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Scarcity of Food: a Factor Destabilising Security in the MENA Region

Introduction

The goal of this paper is to examine the impact of food security on political stability in the MENA region at three levels: the state level, the regional level, and the individual level. The paper also discusses the assessment of the effectiveness of governments in the region in terms of food security risk management strategies, and interregional cooperation. The author has decided to put forward the thesis that food shortages is one of the main driving factors of political instability in the MENA region, and ensuring food security is an important task for current governments in the region.¹

The paper can be broken down into three parts. The first depicts the socio-political and economic situation in the MENA region and the level of food security, and it discusses the relationship between conflict and food insecurity. The second part presents the analysis of examples of the impact of food insecurity on instability

¹ As defined by the Food and Agricultural Organization (FAO), food security refers to four issues: accessibility, access, use and stability. Food must be available at country level, through domestic production and / or import. Households must have access to food, which is associated with adequate distribution to individual consumers. Consumed food should be adequate to maintain health and an active life and be available at all times. See: World Food Summit 1996, *Rome Declaration on World Food Security*, <http://www.fao.org/3/w3613e/w3613e00.htm> [accessed: 10.10.2019], The United Nations, 'Arab Horizon 2030: Prospects for Enhancing Food Security in the Arab Region', Economic and Social Commission for Western Asia, Beirut 2017, pp. 3–4, <https://www.unescwa.org/sites/www.unescwa.org/files/uploads/arab-horizon-2030-prospects-enhancing-food-security-summary-english.pdf> [accessed: 16.11.2019].

in the MENA region. In the third part, the author provides examples of numerous mechanisms and strategies implemented to counterbalance the negative implications of food insecurity on political stability at the state and regional level.

The analysis carried out in this paper was based on various sources: books, reports, and articles from the period of 2015–2019, and the author’s own research. The critical, problem-oriented approach has been applied, which takes into account the behaviour of basic actors, important from the point of view of the topic, and the following research methods have been used: factor analysis, institutional and legal, and content analysis.

Characteristics of the MENA Region

According to the author, the Middle East and North Africa is a region that consists of countries from Morocco, Algeria, Tunisia, Libya through countries of Levant (Egypt, Jordan, Syria, Israel and Palestinian Authority, Lebanon, Iraq) and the Arabian Peninsula (Yemen, Oman, Qatar, Bahrain, Kuwait, Saudi Arabia and the United Arab Emirates) to Iran. However, it is worth mentioning that the term Middle East is not strictly defined. What constitutes the Middle East is open to several interpretations. The main dispute between various interpretations is whether or not to include countries such as Turkey, Sudan, Afghanistan, and the Maghreb region. Studies identify two groups of definitions of the Middle East. The so-called “narrow” approach sees the Middle East as the area of the Arabian Peninsula and the Fertile Crescent (the area from Egypt through Palestine and Syria to Mesopotamia) and does not include Maghreb countries: Libya, Algeria, Tunisia, Morocco, Mauretania. The Middle East is also defined broadly, including the Maghreb region with Afghanistan and Pakistan. There are some researchers who divide the Middle East into three sub-regions: Levant, Maghreb and the Persian Gulf. One of the reasons for this is that the Middle East cannot be defined by objective features – it cannot be characterised by using criteria of a physical geography perspective. It is more a geopolitical term, and in order to define it, is essential to take historical, geo-cultural, geo-political, geo-economic and geo-strategic factors into account.²

There are several links between conflicts and food insecurity. Doubtless, the conflict negatively affects food security, and uncertainty in this area persists as its heritage.³ The lack of food security is not only a consequence, but also a cause of conflict. Research has been conducted for several years now in this area and was intensified after the economic crisis of 2008. Studies suggest that the relationship between food insecurity and conflict is not automatic but rather depends on the context concerning the existing political institutions, the type of political system, the level of economic development, social security networks, citizens’ trust in

² P. Bilgin, ‘Whose Middle East’? Geopolitical Inventions and Practices of Security’, *International Relations*, 2004, vol. 18, pp. 25–28.

³ S. Abis, ‘Food Security and Conflicts in the Mediterranean Region’, *Mediterranean Yearbook*, IEMed 2018, pp. 274–276.

public authorities, and their mobilization capabilities.⁴ As Christopher Barrett emphasises, neither hunger nor conflict exist in a vacuum.⁵ The risk of conflict or unrest due to the food insecurity is higher in so-called hybrid regimes where democratic and authoritarian institutions intertwine, in countries with the low level of development and where social inequalities exclude some citizens from access to goods.⁶ The interaction between the food, water, energy and climate sectors must also be taken into account, as well as agricultural structure and efficiency.⁷ Moreover, the countries that have a large share in food imports and those where households spend a large part of their income on food are more exposed to the conflict.⁸ The likelihood of conflict also increases within ethnically diverse communities and in developing countries, where there is often a lack of stable dispute resolution institutions.⁹ Also, the type of food that causes riots can play a major role, as in many places food is plays a significant cultural role: for example, in Egypt, bread fulfils this role.¹⁰ The countries with high levels of unemployment and the dominance of young people aged 15–24 are prone to conflicts. The degree of urbanisation also plays a role when the rural population moves to cities, the proportion of consumers and producers of food is disturbed. City dwellers are more geographically concentrated, are closer to the governments, and bear lower costs for joint action against those who rule them. However, as Henk-Jan Brinkman and Cullen Hendrix point out, city dwellers generally have better access to food than the rural community and political actors pay more attention to their needs and demands.¹¹ At the internal level, food and water shortages increase the risk of humanitarian crises, uncontrolled migratory flows, resettlements, protests against the authorities related to civil disobedience and may contribute to the community conflict. At regional level, they increase competition for limited resources.¹²

⁴ C. Breisinger, O. Ecker, J.F. Maystadt, J.T. Trinh Tan, P. Al-Riffai, K. Bouzar, A. Sma, M. Abdelgadir, 'How to Build Resilience to Conflict: the Role of Food Security', Food Policy Report, IFPIR 2014, pp. 1–6.

⁵ Ch.B. Barrett, 'Food or Consequences: Food Security and Its Implications for Global Sociopolitical Stability', [in:] Ch. B. Barret (ed.), *Food Security and Sociopolitical Stability*, Oxford 2013, p. 5. The World Food Program USA, 'Winning the Peace: Hunger and Instability', Washington D.C. 2017, p. 44, <https://www.wfpusa.org/wp-content/uploads/2019/03/2017-Winning-the-Peace-Hunger-and-Instability.pdf> [accessed: 15.11.2019].

