ADRU
Academy of the Disaster Research Unit

The System of Emergency Preparedness and Response in the Republic of Armenia

Academy of the Disaster Research Unit (ADRU)
Prepared International (PPI)

ADRU Report No. 2

Contents

Figures

Executive summary

The earthquake of Spitak 1988 revealed many issues related to civil protection and disaster management systems in Armenia and became the main impetus of radical reorganisation of both systems. As a result, the Government of Armenia created the Emergency Management Administration (EMA), which in contrast with the previous Civil Protection Administration (CP) accepted a new, comprehensive approach to the organisation of the whole system from a conceptual, professional and legal point of view, based on the possible occurrence of large-scale disasters.

These system changes continued with the formation of the Ministry of Emergency Situations (MES) in 2008, aimed to tackle the complexity to handle the increasing risk of natural and human-made hazards and to prioritise population safety. The MES is the central government body which implements and coordinates the policies in the fields of civil protection and population protection at times of emergencies.

Spitak's earthquake also led to significant legislation on improvements to enhance disaster risk management (DRM) systems. These improvements include two national strategies ensuring the protection of Armenia's population – the National Security and the DRM national strategies. The National Security Strategy of 2007 governs Armenia's overall population security. It is a system of state policy aimed to guarantee a state, public, and individual security, sustainable development, and the maintenance of the Armenian identity. The DRM National Strategy of 2017 aims to make Armenia a disaster-resilient country and ensure significant reduction of various disaster threats to human lives, country's economy, and communities by establishing holistic grounds for sustainable development. In addition, the Law on Population Protection in Emergency Situations of 1998, is the primary law on the protection of the population and civil defence. It defines the bases and the arrangement of population protection in emergencies, the rights and responsibilities of state and local authorities, enterprises, institutions, organisations, irrespective of the organisational-legal type, as well as officials and the citizens in this sphere.

Regarding the structure of Armenia's DRM system, it is not organised as a monopoly of one structure. It has a comprehensive approach, with the active involvement of all structures and resources of the country (e.g. state agencies of territorial administration, local self-government bodies, non-governmental and private organisations, the Disaster Risk Reduction National Platform (ARNAP), international organisations). The Government of Armenia carries out the overall DRM. However, the MES is the authorised body for the coordination and monitoring of the DRM process in the country.

For coordinating the efforts on controlling the COVID-19 crisis, the Prime Minister established the Interagency Commission for Prevention of Coronavirus in January. The Deputy Prime Minister heads the Commission while the Minister of Healthcare serves as Deputy Chairman. Additional actors working in the Commission include the MES, National Security Service, police, Healthcare and Labour Inspection Agency, State Service for Food Safety, and Disease Control and Prevention Centre. Later, in March 2020, the Commission was replaced by the Commandant's Office after the Government declared a state of emergency. The Commandant's Office has the right to establish measures and temporary restrictions on rights and freedoms applied during the state of emergency, and the means ensuring the legal regime of the state of emergency.

Due to the urgency of the COVID-19 crisis, the state of emergency on Armenia was replaced by a quarantine regime from September 11 until January 11, 2021 through the Decision 1514-N. The Decision

restricts non-citizens of Armenia to enter the country by land borders, unless meeting specific criteria. It also states that upon entering the country, individuals are subjected to immediate medical examination by the Healthcare and Labour Inspectorate. On top of the Decision on the state of emergency, Armenia declared the state of martial law through the Decision 1586-N on September 27, 2020 as a response to the Nagorno-Karabakh conflict with Azerbaijan. The state of martial law aims to preventing the imminent threat of an armed attack against the Republic of Armenia

Finally, it is essential to note that Armenia's DRM and civil protection systems have been strengthened over the decades since its independence; however, there are various gaps in the implementation of DRM activities. For instance, the country's legal framework focuses mainly on civil defence, but it is necessary to establish laws and policies for emergency management and DRM specifically. For example, there are no general provisions that constitute the required legal framework for effective crisis preparedness planning and response. Also, the roles of the big national actors are apparent in the DRM National Strategy; however, the roles and responsibilities of the local actors and communities need to be clarified.

Other gaps include the lack of adequate training and knowledge for some the staff working in Armenia's DRM system, the lack of contingency plans in different entities of the government (e.g. health institutions), and the poor coordination of activities for daily operations during emergencies between the Ministry of Health (MoH) and the MES.

1. History of disaster risk management in Armenia

1.1 Soviet period

The Civil Defence Force (CDF) was the primary governmental agency entrusted with the response to large-scale emergencies in the Soviet Union. CDF's troops and paramilitary units were deployed on such occasions to provide rapid disaster recovery (Bankoff, 2020). These crises were mainly seen in terms of military threats; therefore, during that period, the Soviet Union did not have national specialised rescue units. The absence of well-defined emergency responders and the orientation to wartime conditions resulted in poor coordination, such that the CDF frequently could not handle the disaster management and recovery work in full measure (Bankoff, 2020).

The Chernobyl nuclear power plant explosion in 1986 stretched the CDF-based system to its limits. The Soviet Union government and its officials were unprepared for the scale of the emergency and unable to take decisive action (Bankoff, 2020). As a result, thousands of people paid for these mistakes with their health or lives. Moscow's central government was blamed for its inadequate handling of the emergency, also for its failure to coordinate emergency services, the absence of a rapid response force, supplying defective or obsolete equipment, and for the lack of necessary legal and regulatory frameworks. A couple of years later, the CDF's apparent ineffectiveness was soon demonstrated again, with the Armenian 1988 earthquake (Bankoff, 2020).

1.2 Post-soviet time and Spitak earthquake

Armenia 's transition from a Soviet Republic to an independent nation had enormous implications, including an opportunity to develop new institutions better suited to the country's geography, politics and socio-economy. The country needed to establish a new system that included local accountability and an enabling environment for private development; and it needed to abandon the centrally controlled approaches of Soviet-style bureaucratic structures, lines of responsibility, and norms and standards (GFDRR, 2009).

In 1988 northern Armenia was the epicentre of the most devastating seismic event in the country's history. The Spitak earthquake left around 25,000 deads, 15,000 injured people, 517,000 homeless, and caused severe damage to multiple cities, which resulted in approximately USD 15-20 billion of economic losses (World Bank, 2019). The earthquake struck just as the former Soviet regime was unravelling, reducing assistance to the republic. As a result, Armenia faced this disaster of unprecedented proportions with reduced aid and lack of adequate planning. The earthquake highlighted the fact that Armenia must strengthen its risk reduction and emergency management measures because it had no experience in disaster risk management (DRM) and had no management unit for seismic risk reduction and recovery (World Bank, 2019). At the same time, for the first time, international assistance from outside was deployed to a Soviet republic. Based on the lessons of this deployment, the system of international assistance under the United Nations framework developed, and with it, the International Search and Rescue Advisory Group (INSARAG) as the background of today's first response and life-saving system.

