

NATIONAL UNIVERSITY OF PUBLIC SERVICE

Doctoral School of Military Sciences

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**The consequences of the African water conflicts related to the security of
Europe and Hungary**

Theses of the doctoral (Ph.D.) dissertation

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INTRODUCTION

"We never know the worth of water till the well is dry "

/Thomas Fuller/

In the 21st century, water scarcity is increasingly becoming a real problem around the world. What was once a theoretical and scientific issue has become a tangible phenomenon by 2021. It may seem a cliché, but without water, there is no life.

"Water, like a religion or an ideology, has the power to move millions of people. Human civilizations, from birth, have always settled near water, people setting out when there is little of it left, but also when there is too much. Humanity follows the water, writing, singing, dancing, dreaming, and fighting for it. Every person, everywhere, every day, needs it." ¹

Water is, of course, not only the source of life but also a natural resource in increasingly limited supply. Africa, the second driest continent on earth. It means that 40% of sub-Saharan Africans have limited access to clean drinking water.² Water scarcity is increasing in parts of Africa due to desertification, poor water management, and climate change. According to UN reports, 700 million people will be displaced by water scarcity by 2030.³

At the UN Summit held in New York from 25 to 27 September 2015, 17 Sustainable Development Goals (SDGs) were adopted to build a sustainable future by 2030. Goal 6 of the SDGs is clean water and basic sanitation. Within this, the following targets have been set:

- 6.1) Ensure universal and equitable access to safe and affordable drinking water by 2030.
- 6.2) Ensure adequate and equitable access to sanitation and hygiene for all by 2030, and eliminate open defecation, with a special focus on women, girls, and the vulnerable.
- 6.3) By 2030, improving water quality by reducing pollution, minimizing emissions of hazardous chemicals and other substances, eliminating discharges; halving the share of untreated wastewater, increasing the recycling and safe reuse of treated wastewater globally.
- 6.4) By 2030, significantly increase water use efficiency in all sectors; ensure sustainable water abstraction and drinking water supply to address water scarcity and significantly reduce the number of people/population suffering from water scarcity.

¹ GORBACSOV, Mihail: *People/water rights - An essay by Mikhail Gorbachev* - In. Civilization, the Magazine of the US Library of Congress, October-November 2000 - Available online:

http://www.voiceyourself.com/Mikhail_Gorbachev_Water_Essay.html (Retrieved 20 October 2021).

² UNEP: *Africa Water Atlas*. - 2011. - p. 13-14.

³ UNICEF: *Water Scarcity*. - Available online: <https://www.unicef.org/wash/water-scarcity> (Retrieved 20 October 2021)

6.5) By 2030, the introduction of integrated water resources management at all levels, including cross-border cooperation where appropriate.

6.6) By 2030, protect and restore water-related ecosystems, including mountains, forests, wetlands, rivers, aquifers, and lakes.⁴

These goals show that the UN and its member states have all recognized that water scarcity and access to clean drinking water is already a major problem and that it is only going to get worse in the future. Although the UN's objectives are not binding, as water management is a local and intergovernmental issue, they are very important and forward-looking objectives that address real, existing problems.

The World Water Summit was held between 28-30 November 2016 in Budapest.⁵ The event was attended by 2,200 delegates from 107 countries, including several heads of state and government, ministers, and UN representatives.

The event featured speeches from leading politicians, all of whom drew attention to the links between water scarcity and security.

According to Peter Thomson, President of the 71st UN General Assembly, if people around the world have access to sufficient drinking water, there will be peace and security.

Ban Ki-moon, then UN Secretary-General, said in his video message that in order to achieve the 17 UN Sustainable Development Goals, it is necessary to transform the way we manage resources.