⁶ The World Food Program USA, 'Winning the Peace...', *op. cit.*, pp. 44–45.

⁷ Sh. Efron, Ch. Fromm, B. Gelfeld, Sh. Nataraj, Ch. Sova, 'Food Security in the Gulf Cooperation Council', RAND Corporation, December 2018, pp. 7–8, https://www.rand.org/pubs/external_publications/EP67748.html [accessed: 15.11.2019], M. Hameed, H. Moradkhani, A. Ahmadalipour, H. Moftakhari, P. Abbaszadeh and A. Alipour, 'A Review of the 21st Century, Challenges in the Food-Energy-Water Security in the Middle East', *Water*, vol. 11, April 2019, pp. 2–3.

⁸ H.J. Brinkman, C.S. Hendrix, 'Food Insecurity and Violent Conflict: Causes, Consequences, and Addressing the Challenges', Occasional Paper, No. 4, The World Food Program, Rome 2011, p. 11.

⁹ The World Food Program USA, 'Winning...', *op. cit.*, p. 19.

¹⁰ *Ibid.*, p. 43.

¹¹ C.S. Hendrix, H.J. Brinkman, 'Food Insecurity and Conflict Dynamics: Causal Linkages and Complex Feedbacks', *International Journal of Security and Development*, 2013, vol. 2, p. 8.

¹² H. J. Brinkman, C.S. Hendrix, 'Food Insecurity and Violent Conflict...', *op. cit.*, p. 8.

All the above mentioned issues exist in the MENA region. In terms of political matters and security, the region is epitomised by political crisis. The countries of the region, formed as a result of decolonisation, were struggling with instability from the beginning of their existence. Inter-state relations are defined by competition and a lack of cooperation not only at the political level, but also at the economic level. With the creation of Israel in 1948, the long-lasting Israeli-Palestinian conflict has dominated security architecture of the region. Nowadays, the region faces several interconnected conflicts that tear countries and societies apart, including, among others, the Syrian civil war, the Yemeni civil war, the Libyan civil war, or the struggle for regional leadership between Iran and Saudi Arabia. All of them are fuelled by sectarian, political, economic, and security differences. The authoritarian but domestically weak countries pave the way for radical non-state actors to act. Ethnically and religiously heterogeneous societies do not find a common language.¹³ The state structures in the MENA region are too weak and vulnerable to provide solid defence mechanisms against the challenges they are facing. The conflicts at the political level are accompanied by growing social disparities, poverty, high unemployment, population growth, as well as inefficient and unproductive economies. The region is struggling with an identity crisis and a lack of regional security architecture and a sense of community and common responsibility for the future at domestic and regional level.¹⁴

In terms of income, the MENA countries can be divided into two groups. The first group, which includes those with high incomes, are oil exporters, mainly the Arabian Peninsula countries (without Yemen), but also Libya and Algeria, where over 56% of the world's oil resources and about 36% of the world's natural gas resources are based.¹⁵ The second group, in which 90% of the total population lives, are low- and middle-income countries, such as Morocco, Tunisia, Egypt, Jordan, Palestinian Authority, Lebanon, Iraq, Iran, Syria, and Yemen.¹⁶ Despite positive GDP indicators, the problem is unstable economic growth. Inequalities are a dominating problem in the region, and some citizens are excluded from participation in income.¹⁷ The region is also not attractive to investors. Most countries are listed at the end the World Bank's Doing Business Index ranking, and they have to deal with high levels of corruption, and low governance indexes.¹⁸ What is common to the countries of the region is also a rapid increase in energy consumption, which

¹³ Sh. Akbarzadeh, K. Baxter, *Middle East Politics and International Relations. Crisis Zone*, New York 2018, pp. 2–5.

¹⁴ E. Holmquist and J. Rydqvist (eds.), *The Future of Regional Security in the Middle East: Expert Perspectives on Coming Developments*, FOI, April 2016, pp. 17–23.

¹⁵ M. Hameed, H. Moradkhani, A. Ahmadalipour, H. Moftakhari, P. Abbaszadeh, A. Alipour, 'A Review of the 21st Century...', *op. cit.*, p. 4.

¹⁶ H. Lofgren, A. Richards, 'Food Security, Poverty, and Economic Policy in the Middle East and North Africa', Discussion Paper, No. 10, IFPRI, February 2003, p. 3, <http://ebrary.ifpri.org/utils/getfile/collection/p15738coll2/id/87844/filename/87845.pdf> [accessed: 20.11.2019].

¹⁷ M. Hameed, H. Moradkhani, A. Ahmadalipour, H. Moftakhari, P. Abbaszadeh, A. Alipour, 'A Review of the 21st Century...', *op. cit.*, p. 9.

¹⁸ Food and Agricultural Organization, 'Near East and North Africa, Regional Overview of Food Security and Nutrition', Cairo 2018, p. 42, <http://www.fao.org/3/ca3817en/ca3817en.pdf> [accessed: 15.11.2019].

is associated with the demographic boom and economic transformation. It is estimated that between 2012–2040 energy demands will increase by 95%.¹⁹

The region has one of the highest population growth rates. Over 50% of its people are aged 15–24. According to the UN, in 1970–2000, the population growth rate in the region was one of the highest in the World and amounted to 2.57%.²⁰ By 2050, the region's population will have almost doubled, reaching 650 million.²¹ The population growth is accompanied by rapid urbanisation. In the years 1970–2010, the number of city dwellers increased four times, and by 2050, it is expected that 66% of the region's population will be living in cities.²² The level of urbanisation in the Gulf Cooperation Council (GCC) stands at 84%, and in the least developed ones it reaches 34%.²³ High unemployment particularly affects younger workers. In the last couple of years, the unemployment rate of people aged 15–24 has gone up to almost 25%, a level twice as high as the world average.²⁴

There are significant differences between the countries of the MENA region, both in terms of food safety, and in their ability to cope with the challenges in this area. Overall, the food security prospects in the MENA region are not promising.²⁵ However, most countries are self-sufficient in food. The Average Dietary Energy Supply Adequacy Index (ADESA) for the Arab region is around 134%, which means that the region, taken as a whole, has much more food than it is required for its population to live a healthy and active life. On the one hand, some countries have ratios of over 150%, e.g. Egypt. On the other hand, some reach just 100%. However, ADESA does not take into account how food is distributed.²⁶ According to the Food and Agricultural Organization (FAO), the number of malnourished people has increased since the beginning of the 1990s. It is estimated that this problem

¹⁹ M. Hameed, H. Moradkhani, A. Ahmadalipour, H. Moftakhari, P. Abbaszadeh, A. Alipour, 'A Review of the 21st Century...', *op. cit.*, p. 15.