1.3 Reorganisation of Armenia's civil protection system

The earthquake of Spitak revealed many issues related to civil protection and disaster management systems in Armenia and became the main impetus of radical reorganisation of both systems. As a result, the Emergency Management Administration (EMA) of the Government of Armenia was created (Ministry of Emergency Situations, 2020). The EMA, set up in 1991, replaced the Civil Protection Administration (CP), which was the main body for population safety from 1961. The EMA, in contrast to the narrow frame of the CP activities in the past, accepted a new comprehensive approach to the organisation of the whole system from a conceptual, professional and legal point of view, based on the possible occurrence of large-scale disasters and accidents, their classification and risk assessment (Ministry of Emergency Situations, 2020).

After the creation of the EMA, in 1994, Armenia became a full member of the International Civil Defence Organisation (ICDO) (Ministry of Emergency Situations, 2020), intergovernmental organisation aiming to contribute to the development of its members by ensuring the protection of population and safeguarding property and the environment from natural and human-made hazards. Additionally, in 1997 the Rapid Response Rescue Team was set up. The team's main tasks being to perform rescue operations in the disaster zone, as well as rendering professional assistance to the population in case of emergency incidents in the shortest possible time, and perform recovery works in case of disasters and accidents (Ministry of Emergency Situations, 2020). After 11 years of being a body working under the direct mandate of the Armenian Government, the EMA was renamed into the Armenian Rescue Service and started to operate under the Ministry of Territorial Administration (MTA) (Ministry of Emergency Situations, 2020).

1.4 Formation of the Ministry of Emergency Situations

In 2008 the Ministry of Emergency Situations (MES) was established to tackle the complexity to handle the increasing risk of natural and human-made hazards and to prioritise the population safety. In 2014, the Government of Armenia united the MES with the MTA, forming the Ministry of Territorial Administration and Emergency Situations (MTAES). However, this merged entity lasted only for two years, since they split into two separate bodies again in 2016.

After the split, the MES became the main government body which implements and coordinates the policies in the fields of civil protection and population protection at times of emergencies. In contrast, the MTAD (renamed Ministry of Territorial Administration and Development) contributes to the prevention of emergencies, reduction of consequences and recovery at a local level (Ministry of Emergency Situations, 2020). The MES regained full control of the Armenian Rescue Service, National Service of Seismic Protection, Hydrometeorological Service, State Reserves Agency and National Centre of Technical Safety (Ministry of Emergency Situations, 2020).

2. Legal bases

Since the 1988 Spitak earthquake, the Government of Armenia has passed significant legislation to improve DRM systems. Design and construction codes and standards were also revised and updated to reflect the real seismic hazard and to more correctly determine the seismic loads acting on the buildings and structures. Additionally, two national strategies are ensuring the protection of Armenia's population – the National Security and the DRM national strategies. These strategies and the primary laws on population protection are detailed below.

2.1 National Security Strategy[1]

Armenia's overall security is governed by the National Security Strategy of the Republic of Armenia approved by the, 2007 President's decree NH-37-N dated 7 February. It is a system of state policy aimed to guarantee state, public, and individual security, sustainable development, and the maintenance of the Armenian identity. It is implemented through the development and execution of a unified state policy based on an all-inclusive system of democratic values for all spheres of life.

A new version of the National Security Strategy was approved by the President dated July 2020. The National Security Strategy was updated because, since the first strategy was adopted in 2007, significant changes have occurred in the international and regional security environment. These changes have created more sophisticated and multi-layered challenges for Armenia. Armenia itself has also changed. The non-violent Velvet Revolution of 2018 set a high standard for ensuring state security, development, and prosperity. In this new context, Armenia's security policy hinges upon the democratic system of governance laying sound foundations for the strengthening of the country's economic, political, intellectual, and consequently, military potential. These realities require a new and more ambitious National Security Strategy.

The Strategy is based on three fundamental principles. First, a *strong and prosperous Armenia* is the guarantor of its security. As a state interested in maintaining peace and stability, Armenia shall continually develop capacity along these dimensions and make continuous efforts towards enhancing its role in providing peace, security, and stability in the region. Armenia shall continue to invest in international security through the involvement of Armenian peacekeepers in international peace support missions, not only as a consumer, but also a provider of international security.

Second, this Strategy aims to contribute to *ensuring the perpetuity of Armenian statehood*, preparing the country to withstand whatever threat that may emerge to jeopardise it. The Armenian nation shall, once and for all, override the previous vicious cycle of acquiring and losing statehood, often caused by geopolitical factors beyond our control. The citizens of Armenia must hereafter assert their autonomy over the issue of Armenian statehood, the existence of which does not hinge on geopolitical factors but emanates solely from the will of the Armenian nation. Attaining this goal presumes to unify Pan-Armenian efforts and capacities. Armenian statehood embodies the centuries-old aspirations of the

---

[1] This section is based on the National Security Strategy document (Government of the Republic of Armenia, 2020).

Armenian people—and belongs both to the citizens of Armenia and the entire Armenian nation, who are the bearers thereof and the protectors of its interests.

Third, in the constantly changing world, *Armenia's internal and external resilience should develop* alongside its readiness to respond to new and unforeseeable challenges effectively. Currently, in the context of on-going, large-scale geopolitical changes, such as power shifts, the weakening of multilateral international platforms, and the erosion of confidence among states, the main principles of the current world order have become uncertain. Apart from addressing traditional and predictable threats, states and societies also need to counter unpredictable threats. The most salient example is the outbreak of the novel coronavirus, which shocked the health systems of the world's leading states and plunged the global economy into a crisis. Armenia's National Security Strategy aims to enhance resilience through a nationwide approach to planning and maintaining national security. The comprehensive provision of national security necessitates a convergence of the efforts at both the state administrative and societal levels.

