

## Testimony before the U.S.-China Economic and Security Review Commission

Hearing on “China’s Stockpiling and Mobilization Measures for Competition and Conflict”

Thursday, June 13th, 2024

Prof. Lauri Paltemaa  
Centre for East Asian Studies  
University of Turku  
Finland

This testimony has been written with an aim to describe China’s emergency management system that handles natural and man-made disasters. The testimony will briefly outline the situation and history of natural disasters in China and then move on to describe the emergency management system, its main features and current development trends. The testimony ends with short recommendations to the Commission.

### Introduction: China and Disasters

China suffers from almost all known types of natural disasters. Its geographic location renders it vulnerable to the caprices of the monsoon climate with cyclical droughts and floods. Typhoons ravage its southern and eastern coasts regularly. China is located on a border area between number of tectonic plates and active fault lines, which causes continental earthquakes that range from frequent smaller ones to more rare mega scale events. Altogether, there are over 100 types of various natural hazards present and only major active volcanoes are missing in China. This creates considerable risks to the Chinese population. More than half the population and 70 % of the major cities are situated in areas where serious natural disasters can occur. For example, floods can threaten two-thirds of China’s land area and all the country’s provinces have been struck at least once by earthquakes of magnitude five or more on the Richter scale. Each year, the lives of tens of millions of Chinese are affected by natural disasters and thousands are injured or even killed by them. During the past decade, yearly economic losses from natural disasters have varied around 0.5 – 1 % of the GDP.<sup>1</sup> With the climate change, especially meteorological hazards are also becoming more frequent and destructive. Urbanization and industrialization further have made disasters more costly, complex, and difficult to manage.<sup>2</sup> China therefore has pressing and legitimate reasons to strengthen its ability to manage natural disasters.

---

<sup>1</sup> Natural Disasters Challenges in China: Key Trends and Insights, World Bank August 2020, <https://www.gfdrr.org/en/feature-story/natural-disaster-challenges-china-key-trends-and-insights>

<sup>2</sup> The Ministry of Emergency Management (2021): *National Emergency Management System Plan during the 14th Five-Year Plan Period*

## The CCP and Disasters: Legitimacy, Concepts, and Principles

Historically, managing disasters has always been seen as a, or even *the*, central task of Chinese governments. Already the founding myths of the first Chinese states in the Yellow River basin dating back some 4000 years mention ‘taming the waters’, i.e. controlling floods, as the principal source of legitimacy for the ruler. The Confucian notion of the mandate of heaven (*tianming*) saw that the heaven displayed its displeasure on the ruler’s immoral conduct through natural disasters, that could also be used as justification for rebellion and revolution against the immoral ruler or dynasty (changing the mandate, *geming*).<sup>3</sup>

Even today, emergency management is a central concern to the leaders of the Chinese Communist Party (CCP). During his reign, General Secretary Xi Jinping has issued a series of ‘important instructions’ on emergency management.<sup>4</sup> Further, under the concept of comprehensive (national) security that has been promoted under Xi Jinping, all sectors of governance are included in safeguarding and strengthening both internal (regime) and external (national) security, in this order.<sup>5</sup> Following this, also the Ministry of Emergency Management (MEM) declares to be pursuing a ‘holistic approach’ to national security, while upholding the Party’s leadership role in the emergency management work.<sup>6</sup> The 2007 Emergency Response Law notes that the emergency management’s purpose is to maintain the national security, public safety, environment safety, and social order.

The Covid-19 pandemic provides a good example how Chinese authorities respond to a large-scale natural disaster. During the Corona crisis, the authorities sought to bring the epidemic under control through a long term and extensive “dynamic zero” epidemic suppression *campaign*. In such a campaign, the party-state typically focuses its resources to solve a singular issue or threat and mobilizes the public administration, the party, and private sector resources to meet this purpose. In this case, it meant enforcing strict quarantines and regular testing for infections affecting the whole population. The campaign was never officially ended, but it did so *de facto* at the end of 2022 after failing to suppress the Corona virus. The campaign caused protests and economic dislocation, which still affect Chinese economy today.

Other recent large-scale disasters include with wide scale local mobilization include the North China floods in 2023 around Beijing, Tianjin, and Hebei and the spring 2024 large floods in Southern China. Both cases affected millions of people and caused economic damages measured in billions of RMB.

