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PREFACE

The reader is holding the English version of the *Natural Environment* volume of the *National Atlas of Hungary (MNA)*. A national atlas is the given country's 'identity card,' one of its most significant national symbols in addition to its flag, coat of arms and national anthem. Like the previous undertakings, the present volume is the outcome of wide-ranging professional collaboration: 19 editors, 137 authors, 220 map authors, 17 cartographers, and several dozen professional and language proofreaders, translators have made their valuable contributions to it. Understanding the special significance of the Atlas, in addition to the staff of the Hungarian Academy of Sciences (MTA), colleagues from Hungarian universities and other organisations and institutions (e.g. the Ministry of Agriculture, the Mining and Geological Survey of Hungary, the Hungarian Meteorological Service, and the General Directorate of Water Management) have made their selfless effort in order to assist this national project.

Prior to a more detailed introduction to the first volume of the symbol of the Hungarian state and nation as embodied in maps, it is my great pleasure to guide the esteemed reader along the virtual international and local path that has led to this publication and its digital version.

A national atlas is usually a series of maps complemented with textual explanations and various illustrations, which show the given state's natural, economic and social features through logically and proportionally constructed maps using a well-defined scale and fairly uniform cartographic iconography. It is intended for the country's inhabitants as well as for interested foreigners. The national atlases issued so far all share the *principal feature* that they refer to the given state's territory. They introduce a country's natural, social and economic structure and its spatio-temporal data with an almost *encyclopaedic* scope, in a complex and *structured* form, applying a logical *sequence of maps*. The *main expectations* concerning national atlases are that they should serve the *representation of the state and the nation, public policy planning and decision-making, scientific research, as well as public and higher education*, and due to their user-friendliness, they should also meet the requirements of the *wider educated public*.

In our days, most countries in the world have national atlases as far-reaching national symbols. They were generally compiled during their strife for national independence or shortly after achieving it, and are usually updated every two or three decades. The first atlas was published in 1899 by *Finland*, the country that intended to get rid of Russian control. Up to the mid-20th century, most atlases were issued in a *single volume*, although their size varies considerably, their *methodology* is mostly *unsystematic*, and in *content they tend to concentrate on geography*. After WWII, several developed countries launched their first (or revised) national atlas project, which already aimed at *regional development*.

The 1980s saw the *beginning of a new era* in the history of national atlases, which is primarily due to reasons of *marketing*. The increasingly sophisticated national atlases were now intended for the *educated public* and *actors of public and higher education*. As a sign of targeting wider audiences, in order to be more comprehensible, more popular and more marketable, atlases started to include more explanatory texts,

photographs, and various visual elements at the expense of maps. At the same time, maps were simplified, and themes shifted towards areas more relevant for society and users in general. Still based on scientific research, since the late 1980s the more market-oriented, more mass-consumable atlases have been issued *electronically* as well as in hard copy. The birth and fast spread of personal computers revolutionised cartography, including atlas cartography, all over the world. Thanks to the changes in production and information technologies, modern atlases issued *since the 1990s* have been able to fully meet all of the various functions emphasized in different periods of the past century of atlas making. The first electronic development was the appearance of *CD-ROM versions* accompanying conventional print atlases. Subsequently, *the first internet and web-based national atlas* was marketed in Canada.

In the case of national atlases published over the past two decades, traditional print atlases have definitely been pushed to the background compared to their electronic versions, which contain almost unlimited amounts of multimedia elements (e.g. photos, videos, animation, and World Wide Web hyperlinks). However, *paper-based atlases*, that 'we can still use at times of blackouts,' a specimen of which the reader is holding in their hands, have not disappeared as outstanding *period documents* of the given state's geographic environment. Instead, they have been completely *revived*, becoming more interesting and more fascinating in the course of their competition with electronic mass communication. Meanwhile, *electronic atlases have become primary sources and tools of obtaining and analysing regional information*. The *easy access to and up-to-the minute nature of web-based atlases on the internet* make them attractive because of their practically *unlimited capacity to store data and maps*.

Hungarian geography and cartography have always played a decisive role in developing *our knowledge of the nation and the homeland*, in building the image of Hungarians and their country. Following World War I, especially geographic and cartographic pieces were produced mainly in French, English and German, with maps, map series and atlases among them, reflecting the impact of the Trianon Dictate and justifying the demand for a full or partial restoration of the country's former territorial unity.