Armenia's National Security Strategy states the following principal national interests:

- Ensuring the independence, sovereignty, and territorial integrity of Armenia, and the security of Artsakh. Armenia's independence, freedom, and territorial integrity are the prerequisites for the safety, development, and achievement of the goals of the Armenian people.
- Peace and enhanced international cooperation. Being the guarantor of Artsakh's security and having its contribution to the process of regional and international security, Armenia is an advocate for peace and equitable cooperation.
- Securing democracy, human rights, and the rule of law. Democracy, the protection of human rights, and the rule of law guarantee effective state governance and enhance the country's internal resilience. The sole source of authority in Armenia is the free will of its people.
- Ensuring the security and well-being of the citizens of Armenia, as well as the state's sustainable economic development. Ensuring the safety and well-being of the citizens of Armenia and the continued growth of Armenia's economic resilience is aimed at securing a dignified livelihood in the homeland and achievement of the people's goals.

2.2 Disaster Risk Management National Strategy[2]

The Disaster Risk Management National Strategy of the Republic of Armenia and its Action Plan for implementation were presented by the protocol decree N 14 dated 6 April 2017. The strategy aims to establish a disaster-resilient country, reduce disaster risk and loss of human lives, livelihood and health, as well as economic, physical, social, cultural and environmental losses of people, organisations, communities and the country to ensure increased safety of individuals and the society and the sustainable development of the country.

The vision of the strategy is 'to make Armenia a disaster-resilient country and ensure significant reduction of various disaster threats to human lives, country's economy and communities by establishing

---

[2] This section is based on the Disaster Risk Management National Strategy (Government of the Republic of Armenia, 2017).

holistic grounds for sustainable development'. The main goal of the strategy is to strengthen DRM capacities for the sustainable development of the country.

The DRM national strategy complies with the National Security Strategy and the priority actions of the Sendai Framework for Disaster Risk Reduction 2015 – 2030. The priority actions and objectives of the strategy are as follows:

- *Understanding disaster risk*: improve the disaster risk identification, assessment, analysis, monitoring and early warning continuously developing systems aimed at disaster risk reduction (DRR), as well as making risk-sensitive effective decisions for the country's development.
- *Strengthening the DRM system*: ensure strengthening of the system through raising the effectiveness of management functions, targeted decentralisation and continuous development of the players.
- *Investments in DRR*: incorporate DRR functions and measures, and enhance transparency, ensuring investments in DRR sector and possibilities for implementation of innovative programmes.
- *Building back better*: continuous strengthening of the country's capacities and opportunities for disaster preparedness, as well as rapid disaster response and more effective post-disaster recovery.

Seven targets have been selected for the assessment of the progress of the Sendai Framework for Disaster Risk Reduction 2015 – 2030:

- Reduce global disaster mortality by 2030
- Reduce the number of affected people globally by 2030
- Reduce direct disaster economic loss by 2030
- Reduce disaster damage to critical infrastructure and disruption of basic services, among them health and educational facilities, including through developing their resilience by 2030
- Increase the number of countries with national DRR strategies by 2020
- Enhance international cooperation by 2030
- Increase the availability of and access to multi-hazard early warning systems and disaster risk information and assessments to the people by 2030

Armenia's DRM and resilience activities are also reflected in the UN General Assembly 'Transforming our World: the 2030 Agenda for Sustainable Development' resolution adopted on 25 September 2015.

2.3 Law on Population Protection in Emergency Situations

The law of the Republic of Armenia on Population Protection in Emergency Situations dated 2 December 1998 (amended in 4 September 2020) defines the bases and the arrangement of population protection in emergencies, the rights and responsibilities of state and local authorities, enterprises, institutions, organisations, irrespective of the organisational-legal type, as well as officials and the citizens in this sphere (Government of the Republic of Armenia, 1998).

The law outlines what constitutes population protection and the main activities involved in ensuring it, while also establishing the organisation of population displacement, and both shelter and individual protection. The role of rescue forces, and the primary sources of protection logistics and financing are also described. It determines the following main activities of population protection in emergencies (Government of the Republic of Armenia, 1998):

- State bodies and population warning about the threat and appearance of emergencies.
- The organisation and realisation of population protection in the affected area with the help of population shelter, displacement and individual safety.
- Observance, survey and monitoring of the environment, water and food infection and condition.
- Population protection from radiation, chemical and bacteriological agents.
- Fulfilment of rescue and other emergency accident-restoration activities in the affected area.
- The strengthening of the protection of public order, as well as of objects having protective significance, providing human activities and other vital items.
- The fulfilment of population vital activities in the affected area.
- The purposeful collection and implementation of state bodies property, logistic reserves, transport and other means.
- In case of necessity, possessing and implementation of non-state property in the affected area with a later equivalent compensation.
- Primary implementation of republican, local and departmental contact nets to organise and carry out rescue operations.
- Fulfilment of quarantine and other sanitary-anti-infection activities in the affected area.
- Protection of agricultural cultured plants and animals.
- Fulfilment of medical service for the population.
- Assessment of damages brought about in the result of emergencies in the affected area.
- Involvement of able-bodied citizens (with their agreement) in the process of the elimination of emergency consequences following their professional and personal qualities aimed at fulfilment of population protection activities.

To cope with the changing environment, the Government of Armenia decided to revise this law and developed a new Law on Population Protection. The new law has been drafted, and it is currently under approval. This new law has three main objectives. The first is to harmonise the legal framework, which counts with multiple laws for civil protection and emergency management. Some of these laws have competitive competences, while others are overlapping; hence, it is necessary to harmonise them to have a more comprehensive DRM system and build a shared organisational vision.

The second objective is to decentralise the capacities and decision-making power of the DRM system. The new law will give clear roles and responsibilities to all the stakeholders involved in DRM, giving special attention to the local level. For instance, it will provide more independence to the local governments regarding emergency management activities, decreasing the dependency on the central MES.

The third objective is to increase the effectiveness of the human resources in the MES and the Rescue Services, with the inclusion of periodical training and exercise, and to develop additional capacity-

building activities. The new law also attempts to organise better the leadership of the emergency response – either national or local response – and cover volunteering activities.

This New Law on Population Protection aims to shift back the focus of the DRM and emergency healthcare systems from response to preparedness and prevention, including long-term recovery and BBB, taking a more proactive approach. This change follows the national intention to align Armenia's policies with the Hyogo and Sendai frameworks.

2.4 Additional laws for DRM

- The **Law on Sanitary and Epidemiologic Safety (1992, amended in 2020)** establishes the legal, economic and organisational basis of ensuring sanitary and epidemiologic safety of the population and also provided by the state of guarantee, excluding the influence of harmful and dangerous factors of the environment on the human body and providing favourable conditions for its activity and activity of future generations. Following the COVID-19 outbreak, the 2020 amendment adds the concept of quarantine and the applicable measures for its implementation and control.