²⁰ The United Nations, 'World Urbanization Prospects: The 2014 Revision', United Nations, Department of Economic and Social Affairs, Population Division, New York 2014, <https://esa.un.org/unpd/wup/Highlights/WUP2014-Highlights.pdf> [accessed: 15.11.2019], cited in G. Jobbins and G. Henley, 'Food in an Uncertain Future. The Impacts of Climate Change on Food Security and Nutrition in the Middle East and North Africa', WFP 2015, p. 20, <https://reliefweb.int/report/syrian-arab-republic/food-uncertain-future-impacts-climate-change-food-security-and-nutrition> [accessed: 15.11.2019].

²¹ M. Martens, 'Food and Water Security in the Middle East and North Africa', NATO Parliamentary Assembly, Science and Technology Committee Special Report, 8 October 2017, p. 2, <https://www.nato-pa.int/download-file?filename=sites/default/files/2017-11/2017%20-%20176%20STC%2017%20E%20bis-%20FOOD%20AND%20WATER%20SECURITY%20MENA%20-%20MARTENS%20REPORT.pdf> [accessed: 15.11.2019].

²² *Ibid.*, p. 6.

²³ The United Nations, 'Arab Horizon 2030...', *op. cit.*, p. 15.

²⁴ C.E. Werrell, F. Femia (eds.), *The Arab Spring and Climate Change. A Climate and Security Correlations Series*, Center for American Progress, Stimson, The Center for Climate and Security, p. 43, <https://climateandsecurity.files.wordpress.com/2012/04/climatechangearabspring-ccs-cap-stimson.pdf> [accessed: 20.10.2019].

²⁵ A. Balduzzi, 'Bread, Freedom and Migration: the Role of Food in the Arab Awakening', Barilla Center for Food and Nutrition, 22 May 2019, <https://www.foodandmigration.com/bread-freedom-and-migration-the-role-of-food-in-the-arab-awakening> [accessed: 29.11.2019].

²⁶ The United Nations, 'Arab Horizon 2030...', *op. cit.*, p. 15.

concerns about 33 million people in the region, mostly those living in rural areas.²⁷ A study by the International Food Policy Research Institute (IFPRI) has revealed that, with the exception of oil-rich Arabian Peninsula countries, most face the risk of food insecurity.²⁸ According to the Global Food Security Index (GFSI) for 2012, 2014 and 2016, Israel, Qatar and Kuwait are classified as the most food-safe countries in the region. Syria and Yemen are the most vulnerable states to food insecurity.²⁹ In Yemen, in March 2017, about 17 million people, accounting for 60% of the total population, required food assistance. In Syria, an estimated 6.5 million are at risk of not having access to food.³⁰

The lack of food security at the macro level is influenced by import dependency and challenges related to domestic production; at the micro level, the problems with its even distribution. MENA countries import around 50% of wheat and barley, 40% of rice and 70% of corn. Food import dependency is expected to increase by 64% between 2010 and 2030. In some GCC countries, grain import rates exceed 90%.³¹ What is more, according to the FAO, the slow growth of animal production, a lack of good quality feed in adequate quantities and a lack of appropriate policies supporting infrastructure and services have led to a sharp increase in live animal import over the last decade.³² The poor are the ones who are most affected by the changes occurring in food prices, as they spend between 35% and 65% of their income on groceries.³³

Only 4% of the land in the region is cultivated, and 55% is unsuitable for agricultural production. At present, used land is severely degraded to such an extent that

²⁷ G. Jobbins, G. Henley, 'Food in an Uncertain Future...', *op. cit.*, p. 7.

²⁸ C. Breisinger, T. van Rheenen, C. Ringler, A. Nin Pratt, 'Food Security and Economic Development in the Middle East and North Africa: Current State and Future Perspectives'. IFPRI Discussion Paper, No. 00985, 2010, <http://www.ifpri.org/sites/default/files/publications/ifpridp00985.pdf> [accessed: 15.11.2019], cited in, M. Solh, 'The Outlook for Food Security in the Middle East and North Africa', Rosenberg International Forum on Water Policy, Aqaba, Jordan 2013, p. 99, <http://ciwr.ucanr.edu/files/168767.pdf> [accessed: 5.12.2019].

²⁹ The Economist Intelligence Unit, *Global Food Security Index 2017: Measuring Food Security and The Impact of Resource Risks*, London, 2017, The Economist Intelligence Unit, *Global Food Security Index 2012: An Assessment of Food Affordability, Availability and Quality*, London 2012, The Economist Intelligence Unit, *Global Food Security Index 2014: An Annual Measure of the State of Global Food Security*, London 2014, The Economist Intelligence Unit, *Global Food Security Index 2016: An Annual Measure of the State of Global Food Security Contents*, London 2016, cited in M. Hameed, H. Moradkhani, A. Ahmadalipour, H. Moftakhari, P. Abbaszadeh, A. Alipour, 'A Review of the 21st Century...', *op. cit.*, p. 3.

³⁰ Organization for Economic Cooperation and Development and Food and Agricultural Organization, *The Middle East and North Africa: Prospects and Challenges, Agricultural Outlook*, 2018, p. 87, https://www.oecd-ilibrary.org/docserver/agr_outlook-2018-5en.pdf?expires=1575659070&id=id&accname=guest&checksum=01CA2C360736DE863F51A87629911BB7 [accessed: 20.11.2019].

³¹ M. Martens, 'Food and Water...', *op. cit.*, p. 5.

³² *Improving livestock and livelihoods, and responding to animal health threats*, FAO 2019, <http://www.fao.org/neareast/perspectives/transboundary-animal-diseases/en> [accessed: 5.12.2019].