According to Guang Zhe Chen, Director of World Water Resources, there will be water in the next 20-30 years, but it will be in scarcer supply due to climate change and industrial pollution. And scarcer water supplies will affect both developed and developing countries.⁵

Joaquim Levy, Executive Director of the World Bank Group, pointed out that water scarcity has a significant economic and social impact, and causes migration and conflict.⁶

János Áder, President of the Republic, in his speech drew attention to the fact that *"water is the most endangered resource today, and therefore we must make it the most important issue of political thinking and action. Without sufficient quantity and quality of water, there can be no*

⁴ UN: *Sustainable Development Goals - Goal 6. Ensure access to water and sanitation for all* - Available online: <https://www.un.org/sustainabledevelopment/water-and-sanitation/> (Retrieved 20 October 2021)

⁵ BUDAPEST WATER SUMMIT: *Water Connects - Budapest Water Summit - 2016* - Available online: https://www.budapestwatersummit.hu/hu/Vilagtalalkozo/Hirkozopont/2019_05_03/budapesti_viz_vilagtalalkozo

⁵ Ilona ERDÉLYI: *We can expect a reduction and contamination of our water resources.* - In. National Geographic, 1 December 2016 - Available online: <https://ng.24.hu/fold/2016/12/01/vizkeszletunk-csokkeneserees-szennyezodesere-szamithatunk/> (Retrieved 20 October 2021)

⁶ WORLD BANK: *Remarks by World Bank Group MD and CFO Joaquim Levy at Budapest Water Summit.* - 2016 - Available online: <https://www.worldbank.org/en/news/speech/2016/11/28/remarks-by-world-bank-groupmd-and-cfo-joaquim-levy-at-budapest-water-summit-2016> (Retrieved 20 October 2021)

food, no industrial development, and no sustainable urbanization, water is a guarantee of peace and security."⁷

As the role of water becomes more important in Africa, rivalries between different groups will intensify, which could later escalate into armed conflict. Typically, the lack of water is not the primary source of conflict but only adds to existing tensions. It can be argued that water scarcity does not lead directly to conflict. If there is a well-functioning strong state and a well-functioning diplomatic relationship between countries, water scarcity, and water distribution can be resolved. But the problem starts when there is already some level of political, social, ethnic, and/or religious tension in a region. When the state is weak, the lack of natural resources becomes a very serious problem. In my research, I show that water conflicts in the narrow sense are a real problem in Africa. Apart from ethnic or political tensions, water scarcity is also an important factor in the conflicts in Africa that I have presented. Today, water scarcity is one of the main causes of several low-intensity conflicts in East Africa, among many others.

I consider it important to describe these conflicts and to present, through a multidisciplinary approach, the general cultural and social psychological factors that explain the drivers of resource conflicts such as water conflicts. In this thesis, in addition to providing a complex overview of the causes and interrelationships behind water conflicts, I will predict where and water conflicts, which are currently still low intensity, are likely to escalate in the future.

This is important for the security of Hungary and Europe for at least two reasons. Firstly, the conflicts in Africa are indirectly, but indirectly, infiltrating Europe and Hungary through migration. In addition to many other aspects, mass migration also has security and, in a narrower sense, national security implications, which I will outline in this thesis.

On the other hand, given that Hungary is a member of the UN, the European Union, and NATO, the thesis also collects the international operations carried out in Africa so far with Hungarian involvement. I aim to argue that Hungary's international alliance obligations allow it to be officially present in the conflict-affected region, thus making water conflicts in Africa a security issue for Hungary as well.

To prepare for this, I want to make the findings of my doctoral thesis available to practitioners. My thesis was prepared within the framework of the Doctoral School of Military Science because it deals with the military, security policy, and national security issues. Although it also includes research from other disciplines, particularly psychology and

⁷ EARTH 2016.

sociology, it aims to take a multidisciplinary approach to help understand the drivers of armed conflict.

This thesis aims to present the water and security nexus, the water conflicts in Africa. To examine the causes of water conflicts from a new perspective, using other disciplines in addition to military science. In addition to the causes identified, to predict where further conflicts related to water scarcity are likely to occur in the future. Furthermore, to show that these conflicts may pose a challenge for the Hungarian Defence Forces on the one hand, and may directly affect Hungary's security, including its social, economic, social, public, and national security, through mass migration on the other hand.

FORMULATING THE SCIENTIFIC PROBLEM

The choice of topic may seem strange at first, but what is the connection between climate change, water scarcity, local conflicts in Africa, and the security of Europe and our country? Generally speaking, news about Africa is not covered by the Hungarian media, and Africa and what is happening in Africa are very rarely a topic of conversation for the average Hungarian. But what is happening in Africa has an impact on Hungary and the Hungarian people. Because little is said about this, many people do not think that in today's globalized world, what we see and experience in Hungary is only the consequence or result of certain processes. Conflicts over water and other natural resource scarcity in Africa, although indirect, have very practical and real implications for the security of Hungary and Europe.