- The **Law on Troops of Police (1997, amended in 2009)** gives the tasks and principles of the Armenian troops of police which are a part of the system of Police of Armenia under the Government. They are called to protect human rights and freedoms from criminal and other illegal encroachments, to ensure the safety of society and state.

- The **Law on Secure Use of Atomic Energy for Peaceful Purposes (1999, amended in 2020)** regulates the state regulation of the nuclear energy sector, the safety of installations, ionizing radiation sources, protection from ionizing radiation, radioactive waste management, personnel injury, and other nuclear damages for the protection of the population, the environment and the security of Armenia.

- The **Law on Approval of the Complex Disaster Recovery Plan (2002)** approve the comprehensive disaster zone rehabilitation programme.

- The **Law on Fire Security (2001, amended un 2020)** establishes the legal, economic and organisational basis of ensuring fire safety in Armenia.

- The **Law on Hydrometeorological Activities (2001, amended in 2018)** establishes the legal basis of hydrometeorological activities. It is directed to requirements satisfaction of society, public authorities, legal entities and physical persons in receipt of the information on the hydrometeorological phenomena and processes, and also aimed at providing hydrometeorological safety.

- The **Law on Civil Defence (2002, amended in 2016)** establishes the principles of civil defence, the right and obligation of state bodies and local self-government, the organisations, the citizens of the Armenia, persons which do not have a nationality and foreign citizens in the field of civil defence.

- The **Law on Local Self-government (2002, amended in 2020)** sets out the role of local self-government in enforcing government by the people of Armenia, as well as the notion, bodies, general principles, powers, and legal, economic, financial bases of their operations and the respective guarantees, and to regulate relations between the State authorities and local self-government bodies.

- The **Law on Seismic Protection (2002, amened in 2020)** which prescribes the basics for the organisation of seismic protection in Armenia and regulates the provisions connected with them.

- The **Water Code (2002, complemented in 2020)** regulates the relationship with the county's water bodies by providing the principles of management, use and protection of water resources and water system.
- The **Law on Civil Defence Troops (2004, amended in 2018)** regulates the order, recruitment, preparation, the order of fighting application, competence and organizational basis and principles of activities of the civil defence troops of Armenia.
- The **Law on Rescue Forces and Status of the Rescuer (2004, amended in 2018)** regulates bases and procedure for creation and activities of rescue forces, the rights, obligations, social guarantees and bases of material security of the rescuers and citizens who are taking part in rescue and urgent emergency recovery operations.
- The **Law on Rescue Service (2005, amended in 2020)** governs the basic principles of activities of the Rescue service performing tasks in spheres of emergencies and civil defence, and feature of the Rescue Service as a separate type of public service.
- The **Law on the Legal Regime of Military State (2006, amended in 2020)** establishes the actions taken exclusively in case of an armed attack to Armenia, direct threat of it or declaration of war temporary action which represents particular legal regime of activities of state bodies and local self-government, the organisations, and resolves establishment of certain restrictions of the rights and freedoms of legal entities and citizens.
- The **Law on the Legal Regime of the State of Emergency (2012, amended in 2020)** regulates the legal status of state of emergency. The Law also states the procedures for the declaration of state of emergency, its validity, termination, and measures to be taken during such state.

3. Organisational structures and responsibilities in DRM

The DRM system in Armenia is not a monopoly of one structure. It has a comprehensive approach, with the active involvement of all structures and resources of the country, application of political, logistical means and scientific and participatory components. The Government of Armenia carries out the overall management of DRM; however, the MES is the authorised body for the coordination and monitoring of the DRM process in the country.

The leading players of the DRM are state agencies, territorial administration, local self-government bodies, governing bodies of non-governmental and private organisations, the Disaster Risk Reduction National Platform (ARNAP), international organisations, diplomatic representations in Armenia, committees formed for conducting DRM activities with the involvement of the representatives of different levels (Government of the Republic of Armenia, 2017).
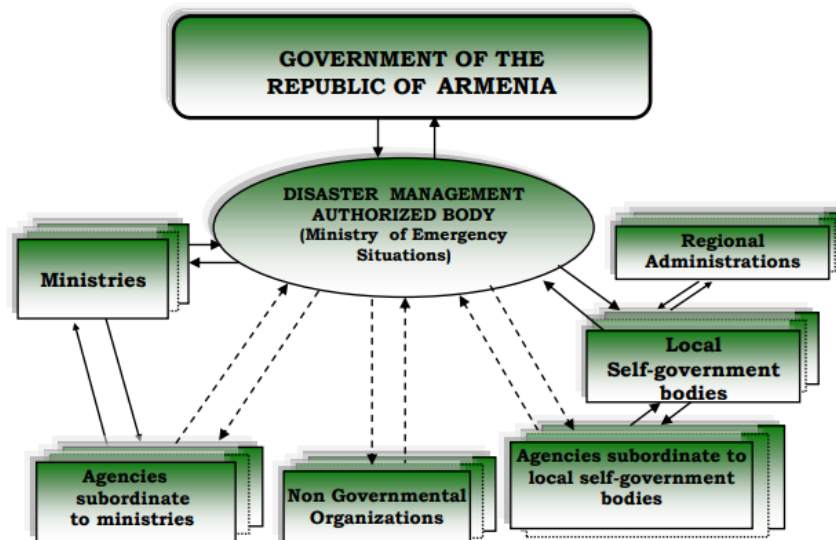

Figure 1: Structure of Armenia's DRM System
Source: UNDP (2009)

Figure 1 presents the structure of the DRM system of Armenia. The figure shows that the system centres in the MES and includes support from other national and regional agencies, local self-government bodies, enterprises, institutions and organisations, as well as non-governmental organisations. The following section describes the different involved players with their responsibilities, as described in the DRM National Strategy.

3.1 Ministries of Armenia

Ministry of Emergency Situations (MES)

It develops, implements and coordinates the policy of Armenia in the fields of civil protection and population protection at times of emergencies using authorities vested in laws and other relevant legal acts; carries out activities on emergency prevention, reduction of consequences and recovery, ensures management of forecasting systems of possible earthquakes, creation, maintenance and updating of necessary material stockpiles for population protection, supervision over keeping and implementation fire safety rules and technical safety norms.

The MES also carries out regular and notable observations, studies and forecasts of hydro-meteorological phenomena, implements technical expertise to ensure the safety of hazardous production facilities, DRR training of state and local self-government bodies, managers and specialists of organisations and the population, carries out processes associated with information management and general awareness during emergencies, operational control of emergencies, centralisation of information sharing processes on population protection and civil protection, operation reflection of information with new measures, and raising the effectiveness of population and civil protection processes.