³³ J.A. Lampietti, S. Michaels, N. Magnan, A.F. McCalla, M. Saade, N. Khouri, 'A Strategic Framework for Improving Food Security in Arab Countries', *Food Security*, vol. 3, February 2011, Supplement 1, pp. 10–18.

its productivity is estimated to have been reduced by up to 30-35%.³⁴ Most of the arable land is concentrated in the Fertile Crescent region around the Tigris and Euphrates rivers and in the Nile basin.³⁵ The largest food producers are Iran and Egypt, producing half of the total agricultural production value.³⁶

Despite the fact that the agricultural sector employs about 40% of the labour force in Morocco and between 20% and 30% in Yemen, Egypt and Iran, the regional governments have invested little in the transformation of rural areas.³⁷ Government spending in this sector has been steadily decreasing since the 1980s.³⁸ Most farmers grow grain, for which 60% of the land is allocated. However, grain production generates only 15% of the gross agricultural production value. Farmers do not want to specialise in more profitable and, what is more important, less water-consuming horticulture, not to mention nutritional values or export opportunities. Grain crops are associated with a lower risk, because they are more immune to changing climatic conditions. Public support for agriculture and access to credit favours large farms. In some countries of the region – such as Egypt, Yemen, Jordan, Lebanon and Iran – most farms are smaller than one hectare. The modernisation policy has largely excluded small owners from public support. These farms are small, technologically backward, and poor. Facilitating large-scale land acquisition by domestic and foreign investors is another policy supporting and promoting large farms³⁹. Another common problem is related to food waste. Food losses account for almost 30% of production.⁴⁰ Another problem is poor infrastructure. Food is often stored on so-called open stalls, making them susceptible to pollution, heat, and humidity, which speeds up the rotting of food.⁴¹ The lack of infrastructure often prevents delivery to urban markets. As a result, food prices are low in producing regions and high in cities. At individual level, many rural farms do not have a market in their area. In Yemen, for 40% of rural households, the nearest market is between 6 and 20 km away, and for the next 20%, the nearest market is more than 20 km away. In addition, these people must invest more to get food when, for example, fuel prices rise.⁴²

³⁴ Organization for Economic Cooperation and Development and Food and Agricultural Organization, 'The Middle East and North Africa...', *op. cit.*, p. 71.

³⁵ 'The Food Security. Factor Stability', Governance, and Development Choices, Dialogue Snapshot Report, The Hollings Center for International Dialogue, April 2018, p. 4, <https://hollingscenter.org/wp-content/uploads/2018/04/Food-Security-Layout-Final.pdf> [accessed: 1.12.2019].

³⁶ Organization for Economic Cooperation and Development and Food and Agricultural Organization, 'The Middle East and North Africa...', *op. cit.*, p. 79.

³⁷ G. Jobbins, G. Henley, 'Food in an Uncertain...', *op. cit.*, p. 20.

³⁸ A. Balduzzi, 'Bread, Freedom and Migration: the Role of Food in the Arab Awakening', Barilla Center for Food and Nutrition, 22 May 2019, p. 4, <https://www.foodandmigration.com/bread-freedom-and-migration-the-role-of-food-in-the-arab-awakening> [accessed: 1.12.2019].

³⁹ Organization for Economic Cooperation and Development and Food and Agricultural Organization, 'The Middle East and North Africa...', *op. cit.*, p. 77.

⁴⁰ 'The Food Security. Factor Stability...', *op. cit.*, p. 6

⁴¹ The United Nations, 'Arab Horizon 2030...', *op. cit.*, p. 95.

⁴² Oxfam, 'Missiles and Food Yemen's Man-Made Food Security Crisis', Oxfam Briefing Note, December 2017, p. 11, <https://reliefweb.int/sites/reliefweb.int/files/resources/bn-missiles-food-security-yemen-201217-en.pdf> [accessed: 16.11.2019].

All of the region's economies will face water scarcity by 2050.⁴³ The average water availability in the region is only 1,200 cubic metres per year per person, compared to the global average of 7,000 cubic metres.⁴⁴ The countries of the region over-exploit their water resources.⁴⁵ Water-use efficiency is only half the world average. Due to the dry climate, around 40% of the crop's areas in the region need irrigation.⁴⁶

The Intergovernmental Panel on Climate Change (IPCC) has identified the MENA region as a hotspot for climate change due to water scarcity, low levels of socio-ecological resilience, social tensions, political conflicts, and the ongoing immigration crisis.⁴⁷ Research indicates that by 2035, the average temperatures in the region will have risen by 1° C in winter, and by 1.5 to 2° C in the summer. By the end of the century, the average temperature may reach 50° C.⁴⁸ By 2030, more frequent and intense drought and heat waves are expected, which implies that precipitation can fall by 20–40%⁴⁹ and crop efficiency can be reduced by up to 30%. Higher temperatures will cause faster rotting of food.⁵⁰ In addition, the projected increase in sea level will have a strong impact on densely populated, low-lying coastal areas, in Qatar, Egypt, Tunisia and the United Arab Emirates.⁵¹ It is estimated that between two and four million people would have to be relocated from the Nile Delta if the sea level rose just by 50 centimetres.⁵²

Food security and instability in the MENA Region

Deepening problems and challenges with food security are not the main reasons for conflicts in the MENA region, but in combination with weak institutions,

⁴³ French National Institute for Agricultural Research, *North Africa and the Middle East through to the year 2050: towards a greater dependence on agricultural imports*, 10 March 2018, <http://institut.inra.fr/en/Objectives/Informing-public-policy/Advanced-Studies/All-the-news/North-Africa-Middle-East-2050-food-dependency> [accessed: 15.10.2019].

⁴⁴ M. Martens, 'Food and Water...', *op. cit.*, p. 5.

⁴⁵ *Ibid.*, p. 6.

⁴⁶ Organization for Economic Cooperation and Development and Food and Agricultural Organization, 'The Middle East and North Africa...', *op. cit.*, p. 70.

⁴⁷ I. Carry, 'Climate Change, Water Security, and National Security for Jordan, Palestine, and Israel', EcoPeace Middle East, Amman, Jordan, Tel Aviv, Israel, Ramallah, Palestine 2019, p. 9, <https://eco-peace.org/wp-content/uploads/2019/01/climate-change-web.pdf> [accessed: 15.10.2019].