THE AIM OF THE RESEARCH

In preparing this thesis, I had the following objectives in mind:

1. To present in detail, with practical examples, first the broader context of environment and security and the impact of scarce natural resources on security, and then the broader context of water and security.
2. To collect and present the water conflicts in Africa in the past and today. All disputes, tensions, conflicts, or wars have arisen in the context of water.
3. To predict where in Africa further conflicts are likely to arise in the future due to lack of water or other natural resources.
4. To analyze and present in a multidisciplinary and complex approach the cause and effect relationships behind conflicts over water as natural resource scarcity. Furthermore, to

identify practical scientific results that help to understand the drivers of conflicts. This could be important for future operations of the Hungarian Defence Forces abroad.

5. To explore the potential impact of water conflicts in Africa on the security of Hungary and Europe. To make clear the links between African conflicts and Hungary's security for education and practice.

HYPOTHESIS

In my doctoral thesis, I tested the following hypotheses concerning the research objectives:

1. Today, and in the future, natural resources, including drinking water, will become increasingly scarce and the role of water will become more important. There is a link between water and security because of climate change and inadequate water management.
2. Water scarcity is not the primary cause of armed conflict or war, but in many conflicts in Africa, it plays a decisive role, directly or indirectly, in the outbreak or escalation of conflict, alongside other historical, ethnic, economic, and political causes.
3. Understand the history and present of the region in the depth necessary to prevent and later resolve conflicts. The culture of the people living there and the local tensions, their dynamics, and drivers. To understand and accept cultural and other differences and to accept that, although there are similarities in general human nature and behavior, every conflict is different.
4. The security of Europe and Hungary is very much affected by the conflicts in Africa. On the one hand, there may be an international peace operation in the region, so Hungary will be officially present in the region, which is related to Hungary's security. On the other hand, these conflicts force a significant number of people to leave their homes. In today's globalized world, these people arrive in Europe and Hungary through migration, and, among many other factors, they also have an impact on Hungary's security.

RESEARCH METHODS

Based on my experiences in Africa, and as a result of my work I have worked with people from Africa for several years, my research has also provided me with practical knowledge and experience. These experiences and knowledge have encouraged me to review national and international literature on the subject. During the research, I aimed to understand the causes of

conflict based on the published findings of Hungarian and international researchers and reports of international organizations.

I studied literature in English, French, and Hungarian. In studying these materials, I analyzed the information using simple logical procedures and concluded.

I have participated in scientific and professional conferences, lectures, and training courses related to my research topic.

In the course of my research, I consulted and conducted semi-structured interviews with people living in or coming from East Africa, as well as with experts on security and geopolitics.

In preparing the thesis, I have carried out the analytical analysis based on primary and secondary sources. After documentary analysis and the verification and evaluation of the information obtained during the interviews, the results were organized and conclusions were drawn. Based on these results, I was able to confirm my hypotheses and, using a pre-decision method, I also used the data collected to present other security risks related to water scarcity (e.g. organized crime, human smuggling, terrorism).

Based on the facts and conclusions of my research, I made recommendations to prevent water conflicts in Africa, thus reducing the security risks for Europe and Hungary. My research aims to publish scientific results that can be applied to education and practice.

All the literature and other sources used in the thesis are listed in the bibliography, and the transcripts of the interviews are in the appendix.

I closed my research on 12 November 2021, so the events of the period after that date, as well as new data and information in scientific papers and reports published since then, are no longer included in this thesis.

THE STRUCTURE OF THE RESEARCH

In the introductory part of the thesis, I will explain why I chose this research topic, formulate the research problem, and review the national and international literature. In the theoretical framework, I present the framework of my research, explain the research objectives, hypotheses, and methods used.

In the first chapter, I will introduce the concept of security, the factors that influence security, the emergence of security policy as a science, and the different scientific approaches and schools of thought on security. I conclude the chapter with a summary and some sub-conclusions.

