



ROLAND BENCE LAKATOS: Presentation of the General Industrial Safety Authority Tasks and Powers

TÜNDE PÉSTI: Measures against prejudice at the Hungarian Police – theoretical research on police culture and cop culture

BÉLA SZILÁGYI: Refugee Camp: A Tool for Dignity and Security

TAMÁS TÓTH - BRENDA MATIAS SILVA: Development Directions of Water Management by Comparing Rio Grande do Norte to Hungary

TAMÁS TÓTH: Changing Focuses Through the Progression of Hungarian Water Management

UPAL ADITYA OIKYA: Incorporation of Human Rights in International Relations

VIKTOR NÉMETH – CSABA SZABÓ: The characteristics of mediation according to fields of application

MÁTÉ SIVADÓ: Radical decrease in the number of homicides in Hungary

BOOK REVIEW: Anticorruption. The MIT Essential Knowledge Series

BELÜGYI SZEMLE

PROFESSIONAL AND SCIENTIFIC PERIODICAL OF THE MINISTRY OF INTERIOR



VOL 69. 2021 / SPECIAL ISSUE 4.

BELÜGYI SZEMLE

EDITORIAL COMMITTEE

PRESIDENT Dr. László Felkai, under-secretary for public administration, Ministry of Interior
SECRETARY Dr. Valér Dános, ret. pol. major general, associate professor
MEMBERS Prof. Dr. Géza Finszter, doctor of the Hungarian Academy of Sciences
Prof. Dr. József, Haller doctor of the Hungarian Academy of Sciences,
head of department, university professor
Prof. Dr. Csongor Herke, doctor of the Hungarian Academy of Sciences,
head of department, university professor
Prof. Dr. László Kecskés, ordinary member of the Hungarian Academy of Sciences
Prof. Dr. Klára Kerecsi, doctor of the Hungarian Academy of Sciences,
university professor
Prof. Dr. András Koltay, rector of the University of Public Service,
university professor
Prof. Dr. László Korinek, ordinary member of the Hungarian Academy of Sciences
Prof. Dr. Miklós Maróth, ordinary member of the Hungarian Academy of Sciences
Prof. Dr. Barna Mezey, doctor of the Hungarian Academy of Sciences,
head of department, university professor
Dr. Sándor Nyiri, ret. leading public prosecutor, honorary associate professor
Prof. Dr. András Patyi, the Vice-President of the Curia of Hungary, university professor
Prof. Dr. Péter Polt, university professor, chief public prosecutor
Prof. Dr. István Sándor, doctor of the Hungarian Academy of Sciences,
tenured university professor
Prof. Dr. Mihály Tóth, doctor of the Hungarian Academy of Sciences,
head of department, university professor
Dr. Ludek Mihalek, member of the Police Academy of the Czech Republic,
university professor
Dr. habil. Philipp Fluri, Executive-in-Residence, Geneva Centre for Security Policy
Dr. hc Detlef Schröder Executive Director of the European Union Agency
for Law Enforcement Training
Dr. Ciprian Maftעי, Ph.D., home affairs attaché at the Embassy of Romania
in Hungary

PROFESSIONAL ADVISORY BOARD

Kristóf Bakai, finance guard colonel, director-general for customs
at the National Tax and Customs Administration
Dr. János Balogh, pol. lieutenant general, director of the National Police
Headquarters
Dr. Szabolcs Bárdos, nat. sec. major general, director-general of the Constitution
Protection Office
Dr. Zoltán Bolcsik pol. lieutenant general, director-general of the National
Protective Service
Dr. Ágnes Frech, leader of the Criminal Justice College at the Budapest-Capital
Regional Court of Appeal, special advisor of the National Office for the Judiciary
Dr. Zoltán Góra, ff. lieutenant general, director of the National Directorate General
for Disaster Management
János Hajdu, pol. pol. lieutenant general, director-general
of the Counter Terrorism Centre
Dr. József Hatala, ret. pol. lieutenant general, president of the National Crime
Prevention Council

2021 / SPECIAL ISSUE 4.

Dr. Frigyes Janza, ret. pol. major general, inspector general for education of the Ministry of Interior
Dr. Zsolt Halmosi, pol. major general, director of the National Directorate-General for Aliens Policing
István Láng, leader of the General Directorate of Water
Prof. Dr. Gábor Kovács pol. brigadier general, dean of the Faculty for Law Enforcement Science of the University of Public Service, tenured university professor
Prof. Dr. János Sallai pol. colonel, University of Public Service, head of department, university professor
Dr. Hedvig Szabó, nat. sec. lieutenant general, director-general of the Special Service for National Security
Dr. Marcel Szabó, constitutional judge, international lawyer
Dr. Tibor Takács pol. lieutenant general, director-general of the Counter-terrorism Information and Criminal Analyses Centre
Dr. Tamás Tóth corr. lieutenant general, leader of the Hungarian Prison Service
Dr. András Túrós, ret. pol. lieutenant general, president of the Nationwide Civil Self-Defence Organization

EDITORSHIP

EDITOR-IN-CHIEF	Dr. Valér Dános, ret. pol. major general
DEPUTY EDITOR-IN-CHIEF	Dr. Zsuzsanna Hornyik
MANAGING EDITOR	Dr. Csaba Szabó PhD, pol. lieutenant colonel
COPY EDITOR	Zsuzsanna Vég
PEER REVIEWER	Prof. Dr. József Boda
FOREIGN LANGUAGES ASSOCIATES	ret. state sec. major general Dr. Lajos Hertelendi, pol. lieutenant colonel Henrietta Luda Károly Cs. Csala pol. colonel József Havasi Anita Varga
EDITORSHIP	H-2090 Remeteszőlős, Nagykovácsi út 3. Phone: + 36 (26) 795-900 /24-600 szerkesztoseg@belugyiszemle.hu www.belugyiszemle.hu
ISSN	ISSN 2677-1632 (Online) Volume LXIX
PUBLISHER	Ministry of Interior of Hungary www.kormany.hu/hu/belugyminiszterium H-1051 Budapest, József Attila utca 2-4.
PICTURE EDITOR	László Botlik
PRINTERY	Duna-Mix Kft.
RESPONSIBLE MANAGER	Lóránt Szakolczai, corr. colonel

CONTENTS

	Preface	7
	STUDIES	
ROLAND BENCE LAKATOS	Presentation of the General Industrial Safety Authority Tasks and Powers	8
TÜNDE PESTI	Measures against prejudice at the Hungarian Police – theoretical research on police culture and cop culture	21
BÉLA SZILÁGYI	Refugee Camp: A Tool for Dignity and Security	31
TAMÁS TÓTH - BRENDA MATIAS SILVA	Development Directions of Water Management by Comparing Rio Grande do Norte to Hungary	53
TAMÁS TÓTH	Changing Focuses Through the Progression of Hungarian Water Management	68
UPAL ADITYA OIKYA	Incorporation of Human Rights in International Relations	85
VIKTOR NÉMETH – CSABA SZABÓ	The characteristics of mediation according to fields of application	93
MÁTÉ SIVADÓ	Radical decrease in the number of homicides in Hungary	108
	BOOK REVIEW	
VIKTOR NÉMETH	Anticorruption. The MIT Essential Knowledge Series	121

ROLAND BENCE LAKATOS	head of department Szabolcs-Szatmár-Bereg Country Disaster Management Directorate, Nyíregyházi Disaster Management Office, Disaster Management Authority Department dr.lakatos.bence@katved.gov.hu
TÜNDE PESTI	PhD student University of Public Service, Doctoral School of Law Enforcement
BÉLA SZILÁGYI	PhD student Óbudai University, Doctoral School on Safety and Security Sciences bela@hbaid.org
TAMÁS TÓTH	PhD student, civil engineer General Directorate of Water Management tothtamas@live.com
BRENDA MATIAS SILVA	MSc student, civil engineer Budapest University of Technology and Economics brendamatiassilva@gmail.com
UPALADITYA OIKYA	PhD candidate University of Pécs, Faculty of Law aditya.oikya@gmail.com
VIKTOR NÉMETH	PhD, postgraduate institute University of Public Service nemeth.viktor@communicatio.hu
CSABA SZABÓ	PhD, pol. lieutenant colonel, managing editor Ministry of Interior of Hungary, Belügyi Szemle Editorship csaba.szabo3@bm.gov.hu
MÁTÉ SIVADÓ	PhD, pol. major, senior lecturer University of Public Service, Faculty of Law Enforcement sivado.mate@uni-nke.hu

PREFACE

*'Wherever the weak flower of real internationalism blooms,
support and irrigate that.'*

Johan Huizinga

Dear Reader,

Language is indispensable for human communication. This concerns both everyday life and scientific researches. In the international scientific space, it is an irremissible condition for communication to reach epoch-making scientific results by use of English, the universal language of science, taking on proudly our researcher's diversity and national affiliation.

The scientific journal *Belügyi Szemle*, as an outranging periodical of Hungarian law enforcement, law and social sciences, reached prominent position first of all by publication of professional and scientific researches in Hungarian language until recent past. The new editorship formulated as a short-term goal to provide space – beside papers in Hungarian – for contributions in English in its special online issues four times and later on six times a year.

The slogan of the editorship of *Belügyi Szemle* is: Science is an international undertaking. We believe that we will be able to make our journal successful through that also in English -after success in Hungarian language - and in the international scientific space.

We hope that the papers published in our fourth English issue this year will generate science-based professional debates and inspire scientific researches, which can contribute to results of international researches in security, law and social questions. We ask you to accept the special Issue 4 of the year 2021 of *Belügyi Szemle* in English with positive appraisal, what will give a meaningful pastime for our readers, as we hope it.

the Editorship



Roland Bence Lakatos

Presentation of the General Industrial Safety Authority Tasks and Powers

Abstract

Over the past decade, general and specific domestic and international legislation establishing of and related to disaster protection has been adopted. The purpose of the regulations is to ensure protection of human life and health and of the environment of facilities. In this article the general industrial safety authority as one of the pillars of the authority's tasks is presented, as well as the relevant legal provisions with regard to the scope constraints.

Keywords: government, disaster management, industrial safety, official activity, prevention

Introduction

Over the past decades, general and specific domestic and international legislation establishing of and related to disaster protection has been adopted. The aim of the legislation is to guarantee the safety of our daily lives, including our privacy, our workplace and its environment, our transport, our vital assets, equipment, facilities and the tangible assets that meet our needs. In order to achieve these tasks and goals, the legislator established the system of professional disaster management organizations in January 2012, including several special fields. The purpose of the regulations is to ensure protection of human life and health and of the environment of facilities. In this article the general industrial safety authority as one of the pillars of the official tasks is presented, as well as the relevant legal provisions with regard to the area limits.

Industrial Safety as a Field of Expertise

The organizational system of public administration has undergone significant development over the past centuries, but the essential elements of its concept have not changed to this day. Public administration can be defined as a special area of executive power of the state. In order to define the concept of public administration, we can define it primarily from the conceptual elements of public administration. The aim of our public administration is to enforce both the 'public' and the 'national' interests, which can be realized through coordinated activities of persons in the possession of public authorities. Zoltán Magyary, the most influential individual of Hungarian public administration, also recognized abroad, defined this activity as follows: *'the administration of the state' i.e., 'the organization of the state, for the effective solution of public tasks in the framework of the legal order in the manner prescribed by their nature.'* (Balázs, 2018).

Within the system of public administration, the organization and concept of public administration understood only to mean public administration bodies which, with regard to the provisions of Article 15 of the Fundamental Law – Pursuant to Article 15 (2) of the Fundamental Law, the Government is the supreme body of public administration, and may establish state administration bodies as defined by law – (Trócsányi, Schanda & Csink, 2014), have been established by the Government and are under its subordinate control or - typically in administrative and official tasks, however - they carry out their professional activities independently of the Government and thus its powers of management are ensuring the constitutional principles. Considering the importance of disaster management *'in 2011, the legal framework for disaster management was reformed.'* (Kátai-Urbán & Vass, 2014).

Regarding the importance of disaster management as a task, the legislator also stated that it is a *'national affair'* which means nothing more than protection of all segments of society including, inter alia, Act CXXVIII of 2011 on Disaster Protection and Amendments to Certain Related Law (hereinafter: as per to the Section 2 § (1) of the Disaster Management Act): citizens, civil defence organizations, the Hungarian Armed Forces, law enforcement agencies, the National Tax and Customs Administration, the National Meteorological Service, the National Ambulance Service, the water administration offices, the national health administration body, voluntary non-governmental organizations and public bodies set up for this purpose, as well as in the case of non-natural disaster, its cause is realized with the involvement or participation of state bodies and local governments. These individuals will be involved in disaster management. Tasks/ rights or obligations/liabilities for the above can only be defined by the legislator

in an independent law based on the highest level of legal source i.e., the Fundamental Law. It can also be deduced from the above that the implementation of disaster management tasks is supported by four basic pillars, namely state and municipal bodies, non-governmental organizations, and citizens (Katai-Urbán, Címer, Szakál & Vass, 2019).

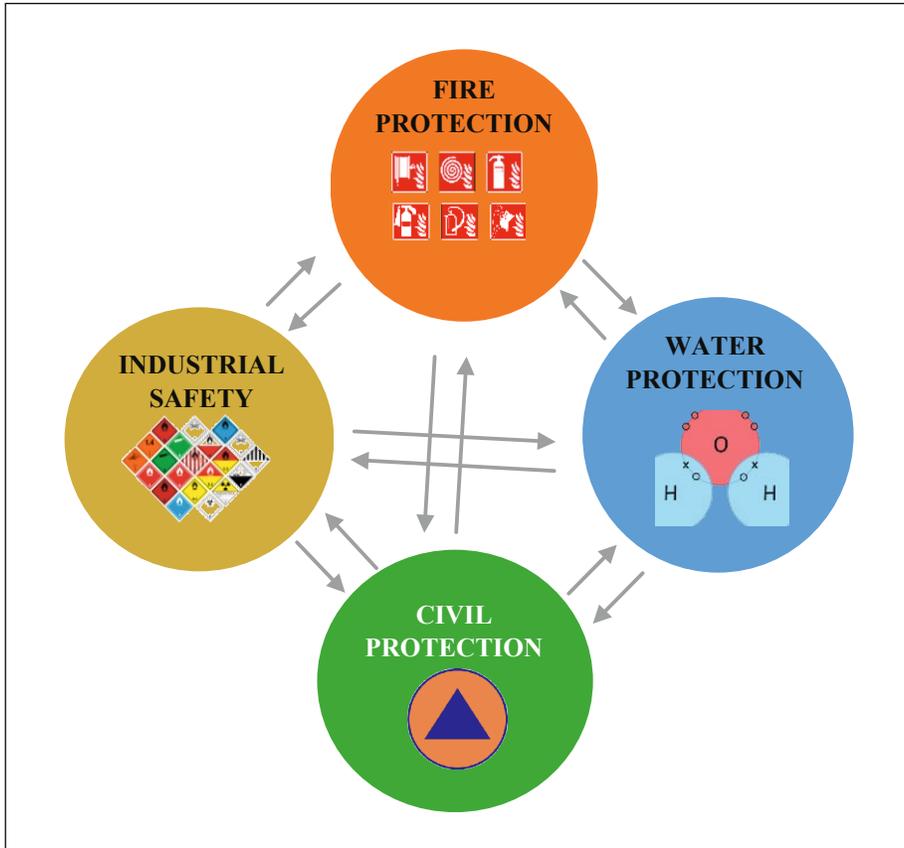
The task system of the Disaster Management Act has been developed in the light of the newer legal environment mentioned earlier. Strong authority powers and sanctions have been set on this scale to achieve prevention goals. The central body of the professional disaster management body with national competence, as well as the county and capital bodies, and the local bodies of the disaster management offices and their related professional fire department are involved in the implementation of disaster management and in related complex official tasks (Teknős, 2018). *'The structure of the national management system, the task of ministers and state bodies involved in disaster protection related to prevention, preparedness and defence, as well as the task of the governmental coordination body for disaster protection are regulated by the Disaster Management Act and in the Government Implementation Decree 234/2011 (XI. 10).'*' (Bognár et al., 2013).

The Disaster Management Act defines the concept of disaster, disaster management, while its implementing regulation describes the dangerous effects, including the types of industrial accidents. As a result of previous changes, the complex disaster management system in today's sense is characterized by the performance of a triple task system, these are prevention, protection and recovery, which also appear as goals (Lakatos & Teknős, 2019; Teknős, 2020). Along these goals, we have to describe the field of expertise, the merging of which enabled the development of a complex system of security, as the pillars of disaster management: fire protection, civil protection and industrial safety and in my opinion, water protection is a fourth area.

It can be seen from the concepts and the triple task system that industrial safety performs significant tasks in order to create full safety. The complex relationship between the different fields is shown in Figure 1, which shows that each field has an impact on the other and neither of their independent operations can be imagined effectively. The complexity of tasks and the triple period system differentiate the system of tasks to be performed by them. Based on the detailed interpretation of Figure 1 we can also consider the system as a Rubik's cube of security, since let's just think through that the four vertices of a three-dimensional cube have specialities and the complex relationship between them is shown by the 3x3 sides of the cube. By laying out the sides of the Rubik's Cube, we achieve the full state of security, and to achieve this, the appropriate steps are

required, that is, in our case, the mutual communication between the four vertices as a speciality. The number of steps can be reduced, as communication between disciplines is essential for efficient work, therefore no sharp line can be drawn between tasks in the field, as one decision can influence the decision or safety of another one, so a complex way of thinking and approach is essential for disaster management. The goal is to strive for the most efficient contact and communication possible when building a bridge between disciplines in order to achieve a state of complete security.

Figure 1: *The relationship between the disciplines that make up the organizational system of disaster management*



Note: Created by the author.

'Authorities and enterprises of the former COMECON countries are now pursuing the same objectives. Especially for Central and East European countries,

which are making steps towards a unified Europe, it is imperative to move towards standards for accident prevention and mitigation compared to those adopted in other European Union countries. These countries have altogether a significant economic potential in the production and handling of chemicals.' (Kaiser & Schindler, 1999).

Industrial safety does not yet have a significant history in the system of tasks and specializations of disaster management, as the unified system of authorities was established on 1 January 2012. But what does industrial safety mean? In the case of the term industrial safety, which was formed from the composition of the two words, the meaning of industry, according to the Hungarian Explanatory Dictionary, is usually *'the activity by which a person makes the extracted or cultivated raw materials suitable for his needs or for the purposes of the future production'* (Bárcki & Ország, 1962). In the case of industrial installations, there are several ones in which hazardous substances are present during operation. In relation to hazardous substances, these facilities and economic operators can be manufacturers, storemen, suppliers and users alike. The meaning of the word security, according to the Hungarian Explanatory Dictionary is *'an order of things and living conditions, a state in which there is no or little possibility of an unpleasant surprise, disturbance, danger, in which there is no need to be afraid of such.'*

From the interpretation of the two words as *interpretatio grammatica*, we can get the essence of industrial safety as a legal institution, as *'from the point of view of industrial safety, the types of civilization disaster, major accidents and other incidents endangering human life and health, the environment and material good, as well as vital systems and their components, which are dangerous to the protection and transport of dangerous goods, or 'critical systems' and facilities' regulation.'* (Kátai-Urbán, 2015).

The field of industrial safety includes the transport of dangerous plants and dangerous goods, as well as the protection of critical infrastructures, the latter also includes the official system of water management and water quality tasks.

The System of Industrial Security, Duties and Responsibilities

The entire organizational system of disaster management, including the tasks and powers, competences and operating rules of the field of industrial safety, as well as the order of management and governance are determined by legislation and public regulatory instruments (Barta, 2014). There are nearly 200 pieces of laws which, in some depth, contain regulations in the field of industrial safety.

The difficulty of the work of professionals working in the field of industrial safety is shown by the fact that, in addition to this large body of legislation, they must have up-to-date knowledge of these regulations in order to fulfil the demand for safety and to represent the interests of customers.

Council Directive 96/82/EC of 9 December 1996 on the control of major-accident hazards involving dangerous substances, i.e. the rules of the SEVESO II Directive and then on the management of major-accident hazards involving dangerous substances, and amending Council Directive 96/82/EC at the legislative level, the Disaster Management Act and related regulations have a key role in the implementation of Directive 2012/18/EU (SEVESO III) of the European Parliament and of the Council and the subsequent repeal of Council Directive 96/82/EC. Article 20 (1) of the SEVESO III Directive requires Member States to ensure that a system of official controls is established.

Accordingly, disaster management, as an organization working to prevent disasters, performs significant official tasks in accordance with the provisions of the Disaster Management Act and its implementing regulation, such as their establishment, operational licensing, control and, where appropriate, sanctioning tasks.

Preventive authority activities include the verification of the identification of hazardous activities, the assessment of safety documentation, and the operation of official registration and information systems. *'The transport of dangerous goods is also a serious source of danger, and thus the industrial safety authority is entitled to control the transport and to sanction deviations from the regulation.'* (Kátai-Urbán & Vass, 2014).

Dangerous goods may be transported by road according to ADR, by water according to AND, by rail according to RID and by air according to IATA DGR. The protection of human life and health, as well as the prevention of environmental damage, are also our basic tasks in hazardous plants, therefore the level of sanctions and their applicability are directly proportional to the degree of danger. A person carrying out official work in the field of industrial safety may take the official measures contained in Section 35 § (1)-(3) of the Disaster Management Act Hungarian Act CXXVIII of 2011, such as prohibiting the pursuit of hazardous activities, imposing fines and reducing the amount of stored, used hazardous substances.

With regard to the performance of official tasks in the case of hazardous plants in the field of industrial safety, the legislator defines the individual powers of action for the *'industrial safety authority'* in Chapter IV of the Disaster Management Act, entitled Prevention of Major Accidents with Dangerous Substances. In accordance with the provisions of Chapter IV, a system of official tasks related to the licensing of hazardous plants has been defined for those performing

official activities. In accordance with the rules of procedure, those performing industrial tasks shall carry out regular official inspections of the establishment concerned. Following inspections, they may impose appropriate sanctions on the operators of the installation in order to remedy any deficiencies which may arise, so that the safety of the installation can be guaranteed as soon as possible. With regard to sanctions, industry safety officials can even ban the activity. The measures of the authority include several ones, in the case of which the costs incurred (guarding, transport, destruction, etc.) are to be borne by the operator.

In the organizational system of the National Directorate General for Disaster Management of the Ministry of Interior, the official tasks are performed by the Deputy Director for Authoritative Affairs, under whose direct control are the head of the prevention and licensing service and the national chief inspector of industrial safety. Our national disaster management body is the National Directorate General for Disaster Management of the Ministry of Interior Deputy Director General for Authoritative Affairs, General Inspectorate for Industrial Safety – which consists of the Department for Dangerous Plants, the Department for Dangerous Transports and the Department for Critical Infrastructure Coordination.

The Government Decree on the Implementation of Disaster Management regulates that the professional disaster management body has territorial bodies, which designate the disaster management directorates for each county and for the capital, which means a total of 20 directorates. The territorial bodies are the chief industrial safety supervisors in each directorate, which, among other things, perform and ensure the management and implementation of industrial tasks at the county level. Within the industrial safety tasks and inspections, additional tasks are assigned to the employees of the mobile disaster management laboratory and the department of disaster protection for authoritative affairs. At the regional level, the National Directorate General for Disaster Management of the Ministry of Interior's Deputy Director General for Authoritative Affairs has set up seven Disaster Management Radiation Detection Units at seven border disaster management directorates. Below the regional levels are the branch offices, the area of operation of which is determined by Decree 43/2011 (XI. 30.) of the Ministry of Interior on the area of competence of the disaster management branch offices. There are industrial safety inspectors in the disaster management offices in the country, one person per branch office, who perform and coordinate the tasks in the field of industrial safety, and perform the necessary measures, gives information and reports for the chief industrial safety inspectors. Employees of the official department are actively involved in the further performance of industrial safety tasks. At these levels, we can differentiate in terms of two types of cases of competence and jurisdiction.

The most important legal sources for our organizational system is the Disaster Protection Act XXXI. of 1996 on Fire Protection, Technical Rescue and Fire Brigade, which regulates fire protection tasks, including fire prevention tasks, official activities and fire inspection.

In the interest of a unified system of fire protection, it can be seen that the goals and tasks to be implemented are determined by the legislation and other administrative organizational instruments (for instance instructions and measures by the National Directorate General for Disaster Management of the Ministry of Interior’s Deputy Director General for Authoritative Affairs), such as the directors of the Ministry of Interior and the National Directorate General for Disaster Management of the Ministry of Interior’s Deputy Director General for Authoritative Affairs.

We can define legal, technical and organizational tasks for the three areas of expertise. In such cases, *‘there are more technical and legal regulations in the field of industrial safety, all three tasks have almost equal weight in fire protection, while technical and organizational tasks predominate in the system of civil protection tasks.’* (Rácz, 2020).

The basic legislation in the field of industrial safety, without reflecting their relationship to each other and the hierarchy of sources of law, is presented in the table below, included but not limited to:

Table 1: *The basic legislation in the field of industrial safety*

INDUSTRIAL SAFETY			
The Fundamental Law of Hungary			
Act CXXVIII of 2011 on Disaster Protection and Amendments to Certain Related Acts			
Act CL of 2016 on General Administrative Procedure			
Act CLXXIX of 2017 on Transitional Rules for Sanctions of Administrative Infringements and on the Amendment and Repeal of Certain Acts in the Context of the Reform of Administrative Procedure Law			
Act I of 2017 on the Code of Administrative Procedure			
Government Decree 234/2011 (XI. 10.) on the implementation of Act CXXVIII of 2011 on disaster protection and amending certain related laws			
TRANSPORT OF DANGEROUS GOODS (ADR, RID, ICAO, LATA, ADN)	DANGEROUS PLANTS	CRITICAL INFRASTRUCTURE PROTECTION	WATER, WATER PROTECTION
Act LXXXIX of 2015 on the promulgation of Annexes ‘A’ and ‘B’ to the European Agreement concerning the International Carriage of Dangerous Goods by Road and on Certain Issues of Its Domestic Application	Act CXVI of 1996 on Atomic Energy	Act CLXVI of 2012 on the Identification, Designation and Protection of Critical Systems and Facilities	Act LIII of 1995 on general rules for the protection of the environment
	Act XXV of 2000 on Chemical Safety		Act LVII of 1995 on Water Management

<p>Act CV of 2016 on the promulgation of the Agreement on the International Carriage of Goods by Rails and its Annexes in 2015 and 2016 in a unified structure</p>	<p>Government Decree 208/2011 (X. 12.) on the detailed rules of the disaster protection fine, on the payment and refund of the disaster protection contribution</p>	<p>Act L of 2013 on electronic information security of state and local government bodies</p>	<p>Act LXXXII of 1995 promulgating the United Nations Framework Convention on Climate Change</p>
			<p>Act LIII of 1996 on the Protection of Nature</p>
<p>Act XLVI of 2007 on the publication of the Appendices to the Convention on International Civil Aviation, signed in Chicago on the 7th of December in 1944 (document containing the detailed rules of Annex 18, Technical Instructions for the Safe Transport of Dangerous Goods by Air ([Doc. 9284-AN/905])</p>	<p>Government Decree 112/2011 (VII. 4.) on the responsibilities of the National Atomic Energy Agency related to the European Union and international obligations related to nuclear energy, the designation of specialized authorities participating in the official procedures of the National Atomic Energy Agency, the amounts of fines and the scientific advice to assist the National Atomic Energy Agency</p>	<p>Government Decree 280/2016 (IX. 21.) on measures necessary in the event of a significant disruption of the electricity system and a crisis in the supply of electricity</p>	<p>Act CCIX of 2011 on Water Utility Services</p>
		<p>Government Decree 360/2013 (X. 11.) on energy-critical systems and the identification, designation and protection of facilities</p>	<p>Government Decree 106/1995 (IX. 8.) on the environmental and nature protection requirements for liquidation proceedings and liquidation</p>
		<p>Decree 44/2000 (XII. 27.) of the Ministry of Health on the detailed rules of certain procedures and activities related to dangerous substances and dangerous preparations</p>	<p>Government Decree 65/2013 (III. 8.) on the implementation of Act CLXVI of 2012 on the identification, designation and protection of vital systems and facilities</p>
<p>Act XXXIV of 2015 on the Promulgation and Domestic Application of the Regulations to European Agreement concerning the International Carriage of Dangerous Goods by Inland Waterways (ADN), signed in Geneva on the 26th May in 2000.</p>			<p>Government Decree 90/2007 (IV. 26.) on the procedure for the prevention and remedying of environmental damage</p>
			<p>Government Decree 219/2004 (VII. 21.) on the protection of groundwater</p>
<p>Government Decree 156/2009 (VII. 29.) on the amounts of fines that may be imposed in case of violation of certain provisions related to road haulage, passenger transport, as well as on the official tasks related to fines</p>	<p>Government Decree 219/2011 (X. 20.) on the prevention of major accidents involving dangerous substances</p>	<p>Government Decree 541/2013 (XII. 30.) on the vital components of water management systems and the identification, designation and protection of water and water facilities</p>	<p>Government Decree 72/1996 (V. 22.) on the exercise of the authority of water management authorities</p>
	<p>Government Decree 190/2011 (IX. 19.) on physical protection and the related licensing, reporting and control system in the field of nuclear energy</p>	<p>The vital components of the agricultural economy and Government Decree 540/2013 (XII. 30.) on the identification, designation and protection of facilities</p>	<p>Joint Decree 18/2003 (XII. 9.) by the Ministry of Environment and Water and the Home Office on the classification of settlements on the basis of flood and inland water risk</p>

Note: Created by the author.

However, it should be emphasized that safety cannot be interpreted specific only to one area, as compliance with the rules of all disciplines is justified in order to fully ensure safety, so it is important to seek supervisory controls for such multidisciplinary facilities (Bognár et al., 2013). The violation of the rules of specialties can trigger a chain reaction, which generates a more serious damage event along the principle of domino effect, or hazardous can even exceed it, generating a catastrophic danger or emergency situation.

The number of establishments dealing with hazardous substances is constantly increasing in the 21st century as a result of meeting the growing needs of consumer society. During the transport of hazardous substances, essential for the operation of facilities, to the place of use, the persons performing official work in the field of industrial safety in the disaster management organization shall ensure the official control of safe transport. On-site inspections of dangerous goods are being carried out in increasing numbers from year to year. During the damage incidents, the work of the dangerous goods transport inspectors and the intervention staff was assisted more than a thousand times by the national disaster management mobile laboratories nationwide. These disaster management mobile laboratories carry out their work under the professional guidance of the National Directorate General for Disaster Management of the Interior's Deputy Director General for Authoritative Affairs, as well as of the county and capital inspectors. There is also a correlation between the number of decisions made by industrial safety officials and the sanctions imposed, as their number has shown an increasing trend. It can be stated that the number of detected irregularities shows a decrease, which is also due to the preparedness of those performing official work and the increasing number of inspections. In order to keep the knowledge of those working in disaster management up to date, it is essential to organize continuous training and participation in local and national exercises, as a result of which the standards and effectiveness of official procedures are constantly improving. Successful implementation of the objectives of industrial safety is one of the tasks of the authorities, while ensuring the creation of conditions and circumstances is also the task and duty of the facilities and companies in accordance with the legal regulations. It is in the interest of the facilities' operators to create the conditions for safe operation, to act with the care of a good farmer in the field of fire protection and industrial safety, as in the absence of this, the burden of liability in the event of a damage. In the case of damage, they cannot rely on ignorance of the law, that is to say, *ignorantia iuris*.