⁴⁸ M.A. Lang, 'Impacts of Climate Change on the Eastern Mediterranean and the Middle East and North Africa Region and the Water–Energy Nexus', *Atmosphere*, vol. 10, August 2019, p. 6.

⁴⁹ *Ibid.*

⁵⁰ G. Jobbins, G. Henley, 'Food in an Uncertain...', *op. cit.*, p. 34.

⁵¹ The United Nations, 'Arab Horizon 2030...', *op. cit.*, p. 11.

⁵² O. Brown and A. Crawford, 'Rising Temperatures, Rising Tensions. Climate change and the risk of violent conflict in the Middle East', International Institute for Sustainable Development, 2009, p. 26, https://www.iisd.org/sites/default/files/publications/rising_temps_middle_east.pdf [accessed: 17.11.2019].

authoritarian regimes, divided societies, the lack of adaptability they are indeed the major factors.⁵³ Several protests related to food shortages took place in response to higher food prices in Egypt as early as in the 1970s, as well as in Jordan and Morocco in the 1980s and 1990s.⁵⁴

The scarcity of food played a significant, though indirect, role in the Arab uprisings sweeping across the region in 2011. Beginning with Tunisia, massive protests touched most of North Africa and the Middle East. During the year, four Arab regimes were overthrown. Tunisian President Zine el Abidine Ben Ali fled the country. President Hosni Mubarak from Egypt was forced to resign and later convicted and imprisoned. As a result of international intervention, Colonel Muammar Gaddafi from Libya lost control of the country and was later killed by his opponents, and the country – given the political, economic and tribal differences – plunged into civil war. In Yemen, President Ali Abdullah Saleh was forced to transfer power but the political transformation was not successful and resulted in a long violent civil war. A civil war began in Syria and despite the fact that the governmental forces have been able to stay in place, fighting continues today. The protests did not bypass the Saudi Arabia and Bahrain, proving that they can happen even in rich economies and no one is exempt from the need to change.⁵⁵

These events were preceded by an increase in global food prices in 2008–2009. By mid-2008, food prices on world markets had risen sharply by several percent.⁵⁶ This was due to higher energy prices, the use of corn not only as food, but also for the production of biofuels, reduced exports due to the growing internal demand for food in exporting countries, speculation on food prices, land accumulation by international corporation⁵⁷ Most governments in the region responded by reducing import duties and increasing subsidies and wages in the public sector. However, food prices for consumers increased by several percent anyway.⁵⁸ Self-immolation of Muhammad Buazizi, a street vendor in Tunisia who had sparked a local uprising, was partly due to the rising costs of food prices. When the Egyptians took to the street in 2011, “bread”, “dignity” and “social justice” were among the main

⁵³ The United Nations, ‘The Drivers and Impact of Conflict on the Sustainable Development Agenda in the Arab Region’, Economic and Social Commission for Western Asia, Beirut 2018, pp. 1–4, https://www.unescwa.org/sites/www.unescwa.org/files/publications/files/the_drivers_and_impact_of_conflict_on_the_sustainable_velopment_agenda_in_the_arab_region_0.pdf [accessed: 29.11.2019].

⁵⁴ P. Bilgin, ‘Re-visioning Security in the Middle East, a Critical Security Studies Perspective’, Paper Prepared for the ECPR Joint Sessions Workshop *Re-defining Security*, Mannheim, 26–31 March 1999, p. 10, <https://ecpr.eu/Filestore/PaperProposal/9f75d90a-6c7e-4928-b6e2-a099b9492340.pdf> [accessed: 29.11.2019].

⁵⁵ L. Sadiki, ‘The Arab Spring: The People in International Relations – International relations of the Arab Spring’, [in:] L. Fawcett (ed.), *International Relations of the Middle East*, Oxford 2016, pp. 346–355.

⁵⁶ M. Solh, ‘The Outlook for Food Security...’, *op. cit.*, pp. 97–105.

⁵⁷ L. Brown, ‘The Great Food Crisis of 2011. It’s real, and it’s not going away anytime soon’, *Foreign Policy*, 10 January 2011, <https://foreignpolicy.com/2011/01/10/the-great-food-crisis-of-2011> [accessed: 18.10.2019].

⁵⁸ C.E. Werrell, F. Femia (eds.), *The Arab Spring...*, *op. cit.*, p. 18.

slogans.⁵⁹ According to the Environmental Justice Foundation, among the major wheat importing countries, “the nine largest importers are in the Middle East, seven had political protests, in 2011. Two countries – the United Arab Emirates and Israel – despite the relatively high level of wheat imports, did not experience major protests because they have high income per capita and most importantly, a low percentage of income spent on food.⁶⁰ The number of malnourished people in the MENA region has increased by 5% since 2011 in countries affected by conflict, the level of malnutrition in non-conflict countries has remained the same.⁶¹ Since 2018, new waves of protests, called New Arab Spring or Arab Spring 2.0, have been taking place in the region; food safety and access to basic services have become one of their driving factors.⁶²

Syria and Yemen are good examples of underlying how problems with access to food, in an ethnically and religiously divided society, a brutal and corrupt regime, widespread social exclusion, and lack of modernization reforms can become a driving force for change. In Yemen, on the eve of the outbreak of the Arab Spring, 45% of the population, over ten million, did not have food security.⁶³ Yemen imports 90% of food, including 90% wheat and 100% rice, which are basic food products.⁶⁴ Several years of internal conflict in Yemen made the situation worse. More than half the population urgently needs help.⁶⁵ The negative consequences of the conflict, such as blockades in ports and damaged infrastructure, have increased food, water and fuel prices, as well as reduced production. Humanitarian aid covers only about 20% of the country’s monthly needs. The population of Yemen has become much more prone to diseases. Oxfam reports that areas with high levels of food insecurity in Yemen have been particularly affected by the cholera epidemic.⁶⁶

In Syria, 40% of the population depends on agriculture. In the years 1999–2011, around 60% of Syria was affected by droughts. Although, as Erik Holmquist and John Rydqvist indicate, the severe drought caused neither a popular uprising nor a civil war in Syria, but created physical and economic conditions that made the Bashar al-Assad regime more prone to general resistance.⁶⁷ As a result of droughts,

⁵⁹ C.O. Ecker, J.F. Maystadt, J.F. Trinh Tan, P. Al-Riffai, K. Bouzar, A. Sma, M. Abdelgadir, ‘Building Resilience to Conflict Through Food-Security Policies and Programs. Evidence from Four Case Studies’, IFPRI 2020 Conference Paper, Vol. 3, May 2014, p. 10.

