

LITERATURE

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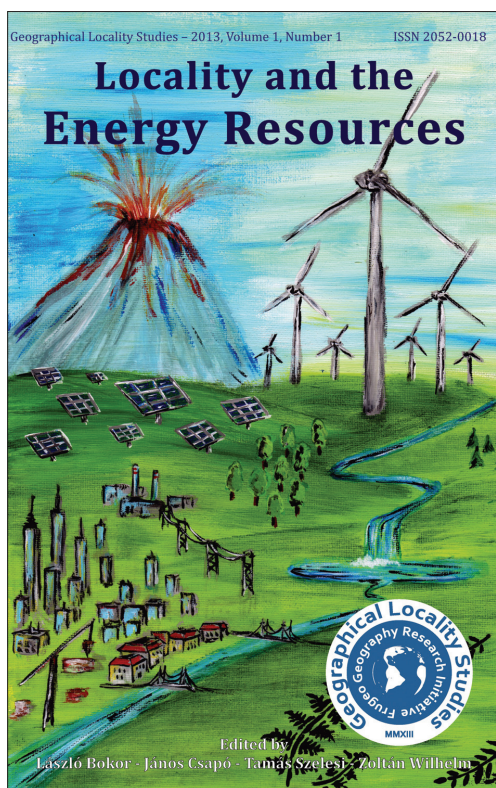
Bokor, L., Szelesi, T., Wilhelm, Z. and Csapó, J. eds.: *Locality and the Energy Resources*. Frugeo Geography Research Initiative. Shrewsbury, UK, 2013. 216 p.

This publication was prepared in honour of Klára BANK, associate professor of the University of Pécs, Hungary. Her main research areas are energy industry, energy management, current issues of energy problems and the role and use of renewable energy sources. In February 2013, she celebrated her 60th birthday, and on the occasion sixteen authors pay tribute with this volume to the staff member, researcher, teacher, but not least the always direct and helpful colleague.

The book differs fundamentally from similar volumes in several aspects. Firstly, the edition was undertaken by Frugeo Geography Research Initiative (FGRI) working in England, which is an educational, research and editorial enterprise that specialises in Geography and Environmental Sciences. The book was scheduled to be the first volume of the series of Geographical Locality Studies, appearing periodically in the FGRI library. Unconventionally, the manuscripts originally did not start as co-authored works, because the editor considered

it relevant that studies published in the book should be the intellectual property of only and exclusively of the authors indicated at the beginning of the papers, presenting their own research, reflecting their own views. This idea, however, was superseded by practical considerations in the meantime. At the same time, the writings are in English, so the book is beyond traditional Hungarian volumes of studies and is scheduled to attract the interest of international experts.

Articles included in the volume are basically organized around few keywords: locality, efficiency, reduction (e.g. output, consumption, wasting), independence (e.g. from imported energy sources), sustainability and stability. These keywords are plastic in content, but all are connected to the sources of energy and closely intertwined. Substantial requirement towards the authors was to focus on the connection between locality and the use of energy resources. The authors' task was to describe energy consumption and technological methods and emphasize the use of energy resources with local importance, the possibility of the improvement



of efficient technologies and methods, that of the reduction of consumption, wasting and sensitivity from imported energy sources, and the relevance of sustainability.

The relevance of this field of research in the new millennium is quite obvious. Since we have to confront a number of strategic challenges, among which healthy foods, clean drinking water and sustainable energy supply are the most important. In the energy sector, the next period will be the age of structural and paradigm shift on both the demand and supply side. Even today, many people live in the delusion of the cheap and infinite supply of energy, but the current consumption patterns are not sustainable in the future. In order to ensure our own future and the next generations' needs and to maintain a liveable environment, a swift change of attitude in the energy field is urgent as well. Performance of the economy, social issues, investor confidence and social well-being also depends on the energy safely accessible and affordable; therefore, one of the major challenges for Hungary is answering the energy-related issues.

There is no doubt about the relevance of the topic, the European Union developed the Europe 2020 Strategy for the ambitious purpose to find a solution to the economic recovery and future challenges at the same time. This also means that the growth should be socially inclusive and above all, more sustainable. At the same time, National Energy Strategy was adopted which formulates the new energy development trends outlining the Hungarian energy vision.