The MES has under its structure the Armenian Rescue Service, Crisis Management State Academy, National Service of Seismic Protection, Hydrometeorological Service, State Reserves Agency and National Centre of Technical Safety.

Ministry of Territorial Administration and Development (MTAD)

It participates in the activities of territorial administration and local self-government bodies for the population protection in emergencies, as well as in the DRR activities of regional administration bodies and communities, contributes to the prevention of emergencies, reduction of consequences and recovery, building resilient communities, integration of DRM measures in community development programmes and implementation, organisation and implementation of regular exercises for DRM capacity development.

Ministry of Health (MoH)

The MoH ensures preparedness of general and specialised medical institutions and equips them with necessary medical-sanitary means and medication, carries out supervision over the quality of medicines imported as humanitarian aid and simplifies certification, if necessary, prepares the application for the request of required medication from foreign countries and submits it to the Ministry of Foreign Affairs.

The MoH also coordinates international medical forces and ensures integration of DRM component into sectoral development programmes, participates in the provision of living for the evacuated population during chemical accidents, conducts situational assessment during biological accidents, ensure sanitary-epidemic safety, laboratory research of air, soil, water and bioassays, identification of biological contamination zones, epidemiological, parasitological and entomological supervision, preventive and anti-epidemic activities, provides relevant conclusion on the sanitary-epidemiological situation of disaster consequences, provides recommendation on quarantine, if necessary.

The MoH has under its structure the National Centre for Disease Control which is in charge to monitor, track, investigate, and stop dangerous viruses, bioweapons, and disease to spread around and outside Armenia.

Ministry of Foreign Affairs (MFA)

It coordinates international cooperation, implementation of international humanitarian programmes and mutual aid processes. The Ministry ensures international cooperation, manages operations for the signing of international agreements, procedures for the organisation of humanitarian aid, and participation of international rescue forces and structures in the disaster relief activities.

Ministry of Nature Protection

The Ministry regulates and controls ecological safety, ensures environmental protection and monitoring processes, as well as carries out the functions of eco-education and manages climate change issues, implements the integration of DRM component in sectoral development programmes.

Ministry of Agriculture

The Ministry of Agriculture carries out activities related to veterinary sanitary, food safety and plant sanitary services, activities on primary seed breeding and ensuring availability of food, forest maintenance, protection, reproduction, utilisation and sustainable control, state monitoring of forests and anti-mudflow activities. The Ministry integrates DRM component into sectoral development programmes.

Ministry of Energy Infrastructures and Natural Resources (MEINR)

The MEINR researches the energy supply networks, activities on ensuring sustainable energy supply in the territory of Armenia, suspending gas and energy supply in the administrative areas of the evacuated communities, activities on providing energy supply for the residential areas of accident planning zones in case of nuclear and radial accidents in the Armenian Nuclear Power Plant, as well as integrates DRM component into sectoral development programmes. Within its authorities, the Ministry supervises the exploitation of open and underground mines both daily and at times of disasters.

Ministry of Education and Science

It is responsible for the organisation of education on disaster management and civil protection in all educational institutions of Armenia. It ensures the continuity of education process during emergencies, coordinates the procedures for the introduction of DRR and emergency plans in the educational institutions, integration of DRM component into the DRR education of republican level and educational programmes, organises regular activities in the organisations under its supervision on the development of DRM capacities.

Ministry of Labour and Social Affairs (MLSA)

It organises and coordinates continuity of programmes of providing livelihoods and social protection for the affected population in the placement areas of affected population with the cooperation of Regional Administration bodies; this is implemented with the resources of regional social service centres and state non-commercial organisation under the supervision of the Ministry. It integrates the DRM component into the sectoral development programmes.

Other ministries

- The **Ministry of Finance** develops recommendations on funding issues regarding population protection activities in the sector of DRM.
- The **Ministry of Economic Development and Investments** ensures sustainable operation of the economy, food and logistical supplies, conducts metrological supervision over technical means of civil protection, integration of the DRM component into the sectoral development programmes.
- The **Ministry of International Economic Integration and Reforms** supports the organisation of the relevant processes for the involvement of rescue, recovery, medical sub-divisions and accepting material aid from foreign countries and international structures for disaster recovery.
- The **Ministry of Culture** organises DRM assessment processes in the sector, implementation of DRM programmes and carries out maintenance of cultural values and their evacuation, if necessary.
- The **Ministry of Defence** participates in rescue activities during emergencies and provides forces and means for rescue and recovery work.
- The **Ministry of Sports and Youth Affairs** supports the involvement of the youth in the establishment of social and volunteer rescue movement in Armenia and implementation of development actions, the establishment of volunteer fireman rescue brigades. It works on the integration of the DRM component into the sectoral development programmes.
- The **Ministry of Diaspora** which, in cooperation with the **Ministry of Foreign**, coordinates inclusion of DRM component into the programmes of Diaspora organisations, organises the provision of necessary humanitarian aid by organisations in Diaspora in times of disasters.
- The **Ministry of Transport, Communication and Information Technologies** supervises the integration of DRM component into programmes of roads, highways, structures and construction, as well as develops, organises, coordinates and controls their vulnerability reduction programmes, provides necessary means of transportation and communication channels for transportation of technical means for the evacuation of the population, affected people and survivors and rescue forces and organisation of population protection activities.

3.2 Additional governmental actors

- The **General Department of the Civil Aviation** organises the stable activity of the organisations under its supervision, protection of the system staff and passengers in airports. The Decree N 105-N of Armenia, dated 2 February 2017, guides the department for accepting emergency response, humanitarian aid and international rescue forces and sending humanitarian aid and rescue forces from Armenia to other countries. The decree regulates the actions and activities of cooperation of the airports of civil aviation of Armenia and state governing agencies.
- **State Urban Development Committee** ensures compliance with disaster resilient urban development norms during the whole process of newly built and reconstructed healthcare, educational, social and other critical buildings, conducts technical supervision and monitoring. Organises and coordinates scientific research and experimental-constructive activities, development of normative technical documents for seismic resilient construction, studies of areas and engineering protection activities.