⁶⁰ Environmental Justice Foundation, ‘Beyond Borders: Our changing climate – its role in conflict and displacement’, 2017, p. 31, <https://ejfoundation.org/resources/downloads/BeyondBorders-2.pdf> [accessed: 17.10.2019].

⁶¹ Food and Agricultural Organization, ‘Near East and North Africa...’, *op. cit.*, p. 6.

⁶² A. G Bhaya, *Analysis: Are we seeing the beginning of Arab Spring 2.0?*, CGTN, 20 November 2019, <https://news.cgtn.com/news/2019-11-19/Analysis-Are-we-seeing-the-beginning-of-Arab-Spring-2-0--LKem9chUeA/index.html> [accessed: 10.12.2019].

⁶³ C.O. Ecker, J.F. Maystadt, J.F. Trinh Tan, P. Al-Riffai, K. Bouzar, A. Sma, M. Abdelgadir, ‘Building Resilience...’, *op. cit.*, p. 6.

⁶⁴ Oxfam, ‘Missiles and Food Yemen’s...’, *op. cit.*, p. 6.

⁶⁵ Food and Agricultural Organization, ‘Monitoring Food Security in Countries with Conflict Situations’, January 2019, pp. 26–30, <http://www.fao.org/3/ca3113en/CA3113EN.pdf> [accessed: 16.11.2019].

⁶⁶ Oxfam, ‘Missiles and Food Yemen’s...’, *op. cit.*, p. 5.

⁶⁷ E. Holmquist and J. Rydqvist (eds.), *The Future of Regional...’, op. cit.*, p. 60.

wheat, cotton and barley crops decreased by up to 50%. Shepherds in north-eastern Syria lost about 85% of their cattle, 800,000 Syrians lost their livelihood. The drought coincided with the limitation of government subsidies for irrigation and fertilizers. In 2010, nearly three million people lived in extreme poverty. By 2011, more than one million Syrians had moved to cities that were already experiencing economic and social uncertainty due to the influx of refugees from Iraq and Palestine.⁶⁸ According to the United Nations Office for the Coordination of Humanitarian Affairs (UNOCHA), 69% of Syrians live in extreme poverty for less than two dollars a day. 54% of people in Syria do not have food security, around 15 million people do not have access to safe water. Syria spends more on buying food than it receives revenues from export.⁶⁹ What is more, food has also been used as a tool and instruments in conflict through, among others resource control, targeting food production, support or exclusion of specific groups from food distribution, or limiting access to humanitarian aid⁷⁰. Material incentives can be an important recruitment strategy. For example, young men joined the so-called Islamic State to meet basic needs, including access to food.⁷¹

Access to resources in the region can become a source of conflict not only at the internal level, but also between countries. More than 60% of the water used in the MENA region is in cross-border rivers and is shared between countries.⁷² The Jordan River is an important source of water for Israel, the Palestinian Authority and Jordan. Over 80% of renewable water resources in Syria come from outside. Jordan shares Azraq Aquifer with Syria and Disi Aquifer with Saudi Arabia. Oil Brown and Alec Crawford indicate that access to the Euphrates River between Turkey, Syria and Iraq has long been a bone of contention.⁷³ Water resources are used as a tool in regional conflicts. Since Israel's occupation of West Bank in 1967, all of its water resources have been under military administration. Division on access to water has been a central element in almost every peace negotiation between Israel, Jordan, Syria and Palestinians.⁷⁴ During conflicts, taxation of water resources, manipulation of water prices, blocking access to water or pollution, as well as damage to water facilities as a result of attacks, redirection of river branches flooding agricultural land or entire villages occurs⁷⁵. For example, when the so-called Islamic State conquered the Nuaimiyah Dam on the Euphrates in 2014, it used the reservoir to flood the lower areas and cut off water for millions Iraqis.⁷⁶

⁶⁸ Environmental Justice Foundation, 'Beyond Borders...', *op. cit.*, p. 32.

⁶⁹ The United Nations, 'Arab Horizon 2030...', *op. cit.*, p. 13.

⁷⁰ 'Breaking the Cycle of Conflict, Hunger and Human Suffering', Concern Worldwide, 3 September 2018, pp. 12–14, https://admin.concern.net/sites/default/files/media/migrated/breaking_the_cycle_of_conflict_hunger_and_human_suffering.pdf [accessed: 20.10.2019].

⁷¹ The World Food Program USA, 'Winning...', *op. cit.*, p. 32.

⁷² N.A. Zawahri, *Water Security in the Middle East and North Africa*, Franklin Humanities Institute, 2017, <https://humanitiesfutures.org/papers/water-security-middle-east-north-africa> [accessed: 29.11.2019].

⁷³ O. Brown, A. Crawford, 'Rising Temperatures...', *op. cit.*, p. 21

⁷⁴ *Ibid.*, pp. 21–22.

⁷⁵ The United Nations, 'The Drivers and Impact of...', *op. cit.*, pp. 9–13

⁷⁶ N.A. Zawahri, *Water Security...*, *op. cit.*

Given the development problems of the region and the history of strained bilateral and multilateral relations, as well as the constant political distrust between the MENA countries, the shortage of water resources may cause another wave of increased tensions and conflicts in the region. Resources are still seen as national assets, MENA leaders regard them as an integral part of national security and political stability, which leads to their militarization.⁷⁷

Examples of food security risk management strategies

One of the key government schemes adopted is an extensive social security network. The central element of it are food subsidies that consume up to several percent of GDP in many MENA countries.⁷⁸ Specialists emphasise that they are not the most effective way to build food security. They are regressive. They generate high costs in terms of distribution and management. They negatively affect the investment potential of individual countries and a more rational, economical and effective policy.⁷⁹ They do not always reach the poorest: for example, in Jordan, to receive food cards people must have social security, and 20% of the poorest do not have it. In countries like Egypt, where subsidised goods are sold through government stores, a common problem is that few of them are in poor areas, making access to them even more difficult.⁸⁰ Reforming the grant systems would lead to cost savings that could be invested in more directed programs improving food safety and nutrition, as well as job creation in poorer areas.⁸¹ It is worth mentioning that some countries limit or reform subsidy policies. For example, in February 2018, Jordan replaced the general wheat bread subsidy program with a targeted aid program, and the Saudi government plans to withdraw subsidies by the end of 2020.⁸²