Summary

As stated above, the task of industrial safety includes the supervision of dangerous plants, the control of the transport of dangerous goods, the protection of critical infrastructures and the field of nuclear accident prevention. As the authority performing industrial safety tasks at the territorial level of disaster management is divided into counties, it performs official licensing, supervision and inspection tasks related to hazardous plants. The purpose of the tasks of the authority and the procedural actions taken are to increase safety, as a result of which major accidents can be avoided, and to reduce their harmful effects, if they occur. Therefore, they also have an important and responsible role to play in correctly assessing the veracity of the information provided by operators and taking the appropriate level of action accordingly. The tasks of the industrial safety authority are tripartite, include analysis, planning and preparation, which are related to the establishment of internal security organizations for vulnerabilities, emergencies and facilities. The tasks of the authorities also include checking if the operators have the necessary tools and resources to deal with major accidents and to eliminate and reduce damage. In the case of defence planning, the county directorates of professional disaster management bodies also have an important role to play in the supervision of external protection plans. It is also the task of the authority to investigate the notifications received in connection with the technical-safety review of gas connection pipelines and user equipment, as well as to keep the official register of experts who may be involved in the proceedings. In order to investigate the gas pipeline cuts, the Disaster Management will carry out the necessary on-site inspection and then take the necessary official measures. Integrated authority action and a complex mindset should fundamentally define the work of disaster management authority professionals in the broadest sense, including those working in the field of industrial safety. In addition to thinking, the legislative provisions described above and the applied legal institutions must be adapted by the legislator to the achievements of our rapidly developing society, and the technical and IT systems to be used must be designed to reflect this. In addition to the developed technical tools and systems, it can be stated that in order to ensure the well-functioning maintenance of industrial safety, qualified human resources are of significant importance from both the state and the private sector. After all, let us not forget the Latin proverb *sutor ne ultra crepidam*, which means that everyone can be the best professional in his field according to his experience, knowledge and education gained during his studies.

References

- Balázs, I. (2018). A közigazgatás [The government]. In Jakab, A. & Fekete, B. (Eds.), *Internetes Jogtudományi Enciklopédia [Internet Jurisprudence Encyclopedia]* (pp. 1-12). Pázmány Péter Katolikus Egyetem.
- Bárcki, G. & Országh, L. (1962). *A magyar nyelv értelmező szótára I-VII. kötet [Thesaurus of the Hungarian Language Vol. I-VII.]*. Akadémiai Kiadó.
- Barta, A. (2014). A területi államigazgatás változásai 2010–2014. [Changes in Regional State Administration 2010–2014.]. *Új Magyar Közigazgatás*, 7(2), 1–4.
- Bognár, B., Kátai-Urbán, L., Kossa, Gy., Kozma, S., Szakál, B. & Vass, Gy. (2013). *Iparbiztonságtan I. [Industrial Safety I.]*. Nemzeti Közszerzői és Tankönyv Kiadó Zrt.
- Kaiser, W. & Schindler, M. (1999). Precautions against industrial accidents: experience in applying the Seveso II Directive in central and eastern European countries. *Journal of Hazardous Materials*, 65(1–2), 59-75. [https://doi.org/10.1016/S0304-3894\(98\)00255-6](https://doi.org/10.1016/S0304-3894(98)00255-6)
- Kátai-Urbán, L. (2015). *Veszélyes üzemekkel kapcsolatos iparbiztonsági jog-, intézmény és eszközrendszer fejlesztése Magyarországon [Development of an Industrial Safety Legal, Institutional and Tool System Related to Hazardous Plants in Hungary]*. University of Public Service.
- Kátai-Urbán, I., Cimer, Zs., Szakál, B. & Vass, Gy. (2019). Risk Management in population protection. *Science For Population Protection*, (2), 1-8.
- Kátai-Urbán, L., Vass, Gy. (2014). *Kézikönyv a veszélyes üzemek biztonságsszervezésével kapcsolatos alapfeladatok teljesítéséhez [Handbook for the Performance of Basic Tasks Related to the Safety Management of Hazardous Plants]*. National University of Public Service.
- Lakatos, B. & Teknős, L. (2019). Az „új” eljárási törvény eddigi, valamint a jövőben hatályosuló szankció törvény várható hatása a hivatásos katasztrófavédelmi szervek hatósági tevékenységére [The Expected Impact of the 'New' Procedural Law so far, as well as the Sanction Law in Force in the Future, on the Official Activities of Professional Disaster Management Bodies]. *Védelem Tudomány*, 4(4). 167-180.
- Rác, Zs. (2020). A katasztrófavédelem és a munkavédelem összefüggései [Relations between Disaster Management and Occupational Safety]. *Agrár- és Környezetjog*, (28), 389-401. <https://doi.org/10.21029/JAEL.2020.28.376>
- Teknős, L. (2018). A katasztrófavédelem és a rendőrség feladatai: a fenntarthatóság biztonsági aspektusai. [Tasks of Disaster Management and the Police: Aspects of Sustainable Safety], In Baranyai, G. & Csernus, D. I. (Eds.), *A fenntartható fejlődés és az állam feladatai [Sustainable development and the responsibilities of the state]* (pp. 279-298). Dialóg Campus Kiadó.
- Teknős, L. (2020). *Az éghajlatváltozás és a rendkívüli időjárás hatásaiból adódó katasztrófavédelmi feladatok kockázatalapú megközelítése. [A Risk-based Approach to Disaster Management Tasks due to Climate Change and Extreme Weather]*, Nemzeti Közszerzői Egyetem.
- Trócsányi L., Schanda, B. & Csink, L. (2014). *Bevezetés az alkotmányjogba [The Special Legal Order]*. HVG-Orac.

Laws and Regulations

2011. évi CXXVIII. törvény a katasztrófavédelemről és a hozzá kapcsolódó egyes törvények módosításáról [Act CXXVIII of 2011 on Disaster Protection and Amendments to Certain Related Law]

A TANÁCS 96/82/EK IRÁNYELVE (1996. december 9.) a veszélyes anyagokkal kapcsolatos súlyos balesetek veszélyeinek ellenőrzéséről [COUNCIL DIRECTIVE 96/82/EC of 9 December 1996 on the control of major-accident hazards involving dangerous substances]

43/2011. (XI. 30.) BM rendelet a katasztrófavédelmi kirendeltségek illetékességi területéről [Decree 43/2011 (XI. 30.) of the Home Office on the area of competence of the disaster management branch offices]

1996. évi XXXI. törvény a tűz elleni védekezésről, a műszaki mentésről és a tűzoltóságról [Act XXXI. of 1996 on Fire Protection, Technical Rescue and Fire Brigade]

Reference of the article according to APA regulation

Lakatos, B. R. (2021). Presentation of the General Industrial Safety Authority Tasks and Powers. *Belügyi Szemle*, 69(S14), 8-20. <https://doi.org/10.38146/BSZ.SPEC.2021.4.1>

Measures against prejudice at the Hungarian Police – theoretical research on police culture and cop culture

Abstract

The author would like to present the measures taken by the Hungarian Police against prejudice in the context of this article. For the analysis, she has chosen the police and cop culture approach. Her aim is to present the organisational framework and the human being itself separately. In the author's opinion, training and education fall between the two cultures. The author proposes further research and education on cop culture, and suggests the introduction of intercultural education to prevent prejudicial behaviour and improve co-operation. The author considers that, by teaching both subjects, police officers will have a better understanding of both prejudices and the dangers of the police profession.

Keywords: police training and education, prejudice, police culture, cop culture

Introduction

Prejudice and prejudicial behaviour are the most serious deviant behaviours at the Hungarian Police, alongside corruption. This article aims to present and analyse the Hungarian Police's measures against prejudice. Two main areas of analysis, police (formal) culture and cop (informal) culture, and the interface between them, police training and education in Hungary, will be presented.

In this article, the author aims to show that those who choose to become police officers not only have special rights – such as the monopoly on legitimate physical violence – which are often emphasised, but also have obligations which apply not only to their working hours, but also to their activities and behaviour during their leisure time. There is a lack of published research in the field of

cop culture in Hungary, so the analysis of this field focuses mainly on the literature and the findings of foreign researchers.

Police culture

As far as laws and regulations are concerned, the organisation and members of the police forces are subject to stricter rules than the average civilian citizens. The basic tasks of the Hungarian Police are defined in the Fundamental Law of Hungary (Article 46), while the detailed regulations on the organisation, operation and activities of the police are laid down in Act XXXIV of 1994 on the Police (Police Act).

The regulation on prejudice can already be found in the Police Act, which states that *'the police officer is obliged to act in accordance with the law, without bias'* (13. § (2) Police Act). The conduct of life of the professional members of the police are also governed by Act XLII of 2015 on the employment status of professional staff of law enforcement agencies (Police Officers' Service Act) and the Code of Ethics of the Hungarian Police. According to Chapter III *'The specific nature of the service relationship'* of the Police Officers' Service Act, the non-prejudice is the ethical principle of the police profession (Article 14 (1)). This is supplemented by the Code of Ethics of the Hungarian Police, which on the one hand, states the prohibition of discrimination in point 4, and on the other hand, under point 5 it defines the type of action to be taken *'The police officer shall be prudent and moderate in the use of the authority vested in him, shall carry out his actions free from prejudice and emotion, and shall avoid unnecessary conflicts. He shall not use or tolerate torture, ruthless, inhuman or degrading treatment...'* In a broader sense, the expectations set out in all the other points in the Code of Ethics of the Hungarian Police help to prevent prejudicial behaviour, as following them does not allow police officers to engage in prejudicial behaviour ([URL4](#)).

Based on the Code of Police Ethics and Code of Conduct *'The ethical principles of the law enforcement profession with regard to members of the professional staff are in particular: loyalty to the country and the nation, preference for national interests, dignity and integrity, freedom from prejudice, impartiality, professionalism, cooperation and proportionality.'* Unlawful behaviour, including prejudicial (deviant) behaviour is controlled from two directions - from inside and outside - of the organisation.

Within the organisation, it is implemented through the hierarchical structure and additional regulations, such as the obligation of police officers to report

to their superiors on events and measures taken in the course of their duties, and through the control by the internal (police) body responsible for crime prevention and detection (the National Protective Service). The impeccable conduct of police officers is also regularly monitored by the Service. Police officers can only be admitted to both training courses and the police force after a strict psychological examination. Regular psychological screening and assistance within the police force also help to prevent police brutality and prejudicial behaviour, and the unified HR¹ system of the Hungarian Police serves as a guarantee that members dismissed from the organisation for deviant behaviour cannot be reinstated.

An external control is the guarantee of citizens' fundamental rights, i.e. the possibility for citizens to complain against a police measure if they feel that their fundamental constitutional rights have been violated. In 2008, an Independent (NGO²) Police Complaints Board was established in Hungary, with the aim of examining the activities of the police from the point of view of the fulfilment of fundamental constitutional rights, which also means the control of police activities (Horváth, 2019). The organisation operated until February 2020, when its task was taken over by the Commissioner for Fundamental Rights.

At the Hungarian Police, unlawful conduct will be investigated in any case, and those forms of conduct and ethical misconduct which are not subject to other procedures by law will be subject to the Code of Police Ethics. Complaints made by citizens can be found on the website of the Hungarian Police.

Cop culture

While police culture focuses more on laws, regulations, environment and organisational frameworks, cop culture focuses on the persons themselves, the behaviour, the reaction and the values of police officers. There is no single and accepted definition of cop culture, however, researchers in many countries around the world have made almost the same statement, as if cop culture were a kind of universal human response to the police profession, which can be found anywhere in the world. Of course, the findings do not apply to all police officers within the police forces. Research in the area of cop culture and prejudice is still limited, mainly concerning the 'street cop' level, which has the most contact with the civilian members of the society, but some general results are available.

1 HR: human resources.

2 NGO: non-governmental organisation.

The people responsible for prejudiced police assaults are almost always male, and the assaults are mostly linked to the 'Norms of Masculinity' within the police. Attention should be paid to the phenomenon of 'Resistance officers', where a member of the group provokes (perceived or real) resistance to the use of force, thereby forcing their colleagues into a situation of violence, and the dangers when police officers position themselves as Warriors to defeat evil. (Behr, 2017).

Everyday policing can reinforce prejudices against certain groups, especially if officers have to confront the same groups every day (interview with Kersten 2009), and the 'blue wall of silence' makes it difficult to discover prejudicial behaviour in the police. *'...there is a wall in the overall police organization that separates 'us blues' from the civilians - that can be the concerned citizen, a person with a migration background, a critical politician, a journalist, whoever. Anything I see as a police officer in the way of mistakes made by my colleagues, I keep inside the wall - and sometimes I even keep quiet about it to superiors.'* (Kersten, 2009).

Although the Hungarian police academic literature does not deal with cop culture separately, some of its aspects and findings appear, e.g. in police management theory it is a part of organisational culture, in police sociology it is a part of occupational and organisational culture, but other literature also refers to the results of this kind of research. From the perspective of police management theory, *'organisational culture is understood as a system of beliefs, values, norms, shared experiences and common actions, activities and behaviours shared by members of the organisation'* (Czuprák-Kovács, 2013). In a police sociology approach, there is a distinction between occupational and organisational culture, occupational culture is more a kind of identity, norm, pattern of behaviour, language and dress standard, a cognitive filter, and organisational culture is *'solidarity between police officers, attitudes towards power and social problems and attitudes towards civil and political expectations'* (Kozáry, 2017).

Hungarian researchers have described two phenomena so far, the 'us and them', which refers to the close nature of the members of the organisation, and the 'end justifies the means' mindset, and member bias, is harmful to efficiency (Kovács, 2016).

The 'ends justify the means' mentality is referred to in other literature as Dirty Harry's dilemma (Klockars, 1980), the danger to the policeman's sense of justice. *'Sometimes, however, the sense of justice of police officers can become dominant against the law. These constellations then lead to delinquent, at least deviant, actions'* (Behr, 2014). According to Kozáry, *'the stress and pressure of the job can make police officers desperate about the effectiveness of the justice*

system, which can lead to an 'ends justify the means' attitude' (Kozáry, 2017). Finszter links the phenomenon to 3 myths. If all three of them are realised, police work will be morally - and legally - damaged. *'The myth of violence confuses harshness with cruelty; effectiveness is justified by the end justifying the means. The myth of hierarchy gives the impression that the organisation also has an information monopoly. It can carry out surveillance of society without control and freely dispose of the data it acquires, whereas the police's knowledge of public order can only be used to protect the community, and the only legitimate purpose of criminal investigation is to prepare the way for justice. The myth of secrecy leads one to believe that there is no need to take responsibility for offences committed in the exercise of authority. And indeed, accountability is very often lacking.'* (Finszter, 2014).

The last public prejudice survey - on xenophobia - was published by the police in 2010. One of its findings was that first-year police students were more tolerant than third-year students, who were measured more closely to active police officers. The researcher herself notes *'It seems that the closer students get to employment, the more similar they are to active police officers. Cognitive dissonance, a psychological state in which an individual experiences a discrepancy between his or her own attitudes, beliefs, thoughts or actions, is likely to play a role in this.'* (Zán, 2014).

Another survey conducted between January and May 2019 among current police officer students also allowed to measure their willingness to cooperate. The research measured students' cooperativeness before and during joint task implementation. The results of the research showed that competitiveness was lower than cooperation, both before and during the joint task, while competitiveness increased during the task, courtesy towards group members decreased. This is due to the goal-orientation and the ambition of the officers to achieve results. The researchers pointed out that in the future, the resulting conflicts should be managed by leaders (Kovács-Tózsér & Pesti, 2019).

Police training and education – interface between the two cultures

On the one hand, police training and education are adapted to police culture in terms of content, both consciously and formally, through the development of the content of the training and education, on the other hand cop culture is expressed informally, through the advice, experiences and stories told by trainers and instructors.

Police training in Hungary has a long tradition. The beginnings of police training date back to the 1920s, and in fact these early courses are the basis of both police training and education (Sallai, 2017, 2018; Boda, 2016). The promotion of scientific research dates back to 1972, when the Department for Police Science of the Ministry of the Interior was established, and nowadays police science has developed into an interdisciplinary science recognized by the Hungarian Academy of Sciences and the Doctoral School of Police Science has been established (Kerezsi & Pap 2015; Boda et al., 2016; Janza, 2019).

Police education can be divided into two levels, officers and non-commissioned officers training and education. Non-commissioned officers training and education can be provided through 10 months of patrol training or 2 years of training and education at a police vocational college. Only persons over 18 years of age, who have graduated from high school and meet the requirements, both physically and mentally, may enter the training to non-commissioned officers. Both patrol training and officer training are based on 50% theory and 50% practice. During the trainings, future police non-commissioned officers are taught the duties and rights of police officers. The subject of prejudice is covered from a legal and ethical point of view, as well as within the framework of the social studies subject ([URL5](#), [URL6](#)).

Officer training is currently offered at three levels – Bachelor, Master and PhD/Doctoral level. The history of the first ‘Police Academy’ dates back to 1947, which operated until 1949, when officer training courses were again organised (Kozáry, 2001). In 1971, the Police College was founded, and started its operations on 1st September 1971 (Boda, 2016). This institution was the legislative predecessor of the Faculty of Law Enforcement of the National University of Public Service, which was established on 1st January 2012. In the same way, students enter officer training at the age of 18 after graduation, and they also have to meet the physical and mental requirements. The issue of prejudice is also discussed in several subjects, not only in the field of law, but also in the sociology of law enforcement, ethics, hate crime, and psychology ([URL1](#), [URL2](#), [URL3](#)). The sociology of policing draws on historical experience and case studies, the hate crime course introduces students to the Roma and Jewish cultures and deals with the LGBTQ+ communities, and in the framework of police ethics they deal with the expectations towards police officers, and psychology focuses on the cognitive part.

It is important to note that the training of police officers does not end with the completion of the police vocational college or the university, members of the professional staff are obliged to undergo further training, and this obligation only ends after 5 years before reaching the retirement age. In-house training

and certified training programmes are adapted to changes, development and expectations of the society, so they also include knowledge and competence development programmes to overcome prejudices. De-escalation training also aims to prevent the use of violence.

Conclusion

Hungarian laws and regulations, and specific rules on the organisation and members of the Hungarian Police, clearly prohibit prejudicial behaviour. During the training and education, the characteristics and dangers of prejudice are presented to the police officers in several aspects and the Hungarian Police also pay attention to the further training of both officers and non-commissioned officers. There is no published research on cop culture in the Hungarian Police, however, one or two observations can be found in the available literature. It would be necessary to summarise the research results and to continue research in this area, and it is proposed to educate police officers in cop culture, so that they have a better understanding of their own situation and the challenges of their profession. The results of research conducted in 2019, which showed that future police officers are goal-oriented and both cooperation and courtesy towards group members decreased at implementation of task, also foreshadow the danger of ‘the end justifies the means’ to achieve results. It would be useful also to introduce intercultural knowledge training to improve cooperation and help to overcome prejudices.

References

- Behr, R. (2014). Über Polizei und Gewalt [About the police and violence], *Berliner Republik – Das Debattenmagazin*, 3. Macht. Kampf. Raum.
- Behr, R. (2017). Maskulinität in der Polizei: Was Cop Culture mit Männlichkeit zu tun hat. – Ein Essay [Masculinity in the Police: What Cop Culture Has to Do with Masculinity – an essay]. *Juridikum*, 4, 541-551.
- Boda, J. (2016). A Nemzeti Közszerológati Egyetem Rendészettudományi Kar feladatai a rendészeti képzésben [The tasks of the Faculty of Law Enforcement of the National University of Public Service in law enforcement education]. *Határrendészeti Tanulmányok*, 1, 4-22.
- Boda, J., Finszter, G., Imre, M., Kerezi, K., Kovács, G. & Sallai, J. (2016). A rendészettudományi kutatások elméleti megalapozása és főbb irányai, [Theoretical framework and main directions of police research]. *Államtudományi műhelytanulmányok*, 17, 1-24.

- Czuprák, O. & Kovács, G. (2013). *Vezetés- és szervezésemélet [Management and organisation theory]*. Nemzeti Közszerológati Egyetem.
- Finszter, G. (2014). *Rendészetelmélet [Law enforcement theory]*. Nemzeti Közszerológati Egyetem.
- Görbe, A. & Zán, K. (2014). *Migráció – előítélet – idegenellenesség, Előítélet-kutatás a belügyi ágazatban [Migration - prejudice - xenophobia, Prejudice research in the law enforcement sector]*. Nemzeti Közszerológati Egyetem.
- Horváth, P. J. (2019). A Független Rendészeti Panasztestület szerepe a rendőrség demokratizálásában [The role of the Independent Police Complaints Board in the democratisation of the police]. *Belügyi Szemle*, 67(10), 59-70. <https://doi.org/10.38146/BSZ.2019.10.4>
- Janza, F. (2019). Főtitkári köszöntő, Gondolatok a rendészettudományról. In Gaál, Gy. & Hautzinger, Z. (Eds.), *Írások a Magyar Rendészettudományi Társaság megalapításának tizenötödik évfordulója alkalmából [Secretary General's Speech, Reflections on Police Science, Publications on the occasion of the fifteenth anniversary of the foundation of the Hungarian Police Science Society]* (pp. 9-12). Magyar Rendészettudományi Társaság.
- Kerezsi, K. & Pap, A. L. (2015). *Rendészet, tudomány, doktori iskola [Law enforcement, science, doctoral school]*. *Magyar Rendészet*, 15(4), 67-83.
- Klockars, C. B. (1980). The Dirty Harry Problem. *Annals of the American Academy of Political and Social Science*, 452, *The Police and Violence*, 11, 33-47. <https://doi.org/10.1177/000271628045200104>
- Kozáry, A. (2001). Rendőrtisztképző iskolák Magyarországon 1945 után [Police officer training schools in Hungary after 1945], *Belügyi Szemle*, 49(10), 80-105.
- Kozáry, A. (2017). *Rendészetszociológia Kézikönyv II [Police Sociology Handbook II]*. Rejtjel Kiadó.
- Kovács, G. (2016). A szervezeti és vezetői kommunikáció sajátosságai a rendészeti szerveknél [The characteristics of organisational and management communication in law enforcement agencies]. *Hadtudományi Szemle*, 9(1), 381-394.
- Kovács, G., Pesti, T. & Tózsér, E. (2019). A hallgatói magatartásformák megjelenése és változásának folyamata a Nemzeti Közszerológati Egyetem „Vírus 2019” Közös Közszerológati Gyakorlatán [Students behaviour patterns and the process of their change at the ‘Virus 2019’ Joint Public Service Practice at the National University of Public Service]. *Magyar Rendészet*, 19(2-3), 115-142. <https://doi.org/10.32577/mr.2019.2-3.7>
- Sallai, J. (2017). A magyar rendészeti képzés története 1922-2017. Rendőr altiszt (tiszthelyettes) és rendőrtiszt képzés a XX-XXI. században [The history of Hungarian law enforcement training 1922-2017. Police officer training in the 20-21. century]. In Czene-Polgár, V. & Zsámbokiné Ficskovszky, Á. (Eds.), *Mérföldkövek az adó- és vámigazgatás történetéből, Válogatott tanulmányok az évfordulók tükrében [Milestones in the history of tax and customs administration, Selected studies in the context of anniversaries]* (pp. 86-126). Magyar Rendészettudományi Társaság Vám- és Pénzügyőri Tagozata.
- Sallai, J. (2018). November 22, a Rendészettudományi Kar kari napja [22 Novembre, Day of the Faculty of Law Enforcement]. *Rendőrségi Tanulmányok*, 1(2), 104-109.

Staud, T. (2019). Die Polizei hat ein Männlichkeitsproblem – Ein Interview mit dem Kriminologen und Polizeiausbilder Joachim Kersten [The Police Have a Masculinity Problem - An Interview with Criminologist and Police Trainer Joachim Kersten]. In Kleffner, H. & Meisner, M. (Eds.), *Extreme Sicherheit, Rechtsradikale in Polizei* [Extreme security, right-wing radicals in police] (pp. 196-209). Verfassungsschutz, Bundeswehr und Justiz, Verlag Herder GmbH.

Online links in this article

URL1: *Website of the National University of Public Service: Bűnügyi igazgatási alapképzési szak tanterve 2020/2021* [Curriculum for the Bachelor's degree in Criminal Justice Administration 2020/2021]. https://rtk.uni-nke.hu/document/rtk-uni-nke-hu/Bunugyi_igazgatasi_alapkepzesi_szak_kkk.pdf

URL2: *Bűnügyi alapképzési szak tanterve 2020/2021-es tanévtől* [Curriculum of the Bachelor's degree in Criminal Justice from the academic year 2020/2021]. https://rtk.uni-nke.hu/document/rtk-uni-nke-hu/bunugyi_alapkepzesi_szak_tanterv_2020_21.pdf

URL3: *Rendészeti alapképzési szak tanterve a 2020/21-es tanévtől* [Curriculum of the Bachelor of Law Enforcement from the academic year 2020/21]. https://rtk.uni-nke.hu/document/rtk-uni-nke-hu/Rendeszeti_alapkepzesi_szak_tanterv_2020_21.pdf

URL4: *A Rendőri Hivatás Etikai Kódexe* [Code of Ethics of the Hungarian Police]. <http://www.police.hu/a-rendorsegrol/testulet/altalanosan/a-rendori-hivatas-etikai-kodexe>

URL5: *Közbiztonsági rendőrrjárőr szakképesítés képzési programja, 2020. szeptember 31.* [Training programme for the Public Security Police Patrol qualification, 31. September, 2020]. <http://www.police.hu/sites/default/files/k%C3%B6zbiztons%C3%A1gi%20rend%C5%91r-j%C3%A1r%C5%91r%20k%C3%A9pz%C3%A9si%20program.pdf>

URL6: *Határrendész és útlevelező rendőrrjárőr szakképesítés képzési programja, 2020. szeptember 1.* [Training programme for border police officers and passport control officers, 1 September 2020]. <http://www.police.hu/sites/default/files/hat%C3%A1rrend%C3%A9sz%20%C3%A9s%20%C3%BAtlevez%C3%A9l%C5%91%20rend%C5%91r-j%C3%A1r%C5%91r%20k%C3%A9pz%C3%A9si%20program.pdf>

Laws and Regulations

Magyarország Alaptörvénye (2011. április 25.), [Fundamental Law of Hungary]

1994. évi XXXIV. törvény a Rendőrségről [The Police Act]

2015. évi XLII. törvény a rendvédelmi feladatokat ellátó szervek hivatásos állományának szolgálati jogviszonyáról [Police Officers' Service Act]

- 2/2013. (I. 30.) BM rendelet, a belügyminiszter irányítása alá tartozó szervek hivatásos állományú tagjainak továbbképzési és vezetőképzési rendszeréről, valamint a rendészeti utánpótlási és vezetői adatbankról [Decree of the Ministry of the Interior on the system of further training and leadership training of professional staff members]
- 45/2020. (XII. 16.) BM rendelet a belügyminiszter irányítása alatt álló egyes rendvédelmi feladatokat ellátó szerveknél foglalkoztatott hivatásos állomány és rendvédelmi igazgatási alkalmazotti állomány alkalmasságvizsgálatáról [Decree of the Ministry of the Interior on the requirements of physical and psychical examination]
- Magyar Rendvédelmi Kar: Rendvédelmi Hivatásetikai Kódex és Etikai Eljárási Szabályzat [Code of Police Ethics and Code of Conduct]
- Belügyminisztérium Rendészeti Vezetőkiválasztási, Vezetőképzési és Továbbképzési Főosztály: Nyilvántartás a belügyminiszter irányítása alá tartozó szervek hivatásos állományú tagjainak továbbképzési és vezetőképzési rendszeréről, valamint a rendészeti utánpótlási és vezetői adatbankról szóló 2/2013. (I. 30.) BM rendelet alapján a belső továbbképzési programokról [Register of internal training programmes according to Decree of the Ministry of Interior, No 2/2013 (I. 30.)]
- Belügyminisztérium Rendészeti Vezetőkiválasztási, Vezetőképzési és Továbbképzési Főosztály: Nyilvántartás a belügyminiszter irányítása alá tartozó szervek hivatásos állományú tagjainak továbbképzési és vezetőképzési rendszeréről, valamint a rendészeti utánpótlási és vezetői adatbankról szóló 2/2013. (I. 30.) BM rendelet alapján a minősített továbbképzési programokról [Register of qualified further training programmes according to Decree of the Ministry of Interior 2/2013 (I. 30.)]

Reference of the article according to APA regulation

- Pesti, T. (2021). Measures against prejudice at the Hungarian Police – theoretical research on police culture and cop culture. *Belügyi Szemle*, 69(SI4), 21-30. <https://doi.org/10.38146/BSZ.SPEC.2021.4.2>



Béla Szilágyi

Refugee Camp: A Tool for Dignity and Security¹

Abstract

Migration is the main challenge of the 21st century. With 272 million people migrating in 2019, of whom 80 million people are forcibly displaced worldwide, their security and the security of those living in the destination countries or regions is a major concern. One of the decisive factors in protection and security is the planning and management of the camps where millions of refugees and internally displaced people are hosted, in several cases, for many years. Well planned and well-organized camps do not only provide assistance and ensure the dignity to those displaced, help the effective work of the aid workers, but can also contribute to reducing crime and gender-based violence, furthermore decrease security threats and concerns. This paper examines how migrant settlement options, especially camps can be a tool for upholding the dignity of those in the camp whether they are refugees, internally displaced persons or different kinds of migrants, but at the same time how they can provide the safety and security for both the hosted population and the hosting community. For this very reason, the purpose of a shelter, the advantages and disadvantages of camps, furthermore setting and planning of camps will be discussed.

Keywords: refugee camps, camp management, dignity, security, protection, migration

Introduction

People have been involved in migration, ‘*the movement of persons away from their place of usual residence, either across an international border or within a State*’ ([International Organization for Migration IOM, 2019a](#)), since our world

¹ My research is connected to the protection of critical infrastructure. My results were presented at the ICCECIP 2020 Conference and its written summary is published in this article.



has been populated. Voluntary migration to find better living conditions, and involuntary migration driven by hostilities or disasters, are as old as humanity. Euripides writes in his play *Medea* in 431 BC: *‘There is no greater sorrow on Earth, than the loss of one’s native land’* (URL1). It is a constantly growing phenomenon, the estimated number of international migrants were 84 million in 1970, it grew to 153 million in twenty years by 1990, while it reached 272 million in 2019 (IOM, 2019b).