In the second chapter, I will then present, firstly, the relationship between environment and security, and then, logically narrowing it down, the relationship between water and security, the

definition of water wars, and the role of water in Africa. At the end of the chapter, I summarise the chapter and draw sub-conclusions.

In the third chapter, I present the water conflicts in Africa. The conflicts described are not, of course, profiling, as neither my research nor the findings of other national or international researchers on the subject support the claim that war is breaking out solely over water. However, it is clear from the analysis of the conflicts presented that past social, political, economic, and ethnic tensions have played a role in them, but all the wars or armed conflicts presented are directly or indirectly closely linked to water or water scarcity. I conclude the chapter with a summary and partial conclusions.

In the fourth chapter, I will first present the rate of population growth in Africa, based on various international studies, and the number of available water resources in close relation to this. I then illustrate the impact of climate change in Africa. I then use sociology and social psychology to describe the characteristics of societies in African countries and briefly highlight the sociological differences between European and African societies in general. Furthermore, in the same chapter, I will describe the drivers of conflicts between human groups over water and other natural resources, using psychology, including social psychology. In this way, the human motivations and factors behind these conflicts can be better understood and thus resolved. Also in this chapter, I summarize the semi-structured research interviews I conducted, which provide insights into how East Africans perceive and experience the interconnections between water scarcity and security in the region. I conclude the chapter with a summary and partial conclusions.

In the fifth chapter, I will present two perspectives on how water conflicts in Africa relate to the security of Hungary and Europe. I will describe, on the one hand, the current and previous mission operations in Africa, in which Hungary is involved, and on the other hand, how water conflicts in Africa are penetrating Europe and Hungary through migration, and what security challenges arise in the context of mass migration.

SUMMARY OF THE RESEARCH WORK

The thesis shows that in many parts of the world, but especially in Africa, the role of water is becoming increasingly important today and will continue to do so in the future. Climate change is severely affecting certain regions of Africa, particularly the East African region and the Sahel, where there are already several low-intensity conflicts, one of the drivers of which, among many other reasons, is the scarcity of natural resources due to water scarcity. As grazing

land, access to water, and fish stocks diminish, there is a growing number of conflicts between different ethnic groups, for whom the possession of scarce natural resources is often a key issue. In Africa, both in recent decades and today, there have been numerous armed conflicts over what is the ownership of natural resources, even if this has not been entirely clear to the outside world.

When examining the conflicts, it is clear that concepts such as "water war" in the media are more likely to be used for "clickbait". Wars will not be fought solely because of water scarcity; many other factors need to come together. These include pre-existing political, social, economic, religious, or ethnic tensions, exacerbated by water scarcity.

When it is a well-functioning, strong state, it could guarantee the security of the people living on its territory, prevent or avoid conflicts, and deal with droughts and water scarcity caused by poor water management or climate change. It may also be able to reach agreements with other states on water sharing. In reality, however, as the examples of Mali in West Africa and Somalia in East Africa show, not all states are strong, or, as in the Mendera Triangle or Lake Turkana, not all states are strong enough to control and manage the situation. The result is the low-intensity water conflicts of today.

These will be exacerbated by droughts resulting from climate change and could lead to real civil war situations that could destabilize a country or region. In such situations, the Hungarian Defence Forces may become involved in the region, and these conflicts - as they involve one of the most densely populated areas in Africa - may generate a huge number of refugees, some of whom may arrive in Europe and Hungary via migration routes, which will have an impact on Hungary's national security, among many other things.

SUMMARISED CONCLUSIONS

As the first objective of the research, the first chapter of my thesis reviews the literature on security. I introduced the concept of security. In this literature review, I presented the works of not only national, European, and Anglo-Saxon, but also African researchers. In examining the concept of security, it was found that security is a subjective concept. According to Ferenc Gazdag, because security is based on perception, some people feel in danger, and some people do not feel in danger because they do not perceive it, and some people do not feel in danger, but still perceive that they are not safe. Ferenc Gazdag's approach to security - that security is subjective and based on perception - is of great relevance in chapter three, when analyzing and

presenting the water conflicts in Africa, in chapter four, when describing inter-group conflicts, and in chapter five, when I examined the question of how host societies react to migration.

