issues, socially unsustainable territorial and social phenomena. Among these, the disappearance of the integrated or compact city due to suburbanisation, the accelerated escape of inner city dwellers to the outskirt areas causing serious environmental damage are particularly important. The change of the land use pattern, the disappearance of traditional land use forms and the increase of built-in suburb areas are principal negative consequences as well. The development of spatial segregation patterns, social polarisation, and certain new types of territorial dichotomies which were created between the different parts of the cities, and particularly between the city centres and the outskirts are extremely unsustainable social issues. The spatial social polarisation also manifested itself in the different types of everyday life territorial consumption models developed by the different social groups.

In order to explain the reasons for the creation of territorial dichotomies it is relevant to point out, firstly that the inequalities of territorial consumption depend not only on the impact of urban sprawl, but they also depend on the social structural mechanism as well. Secondly, it is necessary to indicate the significance of urban cooperation concerning the determining reasons, which is not too characteristic between the different territorial actors, the city, and the suburban local governments. The lack of cooperation is basically due to the limitations of regional planning and administration systems, the problems of local budgets and the individual competition attitudes of the settlements. It is also the main obstacle in the way of managing urban sprawl phenomena efficiently by all the territorial actors together, and it makes the realistic evaluation of new territorial systems, namely the urban regions developed by urban sprawl, very difficult as well. The consequences of urban sprawl are sometimes negative and sometimes positive. It is evident that the Budapest metropolitan region (and the other large urban regions as well) play very important economic, social and regional roles in Hungary. But it is also evident, that the negative impacts of urban sprawl processes limit not only the realisation of these roles and eventually they create unsustainable urban development models as they exclude a lot of people from the advantages of urban regional life.

¹¹ Based on the comparison with the Czech and Austrian case studies it was possible to analyze other European urban sprawl processes and summarize the main European tendencies. (see, Szirmai, V. Social Inequalities in Urban Areas and Globalisation. The Case of Central Europe, Discussion Papers Special, Pécs, 2007 by Centre for the Regional Studies of the Hungarian Academy of Sciences)

Motives of organic food buyers in China – do they differ from the West?

John Thøgersen, Yanfeng Zhou

Aarhus School of Business and Social Sciences, Aarhus University, Denmark
The Business School of Sun Yat-Sen University, Guangzhou, People's Republic of China
E-mail: jbt@asb.dk

Are consumer motives for purchasing organic food a product of the cultural, legal, media, and other relevant contexts or are they determined by the core, differentiating characteristics of organic food products? If the latter, product-centered, view is correct, but not if the former context-centered view is correct, findings from studies in developed countries should be generally valid also for countries and regions of the World with very dissimilar cultural value priorities and legal and other institutions. The Chinese cultural, legal, and economic context is as different from the western European or USA ones as they come. Still, organic food is now available in upscale supermarkets of east and South-east China metropolises such as Shanghai, Beijing, and Guangzhou. Hence, there seems to be a market in China for this type of food. A questionnaire used for a European study was translated to Chinese and a mall-intercept survey was collected in Guangzhou. Main results: As in Western Europe, the purchase of organic food in China is positively related to what Schwartz termed “universalism” values, and to no other value types when universalism is controlled. As in developed countries, the personal attitude towards buying organic food in China is strongly linked to beliefs about its healthiness, taste and environmental friendliness. Contradicting many other studies, this study finds that perceived social pressure has a smaller weight, and personal reasons a stronger weight in intention formation in China as compared to Western Europe. Implications of these findings and the need for further research are discussed

Keywords: *Organic food, China, consumer motivation, mall-intercept survey*

Effects of personal values on organic food consumption: an extension of TPB

Ján Urban

Charles University Environment Center, Prague, Czech Republic
E-mail: jan.urban@czp.cuni.cz

Objectives

The main objective of this paper is to examine the mechanism through which personal values influence organic food consumption, a particular example of proenvironmental behavior. The model of organic food consumption presented and tested in this paper is based on the theory of planned behavior. The original TPB model is extended by including personal values as determinants of more specific behavioral beliefs.