- The **State Revenue Committee** controls imported humanitarian aid and applies simplified procedures for importing and exporting rescue equipment and property.
- **State Nuclear Safety Regulatory Committee** organises and implements safety assessment and expertise of nuclear energy utilisation activities, objects and equipment, organises immediate suspension of the Armenian nuclear power plant, as necessary based in the situation.
- **National Security Service** coordinates the functions of ensuring the safety of critical state facilities.
- The **Republic of Armenia Police** organises and ensures public order, protection of population property and uninterrupted traffic during the evacuation of communities, organisations necessary for defence and economy, as well as organisations of high risk in terms of population protection, protected objects, evacuation assembly points and placement areas, and in passages of movement of rescue forces and equipment in times of emergencies.
- **State Committee of Real Estate Cadastre** provides cadastral, topographic or land maps to the state agencies; these maps may be provided to other parties (arriving international forces) by the state agencies only based on a decree of Armenia for which compensation is paid to the real Estate State Registry.
- The **Council of Public TV and Radio** organises the stable operation of the organisations under its supervision, the extension of reserve portable and mobile satellite stations, raising public awareness on behavioural rules in emergencies, and broadcasting programmes on the process of rescue work and disaster recovery.
- The **National Statistical Service** contributes to the establishment of a standard statistical database on disasters in compliance with relevant international norms and improvement of administrative registry maintenance in relevant state agencies with the integration of DRM provisions.
- **Civil Service Council** promotes the integration of DRM issues into training programmes of civil servants.
- The **Municipality of Yerevan and Community Halls** conduct regular assessments of disaster risks, community vulnerability and capacities, ensure inclusion of DRR activities and relevant activities in the community development programmes. It also ensures the application and ongoing update of electronic risk maps, the inclusion of DRM standards in the process of upgrading the General Plan, formation of a transparent system for DRM information provision, creation of geo-information standard system, provision of relevant base areas for the evacuation of the population, introduction, operation and maintenance of early warning system, building a culture of safety and raising the awareness level of the people.
- **Civil and scientific organisations** are important players and contribute to the development of the scientific potential of the DRM system and solution of its issues in communities.

3.3 Non-governmental actors

- The **Armenian DRR National Platform (ARNAP) Foundation** is a non-governmental organisation that provides opportunities for state, non-governmental, private, and international institutions to participate in decision-making and consultation processes. At the same time, it provides opportunities for organising and controlling day-to-day operational activities, implementing long-term projects. It also provides the necessary flexibility to respond to new challenges.
- The **UN Disaster Management Team (DMT)** is a mechanism for emergency preparedness and response coordination. It is responsible for preparing for and facilitating prompt, effective and well-

coordinated emergency response by its member organisations to a new disaster in Armenia. The DMT mechanism helps coordinate the disaster-related activities, consolidating and directing the efforts of its members to ensure the effectiveness and efficiency of the assistance provided and avoid to the extent possible duplications and unilateralism.

- The **Armenian Red Cross Society** works to reduce the vulnerability of the population through the mobilisation of the power of humanity, to get prepared to cope with situations, which may cause exposure among the people, as well as by assisting people made vulnerable by harsh socio-economic conditions. It aims to increase the resilience of the population towards natural and human-made disasters through DRR on a community level and strengthen disaster preparedness and response.

- The **Scientific Foundation 'International Centre Garni'** develops geological, geophysical, seismological, geodynamic, topographic, infrastructural and water complex databases, carries out the assessment of natural hazards and risks, monitoring of geodynamic processes and creates structures of rapid response for the organisation of monitoring network in epicentres.

- The **Armenian Association of Seismology and Physics of the Earth's Interior (AASPEI)** it is a scientific organisation carries out educational, awareness-raising and consultation activities in the given field, as well as the assessment of natural risks and hazards. It is non-governmental.

- **Private insurance companies** support the development of disaster insurance system and contribute to further improvement. Insurance companies covering disaster losses and damages have little participation in the country—very low penetration rate of 0.62% in 2014 (World Bank, 2017b). The primary insurance companies in the country are Rosgosstrakh Armenia, Armenia Insurance, INGO, SIL Insurance, Nairi Insurance, RESO, ISG Insurance, Armenian Motor Insurers Bureau, Export Insurance Agency of Armenia, Yerkir Insurance. These companies cover multiple risks, from accidents and disaster, to health and businesses.

- **International partners** assist in the establishment and development of the DRM system in Armenia. Leading partners include the UN Development Programme, UNICEF, UN Office for the Coordination of Humanitarian Affairs, Japan International Cooperation Agency, Swiss Development and Cooperation Agency, the Organization for Security and Cooperation in Europe, the World Bank, Asian Development Bank, German Technical Cooperation Agency, Armenian Red Cross Society, Oxygen Foundation, Save the Children International, World Vision organisation, UMCHOR organisation.

4. Armenia's response to COVID-19

The current overarching strategy of the Armenian government in managing COVID-19 has been intense and aggressive containment. The strategic initiative has relied on controlling the spread, swiftly testing suspected individuals, implementing quarantine mechanisms, and expanding on community containment. The modus operandi of the government strategy appears to be targeted and efficient: identify, test, diagnose and control.

4.1 Structure of the response

Armenia's health care system is severely underfunded, with less than 1.6% of GDP going to health care expenditure and more than 50% of all health care expenditure coming from out-of-pocket spending (Shekherdimian & Kopalyan, 2020). Thus, from a structural lens, the health care system is chronically underfunded, which creates systemic limitations that lead to significant issues with access, governance, and quality of care. That being said, the health care workforce remains robust, as the healthcare system does not suffer from a significant deficiency in physicians (Shekherdimian & Kopalyan, 2020).

Furthermore, there is a disproportionate share of specialists compared to primary care physicians. This disproportion, however, may be advantageous with the current situation: the vigorous surge capacity of specialists to deal with particular complications of the coronavirus (Shekherdimian & Kopalyan, 2020). Overall, the numerical distribution is revealing: the average number of physicians per 10,000 capita in Armenia is 43.7, while comparatively, the per capita average for Europe is approximately 30.6. This numerical advantage is relatively positive. However, circumstances regarding registered nurses are the opposite: 88.3 per 10,000 in Europe versus 45.6 per 10,000 in Armenia (Shekherdimian & Kopalyan, 2020).

