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TADEUSZ KĘSOŃ, PHD, ENG  
*The Main School of Fire Service*  
e-mail: tkeson@sgsp.edu.pl  
ORCID 0000-0002-7047-7811

MAJ. PAWEŁ GROMEK, DSC ENG., ASSOCIATE PROFESSOR  
*The Main School of Fire Service*  
e-mail: pgromek@sgsp.edu.pl  
ORCID 0000-0003-0997-5069

# RELATIONS BETWEEN UN SUSTAINABLE DEVELOPMENT GOALS AND SOCIETAL SECURITY. PART 1

## ABSTRACT

Sustainable development is one of the key directions in ensuring security all over the world. The article presents results of literature research on the relationship between the goals of sustainable development and societal security, which significantly relates to the most important utilitarian values. The focus was on the first six goals, i.e. 'no poverty', 'zero hunger', 'good health and well-being', 'quality education', 'gender equality' as well as 'clean water and sanitation'. As a result of exploring the Web of Science® Data Collection database, we obtained 46 articles as the basis for our basic literature research. The authors' interest in the subject of sustainable development varied in the light of societal security. In most cases, indirect relationships between

the objectives in question and societal security have been identified. They shape the environment of societal security hazards, including the cascading effect of their development.

#### KEYWORDS

societal security, local and global security, sustainability, sustainable development goals (SDGs)

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## RELACJE POMIĘDZY CELAMI ZRÓWNOWAŻONEGO ROZWOJU ONZ A BEZPIECZEŃSTWEM POWSZECHNYM. CZĘŚĆ 1

#### ABSTRAKT

Zrównoważony rozwój to jeden z kluczowych kierunków zapewniania bezpieczeństwa na całym świecie. W artykule przedstawiono wyniki badań literaturowych dotyczących relacji występujących pomiędzy celami zrównoważonego rozwoju a bezpieczeństwem powszechnym, które istotnie nawiązuje do najważniejszych wartości użytecznych. Skupiono się na pierwszych sześciu celach, tj. 'brak biedy', 'zero głodu', 'dobre zdrowie i samopoczucie', 'jakość edukacji', 'równość płci', a także 'czysta woda i warunki sanitarne'. W wyniku eksploracji bazy Web of Science® Data Collection otrzymaliśmy 46 artykułów, jako podstawę do zasadniczych badań literaturowych. Odnotowano zróżnicowanie zainteresowania autorów tematyką zrównoważonego rozwoju w świetle bezpieczeństwa powszechnego. W większości przypadków zidentyfikowano relacje pośrednie pomiędzy przedmiotowymi celami a bezpieczeństwem powszechnym. Kształtują one środowisko występowania zagrożeń bezpieczeństwa powszechnego, w tym w ramach efektu kaskadowego.

#### SŁOWA KLUCZOWE

bezpieczeństwo powszechne, bezpieczeństwo lokalne i globalne, zrównoważony rozwój; cele zrównoważonego rozwoju (SDGs).

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## 1. INTRODUCTION

Regardless of the criterion of security division (subjective, objective) or the way of its understanding (positively, negatively), in the aims of sustainable development we can find factors that indicate their direct or indirect influence on the broadly understood assurance of security [1–2]. These will be both factors included in the areas of internal security of particular states, factors of importance for local security in the three dimensions of sustainable development (economic, social and environmental), as well as factors important from individual security perspective. Probably, there is no area that would not be affected by the goals of sustainable development (SDGs). Taking into account the essence of globalisation processes and their impact on the overlapping of individual areas of security, the fundamental subject of achieving the objectives will be to protect human life and health as well as property and environment to assure human survival and basic existence needs. The need to ensure societal security is therefore an inherent feature of the processes of achieving the objectives of sustainable development [3].

As the SDGs are being implemented around the world by different entities [2], the analysis of projects undertaken in the process of their implementation and of the areas emphasized in different regions of the world and by different countries, allows not only to learn about a broad variety and range of problems and threats faced by both local communities and countries, but also to learn more about the problems and threats on a global scale. A very wide spectrum of activities and initiatives, which may seem mundane from the European point of view, are milestones for a very broad range of people in developing countries and local communities in the process of improving their security, life and health protection, job opportunities, access to education or drinking water. Therefore, the analysis and study of the results and effects of the implementation of the SDGs so far, as well as descriptions of actions included in materials selected for the study, is an important tool that on the one hand allows to learn about threats that affect the most important utilitarian values (characteristic for societal security) and ways to deal with them by other countries. On the other hand, it could lead to comparisons and to indicate local, regional and global threats and societal security determinants.