Theoretical background

Wealth of existing models of consumer behavior (for their overview see e.g. Jackson 2005) attest to importance and complexity of consumer behavior modeling. Nowadays, theory of planned behavior (Ajzen 1991) is probably the most widely used and empirically most efficient tool for explanation of consumer behavior. Indeed, this theory has been used with a success for analysis and explanation of food consumption and particularly organic food consumption in several empirical studies (Cook et al. 2002; Kaufmann et al. 2009; Arvola et al. 2008; Kalafatis et al. 1999; Sparks and Shepherd 1992).

Recent review of organic food studies (Aertens et al. 2009) has revealed that personal values are important factors that effect organic food consumption, besides those variables included conventionally in the theory of planned behavior, i.e. attitudes, social norms and perceived behavioral control.

One way to look at the effect of values of organic food consumption is the theoretical perspective offered by Value-belief-norm theory (Stern et al. 1999). Although this theory becomes increasingly popular as a tool of modeling proenvironmental behavior, only few applications of this

theory tested the full causal chain suggested by this theory, which leads from personal values and influences, via various types of beliefs, personal norms and the behavior (Stern et al. 1999; Steg et al. 2005).

We propose to extend the standard model of TPB by including altruistic, biospheric and egoistic personal values as determinants of particular behavioral beliefs which, in turn, are constitutive elements of attitudes. In another words, our model posits that any type of value can be, under certain conditions, a determinant of behavior that is proenvironmental in its consequences. However, specific behavioral beliefs with environmentally-related content are usually related to biospheric values.

Data and method

We use cross-sectional data from a survey of a convenience sample of inhabitants of the town of Kolovraty (N=377). The survey consisted of several questions regarding respondents' organic food consumption and included also indicators of personal values and variables used in the theory of planned behavior.

Structural equation modeling is used to test the proposed model. We use polychoric correlations and bootstrap method to derive model parameters and their standard errors because the empirical indicators used in our study are mostly ordinal.

3 models are tested:

1. model contains only variables from TPB with indirect measures of attitudes, social norms, and perceived behavioral control
2. model is similar to 1st model except that it includes also latent variables of egoistic, biospheric, and altruistic values and assumes that these values have direct effect on certain of the behavioral beliefs
3. model is similar to 2nd except that it allows also for direct effect on values on behavior

Results

Models 1 and 2 fit the data decently well. Biospheric values have positive effect on certain environmentally-related behavioral beliefs and also on their evaluation. The effects of egoistic and altruistic values are much less clear no not contradict VBN theory. Model 3 does not do significantly better fit than model 2. In accordance with parsimony principle, we may claim that the effect of values on organic food consumption is mediated by attitudes or, more precisely, by corresponding specific behavioral beliefs and their evaluation.

To sum up the results, we demonstrate that biospheric values have significant effect on organic food consumption on condition that:

- a) behavioral beliefs related to biospheric values overweight the effect of other beliefs related to organic food consumption;
- b) attitudes have significant effect on organic food consumption.

We hypothesize that these results are generalizable to other types of proenvironmental behavior as well.

Methods of green (public) procurement, awareness raising in Hungary and Germany

László Valkó, Orsolya Diófási

Budapest University of Technology and Economics, Faculty of Environmental Economics, Budapest, Hungary
E-mail: o.diofasi@hotmail.com

Nowadays we hear more and more about climate change, CO₂ emissions, environmental protection and sustainability mostly in the media. In average, people in Hungary are not aware of the proper meaning of these expressions and altogether the consequences of climate change. They don't feel it their problem, rather an abstract expression, or a political scandal. Even the minority, who has quite good knowledge about climate change, does not know what actions they can individually take to avoid the consequences. Even though individual commitment is one of the most important requirements on our way to sustainable consumption and sustainable development.

The proposed presentation topic is green procurement: a tool that is to be used to reach sustainable consumption patterns, further innovation and give a market to eco-technologies. Green procurement means that procurers take environmental issues into account when buying goods or services. The goal is to reduce the impact of procurement on the environment (CO₂ emissions, toxic material, amount of waste etc) and human health.

Buying green is the most active and most demonstrative way of environmental protection, and it is a tool that every individual, public authority and private company can use in order to cooperate in tackling climate change.