In the second chapter, I introduced the link between environment and security, and then further narrowed the issue to the security implications of climate change, supported by concrete real-life examples. I presented the tensions over water in Africa, the geopolitical role of water, and the definition of water conflicts.

In the first and second chapters, I used the national and international literature to provide strong evidence that security science recognizes and researches the links between the environment and security, thus proving my first hypothesis⁸ that there is a link between environmental changes, such as climate change, and security. The effects of these changes have been already existing today, but in the future it will become even more of a problem that natural resources will become increasingly scarce, leading to armed conflicts. This proves my hypothesis that there is a link between security and the environment.

In the third chapter of my thesis, I analyzed, evaluated, and presented in a coherent framework the water conflicts of recent years and today. In this chapter, I presented the water conflicts in such a way that each conflict can be understood independently of the others. In examining the causes and background of water conflicts, I found that water scarcity is not the primary cause of conflicts, but that many other factors contribute to this, such as weak or failed states, or weak state power in a given area, as well as historical antecedents and various ethnic and political tensions. This supports my second hypothesis⁹ that water scarcity alone is unlikely to trigger war or armed conflict, but it can exacerbate existing tensions.

In the fourth chapter of my thesis, I started to examine population growth, quantitative changes in available water resources, and the impacts of climate change in Africa using a multidisciplinary approach. Using social psychology, I examined the relationship between individuals and groups, and the causes of inter-group rivalry, in order to understand the human aspects of inter-group conflict. I concluded that there are cultural differences between European and African societies and local historical, cultural, and social conditions should always be taken into account and accepted when examining conflicts. My findings in chapter

⁸ Today, and in the future, natural resources, including drinking water, will become increasingly scarce and the role of water will become more important. There is a link between water and security due to climate change and inadequate water management.

⁹ Water scarcity is not the primary cause of armed conflict or war, but in many conflicts in Africa, it plays a decisive role, directly or indirectly, in the outbreak or escalation of conflict, alongside other historical, ethnic, economic and political causes.

four supported my third hypothesis that¹⁰ a complex and narrowed approach to conflict and the drivers of conflict should be explored and that this requires a multidisciplinary approach. Other disciplines can help to uncover factors that influence conflict and are closely linked to security.

In the fifth chapter of my thesis, I argued that a future mission in Africa is a very realistic scenario for the Hungarian Defence Forces, and I presented the past and present missions of the Hungarian Defence Forces. This shows that the military engagement in Africa is not new for the Hungarian Defence Forces, and today Hungary's proactive approach to migration management increases the chances of Hungarian soldiers being deployed to an African conflict zone in the context of water scarcity or other natural resource shortages. In the second part of chapter five, I presented migration trends from Africa to Europe. I examined the security implications of migration for host societies. I showed how migration has economic, social, and national security risks, among many other effects. This proved my fourth hypothesis,¹¹ that water conflicts in Africa have an impact on Hungary's security, since on the one hand, Hungarian military involvement in Africa may take place, and on the other hand, people living in areas affected by water and other natural resource conflicts may appear in Hungary, because of the illegal and mass migration and it may cause various security problems.

SUMMARY RESULTS OF THE RESEARCH

The results of my research, my hypotheses, and my research objectives, presented in the five main chapters of my thesis, are summarised in the following sections:

- In order to¹² achieve the first research objective of the thesis, I first introduced the environment and security nexus in a broad sense, then focused on the impact of climate change and natural resources on security, and further narrowed the topic to the water and security nexus and the definition of water conflicts. The related theoretical issues were clarified in the first and second chapters.

¹⁰ Understanding in depth the history and present of the region, the culture of the people living there and the local tensions, their dynamics and drivers, is necessary to prevent and later resolve conflicts. It is necessary to understand and accept cultural and other differences, and to accept that while there are similarities in general human nature and behavior, every conflict is different.