This approach bases on the provisions of the 2030 Agenda for Sustainable Development, which states that “The Sustainable Development Goals

and related targets are interdependent and indivisible” [1]. We made use of papers selected from the Web of Science® (WoS®) Core Collection database. The objective of the research was to analyse and describe general relations between issues that characterise societal security (as an entire phenomenon), and particular SDGs. In order to be able to comprehensively discuss the problem of relations that exist between the goals and societal security, we decided to divide the entire research material into three parts. In the first part objectives from 1 to 6 have been analysed and first conclusions to in-depth analysis have been presented.

## 2. MATERIALS AND METHODS

The areas of implementation of the 17 SDGs range from ensuring conditions for environmental well-being, eradication of poverty and hunger, health and quality of life, quality and sometimes the right to education, access to clean water and adequate sanitation, economic growth and decent work, and an innovative economy, responsible production and consumption, sustainable cities and communities, gender equality and treatment<sup>1</sup> and human rights for all, access to clean energy, care for the environment and ecosystems, as well as issues of peace, justice and strong institutions and cooperation for development [1–2]. These show that it could be difficult to adopt any unambiguous criterion needed to find suitable materials for an analysis. Due to the direction in the relation between SDGs and societal security (as an entire phenomenon), we assumed that:

- a) the analysis of compiled materials would be based on publications from verified, reliable, international database (WoS® Core Collection database) and,
- b) the materials would be selected using a general searching keyword “sustainable development goals AND societal security”.

In this way, 46 publications were selected. The second step was to verify that the relation between SDGs and societal security is described in the papers. That is why we needed to read entirely all of them to identify at least one societal security specification item in the abstract, keywords, research

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<sup>1</sup> E.g., on April 14, 2021, the Spanish Government obliged all economic entities to equalize the salary of men and women employed in the same positions and conditions.

assumptions, research results, discussion or conclusion (incl. future research directions). The items were [3]:

- a) danger to human life and health,
- b) societal character,
- c) urgency of the response,
- d) characteristic hazard (natural disaster or technical failure).

As we have found premises for relations between SDGs and societal security in every material, no paper was rejected. Therefore, we analysed the papers in the light of particular SDGs. This showed us how often authors referred to them in the papers. Figure 1 presents a quantitative result of the preliminary analysis.

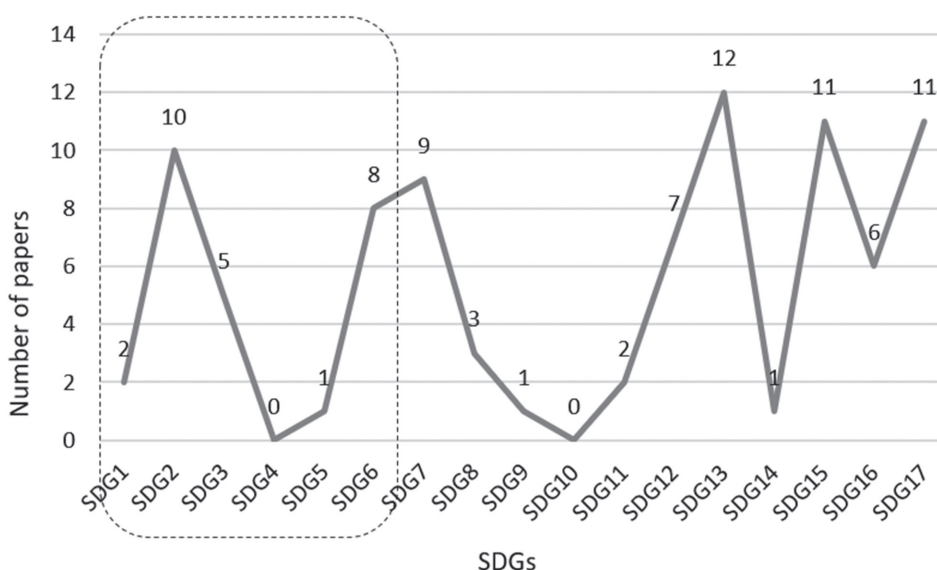


Fig. 1. The frequency of SDGs discussed in the analysed articles  
Source: own elaboration.

The first conclusion is a noticeable difference in frequency distribution. Consequently, not all of the papers are so frequently related with societal security specification items. This fact reflects interests of the authors in considering multiple issues of SDGs with view to societal security.

In this paper we focused on the first six SDGs: 'no poverty' (SDG1), 'zero hunger' (SDG2), 'good health and well-being' (SDG3), 'quality education' (SDG4), 'gender quality' (SDG5) and 'clean water and good sanitation' (SDG6).

