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BALANCE BETWEEN SECURITY AND SUSTAINABLE DEVELOPMENT IN THE PROCESS OF EMERGENCY MANAGEMENT

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Annotation: This article analyzes the issues of maintaining a balance between ensuring security and preserving sustainable development in the process of emergency management. The study reveals the interrelationship between these two important areas based on modern approaches, international experience, and the practice of Uzbekistan. In addition, it substantiates the necessity of ensuring long-term socio-economic stability alongside taking rapid measures during emergencies.

Keywords: emergency situations, security, sustainable development, risk management, state policy, crisis management, social stability.

Introduction

In today's era of globalization, emergency situations (natural disasters, technological accidents, pandemics, and others) significantly affect the development of states. In such situations, the main focus is usually directed toward ensuring security. However, emphasizing only short-term security measures may negatively affect long-term sustainable development.

On December 15, 2022, the Law of the Republic of Uzbekistan "On the State of Emergency" was adopted. This law establishes the legal foundations for preventing natural, technological, and other types of emergencies that may arise within the country, as well as eliminating their consequences[1].

A state of emergency is a special legal regime temporarily introduced in the whole territory of the Republic of Uzbekistan or in certain parts of it, in accordance with the Constitution of the Republic of Uzbekistan. It предусматривает (provides for) the imposition of certain restrictions on the rights and freedoms of citizens (including foreign citizens and stateless persons), legal entities, and other organizations, as well as the assignment of additional obligations.During this regime, the activities of public administration bodies, local authorities, self-governing bodies of citizens, and other organizations are carried out according to a special procedure.

In recent years, the number of emergencies worldwide has increased significantly. According to reports from the International Disaster Database (EM-DAT) and the United Nations Office for Disaster Risk Reduction (UNDRR), the number of emergency situations remained high globally in 2025. According to preliminary estimates, approximately 370–410 major emergencies were recorded throughout the year. As a result of these events, hundreds of millions of people suffered various levels of damage, and tens of thousands lost their lives.

[1] https://lex.uz/uz/docs/-5774840

In particular, climate change-related emergencies — severe floods, wildfires, hurricanes, and extreme heatwaves — occupied a leading position[2].

Throughout 2025, Asia and Africa recorded the highest rates of human casualties, while North America and Europe experienced greater economic losses. At the same time, it was once again confirmed that nearly 90 percent of emergency situations were related to climate factors[3].

World Risk Index and Central Asia

The **World Risk Index** is an international ranking system that assesses countries' exposure to emergencies and their vulnerability to the consequences of such events. This index is published annually through cooperation between the humanitarian organization Welthungerhilfe (World Hunger Aid), based in Germany, and Ruhr University[4].

The index covers more than 190 countries worldwide and determines their overall level of risk related to natural disasters and other emergency situations.According to the World Risk Index, the countries of Central Asia are generally classified within the medium and relatively low-risk groups globally. Kyrgyzstan and Tajikistan face the highest levels of risk in the region. The main reasons are their mountainous terrain, strong seismic activity, and the frequent occurrence of natural disasters such as landslides and floods.

Uzbekistan and Turkmenistan are considered countries with moderate risk levels, mainly facing emergencies such as earthquakes, floods, and droughts. Kazakhstan, due to its vast territory and relatively lower occurrence of natural disasters, belongs to a lower-risk category within the region[55].

In addition, there is also the **Emergency Management Cycle**, an internationally recognized conceptual model for managing emergency situations. This model includes the stages of mitigation, preparedness, response, and recovery.This approach was not introduced by a single organization in one day but gradually evolved through international practice. However, its modern systematic form has mainly developed since the late 20th century.

In particular, the widespread implementation of this model was significantly influenced by organizations such as the **United Nations Office for Disaster Risk Reduction (UNDRR)** and the **Federal Emergency Management Agency (FEMA)** of the United States.

Especially from the 1970s–1980s, FEMA systematized emergency management based on this four-stage cycle[6].

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[2] https://uzbekistan.un.org/uz/about/about-the-un

[3] https://kun.uz/11358372#!

[4] https://www.gazeta.uz/oz/2026/01/23/yim-2025/

[5] https://trialsearch.who.int/?Country=Japan&ReturnUrl=~/ListBy.aspx?TypeListing=2

[6] https://www.misereor.org/fileadmin/user_upload_misereororg/publication/en/worldriskreport-2025.pdf

Later, United Nations institutions, including the Office for Disaster Risk Reduction, further developed this approach at the global level and turned it into a recommended standard model for many countries.For this reason, today the Emergency Management Cycle is applied in almost all countries of the world as the main concept of emergency management.

The key advantage of this cycle is that it allows emergency situations to be managed not only after they occur but also through advance planning and risk reduction. As a result, human casualties decrease, economic losses are reduced, and societies recover more quickly.