¹¹ Europe and Hungary's security - regardless of the fact that the African water conflicts are geographically far away - is affected. On the one hand, there could be an international peace operation in the region, with Hungarian soldiers and civilians carrying out tasks in the conflict-affected area. On the other hand, as these conflicts force a significant number of people to leave their homes, in today's globalized world, through migration, these people arrive in Europe and Hungary, and, among many other factors, they also affect Hungary's security

¹² To illustrate in detail, with practical examples, firstly the broader context of environment and security, the impact of scarce natural resources on security, and further narrowing down to the context of water and security

- The second aim¹³ of my thesis was achieved in the third chapter, where I collected, analyzed, systematized, and presented coherently the water conflicts in Africa in the past and today. All disputes, tensions, conflicts, or wars have emerged in the context of water.
- The third aim¹⁴ of my thesis was also achieved in chapter 3, where I analyzed water conflicts in Africa and concluded that the Horn of Africa, i.e. the East African region and the Sahel, is the most vulnerable to water conflicts today and in the future. Among the water conflicts analyzed, which are still taking place today at low intensity: Lake Victoria, Lake Turkana, the Mendera Triangle, the Darfur situation, these conflicts are all-natural resource conflicts over fish stocks, grazing land, and water resources. And the 'Nile conflict' between Egypt and Ethiopia could threaten to erupt into an inter-state war.
- The fourth objective¹⁵ of my thesis was achieved in chapter four. In this chapter, I attempted to explore the causal linkages of water conflicts as natural resource conflicts using a multidisciplinary approach. I have analyzed data to show and substantiate that rising temperatures, declining water availability, population growth, and the impacts of climate change on Africa are already real problems in Africa today. I have concluded and confirmed that drought and rainfall shortages will become an increasing problem in the Sahel and East African countries and that natural resources will become increasingly scarce. Using sociology, I have briefly described African societies and how collectivist societies are characterized. I have also used social psychology to explain the relationship between the individual and the group, and the psychological explanations for intergroup competition and conflict over natural resources.
- The fifth aim¹⁶ of my thesis was achieved in chapter five, where I presented the impact of water conflicts in Africa on the security of Europe and Hungary. I have shown that, as a statutory task of the Hungarian Defence Forces and as a result of the international alliance system, Hungary is currently taking a proactive approach to the issue, there is

¹³ Collect and present the water conflicts in Africa in the past and today. All disputes, tensions, conflicts or wars that have arisen in the context of water.

¹⁴ Predict where in Africa further conflicts are likely to escalate in the future due to lack of water or other natural resources.

¹⁵ To analyse and present in a multidisciplinary and complex approach the cause and effect relationships behind conflicts over water as a natural resource. Furthermore, to identify practical scientific results that help to understand the drivers of conflicts, which may be important in the context of future operations of the Hungarian Defence Forces abroad.

¹⁶ To explore the potential impact of water conflicts in Africa on the security of Hungary and Europe. To make the links between conflicts in Africa and Hungary's security understandable for practitioners

a possibility of a new role for the Hungarian Defence Forces in Africa. I presented the trends in migration from Africa, the social, economic, and political tensions that migration and, more narrowly, integration issues can create, and the link between migration and organized crime, radicalism, and terrorism. These are the links that threaten the security of Europe and Hungary.

NEW SCIENTIFIC RESULTS

My dissertation on the links between water conflicts in Africa and Hungary's security contains the following scientific results:

1. I collected, analyzed, evaluated, systematized, and presented in a new way the water conflicts of the past and present in Africa. A complex, comprehensive presentation, analysis, and evaluation of water conflicts in Africa have not yet been carried out either in the national or international literature. Using novel methods, I have been the first to present conflicts in East Africa, such as the Manderu Triangle conflict.
2. I showed, through practical examples, that there is a link between water scarcity and security, and that the role of water will be appreciated in the future. Water conflicts are natural resource conflicts, with related problems (inadequate water management, overpopulation, climate change) all contributing to the loss of natural resources. I have shown and demonstrated that the emergence of water conflicts requires several other factors, such as a weak or failed state, which is unable to guarantee the security of its inhabitants and to address the challenges posed by water and other natural resources.
3. I analyzed, systematized, and confirmed that there are no pure water wars or water conflicts. We have many examples of tensions between different states over water allocation, territorial disputes, the disappearance of water, but a war between states over water alone is unlikely to occur. I have shown that water conflicts in the past and today are in fact conflicts over natural resources. The conflict often has significant ethnic, lifestyle, historical, political antecedents and causes.
4. I analyzed, evaluated, and explored the differences between East African and European societies in a new way, using other disciplines such as sociology and psychology, which is of great importance in understanding the mindset of the people living there. From these findings, I have further interpreted and generalized the relationship between individuals and groups, the drivers of inter-group conflict, using psychology. Following these evaluations, I have shown how the human aspects that underlie the conflicts shape

the deepening of the conflicts. Based on my findings, I have made recommendations for practitioners to manage, understand and resolve conflicts.

