Framework Act on the Management of Disasters and Safety in Republic of Korea

Tổng Thủy Linh*, Cao Thị Thúy**

Received on 10 July 2024. Accepted on 29 August 2024.

Abstract: Like many Asian countries, the Republic of Korea (also known as RoK, or South Korea) has suffered from numerous human and economic losses due to natural disasters. To establish a new foundation for disaster management in the country, in 2004 the Framework Act on the Management of Disasters and Safety (FAMDS) was enacted. However, in the context of the impact of increasingly severe climate change, the RoK has continuously experienced serious damage from natural disasters in particular and disasters in general during the 1990s and 2000s. Combining daily safety management with disaster management in general as a complementary foundation to the Natural Disaster Countermeasures Act passed in 1967, the country's approach to disaster management is more comprehensive than those of Vietnam and some other countries in the region. Using statistics and synthesizing data and documents from relevant agencies in the RoK, this article analyzes secondary documents to clarify FAMDS. The contents focus on the background detail, some basic features, and the practical value of the legislation. Finally, the author proposes some policy implications for Vietnam. The research results show that FAMDS not only helps reduce human and property loss but also enhances the image of a safer RoK.

Keywords: Disaster management, safety, natural disaster, the Republic of Korea.

Subject classification: Jurisprudence.

Email: tongthuylinh@gmail.com

^{*} Institute of Northeast Asian Studies, Vietnam Academy of Social Sciences.

^{**} Vietnam Institute of Economics, Vietnam Academy of Social Sciences.

1. Introduction

In 1967, the RoK enacted the Natural Disaster Countermeasures Act (자연재해대책법) to effectively manage and minimize damage from natural disasters. (By June 2024, the legislation had undergone 78 amendments, including being given a new English name: the Countermeasures Against Natural Disasters Act. It comprises seven chapters and more than 70 articles.) Although it is one of the oldest legislations in the RoK, its effectiveness remains limited in practice. Consequently, the country still suffers great human and economic loss caused by natural disasters. Therefore, in 2004, the Framework Act on the Management of Disasters and Safety was enacted, establishing a new legal basis for natural disaster management in particular and disasters in general for the RoK. The Act covers and integrates the Countermeasures Against Natural Disasters Act and innovates the country's natural disaster management activities. Explaining why the RoK enacted the legislation raises many questions: "What are the specific contents of the Framework Act on the Management of Disasters and Safety in the Republic of Korea?", "What led to the birth of the Framework Act on the Management of Disasters and Safety in the Republic of Korea? and, "What have the values of the Framework Act on the Management of Disasters and Safety been for the Republic of Korea in recent years"?

The purpose of this article is to clearly describe the formation context, some basic features, and practical values of this piece of legislation in relation to the RoK. On the basis, some policy implications for Vietnam are proposed in the article.

2. Literature review

At present, there are few research works by the RoK's scholars and reports issued by organizations from around the world that refer to the Framework Act on the Management of Disasters and Safety in the country. One report that indirectly refers to the legislation is the OECD Public Health report ("OECD Reviews of Public Health: Korea") (OECD, 2020). This outlines the role of the Framework Act in the Management of Disasters and Safety and specifically how it aims to streamline government efforts in emergency preparedness and promote comprehensive coordination within the government. It clarifies the responsibilities of the central government to local governments throughout the risk management cycle, from prevention and preparation, to response and restoration (Bo-Young Heo, et al, 2018). In addition, the article also argues that the legislation promotes a series of emergency preparedness measures, including developing warning systems, emergency response and drill manuals, local safety index reporting systems, postevent assessments, safety inspections, and related incentive and support mechanisms. The second indirect research work is the content of "Chapter 9:

Disaster Policies and Emergency Management in Korea" by Dong Keun Yoon, in the book "Disaster and Development: Examining Global Issues and Cases", published in 2014. Therefore, the author indirectly mentions the process of creating the Framework Act on the Management of Disasters and Safety. According to the author, the Daegu subway fire incident and Typhoon Maemi in 2003 were instances why the Framework Act on the Management of Disasters and Safety was promulgated in response to natural and man-made disasters. The Act established a comprehensive management of all types of disasters with steps for mitigation, preparation, response, and restoration (Dong Keun Yoon, 2014: 157). At the same time, the author also mentions some agencies responsible for disaster management as stipulated in the Act.

The research works directly relating to the Framework Act on the Management of Disasters and Safety include the following: Firstly, the South Korean report titled "Study on improvement of Disasters and Safety related acts" issued by the Korea Legislation Research Institute in 2014 was the first comprehensive research work carried out on the legal field related to disasters and safety in the RoK and globally. The report proposed improvements that could be made to the disaster and safety management system stipulated in the study, and analyzed some of the amended contents in the 2013 and 2014 versions of the Act. It also affirmed that further research related to disaster and safety management should be conducted (MOLEG).

The second study mentioned is titled the "Improvement Plan of Framework Act on the Management of Disasters and Safety for Effective Evacuation Strategies in South Korea" by Junho Choi, Chongsoo Cheung, Dongkwan Lee, published in the International Journal of Human & Disaster, Vol.6, No.4, 2021. The authors gave an overview of the Disaster and Safety Management Framework Act in the RoK, pointing out necessary legal improvements to be made such as the need to specify in detail the establishment and consolidation of a public-private partnership network using the capacity of the people (Junho Choi, et al, 2021).

