



ADRU
Academy of the
Disaster Research Unit



Summary of Results of the Research Project CoronaSys

Addressing the Corona Pandemic in Armenia through
Systemic Risk Management (June 2020 - March 2021)

Academy of the Disaster Research Unit (ADRU)

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Acronyms

ADRU	Academy of the Disaster Research Unit
AI	Artificial Intelligence
AKFS	Akademie der Katastrophenforschungsstelle
ARNAP	Disaster Risk Reduction National Platform of the Republic of Armenia
BBK	Bundesamt für Bevölkerungsschutz und Katastrophenhilfe (Federal Office of Civil Protection and Disaster Assistance)
BMI	Bundesministerium des Innern, für Bau und Heimat (German Federal Ministry of the Interior)
CADRI	Capacity for Disaster Reduction Initiative
COVID-19	Coronavirus Disease 2019
CP	Civil Protection Administration
DRM	Disaster Risk Management
DRU	Disaster Research Unit
EMA	Emergency Management Administration
EP&R	Emergency Preparedness and Response
FAO	Food and Agriculture Organization
GDP	Gross domestic product
HIV	Human immunodeficiency virus
INSARAG	International Search and Rescue Advisory Group
IOM	International Organization for Migration
LGBT	Lesbian, Gay, Bisexual and Transgender
MES	Ministry of Emergency Situations
MoH	Ministry of Health
OOP	Out- of- pocket Payments
SARS-CoV-2	Severe acute respiratory syndrome coronavirus type 2
THW	Bundesanstalt Technisches Hilfswerk (Federal Agency for Technical Relief)
WHO	World Health Organization
YSMU	Yerevan State Medical University

Introduction

The ongoing SARS-CoV-2 pandemic poses multi-dimensional and highly dynamic challenges to all sectors of society, including civil protection and health systems, economies, education, and policy-making, down to our very daily routines. As a quick-response research project CoronaSys “Addressing the Corona Pandemic in Armenia through Systemic Risk Management” aimed at conducting a real-time analysis of the events, contexts, needs, and innovations surrounding the global pandemic with specific scrutiny on actions taken in Armenia and Germany. It focused on research and knowledge exchange in terms of expert workshops, stakeholder mappings, a vulnerability assessment, a gap and capacity analysis, innovation monitoring, a comparison of approaches to integrated pandemic management, and a synopsis of socio-political debates on bridging civil liberties and the right to health in democracies. CoronaSys intended to promote an inter-and transdisciplinary platform for knowledge exchange and discussion between partners in Armenia and Germany in the fields of public health, disaster risk management and civil protection, as well as research.

CoronaSys was coordinated by the [Academy of the Disaster Research Unit](#), which is, as a non-profit limited liability company, a spin-off of the [Disaster Research Unit](#) at the Freie Universität Berlin. The funding was provided by the German Federal Ministry of Education and Research. The project comprised the following steps and work packages:

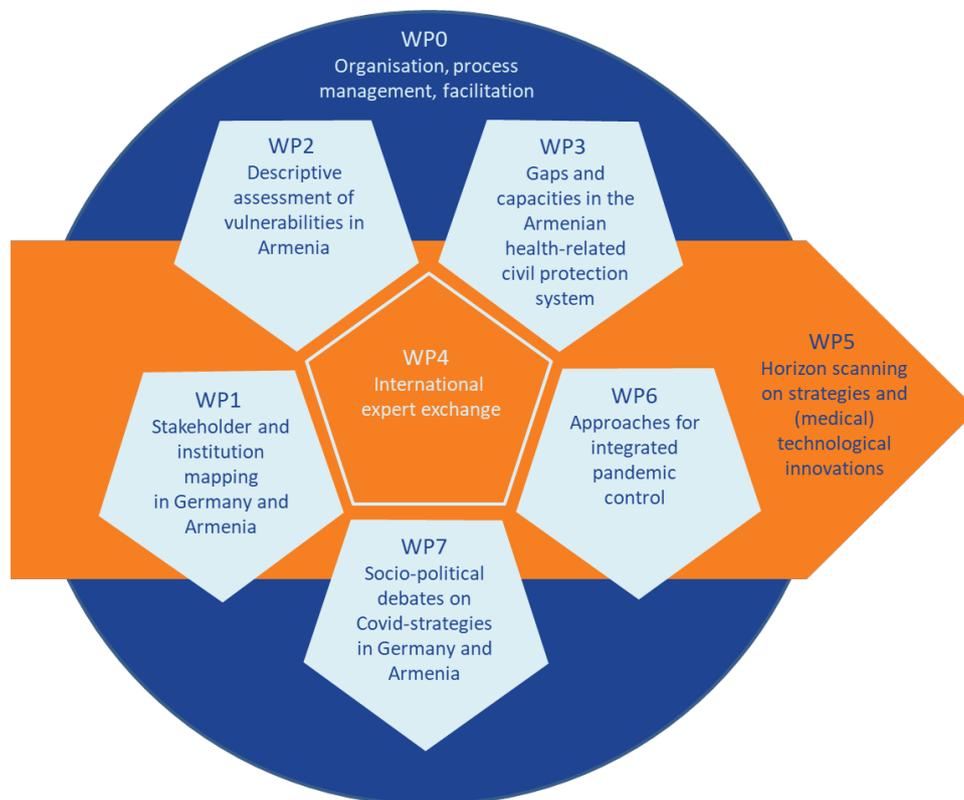


Figure 1 Work packages of the CoronaSys project

This report serves as a project summary and compiles the executive summaries of the following topics:

- A general overview of civil protection architectures in Germany and Armenia in order to understand institutional differences and similarities
- A descriptive assessment of social and socio-medical vulnerabilities within Armenia to identify areas and groups in need of targeted attention
- A study on capacities, gaps, and needs of the Armenian health and civil protection system in the pandemic to recommend priorities for action and research
- A horizon scanning of medical, technical, and social innovations for pandemic management that are currently developed in Armenia and Germany and internationally
- A comparative mapping of existing integrative approaches to pandemic control in Armenia and Germany to further systemic risk management perspectives and approaches
- A synopsis of socio-political debates on strategies for dealing with the pandemic with special emphasis on civil liberties and the right to health in democracies

Please note that this compilation of the executive summaries of the various research reports provides a general overview of the project findings. Please refer to the project website for more detailed information and the full reports: <https://coronasys.a-kfs.de>

Civil protection in Germany

The development of population protection in Germany was primarily based on the experiences of the two world wars. Public discourse focuses much more on the aspect of “security” than on the aspect of “risks”. In accordance with a predominantly federalist organisational concept of German civil protection, the greatest authority in each case lies with the federal states. An exception is civil defence in wars and armed conflicts; here the federal government takes the lead. In addition, the federal government has an advisory role and supports the federal states (*Länder*) with equipment and funding for civil protection.

(Large-scale) exercises are held at regular intervals for civil protection actors at the federal and provincial levels, but there is currently no comprehensive programme of education and training for the population as a whole.

At the state level, the following stakeholders in particular play a key role in German Civil Protection: the Federal Police, the Federal Office of Civil Protection and Disaster Assistance (BBK), the Federal Agency for Technical Relief (*Bundesanstalt Technisches Hilfswerk*) and, if required, the Federal Armed Forces in administrative assistance. While the armed forces are under the authority of the Ministry of Defence, the Federal Ministry of the Interior (BMI) is responsible for the Federal Police, the Federal Office of Civil Protection and Disaster Assistance (BBK) and the Federal Agency for Technical Relief (THW), the latter two being based in Bonn.