5. Based on my analysis and assessment, I have argued that natural resources will become increasingly scarce due to weather and environmental changes caused by climate change. Based on my analysis and conclusions, I predict that the scale of the low-intensity natural resource conflicts that are still ongoing in East Africa today could escalate. In the Sahel, the security situation will deteriorate, especially if the conflict in Mali is further fuelled by climate change, and if, in addition to its ethnic, religious, and political aspects, water scarcity and the struggle of different lifestyles groups for natural resources become more pronounced. The conflict in Mali demonstrates that extremist Islamists can be defeated militarily, but the conflict between groups caused by water scarcity is more difficult to resolve, as one of the most serious roots of the conflict is the lack of water as a natural resource. Tensions between Egypt and Ethiopia over the Nile threaten to turn into a real water war. Based on the research carried out, I concluded that in the future, the Hungarian Defence Forces may face new tasks on the African continent and that the conflict areas may lead to additional refugees and mass illegal migration from the conflict areas to Europe, which may negatively affect the security of our country and our region.

USABILITY OF RESEARCH RESULTS, RECOMMENDATIONS

In line with the research objectives, the thesis and its results can be used in the following areas:

1. In education:
 - The National University of Public Service, Faculty of Military Science and Military Officer Training.
 - The National University of Public Service, Faculty of Water Sciences.
 - The National University of Public Service, Faculty of Political Science and International Studies.
 - At the African Research Institute of the Security Studies Doctoral School at Óbuda University.
 - At the Africa Research Centre of the University of Pécs.
 - In the preparation of Hungarian NGOs and foundations for Africa.
 - During the humanitarian mission training of the Hungary Helps Agency.

- At the MH Peace Support Training Centre's Missionary Staff Officer Basic Course and Missionary Target Preparation Courses.

2. For practice:

- For the Hungarian Defence Forces
- For the national security services of Hungary
- For the Counter-Terrorism Centre
- For police
- For the Ministry of Foreign Affairs and Trade
- For research institutions working on migration and foreign policy

I recommend my thesis to professionals working in the field of national security and law-enforcement and order services, the Hungarian Defence Forces, foreign policy professionals, as well as academics, researchers, and students.

PUBLICATION LIST

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Treszkai, Ákos: Security Risks in Africa: Water Conflicts In: DEFENCE REVIEW: THE CENTRAL JOURNAL OF THE HUNGARIAN DEFENCE FORCES 144:1 (2016) pp.146-157.

PROFESSIONAL AND ACADEMIC CURRICULUM VITAE

Ákos Treszkai studied at a German-Hungarian bilingual secondary school, where he graduated in German in 2006. After graduation he continued his studies at the Police College. During his studies as part of a European Union program at the college, he spent seven months in the German at the German police. Later, as part of the Erasmus program, he studied a semester at De Montfort University in Leicester, England, and spent his internship at Leicestershire County Traffic Police. He graduated from the Police College and joined the Counter-Terrorism Centre in 2010. In the context of his work, he has traveled to various countries in North Africa and East Africa. From 2013-2015 he obtained a Diploma in National Security Expertise from the National University of Public Service and continued his studies at the Doctoral School of Military Science. From 2016 to 2018, he worked as a liaison officer at Europol (European Police Office) in The Hague, the Netherlands. He speaks French at a basic level and has a complex advanced level certificate in German and English. In his research, he combined his African experience with his experiences from Hungary and abroad. His publications are in English and Hungarian. In his publications he has focused on African conflicts, various armed groups in Africa, and the security risks of water scarcity and climate change in Africa. He regularly participates in national and international academic conferences.