They seem to be logically connected. It is noteworthy that there was not a single article that discussed the issues of SDG4. Furthermore, SDG1 and SDG5 were described in a very limited scope (only once). SDG3 was mentioned 5 times, in the middle of the frequency distribution. Nevertheless, SDG2 and SDG6 were at the top of the authors' interest. This allows to make a preliminary assumption that problems related to hunger, clean water and good sanitation could generate serious challenges in ensuring societal security, especially in poor countries and other populations with limited access to relevant resources and services.

### 3. RESULTS AND DISCUSSION

#### 3.1. Security and 'no poverty' (SDG1)

The analysis of SDGs shows that the global poverty level is decreasing. The Sustainable Development Goals Report, published in 2019, not only clearly identifies the fundamental differences in the occurrence of poverty, but also points to regions of the world and social groups particularly vulnerable to its effects. In 2015, 736 million people lived in extreme poverty, of which 413 million in sub-Saharan Africa. This indicator decreased more than 3.5 fold as compared to 1990. The most favourable pace of poverty eradication was found to be in East Asia, where the extreme poverty rate fell from 52% in 1990 to less than 1% in 2015. At the same time, there are regions in the world, where this indicator has increased. In North Africa and West Asia, it increased from 1.6% (2010) to 3% in 2018. Almost 79% of the world's poor live in rural areas. The poverty rate in rural areas (17.2%) is 3.25 times higher than in cities. Moreover, it seems that even employment is no protection against poverty. In 2018, 8 percent of workers and their families worldwide lived in extreme poverty. Children and young people are most affected by poverty. Almost half (46%) of the extremely poor are children under the age of 14. Overall, 20% of the world's child population live in extreme poverty. The report emphasizes that a dangerous signal is that the pace of global poverty eradication is slowing down and, as predicted from 8.6% of 2018, in 2030 it will only decrease by 2.6 percentage points [2].

The authors of the analysed articles indicate very diverse causes and influences of poverty, many political, social and economic factors, includ-

ing, among others: political instability and armed conflicts [4], economic problems of underdeveloped countries and household poverty [5], access to energy supplies [6, 7, 8], environmental and climate change and related frequency of natural disasters and weather anomalies [9, 10], water supply and access [11], access to land and the negative effects of large-scale land acquisitions (LSLAs) [12], interaction between agriculture, nutrition, health and poverty [13].

### 3.2. Security and ‘zero hunger (SGD-2)

The report on the implementation of SDGs shows that one of the most shameful problems in the world, namely hunger and malnutrition, has not only not been solved but what is more no sustainable basis has been established to deal with this problem. After a partial decline in the number of people suffering from hunger (2010–2015), the number of hungry people in the world has increased by 60 million over the last five years [2]. The UN report ‘State of Food Security and Nutrition in the World’ highlights that in 2019 it reached 690 million people and that countries around the world still face many forms of malnutrition (381 million in Asia, 250 million in Africa, 48 million in Latin America and the Caribbean).

According to the UN document, no continent is free from hunger or malnutrition. Universal malnutrition is more than 20% in Africa, in Asia more than 12% in Latin America and the Caribbean about 7%. In addition, approximately 8% of the inhabitants of North America and Europe do not have access to constant, regular, healthy meals and food in sufficient quantities. The total number of people suffering from hunger and food insecurity is over 2 billion [14].

Fighting hunger is only a part of the challenge. Many countries are also facing increasing numbers of people suffering from underweight, dwarfism and obesity, often resulting from hunger, malnutrition and poor diet. As a result of malnutrition in 2019 more than 191 million children under the age of 5 were too thin or too low for their age, and 38 million were overweight. This was a result of a bad diet. A healthy diet costs much more than a minimum subsistence (\$1.90 per day). The result is that three billion people cannot afford a healthy diet (in sub-Saharan Africa and South Asia, 57% of the population is in this situation) [14].

The analysis of the selected articles has shown that the problem of combating hunger, malnutrition and improper nutrition is not only directly related to the phenomenon of food security, but is also linked to many other issues, including, inter alia:

- technical solutions for increasing the capacity of the international community to use Earth observation and satellite data for agricultural monitoring, timely distribution, reliable and obtainable information about [15]:
  - food production, both to stabilise markets and to provide early warning of food shortages;
  - unsustainable land use, food availability and the effects of climate change, abnormal temperatures, precipitation, vegetation anomalies;
  - the potential impact of weather-related natural disasters (droughts, typhoons, hurricanes and floods) on food production to enhance preparedness for effective disaster response;
- socio-political risk factors (e.g. conflicts) [15];
- use of models for testing [16]:
  - the relationship between population growth and agricultural productivity, land use and consumption changes – which can play a key role in reducing both land-use and food safety risks;
  - the impact of rising food prices on food demand, the possibility of obtaining balance between the area of arable land and land necessary for grazing livestock;
  - increasing environmental degradation, greenhouse gas emissions, reduction of crop biodiversity [17];
- the necessity to conduct economic research concerning the interaction between agriculture, nutrition, health, environment, climate change and social attitudes [13];
- access to electricity and decreasing losses incurred during and after the harvest, better protection and storage of food and an indication that no country with an electricity consumption of less than 400 kWh per capita (920 million people in total) achieves a food security index  $> 50$  (measured on a scale from 0 to 100) [7];
- the world food system does not meet the basic food needs of world citizens in the same way; the limited resilience of multi-area crops to economic shocks and climate change, and the under-utilisation of native and area-based traditional crops, which have brought larger plans but



- also required much greater investment; low impact of small farmers on good rural farming systems as a result of limited access to mechanised means of production, techniques and outlets necessary to participate in crop production; shortcomings in national food systems and nutrition programmes (resulting in cardiovascular diseases, hypertension, diabetes on the one hand, and malnutrition in young children and women on the other); the limited purchasing power of small rural poor farms that are unable to cope with high food prices available on the market [17];
- ethical issues of nutrition and food and nutrition security, in particular the scarcity of appropriate quantity, type of food and nutrients leading to [18]:
    - malnutrition and/or obesity with serious and harmful effects on health and development;
    - inhibition of growth as a result of chronic malnutrition in the early stages of life, resulting in children not achieving their full genetic potential, both mental and physical;
    - premature deaths of mothers, infants and young children as well as impairments and often irreversible defects in physical and brain development in young people;
  - the need to take into account the four pillars of availability, access, utilisation and stability (availability, access, utilisation and stability) and to address the issue of fair access and distribution of valuable food products considered to be important for human health, through the implementation of programmes and investments aimed at improving the food production, supply and distribution chains [18];
  - degradation of:
    - soil and the need to reverse these trends and its importance in inter- and transdisciplinary programmes related to food, water, climate and crop biodiversity affecting food security [19], impeded by unfavourable soil and environmental conditions (including abiotic and biotic constraints) of vegetable cultivation, and the need to achieve, through socio-economic and environmental sustainability of natural resources, a 60% increase in agricultural productivity (to feed an expected population of 9.6 billion in 2050) [20];
    - ecosystems that undermine food production and the availability of clean water and strengthen the vulnerability of the population to effects of

natural disasters that pose a hazard to life and health, contributing to the unsustainability of food production and distribution systems and as an effect threatening food security [21];

- water shortages, which result from increased wealth, including in particular [22]:
  - preference of a meat-based diet, which could imperil the limited, fragile and shrinking soil and water resources that are already under heavy strain in densely populated Asian and other countries;
  - industrial production resulting, on the one hand, in an increase in gross domestic product, but, on the other hand, leading to waste or by-products causing pollution and eutrophication of water resources;
  - international trade in animal products/foodstuffs involving the transfer of virtual water, especially when food production takes place in water-poor countries and food is exported to rich countries.

The problem of hunger and malnutrition is aggravated by the crisis triggered by the COVID-19 pandemic. In many parts of the world, it further intensifies the problems of production, distribution and consumption. The authors of the report estimate that as a result of the pandemic, at the end of 2020 the number of hungry people in the world may increase by as much as 130 million people [14].

### 3.3. Security and ‘good health and well-being’ (SDG-3)

The achievement of the Millennium Goals and sustainable development has contributed to improving health and well-being. Mortality among children under the age of 5 has decreased (from 9.8 million in 2000 to 5.4 million in 2017) and vaccination has resulted in an 80% decrease in the number of measles deaths (from 2000 to 2017). Furthermore, the incidence of tuberculosis decreased by 21%, yet in 2017 as many as 10 million people fell ill with tuberculosis. The prevalence of HIV among people aged 15–49 in sub-Saharan Africa fell by 37%. However, the trend is unfortunately not being recorded worldwide. The incidence of HIV has increased, for example, in Western Asia (53 per cent), Central Asia (51%) and Europe (22%). Maternal and child mortality rates have decreased. Furthermore, in 2017 almost 300,000 women died from complications related to pregnancy and childbirth, more than 90% of whom were women in low and middle-income countries [2].