The following non-state actors play a crucial role in Germany’s protection architecture: the German Fire Brigade Association, the German Red Cross, Malteser, the Johanniter, the Arbeiter-Samariter-Bund, the German Life Saving Association, and others. In addition to their tasks in local emergency management, they offer a variety of services, such as first aid courses or transport services for disabled people. In doing so, they rely to a large extent on volunteers and, as mentioned above, are supported by the federal states.

Civil protection in Armenia

Akademie der Katastrophenforschungsstelle, Prepared International (2020). [The System of Emergency Preparedness and Response in the Republic of Armenia](#). AKFS Report Nr. 2. Berlin: AKFS.

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.

Vulnerability profile Armenia

Jafari Berenji, Parisa; Voss, Martin (2021). [Vulnerability Profile Armenia: Assessment of SARS-CoV-2 Pandemic Vulnerabilities](#). AKFS Report Nr. 5. Berlin: AKFS.

The report presents the findings of a descriptive secondary assessment vulnerabilities in the context of the complex and multidimensional impacts of SARS-CoV-2 pandemic in Armenia and highlights main areas and groups that requires special attention in the pandemic response. It is a preliminary assessment with the aim to provide a sound understanding of vulnerabilities in the context of the pandemics multifacted impacts.

Armenia reported its first imported confirmed case of COVID-19 on March 1, 2020, and local transmission has been registered since 11 March. At the time of writing this report, the pandemic continues to impact all sectors of

society. This assessment applies a multifaceted lens to observe key vulnerabilities arising from underlying societal, economic, political, as well as public health and healthcare system conditions in Armenia. Based on a comprehensive literature review, we identified five broader aspects that are most relevant to assess vulnerabilities in the context of a pandemic such as SARS-CoV-2 and its multifaceted impacts. These aspects include: 1) demographic factors, 2) socioeconomic conditions, 3) political conditions, 4) public health, and 5) healthcare systems. Each aspect includes sub-categories that address aspects or areas of vulnerability in the context of pandemic. Using the available data (e.g. from the World Health Organization, the World Bank, and the Statistical Committee of the Republic of Armenia) and a set of most relevant indicators, the team assessed vulnerabilities within the five selected areas. Alongside the statistical data, the information and evidence obtained from the literature review were used to enrich the assessment with a context-specific understanding of the situation in the country. In the report development phase, the team continued to review the latest publications and modified the data and information based on the latest updates.

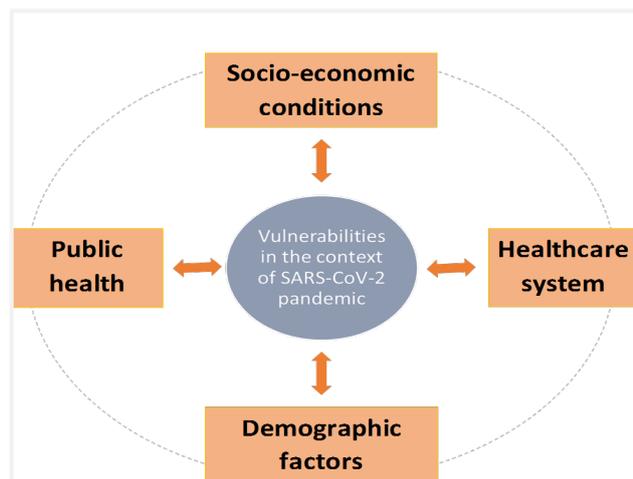


Figure 2 Vulnerabilities in the context of the SARS-CoV-2 pandemic in Armenia

This preliminary assessment aiming to acquire a sound understanding of vulnerabilities in the context of complex and multifaceted impacts of SARS-CoV-2 in Armenia can be used as a basis for further studies and research. The key findings are highlighted below.

Demographic factors

Population trends

- **The Armenian population is declining and ageing.** Armenia is facing a population decline, which is combined with the growing share of population ageing. Around one in ten Armenian people is aged 65 and above.¹ Given that the risk of COVID-19 severe illness and fatality rises sharply with age, Armenia's ageing population implies that a relatively high proportion of the population is potentially at risk for COVID-19. Alongside the health-related risks, older adults are particularly vulnerable to the psycho-social and economic consequences of the pandemic, such as financial insecurities and isolation.

Urbanisation

- **Despite the shrinking trend, the country's urban population is still higher than the global rate.** Around two-thirds of the country's population live in urban areas; more than half of the total population is concentrated in the capital city of Yerevan.² Around 1 in 10 of the urban population lives in urban slums.³ People living in slums and other informal settlements are particularly vulnerable to COVID-19 transmission and infection due to the substandard and overcrowded living conditions.

Household size and composition

- **Many Armenian people live in large and extended family households.** Living in extended families or large households enables many people to share living costs, and thus it can be a primary source of care and support in times of hardship. However, people living in large and extended family households might be at increased risk of virus transmission due to overcrowding and unavoidable close contacts. Thus, optimal strategies will be required for supporting people who have limited options for home-isolation and reducing household contacts.

Socio-economic conditions

Economic factors

- **Armenia's promising economic growth in previous years appears to be affected by the pandemic.** Pandemic mitigation programmes have raised government spending. At the same time, the lower revenue collection and predicted shrinking GDP collection might lead to a state budget deficit in Armenia.

Income distribution and poverty

¹ United Nations. 2020e. World Population Prospects 2019 - Volume II: Demographic Profiles. UN.

² World Bank. 2019r. "Urban Population (% of Total Population)." 2019. <https://data.worldbank.org/indicator/SP.URB.TOTL.IN.ZS>

³ World Bank. 2018d. "Population Living in Slums (% of Urban Population) | Data." World Bank. 2018. <https://data.worldbank.org/indicator/EN.POP.SLUM.UR.ZS>

- **Income inequality is increasing in Armenia.** The Gini coefficient highlights the significant inequality in income distribution within the Armenian population⁴, which could be intensified by the economic impacts of the pandemic.
- **Around one in four Armenians lives below the poverty line.** In 2019, the poverty rate was at 26.4%, and 1.4% of the total population was in food (extreme) poverty in Armenia.⁵ Rural regions have a greater number of poor households than urban areas: more than one in three people live in poverty in rural areas. The increasing poverty is associated with adverse health outcomes among vulnerable poor families, directly affecting poor households' capacity to seek health services and assistance.
- **A growing number of Armenians are experiencing homelessness.** In the context of the SARS-CoV-2 pandemic, Armenian people experiencing extreme poverty and homelessness are particularly vulnerable to the transmission of the virus due to the lack of access to shelter, hygiene, and sanitation services.

Work and employment

- **The unemployment rate, especially youth unemployment, is currently high in Armenia.** The high unemployment rate is a concerning issue in Armenia. The 2020 unemployment data shows that around 34% of adults aged 15-24 are unemployed.⁶ The economic effects of the pandemic are likely to aggravate the current situation.
- **Around one in three Armenians works in the informal non-agricultural sectors.** Informal employment is usually associated with the lack of entitlement to social security schemes and unemployment benefits. As a result, informal workers are particularly vulnerable to the pandemic's adverse economic impacts, such as increasing poverty and unemployment.
- **Remittances resulting from labour migration are a significant source of income for many Armenian households.** Pandemic border restrictions and economic disruptions can threaten the livelihood of the remittance-dependent families.