Forced migration is a non-voluntary or involuntary migratory movement which, although the drivers can be diverse, involves force, compulsion, or coercion. The term has been used to describe the movements of refugees, displaced persons (including those displaced by disasters or development projects), and victims of trafficking. In other terms, forced migration is an involuntary migratory movement of people who wish to escape an armed conflict, violence, the violation of their rights or a disaster (IOM, 2019a). The 1951 Convention Relating to the Status of Refugees provides the definition of refugee in Article 1 as any person who *‘owing to well-founded fear of being persecuted for reasons of race, religion, nationality, membership of a particular social group or political opinion, is outside the country of his nationality and is unable or, owing to such fear, is unwilling to avail himself of the protection of that country; or who, not having a nationality and being outside the country of his former habitual residence as a result of such events, is unable or, owing to such fear, is unwilling to return to it’* (UNHCR, 2010). The term, internally displaced persons is not defined in a legally binding convention or treaty. The United Nations accepted the report E/CN.4/1998/53/Add.2 with the addendum, Guiding Principles on Internal Displacement, presented to the Commission on Human Rights by Representative of the Secretary General on internally displaced persons Francis M. Deng in 1998. The principles, although not binding, have been widely used and complied with since then. According to the Guiding Principles on Internal Displacement, IDPs are *‘persons or groups of persons who have been forced or obliged to flee or to leave their homes or places of habitual residence, in particular as a result of or in order to avoid the effects of armed conflict, situations of generalized violence, violations of human rights or natural or human-made disasters, and who have not crossed an internationally recognized state border’* (United Nations Economic and Social Council, 1998). This definition fits exactly with the Sahrawis displaced from Western Sahara, who were forced to leave their homeland in 1975 and have since then plagued more than 150,000 in refugee camps in Algeria (Besenyő, 2010).

The 2015 migration wave in Europe qualifies as a migration crisis by the IOM definition of *‘a complex and often large-scale migration flows and mobility*

patterns caused by a crisis which typically involve significant vulnerabilities for individuals and affected communities and generate acute and longer-term migration management challenges' (IOM, 2019a).

Although Europe has always been a destination region for voluntary and involuntary migrants, the 2015 migration wave produced an influx in a short time, not seen in Europe before. In comparison, even in 1992, after the collapse of the Soviet Union and the fall of the Iron Curtain, 697,000 people applied for asylum to the nations that make up the EU now. In 2002, due to the Kosovo crisis, 463,000 asylum applications were received (Connor, 2016).

As part of the 2015 migration wave, over 1.3 million people applied for asylum in the 28 European Union countries, Norway and Switzerland, vast majority of them are from three countries: Syria, Afghanistan and Iraq. While unquestionably Germany was the primary target / destination country with 442,000 asylum applications in 2015, followed by Hungary (174,000 applications) and Sweden (156,000), Hungary received the most (1,770) first time asylum-applications per 100,000 of the country's population, just ahead of Sweden (1,600), but far more than Austria (1,000), Norway (590), Finland (590) and Germany (540) (Connor, 2016).

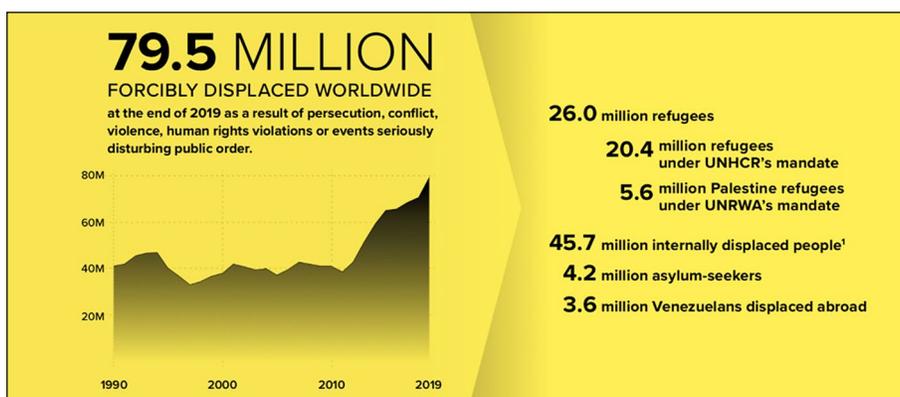
Complex underlying reasons drove this migration wave, with a wide range of push factors driving people to leave their country, especially Syria and Iraq: the unstable political systems of origin countries; the hostilities, terrorist attacks, human rights violations and persecution by governments, the Islamic State of Iraq and Syria (ISIS) and other organizations; the declining economic and employment opportunities; the scarce water resources and agricultural opportunities. The pull factors attracting them into the country of destination were manifold, as well: expectation of safety; shortage of work force in Western Europe and open economic opportunities; promises made by some politicians of the destination countries; and the coercion of smugglers.

There is an ongoing fierce debate what percentage of the migrants in the European migration wave in 2015 and forward were voluntary migrants, 'economic migrants', trying to find better living standards and work opportunities, or involuntary or forced migrants who had to leave their home country because of persecution, hostilities and terrorist attacks. The term 'economic migrant' is not a category in international law, it is used to refer to people on the move solely or primarily motivated by economic opportunities (IOM, 2019a). The European migration wave may be considered a mixed movement (mixed migration) where people are travelling together, generally in an irregular manner, using the same routes and means of transport, but for different reasons. They have varying needs and profiles and may include asylum seekers, refugees, trafficked

persons, unaccompanied/separated children, and other migrants [including economic migrants] in an irregular situation (IOM, 2019a).

The number of forced migrants reached almost 80 million worldwide, this equals to the population of Germany. The 45.7 million people are internally displaced, the largest IDP group is the 6 million Syrians. The number of 26 million refugees includes 5.4 Palestinians under UNRWA² mandate. 73 per cent of refugees lived in neighbouring countries, while developing countries hosted 85 per cent of the world’s refugees and Venezuelans displaced abroad (UNHCR, 2020c). Of the 20.4 million refugees under UNHCR³ mandate, more than half comes from three countries: 6.6 million from Syria, 2.7 million from Afghanistan and 2.2 million from South Sudan (UNHCR, 2020b).

Figure 1: *Number of forcibly displaced people in 2019*



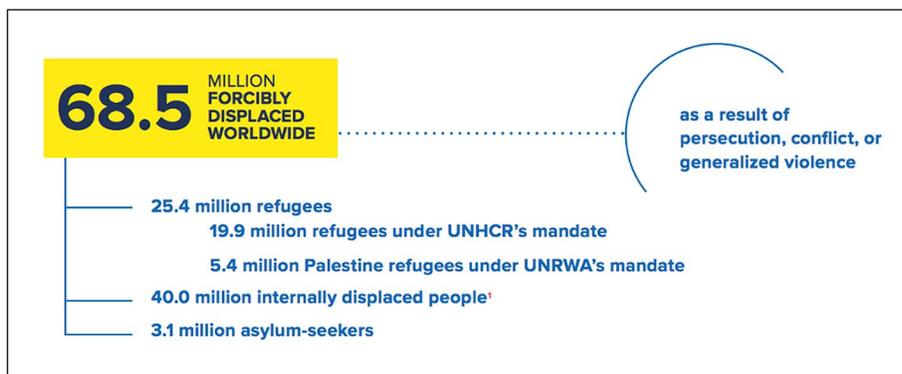
Note: UNHCR: Global Trends Forced Displacement in 2019.

In just two short years, from 2017 to 2019 the number of forcibly displaced people worldwide rose by 11 million (just in comparison: this is more than the population of Hungary) mainly due to the increase of IDPs and the occurrence of Venezuelans displaced abroad. The 79.5 million forcibly displaced represent a close to 100% increase in just a short decade from 41.1 million in 2010 (UNHCR, 2020c).

2 United Nations Relief and Works Agency for Palestine Refugees in the Near East (UNRWA).

3 United Nations High Commissioner for Refugees (UNHCR). The organization now refers to itself as UNHRC The UN Refugee Agency.

Figure 2: *Number of forcibly displaced people in 2017*



Note: UNHCR: Global Trends Forced Displacement in 2017.

Shelter Assistance Solutions, Shelter Categories and Settlement Options

The six settlement options for displaced populations include host families, urban and rural self-settlements, collective centres settlements, self-settled and planned camps. These are categorized into three categories of shelters: local dispersion, mass dispersion and camps. In local dispersion they are put up by host families or they occupy uninhabited buildings, self-scatter in urban or rural areas, unaffected land, even forests. In mass dispersion, migrants are hosted in large public infrastructure, like schools, gymnasiums, stadiums, auditoriums, warehouses. Camps, whether self-settled or planned, are the ultimate solution. Host families, urban and rural self-settlements are less visible, and migrants in these local dispersion options are more difficult to access, to be supported and protected, more vulnerable, but at the same time the host communities are also less protected from possible perpetrators.

UNHCR highlights some of the issues of the local dispersion and mass dispersion in city or urban areas, where *'many refugees share accommodation or live in non-functional public buildings, collective centres, slums and informal types of settlements. Conditions are often substandard and providing shelter poses major challenges'* (URL2).

Figure 3: *The Six Settlement Options for Displaced Populations and the Three Shelter Categories*

	Host families Local families shelter the displaced population within their households or on their properties.	Local Dispersion
	Urban self-settlement Unclaimed urban properties, or land unaffected by the disaster, are used informally by displaced populations.	
	Rural self-settlement Displaced populations create a settlement on collectively owned rural land.	
	Collective centres settlement Existing large structures, such as schools, can serve as collective shelters.	Mass Dispersion
	Self-settled camps Independent from government or int'l organisation support, camps are formed by the displaced population.	Camps
	Planned camps Government or aid organisations plan camps, including infrastructure, to house displaced populations.	

Note: Created by the author, based on United Nations Office for the Coordination of Humanitarian Affairs et al.: Shelter after Disaster.

The following few pictures shows how migrants are settled in the most visible options, mass dispersions and camps. The first picture shows IDPs in the USA in mass dispersion, who lost their homes due to Tropical Storm Harvey in 2017 and settled in George R. Brown Convention Center in Houston, Texas. A more recent picture is another example of mass dispersion from the Philippines after the Taal Volcano eruption in 2020. IDPs are hosted in tents set up in the warehouse of the Old Tanauan City Hall. In Haiti, most of the earthquake affected population settled either in urban self-settlement or, in a more significant number, in self-settled or ad-hoc camps. Turkey set up very well planned and well-organized camps for the Syrian and Iraqi refugees.

Figure 4: *Mass Dispersion. George R. Brown Convention Center in Houston, Texas*



Note: Lagerquist, Jeff: ‘Soaked’: Harvey’s victims find relief inside Houston’s largest evacuation centre ([URL3](#)).

Figure 5: *Mass Dispersion. Old Tanauan City Hall, Philippines*



Note: Razon, Joseph: Evac Center ([URL4](#)).

Figure 6: *Self-settled Camp. IDPs in front of the Presidential Palace, Port-au-Prince, Haiti*



Note: Created by the author.

Opened in February 2015 and run by the Disaster and Emergency Management Presidency (AFAD), the Suruç camp hosted up to 35,000 refugees. It was the biggest refugee city in Turkey with the essential facilities e.g., four schools, a health centre, a firefighting unit, playgrounds, psychosocial support areas, television tents, prayer rooms, playgrounds, sports areas, markets (URL5).

Figure 7: *Well-Planned Camp. Suruç, Turkey*

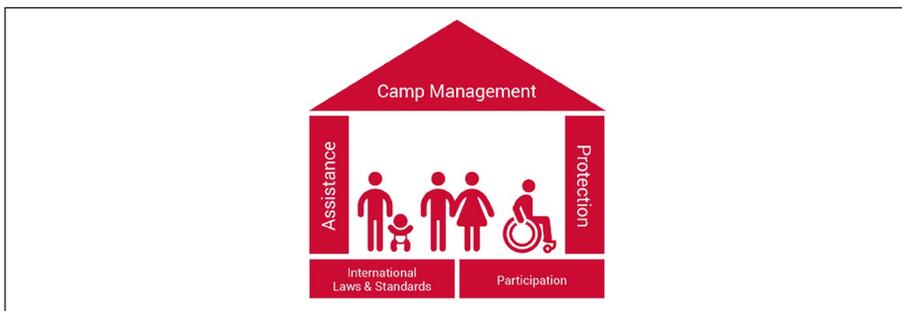


Note: Lim, Wyatt Mingji: *The Turkish Pivot* (URL5).

The Humanitarian Reform Agenda introduced the Cluster Approach in place of the previously used sectors in 2005. Clusters are groups of UN and non-UN humanitarian organizations in the main segments or sectors of humanitarian action (URL6). The Inter-Agency Standing Committee (IASC, 2015) designated 11 clusters⁴ to strengthen system-wide preparedness and technical capacity to respond to humanitarian emergencies and provide clear leadership and accountability in the main areas of humanitarian response. The Global Shelter Cluster (GSC, 2010) is co-chaired by the International Federation of Red Cross and Red Crescent Societies (IFRC) and UNHCR. IFRC is convener in natural disasters while UNHCR leads in conflict situations. The Global Camp Coordination and Camp Management (CCCM) Cluster is to coordinate humanitarian actors with services to displaced populations; the lead agency is IOM in disaster settings and UNHCR in conflict situations, complex emergencies (URL6).

Camps are sometimes the only option and may be the last resort to host displaced persons (IOM, NRC & UNHCR, 2015). Camps are not the permanent sustainable solution; they may only offer temporary provision of protection and assistance with the aim to uphold the basic rights for the displaced. Residence in a camp is never to be considered as a durable solution, it is a temporary response to a situation of displacement. For IDPs and refugees, achievement of a durable solution (repatriation/return, local integration or resettlement) is the key to ending displacement. The Camp Management House illustrates the holistic approach and a cross-cutting sector response of camp management, which is both technical and social in its aims (IOM, NRC & UNHCR, 2015).

Figure 8: *The Camp Management House*



Note: IOM, NRC & UNHCR: Camp Management Toolkit.

4 Global Camp Coordination and Camp Management (CCCM) Cluster, Global Cluster for Early Recovery (GCER), Education Cluster, Emergency Telecommunications Cluster (ETC), Food Security Cluster (FSC), Global Health Cluster, Logistics Cluster, Global Nutrition Cluster (GNC), Global Protection Cluster, Global Shelter Cluster (GSC) and Global Water Sanitation and Hygiene WASH Cluster (GWC) (URL6).

Shelters

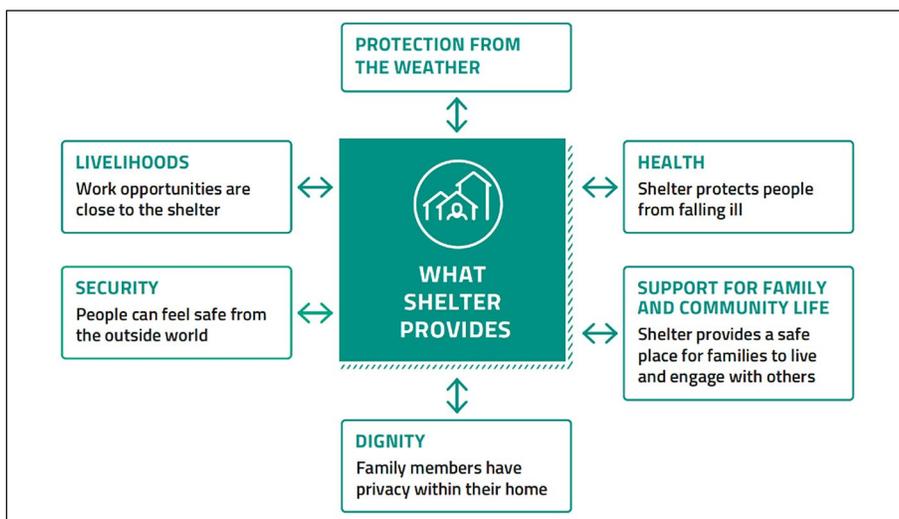
According to UNHCR data, more than 6.6 million refugees and people in refugee-like situations live in camps, among them 4.6 million in planned/managed camps and about 2 million in self-settled camps (URL2).

What migrants / refugees / IDPs are looking for in a shelter, in camps or other settlement options?

Shelter is defined as *‘a habitable covered living space, providing a secure, healthy living environment with privacy and dignity to the groups, families, and individuals residing within it’* (Corsellis, 2005).

The most important priority for displaced people in a shelter is physical and psychological protection. They want protection from weather and the elements, security from violence, attacks and crime, and a safe place for their family life. They search for dignity and private space. They look for healthy living conditions, access to water, hygiene, livelihood and possible work activities.

Figure 9: *What does a shelter provide?*



Note: Sphere Association: Sphere Handbook.

In a camp situation, the minimum standards for a shelter, as set out by both Sphere and UNHCR, is 3.5 square metres of living space per person, excluding cooking, bathing and sanitation spaces (Sphere Association, 2018; UNHCR, 2007). This means 25 square meters for a family of six, which is an extremely small space, but most times this is what needs to be dealt with. The living

space per person should be 4.5–5.5 square metres in cold climates or urban settings (including cooking, bathing and sanitation spaces). The internal floor-to-ceiling height is expected to be lower in cold climate: at least 2 metres, but higher, 2.6 metres in hot climates (Sphere Association, 2018). The minimum surface area is 45 square metres per person in camp-type settlements, including household plots. The 45 square metres per person includes firebreaks, roads and footpaths, personal or communal cooking areas, sanitation facilities, health-care facilities, administrative and educational buildings, warehouses, markets, water storage, drainage, food distribution sites, religious and recreational facilities, and kitchen gardens for individual households, but does not include agricultural activities or livestock. The minimum surface area is 30 square metres per person if communal services can be provided outside of the camp (Sphere Association, 2018).

Beyond the shelters, non-food items need to be provided for those living in the camps. Non-food items include minimum

- two full sets of sufficient quality clothing per person, in the right size and appropriate to culture, season and climate, and adapted to particular needs;
- one sufficient and appropriate quality blanket and bedding (floor mat, mattress, sheeting) per person, for safe, healthy and private sleeping;
- additional blankets/ground insulation required in cold climates;
- long-lasting insecticide-treated nets;
- two family-sized cooking pots with handles and lids, one basin for food preparation or serving, one kitchen knife and two serving spoons per household or group of four to five individuals to prepare, eat and store food;
- one dished plate, one set of eating utensils and one drinking vessel per person;
- sufficient, safe and affordable energy supply to maintain thermal comfort, prepare food and provide lighting (Sphere Association, 2018).

Even if for the shortest time possible, the shelter becomes a home. However, by 2003 the average time of a refugee crisis increased to 17 years (UNHCR, 2004). ‘Average length of stay in a #refugee camp once it passes 5 years gets up to around 20 yrs now,’ tweeted the UNHCR United States (URL7). The largest refugee camp in the world, Kenya’s Dadaab built for 90,000 refugees in 1991, turns 30 years old in 2021. It held more than 420,000 refugees and asylum seekers in 2014 (URL8; URL9; URL10), while 218,873 registered refugees and asylum seekers lived here at the end of July 2020 (URL11). A protracted refugee situation, as defined by UNHCR, is where ‘25,000 or more refugees from the same nationality have been in exile for five consecutive years or more’ in a

given host country⁵. More than three quarters of all refugees, 15.9 million refugees were in protracted situations at the end of 2018. More than one quarter, 5.8 million were in a situation lasting 20 years or more, 2.4 million of them are Afghan refugees in Iran and Pakistan for 40 years. Additional situations over 40 years are the refugees from Western Sahara in Algeria, from Burundi in Tanzania and from Vietnam in China. Certainly, it does not mean that individuals have necessarily been displaced for 40 years, since births and deaths, departures and new arrivals took place. Half of the refugees were in protracted situations lasting 5 to 20 years, 6 million of them are displaced Syrians (UNHCR, 2019).

Issues to Solve in order to Uphold Dignity and Ensure Security

Beyond technical standards, the solution to several issues must drive the planning and organizational work of the camp in order to uphold the dignity of the beneficiaries while ensuring the security of those hosted and those hosting.

- Break-up of family, social and cultural networks
- Lack or low quality of education
- Poor nutritional status
- Poor general health conditions, more vulnerable to infections, viruses
- Poor access to services
- Generally, 75% of refugees/IDPs are women, girls and boys – though in the 2015 European migration wave, the percentage of singles was higher
- Many subjected to sexual and gender-based violence abuses
- More likely to be trafficked or smuggled
- Lack or unreliable identity documents
- Protection and security inside and outside of the camp

Camp Planning

In most rapid-onset situations, displaced populations arrive to a possible settlement area before humanitarian workers, and set up their dispersed settlement or self-settled, ad-hoc camps. However, if the displacement can be foreseen and expected, emphasis needs to be placed on planning the camp in advance.

One must not forget, if the camp is not planned, or a certain facility or service is not planned and set up in advance, the beneficiaries will do it, and chances are that the placement will not be ideal and easily manageable.

5 It does not include Palestinians under UNRWA mandate.

Self-settled camps are more difficult to work with, beneficiaries are more difficult to be served, protected, and supported, services are more difficult to be set up and safely delivered in ad-hoc situations. Self-settled camps in addition pose more significant risks to the dignity, well-being and the security of the beneficiaries and the host communities. Beneficiaries are more difficult to identify and communicate with if they are not in the camp or not in a well-organized camp. Beneficiaries may be more vulnerable and durable solutions will be more difficult to be organized.

Planning the camp and making it a tool for dignity and security for both those in the camp and the outside host community.

The design of the settlement can contribute to reducing crime and gender-based violence, discusses the Sphere Handbook (Sphere Association, 2018). Consider the location and accessibility of shelters, buildings and facilities, night lighting, distance to the toilet and bathing area from the shelter, and passive surveillance through visual lines. Buildings used as collective centres must have alternative escape routes (Sphere Association, 2018). A well-designed camp protects the environment, disease outbreak and fires are prevented. Food, water, medical care and other services are in a walking distance for the displaced population. In order not to expose girls and women to danger, water points and latrines must be well-lit and close to homes (URL2).

Camps hosting over 20,000 should be avoided, however many times it is not possible. The following set up is planned for a population of 20,000.

- Roads and firebreaks 2m between shelters, 7m back from road
- Water supply, waterpoints, latrines, showers, refuse/garbage containers, water drainage
- Health facilities, clinics, hospital, pharmacy
- Feeding, nutritional feeding facilities
- Warehouse and distribution sites (food, non-food items)
- Administrative areas, reception centres, specialised services
- Market, schools, meeting places, cemeteries, religious centres
- The Shelters

Services in the Camps in order to Uphold Dignity and Ensure Security

The health status of a camp population is often fragile and the beneficiaries are exposed to a complex threats and risk factors for disease and death. The main goals of health services in a camp situation are reducing mortality (loss of life),

morbidity (illness) and disability, thus contributing to an improved quality of life. Measles is one of the most serious health problems encountered in a camp situation and is a leading cause of death in many refugee/IDP emergencies. Mass measles immunization campaign is a top priority. Prevention of diarrhoea and cholera outbreaks through hygiene promotion and access to safe water is inevitable. Acute malnutrition is a major cause of mortality in camp populations. Nutrition assessment and implementation of needs-based feeding programmes are important initial activities because malnutrition increases vulnerability to diseases. Adequate shelter, food and water supplies, vector control and proper excreta disposal, decreasing overcrowding, in addition to health education and training on key messages all contribute not only to the improvement of the environment and living conditions of the camp population upholding their dignity, but even more importantly, they are vital for the safety, health and well-being of those living in the camp (IOM, NRC & UNHCR, 2015).

Food rations are usually based on the minimum calory intake of 2,100 kilocalories per person per day. An average adult needs 560 grams of food per day. Pregnant women will need an additional 300 kcal per day in balanced diet, a breastfeeding woman will need an additional 500 kcal per day. The healthy diet contains the following basic food items such as:

- cereals: fortified wheat flour, maize meal, bulgur wheat, sorghum or rice (420 grams/day/person),
- pulses/legumes: dried lentils, chickpeas or beans (50 grams/day/person),
- fats: cooking oil (fortified with vitamin A and D) (25 grams/day/person),
- fortified salt (5 grams/day/person),
- sugar,
- fortified blended food (Corn and Soya Blend (CSB),
- additionally,
- canned meat and/or fish,
- fresh fruit and vegetables,
- micro-nutrients (including vitamins and minerals) may also be provided (IOM, NRC & UNHCR, 2015).

Calculated for a camp population of 20,000 people, this will mean 11.2 metric tons of food daily, 78.4 metric tons weekly and 336 metric tons monthly (IOM, NRC & UNHCR, 2015)!

Diarrhoeal diseases are responsible for 40 per cent of mortality in the first phases of an emergency. Providing Water, Sanitation and Hygiene (WASH) services in sufficient quantity and quality is urgent for people to survive, stay in good health, and maintain dignity, WASH services are among the most vital

and very first services provided in a camp (IOM, NRC & UNHCR, 2015). Sphere requires one water tap for maximum 250 people (Sphere Association, 2018), while UNHCR sets one water tap per community (80-100 people) (UNHCR, 2007). The absolute minimum of 7 litres⁶ of water per day per person must be provided, but this needs to be increased to 20 litres per day per person as soon as possible, water standards for health centres: 40-60 litres per patient per day, feeding centres: 20-30 litres per patient per day, and schools: 3 litres/pupil/day (UNHCR, 2007). According to Sphere, the distance to the nearest waterpoint from households must be less than 500 metres, with shorter than 30 minutes of queuing time at water sources (Sphere Association, 2018). UNHCR sets these standards at no further than 200 metres or a few minutes' walk from water distribution points (UNHCR, 2007). The minimum standards for the services and facilities regulate one latrine per family (6 people) (UNHCR, 2007), but not more than 20 people, and one bathing facility per 50 people (Sphere Association, 2018). Likely water resources available to a camp are surface water such as from rivers, streams and lakes that might be contaminated and require treatment; groundwater such as from wells, boreholes or springs that is susceptible to contamination if not protected, and may or may not require treatment; municipal or private systems, which are likely to be treated and of good quality; rainwater will vary seasonally but may be invaluable, although rainwater is pure and clean in theory, collection and storage methods invariably compromise quality. If water is not locally available it may be supplied by water trucking, airlifting by plane or helicopter or desalination (diesel-electric/solar) (IOM, NRC & UNHCR, 2015). Calculating by the Sphere's indicator of 15 litres of water per person per day, a camp of 20,000 people needs 0.3 million of litres a day, 109.5 million of litres a year only for personal use! (IOM, NRC & UNHCR, 2015).

Education is an essential component of a holistic humanitarian response. Quality education saves lives by providing physical protection from dangers and exploitation often present during displacement. Education transmit life-saving information to children and their families; it strengthens survival skills and coping mechanisms essential during displacement. It mitigates the psychosocial impact of conflict, disaster and displacement. Going to school, and participating in learning with friends and trusted adults help children and their families regain a sense of routine, stability and structure in a chaotic and disorientating setting. For these very reasons, the choice of location for the learning spaces

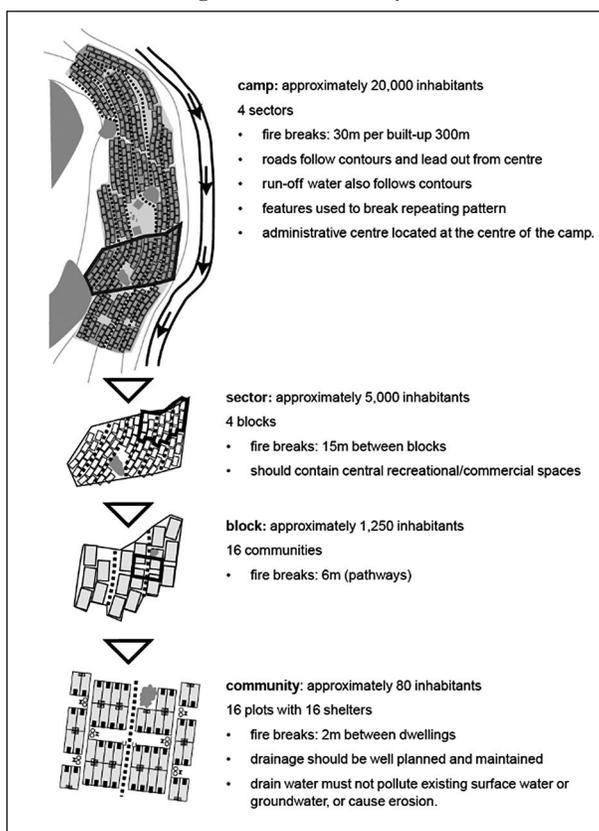
6 In the 4th Edition of Sphere Handbook (2018) it has been increased to 15 liters (Sphere Association, 2018).

is vital, and can often make the difference whether children attend classes or not, especially for those from vulnerable groups. Schools and recreation areas should be relatively centrally located, cleared of surrounding thick bush and at a safe distance from roads used for heavy traffic or areas of the camp, to uphold and protect the safety of students (IOM, NRC & UNHCR, 2015).

One school, one distribution centre and one health clinic need to be built for each sector (5,000 people). One health centre, one market, one feeding centre and one cemetery are to be provided per camp for 20,000 people. A hospital may be required for ten camps, 200,000 people (UNHCR, 2007). Fence and security services are always an issue of discussion and possible disagreement, but they may be advisable in certain settings.

Some specialized services are many times forgotten. Child protection and child care services, especially for children with disabilities, unaccompanied and separated children. Special protection must be extended to single women, single mothers, victims of abuse and victims of trafficking. The service of nutritional feeding centres is of great importance for lactating women, women with young children, malnourished children (supplementary and therapeutic feeding). Psychological, psycho-social and religious services contribute to the mental and spiritual well-being and the dignity of those living in the camp. The elderly, the sick ones and persons with disabilities also require special attention.

Figure 10: An Ideal Layout



Note: Corsellis, Tom & Vitale, Antonella: Transitional Settlement: Displaced Populations.

Camps: Advantages and Disadvantages

What are the main advantages of camps, in comparison especially to local dispersion?

Camps serve large population in a centralized and efficient way, where beneficiaries are easier to identify. The identification, registration, profiling and verification of the refugees / IDPs is indispensable for the management of the camp, and it is an important protection activity in itself. It is easier to provide protection to those living in the camps, and at the same time it is easier to secure the safety of the outside host community. The dignity of beneficiaries is more upheld when camps and services are well-organized and well-managed.

Vulnerable groups (women, children, the elderly, people with disabilities, victims of abuse, separated children), who are most of the time forgotten and so many times victims of abuse, are more protected and better served. Beneficiaries are easier to communicate with, information flow and feed-back are faster and more efficient. It is also easier for advocacy purposes, for the benefit of the beneficiaries and also for the host community. Camps are more economic, since services are easier to be provided at a relatively lower cost, than in local dispersion.

The durable solutions are easier to organize from a camp setting than from a local dispersion setting. For refugees, durable solutions are

- voluntary repatriation to their home country after their safety can be guaranteed and they would not be persecuted anymore,
- local integration in the hosting community, and
- relocation / resettlement to a third country providing them a new home.

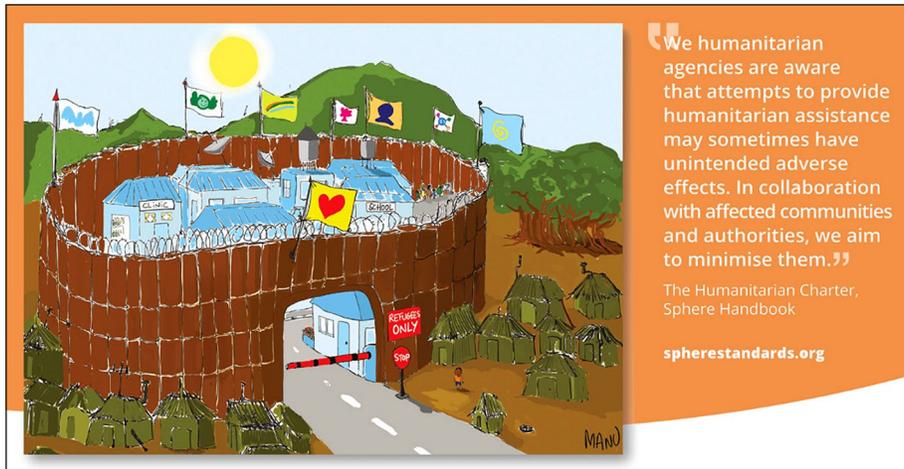
‘For internally displaced persons, a durable solution is achieved when internally displaced persons no longer have any specific assistance and protection needs that are linked to their displacement and can enjoy their human rights without discrimination.’ Durable solutions for internally displaced persons:

- return: sustainable reintegration at the place of origin,
- local integration: sustainable local integration in areas where internally displaced persons take refuge,
- resettlement: sustainable integration in another part of the country (IOM, 2019a).