As managing disasters is regarded as one of the government’s key obligations to the people, mismanaging disasters have direct consequences to social stability and the legitimacy of the ruling party. Disasters are therefore regarded as a major threat to regime security. At the same time, while the Covid-19 epidemic was an exception, the usually local nature of most disasters makes also

---

<sup>3</sup> Lauri Paltemaa: *Managing Famine, Flood and Earthquake in China: Tianjin 1958-1985*. London: Routledge 2016

<sup>4</sup> Ministry of Emergency Management: Press conference on reform and development of emergency management in the new era, China.org.cn, September 12, 2022, [http://english.scio.gov.cn/m/pressroom/2022-09/12/content\\_78415784.htm](http://english.scio.gov.cn/m/pressroom/2022-09/12/content_78415784.htm)

<sup>5</sup> Joel Wuthnow (2022): Securitisation and Governance in the Xi Jinping Era, in *CPC Futures - The New Era of Socialism with Chinese Characteristics*, Edited by Frank N. Pieke and Bert Hofman, NUS Press Singapore, 2022, 149-156; Tai Ming Cheung (2022): The Rise of the Chinese Techno-Security State, in *CPC Futures - The New Era of Socialism with Chinese Characteristics*, Edited by Frank N. Pieke and Bert Hofman, NUS Press Singapore, 2022, 165-174.

<sup>6</sup> The Ministry of Emergency Management (2021): *National Emergency Management System Plan during the 14th Five-Year Plan Period*, p. 35

managing them mostly a local problem. Notwithstanding the rhetoric, emergency management also receives less funding than agencies dealing with 'harder' security issues, such as the police and the military. Emergency management's dependence on local funding makes its implementation uneven and erratic in places.<sup>7</sup>

## The Chinese Emergency Management System

China's overall governance system is regarded as fragmented and complex. Emergency management is no exception to this rule. However, in the recent years there has been a clear aim to centralization, regularization, and standardization of emergency management administration from the central government all the way down to the grass roots level. The most significant change in this respect has been the establishment of the Ministry of Emergency Management (MEM), which was founded in the larger central government overhaul in 2018 bringing together a number of previously existing emergency management offices and commissions under the same centralized administrative roof.<sup>8</sup> The MEM is a cabinet-level executive department of the State Council of China responsible for emergency management, work safety, and emergency rescue in the country. The MEM is a civilian organization but coordinates its activities with the army which has legal obligation to participate in emergency rescue. Currently the MEM is headed by minister Wang Xiangxi who is also a member of the Central Committee of the CCP, which is typical for cabinet level ministers.

Conceptually, the Emergency Response Law of 2007 divides emergencies into four levels: The especially serious ones, serious, large, and ordinary, or red, orange, yellow and blue respectively.<sup>9</sup> The geographic scope and seriousness of the disaster affects the level of the government unit primarily responsible for response. The level is decided by the party leaders and is essentially a political decision. In this context, larger and more urgent a disaster is, large mobilization measures usually follow.

In the red, or especially serious, emergency incidents, the State Council is the responsible for leading the response, which usually has been tasked to the Prime Minister. A state of emergency can be declared by the Standing Committee of the National People's Congress or the State Council, but these are ultimately decisions by the CCP and are extremely rare. For example, this was not done during the Covid-19 epidemic. Nevertheless, in declaring an emergency as especially serious, the State Council can form an *ad hoc* state emergency response command body, and can form command headquarters, and often dispatches task groups to guide emergency management in localities.<sup>10</sup> This way, the localities have enough authority to command resources for the work from provincial and/or central governments, but the central government is also kept aware of the real situation in the localities. Importantly, behind the State Council command body there will always be a more authoritative *ad hoc* CCP leadership small group (*lingdao xiaozu*) established to manage the crisis. It consists of party secretaries of the bureaus, bodies, and organizations that participate in emergency management, such as construction, transportation, health, railway, and police bureaus and authorities. The party therefore leads and coordinates emergency management campaigns

---

<sup>7</sup> Lauri Paltemaa: China's Changing Disaster Management Regime, *China Information*, 31(3) 2017, 284-303.

<sup>8</sup> The Ministry of Emergency Management (2021): *National Emergency Management System Plan during the 14th Five-Year Plan Period*.

<sup>9</sup> The Emergency Response Law of the People's Republic of China (2007), <https://www.lawinfochina.com/display.aspx?looktype=3&lib=law&Cgid=96791>

<sup>10</sup> *Ibid*.

behind the command headquarters, and emergency authorities do not have their own authority, but they derive it from the authorization by the party. This happened for example during the Covid19 crisis, when Xi Jinping took leadership of the anti-covid campaign through a central CCP leadership small group.