Transportation

- **Armenia's transportation sector shows a relatively low logistic performance and road connectivity capacity.** Armenia's score is below the global average in the Logistic Performance Index⁷ and acquires a lower Road Connectivity Index ranking.⁸ During the pandemic, the inadequate capacity of transport infrastructure can influence health care access and delivery of essential goods and services.

⁴ ARMSTAT. 2020b. *Social Snapshot and Poverty in Armenia (Findings of the 2019 Integrated Living Conditions Survey)*. Yerevan: ARMSTAT and World Bank.

⁵ ARMSTAT. 2020b. *Social Snapshot and Poverty in Armenia (Findings of the 2019 Integrated Living Conditions Survey)*. Yerevan: ARMSTAT and World Bank.

⁶ World Bank. 2020g. "Unemployment, Youth Total (% of Total Labour Force Ages 15-24) (Modeled ILO Estimate) - Armenia | Data." Retrieved January 6, 2021 (<https://data.worldbank.org/indicator/SL.UEM.1524.ZS?locations=AM>).

⁷ World Bank. 2018a. "Global Rankings 2018 | Logistics Performance Index." *The World Bank*. Retrieved January 8, 2021 (<https://lpi.worldbank.org/international/global>).

⁸ Schwab, Klaus. 2019. *The Global Competitiveness Report 2019. Insight Report*. World Economic Forum.

Digital technologies and communication

- **Although most of the Armenian population uses the internet, there is a significant digital divide between regions, gender, age and socio-economic groups.** As online technologies are becoming prevalent in maintaining social activities and communication during the global pandemic, the existing digital inequalities can intensify social exclusion. In this situation, the government's over-reliance on digital technologies such as contact tracing apps or online channels of risk communication can create further challenges to access essential information and warnings for the population with limited digital and virtual network accessibility such as the elderly, rural communities, women, less-educated people, and lower-income households.

Gender issues

- **Armenian women are more exposed to financial insecurities due to the pre-existing gender gap and inequalities.** Armenian women have low participation in the labour market. Traditional gender roles and patriarchy, family structure, age, and economic status contribute to the existing gender gap in employment and working hours. Thus, they can be more vulnerable to economic adversities such as unemployment, income loss, and financial stress.
- **The pandemic is likely to exacerbate the burden of unpaid caregiving on Armenian women.** Armenian women typically spend comparatively more time than men in unpaid domestic work such as household chores, childcare, sick, elderly, and disabled family members. During the pandemic, women are at risk of psychological and health stress due to the additional caregiving responsibilities.
- **Survivors of domestic violence are facing challenges to seeking protection in Armenia.** Despite recent efforts, the country still lacks a comprehensive legal framework that ensures the protection of domestic violence survivors, which make them particularly vulnerable to the increasing risk of domestic violence in times of the pandemic lockdown.

Education

- **Despite the country's high literacy and school enrolment rate, social inequality in access to educational opportunities remains a key issue.** Urban-rural disparities and socio-economic background and disabilities shape students' educational pathways in Armenia. The pandemic's disruptive impacts on the educational system can increase existing education inequalities and deprivation in the country. In addition, remote learning through online platforms is not a feasible option for all Armenian students and learners due to existing digital inequalities.

Migration and displacement

- **Financial insecurities and housing problems are among the key challenges for migrants in Armenia.** Many migrants living in Armenia face difficulties obtaining financial security and sustainable housing. Socio-economic disruptions caused by pandemics can exacerbate these long-lasting problems for the migrant population.
- **The recent war over the Nagorno-Karabakh region has resulted in the displacement of thousands of people.** Displaced persons and refugees living in overcrowded settings are at higher risk of infection due to the limitation of essential hygiene services. The lack of adequate primary health care services creates further health risks among displaced people who are in dire need of health care.

Social capital

- **Institutional trust is generally low in Armenia, and people rely more on informal networks and interpersonal trust.** In the absence of the high level of institutional trust, relying on community networks and interpersonal relationships is a common mechanism for Armenian individuals and families in times of hardship and crisis, such as a pandemic.

Political conditions

Governance

- **Armenia is dealing with political instability.** The country is experiencing a political transition toward democratic governance. However, political instability remains a key issue which can influence the governance effectiveness in times of the pandemic.
- **Despite recent progress, corruption and the lack of transparency remain key concerns in Armenia.** In the pandemic, corruption and non-transparent public operations can influence public services and effective response.

State of democracy

- **The political transition toward democracy is an undergoing process in Armenian society.** Pandemic restrictions can trigger concentration of power and anti-democratic and non-transparent procedures of decision-making, affecting the country's transition to democracy.

Freedoms and human rights

- **Despite media diversity, independent journalism is yet to be fully achieved in Armenia.** Government controls impose challenges for Armenian journalists, which can be exacerbated during the pandemic.
- **LGBT people, persons with disabilities, women, and older people face multiple forms of discrimination and social exclusion in Armenia.** Structural exclusion and discrimination contributing to the series of problems and risks such as poverty and the lack of access to essential health care services render marginalised and disadvantaged groups particularly vulnerable to the health and socioeconomic impacts of the SARS-CoV-2 pandemic.

Presence of conflicts

- **The recent armed conflict over the Nagorno-Karabakh region creates additional complexities for managing the pandemic, making the country more fragile and prone to failure.** The conflict over disputed Nagorno-Karabakh between Armenia and Azerbaijan has escalated further into an armed conflict between the two countries, creating extra pressures on the country's institutions, particularly on the healthcare system, as the country is faced with handling the conflict and the SARS-CoV-2 pandemic at the same time.

Public health

Life expectancy and mortality

- **There is a considerable gender difference in life expectancy in Armenia.** Armenian women can expect to live over seven years longer than men. The potential impact of the excess mortality of COVID-19 on decreasing life expectancy could exacerbate the existing gender gap in the population's life expectancy.

- **The adult male mortality rate is significantly higher than adult female mortality in Armenia.** High male adult mortality could indicate the population's mortality pattern in general and the risk of case fatality of COVID-19 in particular. Of course, conflict fatalities need to be accounted for as well.
- **Compared to the European region, Armenia has a relatively high maternal mortality rate and mortality of children under five years of age.** During the global pandemic, maternal and under-5 child deaths are at risk of increasing due to the disruption of health care services and the potential impact on food security and other measures for saving maternal and child lives.

Non-Communicable Diseases

- **Non-communicable diseases are among the main public health challenges in Armenia.** The non-communicable diseases account for 93% of deaths in Armenia.⁹ The non-communicable disease profiles of countries can indicate the risk and vulnerability of its population to the severe progression of and death due to the COVID-19 infection.

Communicable and vaccine-preventable diseases

- **Armenia's incidence of Tuberculosis prevalence remains among the highest in Europe.** TB and COVID-19 are both infectious diseases that attack the lungs. Although the experience on COVID-19 infections in TB patients remains limited, it can be anticipated that TB patients infected by COVID-19 have poorer health outcomes.
- **Compared to the global average, Armenia has a lower HIV prevalence, but the antiretroviral therapy coverage is under the global average.** Although the prevalence rate of HIV is relatively low in Armenia, the significant issues are maintaining essential services and addressing affected populations' needs. During the pandemic, patients are at increased vulnerability due to disruptions of HIV service rooms and special HIV counselling services.
- **Children's vaccination coverage has improved in Armenia, but there are regional differences in timely vaccination.** Armenian rural children are more likely to be vaccinated receive a timely vaccination compared to children in urban areas. The internal migration patterns and associated poor health care access are likely to explain the lower timely vaccination in urban Armenia.¹⁰

Risk factors

- **One in five Armenian people suffers from obesity.**¹¹ Obesity is one of the risk factors that account for the increased disease burden in Armenia and is considered a risk factor contributing to COVID-19 severe illness.
- **More than half of Armenian men aged over 15 use tobacco.**¹² Tobacco smoking increases the risk of NCD diseases, including cardiovascular and circulatory diseases, and can be associated with severe COVID-19.