Disadvantages of camps have been experienced in the humanitarian work for several decades, not only in the 2015 European migration wave. One of the most important disadvantages of camps is that it may create a population dependent on aid with little chance of work or autonomy. Dependency on external support is a dangerous factor especially if work and economic opportunities are not possible or not provided. There is an increased health risk if the camp is crowded, as larger populations live in a smaller area, and if the health and sanitation facilities and services are not sufficient and appropriate. Possible conflicts with the outside community may rise, especially if those living in the camps are provided more support and opportunities than the host community, if the camp beneficiaries pose a security threat to the host community or the possible environmental damage, due to deforestation or pollution to water sources for example, upsets the host community. The camp may be misused by those excluded from refugee status or by criminal elements for recruiting child soldiers, rape, abuse,

smuggling, human trafficking. Finally, a larger population is more difficult to protect, thus special protection measures are advisable, however, attention needs to be paid that those protecting shall not abuse their power.

Figure 11: *The Conflict between the Hosted Population and the Hosting Communities is an unfortunate Adverse Effect, especially in the Global South*



Note: Sphere: Cartoons Campaign Posters.

Conclusion

‘Protecting people’s safety and dignity is a primary aim to humanitarian action’, underlines the UN publication that synthesises the findings, declarations and the outcome of the consultations leading up to the World Humanitarian Summit 2016. The ability to live in dignity, free from fear and violence is of great importance for people affected by crises. They pursue not only material assistance, but they want safety, dignity and hope (World Humanitarian Summit secretariat, 2015).

Migration can save the lives and/or improve the status of migrants and their families by escaping from persecution and violence, by improving socioeconomic status, by offering better education opportunities, and by increasing the income through remittances for ‘left behind’ family members. However, the migration process can also expose migrants to violence, risks, such as dangerous journeys, psychosocial stressors, sexual and physical abuses, nutritional deficiencies and changes in life-style, exposure to infectious diseases, limited access to protection, quality education and health care, interrupted care, smuggling, human trafficking, and crime (IOM, 2017).

Camps can be a tool for upholding the dignity of those in the camp whether they are refugees, internally displaced persons or different kinds of migrants, and at the same time, camps can provide the safety and security for both, the hosted population and the hosting community.

The location and accessibility of shelters, buildings and facilities, the night lighting, distance to the toilet and bathing area from the shelter, and passive surveillance through visual lines are all of great importance in protection and provision of safety. Buildings used as collective centres must have alternative escape routes (Sphere Association, 2018). A well-designed camp protects the environment, disease outbreak and fires are prevented. Food, water, medical care and other services are in a walking distance for the displaced population. In order not to expose girls and women to danger, water points and latrines must be well-lit and close to homes (URL2).

Well-planned and well-organized camps do not only provide assistance and ensure the dignity to those displaced, help the effective and safe work of the aid workers, but can also contribute to reducing vulnerabilities, crime and gender-based violence, furthermore decrease security threats and risks.

References

- Besenyő, J. (2010). Saharawi refugees in Algeria. *AARMS*, 9(1), 67-78.
- Connor, P. (2016). *Number of Refugees to Europe Surges to Record 1.3 Million in 2015*. Pew Research Center Global Attitudes & Trends. www.pewresearch.org/global/2016/08/02/number-of-refugees-to-europe-surges-to-record-1-3-million-in-2015/
- Corsellis, T. & Vitale, A. (2005). *Transitional Settlement: Displaced Populations*. Oxfam.
- Inter-Agency Standing Committee (2015). *Introduction to Humanitarian Action. A Brief Guide for Resident Coordinators*. https://interagencystandingcommittee.org/system/files/rc_guide_31_october_2015_webversion_final.pdf
- International Organization for Migration IOM (2017). *Migration Health in the Sustainable Development Goals: 'Leave No One Behind' in an increasingly mobile society*. https://www.iom.int/sites/default/files/our_work/DMM/Migration-Health/Migration-in-the-Sustainable-development-goals.pdf
- International Organization for Migration IOM (2019a). *Glossary on Migration*. International Migration Law No. 34. https://publications.iom.int/system/files/pdf/iml_34_glossary.pdf
- International Organization for Migration IOM (2019b). *World Migration Report 2020*. International Organization for Migration. Geneva. https://publications.iom.int/system/files/pdf/wmr_2020.pdf

- International Organization for Migration (IOM), Norwegian Refugee Council (NRC) & UN Refugee Agency (UNHCR). (2015). *Camp Management Toolkit. Edition June 2015*. <https://www.refworld.org/pdfid/526f6cde4.pdf>
- Sphere Association (2018). *Sphere Handbook: Humanitarian Charter and Minimum Standards in Humanitarian Response*. Sphere Association.
- UNHCR (2004). *Protracted Refugee Situations*. UNHCR internal document. Executive Committee of the High Commissioner's Programme, 30th Meeting. UN Doc. EC/54/SC/CRP.14. <https://www.refworld.org/pdfid/4a54bc00d.pdf>
- UNHCR (2007). *Handbook for Emergencies*.
- UNHCR (2010). *Convention and Protocol Relating to the Status of Refugees*. Text of the 1951 Convention Relating to the Status of Refugees. Text of the 1967 Protocol Relating to the Status of Refugees. <https://www.unhcr.org/3b66c2aa10>
- UNHCR (2018). *Global Trends Forced Displacement in 2017*. UNHCR. <https://www.unhcr.org/statistics/unhcrstats/5b27be547/unhcr-global-trends-2017.html>
- UNHCR (2019). *Global Trends Forced Displacement in 2018*. <https://www.unhcr.org/5d08d7ee7.pdf>
- UNHCR (2020b). *Global Report 2019*. UNHCR. Geneva. https://reporting.unhcr.org/sites/default/files/gr2019/pdf/GR2019_English_Full_lowres.pdf
- UNHCR (2020c). *Global Trends Forced Displacement in 2019*. UNHCR. <https://www.unhcr.org/5ee200e37.pdf>
- United Nations Economic and Social Council (1998). *Guiding Principles on Internal Displacement*. E/CN.4/1998/53/Add.2. <https://undocs.org/E/CN.4/1998/53/Add.2>
- United Nations Office for the Coordination of Humanitarian Affairs OCHA, Department for International Development DFID & Shelter Centre GSC (2010). *Shelter after Disaster: Strategies for Transitional Settlement and Reconstruction*. https://www.humanitarianlibrary.org/sites/default/files/2014/01/shelterafterdisasterguidelines2010_0.pdf
- World Humanitarian Summit secretariat (2015). *Restoring Humanity: Synthesis of the Consultation Process for the World Humanitarian Summit*. United Nations. <https://reliefweb.int/sites/reliefweb.int/files/resources/Restoring%20Humanity-%20Synthesis%20of%20the%20Consultation%20Process%20for%20the%20World%20Humanitarian%20Summit.pdf>

Online links in this article

URL1: Guterres, A. (2014). *Opening Remarks at the 65th Session of the Executive Committee of the High Commissioner's Programme*. António Guterres, United Nations High Commissioner for Refugees, Geneva, 30 September 2014. UNHCR. <https://www.unhcr.org/afr/admin/hcspeeches/542a6e6e9/opening-remarks-65th-session-executive-committee-high-commissioners-programme.html>

- URL2: *Shelter*. UNHCR. <https://www.unhcr.org/shelter.html>
- URL3: Lagerquist, J. (2017). 'Soaked': Harvey's victims find relief inside Houston's largest evacuation centre. CTV News. <https://www.ctvnews.ca/world/soaked-harvey-s-victims-find-relief-inside-houston-s-largest-evacuation-centre-1.3567870?cache=yesclipId104062>
- URL4: Razon, J. (2020). *Evac Center*. Philippine News Agency. <https://www.pna.gov.ph/photos/42567>
- URL5: Lim, W. M. (2018). *The Turkish Pivot*. Defense Politics Asia. <https://defensepoliticsasia.com/the-turkish-pivot/>
- URL6: *What is the Cluster Approach?* UN OCHA. Humanitarian Response. <https://www.humanitarianresponse.info/en/about-clusters/what-is-the-cluster-approach>
- URL7: UNHCR United States. (2016). *Average length of stay in a #refugee camp once it passes 5 years gets up to around 20 yrs now*. Twitter. <https://twitter.com/unhcrusa/status/732579811927941120>
- URL8: McClelland, M. (2014). *How to Build a Perfect Refugee Camp*. New York Times. <https://www.nytimes.com/2014/02/16/magazine/how-to-build-a-perfect-refugee-camp.html>
- URL9: McKnight, J. (2016). *Architects for Society designs low-cost hexagonal shelters for refugees*. Dezeen. <https://www.dezeen.com/2016/04/14/architects-for-society-low-cost-hexagonal-shelter-housing-refugees-crisis-humanitarian-architecture/>
- URL10: Block, I. (2019). *Refugee shelters could be built from concrete fabric in 24 hours*. Dezeen. <https://www.dezeen.com/2019/09/17/cortex-shelter-cutwork-refugee-architecture/>
- URL11: UNHCR. (2020a). *Dadaab Refugee Complex*. <https://www.unhcr.org/ke/dadaab-refugee-complex>

Reference of the article according to APA regulation

- Szilágyi, B. (2021). *Refugee Camp: A Tool for Dignity and Security*. *Belügyi Szemle*, 69(S14), 31-52. <https://doi.org/10.38146/BSZ.SPEC.2021.4.3>



Tamás Tóth - Brenda Matias Silva

Development Directions of Water Management by Comparing Rio Grande do Norte to Hungary

Abstract

International cooperation facilitates the development of water management. In many cases, development does not necessarily require the invention of new things, but the exploration and implementation of good practices that have already proven themselves in other parts of the world. Knowledge sharing improves theory and helps to find appropriate practical solutions. From time to time, it may be useful to examine the state of development of water management in comparison with other countries. Climate change and demography turn attention to water management and collaboration. The authors of this article examine and compare the water management of Hungary and Rio Grande do Norte. Both places face similar challenges in many aspects. The main objective of this article is to recommend future development directions in terms of water management. Research results might stimulate further common cooperation between the countries and work on international projects. The authors examined and compared the climatic and hydrological conditions, organizational structure and the challenges, water management needs to face.

Keywords: water management, flooding, water scarcity, development, climate change

Introduction

Water knows no boundaries. We believe that international cooperation on both institutional and individual base might be an essential tool to facilitate the development of water management. Common work of experts and scientists might evolve discussion and help to identify practical solutions to the given challenges. We, as the authors, have different background and knowledge in terms of

Brazilian and Hungarian water management and we decided to research the development directions by comparison.

Brazil consists of 5 regions including the Northeast Region. Rio Grande do Norte (RN) is one of the states in the Northeast Region. Rio Grande do Norte means Great River of the North in English. Its area is 52,797 km² compared to the 93,030 km² area of Hungary. In this paper, we primarily focus on comparing RN to Hungary. Both Rio Grande do Norte and Hungary have a long history of water management. Despite the distance of locations, both parties face similar challenges in many aspects. At first sight, both Brazil and Hungary might seem to be water abundant countries in general but if we examine the situation in details, we might recognise the vulnerabilities in terms of climate change and the unequal distribution of water resources. We are committed to analyse the water management of RN and Hungary and identify similarities and development possibilities.

The main objective of this article is to analyse the water management of Hungary and Rio Grande do Norte by comparison and recommend development directions.

Joint research might lead to further discussions and fruitful collaborations in international projects. Our research results might facilitate the future development of Brazilian and Hungarian water management and even might inspire others to have new ideas.

Climate Patterns

Climate is a core factor of water management. We consider it important to overview briefly the climate situation of Hungary and Rio Grande do Norte to put our water management activities into context.

Situated in the Northeast of Brazil (NEB), the State of Rio Grande do Norte is influenced by two different climates, according to Köppens's classification (Beck et al., 2018). Tropical zone with dry summer (type AS) and low latitude with semi-arid climate (type BSH). More than 90% of Rio Grande do Norte is in the semi-arid zone (Silva, Spyrides & Lucio, 2012). Meanwhile, Hungary has a typical continental climate with hot dry summers and mildly cold winters. Large parts of the country are semi-arid or dry sub-humid, similarly to RN. According to the worldwide used aridity index, Hungary is identifiable as an 'affected country' under the terms of the United Nations Convention to Combat Desertification (URL1).

The mean annual rainfall on the eastern coast of RN is over 1000 mm, while in the south-western and north-western areas, it ranges from about 700 mm to 1000 mm (Alvares, Stape, Sentelhas, Gonçalves, Sparovek, 2014). In the central part, the rainfall is lower than 700 mm. The marked rainfall variability within the same

year in the Northeast Region is associated with alterations in sea surface temperature patterns over the tropical oceans. It affects the position and intensity of the Intertropical Convergence Zone over the Atlantic Ocean, as well as the temperature anomalies observed in the Pacific Ocean, which happen in years with La Niña and/or El Niño (URL2). Extreme weather events experienced in the RN are related to the variability of atmospheric circulation patterns (Vale, Spyrides, Andrade, Bezerra & Silva, 2020). The high solar radiation, associated with the variable rainfall regime contribute to the increase of evaporation rates, which mostly vary from about 1000 to 2000 mm per year, but in some cases can reach 3000 mm per year (URL2). In Hungary, the mean annual rainfall is about 500-750 mm. In the Great Plain area, which is significant in terms of agriculture, it is mostly lower than 600 mm (Lakatos & Bihary, 2011). Regarding precipitation, we must mention that the mean annual values blur the challenges. In Hungary, there is a significant seasonal difference. Extreme weather patterns cause challenges to water management concerning both water scarcity and flood. For example, in 2020, a new daily rainfall record was set by 178 mm/day at Station Vése, Hungary. But on the other hand, the Spring of 2020 was the 3rd driest spring in Hungary, on record from 1901 (URL3). Based on the statistics of the Hungarian Meteorological Service, we can state that the amount of rainfall is slightly decreasing.

Agriculture faces the biggest challenge during the subsequently dry and hot days. The chance of a moderate drought significantly increased in the last years (Földi, 2019). The average temperature in the Rio Grande do Norte is predominantly higher than 24 degrees Celsius (Alvares et al., 2014). Although in Hungary, the mean average temperature is just about 10-12 degrees Celsius, the summers are hot and dry. The hottest day was 30th August at 37.4 degrees Celsius at Station Mezőkovácsháza in 2020 (URL4).

RN's main biomes are the Caatinga (95%) and the Atlantic Forest (5%). The elevations range from 580 to 830 m, with a predominance of shallow rocky soils with low water retention capacity (Silva, Spyrides & Lucio, 2012). In Hungary, we can find different types of soils, but in terms of drought, the most problematic is the sandy soil with low water retention capacity for example in the Nyírség area.

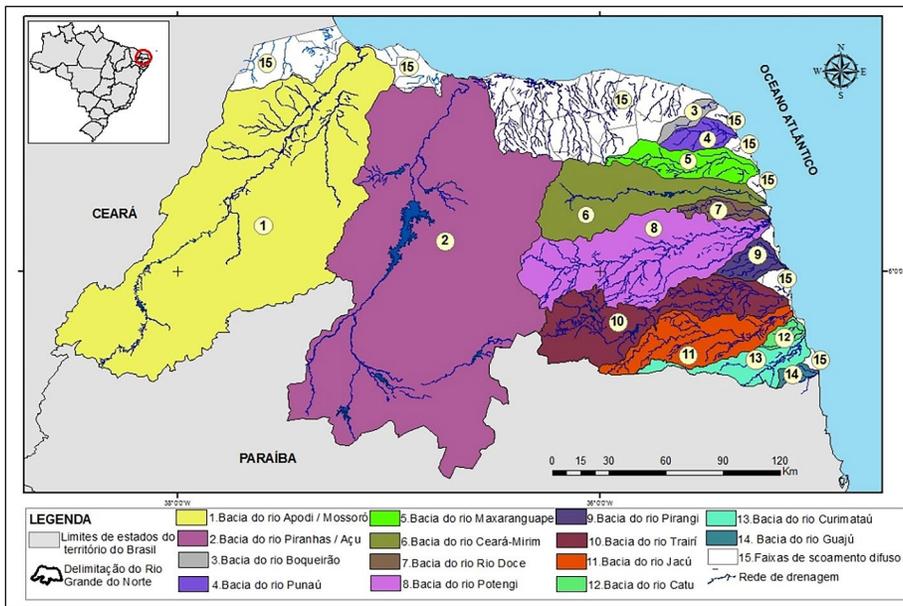
According to the report of the Intergovernmental Panel on Climate Change the North-eastern region is threatened by transformation of semi-arid conditions into a semi-desert in the next 60 years (URL5). If this happens, the RN state will be greatly affected, as it has about 90% of its territory with semi-arid climate characteristics (Silva, Spyrides & Lucio, 2012).

Water Management of RN state and Hungary face similar challenges in the mitigation of climate change-driven extreme events. We need to find solutions to adapt to climate change and handle the environmental and socio-economic impacts.

Hydrology and administrative structure

Hungary's whole area is located in the Danube River Basin, while RN's area is divided among several different river basins. We compared the directions of the main rivers' flow. The Danube collects the rivers of the Carpathian Basin. It flows east until Veróce and then turns south. The River Apodi and the Piranhas-Açu, as the main rivers of RN, flow north, northeast, while the other smaller rivers of RN flow east. Piranhas-Açu is the main river of RN and it is an interstate river. The hydrographic basin of the Piranhas - Açu River covers a territory of 42,900 km² distributed between the States of Paraíba and Rio Grande do Norte, where approximately 1,552,000 inhabitants live (URL6). The territory of it is similar to the area of River Dráva, a tributary of Danube. The international river basin area of Dráva is about 40,000 km². The international Danube River Basin spans across more than 800,000 km² and it extends into the territory of 19 countries and is considered the most international river in the world, where approximately 83 million inhabitants live (URL7).

Figure 1: Hydrographic Basins of Rio Grande do Norte



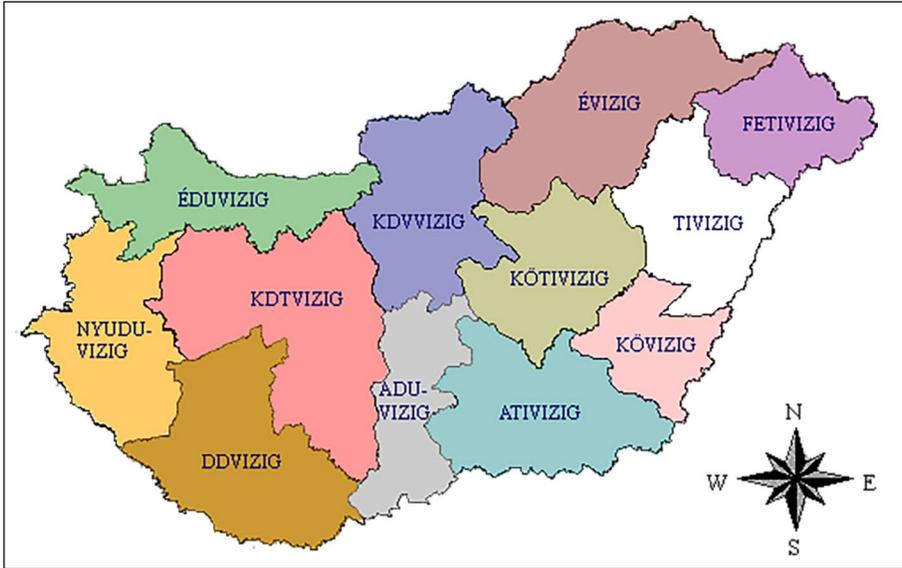
Note: Trolei & Silva (2018).

As shown above in figure 2, the Apodi / Mossoró and the Piranhas-Açu are the main river basins. The other basins of lesser territorial extension of drained area flow into the east coast of the state, such as the basins of the Boqueirão, Punau, Maxaranguape, Ceará-Mirim, Doce, Potengi, Pirangi, Tairi, Jacu, Catu, Curimataú and River Guajú. Among these catchments, the main river basin of the capital of RN, called Potengi, runs through several territories before flowing into the city of Natal.

The comprehensive legislation on water management was reinforced almost at the same time in Brazil and in Hungary. In Hungary, the Law XVII of 1995 on water management was an important milestone in this regard. Similarly, in Brazil, Law no. 9,433 of 1997 instituted the National Water Resources Policy (PNRH), also known as the Water Law. Concomitant with the institution of the PNRH by Law no. 9,433, the National Water Resources Management System (SNGRH) was created, structured to promote the management of water resources in an integrated, participatory, and decentralized manner. It is composed of six entities: National Water Resources Council, National Water Agency, Water Resources Councils of the States and the Federal District, Hydrographic Basin Committees, and Water Agencies (Farias, de Feritas Amorim & Saraiva Junior, 2018). Hungary is a member state of the European Union and therefore the implementation of the common water policy of the EU is fundamental. International relations are important, therefore Hungary participates in the International Commission for the Protection of the Danube River (ICPDR) and many other organizations and working groups. Hungary regularly reviews its River Basin Management Plan in accordance with WFD and framed its own National Water Strategy (Jenő Kvassay Plan), too.

In Hungary, there are 12 regional water directorates that cover the whole area of Hungary. They are organised on a water basin level but also the administrative boundaries are considered. Both in Rio Grande do Norte and in Hungary, water management is organised on a river basin level. Regional directorates of Hungary are coordinated by the General Directorate of Water Management. In case of emergency, for example, if there are more water directorates affected by severe water pollution or a significant flood, there is a structural reorganisation and a so-called National Technical Coordinating Committee manages the situation. Water management issues primarily belong to the Ministry of Interior but other ministries are also involved for example the Ministry of Agriculture or the Ministry for Innovation and Technology regarding EU funded projects or the Ministry of Foreign Affairs and Trade. Figure 2 shows the 12 water directorates of Hungary.

Figure 2: *Water Directorates of Hungary*



Note: URL19.

The water management of Rio Grande do Norte is divided into state entities of water resources management. The State Water Resources Policy and State Water Resources Management System aim to establish the institutional procedure under which the state water policy should be implemented and provide systematic management of the water resources considering the quality and quantity (URL8). There is a State Council of Water Resources (CERH) which is responsible for analysing proposals, conflict arbitration, and articulating promotion of the water resources in the state. Concerning funding the State Water Resources Fund (Funerh) is responsible. There is a particular institution responsible for the planning named State Water Resources Plan. The water resources management body is the Water Management Institute of the State of Rio Grande do Norte. It is responsible for granting the right to use water resources, licenses for hydraulic works and dam safety. Furthermore, the Secretariat for the Environment and Water Resources is also involved in water resources management. It has 3 committees installed, in addition to the Water Basin Committee of Píancó-Píranhas-Açu, which is interstate but also recognized by the State Council of Water Resources and an integral part of the State Water Resources Management System. The structure is controlled by the State Secretaries and Entities, responsible for the management of the basins and water resources of the states.

Figure 3: State Water Resources Management System of Rio Grande do Norte



Note: [URL8](#).

Both Hungary and Rio Grande do Norte have detailed water legislation from the '90s to ensure the safety of the society, regulate water utilization, preserve and improve the state of the water. We stated that the water-related responsibilities are shared among different entities and the water directorates are organised on a catchment base in both cases. Public water management organizations have to face multifaceted, complex challenges.

Challenges in focus

Ensuring safe water and meeting different types of water demands are remarkable challenges for water management. Climate change will probably intensify extreme weather events. Floods and droughts threaten both RN and Hungary.

In this article, regarding flooding, we primarily concentrated on flood management in terms of rivers and did not examine the flood risk from sea-level rise. Extreme rainfall events might occur more frequently in many regions of Europe (Coffel, Horton & de Sherbinin, 2018; Nerem et al., 2018). Increasing flood risk

is forecasted in the European Union due to extreme weather events and inappropriate land use (Alfieri, Dottori, Betts, Salamon & Feyen, 2018). Hungary is among the countries most exposed to flooding in the EU and has the highest relative share of people living in such areas, about 1.8 million people, which means 18% of the population. (Tóth, 2019). 23% of Hungary is considered to be a flood-prone area that means 21 248 km². (Szlávik, 2013). Floods also have a negative environmental and socioeconomic impact on Rio Grande do Norte. Population share at river flood risk is 10.27% and 2.87% at flash flood risk in Rio Grande do Norte (Debortoli, Camarinha, Marengo & Rodrigues, 2017).

RN and Hungary are also among the countries threatened by flash floods. Due to climate change, presumably, flash floods may become more severe. In Brazil, intense rainfall events that triggered flash floods and landslides were responsible for 74% of the deaths related to natural disasters in the 1991–2010 period (Bresch, 2011). Both RN and Hungary apply structural and non-structural measures to prevent or mitigate flood damages. In the EU, severe floods reinforced the need for coordinated action, therefore the member states work on the implementation of Directive 2007/60/EC on the assessment and management of flood risks, commonly known as Flood Directive (FD).

Both Brazil and Hungary are considered water abundant countries in general. According to the Brazilian National Water Agency, Brazil is considered one of the countries with the highest availability of freshwater in the world (URL9). Also, according to the Food and Agriculture Organization of the United Nations, Brazil has the highest average precipitation per year, and the uppermost amount of water from external and internal natural resources than any other country (URL10). Despite the abundance of water resources, the distribution of the resources is unequal and both places are threatened by droughts. Brazil has twelve percent of the world's total fresh water but it is extremely unevenly distributed. About 73 percent of the country's water is concentrated in the Amazon River Basin, while the semiarid Northeast, where the State of Rio Grande do Norte is located, has only 3 percent of the country's water resources, about 1,200 cubic meter per capita (URL11). The State of Rio Grande do Norte in Brazil is part of the '*Drought Polygon*', a region recognized by legislation as subject to repeated crises of prolonging droughts and, consequently, subject to special measures by the public sector according to the Superintendence of Economic and Social Studies of Bahia. The high rates of evaporation occurring in the Brazilian Semi-Arid, both in water-free surfaces (dams) and in the soil, represent a significant loss in the water availability of a region for the growth and development of species, which, over the centuries, may result in the selection and adaptation of those most resistant to water shortages (URL2).

Severe droughts pose challenges also to Hungary therefore water management and the agriculture sector need to discuss and work together. Agriculture faces the biggest challenge during the vegetation period. Prolonged drought makes irrigation inevitable.

In Hungary, the size of the irrigated area fluctuates around 100 thousand hectares per year. The size of the irrigated area in 2019 was approximately 108,300 ha. The states of irrigational canals and structures have deteriorated in many cases as a result of underfunding. In Rio Grande do Norte the size of the irrigated area is 61,189 hectares according to the Agricultural Census of 2017 by the Brazilian Institute of Geography and Statistics ([URL12](#)).

RN applies Drought Monitoring (DM) to monitor and reduce the impacts of the drought. It is a regular and periodic monitoring of the drought situation in the Northeast of Brazil ([Martins et al., 2015](#)). The DM monitors monthly how the drought is progressing in all the states of the Northeast and produces a drought map. This map presents an actual state of the drought situation and does not forecast the drought phenomena. The DM gathers meteorological, hydrological, and agricultural data considering not only the amount of rain (rainfall index), but the reservoir levels, soil moisture and other information that are key to obtain the complete picture of the drought in each region. To mitigate drought effects, the Hungarian water management also launched a drought and water scarcity operational monitoring system in 2018 ([Fiala et al., 2018](#)). It consists of more than 100 monitoring stations. These stations can measure different parameters and based on the results calculate indicators. The system provides data not just on the current state of drought but it is able to forecast the situation for some days. It serves as an informative tool for farmers interested in irrigation. A similar drought monitoring system based on the concept of the Hungarian system might be useful tool in Rio Grande do Norte, too. So, in further research, the conditions of implementation can be examined.

In RN, historically, reservoir, dam and weir constructions were parts of the main strategy adopted by the government to deal with the drought problem ([URL13](#)). In total, the RN state has more than 40 reservoirs with a water storage capacity of 4,289,280,000 m³ ([Trolei & Silva, 2018](#)). Those reservoirs store and collect rainfall water and water from rivers to be used during scarce periods for drinking water supply, irrigation and agriculture, livestock animal supply, and fishing. According to the Secretariat of Environment and Water Resources of Rio Grande do Norte, 10 out of 12 of the main reservoirs of the RN state are with their reservation levels lower than 15% of their capacity ([Trolei & Silva, 2018](#)). The low levels of precipitation and humidity and high temperatures contribute to the high volume of water loss. We found that there are five aquifers in RN:

Açu, Barreiras, Aluvião, Jandaíra and Cristalino. These aquifers are used mainly for human supply, but people also use these resources for irrigating crops. We think that - wherever it is possible - primarily the surface should be used for irrigation. To supply municipalities without reservoirs, an extensive system of water canals and pipes serve as an alternative to mitigate water scarcity. This system consists of more than 1600 km of water pipes and it supplies 106 municipalities and 1,200,000 consumers in the RN state (Trolei & Silva, 2018). There is a total of 17 water canals and pipe systems in the RN state, and it has the function of transporting water from one location to another, either through atmospheric pressure (slope of the land) or via pumping. Another alternative to complement the water supply and reduce the water crisis is the use of water tank trucks which supply 65 out of the 167 municipalities in the RN. The use of tank water trucks is an indicator of the severe water crisis and public calamity affecting 40% of the state population (Trolei & Silva, 2018).

The volume of daily water consumption is 331,744 m³ in the RN state. It means about 100 litres/capita/day. In Hungary, the average daily water consumption per person is 90-100 litres (URL14). Comparing RN with Hungary we state that consumption is on a similar level. The connection level to the piped drinking water system in the case of municipalities is high in both cases. 166 out of 167 municipalities are supplied by piped water in RN (URL12). While all Hungarian municipalities are connected to the drinking water system and the total household connection is 95%.

In Natal, the capital city of RN, 417 analyses performed and 181 (43.41%) were not in compliance with the free residual chlorine standard (URL12). It might cause microbial proliferation in the water and thus reach the population with water-related diseases and contaminants, mainly acute diarrheal diseases. Therefore, we can affirm that 43% of the piped water does not meet the drinking water quality standards. Compared to Hungary it is a serious issue in RN.

In Hungary, 92%-97% of drinking water is from deep groundwater sources (URL15; URL16). Hungary's tap water can be safely consumed (URL17). According to the last water quality report, the adequacy level is over 95% for most water quality parameters (Bufa-Dórr, Málnási, Oravecz, Vargha & Vecsey, 2021). Water network loss is also an important factor to be examined. In RN, the estimated value of water supply network losses is 46.3% (Farias et al., 2018). In Hungary, it is estimated at 48%. (Somos, 2011). Concerning the sewerage system, approximately 82% of the households were connected to the system in 2018, in Hungary (URL18). Against that in RN, the sewerage network system covers only 77 municipalities, roughly 46.1 % of the total number of municipalities (Farias et al., 2018).