International Experience: The Example of Japan

Speaking about international experience, Japan is considered one of the world's leading countries in emergency management.The country's main approach is based not on responding after an emergency occurs, but rather on reducing risks beforehand and keeping society constantly prepared.

On March 11, 2011, the **Great East Japan Earthquake** and the following tsunami demonstrated to the entire world how essential the culture of **Bousai** (disaster preparedness) is.

At the time of the disaster, approximately 3,000 school students in Kamaishi City were having lunch. Immediately after the earthquake ended, without waiting for instructions from teachers, the students ran toward higher ground. They even shouted to others, "Run, a tsunami is coming!"

As a result, **99.8% of the students in the city survived**, largely due to collective discipline and preparedness.Japan also has the **Jichikai system**, which is considered one of the world's most organized and widespread volunteer first-aid systems.

In emergency situations, especially earthquakes, the first **15–30 minutes** are considered the **"golden time"** for saving lives.

Professional rescue teams may be unable to arrive within this period due to traffic congestion or damaged roads. However, Jichikai volunteers are already present at the scene and can immediately begin providing first aid[77].

Japan also has highly developed **seismic safety standards** because the country faces a high level of earthquake risk. Therefore, all buildings and infrastructure are constructed according to strict seismic regulations.

Modern technologies, including the **Base Isolation System**, are widely used. This system prevents buildings from being directly connected to the ground by placing them on rubber or special support structures. As a result, earthquake vibrations are transmitted to buildings to a much lesser extent.In addition, old buildings are regularly reinforced and modernized. This significantly reduces human casualties and material damage during powerful earthquakes[88].

The country also has a highly developed **early warning system**, which automatically notifies the population a few seconds before earthquakes or other emergency situations occur.Rapid signaling mechanisms through mobile phones, television, radio, and transportation systems have been established. This allows people to evacuate and move to safe areas in time.

In particular, **digital monitoring and early warning systems** form the foundation of prevention.

Today, satellite data and **GIS (Geographic Information Systems)** make it possible to analyze changes in the earth's surface, river levels, and weather anomalies within seconds.

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[7] https://data.humdata.org/dataset/worldriskindex

[8] https://kun.uz/27828980#!

For example, in regions with high seismic risk, the installation of digital monitoring systems can significantly reduce the economic damage caused by potential earthquakes. According to available facts, such disasters may account for nearly **6 percent of GDP losses**[9].

At the same time, the issue of **infrastructure resilience and strict standards** remains important.The principle of **"Build Back Better"** should be applied not only after disasters but also during the construction process itself.

The seismic resistance of buildings, the safety of hydraulic engineering structures, and technological control at industrial facilities are integral parts of sustainable development.If safety standards are ignored today, tomorrow's economic growth may be destroyed by a single natural disaster.

At the same time, the **human factor and safety culture** are the most important components of the system.No matter how advanced technology becomes, if people lack skills for acting during emergency situations, the number of casualties will continue to increase.

Therefore, conducting regular training exercises in educational institutions and enterprises, as well as preparing people psychologically and physically, is one of the most effective ways to build a sustainable society[10].

Conclusion

Ensuring security during emergency situations today requires cooperation not only from government institutions but also from society as a whole.

Analysis shows that systems at the neighborhood level such as **Jichikai**, early warning mechanisms, earthquake-resistant infrastructure, and the regular training of citizens significantly reduce the negative consequences of emergencies.

At the same time, modern approaches also require the development of digital technologies, artificial intelligence-based forecasting systems, and rapid rescue services.

Japan's experience demonstrates that the joint preparedness of the government system and society is one of the most important factors in emergency situations.

Overall, achieving effectiveness in emergency management requires a **comprehensive approach**, in which state policy, technological development, and public participation must work in harmony.

Based on this, strengthening the neighborhood (mahalla) system in Uzbekistan, expanding digital warning systems, and improving public preparedness will play an important role in reducing emergency risks.

References

1. https://lex.uz/uz/docs/-5774840
2. https://uzbekistan.un.org/uz/about/about-the-un
3. https://kun.uz/11358372#!
4. https://www.gazeta.uz/oz/2026/01/23/yim-2025/

[9] https://uz.wikipedia.org/wiki/Favqulodda_holat

[10] https://www.unr.edu/organizational-resilience/phases

5. https://trialsearch.who.int/?Country=Japan&ReturnUrl=~/ListBy.aspx?TypeListing=2
6. https://www.misereor.org/fileadmin/user_upload_misereororg/publication/en/worldriskreport-2025.pdf
7. https://data.humdata.org/dataset/worldriskindex
8. https://kun.uz/27828980#!
9. https://uz.wikipedia.org/wiki/Favqulodda_holat
10. https://www.unr.edu/organizational-resilience/phases