⁹ World Bank. 2016a. "Cause of Death, by Non-Communicable Diseases (% of Total)." The World Bank. 2016. <https://data.worldbank.org/indicator/SH.DTH.NCOM.ZS>.

¹⁰ UNICEF Armenia. 2018a. "Education UNICEF Armenia Supports the Government in Making All Schools Inclusive and Child-Focused." 2018. <https://www.unicef.org/armenia/en/what-we-do/education>.

¹¹ WHO. 2017. "Prevalence of Obesity among Adults, BMI \geq 30, Age-Standardized Estimates by Country." Global Health Observatory Data Repository, World Health Organization. World Health Organization. 2017. <https://apps.who.int/gho/data/node.main.A900A?lang=en>.

¹² WHO. 2020n. "Prevalence of Current Tobacco Use: Data by Country." Global Health Observatory Data Repository, World Health Organization. 2020. <https://apps.who.int/gho/data/view.main.GSWCAH20v?lang=en>.

- **Although the total alcohol consumption level is relatively low in Armenia, there is a significant difference in consumption across gender.** Alcohol consumption is associated with multiple forms of diseases and compromises the body's immune system, making it more vulnerable to infectious diseases such as COVID-19.
- **The air quality in Armenia is moderately unsafe.** Exposure to ambient air pollution increases the risk of respiratory diseases and chronic lung inflammation and can pose a risk factor for COVID-19 infection and mortality.

Water, sanitation, and hygiene services

- **Around 1 in 7 Armenian households lacks access to safely managed drinking water.**¹³ In the pandemic, the lack of access to safely managed drinking water from an improved source accessible on-premises can affect households' wellbeing and health.
- **Around 1 in 20 Armenian households lacks access to basic sanitation facilities.**¹⁴ The lack of basic sanitation facilities forces people to use the shared facilities with other users, thus increasing their risk of infection with the SARS-CoV-2 virus.
- **Around 1 in 20 Armenian households lacks a handwashing facility.**¹⁵ Since poor hygiene is one of the main routes of transmission of the SARS-CoV-2 virus, households that lack hygiene facilities are less equipped to protect themselves from the infection.

Food security and nutrition

- **Around 1 in 7 Armenians are food-insecure, and approximately 1 in 20 of the population is undernourished.**¹⁶ The combined effects of COVID-19 and food security vulnerability can raise the health risks and worsen existing food insecurity, poverty and inequalities.
- **Unhealthy dietary habits and child malnutrition remain key concerns in Armenia.** Armenia has shown limited progress in increasing the consumption of diversified and nutritious foods. Different forms of malnutrition, including overweight, anaemia, and stunting, affect the health of Armenian children. The shift in consumer demands toward cheaper and less nutritious foods brought on by the pandemic can exacerbate the malnutrition within the population.

Healthcare system

Physical and human resources

- **Compared to averages in Europe and Central Asia, there is a lower hospital bed capacity in Armenia.** Since the country's independence from the Soviet Union, there has been an overall decline in Armenia's hospital bed capacity. As is the case for many other countries, hospital capacity and medical equipment shortages are major concerns as COVID-19 cases spike in Armenia. The armed conflict between Armenia and Azerbaijan has resulted in further pressures on the country's healthcare system, as it is forced to deal with the pandemic and war casualties at the same time.

¹³ WHO/UNICEF JMP. 2017. "Drinking Water, Sanitation and Hygiene Services." *The WHO/UNICEF Joint Monitoring Programme for Water Supply, Sanitation and Hygiene (JMP)*. Retrieved December 10, 2020 (<https://washdata.org/monitoring/drinking-water>).

¹⁴ Ibid.

¹⁵ Ibid.

¹⁶ WFP. 2019. *Comprehensive Food Security, Vulnerability Analysis (CFSVA) Update 2019*. World Food Programme.

- **Despite relatively high number of health workers human in Armenia, the uneven geographical distribution of medical workers contributes to a shortage of regional and rural healthcare workforces.** The uneven distribution and concentration of health workforce in larger cities, especially in Yerevan, have resulted in a shortage of professional health workforce in other regions, including in rural areas, and can pose significant challenges for dealing with the pandemic in those areas.

Health security core capacities

- **Armenia faces inadequate laboratory capacity.** The lower laboratory capacity may pose challenges for laboratory support and urgent needs to boost testing capacity for early detection and containment of the COVID-19 outbreak.

Health Financing

- **Household Out-of-Pocket Payments remain the largest sources of health financing in Armenia.** The high proportion of household out of pocket payments suggests inadequate protection for households, which may be exacerbated in the wake of COVID-19. Simultaneously, a low share of public health expenditure poses challenges to the Universal Health Coverage in Armenia.

Mental health care services

- **Mental health services mainly focus on inpatient care in Armenia, whereas the number of outpatient treatment facilities are relatively low.** During the pandemic, shifting to home-based health care and remote community services are potential strategies for maintaining mental health care. The feasibility of these adaptation strategies is currently limited in Armenia's centralised and hospital-based mental healthcare system. Shifting to home-based and remote community services mainly depends on capacity of community-based mental health care and availability of human resources, which are currently limited in Armenia.

Long-term care

- **Family and informal caregiving are not adequately supported.** In Armenia, long-term care mainly relies on the informal setting within families. However, families need the external support and financial assistance, which are currently limited in the country. In the context of COVID-19, the inadequate support for informal long-term caregiving and the lack of accessible health care services may exacerbate health risks, financial burdens, and, thus, the vulnerability of the patients in need of long-term care and their families.

Health care services in prisons

- **Despite improvements in these areas, poor equipment, lack of medication, and limited staff have remained key issues regarding health care services in the country's prisons.** The containment of the virus in prisons is likely to fail if strong infection prevention measures, adequate testing, treatment, and medical care and services are not carried out in prisons and other similar settings.

Gaps and capacities in Armenian civil protection and health systems

Akademie der Katastrophenforschungsstelle, Prepared International (2020). [Gaps and Capacities Analysis of the Armenian Civil Protection and Health Systems](#). AKFS Report Nr. 1. Berlin: AKFS.

An important component of the CoronaSys project was the assessment of gaps and capacities in the Armenian civil protection and health systems. The diagnostic tool that was tailored to this assessment was inspired by the 2017 World Bank Ready to respond (R2R) methodology, with additions from the 2013 WHO toolkit for assessing health-system capacity for crisis management and being mindful of the CADRI initiative for the implementation of DRM to achieve the Sustainable Development Goals. The methodology builds on the following five core components of Emergency Preparedness and Response (EP&R): (1) legal and institutional frameworks; (2) information; (3) facilities; (4) equipment; and (5) personnel. Data was gathered through desk review and 11 key informant interviews with representatives from the Armenian Red Cross, ARNAP, Crisis Management State Academy, the Ministry of Emergency Situations, the Ministry of Health, Safe the Children, UNDP Armenia, WHO Armenia and WHO Europe.



Figure 3 Components of disaster risk management

Main conclusions in relation to legal and institutional frameworks

The establishment of the Ministry of Emergency Situations (MES) in 2008, gave Armenia a central body to efficiently coordinate the DRM efforts and strategies. The MES is responsible to develop, implement and coordinate the policies in the fields of civil protection. The MES carries out activities on emergency prevention, mitigation and recovery, and it creates, maintains and updates necessary material stockpiles for population protection.