According to the Piranhas-Açu Basin Committee and the Brazilian National Water Agency, the potential for the construction of dams and reservoirs is very close to the depletion point, beyond which the construction of new reservoirs, from the hydrological point of view, would cause diseconomies because of the intensification of evaporation losses. Also, according to them, optimization of the use of stored water is necessary, either through the introduction of more rational operating routines or through the technical improvement of the production processes. According to the Piranhas-Açu Basin Committee and the Brazilian National Water Agency, the occurrence of cyanobacterial blooms in the basin's reservoirs is compromising the water quality. A probable cause for the occurrence of the problem is the release of untreated sewage into the water bodies of the Basin (URL13). Considering that the water accumulated in the reservoirs is the main source of human and animal supply, it is necessary to prioritize investments by the government for environmental sanitation. Improving the water supply water resources management and effectiveness of the reservoirs and water canal and pipe system is vital to guarantee the water supply in the state. In this context, the state presents fragilities in its system and only the analysis and study of the individual characteristic of each municipality or municipalities in a similar situation will provide the solution for each case. The process of urbanization increased the impermeability of the soil and the amount of runoff water in the urbanized areas in the RN state (URL6). The infiltration area for the precipitation water decreased considerably over the years. Despite the fact that only 9% of the flood emergencies in Brazil are located in the Northeast, it is still a challenge in that region (URL6). To mitigate those effects structural and non-structural measures are implemented. There are case studies in the RN state to model precipitation and runoff water with the aim to control and prevent floods.

In summary, water management equally faces challenges in terms of flood and drought. Prolonged exposure to weather extremities burdens the economic competitiveness of Hungary and Rio Grande do Norte. We consider the implementation of an integrated water management approach necessary. We identified many points where improvement is needed in the future.

Conclusions

Water Management of Rio Grande do Norte and Hungary face similar challenges in the adaptation of climate change driven extremities. We deem that effective solutions can be found by international cooperation.

Both sides have their own complex water legislation and operate multifaceted water management organisation and system to ensure the safety of the society and equally preserve and improve their water resources.

Drought is one of the most remarkable pressuring factors. We suppose that the concept of the Hungarian drought monitoring system might be implementable in Rio Grande do Norte. In the future, further thematic research could be executed to examine the conditions of the implementation.

Improvement of piped water quality and the increase of sewerage system coverage probably will be a key challenge for Rio Grande do Norte in the following decade. Hungary has achieved significant results in the past in these areas, but the high network losses and the emerging pollutants show that further development is needed. The focus will inevitably turn to maintenance work and cost. Therefore, we think that the maintenance cost calculations should be a key part of future water supply and sewerage infrastructure development in Rio Grande do Norte.

Bibliography

- Alfieri, L., Dottori, F., Betts, R., Salamon, P. & Feyen, L. (2018). Multi-Model Projections of River Flood Risk in Europe under Global Warming. *Climate*, 6(1), 6, 1-19. <http://doi.org/10.3390/cli6010006>
- Alvares, C. A., Stape, J. L., Sentelhas, P. C., Gonçalves, J. L. M. & Sparovek, G. (2014). Köppen's climate classification map for Brazil. *Meteorologische Zeitschrift*, 22(6), 711-728. <http://doi.org/10.1127/0941-2948/2013/0507>
- Beck, H. E., Zimmermann, N. E., McVicar, T. R., Vergopolan, N., Berg, A. & Wood, E. F. (2018). Present and future Köppen-Geiger climate classification maps at 1-km resolution. *Scientific Data*, (5), 180214, 1-12. <http://doi.org/10.1038/sdata.2018.214>
- Bresch, D. N. (2011). *Flood Risk in Brazil*. Swiss Reinsurance Company Ltd.
- Bufa-Dórr, Zs., Málnási, T., Oravecz, O., Vargha, M. & Vecsey, A. (2021). *Magyarország ivóvíz-minősége, 2019 [Drinking Water Quality in Hungary, 2019]*. Nemzeti Népegészségügyi Központ.
- Coffel, E. D., Horton, R. M. & de Sherbinin, A. (2018). Temperature and humidity based projections of a rapid rise in global heat stress exposure during the 21st century. *Environmental Research Letters*, 13(1), 1-9. <http://doi.org/10.1088/1748-9326/aaa00e>
- Debortoli, N. S., Camarinha, P. I., Marengo J. A. & Rodrigues, R. R. (2017). An index of Brazil's vulnerability to expected increases in natural flash flooding and landslide disasters in the context of climate change. *Natural Hazards*, 86(2), 557–582. <http://doi.org/10.1007/s11069-016-2705-2>

- Farias, J. F., de Feritas Amorim, R. & Saraiva Junior, J. C. (2018). Gestão dos recursos hídricos no Rio Grande do Norte [Water Resources Management in the Rio Grande do Norte]. *Confins*, 34(1), 1-15. <http://doi.org/10.4000/confins.12886>
- Fiala, K., Barta, K., Benyhe, B., Fehérvári, I., Lábdy, J., Sipos, Gy. & Gyórfy, L. (2018). Operatív aszály- és vízhiánykezelő monitoring rendszer [Operational drought and water scarcity monitoring system]. *Hidrológiai Közlöny*, 98(3), 14-24.
- Földi, L. (2019). Climate Change and Our Water Resources. In Földi, L. & Hegedűs, H. (Eds.), *Effects of Global Climate Change and Improvement of Adaptation Especially in the Public Service Area* (pp. 203-219). Ludovika Egyetemi Kiadó.
- Lakatos, M. & Bihary, Z. (2011). A közelmúlt megfigyelt hőmérsékleti- és csapadéktendenciái [Recently observed temperature and precipitation trends]. In Bartholy, J., Bozó, L. & Haszpra, L. (Eds.), *Klímaszcenáriók a Kárpát-medence térségére [Climate scenarios for the Carpathian Basin]* (pp. 146-169). Magyar Tudományos Akadémia.
- Nerem, R. S., Beckley, B. D., Fasullo, J. T., Hamlington, B. D., Masters, D. & Mitchum, G. T. (2018). Climate-change-driven accelerated sea-level rise detected in the altimeter era. *Proceedings of the National Academy of Sciences*, 115(9), 2022-2025. <http://doi.org/10.1073/pnas.1717312115>
- Martins, E., Nys, E., Molejón C., Biazeto, B., Silva, R. & Engle, N. (2015). *Monitor de Secas do Nordeste, em busca de um novo paradigma para a gestão de secas [Drought Monitor in the Northeast, looking for a new paradigm for drought management]*. Banco Mundial. <http://doi.org/10.13140/RG.2.1.4238.8886>
- Silva, C. M., Spyrides, M. H. & Lucio, P. S. (2012). Distribuição Espacial da Precipitação sobre o Rio Grande do Norte: Estimativas de Satélite e Medidas por Pluviômetros [Spatial Distribution of Precipitation over Rio Grande do Norte: Satellite Estimates and Pluviometer Measurements]. *Revista Brasileira de Meteorologia*, 27(3), 337-346. <https://doi.org/10.1590/S0102-77862012000300008>
- Somos, É. (2011). A csöbe zárt ivóvíz... (vagy mégsem?). [Drinking water closed in pipes...(or not?)]. *Magyar Tudomány*, 172(12), 1425-1439.
- Szlávik, L. (2013). *Szembenézünk az árvizekkel*. [Facing floods]. Alföldi Nyomda Zrt.
- Tóth, T. (2019). Application of Natural Water Retention Measures in Flood Management. *Műszaki Katonai Közlöny*, 29(1), 139-152. <https://doi.org/10.32562/mkk.2019.1.11>
- Trolei, A. L. & Silva, B. L. (2018). Os recursos hídricos do Rio Grande do Norte: uma análise da vulnerabilidade territorial ao colapso no abastecimento de água [The hydric resources of Rio Grande do Norte: an analysis of territorial vulnerability to collapsing in water supply]. *Confins*, 34(1), 1-71. <http://doi.org/10.4000/confins.12901>
- Vale, T. M., Spyrides, M. H., Andrade, L. M., Bezerra, B. G. & Silva, P. E. (2020). Subsistence Agriculture Productivity and Climate Extreme Events. *Atmosphere*, 11(12), 1287, 1-21. <http://doi.org/10.3390/atmos11121287>

Online links in this article

- URL1: *Hungary Desertification and Drought*. <https://www.climatechangepost.com/hungary/desertification/>
- URL2: *Precipitação e Evaraporação. [Precipitation and Evaporation]*. https://www.agencia.cnp-tia.embrapa.br/gestor/bioma_caatinga/arvore/CONT000g798rt3p02wx5ok0wtedt3nd3c631.html
- URL3: *Új országos napi csapadékkorrekord született*. https://www.met.hu/omsz/OMSZ_hirek/index.php?id=3861&m=2
- URL4: *2020 a szokásosnál jóval melegebb, átlagos csapadéku év volt Magyarországon*. https://www.met.hu/omsz/OMSZ_hirek/index.php?id=2961
- URL5: *Climate Change 2007: Synthesis Report*. <https://www.ipcc.ch/report/ar4/syr/>
- URL6: *Controle de Enchentes [Flood Control]*. <https://www.ipea.gov.br/cts/pt/central-de-conteudo/artigos/artigos/231-controle-de-enchentes>.
- URL7: *Countries of the Danube River Basin*. <https://www.icpdr.org/main/danube-basin/countries-danube-river-basin>
- URL8: *A gestão de recursos hídricos no Rio Grande do Norte [Water resource management in Rio Grande do Norte]*. <https://progestao.ana.gov.br/panorama-dos-estados/rn>
- URL9: *Conjuntura Brasil dos Recursos Hídricos do 2019 [Brazil Water Resources Situation in 2019]*. http://www.snirh.gov.br/portal/snirh/centrais-de-conteudos/conjuntura-dos-recursos-hidricos/conjuntura_informe_anual_2019-versao_web-0212-1.pdf
- URL10: *World Water Resources by Country*. <http://www.fao.org/3/y4473e/y4473e08.htm>
- URL11: *Securing Water for the Poor in Northeastern Brazil*. <https://www.worldbank.org/en/results/2016/09/20/securing-water-poor-northeastern-brazil>
- URL12: *Pesquisa Nacional de Saneamento Básico do Rio Grade do Norte [National Survey of Basic Sanitation in Rio Grande do Norte]*. <https://cidades.ibge.gov.br/brasil/rn/pesquisa/30/84366>
- URL13: *A Bacia [The Basin]*. <http://www.cbhpiancopiranhasacu.org.br/site/a-bacia/>
- URL14: *The Hungarian water sector*: https://www.maviz.org/eng/the_hungarian_water_sector
- URL15: *Ivóvíz minőség, 2013 [Drinking Water Quality, 2013]*. <https://www.antsz.hu/data/cms65055/Ivovizminoseg2013.pdf>
- URL16: *Guide - Groundwater in Hungary II*. http://fava.hu/kvvm/www.kvvm.hu/szakmai/karmentes/kiadvanyok/fav2/fav2_eng.pdf
- URL17: *Továbbra is biztonságos a csapvíz fogyasztása Magyarországon [The consumption of tap water in Hungary is still safe]*. https://www.maviz.org/fogyasztoi_hir/tovabbra_is_biztonsagos_a_csapviz_fogyasztasa_magyarorszagon
- URL18: *A települések infrastruktúrális ellátottsága [Infrastructure of municipalities]*. <https://www.ksh.hu/docs/hun/xftp/stattukor/telepinfra/telepinfra18.pdf>
- URL19: *Vízügyi Igazgatóságok*: <http://www2.nyuduvizig.hu/?m=109>

Reference of the article according to APA regulation

Tóth, T. & Silva, M. B. (2021). Development Directions of Water Management by Comparing Rio Grande do Norte to Hungary. *Belügyi Szemle*, 69(SI4), 53-67. <https://doi.org/10.38146/BSZ.SPEC.2021.4.4>





Tamás Tóth

Changing Focuses Through the Progression of Hungarian Water Management

Abstract

Hungary is one of the best examples to represent the manifestation of hydrological extremes. Studying the history of Hungarian water management and examining our present show how water management has developed. As time passes, changing job scopes and the expansion of available tools are recognisable. During the development, water management experts have been heading from ad hoc interventions to coordinated complex planning and in the meanwhile the process shows in which direction the focus points have changed. The aim of this paper is to explore the way Hungarian water management is heading under the changing circumstances. It examines the place and role of Hungary in the development of water management. The author researches the correctness of the direction of development and the change of focus points in comparison with other countries. Building on past experiences, this paper seeks the answer for the question how water management will be in the future. Research results provide guidance on how Hungarian water management can be at the forefront of future modern water management.

Keywords: water management, engineering, development, history, future

Introduction

Water as an essential material plays a central role in life. Preserving the quality and quantity of water is one of the most important responsibilities of every nation. For this reason, water issues need to belong to the main focuses of public service, too. The nature of water is dichotomous as it ensures our very existence but also might destroy us. Our relation with water has always been particularly important. Valuation of actions might not be considered static under dynamically changing conditions. Planning processes are multi-factored and they change



according to the new demands on society. Throughout history, both water utilization and protection against water damages have been emphasized as key issues in Hungary. Extreme hydrological events occur frequently in Hungary. After the research of Hungarian water management, it is recognizable that ad hoc interventions turned into coordinated complex planning through the years and it can be noticed how the focus points of water management have changed over time. With the expansion of available modern tools, the job scope broadened. It is noticeable how the emphasis changes from building conventional big infrastructures towards informatics. I consider it important to notice that individual interventions in the past can only be evaluated ethically in the spirit and context of the given age. The question arises, where water science is heading to in the future? How the focuses have been changed as time passes? Do water management experts follow the right direction?

It is reasonable to assume that the focus of water management changes by the development over time. The goal of this article is to explore the changing directions of Hungarian water management and examine how the focus points changed along the journey. The research is based on the synchronisation of Hungarian water management development and its triggers. Conclusions might not be considered ultimate but they state recognitions based on the facts of our current knowledge and hopefully these can be useful regarding future's water management issues. Research results provide recommendations on how Hungarian water management could belong to the forefront of modern water management.

The Beginnings

What is water management? Shortly, water management is a planned activity to harmonize hydrological conditions with needs of society. The 'content of water management' has been constantly evolving as science is developing. The available toolset has grown. Over time, the concept scope of water management expanded but its main principle has always remained the same. It is discussed in more details in the chapter 'Classic Water Management'. Water-related interventions were always part of people's lives, but in the beginning water management did not exist in the classical sense. Given interventions were consciously carried out but not coordinated on a wider scale and there was a lack of comprehensive approach. In this chapter, I intend to show the beginnings to understand the triggers, but I do not consider these actions as 'water management'. I highlight only the main events shortly, without the aim of giving a deep and

complete historical overview. The following events serve as a good illustration to show the large-scale water-related interventions made by Hungarian predecessors. I deem the publication of Zsigmond Károlyi as the first comprehensive collection of Hungarian water management history (Károlyi, 1960). The pursuit of water damage remediation and water utilization has accompanied humanity since its inception.

Firstly, the emphasis was put only on the utilization of waters without any interventions. Over time, the idea matured in people to interfere in the given conditions and to try to protect themselves or to reach more effective water utilization. The earliest data about Hungarian water regulations are available from the 13th century (Bobics, 1885). At the former territory of the Hungarian Kingdom, Queen Mary, the wife of King Béla IV. ordered to dig a new canal for the Danube from Bratislava to Gönyű to protect their estates of Magyaróvár from floods. More specifically it affected the Great Rye Island and the Kisalföld region. An important milestone and source is the '*Tripartitum opus juris consuetudinarii in clyti Regni Hungáriáé*' in the Latin language (Werbőczy, 1514). It is the collection of customary laws of the country from 1514. It contains the legal background of property issues caused by changing riverbeds and property rights related to flood embankments and milldams. It states the necessity of private property restrictions in the case of water regulations.

The first Hungarian source about a flood embankment restoration is available from 1569.¹ King Maximilian I. (he is from the Habsburg dynasty) ordered in his decree in Article 21 to restore the damaged embankments of Great Rye Island. During those times these works were carried out by affected counties and were not financially supported by central funding. As an example, the Third Decree of King Matthias II. from 1613 marks the defence against the flood of the river Tisza as a duty of affected parties, the counties.² (The Hungarian Kingdom consisted of counties). He ordered the affected counties to build embankments against flooding to preserve their assets and let the arrangement be made among them. The territory of Hungarians was severely affected by flooding and constant water coverage was high. At that time, the main focus was on flood protection and probably flood protection was not synchronized with water regulation interventions yet. The first source about centrally financed works is a law by King Leopold I. from 1687.³ He ordered it related to the danger posed by the river Vág and Danube. He appointed commissioners to examine the issue.

1 Law XXI of 1569 on transferring the work of Bratislava and Komárom counties to the embankments of Danube at the Rye Islands.

2 Law XXVII of 1613 on making embankments against the flooding of the Tisza and other rivers.

3 Law XVI of 1687 on appointments of commissioners to examine the River Vág and the Danube.

To understand the development process of water management, we need to examine it in the context of history. Historical conditions fundamentally determined its speed of development. From the beginning of the 16th century, the Hungarian Kingdom waged wars against the former Ottoman Empire for over 150-200 years. During this time a significant part of Hungarian territories was occupied by the Turks and it led to deterioration and a substantial part of the country depopulated. In the late 17th and early 18th centuries, it became important to settle the degraded water infrastructure to rebuild the economy of the country. Water canal and water regulation plans were made by Dutch and Belgian engineers to help improving the economic situation. But due to lack of finance only a few plans were implemented. Navigation started to be in the focus to enhance the recovery of the economy. In 1723 the Royal Council of Governors was committed to turn various rivers and canals navigable to reach different areas to facilitate trade and thereby repopulate deserted areas.⁴ In the following years, during the reign of Queen Maria Theresa (1740-1780) further steps were made to improve navigability.⁵ The Institute of Engineering (Institutum Hydrotechnico-Geometricum) was founded in 1782, on the effect of Maria Theresa, by King Joseph II. (Fodor, 1955). It was an important milestone in education. The institute required 2 years of internship after 3 years of theoretical education. It was the second institute in Europe where the technical sciences were educated at university level. It probably significantly contributed to the development of a knowledge base in the area of water management in the following years.

In 1793, the Kingdom of Hungary started to build its first - and for a long time only - shipping canal according to the plans of József Kiss and Gábor Kiss (Kiss, 1792). The canal was named after Franz Joseph Carl von Habsburg-Lorraine, the King of Hungary as Ferenc I. The 238 km long Ferencz Canal was handed over to traffic in 1802. It was then the largest canal in the world that was navigable even by 650-tonne ships, while other European and American canals were suitable for 200-300-tonne vessels only. Figure 1 shows the plan of Ferencz Canal.

4 Law CXXII of 1723 on the installation of canals.

5 Law XIV of 1751 on the elimination of mills that are harmful to the community.

Figure 1: Ferencz Canal



Note: URL1.

In general, the development progressed from ad-hoc symptom-based interventions to the direction of more profound transformations. Before the 19th century, the most crucial problems were the frequently flooded large areas with constant

water coverage and the issue of navigation to reinforce the economy. Before the 19th century, Hungarian water management had not existed yet but its roots are detectable. Based on the foundation of high-level education, the 19th century brought the golden ages of Hungarian Water Management.

Classic Water Management

I deem that the beginning of classic water management in Hungary derives from the publication of József Beszédes's book in 1831 (Beszédes, 1831). He was the first to define the concept of water management in Hungary. He stated that water management is a science that is about making plans to manage and regulate water while taking into account the social and geographical situation of the river basin. As its goal, he defined the elimination of water damages and water utilisation. I consider his definition of water management very similar to the current generally accepted definitions. According to him, at that time there had not existed any country with national scale water management. Already in 1831, he recognised the importance of water basin perspective and he highlighted the difference of country border and river basin border. Beszédes recognised the necessity of coordinated planning on country-scale to avoid works that hinder each other. So, the catchment-level approach already emerged in 1831. At that time, water engineering in Hungary was only limited to carry out more or less independent water developments and there was a lack of unified water management activities.

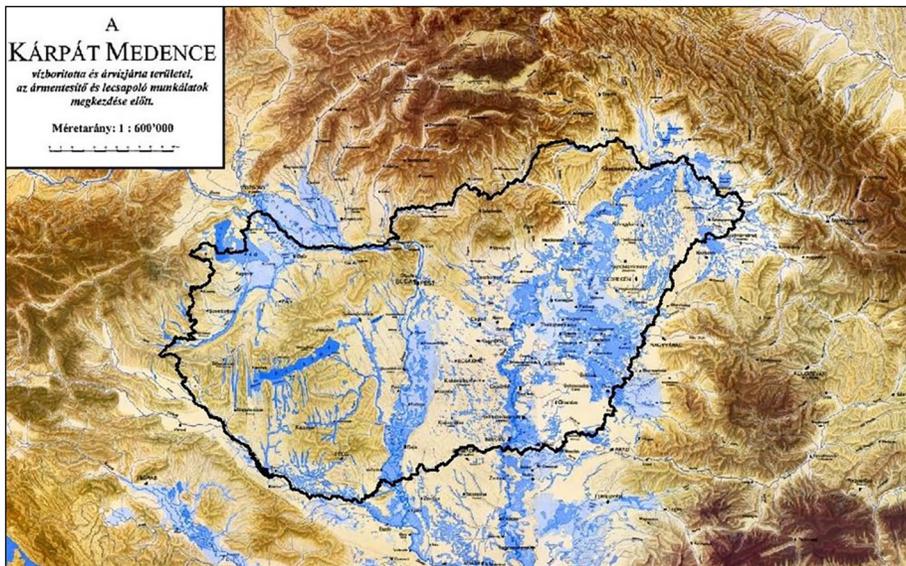
At the beginning of the 19th century, the Napoleonic Wars led to inflation and economic crises in Hungary. The demand for reforms emerged in society. Count István Széchenyi's reform program had brought the change in political views and society (Széchenyi, 1830). In his publications he noticed the importance of a regulated Danube and argued for the regulation of the Danube by presenting the positive economic effect of the regulation (Széchenyi, 1831). He fitted this high-profile water management program into the context of economic development (Széchenyi, 1833). Water regulation leads to safety and better navigation conditions for transport, which might increase trading. It would be followed by the strengthening of the industry that could lead to producing more profitable processed products. Along with this logic, the water regulation ultimately leads to the rise of the Hungarian economy (Széchenyi, 1831).

During this period the coordinated regulation of rivers was on the agenda. A comprehensive hydrological survey had already started at the main rivers in the 1830's. Floodplain areas of the river Tisza surpassed the Danube so the

issue of Tisza came to the fore. Large-scale plans were made by Pál Vásárhelyi recognised even by foreign experts (Károlyi, 1960). According to the plan of Vásárhelyi, Széchenyi started the regulation of the river Tisza in 1846. Figure 2. shows the permanently waterlogged and the temporarily flooded areas in the Carpathian Basin before the water regulations. Permanently waterlogged areas are in dark blue and temporarily flooded areas signed by light blue.

Hardly the water regulations started, the historical circumstances led to one of the most remarkable events of Hungarian history. In 1848 the Hungarian Revolution and War of Independence broke out, but the revolution was surpassed in 1849. Due to troubled historical circumstances, water-related developments were hindered. The issue of water regulations was reset on agenda only after the Austro-Hungarian Compromise of 1867.

Figure 2: *Permanently water covered and temporarily flooded areas in the Carpathian Basin before the water regulations*



Note: Hydrological Institute of Hungarian Royal Ministry of Agriculture, 1938.

In Hungary, due to the low-gradient river sections and the plain areas, flood management was still among the most urgent issues (Kvassay, 1917). Hungary founded the Institute of Water Engineering in 1879 under the direction of Jenő Kvassay (Kvassay, 1880). After the establishment of the institute the flood management and drainage works started to continue rapidly. The significance and volume of the work can be illustrated well by the fact that Kvassay referred to

it as the 2nd Hungarian conquest of the homeland (Kvassay, 1917). As an effect of water regulation, the cultivated land increased by nearly 30% and it made possible the increase of population by more than a third. The population of the country was 11,554,377 in 1850, and 15,739,259 in 1880 (Károlyi, 1960). Water management issues were merged under the scope of the Ministry of Agriculture in 1889.⁶ The first and foremost task of the water management under the Ministry of Agriculture was to prepare an integrated plan and program to continue the regulation of River Tisza.⁷ Subsequently, integrated plans were made for the Danube and other major rivers of the country. According to the new plans, they started the regulation of the rivers Kőrös, Bodrog, Szamos and Dráva. 106 million m³ of ground were moved during the work. To represent the size of the work, if we put the amount of ground moved on a rail, we would need 19 million 10-ton wagons. The train would be so long that it would circumnavigate the Earth almost three and a half times (Lászlóffy, 1940). The work done was also outstanding by European standards. Several foreign delegations participated in study visits. In the following years, as a result of the measures taken in the field of flood management, the situation has improved. Embankment construction progressed well. The effectiveness of flood management has been increased further by the development of the telephone network and also several pumping stations were built. River regulation works also benefited shipping. Hungary was willing to improve its waterways. Improvement was important for both domestic and foreign trade. Hydraulic engineering was developed further by Szilárd Zielinski, who introduced the use of reinforced concrete in Hungary. The ship sluice of Bökény designed by him is one of the first sluices built of reinforced concrete (Károlyi, 1960).

Other than water regulation, we know that one of the key parts of flood management is forecasting. The first experimental water level forecasts were already made in 1889, based on a method developed by József Péch. The first time the forecast was applied during the flooding of the Tisza in spring 1890 and they even published results on the expected water levels. At that time, water level forecasts were issued only in France and the present area of Czech Republic so it was a significant achievement (Lászlóffy, 1956).

Improvement of soil conditions and irrigation progressed more slowly. Isván Türr, who was one of the outstanding engineers of that age, argued for irrigation development. The Corinth Canal was built partly based on his plans, and he was

6 Decree 103 of the Royal Hungarian Trade Minister and Agricultural Minister in accordance with Law XVIII of 1889.

7 Law III. of 1894 on the further water regulation of the Tisza and Bodrog and on the relocation of the Ferencz Canal Estuary at Tisza.

also involved in designating the route of the Panama Canal. He approached the issue of irrigation from the point of view of economic development and set it in parallel to railway developments. He deemed that too many railway networks had been built too fast. Due to the large loans taken for railway development, not enough financial possibility remained for the development of irrigation. The expensive transportation costs and the repayment of the loans and interests hindered the development of agriculture and thus the national wealth (Türr, 1880).

Drainage was also important regarding drinking water quality and public health. Before drainage, the available water resources in the Hungarian Great Plain were of poor quality. Previously, artesian wells were not drilled, from which the population could have obtained good quality filtered water. At the turn of the century, significant progress was achieved in sewerage and water supply. Drilling of artesian wells spread to support drinking water needs. Experts recognised the necessity of addressing the issue of drinking water supply and sanitation in a coordinated way. It is interesting that in 1917, Jenő Kvassay, director of the National Hydraulic Engineering Directorate, evaluated the water management policy of the last 40 years, he considered the achievements in terms of water quality protection good and he ruled out further deterioration of the situation. Recently we know that water quality problems are far away from being solved. New emerging pollutants and microplastics pose risks.

Hungarian water management had already assessed the hydropower potential of the country in 1905. The result of the state scale assessment was published in a book titled 'Hydropower of Hungary' (Viczián, 1905). After some years, due to World War I (1914-1918), Hungary had to import a significant amount of oil and coal to generate electricity so Jenő Kvassay as a water manager deemed it also necessary to consider the untapped hydropower potential. Due to the lost world wars, the question of hydropower potential was stuck in the background in the following decades until the controversial bilateral issue of Gabčíkovo-Nagymaros hydroelectric dam project. After this debated issue the hydropower potential of Hungary mostly remained untapped and in the following years the attention turned to nuclear energy and renewable sun and wind energies. Due to industrialization, different interests and various water needs emerged and it induced the conscious management of water resources. In 1952, Hungary founded the Research Institute for Water Management. (Unfortunately, in the meantime the institution was abolished.) The first task of the institute was to size up the country's water resources and make water resources plans. The quantitative survey of water resources was completed in 1954, and then the qualitative survey was finished in 1958. These surveys were the base of planned water management. I consider the establishment of the institution

as a noteworthy step on the way to develop modern water management. Also, it was time to establish planned and unified water management. Independent public water administration was founded in 1953.

Some recognized the importance and the potential of a common joint forum to collect and share theoretical knowledge and practical experiences. There was a need for a scientific paper. So, they started to publish a new journal named ‘*Vízügyi Közlemények*’ (Water Management Journal) regularly and it played an important role in knowledge development of the water management society. The Journal served as a common platform for knowledge sharing and it helped to trigger discussions. It represented a cohesive force. Jenő Kvassay noted that beyond the scope of a specialised technical paper, engineers need to consider even the economic, administrative and legal aspects of their job. He stated, ‘... *without these we could only be highly educated but remain one-sided people.*’ (Kvassay, 1911). They recognised the role of self-education. Expanding of knowledge contributes to the general progress of the nation.

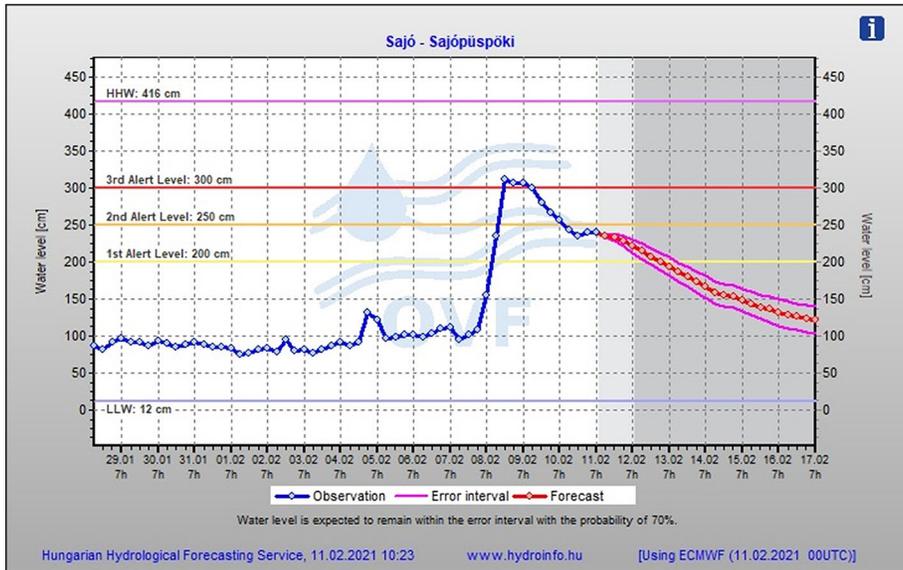
In summary, during this age the development of technology made the implementation of the most important classic water infrastructures possible. Hungarian predecessors achieved remarkable results in many aspects of water management. They implemented the infrastructural base of further development. Leading experts had recognized the economic context of water management. They understood the nexus of river regulation, navigability, agricultural water management and trade and sought to design measures accordingly. After this era, I consider the spread of information technology as the new engine for further water management development.