The incidence of tropical diseases has not been reduced. In 2017, 3.5 million more cases of malaria were reported in the 10 most affected African countries as compared to 2016. Although they are being combated, billions of people are still affected by neglected infectious tropical diseases (NITDs). They particularly affect people living in poverty in 149 tropical and subtropical countries and are primarily caused by the lack of adequate sanitation and by contact with infectious carriers and pets. In 2017, a total of 1.58 billion people required mass or individual treatment and care because of NITDs, including 52% of the population (522 million people) in the least developed countries.

Statistics on medical personnel are still unsatisfactory. “Nearly 40 per cent of all countries have fewer than 10 doctors per 10,000 people and about 58 per cent of countries have less than 40 nurses and midwives per 10,000 people. Healthcare workers are unevenly distributed both globally and across countries. In all the least developed countries, there are fewer than 10 doctors per 10,000 people and 98% fewer than 40 nurses and midwives per 10,000 people [2].

The articles selected on the basis of the phrase “sustainable development goals AND societal security” are only partly related to health and health care security. They address the concept of “One health” and the role of non-governmental organisations in the process of combating HIV/AIDS, and focus on some of the premises that influence the conditions of communities in different regions of the world and factors that affect health and well-being. The analysis of the articles shows that the health situation and well-being of people depends on many indirect factors, not only those related to the access to health care itself or its functioning, but also resulting from social and economic conditions, environmental pollution or the decreasing supply of renewable water resources and access to water, among others.

The authors emphasize the essence of adopting a holistic view of changes in the ecosystem and geological system of the planet under the influence of human activity (Anthropocene) [23]. Analysing the problems of India, they emphasise that in the future, in the absence of decisive action on the implementation of SDGs, it may not be possible to provide enough drinking water and sanitation not only for all urban but also rural residents (especially, to reduce the problem of open defecation of residents).

The challenge to provide livelihoods for millions of people in river basins is to protect and maintain water biodiversity, especially taking into account ever increasing amounts of untreated urban wastewater. Pollution of rivers

and limited access to clean potable water require immediate steps to improve the awareness and scope of the basic sanitation system. This has a direct impact on the health security of many millions of people [23].

Elements indicated in the process of health care comprise the role and opportunities of agricultural economics research and the interactions between the environment, climate change, agriculture, nutrition and health [13]. The “One health” concept plays an important role in the implementation of the SDG “good health and well-being” and safety assurance. In order to maximise its benefits, it is necessary to move away from the health sector’s perception of it only from the perspective of human health security and crisis response and open up to a flexible approach to multi-sectoral cooperation, which makes an important contribution to social well-being [24].

Factors that still cause the death of many victims in various regions of the world (2.2 million human deaths and 2.4 billion cases of disease each year) are zoonoses [25] (e.g. Ebola disease, rabies, leptospirosis, highly contagious avian influenza virus, or severe acute respiratory syndrome – coronavirus, brucellosis, anthrax, echinococcosis). The consequences of these diseases and the risk of their spread are particularly acute in low and middle-income (LMIC) African communities. We can therefore speak of a global need to prioritise endemic zoonoses, especially in view of the need for global health security. However, “weaknesses in health systems limit the ability of LMICs to deliver effective health care, disease surveillance and response to epidemics” [25], this spread and the effects of the SARS-COV-2 pandemic show that new zoonoses are a real threat to the whole world, and until effective vaccines have been invented, the disease will result in a great many deaths and financial losses in all sectors of national economies.

### **3.4. Security and ‘quality education’ (SDG-4)**

The enrolment rates for each age group show that the problem of illiteracy and lack of basic mathematical skills still exists. In 2015, around 617 million children and young people (primary and secondary) worldwide lacked basic minimum skills in reading and mathematics (i.e. more than 55% of the total number of children worldwide). In total, 58% of children worldwide cannot read and 56% do not have a minimum proficiency in mathematics. The Report shows that these problems occur on every continent. In sub-Saharan

Africa these values are at the level of 84% and 88%, respectively, in Central and South Asia 81% and 76%, Latin America and the Caribbean 36 and 52, North Africa and West Asia 57% each, Eastern and South-East Asia 31% and 28%, Oceania 22% and Europe and North America 14%. In addition, 750 million adults were illiterate (as many as 2/3 of them women) [2].

Although the article selection mechanism did not indicate any material for analysis, which would be directly related to the problems of quality and accessibility to education both in school age and lifelong learning, these factors were indirectly indicated as results of the research conducted by ESPOOL professors and students. Their socio-economic diagnosis highlighted the educational, economic, social and environmental problems that the La Union-Duran Guayas-Ecuador community under study had to solve. They mainly concerned education, lack of jobs, water availability and exploration, health and safety problems [26, 27].