Despite Armenia's positive development over recent decades, some of these developments have been lost recently. The focus of the Armenian DRM system has been shifting from risk reduction and mitigation (proactive) to response and disaster recovery (reactive). Lack of institutional memory, frequent change of leadership and strategies, short-term approaches, centralised decision-making, and lack of shared vision between stakeholders has been noted. Financial means to support, maintain and further mature the DRM systems fall short as a result of the challenged economy, partially as a result of drought affecting the agricultural sector for a longer period of time.

Main conclusions in relation to information

Community engagement is mostly seen as volunteering. There is a considerable volunteering potential in the country; however, there are no laws or policies for the coordination of volunteers in emergency response. The Armenian Red Cross is the primary body organizing the volunteers, providing training, and managing the volunteer pool system. Armenia's decision-making process has been centralised

since the country's independence. There is a growing need to augment the autonomy of local governments to ensure prompt and tailored actions in the context of information exchange and the education of the people of Armenia.

Armenia does not have a multi-hazard monitoring and surveillance program in place, but there are multiple single alert systems in operation, like SMS messaging and sirens. The warning system suffers from a lack of information-sharing and data analyses capacities.

The MES has the responsibility to perform risk assessments and keep updated GIS data on the main hazards affecting the country. This information focuses on the largest regions of the country, leaving unattended most of the country's communities. It also focuses on earthquakes, without considering other hazards, such as technological and hydrometeorological.

Main conclusions in relation to facilities

Armenia has a well-established emergency operation centre with a comprehensive approach to handle daily situations and large-scale emergencies. The Centre functions as a focal point for decision-making. It also works as an information channel between the multiple disasters and emergency response actors in Armenia, and primary dispatch centre of response units as police and firefighters.

There is a variety in the quality and content of the hospital emergency response plans and it was observed that some healthcare facilities are more prepared than others. Planning for incident and crisis management through exercises, drills, training, information management and communication, rarely exist in health care facilities.

The Crisis Management State Academy covers the national level through vocational and practical training, and high education courses and programmes. The Academy has adequate funding which allows it to run well-equipped classrooms and laboratories, as well as to possess practice rescue equipment.

Main conclusions in relation to equipment

There are no recent assessments of the Armenian emergency response equipment capacities, nor a comprehensive management plan of the response equipment owned by the MES and the Armenian Rescue Service. It is critical to developing a homogenous and complete inventory management strategy for maintenance requirements and to identify which equipment should be replaced over time in order to enable adequate budget planning.

Communication systems have developed significantly in the country over recent years. However, internet services are highly vulnerable to suffer from disruptions due to their complete dependency on Georgia's infrastructure since most of the services are provided through a single-line connection coming from Georgia.

Stocks of medical supplies for emergency response are located all around the country. The Armenian Rescue Service keeps the most extensive stocks of pharmaceuticals. Other organisations with medical supplies to deal with emergencies include the National Centre for Communicable Disease Prevention and Control, Humanitarian Assistance Centre, and Armenian Red Cross.

Hospitals are responsible for keeping stocks of emergency items and medications lasting for a minimum of 20 days (up to two months in some hospitals in locations hard-to-access).

In the current situation, international donors play a significant role in Armenia's process to obtain equipment. Significant donors include the governments of China, Germany, Japan, Russia, Sweden, Switzerland, and the United States.

Main conclusions in relation to personnel

In 2009 the Armenian training scheme for emergency management was developed. It is a multisectoral plan, which intends to increase the response capacities and the coordination between the principal actors of the emergency response, the MES and the MoH, and additional national and international stakeholders. International assistance for the development of personnel capacities has been requested on multiple occasions by the Armenian government. One of the most significant supporters has been the Swiss Agency for Development and Cooperation that delivered many simulation exercises over the years. Additional actors who have coordinated capacity development exercises and drills in Armenia include the FAO, IOM, INSARAG, and the Armenian Red Cross.

The Crisis Management State Academy offers vocational education and training in fire protection and rescue, specialised search and rescue, risk management, medical response, and other civil defence related topics. The Academy also provides higher education courses in crisis management, at diploma, bachelor's and master's levels, and emergency management education for civil servants including managers, doctors and teachers, as well as for schoolchildren. MoH is the ruling institution regarding training for health emergency management, and the Armenian Red Cross provides courses in first aid both to the rescuers and general population. Other key entities covering training on both the national and regional levels include the Armenian Red Cross, providing training including first aid, basic rescue, and needs assessments, and the MoH, supporting emergency healthcare courses in the Yerevan State Medical University.

Gaps in the DRM system

In recent years, the government of Armenia has proven its strong commitment to DRM and crisis management. This has been observed with the establishment and continuous strengthening of the MES, based on strong legislation and the integration of previously independent structures, such as the Armenian Rescue Service and the Crisis Management State Academy. Gaps that remain are the following:

- Lack of financial resources: Armenia's budget for Emergency Preparedness and Response is insufficient to sustain operations and maintain and replace (safety) equipment.
- Community engagement requires further strengthening by providing an enabling environment and (volunteer) organization.
- The local-level leadership and institutions need to augment their autonomy, decision-making power and resources.
- Lack of inter-agency collaboration (e.g. between the MES and the MoH).
- Lack of standardized health emergency preparedness plans, and comprehensive policies on DRM education, training, exercises, and research
- Lack of a homogenous and complete inventory management strategy to identify which equipment must be replaced and updated.
- There are no recent assessments of the Armenian emergency response capacities, nor a comprehensive management plan of the response equipment owned by the MES and the Armenian Rescue Service.

Horizon scanning of social, medical and technological innovations

Akademie der Katastrophenforschungsstelle (2021). [Social, Medical and Technological Innovations in the Wake of the SARS-CoV-2 Pandemic](#). AKFS Report Nr. 6. Berlin: AKFS.

The impact of COVID-19 was not only felt in the health sector, but also in the social, cultural, and economic spheres of countries and communities all over the world. The challenges it posed to health care providers, the economy, education systems, and the cultural, political, and social foundations of most societies were and continue, at time of writing, to be immense.



Figure 4 Areas screened in the conducted horizon scanning

In response to these challenges, a variety of innovations were developed in almost all sectors of society. The search for possible treatments for the disease and a vaccine against COVID-19 was without a doubt one of the most urgent and most visible efforts to control the pandemic. Never before have so many scientists, pharmaceutical companies, governments, and private sector stakeholders worked so closely together as in the pandemic response, and never before have so many research papers been published on a single topic in such a short time.

Great progress has been made in engineering, chemistry, and communications, to name a few examples. Existing technologies such as artificial intelligence (AI) have been adapted and further developed to address the pandemic in a variety of ways. Through a real-time learning process, new response strategies and policies have been developed not only at the government level but also in municipalities and communities, and even in individual factories, start-ups and micro-businesses.

As part of the CoronaSys project, a horizon scanning of social and medical-technological innovations was conducted between July 2020 and January 2021, with a focus on innovations of potential interest for the Armenian and German project partners. To this end, news media, scientific research platforms, journals and other online sources were screened on a weekly basis. This horizon scanning showed that a large number of very different innovative products and approaches have emerged from almost all areas of science and industry. In particular, substantial progress has been made in the areas of prevention, diagnosis, and treatment of COVID-19. This significantly influenced the pandemic response and, in some cases, made it at all possible to begin with. The innovations found may provide interesting impulses for stakeholders in Germany and Armenia. There have also been numerous innovative concepts, technologies and approaches in other research areas such as AI and digital health, as well as communication and education, to name but a few.