Modern Water Management

The advent of computer technology and the Internet has brought a radical change in water management. The beginning of modern water management can be traced back to the time of computers and the birth of hydro-informatics. Research focus has shifted to informatics from the late 20th century and in the 21st century. Previously unimaginable perspectives have opened in water management due to the application of information technology. However, we must not forget that the new possibilities might bring new dangers, too, so the application requires caution and professionalism. Computerization has led to significant improvement in forecasting. Modern water management is heavily based on data collection, data processing, and therefore on data-based monitoring systems. A new dimension opened in hydrography also by the significant amount

of information and automated measuring stations. Forecasting is based on monitoring systems. Specialists are constantly working on refining the forecasts by model developments or improvements. Figure 3 represents a 6-day hydrological forecast for the river Sajó.

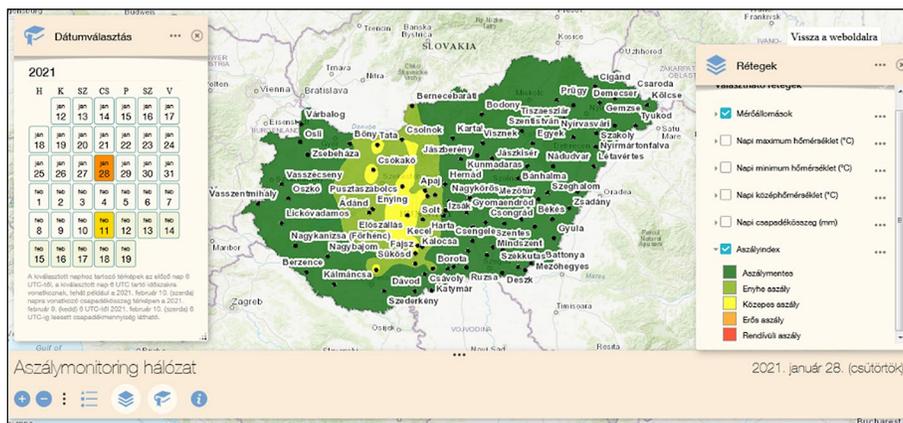
Figure 3: Hydrological forecast for the Sajó at the station Sajópüspöki



Note: URL2.

Different types of modelling also belong to the toolkit of water management professionals. Modelling can be successfully applied to sizing water networks, examining runoff conditions, valuing risk management, etc. Data management is a key factor as being the essence of modelling. New tools help to prepare and facilitate conscious planning. For example, Figure 4 shows the drought and water scarcity monitoring system developed and applied in Hungary.

Figure 4: Operational Drought and Water Scarcity Management System



Note: URL3.

The monitoring system calculates indicators based on various data gained from monitoring stations and is able to provide a few-day forecast by interpolation for the area of Hungary.

In terms of remote sensing, we can state that nowadays the way is open to apply satellite-based remote sensing. It can be suitable to detect environmental changes. It can be mentioned that the application of drones is rapidly spreading also in water management in the 21st century.

The recognition of climate change has also emerged as a new key factor in water management. Considering climate change, previous measures might get a new aspect. Climate change as a phenomenon was not yet known during the age of classic water management and therefore engineers could not plan with it. Past actions can be assessed only by having regard to this fact. Due to climate change, searching for new innovative solutions must be encouraged. Climate change gets into the major focus of water management experts. Due to climate change, the attention of Hungarian experts turns to both flood risk mitigation and water retention.

Concerning public utilities, it must be stated that the piped drinking water supply and wastewater drainage developed a lot in the 21st century. Hungary is almost completely covered by piped drinking water supply (over 95%) (URL4). Both the development of water purification and wastewater treatment technology improved significantly in the last decades and it is still progressing. It is in line with other European countries.

Regarding the international context, the reinforcement of common water policy was a milestone in water management. The European Union (EU) established

a common water policy called Water Framework Directive in 2000.⁸ It came into force to preserve and improve the quality and quantity of European waters. Hungary became a member state of the EU in 2004 therefore common principles must have been adopted. The directive turned the focus of Hungarian experts on water resources management, water quality and caused strengthening of international cooperation. Hungarian water management places great emphasis on participation in international working groups and committees. Comparing it to the age of classic water management I can recognize similarities. Even hundred years ago the CEO of the Institute of Water Engineering considered gaining foreign experience important e. g. 18 out of the total number of 37 employees were attended foreign study trips (Kvassay, 1890). In line with this I deem the reintroduction of longer study trips at least as important as attending in working groups. I recommend reviving this activity after the end of the COVID-19 pandemic in order to be able to gain deeper knowledge based on foreign practice. I suggest placing more emphasis on engaging in further international projects. In line with international aspirations, the importance of nature conservation and environment protection has increased in Hungary, too. Applicability of nature-based solutions is coming to the fore and sustainability is getting more important. Researchers work on facilitating circular economy.

It can be noticed that emphasis shifts from large-scale investments toward the direction of small-scale complementary interventions. The more infrastructure is being built the more maintenance and reconstruction is needed, so in countries with developed water-related infrastructure the role of maintenance and reconstruction will get in front of building over time.

I state that previously applied approaches during the time of classic water management were strongly technic- and economic-weighted and at present, it seems to be completed by more environmental awareness. Currently, the implementation of integrated water management is an actual challenge concerning socio-environmental-economic needs (Ijjas, 2019). I examined the leadership of the Hungarian water management. In terms of the institutional structure, it consists of 12 regional water directorates coordinated by a central institute named General Directorate. In total, it means 13 directors and 13 chief executive engineers. I stated that there is not any female person among these leaders. In my research, I stated that there has not been any female director yet in the course of Hungarian water management history. I suggest strengthening the role of women in the future. Education needs to be modernized in line with rapidly progressing digitalization.

8 Directive 2000/60/EC of the European Parliament and of the Council of 23 October 2000 establishing a framework for Community action in the field of water policy

Acquisition of specialized IT skills has to be the focus of Hungarian water management courses. I believe that water professionals might reach outstanding results in the future if they will be able to combine their engineering knowledge with IT development skills. Digitalization belongs to the area of modern water management that is waiting for the most to be discovered in the following years (URL5). I believe that the potential of artificial intelligence (AI) offers versatile solutions in practical water management. I think the practical application of AI will be marked as an important milestone in the history of water management if future generations will look back to our present time. Using machine learning, neural networks, etc., as artificial intelligence tools, might be useful for example in forecasting, optimization, decision-making support and so on. Researching the application of AI in water management might be the next breakthrough point for water management in the next decades. Developing a national digital water management strategy would be appropriate to set directions. International Water Association (IWA) published a document that contains a good illustration of versatile applications of AI and gives a comprehensive picture of the latest researches in Singapore (NG, Seah & Pang, 2020).

Conclusions

Having regard to water science, researches are widened and accelerated. Over time the number and diversity of water related scientists increased. Versatile experts and expanded knowledge made improvement of Hungarian water management possible and caused the blurring and spreading of focus points. Based on this research, it can be stated that the focus points of water management are not constant but dynamically changing over time. According to this principle, the focuses might alter continuously even in the future. The visions of engineers change and the role of nature, environment and sustainability get more emphasis as the decision-making processes become less economic-weighted. I consider it crucial to implement the inseparable technical, economical and environmental unity approach in order to do effective and sustainable future investments and plans. Understanding the history of development of the Hungarian water management can play an important role in guiding future complex engineering thinking. Comparing the present different individual disciplines to the age of classical water management, it can be stated that the disciplines are highly fragmented. It might easily lead to self-serving science, so in order to avoid it there is a need to have a clear guideline. Synthesizing fragmented research results is key in the direction of common development.

In many cases, the problems of the present are rooted in the past and solutions are already found by our predecessors. With our new technical abilities and skills, it is worth researching how experts in the past were thinking about a given issue. We should analyse their conclusions and solutions and examine if it is possible to address and apply them under the current circumstances. Addressing extreme events due to climate change, urbanization and demographic changes pose a new challenge for modern water management professionals so the education system needs to be adapted to these changing conditions. In the near future, focus turns to the application of artificial intelligence in water related issues. I believe that the application of AI will be the leading research area of water management by 2025. Digitalisation will be in the main focus of water management until 2050 at least. New outstanding results will be available by the combination of engineering and IT development skills. Acquisition of programming skills will get more emphasis. Therefore, new coding and other special IT skills need to be trained more by education to be able to reach significant results in applied science. By utilising the hidden potential of AI could the Hungarian water management reach a ground-breaking result and make significant progress in the coming decades. It would be appropriate to develop a digital water management strategy. Awareness of society might be improved by a stronger presence of Hungarian water management in the online space via social media. I stated that there was not any female director in the almost 150 years old history of Hungarian water management. Although the number of women involved in water management increased, I suggest further strengthening of the role of women.

References

- Beszédes, J. (1831). *Magyarországi hidrotechnikából próbául [About Hungarian hydro engineering as an experiment]*. Petrózia Trattner J. M. és Károlyi István.
- Bobics, K. (1885). *Vázlatok a Magyarországnak főképp dunántúli kerületében e század folyama alatt végbevitt vízszabályozásokról [Drafts of the water regulations carried out in Hungary during the century in the Transdanubian territory]*. Athenaeum Nyomda.
- Fodor, F. (1955). *Az Institutum Geometricum, az egyetem bölcsészeti karán 1782-1850-ig fenállott mérnöki intézet [The Institutum Geometricum, engineering institute operated at the university's Faculty of Arts from 1782 to 1850]*. Tankönyvkiadó.
- Károlyi, Zs. (1960). *A vízhasznosítás, vízépítés és vízgazdálkodás története Magyarországon [History of water utilization, water construction and water management in Hungary]*. Tankönyvkiadó.

- Kiss, J. (1792). Azon kir. társaságról, mely egy hajókázható csatornát ásattat Magyar országban [About the royal company that digs a navigable canal in Hungary]. *Magyar Hírmondó*, 421(1), 533.
- Kvassay, J. (1880). *Jelentés a kultúrmérnökök által foganatosított és tervezett talajjavításokról az 1879. évben [Report on soil improvements carried out and planned by cultural engineers in 1879]*. Weiszmann Testvérek Könyvnyomda.
- Kvassay, J. (1890). A talajjavítások terén 1889. évben tett intézkedésekről jelentése az Országos Kultúrmérnöki Hivatalnak [Report on the measures taken in the field of soil improvements in 1889 to the National Office of Cultural Engineering]. *Vízügyi Közlemények*, 1(1), 1-10.
- Kvassay, J. (1911). Előszó [Preface]. *Vízügyi Közlemények*, 1(1), 1-2.
- Kvassay, J. (1917). Vízgazdálkodási politikánk [Our water policy]. *Vízügyi Közlemények*, 7(4-6.), 261-267.
- Ijjas, I. (2019). *Integrált Vízgazdálkodás – A hidroinformatika születése – európai és globális integráció [Integrated Water Management - The birth of hydroinformatics - European and global integration]*. Typotex Kiadó.
- Lászlóffy, W. (1940). A kultúrmérnökök hatvanévi munkásságának eredményei [The results of the sixty years of work of cultural engineers]. In Trummer, Á. & Lászlóffy, W. (Eds.), *A kultúrmérnöki intézmény hat évtizede [Six decades of cultural engineering]* (pp. 64-88). M. Kir. Földművelésügyi Minisztérium.
- Lászlóffy, W. (1956). A hazai árvízjelzés tökéletesítése [Improving flood forecasting of Hungary]. *Vízügyi Közlemények*, 38(2), 316-328.
- NG, J. H., Seah, H. & Pang, C. M. (2020). *Digitalising Water – Sharing Singapore’s Experience*. IWA Publishing. <https://doi.org/10.2166/9781789061871>
- Széchenyi, I. (1830). *Hitel [Loan]*. Petrózia Trattner J. M. és Károlyi István.
- Széchenyi, I. (1831). *Világ [World]*. Landerer Nyomtató Intézet.
- Széchenyi, I. (1833). *Stádium [Status]*. Wigand Otto.
- Türr, I. (1880). Gazdasági viszonyaink javításához [To improve our economic conditions]. *Gazdasági Mérnök*, 4(40), 512-518.
- Viczián, E. (1905). *Magyarország Vízierői [Water Energy of Hungary]*. Magy. Kir. Földművelésügyi Minister.
- Werbóczy, I. (1514). *Tripartitum opus juris consuetudinarii inlyti Regni Hungáriáé [Tripartite book on customary law of Royal Hungary]*.

Online links in this article

URL1: *Dunai Szigetek. Ferenc császár csatornája*. <https://dunaiszigetek.blogspot.com/2013/02/ferenc-csaszar-csatornaja.html>

URL2: *Hungarian Hydrological Forecasting Service. Hydroinfo*. http://www.hydroinfo.hu/en/hidelo/hidelo_graf_tisza.html

URL3: *Operatív Vízhány Értékelő és Előrejelző Rendszer*: <http://aszalymonitoring.vizugy.hu/index.php?view=pattern>

URL4: *World Bank: Water and Wastewater Services in the Danube Region : Hungary Country Note*. <https://openknowledge.worldbank.org/handle/10986/22139>

URL5: *Szöllősi-Nagy András: Digitális integrált vízgazdálkodás, avagy merre megy a világ?* http://www.maszesz.hu/tudastar/download/978_32a8b429efb8e29b926156a7bfc80ace

Laws and Regulations

1569. évi XXI. törvénycikk Pozsony és Komárom vármegyék munkája felének, a szigetek áttele a Duna víztorkolása gátjaihoz és töltéséhez [Law XXI of 1569 on transferring the work of Bratislava and Komárom counties to the embankments of Danube at the Rye Islands]

1613. évi XXVII. törvénycikk, hogy a Tisza és más folyók kiöntése ellen töltéseket készítsenek [Law XXVII of 1613 on making embankments against the flooding of the Tisza and other rivers]

1687. évi XVI. törvénycikk a Vág és a Duna folyók megvizsgálására biztosokat neveznek [Law XVI of 1687 on appointments of commissioners to examine the River Vág and the Danube]

1723. évi CXXII. törvénycikk csatornák berendezéséről [Law CXXII of 1723 on the installation of canals]

1751. évi XIV. törvénycikk az országban a közönségre nézve káros malmok megszüntetéséről [Law XIV of 1751 on the elimination of mills that are harmful to the community]

1894. évi III. törvénycikk a Tisza és Bodrog mellék-folyók szabályozásának folytatólagos munkálatairól, valamint a Ferencz-csatorna tiszai torkolatának áthelyezéséről [Law III. of 1894 on the further water regulation of the Tisza and Bodrog and on the relocation of the Ferencz Canal Estuary at Tisza]

A kereskedelemügyi m. kir. minister és a földmivelésügyi m. kir. minister tájékoztató 103. rendelete, az 1889. évi XVIII. t.-cikk értelmében megállapított ügybeosztás tárgyában [Decree 103 of the Royal Hungarian Trade Minister and Agricultural Minister in accordance with Law XVIII of 1889]

Directive 2000/60/EC of the European Parliament and of the Council of 23 October 2000 establishing a framework for Community action in the field of water policy

Reference of the article according to APA regulation

Tóth, T. (2021). Changing Focuses Through the Progression of Hungarian Water Management. *Beltügyi Szemle*, 69(S14), 68-84. <https://doi.org/10.38146/BSZ.SPEC.2021.4.5>



Upal Aditya Oikya

Incorporation of Human Rights in International Relations

Abstract

Human rights have been firmly enmeshed in both studies and practice of international relations. The prevailing theories of international relations describe the function of those rights in substantially dissimilar ways, and it is apparent that their key statements include compelling arguments, suggesting an inconvenient apposition of state sovereignty with ideas of universal moral order. The development of the universal human rights regime of the United Nations (UN), the growth of international non-governmental organizations (NGOs), and, eventually, human rights activists have made it possible for human rights to be more deeply incorporated into state diplomatic activities. These trends, however, raise critical concerns about the practice of the state of human rights. Although there is some reversal of the norm, however, states continue to face humanitarian crises and show signs of human rights protection domestically and promotion internationally to varying degrees. In the same way, we are also seeing a major change in the principles and procedures of international enforcement of human rights. The goal of this paper is to address briefly certain variables relevant to the incorporation of human rights in international relations.

Keywords: human rights, international relations, liberalism, The Universal Declaration of Human Rights (UDHR), United Nations (UN)

Prelude

Human rights are generally considered and recognized as the basic moral rights of the individual, which are essential for the existence of human dignity (Hanson & Dunne, 2009). Human rights are therefore a means to a larger societal end, and the legal structure of it informs us of the rights deemed to be the most fundamental in society at a given time. Even considering human rights



as inalienable and as a moral characteristic of individuals not contravened by public authorities, rights must also be identified – in other words, built up – by individuals and codified in the judiciary (Donnelly, 1999). Whilst theoretical and even spasmodic rights have a long tradition, it was in America and in France's eighteenth-century revolutions that national politics were developed based on broadly shared rights. Yet human rights remained, amid the rhetoric of universality, mainly a domestic matter to be embraced or not accepted until recognized in international law in 1945.

From the classical liberal perspective, a good society bases itself on the respect of equality and freedom of people, guaranteed by the application and recognition of the basic lawful rights of the individual. Liberalism is usually a synonym for personal freedom. However, previously it was imagined that the state, and not its inhabitant, is the fundamental component in international relations (Hanson & Dunne, 2009). Rather the central concept was claimed to be the state sovereignty and non-interference in states' internal matters. In this way, the topic of international human rights transfers liberalism into a realist world (Forde, 1998).¹ Human rights in modern international relations, to paraphrase Bentley Charles Merriam, represent the best of times as well as the worst of times (Forsythe, 2012). Revolutionary developments occurred during the half-century after World War II in terms of the diplomatic practice of internationally recognized human rights. In the Charter of United Nations, we can find the conception of human rights, which was not the case with the Covenant of the League of Nations. The Member States of the United Nations negotiated an international bill of rights, which codified that individuals had certain fundamental rights that had to be upheld and respected and later on supplemented by other treaties and declarations. In the first decade of the 21st century, the ICCPR (International Covenant on Civil and Political Rights) was formally adhered to by more than 160 states (the membership of the United Nations was 192 in 2010) (Hanson & Dunne, 2009). There have been some more impressive regional developments. In 2010, the Council of Europe, consisting of 47 States have ratified a regional convention on civil and political rights, which is generally recognized in that region, and in addition, established an international tribunal for the resolution of conflicts arising under that treaty. A supranational court to provide binding decisions and a regional convention on human rights have also defined the Western Hemisphere regarding their foreign affairs.

All states officially recognize the Geneva Conventions of 1949 and take the view that even parties participating in armed conflicts should uphold such personal

1 For an excellent discussion of varieties of liberalism and realism.

protections. In 1993 the High Commissioner of Human Rights was approved by the UN General Assembly. In the mid-90s, the United Nations Security Council formed international criminal courts to prosecute the perpetrators of genocide, crimes against humanity, and war crimes individually in the former Yugoslavia and Rwanda for violations of the laws of war, which revived the international criminal responsibility after the 1940s Nuremberg and Tokyo trials. In 1998, the statute of a standing international criminal court with jurisdiction identical to the two ad hoc courts was accepted by a diplomatic conference in Rome. A United Nations summit meeting in 2005 reaffirmed the concept of Responsibility to Protect (R2P). Henceforth, while sovereign states were solely responsible for the defense of human rights in their territories if states proved unable or unwilling to avoid mass atrocities, it was the responsibility of third parties to intervene. Other development includes the key point that the human rights are not anymore considered as the domestic jurisdiction of a state.

In theory, regarding the treatment of the individuals, the States had to respond to the international community. Thus, foreign affairs now include not only the topic like trade & war but human rights, as well. Upon considering the human rights universally applicable, some attention has been paid to the universally recognized rights. Foreign affairs include the governance dimensions in the context of public policy management of policy matters (Rosenau & Czempiel, 1992). Part of this international governance was the commitment to human rights. Many national constitutions and many domestic public policies have long been influenced by questions about the fair value, equality, and health of individuals. Since 1945, whether the distribution of power is bipolar, multipolar, or unipolar, foreign affairs have been greatly influenced by the same questions regarding individual autonomy, dignity and security (Brilmayer, 1994).

However, perhaps the existence of inhumanity, which no other situation captured so well, when the Mao regime-induced famine in China from 1958 to 1962 costs nearly 30 million lives (Forsythe, 2012). The international community was not only unable to respond, but even several externals denied the major occurrence or incident of the catastrophe. The famine of Mao made him a bigger mass murderer than Stalin or Hitler if you judge the events by the number of lost human lives. The twentieth century was not precisely a good period for the pursuit of liberal values with much of its records of mass murder and mass suffering. About 35 million people have been estimated to have died the military conflicts in the 20th century; however, perhaps between 150 and 170 million people were killed by their governments by political assassination or mass misery (Rummel & Horowitz, 1994).

David Rieff, a reputed journalist was very perceptive in suggesting that the 20th century had the highest standards and the worst realities in contrast with the previous century (Vogel, 2003). Some have historically taken the view that European communism has been a dangerous game, despite the fall of the communist economy elsewhere, including China and Vietnam, and those who wanted significant global actions for human rights were naively optimistic (Mearsheimer, 1992).

The rise of militant Islamists or Islamic jihadists seemed to confirm this shadowy view of the uninterrupted human condition in the post-Cold War world. The Cold War ended therefore not with the absence of 'realists', those who contend that human rights in international relations must be returned to a self-interested sovereign state. However, ironically democratic realists like Henry Kissinger who were prepared to sacrifice democracy and foreign rights to advance the interests of their State, no matter how much they might be philosophical Liberals in their home countries in support of human rights and democracy.

Collectively, democratic communities had the right to protect themselves. The question arises whether, by compromising other's human rights, a democratic society can promote its protection and prosperity or not. Also, statements on universal human rights acknowledged that it was not easy to interfere with human rights issues in a little room of policy that is left over by intense national rivalry without a central administration (Nossal, 1982).

Human rights and international relations in the contemporary world

Many researchers who work in the field of international relations have some sort of dilemma about human rights in contemporary discourse on world political issues. Human rights are a polite fiction in a geopolitical world governed by the claims of states to be exclusive in their jurisdiction. At least this is what political realists claim, who have been the dominant voice in international relations since the discipline arose (Hanson & Dunne, 2009).

Liberals argue that it is sensible for states to follow policies that are consistent with the standards of human rights. Constructivists, albeit for various reasons, are also critical of realism. The states argue that for purposes of identity and status, they are following human rights' goals. It reveals a significant philosophical question about the difference between 'truth' and our interpretive and explaining theories since there is an active discussion among key theories about IR as to how human rights are and why they are promoted by actors. If we consider human rights as a global culture, then we have the inherent right to ask the states and other actors to know about their duties, when it is being

systematically denied. Two areas of international responsibility will be the subject of the debate. Firstly, because of their duties under the various human rights treaties, where all states have a responsibility to protect themselves. The second dimension of international responsibility relates to states' bonus to serve as humanitarian rescuers in situations where a state fails, or a government commits severe human rights violations (Hanson & Dunne, 2009).

The normative study of international relations (IR) suggests its subject matter is 'the world of sovereign states'. In the mainstream IR, it is often popular to treat countries as rational actors trying to optimize their strength and stability. Both theories are based on what IR scholars call anarchy. In this word, the meaning is not a perpetual state of war, but the lack of an 'international state', which has the authority and power to establish peace (Hanson & Dunne, 2009).

Human rights as soft law

For many players in foreign affairs, the official long-term objective is the establishment of the rule of law in support of human rights. Thus, it implies in international affairs in terms of human rights principles, as well as on those general norms which lead to cases of international and national courts protecting human rights. Cases of the Court will turn international legal standards into explicit rules providing for concrete safeguards. In this view, international human rights law will become a hard law. This is an ambitious objective, already partially achieved.

The key type of soft law which is covered by the non-judicial means such as state foreign policy, the activity of NGOs e.g., Amnesty International, the action of non-profit corporations, and the actions of the private individuals, by paying special attention to international human rights norms. When these actors follow human rights norms and principles through their different actions, this can often have a larger impact and effect than through court proceedings (Hanson & Dunne, 2009).

Global international relations will be significantly strengthened by getting Western Europe's regional international law closer to its interlocking human rights principles, as laid down by the European Court of Human Rights and the European Court of Justice – the latter ruling on some human rights issues, even though it is a forum on economic issues. Only symbolic wins on topics like the persecution of foreign torturers have been made as US courts have ruled on certain human rights issues that concern international affairs. Yet, aside from the courts and the hard law, one can make progress on human rights. The military war is a very simple example in this point. Since 1864, a variety of treaties have

codified different legal protections for individuals who are not engaged in armed conflict. A long history of normative is now visible in what is called Law on the Protection of War Victims of the Law on Human Rights in Armed conflict or the International Humanitarian Law. These legal principles are the subject of numerous books and even a few libraries. The number and national laws arising from it, however, in the last 140 years, in the national and international courts, which have important or prominent cases, is minimum by any way of estimation. The relative lack of cases of international human rights' legislation in the armed conflicts (except for Germany after World War II) does not mean that the law does not extend to armed conflicts. Instead, the legislation is primarily sponsored by the military and political decisions (as far as it is) and individual efforts by organizations such as the International Red Cross Committee (any relevant macro-evaluation, even if it is likely to point some significant occasional cases in court concerning international humanitarian laws, such as the US Court's decision in Hamdan in 2006 that the US military prison in Guantanamo Bay on the island of Cuba was subject to the 1949 Geneva Convention) (Hanson & Dunne, 2009).

A variety of human rights lawyers are still calling for more tough human rights legislation. This is a laudable goal from one point of view. The Organization for Economic Co-operation and Development (OECD) States support the idea of equality before the law for every individual. Whoever violates the law would be punished without any prejudice e.g., 'political consideration'. However, the pursuit of universal human rights principles by hard law rulings is unlikely to happen on a daily basis in the next century – and should not happen in all circumstances. All concerns that policymakers face problems - whether International courts are established, whether they are funded by adequate political and material resources and whether national courts should be encouraged to resolve human rights - on delicate foreign policy issues. The classic problem of soft law decision is when and how far human rights problems can be driven to the detriment of conventional security and economic considerations. This is the dilemma between realism and liberalism. International policies are inescapable in the management of contradictions (Hoffmann, 1977). As a result, the politicians also find it appropriate to compromise between promoting human rights and that of another public interest, such as physical protection and/or economic welfare. Many governments are still repressive and lack significant interest in supporting democratic or other rights, even following a 'third wave of democratization' (Huntington, 1991). Furthermore, in liberal democracies, public and especially corporate opinions do not always or easily support the national costs to promote foreigners' rights. As one author wrote, even in the 90s, those involved in international human rights faced several 'structural'

constraints (Donnelly, 1986). Policymakers, particularly those in OECD countries, are operating in this setting, where there can be a genuine debate about how best to advance human dignity and what can be achieved with a fair prospect of success. In the field of application of the law, political decisions also affect the enforcement of the law, including in the OECD states. More clearly, political decisions based on policy choices and power considerations are entangled in several ways with decisions mandated by legal rules. International affairs present the same basic condition, but with a much greater focus on political decisions in the process of soft law, and relatively giving less emphasis on hard law arising from courts in the adjudication process.

Conclusion

In conclusion, it may be assumed that human rights are now a permanent aspect of foreign affairs. The relation between mainstream IR and human rights is both constructive and challenging at the same time (Hanson & Dunne, 2009). It is constructive in the view that a standardizing choice of where to begin—with a world of states or a world of individuals—inevitably leads the scholars to consider the effect of the actors on the other side of the ledger (Hanson & Dunne, 2009). The challenging aspect would be that it needs activists to be conscious of the dynamics of the world political system and the simple but inconvenient fact that there are always conflicting claims of justice on the part of various actors. The foundation of adequate resolution is certainly not necessarily the demand for fundamental rights of one constituency (Hanson & Dunne, 2009). In the practice of states, two elements of human rights protection need to be present in any claim that standard cascades are effective. Firstly, the internalization of principles of human rights globally, where citizens' rights and privileges are incorporated in national social and legal practices. Second, the externalization of these principles can be seen as a dedication to international human rights regimes and the recognition of an obligation to uphold human rights where violations are visible in other nations (Hanson & Dunne, 2009). The formulation of 'Responsibility to Protect' (R2P) leads to this second aspect of externalization (Hanson & Dunne, 2009). At the same time as granting sovereignty primacy—as well as responsibility—it focuses attention on the need for states to act outside their borders and even against other states, in order, as Nicholas Wheeler put it, to 'save strangers' (Hanson & Dunne, 2009). The need to participate in early warning and conflict prevention has also been recognized by state practice, and this is an increasing field of IR study (Hanson & Dunne, 2009).

References

- Brilmayer, L. (1994). *American Hegemony: Political Morality in a One-Superpower World*. Yale University Press.
- Donnelly, J. (1986). International Human Rights: A Regime Analysis. *International Organization*, 40(3), 599-642. <https://doi.org/10.1017/S0020818300027296>
- Donnelly, J. (1999). The social construction of international human rights. In Dunne, T. & Wheeler, N. J. (Eds.), *Human Rights in Global Politics* (pp. 71-102). Cambridge University Press. <https://doi.org/10.1017/CBO9781139171298.004>
- Forde, S. (1998). Ways of War and Peace: Realism, Liberalism, and Socialism. *American Political Science Review*, 92(3), 678-679. <https://doi.org/10.2307/2585493>
- Forsythe, D. (2012). *Introduction: Human rights in international relations*. In *Human Rights in International Relations*. Cambridge University Press. <https://doi.org/10.1017/CBO9781139059114.005>
- Hanson, M. & Dunne, T. (2009). Human Rights in International Relations. In Goodhart, M. (Ed.), *Human rights: Politics and practice* (pp. 59-74). Oxford University Press. https://www.researchgate.net/publication/43525803_Human_Rights_in_International_Relations
- Hoffmann, S. (1977). The Hell of Good Intentions. *Foreign Policy*, 29, 3-26. <https://doi.org/10.2307/1148528>
- Huntington, S. P. (1991). The Third Wave. Democratization in the Late Twentieth Century. (University of Oklahoma Press, 1991. xvii, 366). *The Review of Politics*, 55(2), 348-351. <https://doi.org/10.1017/S0034670500017435>
- Mearsheimer J. (1992). Disorder Restored. *Journal of American Studies*, 27(3), 465-466. <https://doi.org/10.1017/S0021875800032503>
- Nossal, K. (1982). Duties Beyond Borders: On the Limits and Possibilities of Ethical International Politics. *Canadian Journal of Political Science*, 15(2), 421-422. <https://doi.org/10.1017/S0008423900058807>
- Rosenau, J. & Czempiel, E. (Eds.) (1992). *Governance without Government: Order and Change in World Politics*. Cambridge University Press. <https://doi.org/10.1017/CBO9780511521775>
- Rummel, R. J. & Horowitz, I. L. (1994). *Death by Government: Genocide and Mass Murder Since 1900*. Routledge. <https://doi.org/10.4324/9780203793756>
- Vogel, T. (2003). A Bed for the Night: Humanitarianism in Crisis. *Ethics & International Affairs*, 17(1), 169-170. <https://doi.org/10.1017/S0892679400008376>

Reference of the article according to APA regulation

- Oikya, U. A. (2021). Incorporation of Human Rights in International Relations. *Belügyi Szemle*, 69(SI4), 85-92. <https://doi.org/10.38146/BSZ.SPEC.2021.4.6>



Viktor Németh – Csaba Szabó

The characteristics of mediation according to fields of application

Abstract

Mediation has various features as being a special communicational endeavour regarding to the agreement of two or more parties in a conflicted situation. Presenting these features allows to draw the conclusion that mediation is beyond simple conflict management, thus, it has independent institutional framing both theoretically and practically. This paper reflects on the Participation Theory of Communication (PTC) as a theoretical framing, although the practical implementation stands in its main focus. By presenting all application fields of mediation – family, workplace, communal (urban), peer (school), healthcare and intercultural (minority) mediation – based on the author’s personal experience as practicing mediator, the specific features of the mediation process are demonstrated.