The military is obligated to participate in emergency response and coordinates its activities with the responsible levels of government. The People's Liberation Army (PLA) also has designated units in military regions assigned to rapid emergency response and which often have access to air transportation. In practice, army representatives will take part in local leadership small group work and local command headquarters, while also having its own command structure. In China, citizens, legal persons, and other organizations are obligated by law to participate in the emergency responses.<sup>11</sup> During the Mao-era this could mean that large numbers of citizens were mobilized to disaster prevention and search and rescue operations with little notice or training. During the reform period, this mass mobilization practice has been used to a lesser extent, and disaster management campaigns have become more based on the mobilization of all sectors of public administration, the CCP members as well as state-owned and private companies in a form of more managed campaign mobilization.<sup>12</sup> The law stipulates the county level as the lowest administrative level responsible for setting up a separate emergency management system, but in practice building permanent emergency management structures has been expanded to the lowest (*shequ/village*) administrative level in an on-going long term project to develop local response capabilities that started in the mid-2010s and still continues.<sup>13</sup>

Conceptually, the 'first response' to natural hazards is regarded as local responsibility, which is not surprising. In the current emergency response concept, the military forces are to be used as the 'spearhead' acting quickly and being used in dangerous and demanding situations. Closely following them, the China Fire Rescue (CFR) forces forms the main professional rescue force, while the other professional rescue teams such as fire brigades in state-owned companies act as a supplementary forces, and non-governmental search and rescue groups are regarded as auxiliary forces in emergency work.<sup>14</sup>

Declaring a 'period of warning' and then a 'period for organizing the emergency response' operations gives in principle wide powers to local governments (their command bodies) to order mobilization of rescue teams, evacuations, deploying and requisitioning rescue materials and shelters, strengthening public security measures, ordering local entities to cease operations for avoiding damages, traffic controls, quarantines, as well as organizing citizens to attend the emergency response rescue and operations, etc. Operations command bodies may requisition equipment, facilities, premises, transportation vehicles, and other materials from companies and individuals and require organizations that provide medical, transportation, and other public services to assist emergency work.<sup>15</sup>

In addition, the propaganda authorities participate actively in emergency management. Chinese emergency management is always accompanied with wide use of propaganda, censorship, and

---

<sup>11</sup> The Emergency Response Law of the People's Republic of China (2007)

<sup>12</sup> Perry, E. J. (2011). "From Mass Campaigns to Managed Campaigns: "Constructing a New Socialist Countryside"". In *Mao's Invisible Hand*. Leiden, The Netherlands: Harvard University Asia Center, 30-61.

<sup>13</sup> Paltemaa 2017

<sup>14</sup> The Ministry of Emergency Management (2021): *National Emergency Management System Plan during the 14th Five-Year Plan Period*

<sup>15</sup> The Emergency Response Law of the People's Republic of China (2007)

monitoring of news and online debates about disasters and large-scale accidents when they occur. Crisis communication in China is therefore not only, or even primarily, about helping the population to cope with the emergency situations, but rather about managing popular opinions and sentiments through controlling information and the narrative about the disaster.<sup>16</sup> Such narratives always contain praise for the emergency management efforts by the party for its unerring leadership, extolling the exemplary behavior of soldiers, work units and chosen individuals, silencing or obfuscating any discussions about culpability or mistakes by the authorities as well as include reminders to people to be thankful for the government's relief aid, while stressing that people have to primarily rely on their own efforts in coping with the situation. Hiding real casualty and damage figures is typical as is the practice to fade out news coverage of disasters after a while. Moreover, Chinese disaster news coverage will never provide the big picture or scrutinize party-state activities critically.

### The Civil Air Defense System

It is good to note that China has a dual system for emergency management. Parallel to the MEM, but smaller and organizationally less powerful (not a cabinet ministry, but a separate office), there is the China Civil Air Defense Office (CCAD), which has overlapping functions with the MEM, but is a civilian-military organization. Internationally, merging civil defense with emergency management is common and happens also in the FEMA system. In China, this is referred to as 'the combination of air defense and disaster prevention'. However, as noted, the two organizations in charge of these matters are administratively separate.