By 15 January 2021, more than 150 innovations from these and other areas were compiled in an innovation table based on more than 700 literature sources and more than 70 media outlets and research platforms screened weekly. Also, more than 40 fact sheets on selected innovations were prepared.

Pandemic policies in Germany's federal system

Merkes, Sara T.; Brüggem, Franca; Voss, Martin (2021). [Pandemic Policies in Germany's Federal System: A Comparative Perspective on SARS-CoV-2 Measures in Bavaria and Saxony-Anhalt in March and April 2020](#). AKFS Report Nr. 7. Berlin: AKFS.

In the federal country of Germany, states are responsible for addressing disaster situations, including pandemics. Thus, policies may differ between states, even in cases such as a nationwide pandemic. In the context of the SARS-CoV-2 pandemic, the federal system has been described as a complicating factor towards a nationwide uniform strategy.¹⁷ However, it has also been considered a strength in addressing the SARS-CoV-2 outbreak, as state officials are able to respond better to local circumstances.¹⁸

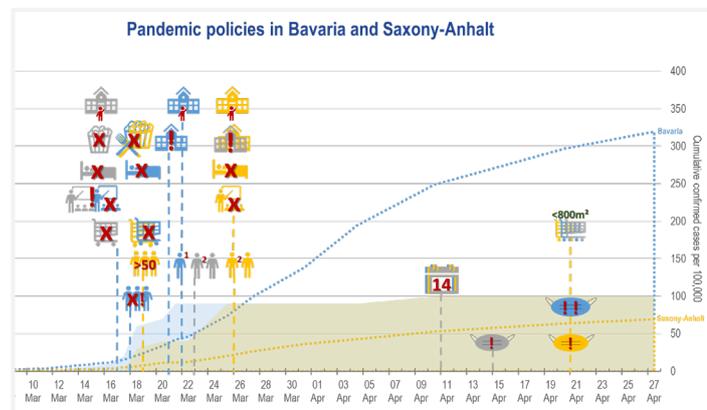


Figure 5 Pandemic policies in Bavaria and Saxony-Anhalt

Looking at the federal-state level, this report provides a comparative insight into different policies implemented in Germany with the example of the two states of Bavaria and Saxony-Anhalt during the first infection wave in the months of March and April 2020. The descriptions of policies are contextualised with the development of infection cases at the state level.

In which ways are pandemic policies similar or different? To what extent do they mirror local infection rates or harmonise with broader policy trends?

Despite the socio-economic and political differences between the states of Bavaria and Saxony-Anhalt, both states issued pandemic containment and control measures in the areas of contact tracing and isolation, gathering, contact and exit restrictions, closure of retail businesses, community and educational facilities, restaurants and touristic accommodation, leisure, entertainment and sports locations, health-sector provisions, and transport services during the first SARS-CoV-2 wave in March and April 2020. This finding is interesting in as far that it can be argued that, despite differences in details, the pandemic policies of the two separate states within the federal country of Germany are, on a broader scope, more similar than different. One contributing factor seems to be the federal government's efforts to harmonise states' response strategies via federal-state conferences. Another contributing factor may have been an initially strong agreement about the need to address the pandemic as a new threat with many uncertainties. However, competing political perspectives manifested as the pandemic progressed, for instance on the lifting or continuation of measures. Thus,

¹⁷ Bräutigam, Frank. 2020. 'Corona-Krise: Stresstest für das deutsche Föderal-System'. *tagesschau.de*, 13 March 2020. <https://www.tagesschau.de/inland/corona-bewaehrungsprobe-foederaler-staat-101.html>.

¹⁸ Feld, Lars P., and Thomas König. 2020. 'Corona-Krise in Deutschland: Der Föderalismus wirkt'. *Die Zeit*, 11 May 2020, sec. Politik. <https://www.zeit.de/politik/deutschland/2020-05/corona-krise-deutschland-foederalismus-lokale-schutzmassnahmen-lockerungen>.

it remains to be seen whether further comparative research during the summer, and particularly during the second wave of infections in the autumn of 2020, reveal similar or conflicting findings.

Comparing the two states in more detail and focusing on the period of March to April 2020, the following similarities can be concluded: Based on recommendations/agreements in federal-state consultations, both states issued quarantine orders for people entering Germany from abroad; implemented restrictions/bans of gatherings, but lifted the ban on religious gatherings at the beginning of May; closed and reopened retail businesses in a similar way; closed community facilities, restaurants as well as leisure, entertainment and sports facilities at similar times; and ordered the postponement of plannable medical procedures. Public transport continued to operate in both states throughout. While the similarities are remarkable and often linked to federal-state conferences and recommendations, there were also a number of differences between the states' responses:

- Bavaria **restricted gatherings** and issued stay-at-home orders earlier, for a longer time and generally applied higher stringency levels. Bavaria followed the federal recommendation to ban religious meetings, whereas Saxony-Anhalt began by restricting meetings to a maximum of 50 people. While Saxony-Anhalt opted for **contact restrictions** in accordance with the country-wide agreement, Bavaria chose to implement earlier, longer and stricter measures.
- In the area of **retail**, there were initial differences in mask wearing requirements and number of customers by sales area, with Bavaria observing stricter rules. Trade fares in Bavaria remained closed until September, two months longer than in Saxony-Anhalt.
- Bavaria closed **community facilities** such as schools and kindergartens earlier and started reopening significantly later than Saxony-Anhalt. Workshops and day-care facilities opened in Bavaria a month later.
- Bavaria reopened **outdoor restaurants** earlier and indoor services later. **Touristic accommodation** was banned a week earlier in Bavaria while full reopening was similar, however exceptions were made for in-state tourism earlier in Saxony-Anhalt.
- Saxony-Anhalt granted exceptions for professional Olympic training from the beginning, while Bavaria did so only in May. Generally, there were differences in timing and reopening concerning various **leisure, entertainment and sports facilities**. Bavaria reopened libraries 14 days earlier than Saxony-Anhalt.
- Concerning **health sector provisions**, Bavaria began to restrict visits in medical facilities earlier, while Saxony-Anhalt followed national recommendations at first, then also banned visits one week later. While both followed national recommendations to postpone plannable medical procedures, Bavaria did so 5 days earlier than Saxony-Anhalt. Bavaria issued further orders in connection with the declaration of the state of disaster and the management of hospital capacities. Saxony-Anhalt did not declare the state of disaster.
- Saxony-Anhalt restricted **travel into the state**. Bavaria made **masks** compulsory in public transportation earlier, while Saxony-Anhalt began with a simple recommendation.

Where there were differences among the two states, Bavaria generally enforced earlier, stricter and longer measures, with the exceptions of reopening libraries and outdoor restaurants, which was done earlier than in Saxony-Anhalt. The policies reflected the infection development in Bavaria, which was significantly higher on a per 100,000 capita basis than in Saxony-Anhalt. Despite the states' policy differences, policy harmonisation in terms of restrictions was relatively successful in the beginning of the pandemic. However, reopening strategies in particular became an issue of contention, as well as conflicting strategies and timing. Further study is needed to reveal how changes to and differences in response policy evolved over the months following the first pandemic wave and during those thereafter.