In the success of such strategies locality plays an important role, cities should undertake concrete actions to achieve the targets. Cities as key centres of economic development and innovation provide the territorial framework for environmentally friendly and socially inclusive growth. In addition to the fact that we must find a solution for social exclusion in cities, the greatest energy saving potential is also concentrated in urban areas. Investments in energy-efficient urban infrastructure create a thriving business environment and attract more people to the local labour market. Higher levels of employment can help overcome the income-dependent and energy-wasting habits of consumers as well as can provide the financial resources for the new, climate-proof growth. Thus, cities represent both a challenge and a solution to climate change. A challenge because the energy demand of the world's cities covers two-thirds of the total energy consumption, but also a solution, since, due to the dense urban network and compactness, cities have the opportunity to operate in a very energy-efficient manner.

Papers included in the volume are structured as follows. First, the former PhD-student of Klára BANK, László BOKOR pays tribute to her with the paper titled 'The Importance of Energy Resources in the Local Environment'. The author's goal is to shed light on the nature, origin, natural relations and the importance of local-level utilization of energy resources, all in accordance with the social sphere. It also aims to help understand the geographical interpretation of power systems, in order to show the ever closer relations between the natural and social, as well as local and global spheres.

In his essay Béla MUNKÁCSY (Department of Environmental and Landscape Ecology, Eötvös Loránd University, Budapest) argues for the importance of holistic approach in energy planning and he believes that we need to break with the narrow-minded technological approach. There are many non-technological principles that have serious impact on energy planning. In this respect the changing role of geography is remarkable, because it can be considered a complex discipline in itself. Therefore, the author attributes a decisive role to spatial approach, also because renewable energy sources are scattered in space.

János CSAPÓ a former student and current colleague of Klára BANK discusses best practices of 'Energy Efficiency in Tourism' both on Hungarian and international level where energy efficiency practices are integral part of tourism development. Selected case studies include New Zealand, Australia, the European Union and South Transdanubia (Hungary). He concludes that energy efficiency is an important driving factor for tourism development.

Nándor ZAGYI current PhD-student of Klára BANK, provides possible solutions to mitigate the environmental impact of air conditioning, under dry and semi-arid climatic conditions in his paper, with the title 'Traditional Energy – Free Solutions for Ventilation and Air-Cooling in Arid Tropical Areas of Asia' In the study areas (North Western India and the Iranian Basin) many long-established technical methods are applied which could be used also in modern architecture. These methods help adapt to extreme weather conditions by making use of water cooling and heat removal capability, as well as the possibilities of shading.

Zoltán WILHELM ANALYSES THE ROLE OF water as natural resource, cultural heritage and tourism attraction in India pointing out its weaknesses in relation to the possibilities. Furthermore, he demonstrates the specific role of water as a natural resource in the sub-continent. The author notes that the traditional and sustainable water management practices can contribute to the broadening of tourism supply. The current and former student of the celebrated, László BOKOR and Tamás SZELESZ greet her by publishing their work titled 'Bhutan: A Nature-based Holistic Society in the Himalayas'. The study using the current comprehensive international literature highlights how the population tries to live in harmony with nature, which is evident in the course of their daily lives and activities. Conditions for the development of energy systems are basically defined by the surrounding mountain ranges that can also be considered as the basis for the Bhutanese culture.

The results published by Lajos GÖÖZ in the paper titled 'The Feasibility of Small-regional Autonomous Energy Systems' are also adapted to the geographical career of the celebrated. The study describes the regional development effect of renewable energy sources. The positive effects are linked to employment, research and development, SME activities and industrialisation. The author points out that renewables have strong positive impact on the living standard and human resources. The work emphasizes the importance of budget support, because if the government fails to take a part in these developments, Hungary will not be able to achieve the goals of the Energy Action Plan.