Keywords: family mediation, community mediation, workplace mediation, peer-to-peer mediation, intercultural mediation, participation theory

Introduction

The number of applicable areas of a mediation protocol is practically unlimited. The legal regulation supports rather opportunities, and does not regulate by limitations. Only penal processes limit in certain cases the application of the restorative process.¹ The practical distribution of mediation will be decided by its applicability, usefulness for the participating agents. The time of distribution of mediation will be determined by its embedding into bureaucracy

1 In cases where mediation cannot replace penal process, it can be used as additional, damage repairing or contact settling procedure. The court even takes participation in reparation processes into consideration in rendition of the verdict (Fellegi, 2009).

and professional coherence. Professionally the most coherent field is presently healthcare and the medical profession within that. Below, the fields will be presented and interpreted on participation where mediation processes are applied in highest case numbers.

Family mediation

Mediation is mostly used in Hungary in case of problems in connection with crises at several periods of partner relationships. On this field we have the highest number of cases, which has several reasons, seemingly divergent from each other. To make this most complex and most complicated type of mediation understandable - which has probably the highest importance – we need a detailed examination of their reasons.

In case of mediations completed by us, problems in partner relationship were in the background. A partner relationship is the most intimate scene between a woman and a man. On this scene the presence of more agents is not possible. As in case of appearance of a third agent, it is not the intimate scene between a woman and a man anymore, which could be later the bases of a family. Several psychological and theological schools of thought skim over this type of connection. Psychologist Feldmár means that the emergence of a connection between woman and man means the death of the ‘ego consciousness’ and the birth of the ‘we consciousness’, and childbirth means the death of ‘we consciousness’ and the birth of the family companionship. (Feldmár, 2006) With these ‘deaths’ go hand in hand the death of the connected communication.

The communication changes in connection maintain the relationships among family members, which can be stronger in certain cases than the forced sustenance of the marital connection. Here is shown the thesis of PTC, according to that the scene means a connection of the own worlds among the agents (Horányi, 2007) – because of the communication characteristics for and driving of the connection – and not the physical scene categorically, which is the consequence of the forced cohesion of connections. In the family as an institute, the single members have their own roles and fields of activity and a considerable part of the operations in connection with these fields of activity cannot be assigned to another member of the family. These roles and the connecting tasks, common activities can function if the connection between woman and man – that means the basis for the family – is based on stable, calculable and cooperative fundamentals, in spite of any changes. The basis of functioning is assured by the continuous connection and cooperation of the two agents. The agents do not make

public a part of their own world for the partner anymore, only the part needed for a cooperation in connection with the children persists shared. On a certain field it is important to remain a problem realising and problem-solving agent - and both parents aspire after that - as the connection to the education and the future of the child, etc. are important. The intimate connection between woman and man - starting from the beginning and excluding any others - has to be closed, and one of the partners has also to mourn it regularly (Viorst, 2002). It is a rare constellation that both partners are - nearly - at the same emotional level in a connection between a woman and a man, regularly one of the partners is not bound to the other one anymore, e.g., feelings gone away, in love with another person, etc. Release and new basis of the connection are only partial, as the children mean a continuous connection between the parents. So, the partial conclusion of the own world and the regular operation of another part need similarly a common will, a partner connection with the other agent, just like in any other mediated situations.

For people having acute problems in a partnership connection, it is sometimes enough to offer a safe scene for mediation and the attention of mediators to articulate fears and grievances. A meeting on a common scene might be in an acute case enough to accept the situation and to understand the feelings of the other partner.

The case of chronic, long-lasting problems in the partnership is much more complicated and complex. Here the partners have not been living together on the scene of intimation between woman and man for a long time already, but they further fulfil their roles - or at least a part of them - to meet expectations of society and environment. This situation the agents experience in their own worlds in a very different way. Some people realise it as a dismal failure and escape into psychosomatic diseases. Others use the aches for continuous regeneration of play situations (Berne, 2008), because in this way they stay in a kind of connection with the other party. Others blame themselves and go to therapists and healers to change themselves in order to sustain earlier conditions.

The problem, i.e., the gist between the present and the desirable situation is that one of the parties identifies the requested future state in chronic partnership situations with the past state before the problems. This cannot occur, because the changed situation between the parties makes only the realisation of another desired status possible. Even in the case that both parties would like to restore the situation before the problem in the past - i.e., if their goals correspond - it cannot be performed in the same way.

This anomic situation brings along uncertainty and fear, the agent means the desired situation to be available by attack, destruction and neglect of the other party.

The parties usually turn to external help in this period, which can be exclusively the legal way at that time, except if they intend to get the other party into therapy. Through this step the agents give up the opportunity to control the problem. The goal is in this case not the resolution of the problem but defeating the other party by legal means. The agents form a coalition with their legal representatives. The legal representative has only availability to the knowledge within the institutional system of law. In most cases this information is compromising and presenting the other party in a negative way. Law judges and applies the logical system of winner-looser, because one of the parties is ‘in the right’.

There are situations where even law is unable to decide, for example in child custody. In such situations the legal representatives can present an infinite interlocking and explanation of arguments and counter-arguments, so that the judge will continuously adjourn the case, or decides – which corresponds legal regulations but not the interest of the parties or of the child -, or he can send the parties to mediation. In latter case they became again agents with problem realising or problem-solving function after years of litigation. In mediation the parties need time to realise that they will change the existing situation and to act as an agent again and bring own decisions for their own future.

Family mediation was made obligatory² in Britain from April 2011. Those only may enter legal procedure who tried mediative process verifiable unsuccessfully. In Hungary the Family Law Book of the Civil Code (Boros, Katonáné Pehr, Kőrös, Makai & Szeibert, 2014) has introduced the term obligatory mediation from 15th March 2014. In order of settlement of the regulatory law of parents, for maintaining contact between parents and children and for child custody at third party, including cross-border legal matters, too (Boros et al., 2014). It is a very important milestone in the regulation, but it functions practically in a small part only because of unfamiliarity and novelty of the process.

Workplace mediation

The workplace as an institute is the scene of the realisation of several interpersonal relationship systems. On one side it is the scene of actions of employees according to developed and expected protocols on the given workplace. On the other side it is also the scene of private interpersonal connections developed by coherent, frequently from each other dependent duty cycles.

2 The participation at mediation information and assessment meeting (MIAM) was obliged.

Employees join forces for centuries to increase enforcement of interest in connection with work and to try to achieve goals. The private communication descending from interpersonal cooperation increase or decrease effectivity and through that also marketability of a given economic organisation in an unmeasurable way.

Labour mediation

To the world of labour are not only concrete labour disputes and problems connected, during working the employees get into interpersonal interactions practically in each minute of the work time. Such interactions can induce disputes – even unintended – and these can be professional or absolutely personal, and occasionally these two fields can be mingled.

In research from 2008³ were workplace conflicts examined, each incident defined as conflict which can interrupt work process. Employees meant that the main reasons of conflicts were due to personalities or excessive selfishness. To indulge in personality means an attack against another person in a conflict, while egoism means – just in the opposite way – a strong effacement of the other party from communicative point of view. The people asked felt themselves unmotivated, angry and frustrated. In the countries of the examination people spend at an average 2.1 hours with conflicts in a week, that means, in the United States only, 370 million work days a year. These conflicts are mostly not developed about unsolved concrete work disputes but they are based on the relationship between the parties. The responders mentioned as solution the timely recognition of the personal line, the increase of the time spent for the solution of the conflict and the involvement of a mediator. The participation at a conflict treatment training was refused by a significant majority, but the time for learning about others - either in form of community events (team building trainings) or in form of concrete mediation – was supported.

In cases getting into the workplace mediation process, the stress due to work, overload and not appropriate interpersonal connection are the sources of problem. An example for that is the case of a mediation between the general manager and the commercial manager of a big multinational company in Hungary

3 The research consisted of two main periods. In the first one 5000 employees of nine countries – United States, Brazil, United Kingdom, Denmark, France, Germany, Ireland, the Netherlands, Belgium – were asked about their relationship to workplace conflicts. In the second one the employer perspective in 660 workplaces was examined in the United Kingdom – incorporated the HR departments - the same subject.

a few years ago⁴. The general manager intended to give the commercial manager notice, though it was not supported by any performance indicators. Before an employment-related process the parties agreed on mediation. The starting situation of the mediation was how to cancellate a contract by the agents without an employment process. In contrary to that neither the place of the real problem nor its solution was connected to the performance at the workplace, to the amount and quality of work performed or the professional personality of the other agent. To realise that it was indispensable to present the problem in another scene – with its apparent perpetrator - the other agent together. The identification of the real situation is frequently enough to sense the previously problematic meant situation in another way by the agent. So, the agent will have the opportunity to find the steps leading to a solution – like it is shown in the problem mentioned above.

Mediation guides the agents, by realisation of a safe scene, in a direction where they can present own interests and necessities based on own resources and earlier positive experiences.

Communal (urban) mediation

In the following will be discussed (more detailed) the mediation cases with the most participants and their relations.

The number of participants may reach even 40-50 persons, the results of their mediation may influence even towns with citizens over thirty thousand. The high number of participants could seem to be unintelligible and unmanageable on first look, considered the available time only. How can be so many own worlds presented and agreed about within so short time?

Community mediations can be shared – according to my experiences collected – in two main groups as follows: (1) the aim is the solution for a given and by each participant in the same way regarded problem; so, for example the change in traffic regulation in a city, (2) restoration in a concrete damaging event, i.e., in the course of a victim-offender mediation⁵ support and hearing of the partners, or participation of others – not directly met in the case – as listeners. So can be for example a school ruck, where both the offended party and the offender or offenders and supporters are present, who help the parties to find the best solution

4 The mediation process was made with a mediator together in 2011.

5 Perpetrator-victim mediation, or restorative process, is a mediation process where a damage will be restored.

for atonement. In such cases the supporters can be parents, friends, class mates and also further participants like teachers, educational psychologist, or also a person named by the victim and not met in the given case directly (Herczog, 2004).

Community mediations are also carried out to change a given sample or habit or to set up an earlier not existing, new order. Interests and necessities are perfectly clear, they are not, or only at a very small part hidden. So, the topics of community mediation sessions are statements of problems and search for solutions at a conscious and rational level.

The key question for mediators is the selection of proper representatives of community interests. Persons with appropriate knowledge and preparedness are needed to represent the community at the sessions, for a proper visualisation of the problem to be solved and for expression of the connected demands and needs. Among mediators are people who only deal with preparations. The preparative mediators are not present at the sessions. The mediation is led by two mediators and they are supported by a minute writer.

Agents in coalition

During a community mediation, agents get into coalition with other participating agents. The own capacity can be complemented with capacities made available for each other, which can be used for realisation and solution of the problem and also in communication (Horányi, 2007).

A sample for that is a community mediation initiated by an architect general of a Mayor's Office in a Hungarian city, as presented afterwards⁶:

The regulation of the traffic order in the city has not followed a uniform conception for the last decades. Decision makers did not agree with other parties interested and competent in these questions, due to other problems isolated decisions were made about the traffic order of the city. Agents using several areas of the city complained in the Mayor's Office but no appreciable changes were generated by the private complaint. What associates of the Office could do, was limited on listening to and registering of the complaints. It generated a newer problem – intensifying the other one – because through that the associates of the office lost a lot on professional authenticity.

In the evolved situation the associates of the Mayor's Office initiated any kind of reconciliation in vain, the citizens did not appear or did not consider the initiators of such professional forum's objective. The architect general of the city has previously taken part in community mediation process as observer and so

6 The mediation was led together with three mediator colleagues, in two parts, in 2013.

has known methodical, effectivity financial and constructional implications of the procedure. Altogether two mediation sessions were hold, lasting each of them for four hours.

At the mediation session the public suggested after a few formal questions that the persons belonging to the several districts should start to measure, mark and note problems with traffic order separately, with the help of an A0 sized map: and when they finished to bring them to the attention of the whole population. The problems starting up were walked through several times by each agent group.

The second session took place two weeks later, with the same participants, working this time on solution of the traffic problems collected at the first occasion. The first filter of the solutions were the demands of traffic participants, the second one the traffic policing regulations, and the third one the low financial opportunities of the city.

The groups made altogether 57 solution proposals in coherence with traffic policing regulations, with opinions of professionals of the city's traffic department and satisfied the demands of the users of the city – and these all were solved at a very low budget. The proposal was overtaken by the Traffic Department of the Mayor's Office.

The basis for success in above cases gave the coalition of agents with - earlier not coinciding – preparedness, knowledge and competencies at a common scene (Horányi, 2007).

The agents with this preparedness participated – accompanied with a coherent and appropriate communication – both at works of small groups of several districts and also at questions meeting the whole of the city. This latter one has a key importance as at the beginning of the mediation session proposals were assigned to the target and associated priorities. In this way, the necessary changes, needed to meet the goal of the whole community, could be found. Both at taking into account problems in connection with traffic order and at elaboration of solutions complied with previous priorities, the community let adhered priorities set up earlier by workers in small groups, i.e., a strong controller role of the whole community could be experienced, too.

The resultant of knowledge both of collaborators in small groups and of the traffic order of the city was taking into account all possible traffic problems and the opportunities for their improvement. The groups have taken into consideration opportunities staying above but influencing traffic at the first session already. This can show very well, that in case when appropriate preparedness is accumulated, then proposals can help not only in problem solving – i.e., in solving problems of the past – but also in offering sustainable future solutions.

This arises from the fact, that the own logic of the agents working as members of the coalition – which was to experience in cost effective and planning thinking for the city – was identical with logic of other members of the coalition.

At the common work the parties visualised only from their own worlds their preparedness in connection with concrete problems to be solved in the mediation scene.

School or peer mediation

School mediation covers a wide spectrum of means and types of mediation. On this scene you can find the widest variation of mediation solution forms assigned to conflicts.

School mediation means to solve conflicts in the upper classes of primary schools or in secondary schools among students, teachers and parents, or students and teachers. Considering its form, it can mean conflicts of individuals or cases meeting the whole community of the school or a smaller part of that. School mediation is a subtype of community mediation where the school - with its institutional characteristics - defines clearly scene and participants of the subtype.

In the own world of students opens and appears place for new pattern both with biological changes and the connecting mental processes. The appropriate choice and application of these pattern is a difficult process due to lack of experiences, and therefore companions, helpers, i.e., pedagogues are needed.

I continuously followed the demands of teachers during school mediations and so I experienced that they consider the loss of their prestige as the source of conflicts. They want to keep or regain it in any way. The means used for that create an opposite effect: threatening, punishment, making superiority felt can provisionally appear as means of solution, but in the long run these do not mean real results. Settlement of disputes of students among each other has a basic importance as they will have to meet each other daily after any conflict and to stay in the same room frequently. In case that the conflict is not settled in an appropriate way, it may have a negative effect on the development of their personalities; they might be separated from the community and they will decrease activities in learning. *‘So, it is unconditionally important that students learn in the school technics of conflict handling and social and emotional abilities. The appropriate learning environment in the school is much more effective for progression of the students than a private school status’* (Törzs, 2010).

In peer communities we understand peer mediation as the sort of mediation, where problems among students are solved with the help of a fellow student of

their age (according to experiences one-two years elder) as mediator. Handling of the conflict will not be considered in such cases as an unpleasant and unsolvable task, but rather as a positive challenge (Kinnunen, 2010). Peer mediation considers closedness and rejection of teenagers against other age groups. It offers a safe scene for them to undertake conflicts, to present their own interests and needs, and so it also provides an opportunity to find a real, interest-based solution.

The special communicational situation of the young teenagers further restricts the scene of presentation of the own world on their age group. Only they are considered as authentic for understanding, acceptance and safe handling of the problem. The leadership of a peer mediator gives a guarantee that no retorsion or negative consequences happen after the mediative session; in case of teachers this confidence is missed. The mediator has to be present not as an expert but as an everyday person, compeer with the parties, who can lead and control the process, as the most important goal in this process is the restoration of the relationship between the parties (Marklund, 2010). Follow-up is easy at school level because of the everyday meetings. The work of peer mediators is always supported by one or more adult mediators. About mediation the parents get information, too.

At a peer mediation are numerous preconditions to be fulfilled for proper functioning. For presentation of the agents' own world is here not expertise of the mediator and the use of special communicational technics needed but rather the realisation of a safe, confidential and discrete atmosphere. Understanding of each other's own world, the expression of interests take place easier than in the case of elder generations.

Healthcare mediation

Healthcare mediation means the handling of conflicts between healthcare workers and patients. In the healthcare sector state-run and private institutes have different approaches to mediation process. In the state-run sector are patient rights processes characteristic, where – according to the survey of Decastello – health institutions are sued for 1,3 billion HUF, and this kind of processes are to 80% won by the patients in Hungary (Decastello, 2008).

From communicational point of view there was a change on the part of the patients in the relationship healthcare workers – patients. It arose on one side from better preparedness of the patients about illnesses and from always more conscious articulation of this knowledge, and on the other side appeared private hospitals, where patients' rights were effectively admitted. So, from the side

of the patients arose a kind of consumer awareness – and relevant communication – with a main characteristic that patients are even ready to choose the legal way against the healthcare system to allege their expectations and demands.

This process was realised by the healthcare system as a problem, which cannot be solved for years mainly due to financial reasons – although the opportunities for professional solutions are known.⁷ Decastello means that it has turned out several times that the patient does not want to avenge the insult during his hospital treatment, but intends to get known the reason of that. The patient does not intend to litigate, rather would accept an apology. When it is expressed, the patient calms down, even making suggestions to avoid similar situations later (Decastello, 2008). For lack of appropriately trained personal to satisfy informational demands, the patients do not get any information and choose the legal way to remedy grievances.

The satisfaction of these kind of demands of the patients by competent personal could bring in the state-funded sector – according to experiences – considerably cost reduction for the institutional system of healthcare. Not satisfying these – partially already recognised – demands is not only a paradox on one side because it was more profitable to make steps for solution – even at local level in the particular hospitals – and on the other side because experts of physical and neurobiological processes – which is the root of the matter – are employed in the healthcare system.

Mediation is used presently mainly in the private sector. This is the area where the majority of medical interventions is utilised as a kind of ‘convenience’ service.⁸ Patients here have absolutely consumer awareness in contrary for example to a patient of a road accident.

Considering the other party, in the state-funded healthcare system a market-oriented attitude of the leadership in a hospital is not, or only partially present. The healthcare system cannot make use of such opportunities increasing cost effectiveness like contentment due to emotional care of the patient. Private hospitals are perfectly market-orientated, and therefore pay attention to communication with patients. Naturally, physicians make mistakes in this system, too, patients are also here aggrieved, but the handling of indignities is very important, even if making public of the given case appears as an argument. The measurement of future losses needs a kind of advance thinking, risk analysis and deliberation but only from those where sustainment, growth are self-dependent and are not

7 In numerous West-European countries are sister employed to satisfy social and information demands of the patients, they declare in details what will happen, inform about the process of recovery, what are the opportunities, i.e., their task is to give mental support and to calm the patients. In Hungary is this the task of the physicians, what they cannot perform due to overload and lack of preparedness.

8 Plastic and corrective surgeries, e.g., ophthalmological interventions.

supported by any other organisation. This can be a market organisation, where we can see by the frequently mentioned evolutionally parallel, that the other agent fights as humane for assertion of own interests. A successful mediation is able to choose the solution serving own interest in the best way – and is able to apply his emotions-fed communication not for attacks, destruction, punishment, i.e., along the logical way of legal winner-looser, – but to adjust it along an undoubtably more advanced solution. The other agent is also able to choose a solution causing the smallest loss.

Compared with that, in the state-funded institute systems the lack of knowledge and preparedness is obvious. These institutes are not interested in positive outcome, even the acknowledgment of mistakes means the greatest risk for physicians and leaders socialized there. The retention of professional prestige is the most important, there are no financial aspects, i.e., the protection of values – in this case the infallible and perfect physicians – instead of interests is the only interest. And all this in spite of the fact that the institutes lost 80 p.c. of the processes. The explanation of that is that the value-based approach involves position-based trials. It means logically that an either-or (winner-looser) solution is possible. For these institutes could mean a solution if the possibility of erring could be officially acknowledged – according to practical proportions – and the institutes could offer protocol solutions for such cases. The lack of this security and the uncertainty and fear caused can trigger a reaction of denial and the inherent communication at physician and healthcare institutes. Therefore, medical malpractice proved at court is only acknowledged.

Minority / intercultural mediation

Minority or cultural mediation concerns releasement of problems between the majority of the society and a – due to certain characteristic different – minority community. The minority can be an immigrant group, which left the fatherland due to political of economic reasons. A part of minority groups is formed by the metics⁹, who have been living in the given country for decades but do not become citizens of the given country even after several decades, a good example is for that the community of Turkish people in Germany. To minorities belong members of separated religious groups. So are e.g., the Muslims settled down in European countries.

9 Metics (Greek) cohabitants, those who live together with the majority society over generations, have the same lifestyle but do not become a homogeneous part of the society.

To the group of minorities belong national minorities. In Hungary this group is regularly considered as the synonym of the expression minority. At the present are fourteen officially acknowledged minorities, the biggest one is the community of Romani with one million members.

A conflict emerges between the majority of the society and the minorities, when the parties feel themselves endangered because of – real or meant – cultural differences. A considerable part of these differences remains hidden at groups belonging to the same culture, dress similarly and speak the language of the majority without accents. Their minority culture is basically only practised in own four walls and occasionally, e.g., on holidays are these presented for the majority of the society. All Hungarian minorities do in such way, except Romani.

In case the members of the minority do not perceive the differences, they are not considered as different and so does not start a process of stigmatisation either. In case, there is no distinction, no prejudices will emerge against the group.

At cultural mediation are two main tools applied in my own praxis. One of them is narrative mediation when a solution on group level should be found. When the parties- starting from generalisation – get always deeper known their concrete community and cultural own worlds, in most cases projected into a story or a tale. In this way they can get acquainted with concrete cultural elements instead of prejudices; intention will be replaced by ration. This step will change the principle of only truth: as the parties get known and accept cultural elements of the other party, they can accept truth and basic values visible from their perspective. By these technics the agents do not create common own worlds as cultural values with roots developed in millennia cannot and should not be changed. The goal is here to sense, recognise and accept the existence of the other culture.

The other tool also can be applied to solve problems with other minorities emerging at community mediations. This tool is concretisation,¹⁰ locating the problem and the agents indicating that.

From the processing of a co-mediative session, you can draw the lesson that the members of the community of a different nationality were able to draw a conclusion valid for themselves, too: beside the village day arranged monthly, the organisation of common cultural events, the widening of the stream of communication was considered as most important to avoid community problems. The sessions of the settlement's self-government were broadcasted by the village-tv, resp. actual information in connection with particular communities were presented continuously on the official website of the mayor's office.

10 This is practically the transformative mediation itself.

It means practically a share and enlarge of the agglomerate knowledge in the widest circle. Geertz (1994) and Niedermüller (1999) say that this agglomerate knowledge implies the implicit and explicit conceptions, explanations and subsequent modes of action and regulations (Horányi, 2007).

This practical case clearly confirms that the differences in habits and limits of particular communities – in lack of appropriate preparedness and knowledge – start intentional guessing, avoidance and separation on community level. In case the reasons behind cultural differences become clear, information as factual data is handled and differences are not approached on an emotional but on a rational basis.

During minority mediations – in case of communities keeping contact with each other in physical space, or living together in a certain form - it is important, beside narrative mediation technics, which helps the acceptance of the other group, to search for concrete reasons and cases where the problem can be manifested, e.g., made concrete. In this process is possible to separate the problem as process and the person of group identified with the problem, and to treat them as agents. This is the phase where two agents appear connected to the problem. Until now an only agent has existed, as the other party has not been considered as agent, therefore latter one could not appear as equal party in problem solution, a common own world could not be developed.

During a minority mediation prejudices against appearing communities and the intentional fear in the agent realising the problem, show essential similarity. The starting basis of both is the endeavour for adherence of the given norm, regulation system. The several norm systems of several communities can cooperate – according to practical experiences – in a natural way in case that the norm system of the other party is mutually known. The appearing problems are caused by lack of knowledge of a particular argument connected to or implied in the norm system.

References

- Berne, E. (2008). *Sorskönyv [Faith book]*. Háttér Kiadó.
- Boros, Zs., Katonáné Pehr, E., Kőrös, A., Makai, K. & Szeibert, O. (2014). *Polgárjog. Családjog [Civil Code. Family Right]*. HVG Orac.
- Decastello, A. (2008). *A közvetítői eljárás az egészségügyben [The mediation process in health-care]*. Doktori értekezés tézisei [Thesis of a doctoral dissertation]. Pécsi Tudományegyetem.
- Feldmár, A. (2006). *A tudatállapotok szivárványa [The rainbow of mental states]*. Könyvfakasztó.

- Fellegi, B. (2009). *Út a Megbékéléshez – A helyreállító igazságszolgáltatás intézményesülése Magyarországon [The way to reconciliation – The institutionalisation of restorative justice in Hungary]*. Napvilág Kiadó.
- Geertz, C. (1994). *Az értelmezés hatalma. Antropológiai írások [The power of interpretation. Anthropologic scripts]*. Osiris Kiadó.
- Herczog, M. (Ed.) (2004). *Megbékélés és jóvátétel [Reconciliation and remedy]*. Család, Gyermek, Ifjúság KKE.
- Horányi, Ö. (Ed.) (2007). *A kommunikáció mint participáció. [Communication as participation]*. Typotex.
- Kinnunen, A. (2010). Iskolai konfliktuskezelés Finnországban. In Gyökös, M., Klopfer, J. & Lányi, K. (Eds.), *A helyreállító igazságszolgáltatás európai jó gyakorlatai a büntetőeljáráshoz [European good practice in restorative justice in criminal proceedings]* (pp. 67-71). Igazságügyi és Rendészeti Minisztérium.
- Marklund, L. (2010). Iskolai konfliktusok kezelése kortárs-mediációval Svédországban. In Gyökös, M., Klopfer, J. & Lányi, K. (Eds.), *A helyreállító igazságszolgáltatás európai jó gyakorlatai a büntetőeljáráshoz [European good practice in restorative justice in criminal proceedings]* (pp. 72-77). Igazságügyi és Rendészeti Minisztérium.
- Niedermüller, P. (1999). A kultúraközi kommunikációról. In Béres I. & Horányi Ö. (Eds.), *Társadalmi kommunikáció [About intercultural communication. In. Social communication]* (pp. 96-111). Osiris Kiadó.
- Törzs, E. (2010). Közvetítői eljárás – mediáció – Magyarországon, felnőtt korú elkövetők esetén. In Gyökös, M., Klopfer, J. & Lányi, K. (Eds.), *A helyreállító igazságszolgáltatás európai jó gyakorlatai a büntetőeljáráshoz [European good practice in restorative justice in criminal proceedings]* (pp. 130-135). Igazságügyi és Rendészeti Minisztérium.
- Viorst J. (2002). *Szükséges Veszteségeink [Our necessary losses]*. Háttér Kiadó.

Reference of the article according to APA regulation

- Németh, V. & Szabó, Cs. (2021). The characteristics of mediation according to fields of application. *Belügyi Szemle*, 69(S14), 93-107. <https://doi.org/10.38146/BSZ.SPEC.2021.4.7>



Máté Sivadó

Radical decrease in the number of homicides in Hungary

Abstract

In Hungary, the number of crimes recorded by crime statistics is surprisingly decreasing. Since its peak in 1998, the overall crime rate has fallen to less than a third. Within this, the decline in the number of homicides, which fell to one-fifth, is even more pronounced. Many people critically look at statistical indicators, and the authority's accounting methods know the superior numbers. In my research, I examined this.

Keywords: criminology, crime statistics, number of homicides, police credibility

Introduction

I intend to bring my publication up for discussion. On the one hand, I want to continue the research and publication on the topic in the future, and on the other hand, I welcome well-founded comments and criticisms.

The evolution of the number of homicides in many cases provokes noisy professional debate. Hungary has experienced a radical decline in this respect since 1994, which embarrasses professionals, too. Even in the best-intentioned man, logical doubt arises, seeing the extent of the decline in an incredibly short time in historical terms.

In 2016-17, it emerged that the Hungarian homicide data published by Eurostat¹ are not the same as the Hungarian statistical data, they do not show such favorable numbers as the latter one. The difference was that the Hungarian data included only intentional and completed homicides, and the European statistics also included data on homicides committed at the experimental or preparatory stage or through negligence.

1 European Statistic Office.



Opinion leaders, critical of increasingly favorable domestic homicide data in professional forums have also suggested that unsolved homicides are more likely to be described by the authorities as a fatal bodily injury or a negligent threat of death in the occupation, in order to improve homicide statistics.

These opinions are also widespread in law enforcement and practical police circles.

Research methodology

In the course of my research, I obtained the available statistics on the homicide data of Hungary from the Criminal Statistics of the Unified Investigation Authority (ENYÜBS), the Criminal Statistics System (BSR), the Central Statistical Office, and the National Statistical Data Collection Program (OSAP).

I sent data requests to the Ministry of Interior, the Criminal Analysis and Evaluation Division of the National Police Headquarters (ORFK), the International Criminal Cooperation Center (NEBEK), and the Central Statistical Office (KSH).

Perhaps the most important thing is to distinguish between ENYÜBS and BSR data. The former is an output statistic, i.e., it is compiled at the end of the investigation phase of criminal proceedings. Thus, it does not show how many crimes occurred during the period under review but how many were closed. The duration of the procedures varies, so this bias should be included in analyzing the system data. BSR data contains data on currently ongoing investigations, making them more up-to-date. The ORFK does not provide official information on the latest data. The main reason for this is that drawing far-reaching conclusions from data of ongoing proceedings can be misleading. In the meantime, it may turn out that the pending case has been reclassified by the authorities, terminated, or suspended in the absence of a crime or perpetrator.

Global decline in violence

‘In addition to quantitative indicators, qualitative changes are equally important in the study of homicide trends, so the incidence rate of qualified homicides is also a significant consideration in the analyzes. International comparisons of the number of individual crimes can be difficult due to differences in criminal law. However, the definition of a basic case of homicide is uniform because it is essentially an act committed with intentional causing of another person’s death, which is a criminal offense everywhere and differs mainly in qualifying

circumstances. By virtually the same definition of intentional homicide, it is possible to compare it internationally.’ (Bolyky, 2018).

In my research, I intend to examine the doubts that have arisen and analyze the trend in an international comparison.