Integrated pandemic management

Blümel, Ina; Brüggem, Franca; Voss, Martin (2021). [Towards Integrated Pandemic and Disaster Management: Approaches in Armenia and Germany](#). AKFS Report Nr. 8. Berlin: AKFS.

In the report on integrated pandemic and disaster management, the authors attempt to extract a working definition for *integrated management* by analysing the term’s use in disaster risk reduction, health, humanitarian aid, and the business and education sectors. The aim is to develop an encompassing, systemic understanding of integrated management which addresses the complexity of related effects if disasters and crisis such as a pandemic. In a second step, a mapping exercise is undertaken to identify existing integrated management approaches in pandemic preparedness and response plans and legislation in Armenia and Germany.

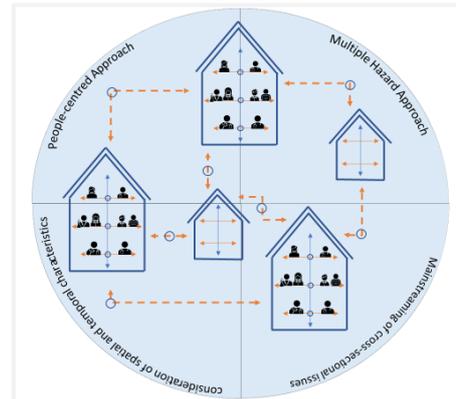


Figure 6 Integrated pandemic management

In its most basic understanding, integrated management an act or process of *combining two or more things so that they work together*.¹⁹ In the attempt to understand the applied usage of the term *integrated management* in various fields, the report summarises the findings of an extensive literature review. The literature review, conducted with focus on disaster risk reduction and health sector literature and complemented by humanitarian aid, business, and education sector perspectives, identified eight different aspects that were common across all documents considered in this report. The commonalities can be grouped into three structural aspects, four general principles and two objectives. These are:

Structural aspects	General principles	Objectives
<ul style="list-style-type: none"> • Harmonisation of information/ knowledge management and policy making. • Internal integration • External integration 	<ul style="list-style-type: none"> • Mainstreaming cross-sectional issues • Multiple-hazard approach • People-centred approach • Consideration of spatial and temporal characteristics 	<ul style="list-style-type: none"> • Improved effectiveness with strong intent to improve prevention and resilience • Improved efficiency/ optimised usage of resources

Based on these commonalities the authors suggest the following working definition: *Integrated management of crises and disasters (IMCD) refers to a complex and dynamic societal process in which all aspects perceived as relevant by horizontally and vertically as well as internally and externally cooperating actors are understood in their context and corresponding effective and efficient measures are taken in a coordinated manner by all relevant actors to prevent crises or disasters and,*

¹⁹ Janet M. Box-Steffensmeier, Henry E. Brady, und David Collier, Hrsg., *The Oxford Handbook of Political Methodology*, Bd. 1 (Oxford University Press, 2018), <https://doi.org/10.1093/oxfordhb/9780199286546.003.0028>.

in case of their occurrence, to avert harm and ensure the well-being of the people at risk under dynamically changing conditions.

In a second step, a select number of Armenian and German pandemic response plans and legislature was reviewed for the presence of the identified structural aspects, general principals, and objectives. Findings from the mapping exercise include:

- The terms integration/integrated management themselves are partially or fully absent in most documents. Instead, relatively frequent reference is made to coordination and/or collaboration, indicating a tendency towards integrated management without this being explicit.
- Some documents state that stakeholders *will be working together* on specific areas or subjects while falling short of explicitly outlining *how* this will be done. It must thus be assumed that the actual manifestation (planning documents, working agreements, division of responsibilities/labour) of how to manage the complex, dynamic processes of integrated preparedness and response to disasters takes place at the operational and (inter-)organisational level – if at all.
- Both countries (Germany and Armenia) updated pre-existing key preparedness and response plans in 2020, indicating that neither country was prepared to fully meet the demands of a public health emergency of the scale of the SARS-CoV-2 pandemic - despite health experts around the world having issued respective warnings for many years.
- Not all documents lend themselves in their structure and intent to the mapping of any or all structural aspects, leading principles, and key objectives.

In conclusion, the authors find confirmation of a statement made by the WHO in 2009 that in mapping the presence of integration in pandemic preparedness and response plans and legislation, there is no 'yes or no' answer to the question whether a plan or legislation is laid out in an integrated approach.²⁰ None of the mapped documents fit the proposed definition of integrated crisis and disaster management, and even a very loose interpretation of an integrated approach is difficult to discern. However, collaboration and coordination, both vertical and horizontal, are core elements in most of the documents and *invite the suspicion* that there is factual integration taking place at operational and organisational level.

Gradual processes of integrated preparedness and responses might be taking place *downstream*, i.e., in and between institutions and organisations, with anything from *loosely* coordinating activities *occasionally* between different sectors or divisions, to rooting integration at the core of the planning process all the way through seamless implementation of a multi-sectoral, multi-hierarchical implementation being conceivable. Also, various configurations of integrated (pandemic) management might appear, depending on local circumstances.

It must be noted that the theoretical inclusion of any concept on paper is an important step in the process towards its practical implementation. However, the actual implementation may pose challenges and issues unforeseen in the theoretical approach. Further research is needed to assess the presence of integrated management of crises and disasters in preparedness and response plans at

²⁰ Catriona Waddington und Dominique Egger, „Integrated Health Services - What and Why?“ (World Health Organization, 2008), https://www.who.int/healthsystems/service_delivery_techbrief1.pdf.

operational levels (i.e., in and between organisational, ministerial, national, regional, and local levels), for instance through after-action reviews, lessons learned exercises and key stakeholder interviews.

The report is to be understood as an explorative endeavour and not a comprehensive assessment. Several limitations impacted on the comprehensiveness of this working paper including access to operational documents and to full versions of some legislative documents from Armenia, and the quality of publicly accessible English translations. This report is intended as baseline for a future, more in-depth analysis.

Debates on civil liberties during the pandemic in Armenia and Germany

Merkes, Sara T.; Güven, Şermin; Voss, Martin (2021). [Democratic Disaster Risk Management and Pandemic Control: Socio-Political Debates on Civil Liberties during the SARS-CoV-2 Pandemic with Examples from Armenia and Germany](#). Berlin: AKFS.

The research report “Democratic Disaster Risk Management and Pandemic Control: Socio-political Debates on Civil Liberties during the SARS-CoV-2 Pandemic with Examples from Armenia and Germany” revolves around the questions of what democratic risk and disaster management may look like in times of exceptional crisis, which key issues characterise democratic disaster management, and what challenges democracies face during times of exceptional crisis. Following the literature review, it concretises these questions with reference to the case of the SARS-CoV-2 pandemic from March to December 2020. The analysis proceeds with comparing public discourses – as reported by media – within two countries with differing democratic histories, namely Armenia as a relatively young and transitioning democracy and Germany as a consolidated democracy. Several key findings may be drawn from the research and in-depth analyses:



Figure 7 Discourses in Armenian media

Key findings

Autocracies and democracies tend to address emergencies differently

The management of disaster, pandemic, crisis, and emergency situations may, at times, require interference with core societal norms in order to address threats, protect people and infrastructures, save lives, and minimise harm and damage. Depending on the political and economic systems, societies' values, as well as cultural shaping, choices between pandemic control and public liberties may differ. While authoritarian systems, in line with their general governance tendencies, may tend to

try to implement containment measures via threat of force, punitive action and digital surveillance, democratic systems are challenged, especially in times of long-lasting crisis and emergency, to reconcile democratic values and freedoms with adequate crisis management and civil and health protection, thus to operate within their democratic provisions rather than outside of them. In this sense, they need to find ways for democratic disaster risk management.