Procuring green and energy efficient products and learning how to decide whether a product environmental friendly is or not creates more awareness among people and helps giving the expression "sustainable consumption" a meaning and shows the actions that can be done for it. However green procurement also needs to be promoted and therefore I (Diófási) would like to present the BuySmart project that is funded by the EU and is run by seven different countries. I had the chance to work in this project, in which the consortium developed a toolkit (with guidelines, ready-touse criteria, calculation tool for several product groups) that makes green procurement easier, for private companies and public authorities, and they also run a campaign and give free of

charge consultations on the topic. Unfortunately Hungary is not involved in this project, but as my PhD work, along with the Faculty of Environmental Economics at BME we would like to develop a similar program for Hungary also. We would like to have a consulting, educational and auditing system that would be suitable for introducing green public procurement in Hungary effectively. The works had already started and this conference would be a great forum for showing our developments.

The social and territorial aspects of everyday life, public service and space consumption in the Budapest Metropolitan Region

Zsuzsanna Váradi, Szilvia Kovács

Institute of Sociology, Hungarian Academy of Sciences, Budapest, Hungary
E-mail: varadizs@socio.mta.hu

The aim of the presentation is to show the territorial consumption of different everyday activities, public service and space, realised by the population in the Budapest Metropolitan Region, based on the empirical results¹² of the sub-research, called 'The social mechanisms and interests determining consumption models', developed by the Institute of Sociology of the Hungarian Academy of Sciences, in the consortium project 'Sustainable Consumption, Production and Communication' organised by the Corvinus University of Budapest.

Processes such as globalisation, transition and new urbanization trends, like urban sprawl, reconstructed the social and territorial structure of the metropolitan areas. It is already known, that the outskirts settlements attracted the middle and high social strata groups from the metropolitan city, and also due to their outmigration, the social structure was changed hierarchically in the different residential areas and agglomeration zones.

Beside this, the globalized consumer models and places (eg. shopping malls, entertainment parks, private institutions, such as schools, health care services) modified the historically developed consumer behaviour, and their territorial movements.

These complex phenomena caused differences in the consumption models between the different social and territorial groups and also generated a lot of sustainability issues to be examined in the urban region.

¹² Combined from two sources, on the one hand, results of a quantitative survey: 1000 questionnaire of inhabitants in the Budapest Metropolitan Region (600 from Budapest and 400 from several underdeveloped and developed settlements in the agglomeration area). On the other hand, outcome of a qualitative research: cca. 60 interviews with local stakeholders (60% from the capital and 40% from the metropolitan region).

In order to extract and link these aspects, the presentation focuses on the socially, economically and territorially defined consumption in the Budapest Metropolitan Region. It highlights the characteristic usage of urban space by several specified social groups (according to educational level, income and working position).

Firstly it would like to underline the main features and models of everyday life activities by localizing their consumption scenes, such as places of work, education and shopping. It would like to present the consequences of the new regional social structure and the reorganisation of the territorial consumption habits together, their dependence on each other, as well as the local or global consumption patterns of the different social groups.

In addition, another significant task of the lecture is to analyse the consumer locations of public service and space among the different social residential groups. To achieve this goal, it discusses the utilization of various urban public spaces and public institutions, the social infrastructure of the different social and territorial groups and the determining factors of these public consumer habits territorially.

The differences which appear in the use of public services could strengthen the hierarchical social arrangement, where social conflicts could take place in this context. So the presentation deals with the background of territorial occupational contradictions via the structure of metropolitan society.

Integration of business activities into regional sustainability initiatives

Gyula Zilahy, Ágnes Zsóka, Szilvia Luda

Corvinus University of Budapest, Budapest, Hungary

E-mail: szilvia.luda@uni-corvinus.hu, gyula.zilahy@uni-corvinus.hu, agnes.zsoka@uni-corvinus.hu