In addition, there are interesting relationships between electricity consumption and learning. Surveys of rural communities in India show that every 10% increase in electricity consumption means a 7% increase in the number of pupils enrolling in schools [28].

### **3.5. Security and 'gender equality' (SDG-5)**

The world is not only not free from gender inequality but also from violence against women. Due to different conditions of inequality, cultural, environmental, traditional understanding of the role of a woman – as a guardian of the home – or a servant role towards men, depending on the cultural circle, the rights of girls and women are abused and violated.

“Women and girls continue to experience violence and cruel practices that deprive them of their dignity. At least 200 million women in 30 countries (more than half in West Africa) have undergone female genital mutilation (FGM)” [2]. Although FGM has fallen by about 25% on average over 20 years, about 30 per cent of girls aged 15–19 in these countries have been mutilated. In addition, the Report shows that 18% of women and girls aged between 18 and 49 who have been or are in a relationship have experienced physical and/or sexual violence from their current or former partner [2].

Women do a disproportionate share of unpaid domestic work. They spend three times as much time on care and housework as men, which gives them

no time for education or rest and limited opportunities for gainful employment. This automatically negatively affects their socio-economic situation and, in some cases, their total dependence on their partner/spouse. Women often do lower paid jobs or are paid less for the same work as men. They hold lower positions. Despite accounting for 39% of the workforce in 2018, they held only 29% of managerial positions. The representation of women in national parliaments (in 103 countries surveyed) was between 0% and 61.3% (but on average only 24.3%). From a study of legal loopholes concerning women conducted in 53 countries, loopholes have been ascertained in the area of public life in about  $\frac{1}{3}$  of them, and almost  $\frac{2}{3}$  of the countries lacked regulations on direct and indirect discrimination against women. Moreover, in more than  $\frac{1}{4}$  of the countries surveyed there were legal loopholes as regards violence against women. The worst recorded case was the legislation on rape. 68% of the countries did not have laws on consent-based rape [2].

The analysed materials show that gender inequality, especially in rural areas, is reinforced by climatic conditions, lack of work, environmental degradation and loss of pastures. On the one hand, it results in men migrating for work, and on the other hand, it forces additional burdens on women to support their families, especially when the survival of the household becomes a priority. They take on a range of low-paid, inefficient and often dangerous jobs. In addition, patriarchal social structures mean that even if they could do better paid work and hold managerial positions, they do not have such a possibility [5].

As far as women's rights are concerned, in some regions of the world, especially in multigenerational families, the role and status of women depends on their age and position in the family. Older women have more rights and opportunities to make decisions mainly on nutrition issues, while younger women have to provide a living and work. Women's role and rights are still decreasing in multi-generational polygamous households where only older men make important decisions [5].

### **3.6. Security and 'clean water and sanitation' (SDG-6)**

Due to intensifying climate change, pollution and degradation of water ecosystems, population growth, fresh water is becoming a globally threatened resource. According to the Sustainability Report, 785 million people in 2017 did not have access to basic drinking water services and 40% of the

world's population (around 3 billion) did not have basic water and soapy hand washing facilities in their homes. Approximately 25% of health care facilities and more than 30% of primary schools in the world had no access to drinking water, sanitation and hygiene services. The lack of basic water and sewerage services in homes and public places means that about 9% of the world's population is forced to practice open defecation [2].

Rising river pollution in Africa, Asia and Latin America, climate change and drying up of natural wetlands and increasing water consumption (global water consumption is growing more than twice as fast as the world's population) are causing "2 billion people to live in countries with severe water scarcity, and about 4 billion people to suffer from severe water shortages for at least 1 month a year [2].

As essential for health, food security, poverty eradication, the functioning of agriculture and many areas of the economy, including energy security, it requires immediate and collective action, using the most modern technologies. These actions may include the use of satellite data to monitor water and soil moisture consumption in agriculture in connection with yield forecasts and actual crop yields [15], local counteracting restrictions on the availability of drinking water and the possibility to irrigate farmland through the use of desalinated sea water [29]. Ensuring 'The quantity, quality and availability of fresh water is essential not only for human entrepreneurship and well-being, [...] but also for the diversity of ecosystems ensuring global water security' [30]. It is one of the most difficult environmental management challenges. Appropriate management of water and freshwater resources in particular can also bring about significant benefits in terms of protecting biodiversity [30].

The articles analysed often refer to the problems of individual countries. India is a good example. According to the authors, the country where the fundamental problems of water management are concentrated, needs to cope with the misappropriation of water resources, the decrease of total internal water resources and total renewable water resources (64.29%), the increase in the productivity of water resources in agriculture, more produced than treated municipal wastewater, the increase in recycling and reuse of water, the further reduction of open defecation rates in both rural and urban environments and the reduction of water stress. Immediate action is needed to improve awareness and basic sanitation [11].