Another critical structural variable during pandemics is hospital capacity. Armenia's hospital bed capacity in 2015 was 4.2 beds per 1000 individuals. This number is relatively higher than the United States at 2.9 beds in 2013; however compared to South Korea, which had 11.5 beds in 2015 (World Bank, 2020), the comparative structural assessment becomes a bit clearer (Shekherdimian & Kopalyan, 2020). The relative excess of per capita beds as well as low bed occupancy rates, which during most times contribute to inefficiency and waste within the system, may serve to increase Armenia's surge capacity in times of need. There are, however, more nuanced factors that will need to be taken into consideration: the proportion of beds that are ICU beds; the number of beds with infection control/negative pressure rooms; and availability of such beds in all hospitals. For example, infectious illnesses, typically get treated in centralised places (i.e. Nork infection hospital) (Shekherdimian & Kopalyan, 2020). Additionally, there is an observed tendency in Armenia to skip primary healthcare and go directly to secondary hospital care. This tendency occurs through the lack of trust of the patients on the primary healthcare and their desire to have more specialised treatment. Thus, while overall surge capacity theoretically exists in terms of the number of beds, there are still significant factors that need to be taken into consideration to address limitations.

Noting that no known medication exists to treat COVID-19, the concentration remains on ancillary medicines. Armenia appears to have sufficient amounts of antibiotics, for example, to treat superimposed bacterial infections that will be needed during surge capacity. (Shekherdimian & Kopalyan, 2020) Similarly, Shekherdimian and Kopalyan (2020) state that Armenia has sufficient ventilators and respiratory support machines to combat the surge if a broader outbreak takes place, although no specific

scenario is mentioned. The MoH recently announced the country has 334 ventilators, 15 of which are reserved explicitly for coronavirus use. Further 21 are being purchased. Proportionally, Armenia has one ventilator per 8,450 persons, compared to Canada with one per 7,500, the United Kingdom one per 13,400 and Italy one per 16,000 (Shekherdimian & Kopalyan, 2020).

4.2 Main actors of the response

To coordinate the efforts on preventing the COVID-19 spread in Armenia, the Prime Minister established the **Interagency Commission for Prevention of Coronavirus** in January (Armenpress, 2020). The Deputy Prime Minister heads the commission while the Minister of Healthcare serves as Deputy Chairman. The composition of the commission includes Deputy Healthcare Minister, Deputy Foreign Minister, Deputy Minister of Emergency Situations, Deputy Director of the National Security Service, Deputy Chief of Police, Tourism Committee director, Civil Aviation Committee administrator, Healthcare and Labour Inspection Agency Director, State Service for Food Safety Director, Disease Control and Prevention Centre director, WHO Armenia Office Director, and FAO Programme Manager (Armenpress, 2020).

Through the Decision 298-N of 16 of March of 2020, Armenia declared a state of emergency, taking into account the increased cases of COVID-19 and the pandemic classification from the WHO. The state of emergency allows the Government to take steps to minimise the risk of infection during the outbreak of COVID-19. The Decision also established the **Commandant's Office** to jointly manage the forces and means ensuring the legal regime of the state of emergency, with the Deputy Prime Minister as Commandant. The Commandant's Office was composed of the Minister of Emergency Situations, Minister of Health, Minister of Economics, Minister of Territorial Administration and Development, Head of the State Revenue Committee, Head of the Police, Director of the National Security Service, Deputy Chief of Staff of the Prime Minister, Head of the Bureau for Coordination of Inspectorates of the Staff of the Prime Minister, Head of the Healthcare and Labour Inspectorate and the Head of the Food Safety Inspectorate. The Commandant's Office has the right to establish measures and temporary restrictions on rights and freedoms applied during the state of emergency, and the means ensuring the legal regime of the state of emergency.

Due to the urgency of the COVID-19 crisis, the state of emergency on Armenia was replaced by a quarantine regime from September 11 until January 11, 2021 through the Decision 1514-N. The Decision restricts non-citizens of Armenia to enter the country by land borders, unless meeting specific criteria. It also states that upon entering the country, individuals are subjected to immediate medical examination by the Healthcare and Labour Inspectorate. According to the results, the person is hospitalized if corresponding symptoms are present, or the person is instructed to self-isolate for a period of 14 days, during which he or she may undergo a polymerase chain reaction (PCR) diagnostic test. In case of a negative result of the PCR test, the person can leave self-isolation.

On top of the Decision on the state of emergency, Armenia declared the state of martial law through the Decision 1586-N on September 27, 2020 as a response to the Nagorno-Karabakh conflict with Azerbaijan. The state of martial law aims to preventing the imminent threat of an armed attack against the Republic of Armenia, as well as ensuring the normal functioning of state and local self-government bodies, natural and legal persons, and the protection of the life and safety of people.

5. Training and schools

DRM is taught in higher education institutions and schools of general education with relevant training programmes. DRM topics are included in the state's standards of general education which enabled providing DRR courses also in elementary and secondary schools, as well as in pre-school institutions. The process of regular training of managers and specialists is also regulated. Existing knowledge and expertise and further development of capacities are one of the milestones for implementation of DRR strategy and building a culture of safety and resilience (Government of the Republic of Armenia, 2017). The schools and academies teaching DRM topics in Armenia are the following:

- The **Crisis Management State Academy of the MES**, founded in 1992, is the state-owned public academy committed to teaching issues of DRM. The Academy trains professionals in fire protection, rescue missions, risk management, civil defence and rescue operations. It offers vocational, bachelor's, master's and additional educational programmes (UNDP, 2009). About 1700 participants from state administration and local self-government bodies and organisations and nearly 400 firemen-rescuers get to know DRR issues through the training programmes of the Academy, and about 200 graduates annually become specialists of DRR (Government of the Republic of Armenia, 2017).
- The **Faculty of Geography and Geology of Yerevan State University** works with consultation and implementation of specific activities on studying natural disasters, forecasts and struggle against disasters are provided by the faculty using geographical, geomorphological, geological, geophysical and geochemical methods (UNDP, 2009).
- The **Centre for Ecological-Noosphere Studies (CENS)** of the National Academy of Sciences conducts the assessment of the sustainability of landscapes, ecological risks and level of pollution, and carries out laboratory analysis (UNDP, 2009).