As part of the continuously increasing effort both at the international and national levels to mitigate the impact of human activities on the environment and to solve social and economic problems all around the world, national and regional sustainability strategies have sprouted based on international treaties and other initiatives. Regional Sustainability Initiatives (RSIs) may play a significant role in promoting the cooperation of different stakeholders of society towards a more sustainable future. RSIs can often deal with a number of environmental and social problems more effectively and efficiently than international, national or local activities. RSIs are getting more and more frequent in many countries and are also promoted by the European Union, while empirical evidence provided by scientific research is scarce and filled with contradictions. The research project conducted at the Corvinus University of Budapest, supported by the Norwegian Financial Mechanism, aims at the characterization of such Regional Sustainability Initiatives from the point of view of stakeholders, especially corporate participation. The main theoretical considerations behind the proposed model are provided by the literature focusing on the inter-organizational relationships characterizing business organizations. The research examines the underlying principles of RSIs and their implementation in practice; the motivational factors of different stakeholders. The paper introduces six theories – transaction cost economics, resource dependence theory, strategic choice perspective, stakeholder approach, organizational learning and institutional theory – which can explain corporate participation in RSIs, the barriers to participation and the success factors. RSIs in practice are analysed through an interview-based empirical survey in Hungarian regions and some recommendations for policymakers are provided. Results clearly show the relevance of the proposed theories in exploring the preconditions for corporate participation in Regional Sustainability Initiatives.

Consumers' motives and barriers to organic food purchase: focus on environmental concerns, attitudes and subjective norms

Iva Zvěřinová

Charles University Environment Center, Prague, Czech Republic
E-mail: iva.zverinova@czp.cuni.cz

Organic food production represent for many experts, policymakers and for a part of lay public a way to reduce the environmental burden. The volume of organic food production hinges on, among others, consumer's preferences of organic food. The objective of the paper is for these reasons to analyze motivational factors and barriers that affect purchase decision-making related to organic food.

The focus of this paper is on relationship between environmental concern and organic food consumption. Over the last 30 years of research, it has been found that the direct relationship between environmental concern defined as a general attitude and specific proenvironmental behaviors is low to moderate (Balderjahn, 1988; Gill et al., 1986; Hines et al., 1987, Ajzen, 1991, 2008). These findings are in line with the "principle of compatibility" (Ajzen and Fishbein, 1980, Ajzen, 1988). According to this principle, a strong attitude-behavior correlation can be expected to the extent that the measures of attitude and behavior involve exactly the same action, target, context, and time element (Ajzen & Cote, 2008). On the other hand, the effect of general attitudes on specific behaviors may be mediated by specific attitudes toward the behavior (Ajzen, 2005). According to Bamberg (2003), environmental concern as a general orientation pattern influences the definition of a specific situation that is the generation of situation-specific cognitions. Bamberg (2003) empirically confirmed that environmental concern is an important indirect determinant of specific behaviour.

Methodology

Conceptually, the model presented in the paper draws from the theory of planned behaviour (TPB) (Ajzen, 1991). Further, the model complements TPB by including variable capturing

environmental concern (the revised New Environmental Paradigm scale). The purpose of the modeling is to explain probability of purchase of organic food by respondent. This probability is explained by intention to organic food purchase and environmental concern. The intention to organic food purchase is explained by joint influence of attitudes, perceived social norms, perceived control over behavior. Further, the model of TPB is tested separately for two subgroups: high and low environmentally concerned consumers. Technically, multiple regression analyses are used to test formulated hypotheses.

Data

The data come from an original survey conducted in 2008 on a representative sample of consumers from Prague and Znojmo region in the Czech Republic. Quota sampling was used to draw samples representative of the two regions resulting in total of 684 valid observations.

The two regions were chosen to cover heterogeneity in structural socio-economic and demographic characteristics of Czech consumers. The further reason for selection of these locations was to explore the potential differences in attitude and behaviour between the inhabitants of a large city and those of provincial town and countryside (cp. Von Alvensleben, 1998).

Results

The analysis of data has shown that there is lower probability that inhabitants of Znojmo region purchase organic food in comparison with inhabitants of Prague. The highest odds of purchasing organic food have secondary and university educated respondents. Further, the household income category to which belong the respondent and the respondent's gender, influence organic food purchase. Organic food has been purchased more likely by women than by men.

Attitudinal variables, particularly attitudes to organic food, subjective norms and environmental concern, have the positive direct effect on organic food purchase. However, the inclusion of environmental concern in TPB only slightly increased the variance explained by the model. But the impact of attitudes and subjective norms on intention to purchase organic food is different for high and low environmentally concerned consumers. Furthermore, there are significant differences in the behavioral, normative and control beliefs between high and low environmentally concerned consumers. Therefore environmental concern influence organic food consumption mainly indirectly.



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