In the most populated countries or those with extreme climatic conditions, water stress will become increasingly important both in development processes, food security and emerging social problems.

Shortages and lack of access to drinking water and of suitable sanitation and hygiene services adversely affect the education and health of millions of schoolchildren. It severely limits the provision of assistance to the sick and increases the risk of infections and infections among those seeking help. According to estimations water scarcity may cause the displacement of about 700 million people [2]. Uncontrolled migration should also be taken into account, which can cause more than just social conflicts. Scarcity or even lack of drinking water can lead to international disputes and, in extreme cases, to local armed conflicts [31].

It is important to take into account local realities and the legitimacy of the water sector reform process, as well as the integration of peace and security concerns into water security issues [32], as important factors for social security. Although this may seem a paradox, restrictions on access to drinking water, especially in densely populated and water-poor Asian countries, can contribute to economic development and the changing dietary preferences of richer populations based on meat products, for which much more water is needed than for plant-based food production. The second negative factor affecting dwindling water resources is the export of food and feed products, causing the transfer of virtual water from poor to rich countries [22].

The increase of both pollution control and availability of water resources may be facilitated by remote sensing and earth observation technologies and sometimes controversial water infrastructure (dams and reservoirs) for water storage affecting biological ecosystems [33]. Care should be taken to ensure that local measures in this area do not cause regional and global water stress and limit as much as possible the ‘deterioration of natural features of freshwater ecosystems’ [34].

On a local scale, all activities, e.g. in Poland, concerning small retention and subsidies for all investments in storage of rainwater and its use for watering greenery, both at home and in public space, should be evaluated very positively.

The water-related objective is inextricably linked to agriculture (food safety, especially in rural areas), energy (water energy and other energy systems), land irrigation (crop and breeding development), public health



(quality and access to water and sanitation) and its implementation will directly and indirectly affect other SDGs [33].

#### 4. CONCLUSIONS

The analysis of articles pertaining to the implementation of SDGs from the viewpoint of their relationship with security in the broadest sense of the term, allows us to show the way that the areas in which they are implemented by individual countries in different regions of the world are of fundamental importance in the process of creating and influencing security conditions. They present challenges and threats, not only relating to specific communities, geographical regions, branches of the economy, states, but which is very important, allow their analysis from a horizontal perspective. By looking at and analysing individual problems, we may not only learn about important threats in the conception of security in question, but we may also become acquainted with problems important for local communities, the solution of which has a direct influence on the improvement of security, from individual security to global security. The reason is that the globalisation processes mean that the provision of security is becoming an interconnected set of activities and cannot be separated according to region. Even if we accept that a region, state or community may consider itself safe, on a global scale it will still have to bear the costs of providing security in other regions of the world.

For it is undeniable that:

- A. The negative effects of poverty can generate a whole range of limitations and threats, including hazards to the security of the individual (limited access to: health care, education, meeting subsistence needs or even social exclusion), falling into conflict with the law.

These risks, combined with frequent depravity from an early age, can have consequences throughout life. A shameful problem for individual countries is when poverty becomes the cause of crimes and turn into a problem for local communities. Asocial behaviours, criminal problems, petty crime, vandalism, graffiti, causing anxiety or a sense of threat to the inhabitants, often resulting from poverty, have not only an indirect but also a direct connection with the security of local communities [34]. Consequently, we see that the SDG1 objective is not only related to other objectives, but also plays an important role in the security processes.

- B. The prevailing hunger and chronic malnutrition in many regions of the world and their causes and effects are factors that directly affect not only the security of individuals but also of entire communities.

Soil degradation, land use changes, displacement of indigenous crops in favour of large-scale crops that disrupt water management, imbalance between industrial development and the need to ensure clean soil and environment or entire ecosystems leads directly to threats to food security. The implementation of SDG2 is therefore a prerequisite for any change. The lack of success in achieving this goal, indirectly in the long run, may lead not only to health hazards or migration of local population, but also to social instability and internal conflicts.

- C. Ensuring broad access to healthcare, combating infectious diseases and helping those who suffer (SDG3) is sometimes a task that goes beyond the capacity of national health structures.

NGOs operating in democratic countries are often involved in providing international aid, especially in poor or devastated disaster-stricken countries. Their role in helping and contributing indirectly to combating infectious diseases such as HIV/AIDS is also important. Limiting their functioning in non-democratic countries may not only make it difficult, but also make it impossible to achieve the goal of putting an end to HIV/AIDS in the world by 2030 [26].