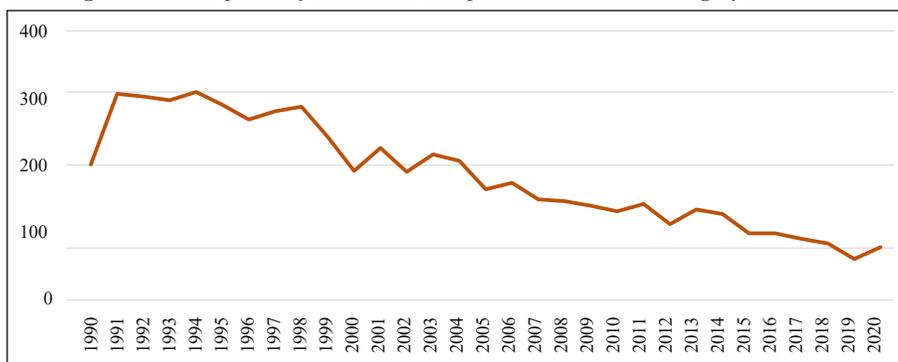
‘There is a withdrawal of violence in all areas of life. Everyday life is quite different if we are constantly afraid of being kidnapped, raped, or murdered, and it is difficult to achieve advanced art, learning, or trade if the institutions that support them are looted or set on fire at the moment they are built. The historical trajectory of violence affects how we live our lives and how we interpret them. What could be more important to our perception of the meaning and purpose of life than deciding whether we have gotten better or worse over time due to humanity’s efforts. And above all, how do we interpret modernity — how the forces of individualism, cosmopolitanism, logic, and science have undermined the family, tribe, tradition, and religion. Much depends on how we view the legacy of this change: seeing the world as a nightmare of sin, terrorism, genocide, and war, or valuing it as a period that, measured on the scale of history, has never been seen as a peaceful, blessed time ‘ (Pinker, 2018).

Pinker describes in his book five psychological systems, or, as he calls them, a demon; in this sense, we either resort to violence as a means, or we want to express our dominance with it, but sometimes we want revenge for some perceived or actual harm, or we think in the name of some ideology that the end sanctifies the means. There is another demon to reckon with: of course, it is also conceivable that we are sadists.

We are not only endowed with demons, but angels - the original title of the work (*The Better Angels of Our Nature: Why Violence Has Declined*) also refers to the traits that tell most of us not to be at each other’s throats, no matter how much fun it may seem at first. Empathy can play a significant role in this - we have to think that while it would be a pleasure to punch somebody in the nose, well, if we were in the person’s place, we probably would not be too happy. Angels also include restraint, moral sense, and finally, common sense: it allows us to see the great connections and think about what can make our lives easier and safer ([URL 1](#)).

In the United States, there were 750 violent crimes per 100,000 residents in the early 1990s. The indicator fell by more than 50% by 2013, and there were only 368 violent crimes per 100,000 inhabitants. Between 1980 and 2014, the rate of violent crime fell by 39%, and between 1993 and 2016, the incidence of victimization also fell by 20%, a remarkable 40% drop between 1995 and 2010 (Tcherni-Buzzeo, 2018).

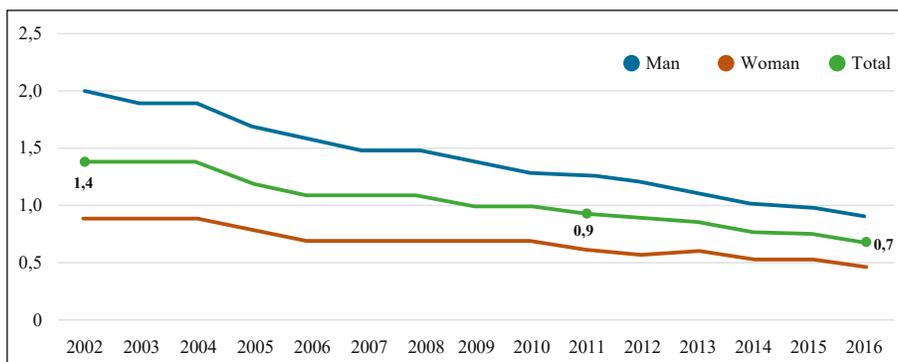
Figure 1: Development of intentional, completed homicides in Hungary 1990-2020.



Source: ORFK Criminal Analysis and Evaluation Department.

In the meantime, we can see that there is a significant decline in homicides in the European Union as well. The most striking is the decrease in the number of homicides committed against men during the period under review. The number per 100,000 inhabitants decreased from 1.9 cases to 0.9 cases between 2002-2016. The comparability of international data naturally raises many questions, as Szabolcs Mátyás has already written (Mátyás, 2020).

Figure 2: The homicide rate 100,000 per capita by sex in the European Union 2002-2016.



Source: Eurostat.

Disappearances in Hungary

Based on the data of the Hermon Circulation Registry System, the number of released missing person bulletins due to disappearance between 2014-2020 (broken down by year) was as follows:

Figure 3: *Number of released missing person bulletins due to disappearances based on data from the Hermon Circulation Registry System*

Year	2014	2015	2016	2017	2018	2019	2020	Till 2021. 05.24.
Child /0 - 14 year/	3864	2911	2731	3117	2900	3123	2762	1151
Juvenile /14 - 18 year/	13021	16368	15968	15907	15499	15472	15482	6289
Minor total	16885	19279	18699	19024	18399	18595	18244	7440
Adult	3190	3543	3584	3193	3084	2955	2468	826
Total	20075	22822	22283	22217	21483	21550	20712	8266

Source: NEBEK.

Based on the statistical data collected from the Hermon Circulation Registry System, the number of released missing person bulletins has not changed significantly in recent years, it is almost stagnating.

It is important to note that the number of recorded missing person bulletins is not the same as the number of disappearances. In the case of minors, the high number of releasements is typically the number of children who have left the place of care without a permit or who do not return there at the prescribed time, placed with temporary effect. In these cases, we cannot speak of disappearance in the traditional sense of the word, because in most cases, the place of residence of the minor (for example, the area of care of the child who has escaped) is generally known. It happens that a minor leaves the designated place of care without permission several times a year. By implication, as many times as one escapes, this generates the initiation of as many rounds of procedures in the detection of the statistical system.

The disappearance of minors may also be due to conflict situation between the parents or between a parent and the child, the dispute over the child's placement, or possibly the prevention of a child protection authority measure. Minors placed in orphanages, residential homes, and foster care typically escape to their parents, relatives, or friends during their unauthorized departure. Reappearance of a missing person depends on several factors. It is influenced by the circumstances, cause, and location of the disappearance. About 30% of missing minors appear within one day of reporting, another 30% within a week of reporting, and 35% within one month.

The remaining 5% include minors whose whereabouts are presumed by the competent authority in the light of the information gathered during the data collection but are difficult to trace for other reasons (they are abroad, hidden by their family or friends).

Within the special management activities of the Circulation Registry and Management Department of NEBEK, special attention is paid to the handling of disappearance cases of adults. For these cases, a comprehensive, efficiency-enhancing system was developed, the implementation began between 2017-2018, in the first phase by mapping out more than 800 existing cases at national level. During the examination of the cases, it can be stated that the following types of cases occur in the circling system due to their nature:

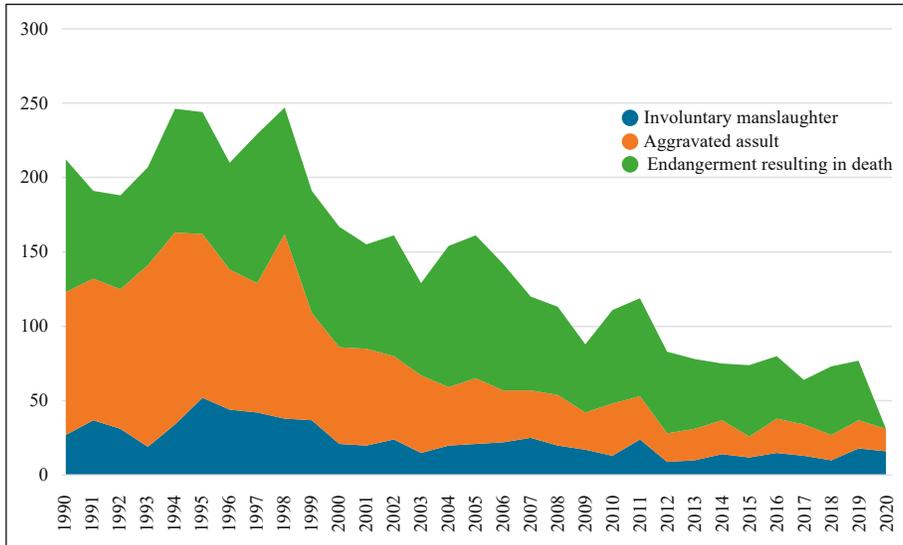
- disappearances of a child or juvenile that last only a short time (that are usually affecting the same persons, unauthorized departures become permanent, and then the persons are appeared);
- departures, usually due to dementia, which is common for the elderly, sometimes maybe fatal, but a corpse is not always found;
- those leaving the hospital due to mental or other problems;
- those who leave intending to commit suicide, some of whose bodies are not found;
- disappearance resulting from the lifestyle of the missing person (especially death resulting from a decline due to alcoholism, drug addiction), during which the body of the wanted person does not appear;
- a smaller number of voluntary departures (escape due to family, kinship, or couple relationships).

The current Tracing Act, which entered into force on 1st January 2014, defines the data processing time in 90 years, which was 20 years before that, so this generates a continuous increase in the number of cases compared to the previous ones.

Based on the analysis of the latest statistical data, it can be stated that the number of missing adults, sought for more than 90 days, does not change significantly, it is between 800-825 cases. Old and newly reported cases are constantly monitored, and the necessary analysts and data collection activities are performed/directed by the department. Based on the above, it can be concluded that the development of the number of disappearances does not give a reason to assume that there would be a large number of missing homicide victims among the missing persons.

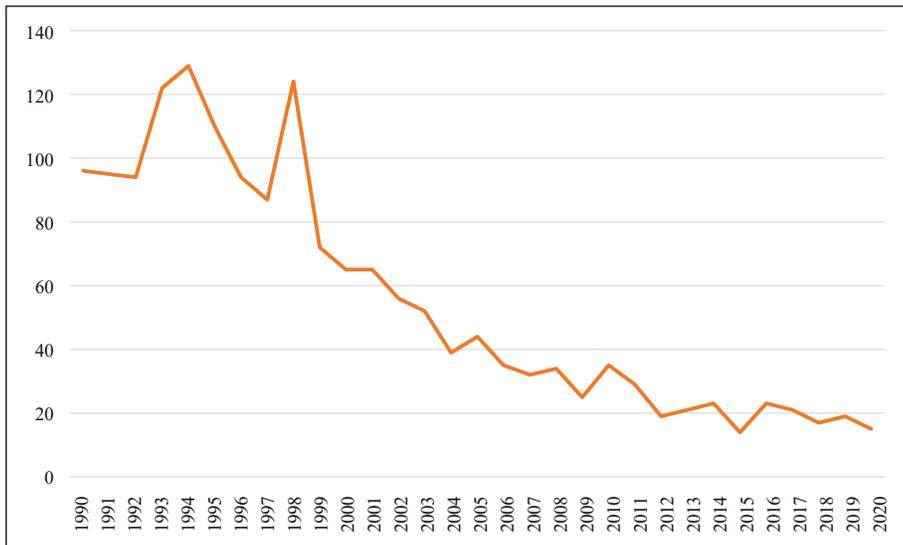
Development of crimes related to homicide in Hungary

Figure 4: *Tendencies of homicide-related crimes in Hungary between 1990-2020.*



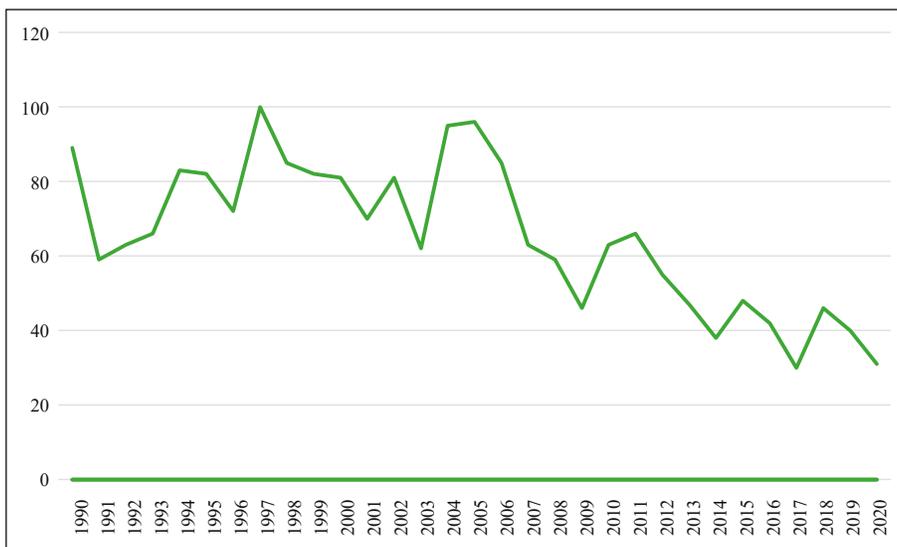
Source: ORFK Criminal Analysis and Evaluation Department.

Figure 5: *Aggravated assault crime in Hungary 1990-2020.*



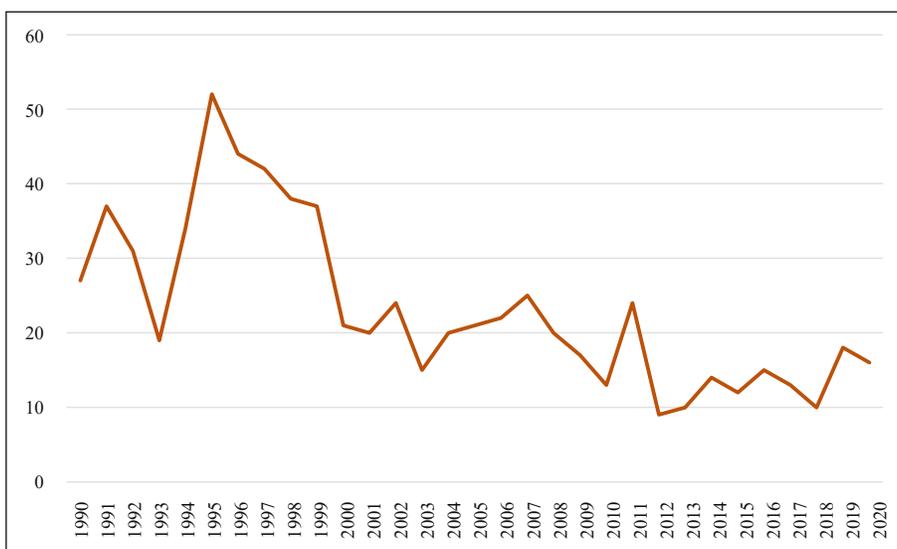
Source: ORFK Criminal Analysis and Evaluation Department.

Figure 6: *Endangerment resulting in death as criminal offense in Hungary 1990-2020.*



Source: ORFK Criminal Analysis and Evaluation Department.

Figure 7: *Involuntary manslaughter as criminal offense in Hungary 1990-2020.*



Source: ORFK Criminal Analysis and Evaluation Department.

The charts show that the notion, that the decrease in the number of intentional, completed homicides is due to an increase in the number of crimes adjacent to homicide resulting from a kind of official ‘transfer’ can be refuted. In terms of both fatal bodily harm, negligent homicide, and endangerment in the course of a fatal occupation, the number of cases is similar to or greater than intentional homicide registered by ENYÜBS in the examined period between 1990 and 2020.

Latency in homicide cases

Latency means that the crime in question does not come to the attention of the authority. In the case of homicide, this is likely to be much lower than in property crimes. The disappearance of a person usually calls the attention of someone. From the family, in the absence of that friends, buddies, possibly the authorities. The other possibility is that the deceased person is found, but in the absence of a trace of external injury, despite of an autopsy, the cause of death is determined by the coroner, due to some natural reason or other reasons. It can also cause latency if the person’s disappearance is reported to the authorities, but the measures taken to find it do not lead to results. In this case, the person will remain missing in the Tracking Information System for a long time.

The National Police Headquarters (ORFK) has developed new strategies to reduce the latency in homicide cases. They work according to a conscious processing methodology for adult disappearances beyond ninety days. These cases are investigated individually. If there is a suspicion that a crime may be behind the disappearance, the ORFK headquarters will initiate an investigation at the relevant county police headquarters to investigate the matter more thoroughly, involving the National Bureau of Investigation.

Since the 1990s, police have been searching thousands of adults in the long run due to disappearances, and trying to identify thousands of unknown corpses or body parts in the same period. As a result, the authority found murder in connection with twenty unidentified bodies. In the case of unknown but later identified corpses, in many cases, it turns out that no one searched for them.

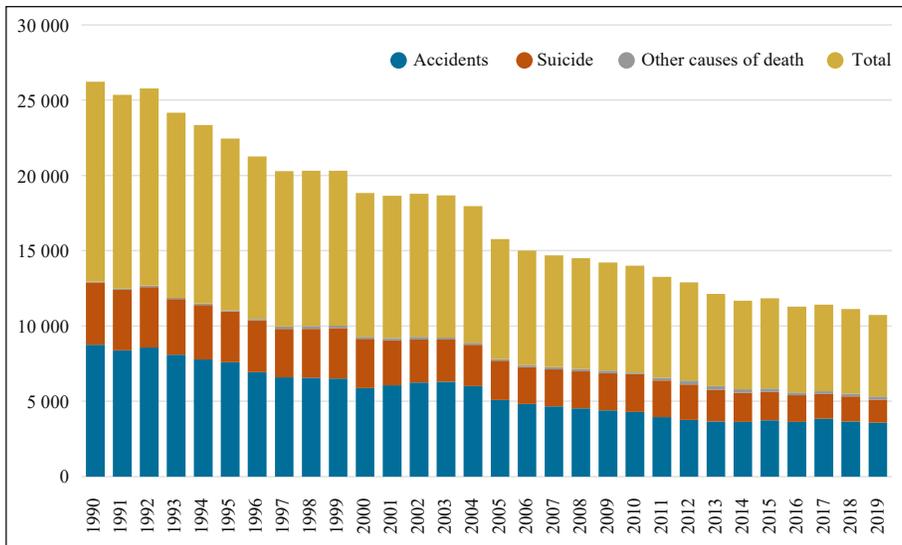
ORFK is also looking for a solution in this matter. They initiate at the Central Office of Public Administration and Electronic Public Services (KEKKH), who are the persons who do not respond to the authority’s request, for example, when their new document is prepared. The ORFK has also recently initiated a review of emergency deaths during the period 2016 - 2020 by county police headquarters.

Extraordinary deaths

In addition to the above indicators, I found it relevant to examine the number of notable deaths, so I contacted the National Police Headquarters to provide information how the number of notable deaths has developed from 1990 to 2020 in Hungary. According to the answer, for 1990-2020 the Police do not have official statistics on the number of extraordinary deaths that occurred in this period. 24/2014 on the police procedure to be followed in the event of an extraordinary death. (VII.11.) The ORFK instruction stipulates the obligation to provide information to the regional police bodies, the content of which, however, has been continuously expanded and modified over the years. CLV 2016 on official statistics.

I then contacted the Central Statistical Office, where the following information was provided.

Figure 8: Extraordinary deaths in Hungary between 1990-2020.



Source: CSO (data available for 1990-2019. Due to the amount of data, the table can only be displayed every few years, so 2019 is lagging).

The data clearly shows that there has also been a significant reduction in these extraordinary causes of mortality over the last twenty years. Based on these, the assumption that the investigating authorities register many allegedly undetectable homicide cases as notable deaths can be refuted. I am writing this although several cases discovered later show that such a trend is scattered.

Completion

As I mentioned in my introduction, I intend to act my publication as a stimulus. I hope many of those, who put the domestic homicide statistics into question, will read it.

In summary, the opinions that suggested statistical gimmicks behind the decrease in homicides in Hungary should be accepted as decreasing figures according to the current state of research. It is also a common argument that the ENYÜBS data, due to their output nature, do not show the current situation, as they include the bias caused by the length of the cases or their differences. In this regard, it can be stated that in a trend of nearly twenty years, these distortions disappear and do not significantly affect the evaluation of the data. I welcome suggestions as to what data still needs to be examined to verify the authenticity of criminal statistics.

A few words about the possible reasons for the decline. *‘Among the background factors are the impact of economic recovery and declining unemployment, demographic factors, immigration and policy factors such as increasing lengths of imprisonment and the generalization of selective neutralization. Among the reasons for the decline in the proliferation of security devices, which has reduced the chances of committing crimes. If the chances of committing a crime decrease, fewer commit the first crime that marks the beginning of their criminal career. Demographic change has had a major impact on the declining trend in crime, particularly the decline in the proportion of young men in the age group 15-25, which is the main determinant of the age distribution of the offending population. The other side of demographic change is, due to advances in medicine and advances in technology, the extension of the average age and the significant increase in the age group of the older population. The population of the elderly is growing mainly in Europe: the European population over the age of 65 has tripled in the last sixty years, and the number of people over the age of sixty is six times higher than in 1950. However, as you get older, you become less likely to commit a crime. Emigration is a particularly crime-reducing factor in Eastern Europe: for example, the Hungarian population lacks nearly half a million young people of working age in the West.’ (Kerezsi, 2020).*

The statement by János Lázár (at the time Minister, was leading the Prime Minister’s Office), that public employment impacted crime trends, were widely outraged. *‘János Lázár told in a public forum in Hódmezővásárhely that he thinks, public work is useful because those who work from early morning until 3 in the afternoon will not feel like stealing. For anti-poor and racist statements protested both advocacy organizations, representing public workers.’*

(URL2). The style of Lázár's statement was, of course, rightly criticized, but it can be agreed that some of the strata affected by crime were forced to participate in public employment, which took their energy away from crime and contributed, albeit minimally, to make a living, thereby reducing the motivation to commit a crime.

References

- Bolyky, O. (2021). *Az emberölések jogi és kriminológiai jellemzői, különös tekintettel a mentális tényezők büntetőjogi értékelésére [Legal and criminological characteristics of homicides, particularly to the criminal assessment of mental factors]*. Doctoral dissertation. Pázmány Péter Katolikus Egyetem. https://jak.ppke.hu/uploads/articles/12332/file/Bolyky_O_Tezis_mk.pdf
- Kerezsi, K. (2020). *Trend lesz-e (a jövőben is) a bűnözés csökkenése? [Will the decline in crime be a trend (in the future as well)?]*. *Magyar Tudomány*, 181(5), 577-590. <https://doi.org/10.1556/2065.181.2020.5.2>
- Mátyás, Sz. (2020). *Bűnözésföldrajz [Criminal geography]*. Didakt Kiadó.
- Pinker, S. (2018). *Az erőszak alkonya [The twilight of violence]*. Typotex.
- Tcherni-Buzzeo, M. (2018). The 'Great American Crime Decline': Possible Explanations. In Krohn, M. D., Hendrix, N. & Hall, G. P. (Eds.), *Handbook on Crime and Deviance* (pp. 309-335). *Handbooks of Sociology and Social Research*. https://doi.org/10.1007/978-3-030-20779-3_16

Online links in the article

- URL1: *Bármilyen erőszakosnak is tűnik a világ, egyre kevésbé gyilkoljuk egymást.* <https://qubit.hu/2018/07/24/az-eroszak-alkonya-barmilyen-eroszakosnak-is-tunik-a-vilag-egyre-kevesbe-gyilkoljuk-egymast>
- URL2: *Közmunkások jelentik fel Lázárt, amiért szerinte azért jó a közmunka, mert így nincs kedvük lopni.* <https://merce.hu/2018/01/31/feljelentik-a-kozmunkasok-lazart-amiert-szerinte-azert-jo-a-kozmunka-mert-igy-nincs-kedvuk-lopni/>

Reference of the article according to APA regulation

- Sivadó, M. (2021). Radical decrease in the number of homicides in Hungary. *Belügyi Szemle*, 69(SI4), 108-120. <https://doi.org/10.38146/BSZ.SPEC.2021.4.8>



BOOK REVIEW

Viktor Németh

Anticorruption The MIT Essential Knowledge Series

Abstract

The MIT Press Essential Knowledge series provides the reader with accessible, concise, yet interesting and completely up-to-date information. Each part was written by excellent experts on the subject, in a language understood by non-experts, too. In this way, the current research data and results in the field of each topic can be really used. Nowadays, it is not easy to find in the endless set of information obtainable on the World Wide Web those that essentially provide the fundamental knowledge on a particular topic. The MIT series fill a gap in this. The topic of the present volume of the series is the anticorruption, as a world phenomenon, its current development and situation. And the topicality of the current theme is perhaps duly justified by the following World Bank estimate: *‘Much of the globe is infected with corruption, sapping as much as 3 percent of annual per capita GDP in large swathes of Africa, Asia, and Latin America. Even North America is hardly immune. The World Bank says that \$1 trillion or more is lost each year to corruption, globally.’* (Rotberg, 2020).

Keywords: political corruption, prevention, case studies, leadership factor, transparency

Preface

This prominent publication is a professional feat, as it adequately provides a comprehensive picture of the current state of anti-corruption processes in the world in a transparent and comprehensible way. The author Robert I. Rotberg is the Founding Director of Harvard Kennedy School’s Program on Intrastate Conflict and Conflict Resolution. His main area of expertise represents the theory

of international relations, which he has been researching for many decades. Related to this theme, he has authored a number of books that discuss corruption in some context and its possible treatments. Two other works on this topic have been published by Rotberg: *The Corruption Cure* (2017) and the *Anticorruption: How to Beat Back Political and Corporate Corruption* (2018) edited by him in the special issue of *Daedalus*.

Review

The book consists of 272 pages, ten chapters, it reveals and analyzes the dominant forms of corruption, their background, and the key reasons for its development. Furthermore, it presents possible solutions and anti-corruption procedures and techniques. The author considers leadership and its use to represent the most crucial component of preventing and combating corruption. This leadership is ready to implement changes consistently to achieve the right political culture. *‘The phenomenon of corruption has existed since antiquity; from ancient Mesopotamia to our modern-day high-level ethical morass, people have sought a leg up, a shortcut, or an end run to power and influence.’* (Rotberg, 2020).

Summary of the chapters

The first chapter defines an internationally accepted concept of corruption: *‘the abuse of public office for private gain.’* (Rotberg, 2020). It compares with other definitions through practical examples, therefore proving the exact nature of the definition. Corruption is also highlighted as a contradictory process: it is currently strengthening the degenerative process of deepening poverty in the recipient countries. Petty corruption represents a minor but high-frequency phenomenon that pervades society as a whole. While the Grand Corruption represents a larger amount, but less concerned involved in corruption.

The next section presents international organizations that index and seek to categorize corruption, such as the Transparency International’s Corruption Perceptions Index (CPI) and World Bank’s Control of Corruption Indicator (CCI). However, categorizing each type of corruption is a complex task due to their differentiation. The official ranking did not change significantly in the last years, New Zealand, Finland, Denmark, Canada traditionally represent the elites of the list. The third chapter explains how the Nordic nations, New Zealand, and Canada, now all rated among the least corrupt in the world, were once overflowing with

corrupt practices, and how those were moderated and then largely extinguished (OECD, 2014). Chapter four extends the examination of how nations shifted from the corrupt to the non-corrupt sides of the ledger in South America and Central America, and particularly to the modern cases of Uruguay, Chile, and Costa Rica, the least corrupt governments in Latin America.

The following section presents the most important anti-corruption tools. Good practice shows that in addition to individual punishment, collective corruption-free habits need to be extended to society as a whole. Besides, a strong leadership capable of overseeing and adhering to, these best practices are needed. Strong leadership is the solution to amend. It presents the changes made based on the above through practical examples. Such are Singapore, Hong Kong, African Rwanda, or European Croatia. In these countries, determined leadership, with swift action, has achieved fundamental changes in anti-corruption activities. The anti-corruption successes of the Nordic countries, known as the Nordic example, are derived from a well-functioning social structure: *‘That means that they exhibit high levels of social trust, are wealthy with low levels of inequality, are well-educated, and expect integrity and openness from their politicians and civil servants.’* (Rotberg, 2020). In addition to the eminent Nordic countries, the author also presents successful anti-corruption good practices in South America. Like Uruguay, where 83% of the population did not encounter any administrative or other bribery (Rotberg, 2020). Social rejection of corruption has risen to standard levels in the most decent country on the continent.

In the fifth chapter, Rotberg sets out the framework needed to stop corruption: *‘Good laws, good investigative tools and techniques, diligent inspectors, committed ombudsmen, a completely free and active media, a properly functioning judiciary, and some new types of courts are essential. Conscientious and principled leadership is essential.’* (Rotberg, 2020). In detail he analyzes and presents the previous elements in common law regimes in the British Commonwealth and the United States. The following two chapters present well-functioning examples of sophisticated tools needed for transparency and official accountability through the Singapore and Hong Kong practices. The author points out that the operational effectiveness of transparency depends significantly on the system-wide cooperation of control tools. The latest technological innovations help to implement this properly and significantly. These innovations undoubtedly make it easier to gather and record credible evidence. In the penultimate chapter, the author names the leaders as clear responsible for the regulation of corruption. *‘Leaders set the tone and stage, persons in charge implicitly authorizing their subordinates to steal or cheat. Integrity or its absence, therefore seeps into the collective social consciousness either to make corruption*

an ongoing social practice.' (Rotberg, 2020). The author cites Botswana, New Zealand, Uruguay and Singapore as positive examples. In the latter, taxi drivers do not even accept the tip, which is a good indicator of the system-wide spread of the integral driving example.

Summary

In the ninth chapter, instead of usual summary, we find a very specific 13-step guide to a successful fight against corruption, of which Rotberg identifies political will as a key factor. This test encourages critically reviewing your organization's actual situation. To radically rethink the place of a given organization in the critical system outlined by the author. Especially useful and recommended for company managers and authoritarian leaders of bureaucratic organizations.

References

Rotberg, I. R. (2020). *Anticorruption*. The MIT Press Essential Knowledge Series. The MIT Press.
OECD (2014). *CleanGovBiz. Integrity and practice*. Organization for Economic Co-operation and Development. <https://maritimecyprus.files.wordpress.com/2017/09/oecd.pdf>

Reference of the article according to APA regulation

Németh, V. (2021). Anticorruption. The MIT Essential Knowledge Series. *Belügyi Szemle*, 69(S14), 121-124. <https://doi.org/10.38146/BSZ.SPEC.2021.4.9>

CONDITIONS OF PUBLICATION

Belügyi Szemle accepts and publishes scientific messages with outstanding alignment to the control and organisational system of the Ministry of Interior, first of all in the topics law enforcement, public order, public safety, safety policy, self-government affairs, social deviances, and further analyses and evaluates the questions of law enforcement from criminological, criminal sociological, criminal legal and policing aspects.

Belügyi Szemle accepts manuscripts of the authors for editing through applying in the Open Journal Systems.

At the conformation of receipt, the Editorship informs the acceptance and the expected publishing time of the manuscripts sent in. The Editorship peer reviews the received manuscripts from a professional and scientific point of view and reserves the right for stylisation, correction, typographic adjustment of the manuscripts.

The Editorship does not undertake republishing.

Articles published in Belügyi Szemle do not unconditionally reflect the opinion of the Editorship, any responsibility for their contents bear the authors exclusively. The whole of the periodical, including individual articles, is protected by copyright, any use of them outside of copyright law is illegitimate and prosecutable.

Phone number: +36 (26) 795-900 / 24-600

Email: szerkesztoseg@belugyiszemle.hu

Web: www.belugyiszemle.hu

OJS: ojs.mtak.hu/index.php/belugyiszemle/index