The law stipulates that the State Council and the Central Military Commission lead the national civil air defense work together. This includes activities that enable the population to withstand war-related distress, natural disasters, and man-made accidents.<sup>17</sup> The MEM and the CCAD therefore have overlapping jurisdiction. In peacetime, local civil air defense organizations are obligated to assist emergency management authorities during natural disasters. However, at the same time the CCAD directs and manages the building and maintaining bomb shelters, which can also be used during peace time as emergency shelters during such hazards as storms, earthquakes, or dangerous temperatures. Such facilities also offer command posts for disasters command bodies. Local governments are obligated by law to plan civil air defense and construct shelters, including underground storage spaces for emergency materials. Further, all civilian buildings large enough should have basements that can be used as shelters if needed. It is difficult to say how well these regulations have been implemented, however, since the sanctions for neglecting these obligations are low and building shelters is relatively expensive. Building emergency / bomb shelters for emergency management command bodies is nevertheless an on-going project.<sup>18</sup>

---

<sup>16</sup> Bin Xu, *The Politics of Compassion – The Sichuan Earthquake and Civic Engagement in China*. Stanford University Press, Stanford (2017); Christian P. Sorce, *Shaken Authority -China's Communist Party and the 2008 Sichuan Earthquake*. Cornell University Press, Cornell (2017).

<sup>17</sup> *People's Air Defense Law of the People's Republic of China* (1999)

<sup>18</sup> See for example 国家人防办唐玉俊副主任调研指导济南市人民防空工作, 2022-06-19, <https://baijiahao.baidu.com/s?id=1736031204852658931&wfr=spider&for=pc>

## Current Trends of the Development of Emergency Management System

In the past ten years, China's emergency management system has been developed in a number of fields. Development priorities have included centralization of disaster management and improving center-local coordination, building more professional rapid action emergency response forces, standardization, building up emergency material reserves, grass-roots organization building, and increased usage of high-tech equipment and solutions in emergency work. In addition to this, constructing emergency shelters has been an on-going process.<sup>19</sup>

*Centralization and center-local coordination:* Establishing the MEM in 2018 aimed at fostering a more systematic, integrated, and coordinated emergency management. Its goal was to establish unified and permanent national emergency command structure with regular professional staff and ability to deliver quick response as well as more efficient coordination among different administrative levels and units.

The *National Emergency Management System Plan during the 14th Five-Year Plan* indicates how one of the main goals of emergency management reforms has been to establish permanent central and local emergency management command centers. First on the central level, and then on provincial and lower administrative levels. The county level is envisioned to establish mobile command centers, while the grassroots will have 'comprehensive emergency rescue service stations'. Through the improved permanent command structure, the aim is to improve the 'combat readiness' of rescue forces by implementing what is called a 'quasi-military management style' on emergency management. Of these centers, at least the National Emergency Command Headquarters has been established.

*Professionalization:* The plan is to expand the professional rescue services directly under the command of the emergency command headquarters. These forces are called the China Fire and Rescue, CFR, which consist of the Chinese People's Armed Police Force (CAPF) Fire Fighting Force and CAPF Forest Fire Force. The plan calls for further expansion of these forces in provinces and localities under the unified leadership and command by respective emergency command headquarters aiming at having at hand rapidly deployable strictly disciplined force that is organized in a quasi-military manner to quasi-active service. Nevertheless, the MEM complains that in reality there is still an acute shortage of such emergency forces, especially that of the CFR.

*Standardization:* The MEM aims to standardize emergency management practices, technical specifications and parameters of emergency equipment, signs, and supplies. As a good example of this are the recently issued emergency signs which the localities and unit should use to mark and guide people in emergency situations (see image 1 below).

*Improving material preparedness:* the MEM has also promoted ensuring access to emergency supplies and equipment through building emergency storages. The plan has been to improve the system for disaster relief material reserves at the central, provincial, city, county, and township levels as well as mapping out and having necessary capacity of emergency production by private and state-owned companies (so called capacity reserving enterprises). There exist 20 central relief supply reserve bases and in 2020-2025 the goal has been to build or expand 35 more 'comprehensive relief supplies warehouses' and seven more 'comprehensive national reserve bases' in transportation hubs, densely populated areas, and areas prone to serious disasters. Local

---

<sup>19</sup> The data in the discussion below are based on the Ministry of Emergency Management (2021): *National Emergency Management System Plan during the 14th Five-Year Plan Period*

governments have also been encouraged to establish their own emergency supply reserves, especially in the central and western regions, and economically underdeveloped high-risk areas. Transportation of relief supplies is to rely on 'large backbone logistics enterprises' including aviation and high-speed rail. Emergency management-related industries and enterprises have been guided to produce emergency management-related products such as protective materials, emergency communication products, emergency broadcasting systems, and transportation products such as all-terrain rescue vehicles and large-span pontoon bridges. An additional goal is constructing an emergency communication network that integrates air, space, land, and sea channels to improve emergency communications capabilities under extreme conditions.