- D. The problems of people with no education or very little education are the same everywhere.

We can unequivocally state that education and gained knowledge aimed at the implementation of SDG4 is an approach at solving problems at which individual SDGs are addressed. It enables the development of an individual, easier obtaining of work, getting out of poverty, contributes to the economic development of individual countries and ensures sustainable development. In such a way, it directly influences the elimination of threats and improves security in every area.

- E. Each of gender inequalities can generate serious risks. Starting with discrimination in access to education, unequal start in life, poorer and lower-paid work, abuse and domestic or sexual violence.

Ensuring gender equality (SDG5) is therefore important in terms of providing security for individuals and discriminated groups. At the same time, it may not be perceived merely as a moral problem but in many

regions of the world a cultural problem, where individual genders are assigned not only rights but also patterns of functioning in local communities.

- F. At the micro and sometimes macro scale, the scarcity and unavailability of clean water generates many food and health problems. Globally, the shortage or even lack of drinking water can lead to international disputes and, in extreme cases, local armed conflicts.

The analysis contained in this part of the study, as well as observations of everyday life and news from the world provided by the mass media, show that the world is struggling with various problems. Violations of human rights, modern slavery and economic exploitation, totalitarian and authoritarian political systems, unimaginable poverty, extreme weather phenomena, humanitarian and atmospheric disasters, hurricanes, floods or droughts, the dynamics and scale of which threaten the lives and property of millions of people around the world. Combating their effects requires the involvement of not only individual countries but also international aid. Abundant farming, deforestation, environmental degradation and climate change further strain and sometimes even “directly exacerbate water and food risks, affect supply chains in the agricultural sector and put a big question mark over the future of cities and towns along the coasts of the seas and oceans” [35]. Achieving SDGs should not just be seen as a priority task, but first and foremost a mission for all. It is impossible to ensure societal security without promoting sustainable development. However, relations between analysed SDGs (from SDG1 to SDG6) and societal security are generally indirect. Nevertheless, they could express their potential for generating and/or increasing cascading effect of threats development in terms of societal security.

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**TADEUSZ KĘSOŃ** – graduate of the Military University of Technology, Postgraduate Studies in Internal Security at the University of Warsaw and Marshall Center – The College of International and Security Studies – Executive Course 99–1 Garmisch-Partenkirchen. In 1996, he defended his doctoral dissertation at the National Defence Academy. In the years 1997–2016 he worked in central government administration bodies, including the Government Centre for Strategic Studies and the Ministry of Labour and Social Policy. He combined work in government administration with scientific and didactic work at the Jan Kochanowski University in Kielce (Piotrków Trybunalski branch) and the Social Academy of Sciences in Warsaw. Specialist in polemology, crisis management and state security management. Currently he is a research and didactic employee of the Institute of Internal Security at the Main School of Fire Service. Author and co-author of several books and monographs as well as many articles on armed conflicts and broadly understood national security.

**TADEUSZ KĘSOŃ** – absolwent Wojskowej Akademii Technicznej, Podyplomowego Studium Bezpieczeństwa Wewnętrznego Uniwersytetu Warszawskiego oraz Marshall Center – The College of International and Security Studies – Executive Course 99–1 Garmisch-Partenkirchen. W 1996 r. obronił rozprawę doktorską w Akademii Obrony Narodowej. W latach 1997–2016 pracował w centralnych organach administracji rządowej, w tym w Rządowym Centrum Studiów Strategicznych oraz Ministerstwie Pracy i Polityki Społecznej. Pracę w administracji rządowej łączył



z pracą naukowo-dydaktyczną na Uniwersytecie Jana Kochanowskiego w Kielcach – Filia w Piotrkowie Trybunalskim oraz Społecznej Akademii Nauk w Warszawie. Specjalista w zakresie polemologii, zarządzania kryzysowego oraz zarządzania bezpieczeństwem państwa. Obecnie jest pracownikiem naukowo-dydaktycznym Instytutu Bezpieczeństwa Wewnętrznego Szkoły Głównej Służby Pożarniczej w Warszawie. Autor i współautor kilku książek i monografii oraz wielu artykułów z zakresu konfliktów zbrojnych, a także szeroko rozumianego bezpieczeństwa narodowego.

**PAWEŁ GROMEK** – holder of post-doctoral degree of security studies, master in fire protection, engineer, professor at the Main School of Fire Service, officer of the State Fire Service.

**PAWEŁ GROMEK** – doktor habilitowany nauk o bezpieczeństwie, magister inżynier pożarnictwa, profesor Szkoły Głównej Służby Pożarniczej, oficer Państwowej Straży Pożarnej.