In 1945, the *Atlas of Central Europe* issued both in Hungarian and in English was compiled by the *Institute of Political Sciences*, the organisational predecessor to today's *Geographical Institute* Research Centre for Astronomy and Earth Sciences of the Hungarian Academy of Sciences, already meeting all the requirements for national atlases. However, rather than focusing on the territory of one state (Hungary), it represented as well as the *Carpathian Basin and its wide environment* (12 countries).

Following the fundamental political, social and economic changes of 1948, 1967 saw the *first edition of the National Atlas of Hungary*, which was to propagate the new socialist Hungary. Based on the recommendations of the International Geographical Union's (IGU) Commission on National Atlases, work on the map collection was launched in 1959. The atlas, whose birth was assisted by the scientific contributions of MTA (especially its Geographical Committee) and the



cartographic projects of the Cartographia Ltd. Company, intended to facilitate 'economic management and planning' as well as to *offer general information* about the country. Again funded by the Government, in 1983 MTA in cooperation with the Ministry of Agriculture and Food decided on a revised edition of the National Atlas. *Coordinated by the Geographical Research Institute of MTA* and with the contribution of 87 (mainly) state-run institutions and organisations, as well as 183 authors, *the second edition of the National Atlas* was issued *in 1989*, shortly before the democratic regime change. In order to be more open to the outside world, the still one-volume atlas, *which had grown four-fold in size compared to its earlier version*, was now bilingual (*English and Hungarian*).

The country's fundamental post-1989 social and economic transformation compelled the Geographical Research Institute to continue in 1994–1995 the publication of the National Atlas in its *supplementary map lift-out series*, in order to provide the public with fast and accurate information. The National Atlas managed to *catch up with international trends*. Thus, it broke with the tradition of producing one huge uniform volume; it changed its orientation by *turning to the general educated public and opening its vista to education*; it selected *problem-centred issues* of interest to a wide range of the population; and for working with maps and geographic information, *it switched to digital technology* (ArcGIS).

In preparation for a further edition of the National Atlas, *in 2009* our legal predecessor, the *MTA Geographical Research Institute* issued its relatively small-sized information atlas called *Hungary in Maps* in English, and subsequently in *2011 also in Hungarian (Magyarország térképekben)*. With the help of numerous maps, this publication intended to give a quick overview of the Hungary of the 2000s and of the Carpathian Basin.

Nearly a quarter of a century following its second edition, in 2013 preparations for *the new (conventional) edition of the Atlas of Hungary* were started – again under the coordination of the *Geographical Institute of the MTA Research Centre for Astronomy and Earth Sciences (CSFK)*, enjoying the support of József Pálinskás, former president of the Hungarian Academy of Sciences.

It is a unique *novelty* of our aims that the 2018 edition of the Atlas of Hungary wishes to present the *dynamic spatial structure of nature, society and the economy* not merely for Hungary, but wherever the required data are available, for the entire Carpathian Basin and its neighbourhood (the Carpatho–Pannonian Area), thus covering a territory of some half a million km² and 34 thousand settlements in twelve countries. It is

to be noted that in the National Atlas, we strictly distinguish the terms ‘Pannonian Basin’ and ‘Carpathian Basin’, which are frequently believed to be synonyms. While on the one hand, the *Pannonian Basin* is a geographical and natural phenomenon, meaning the actual basin between the Alps, the Carpathians and the Dinarides, on the other hand, the *Carpathian Basin* (without irredentistic connotations), frequently used in colloquial Hungarian, covers the historical-cultural homeland, the autochthonous settlement area of Hungarians, in fact, the historical territory of the State ¹.

It has been an additional important objective to compile and publish high-quality geo-informational background material for the *governance and for public and higher education*. In other words, we intend to make available to large sections of the population *scientifically well-established reader-friendly* material about Hungary and the Carpathian Basin.

In addition to the conventional (print) version, for the internet-based Atlas, interactive analysis and searchability will be enabled; in line with contemporary technical expectations, we wish to *build an interactive digital national geo-information system* and upload the National Atlas content on it. In order to provide foreign readers with authentic information of international standards, in addition to the Hungarian version, it is essential to *publish the English translation*, as well as the Hungarian original, of the four upcoming volumes of the Atlas to be produced in 2018–2021 and to *make them available online*.