Democratic disaster risk management (DDRM) builds on democratic principles, norms, and institutions

Democratic risk and disaster management is bound to the very principles and core values of democracy. Based on criteria identified in literature, the reports suggests an understanding of democratic disaster risk and crisis management along the following lines: Democratic risk and disaster management protects and operates within the parameters of democratic principles, norms, and institutions, respects the respective functions and responsibilities of elected bodies, and is held accountable by the checks and balances and hierarchy of control of oversight institutions, including the legislative and judiciary as well as the constitutional and democratic rule of law and international law, meaning that there are opportunities for the reversal and adjustment of measures in place. The protection of human rights and fundamental freedoms is at its core; their suspension or restriction requires consideration and weighing based on the principles of legitimacy (in their objective), necessity, suitability, proportionality, reasonability, the minimal restrictiveness and intrusiveness possible, gradualness, temporality, equity, non-discrimination, legality (according to the law), and compliance with international law.

DDRM faces particular challenges but also comes with strengths

Authoritarian choices for disaster and pandemic management differ significantly from more democratic options. Some authoritarian states may be more successful in managing crises, pandemics and disasters. Democracies, however, need to find different ways of crisis management if they do not wish to endanger the very core of their political and societal norms. Based on the findings of different studies, the following observations can be summarized: Democracies may face particular capacity challenges when it comes to reducing affectedness and death rates in pandemics (but not in disasters generally) and increasing response pace. However, they tend to be better able to absorb economic shocks. In the area of policy restrictions, democracies tend to restrict individual liberties less stringently (in the case of a democratic regime history), implement less restrictive lockdowns and tend to be more successful on mobility reduction (controlled for stringency level). Newer, less robust democracies are more likely to declare a state of emergency in comparison to more authoritarian as well as more democratic regimes. Democratic methods for improving compliance comprise investing more in persuasion while using coercion where necessary, fostering trust, public risk awareness and trustworthy crisis management, as well as considering suitable incentive and motivation mechanisms.

Public debates and media reporting may address numerous issues of contention and democratic challenges during times of crisis

To the extent that journalism is free and functioning, media reporting may point to questions of human rights, individual freedoms, and democratic principles during times of restriction to overcome a particular threat to society. Looking at the examples of Republic of Armenia and the Federal Republic of Germany, a media analysis was conducted on democracy-related reporting in connection with the SARS-CoV-2 pandemic from March to December 2020. Media outlets addressed a wide range of democratic pandemic and disaster management issues and debates during this time of public health crisis in both countries: They, for example, informed about, reported on, and at times critically assessed issues surrounding pandemic restrictions, protest activities and the question of bans but also

the acceptance of measures, accountability for crisis management and the participation/role of parliament, data protection, and restrictions of individual freedoms.

Debates in the Armenian context also focused on the limitation of the freedoms of information and press, the so-called constitutional court crisis and the cancellation of the constitutional referendum, the elections held in Nagorno-Karabakh, democratic challenges as well as international perspectives on Armenian democracy, and penalties for violating pandemic measures. Reporting in Germany revolved, among other things, around the efficacy of the federal system versus a more centralised approach and, furthermore, a comparative perspective on pandemic management in other regime types, the alterations to the Infection Protection Act, vaccination and special rights for immunised people, the practice of religion during the pandemic, and the observation of the conspiracy-influenced and anti-pandemic protest movement “Querdenker”.

Points to ponder

Based on the findings presented above, societies, policy-makers, and stakeholders in the fields of disaster, crisis, and pandemic management may consider a number of questions concerning respect of democratic procedures in times of exceptional emergencies:

What disaster risk management provisions and procedures are in place? And to what extent are they in line with broader socio-political norms and values?

The underlying hypothesis of this report states that in pluralist and democratic societies, considering the value systems and functioning logics of these societies, disaster management cannot be addressed solely through governmental control, but requires the additional involvement of citizens and public participative effort to deal with ongoing and future challenges, risks, and threats. The social contract between democratic government and the people entails the state’s responsibility to ensure safety, public health, as well as civil liberties and fundamental freedoms. States and governments can also choose to invest in transparent guidance, apply appropriate and reasonable restrictions, and make an effort to foster social trust that empowers people to make informed decisions and act responsibly.

Which democratic principles, norms, and institutions are or may be affected in a particular disaster?

When addressing emergency situations, not only in longer-term crises but especially so, democracies need to justify why restrictions on fundamental and democratic freedoms may become necessary in a particular situation and, at the same time, clarify what will be done, to ensure their highest protection possible. Therefore, it is crucial to think through different scenarios and emergency situations to work out governance and legislative procedures as well as to consider potential red flags ahead of a crisis as part of proactive disaster risk management with effective measures for emergency response.

How can the functions and responsibilities of elected bodies be upheld or restored as quickly as possible? Which accountability mechanisms, checks and balances, and oversight institutions play a critical role in preventing or limiting executive overreach? Which opportunities exist for the reversal and adjustment of decisions? Are emergency stipulations designed in such a way that national and international legally binding frameworks are respected? According to these frameworks, which principles ought to be addressed when suspending or restricting human rights and fundamental freedoms?

Which democratic challenges arise for disaster management in a particular context? And how can a society make best use of the strengths that come with democratic disaster risk management?

With regard to management, strengths of democracies may include a better economic shock absorbance (according to a study concerning disasters between 1962 and 2004) and less restrictive lockdowns and at the same time, more successful mobility reduction (according to a study on the early phase of the SARS-Cov-2 pandemic). Ways of compensating for weaknesses that democratic systems may face in crises and disasters include learning effects, institutional quality, government effectiveness and capacities, economic development, equality, social trust and cohesion, public risk awareness, and economic shock absorption measures. Democratic disaster risk management may be strengthened by respecting checks and balances, empowering and winning citizen support via cooperation and trust, establishing clear responsibilities to avoid power struggles, fostering civil society capabilities, protecting freedom of information and research while engaging in multi-directional information streams, countering false information via transparency, proactive communication and reliable crisis communication channels (as opposed to restricting media), and building on public, expert-informed risk decision-making and debate. In this sense, democratisation of disaster management entails the encouragement of citizen responsibility for prevention, participatory and engaging rather than a coercive top-down approach. Democratic strategies of improving compliance comprise investing more in persuasion while using coercion where necessary, fostering trust, public risk awareness and trustworthy crisis management, as well as considering suitable incentive and motivation mechanisms.

What are possible ways to support and strengthen public debates and independent media reporting in situations of state of emergency and disaster?

In light of extensive restrictions on fundamental and democratic rights during the SARS-CoV-2 pandemic, the need for and role of responsible journalistic reporting and critical public debate in democracies that acknowledge public health threats became apparent. Single-option, conspiracy, or propaganda narratives go against the core norms and functioning logics of those open and democratic societies that are built on the quest for 'better' arguments and solutions through debate and democratic competition. Simultaneously, a huge demand for information, crisis communication and exchange of concerns, numerous media restrictions and reporting challenges arose from pandemic policies worldwide. Democratic societies may pose the question of how to ensure the space for criticism and debate during times of emergency and disaster. How can they foster responsible journalism? How may they engage parliaments and civil society and allow for the consideration of diverse perspectives and interests during times of threat and uncertainty? How can they address myths, conspiracies, and no-alternative discourses without resorting to the restriction of media freedom, but instead strengthening responsible and independent journalism?

Impressum

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