Major training exercises

- In **2018** the **Austrian Red Cross** conducted five simulation exercises in Armenia and Georgia. They aimed to test the levels of increased emergency preparedness of Armenian and Georgian Red Cross Societies based on prior project achievements such as contingency plans, standard operating procedures, and training (Austrian Red Cross, 2018).
- In **2018** the **International search and rescue advisory group (INSARAG)** Africa-Europe-Middle East Regional organised the **Earthquake Response simulation exercise (SIMEX)** at MES dedicated to the 30th anniversary of Spitak earthquake. 17 urban search and rescue teams, 12 emergency medical teams, UN disaster assessment and coordination team – 160 people in number, (some even real rescuers of the Spitak earthquake of 1988), as well as high-ranking officials of INSARAG secretariat, took part in the exercise (INSARAG, 2018).
- In **2017** the **IOM** supported the first inter-agency SIMEX on **humanitarian relief and disaster preparedness** between Armenia and Georgia. IOM organised a simulation for 30 participants from concerned agencies at the Gogavan crossing on the Armenian-Georgian border. The exercise aimed to build the capacity of Armenian officials in humanitarian crisis response, including conflict-induced displacement (IOM, 2017).
- In **2009**, the **FAO** performed the **'Strengthening Foot-and-Mouth Disease prevention and emergency response capacity in the Trans-Caucasian countries'** SIMEX. This exercise had the objectives

to allow staff from central and district level to practice their skills in FMD control, test national contingency plans, and simulate a working environment that best represents real-life conditions (FAO, 2009).

6. Identified gaps and weaknesses

The following is a list of gaps and weaknesses of the Armenian DRM system identified and compiled from various reports (UNDP, 2009; WHO, 2014; World Bank, 2017a).

- Armenia's legal framework focuses mainly on civil defence; it is necessary to establish laws and policies for emergency management and DRM precisely and enhance the implementation system for these regulations.
- There are no general provisions that constitute the necessary legal framework for effective crisis preparedness planning and response in the health sector.
- There are bases for the decentralisation of DRM, but the process is not complete yet. It is also connected with the incomplete fulfilment of the local self-government processes.
- The roles of the big national actors are evident in the DRM national strategy; however, the roles and responsibilities of the local actors and communities need to be clarified. This will help to design plans for local capacity building.
- Issues related to the functions of state administration, territorial administration and local self-government bodies and several stakeholders of the DRM sector.
- The requirements of the concept of population education on DRR are partially implemented, in particular, DRM issues are not fully incorporated in pre-school education programmes and curricula of the middle school (5-9 grades). There are issues concerning the organisation of DRM education that are connected with the global transformation to include general education, including pre-school education; there is no common database on the safety of educational institutions yet.
- It has been pointed out a lack of adequate training and knowledge for some of the staff working in Armenia's DRM system.
- There are issues associated with global climate change, resilience and adaptation.
- DRR awareness system has not been effective with its specific mechanisms and tools.
- A standard methodology for disaster risk assessment and a complete monitoring system with its components and databases have not been formed yet.
- It is needed to enhance the organisation of emergencies, especially in rescue operations and control of emergency sites.
- Rapid response preparedness skills are available; however, there are severe gaps in the efficient organisation of post-disaster recovery.
- The MoH should become an active member of ARNAP's advisory council and board of trustees to ensure adequate representation of the health sector in DRM.
- The MES should develop crisis management or DRR national programme or plan (for all types of risk). The MoH, in turn, should create the health of the overall programme or project.
- There is a lack of coordinated activities for daily operations during emergencies between the MoH and the MES.
- A monitoring framework for the implementation of health care facilities' emergency-response plans is lacking.
- There are no contingency plans in different entities of the government (e.g. health institutions).

Bibliography

Armenpress. (2020, January 31). PM Pashinyan orders creation of special governmental commission on preventing coronavirus in Armenia.

Austrian Red Cross. (2018). *Simulation exercise in Armenia and Georgia*. Retrieved from https://www.roteskreuz.at/news/datum/2018/10/30/simulation-exercise-in-armenia-and-gergia/

Bankoff, G. (2020). What happened to the Second World? Earthquakes and postsocialism in Kazakhstan. *Disasters, 44 (1)*, 3-24.

FAO. (2009). *FMD regional simulation exercise*. Retrieved from http://www.fao.org/ag/againfo/commissions/docs/Workshop_0509/Agenda.pdf

GFDRR. (2009). *Disaster risk reduction and emergency management in Armenia.*

Government of the Republic of Armenia. (1998). *The law of the Republic of Armenia on population protection in emergency situations.*

Government of the Republic of Armenia. (2017). *Protocol decree N 14 on the approval of the disaster risk management national strategy and the action plan.*

Government of the Republic of Armenia. (2020). *National Security Strategy of the Republic of Armenia.*

INSARAG. (2018). *INSARAG AEME Regional earthquake response exercise, 5 to 7 December 2018, Armenia*. Retrieved from https://www.insarag.org/global-structures/insarag-upcoming-events/671-insarag-aeme-regional-earthquake-response-exercise-5-to-7-december-2018-armenia

IOM. (2017). *Armenian Disaster Response Simulation Supported by UN Migration Agency*. Retrieved from https://www.iom.int/news/armenian-disaster-response-simulation-supported-un-migration-agency

Ministry of Emergency Situations. (2020). *Ministry history*. Retrieved from http://mes.am/en/history/

Shekherdimian, S., & Kopalyan, N. (2020, March 22). Armenia Combats the Coronavirus: State Capacity and the Diaspora. *EVN Report*. Retrieved from https://www.evnreport.com/readers-forum/armenia-combats-the-coronavirus-state-capacity-and-the-diaspora

UNDP. (2009). *Assessment of legal and institutional framework for disaster management and disaster risk information systems in Armenia.* Yerevan, Armenia.

WHO. (2014). *Assessment of health-system crisis preparedness: Armenia.* Copenhagen, Denmark: WHO.

World Bank. (2017a). *Assessment of disaster risk management capacities in Armenia: Informing the national disaster risk management strategy.* Washington, DC, USA.

World Bank. (2017b). *Disaster risk finance country note: Armenia.* Washintong D.C., USA.

World Bank. (2019). *Three decades since Spitak, disaster resilience remains a priority for Armenia*. Retrieved from News: https://www.worldbank.org/en/news/feature/2019/12/06/three-decades-since-spitak-disaster-resilience-remains-a-priority-for-armenia

World Bank. (2020). *Hospital beds (per 1,000 people)*. Retrieved from Data: https://data.worldbank.org/indicator/SH.MED.BEDS.ZS

Impressum

Title

The System of Emergency Preparedness and Response in the Republic of Armenia

Publisher

Cover

Photo by Possessed Photography on Unsplash

Project funding

The authors

Mr Marc Arnold is senior analyst at Prepared International (PPI).

Mr Santiago Lema Burgos is a research assistant at Prepared International (PPI).

Dr Albrecht A. Beck is the managing director of Prepared International (PPI), member of the United Nations Disaster Assessment and Coordination Team (UNDAC) and NATO's civil advisor for population movements.

Acknowledgements