Further strategies include food concentration, diversification of supply, investments in food-producing enterprises and the acquisition of agricultural land abroad. The governments of Jordan and Saudi Arabia and the United Arab Emirates maintain stocks of basic products for several months. Wheat imported by Egypt comes from various countries, including Russia, Ukraine, Romania, Poland, France, USA and Argentina.⁸³ Rich Gulf countries invest in food companies abroad, e.g. United Arab Emirates invests in Serbia and India. The United Arab Emirates and Saudi Arabia are ranked among the ten largest countries investing in agricultural crops abroad.⁸⁴

⁷⁷ O. Brown, A. Crawford, 'Rising Temperatures...', *op. cit.*, p. 10.

⁷⁸ C.O. Ecker, J.F. Maystadt, J.F. Trinh Tan, P. Al-Riffai, K. Bouzar, A. Sma, M. Abdelgadir, 'Building Resilience...', *op. cit.*, pp. 10–12.

⁷⁹ A. Lampietti, S. Michaels, N. Magnan, A.F. McCalla, M. Saade, N. Khouri, 'A Strategic...', *op. cit.*, pp. 10–18.

⁸⁰ G. Jobbins, G. Henley, 'Food in an Uncertain...', *op. cit.*, p. 12

⁸¹ C.O. Ecker, J.F. Maystadt, J.F. Trinh Tan, P. Al-Riffai, K. Bouzar, A. Sma, M. Abdelgadir, 'Building Resilience...', *op. cit.*, pp. 15–24.

⁸² Food and Agricultural Organization, 'Near East and North Africa...', *op. cit.*, p. 27.

⁸³ *Ibid.*, p. 27

⁸⁴ Sh. Efron, Ch. Fromm, B. Gelfeld, Sh. Nataraj, Ch. Sova, 'Food Security...', *op. cit.*, p.18.

The countries of the region are also making attempts at modernising and improving domestic agricultural production. The situation is most propitious in the GCC countries that invest in alternative crop varieties. The Kuwait Institute for Scientific Research and International Centre for Biosaline Agriculture conduct advanced research on the development of drought-resistant plant varieties as well as projects to combat desertification by increasing afforestation and appropriate land development. The production of greenhouse vegetables is also developing in these countries. In addition, in terms of providing access to water, GCC countries have invested in the water desalination process. However, it is highly expensive and energy-consuming and not all countries have this opportunity.⁸⁵ Saudi Arabia and the United Arab Emirates produce about one third of desalinated water in the World.⁸⁶ Many GCC countries are also increasing their water resources by using treated wastewater to irrigate certain types of crops. GCC countries have also made efforts to improve groundwater management.⁸⁷

The countries are trying to support local production. The examples are programs in Tunisia and Jordan, which focus on the needs of local farmers by promoting the use of local products in school canteens,⁸⁸ and Morocco has introduced provisions to decentralize agricultural projects and to consult them with the local community.⁸⁹ Good practices also come from projects financed by external organizations such as FAO or WFP. In 2017–2017, FAO implemented the Youth Mobility, Food Security and Rural Poverty Reduction project, which held training sessions in the field of running small farms for unemployed youth.⁹⁰ The WFP implemented the Home-Grown School Feeding project providing school meals for around 2.5 million children in Algeria, Egypt, Iran, Jordan, Lebanon, Morocco, Sudan, Syria, Tunisia based on locally produced products.⁹¹

Regional cooperation is a challenge, although here good practices and examples of involvement can also be seen. The Arab Ministerial Water Council, the Arab Ministerial Council for Electricity and the General Assembly of Arab Ministers for Agriculture, the Council of Arab Ministers Responsible for the Environment, and the Joint Committee on the Arab the Region have adopted several regional strategies

⁸⁵ *Ibid.*, p. 10.

⁸⁶ N. Farajalla, R. Hajj, A. Jagerskog, T. Terspta, 'Enhancing Regional Cooperation in the Middle East and North Africa through the Water-Energy-Food Security Nexus', Planetary Security Initiative, Policy Brief, April 2017, p. 5, https://www.researchgate.net/publication/317036677_Enhancing_regional_cooperation_in_the_Middle_East_and_North_Africa_through_the_Water-Energy-Food_Security_Nexus [accessed: 30.11.2019].

⁸⁷ Food and Agricultural Organization, 'Near East and North Africa...', *op. cit.*, p. 27. See: R. Bailey, R. Willoughby, 'Edible Oil: Food Security in the Gulf. Energy, Environment and Resources', Chatham House Briefing Note, November 2013, <https://www.chathamhouse.org/sites/default/files/public/Research/Energy%2C%20Environment%20and%20Development/bp1113edibleoil.pdf> [accessed: 30.11.2019].

⁸⁸ The International Policy Centre for Inclusive Growth, 'Social Protection after the Arab Spring', Policy in Focus, vol. 14, Issue 3, December 2017, p. 36, https://www.ipc-undp.org/pub/eng/PIF40_Social_protection_after_the_Arab_Spring.pdf [accessed: 30.11. 2019].

⁸⁹ *Ibid.*, pp. 56–62.