Károly TAR, associate professor at the College of Nyíregyháza investigates the relationship between relative frequency, relative energy content, average velocity, and the average length of time of the wind directions. He also determines the measure of stochastic connection between the energetic parameters for characterisation of inner definiteness of the wind energy field. He draws the reader's attention to the fact that the value of wind direction's energetic parameters and the ratio of their significant connections are also dependent on the orography.

Over and above, it has a downward trend in time. Most non-significant connections were observed between the average velocity and average length of time or between the relative frequency and the average velocity of the wind directions. Results of the author show, that the inner definiteness of the wind field became weaker in Hungary which requires more caution in the site selection of wind energy utilisation. Károly TAR and Mihály TÖMÖRI together greet the celebrated with the paper on 'Realistic Potentials of Wind Energy Utilisation in Hungary'. The authors not only explore the climatic potentials of wind energy utilisation, but also the potentials in Hungary's geography and land use, science and energy policies. The study presents the main factors in installing wind turbines and designates the areas recommended for installation.

Gabriella ANCSIN (University of Szeged) explores the advantages of the utilisation of geothermal energy with respect to the technology and economic performance. Thermal waters have been widely exploited for nearly half a century in the area of the Great Hungarian Plain not only for balneological, but also for industrial and agricultural purposes, as well as for public heating. The use of geothermal energy for heating has been more and more propagated, and substantial economic advantages can be achieved in case of larger public buildings as well as residential complexes.

Mária MOHOS and Lajos KECZELI salute the celebrated with a study titled 'The Functioning of the Cement Factory in Királyegyháza in a Rural Area'. The authors provide interesting results connected to the human geographical aspect of the topic. They clearly identify three possible ways of development in the micro-region affected by the cement factory. In the first case, the agricultural nature remains, which will be linked to a nearly equivalent industrial profile. Agricultural production is strengthened by the cement plant supplied by biomass fuel. In the second case, the primary sector is completely relegated, while the secondary and tertiary sector would take up the majority of workers. According to the third variant – based on the negative trends in the world economy – the failed economic restructuring would lead to a situation where the original agricultural profile remains dominant.

Viktor GLIED assistant professor at the Department of Political Studies, University of Pécs highlights the background of 'Social Conflicts in the Shadow of the Paks Nuclear Power Plant'. As author argues surveys of the last decade show that the Hungarian society does not reject the operation of Paks Nuclear Power Plant. However, the proposed new extension sets new questions related to the financing of the investment and its necessity. The author points out that international considerations against nuclear power and energy are guided by not only financial issues but also emotional and political motivations. The author draws the reader's attention to the case of the Hungarian situation: it is not the security risks which are primarily mentioned in connection with the expansion of the plant. It is rather the costs associated with the construction of the new blocks and the reconstruction of uranium mining.

The organising principle of the book was from the general to the more specific topics, from the higher territorial level towards the lower. Thus, the introductory provisions are followed by Asian and Hungarian examples. In case of the latter, the book also moves from the general to the regional and in sectoral approach, where wind, geothermal and finally nuclear energy are discussed. The editors are to be commended for the carefully designed internal structure of the volume and to its attractive appearance. The cover design is a hand-painted drawing about the natural energy sources by Viktória NEMES. On the back, info arousing the interest of the readers can be read. One tab gives the concise biography of the celebrated, the other a short description of the editors.

To conclude the present volume attempts to provide a starting point for those who are open to heed the recommendations and add their own experiences to it. However, the main target groups are professionals and local experts involved in city management, urban and regional planning, decision-makers, officials managing processes and professionals supporting their work. In fact, it can be recommended to all those who are involved in the development of local, regional or sectoral development-policy making, implementation, professional preparation, what is more, the education at national or European level. Instead of permanent reference to the lack of funds, understanding approaches different from ours (even Asian) described in the book can be exemplary and strongly recommended for consideration, which may contribute to the practical and cost-effective management of problems and the change of attitude. We understand that the knowledge connected to the importance of energy awareness is expanding almost day-to-day. That is why we encourage all readers of this volume to adapt the information described here to the conditions of his/her own locality, complete it and contribute to the construction of this growing knowledge. Asking them to use and propagate, explain to others the described information in this volume, consider these guidelines and initiate further discussions at local and national levels.

RÓBERT TÉSITS