The *traditional paper-based edition* will cover the most important topics in *four volumes* (The Hungarian State and its Place in the World; Natural Environment; Society; Economy) and in *representative quality*. It will serve mainly awareness-raising and information provision rather than academic research. Naturally, we know that paper-based volumes, whose production takes a long time, may contain less up-to-date information at the time of their issue, therefore many present-day readers find them less attractive. Nevertheless, future generations will see them as *significant records of the period*. In contrast, practically up-to-the-minute information and contact with the wider public will be ensured by the *digital version (e-MNA)* available at www.nationalatlas.hu.

For the sake of user-friendliness, *each chapter of a volume has its own colour*, which appears on the margins of pages, in subtitles, as well as in references to

non-verbal information. Unlike in strictly academic publications, however, in the same way as in other national atlases, the chapters only give the authors’ names. Their particulars (scholarly rank, position, primary employer’s name and town) are specified at the end of each volume (*Authors, Bibliography and Sources*). Due to the nature of the genre, we do not include any footnotes or references to any literature. Therefore, all the sources for the texts, for compiling figures, the list of further readings, and names of photographers are to be found in the *Authors, Literature and Sources* section. Due to these reasons (and occasionally space limitations), non-verbal sources (i.e. maps, tables, graphs, diagrams and photos) that enrich the topics do not feature the names of their authors or their origins. Titles of these vital components of the atlas are included in the lists of figures, tables and pictures, offering help in focused searching.

In the printed version of the Atlas, two-page maps accompanied by detailed information have a special significance. They are not always placed next to the text they refer to because they have to be on facing pages so that their middle section should be equally readable. In addition to these illustrations, highlighted in the relevant chapter’s colour, *text boxes* explaining interesting professional terms, ideas or phenomena (often containing their own graphs and other visuals) add content and help the reader to use the Atlas.

Each of the subsequent volumes will start with a *brief chapter called Hungary at a glance, overviewing the country’s particulars*. The maps included introduce the administrative division of Hungary in the current year, as well as the general geographical features, i.e. the topography, hydrography, and the settlement and transport network of the Carpatho–Pannonian Area.

In the English versions, geographical names (e.g. topographic, hydrographic and settlement names) are given *in English* in the first place, or when that does not exist, *in the given country’s official language*. In regions where the proportion of national-ethnic minorities is over 10%, geographical names are given also in the minority language, using ethnonyms both in the maps and the texts. The equivalents of the English geographical names as used in the country concerned are to be found in the *List of English and Foreign Names* at the end of each volume.

Natural Environment volume of the Atlas introduces the features of the *lithosphere, hydrosphere, atmosphere, biosphere*, and *environmental protection*, as well as *na-*

ture conservation in Hungary (and whenever possible, in the Carpathian Basin). Compared to its predecessors, the synthesizing chapter on natural hazards is completely new. Compared to the sections dealing with the natural environment in the 1989 edition, the overall length and number of maps has doubled, and the proportion of explanatory texts, tables, graphs and pictures has increased from 25 to 50%, while the inclusion of photographs appears as a new feature of the Atlas. Thanks to this new approach, the number of maps covering the Carpathian Basin has risen to 33, and there are as many as 28 maps of Europe. While in the 1980s the main themes were centred on waters, geology and the climate, in the current edition the topics are much more balanced. Far more space is given to Hungary’s flora and fauna, nature conservation and landscapes.

Besides the Atlas creators’ professional knowledge, dedication and enthusiasm and the diverse contribution of the MTA, the publication of this volume has been enabled by government support, and its printing has been financed by the Ministry of Human Capacities (Emmi).

As a final word, let me express my gratitude to all contributing institutions and persons for their selfless dedication to the project, as well as for the Academy’s and the Government’s generous support that has enabled the edition of the Natural Environment volume of the new National Atlas of Hungary. On behalf of the several hundred contributors, let me express our hope that our esteemed readers inside and outside the national borders will enjoy the pleasures and benefits of browsing the printed book (despite its large size) or reading its digital version on the Atlas webpage. We trust that it will assist in getting to know the natural environment of Hungary and the Carpathian Basin, its present state and the processes that shape it, which our contemporary society cannot ignore.

KÁROLY KOCSIS

Full member of MTA
President of the Editorial Board