⁹⁰ A. Balduzzi, 'Bread, Freedom and Migration...', *op. cit.*

⁹¹ The International Policy Centre for Inclusive Growth, 'Social Protection...', *op. cit.*, p. 35.

on water climate issues and food security. In 2016, The League of Arab States commissioned regional institutions and academic partners to develop a series of reports on the issues discussed. Egypt, Jordan, Morocco, Syria, Tunisia, Sudan and Yemen implement a project funded by the Arab Fund for Economic and Social Development, the Kuwaiti Fund for Economic Development, and the Islamic Development Bank. The aim of the project is to improve food security and greater efficiency of the agricultural sector, taking into account the challenges related to climate change and population growth.⁹² Moreover several countries have taken steps to resolve disputes regarding water resource management in the region. Egypt, Ethiopia and Sudan have signed a Khartoum declaration which attempted to resolve disputes with access to shared water resources. In 2015, Saudi Arabia signed an agreement with Jordan on mechanisms for settling disputes over cross-border water resources.⁹³ Jordan, Israel and Palestinians have been cooperating in a large project (Red-Dead) aimed at transporting water from the Red Sea to the Dead Sea.⁹⁴

Conclusions

As indicated above, all countries of the region that is the object of scrutiny are affected by the problem of food shortage due to the lack of adequate land for cultivation, which affects import dependence and susceptibility to fluctuations in food prices on international markets, water shortage and the negative effects of climate change. Despite the fact that each country of the region has a unique experience and history, a distinct power structure in the economic and political dimension and, most importantly, an ideological specificity, they all struggle with economic problems, a high unemployment rate especially among young people, social inequalities, weak institutions, which negatively affects the implementation of mechanisms and strategies for dealing with challenges. The situation is further complicated by the fact that hydrological borders do not coincide with political ones, and the MENA region is one of the most conflicted areas on Earth, where cooperation is difficult. Conflicts heritage has breached the ability of communities and governments to cope with change. Although external and internal conflicts in the region have a political dimension, in some cases their broader socio-economic context, including access to basic resources and lack of food security, determines their outbreak, intensity, scale or duration.

Despite the examples of schemes and initiatives launched by individual countries and regional institutions to improve food security and in sectors that are directly or indirectly correlated with it, they are mostly sectoral and the challenges faced by the countries of the region must be treated comprehensively. Investments

⁹² M. Solh, 'The Outlook...', *op. cit.*, p. 113.

⁹³ Sh. Efron, Ch. Fromm, B. Gelfeld, Sh. Nataraj, Ch. Sova, 'Food Security...', *op. cit.*, p. 16.

⁹⁴ T. Baconi, 'Testing the water: How water scarcity could destabilise the Middle East and North Africa,' Policy Brief, European Council of Foreign Relations, 13 November 2018, p. 8, https://www.ecfr.eu/page/-/how_water_scarcity_could_destabilise_the_middle_east_and_north_africaFI-NALV3.pdf [accessed: 30.11.2019].

in food security should be a part of the national security strategy and in post-conflict states should be treated as part of their reconstruction. Food safety issues, if not properly and timely addressed, can strengthen existing social pressure and become a source of further internal and regional conflicts. This will not take place without external support and without a broad cooperation platform involving all entities and institutions in the region.

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Niedobór żywności: czynnik destabilizujący bezpieczeństwo w regionie MENA

Streszczenie

Niniejszy artykuł analizuje wpływ bezpieczeństwa żywnościowego na stabilność polityczną w regionie MENA na szczeblu państwowym, regionalnym i indywidualnym. Omówiono także ocenę skuteczności rządów w regionie pod względem strategii zarządzania ryzykiem bezpieczeństwa żywności i współpracy międzyregionalnej. Autor wysuwa tezę, że niedobór żywności jest jednym z głównych czynników niestabilności politycznej w regionie MENA, a zapewnienie bezpieczeństwa żywnościowego jest ważnym zadaniem dla obecnych rządów w całym regionie. Biorąc pod uwagę problemy rozwojowe regionu oraz historię napiętych stosunków dwustronnych i wielostronnych, a także ciągłą nieufność polityczną między krajami regionu MENA, brak zasobów żywności i wody może zaostrzyć napięcia i wywołać dalsze konflikty w regionie.

Słowa kluczowe: bezpieczeństwo żywnościowe, zmiany klimatu, region MENA, arabska wiosna

Scarcity of Food: a Factor Destabilising Security in the MENA Region

Abstract

This paper looks at the impact of food security on political stability in the MENA region, at the state, regional and individual levels. It also discusses the assessment of the effectiveness of governments in the region in terms of food security risk management strategies and interregional cooperation. The author puts forward the thesis that food shortage is one of the main driving factors of political instability in the MENA region, and ensuring food security is a major task for current governments in the entire region. Given the

development problems of the region and the history of strained bilateral and multilateral relations, as well as the constant political distrust between the MENA countries, the shortage of food and water resources may exacerbate tensions and stir further conflict in the region.

Key words: food security, climate change, MENA region, Arab Spring

Nahrungsmittelknappheit: ein destabilisierender Faktor für die Sicherheit in der MENA-Region

Zusammenfassung

Der vorliegende Artikel analysiert den Einfluss der Ernährungssicherheit auf die politische Stabilität in der MENA-Region auf staatlicher, regionaler und individueller Ebene. Er diskutiert auch, wie die Wirksamkeit der Regierungen in der Region in Hinsicht der Strategie des Risikomanagements, der Ernährungssicherheit und der interregionalen Zusammenarbeit beurteilt wird. Die Autorin stellt die These auf, dass die Nahrungsmittelknappheit einer der Hauptfaktoren der politischen Instabilität in der MENA-Region ist und die Gewährleistung der Ernährungssicherheit eine wichtige Aufgabe für die derzeitigen Regierungen in der ganzen Region darstellt. Angesichts der Entwicklungsprobleme der Region und der Geschichte der bilateralen und multilateralen gespannten Beziehungen, als auch des ständigen politischen Misstrauens unter den MENA-Ländern, kann Knappheit bei der Lebensmittel- und Wasserversorgung die Spannungen verschärfen und weitere Konflikt in der Region schaffen.

Schlüsselwörter: Ernährungssicherheit, Klimawandel, die MENA-Region, der arabische Frühling

Дефицит продовольствия: фактор дестабилизирующий безопасность в регионе MENA

Резюме

В статье дан анализ влияния продовольственной безопасности на политическую стабильность в регионе MENA на государственном, региональном и индивидуальном уровнях. Также дана оценка эффективности действий правительств государств региона с точки зрения стратегии управления рисками продовольственной безопасности и межрегионального сотрудничества. Автор выдвигает тезис о том, что дефицит продовольствия является одним из основных факторов политической нестабильности в регионе MENA, а обеспечение продовольственной безопасности остается важной задачей для нынешних правительств государств региона. Учитывая проблемы развития региона и историю напряженных двусторонних и многосторонних отношений, а также существующее политическое недоверие между государствами региона MENA, нехватка продовольствия и водных ресурсов может усугубить напряженность отношений и вызвать новые конфликты в регионе.

Ключевые слова: продовольственная безопасность, изменение климата, регион MENA, арабская весна