*Building emergency shelters:* The national emergency management plan states that improving the planning and layout of emergency shelters is one of the national goals 2020-2025. This includes building emergency shelters and improving the fortification levels of major facilities to better withstand meteorological and geological hazards. In key cities as well as disaster-prone areas and key counties the aim is the build 'comprehensive emergency shelters' which can functions as emergency command facilities and better enable exercises, stockpiling material reserves, and helping the resettlement of disaster victims.

Constructing emergency / bomb shelters as also a task of the CCAD, which also has an on-going shelter construction programme. A somber reminder of the issues involved in this is given in a 2022 news article on the completion of the construction of the new underground command center of the Jinan Civil Air Defense Office in Shandong Province. In the opening ceremony, Tang Yujun, the Deputy Director of the National Civil Air Defense Office, declared that the completion promoted "the continuous deepening of preparations for war and military struggle preparations for civil air defense." Through this, he further declared, "The command system [of civil air defense] has been gradually improved ... and the ability to win has been significantly improved."<sup>20</sup> It is good to note that such militant tone is not common in purely emergency management-related articles or news releases. Coordination between emergency management and civil defense can also be seen for example in how emergency signs have been standardized by the MEM including ones for emergency / bomb shelters (see image 1).

---

<sup>20</sup> 国家人防办唐玉俊副主任调研指导济南市人民防空工作, 2022-06-19, <https://baijiahao.baidu.com/s?id=1736031204852658931&wfr=spider&for=pc>



Image 1: Example of national standardized signs for emergency shelters 2024.<sup>21</sup>

### The Impact of the Covid-19 Epidemic

The emergency response to the Covid-19 crisis was largely the responsibility of the National Health Commission but emergency management authorities participated in implementing the campaign for example by providing equipment and helping with logistics. It has been argued that the Covid-19 crisis started partly due to inability of the early health warning system to fulfil its functions.<sup>22</sup> Although the draconian quarantine and testing measures failed to suppress the epidemic in the end, the event has to be seen as a demonstration of the great power the Chinese style campaign-based emergency management possesses. The anti-Covid-19 campaign further provided an exercise in nation-wide mobilization that had not happened since the Mao-era and showed that the party is capable of mobilizing the public sector, CCP members, and private companies to a long-lasting campaign if there is political will. This said, the long-drawn-out campaign depleted local revenues and inflicted damage to CCP's and Xi Jinping's legitimacy.

It is difficult to determine yet if the Covid-19 campaign changed emergency management permanently and how. By diverting attention and resources to maintaining the 'dynamic zero', it may actually have delayed reaching of some of the reforms and development targets that China's emergency management currently has, as listed above. It also depleted local governments' revenues, which combined with the economic trouble created by the bursting of the housing bubble cannot but affect negatively local ability to respond to emergencies.

### Policy Recommendations

China has rational and pressing reasons to improve and strengthen its civilian emergency management system. In the past ten years or so, the emergency management system has been strengthened on all levels of administration and this development continues. The main concern has

<sup>21</sup> Ministry of Emergency Management (2024): 应急避难场所标志, GB/T 44014-2024

<sup>22</sup> Zhenze Huang (2022): China's 'Fragmented Authoritarianism' During the COVID-19 Pandemic, *The Diplomat* June 25, 2022, <https://thediplomat.com/2022/06/chinas-fragmented-authoritarianism-during-the-covid-19-pandemic/>



undoubtedly been to be better able to manage frequently occurring natural disasters, diminish the human and material losses incurred by them, and create more resilient society in general. However, the emergency management capabilities that are needed to build societal resilience such as improved crisis management organization, clearer command channels and responsibilities, and more permanent and professional rescue forces, as well as many forms of material preparations from stockpiling to constructing emergency shelters are often directly usable in civil defense as well. Nevertheless, one also needs to keep in mind that in China local variation in emergency management is large and the implementation of plans and policies is usually less impressive than the plans themselves.

As recommendations, first, I'd like to note that engagements with Chinese emergency management such as offering disaster aid and exchange of information on natural hazards might offer openings for dialogue. Although no one wants disasters to happen, due to China's geological and meteorological endowments it is unfortunately likely that the future holds many disasters for her. Using these as opportunities for disaster diplomacy might be prudent. Second, at the same time, following the development of emergency management and civil defense and the tone this work takes is also advisable.