The third study that deals with the legislation is "A study on re-establishment of the Framework Act on the Management of Disasters and Safety" by Seung Yup Kyen in 2023. The author analyzed the issues in the Framework Act on the Management of Disasters and Safety, and related acts, ensured the predictability of the acts, and proposed a plan to reconstruct the Act. According to Seung Yup Kyen, despite many amendments, the massive number of casualties in the 2022 Itaewon crowd crush reflected the Act's limitations. These include its complexity and incomprehensibility (due to frequent amendments), which hinder the predictability of the act and make it difficult to achieve the rule of legislation in the RoK's administrative act (Seung Yup Kyen, 2023).

Thus, five research studies have been carried out into the Framework Act on the Management of Disasters and Safety in the RoK. These affirm the role of the Act in emergency preparedness and comprehensive coordination within the government, regulating the responsibilities of several agencies. In addition, results of the research suggest that the Act still needs to be improved, such as including detailed regulations on the establishment and consolidation of public-private partnership networks using the capacity of the people (Junho Choi, 2021).

Direct research related to the Framework Act on the Management of Disasters and Safety has not yet been conducted in Vietnam. In the research article *Social Disaster Management in South Korea: Case Study of the Sewol Ferry Sinking* in 2014, by Luong Hong Hanh published in the Vietnam Review of Northeast Asian Studies, No. 11 (225), November 2019, the author indirectly mentioned Article 3 of the Framework Act on the Management of Disasters and Safety, which regulates social disasters (Luong Hong Hanh, 2019). Thus, there is no understanding of, and information about, the RoK's Act. Therefore, it is valuable to carry out systematic research on the base contents of the Framework Act on the Management of Disasters and Safety, as well as the value of the legislation.

3. Research method

The research object is the Framework Act on the Management of Disasters and Safety in the RoK. This article employs the method of secondary document analysis to clarify the research content. In order to provide a comprehensive picture of the Framework Act in the RoK, the author synthesizes documents and statistics from relevant agencies and scholars from the country.

4. Results

4.1. Background of the establishment

In 2004, the Ministry of the Interior and Safety (MOIS) issued the Framework Act on the Management of Disasters and Safety; this marked a turning point in the transformation of the RoK's natural disaster management system. It has since undergone 40 amendments, partial amendments, and new amendments to other acts; in 2020 alone four amendments were made. At the same time, the RoK issued the Enforcement Decree of the Framework Act on the Management of Disasters and Safety. By 2024, this decree has been amended 99 times. Before promulgating the Framework Act, the RoK continuously suffered numerous major social disasters from 1993 to 1997. These include the sinking of the Seohae passenger ferry (1993); the Seongsu Bridge collapse (1994); the 1995 Taegu Metro Line gas explosion at the construction site in Daegu; and the Korean Airlines crash in 1997 that killed 228 out of 254 people on board (VnExpress, 2010). Following these disasters, in 2002–2003, the country suffered serious damage from typhoons Rusa and Maemi. The former (2002) killed 184 people (including the missing),

impacted 88,626 people, and flooded 17,046 houses (ARDC, 2024). Losses resulting from Typhoon Maemi (2003) included 130 people killed, 10,975 people affected, and 421,015 houses flooded (Asian Disaster Reduction Center). In particular, in 2003, the RoK also suffered terrible losses in human lives and property in the Daegu subway fire accident. Continuously suffering heavy losses to human lives and property from natural and social disasters, the country's government has to improve its legal system on disaster management, as well as establish and supplement agencies responsible for the domain. Limitations in natural disaster management, and difficulties in minimizing losses, etc., are what sparked the promulgation of the Framework Act on the Management of Disaster and Safety. The legislation represented a new step forward in the RoK, transforming the natural and social disaster management system by closely linking disaster management activities to safety management in daily life.

4.2. Some basic features

The Framework Act on the Management of Disasters and Safety is one of the biggest legislations in the RoK, comprising 10 chapters and 136 articles. It not only provides a detailed definition of disasters, and identifies those state agencies with authority to manage disasters and safety, but also establishes measures to prevent against natural disasters, defines procedures for preparing for and responding to disasters as well as restoration requirements, while enhancing safety culture. Playing a fundamental role in shaping the RoK's disaster management, the 10 chapters cover the following aspects:

Chapter 1. General provisions (seven articles);

Chapter 2. Safety management organizations and functions thereof (functions and agencies); organization of disasters and safety management (22 articles);

Chapter 3. Safety management plans (five articles);

Chapter 4. Prevention of disasters (16 articles);

Chapter 5. Preparedness against disasters (10 articles);

Chapter 6: Disaster Response (26 articles);

Chapter 7: Restoration of Disasters (13 articles);

Chapter 8: Promotion of Safety Culture (seven articles);

Chapter 9: Supplementary Provisions (24 articles);

Chapter 10: Penalty Provisions (six articles);

Firstly, in Article 3, the concept of a disaster (natural or social) in the RoK means any of the following occurrences that cause or are likely to cause harm to the lives and property of citizens and the State (Korea Legislation Research Institute, Framework Act on the Management of Disasters and Safety, Article 3)

Natural disasters (자연제난) include: typhoons/tornadoes/hurricanes, storms, floods, tsunamis, wind waves, earthquakes, landslides/mudslides, blizzards, hailstorms, avalanches, heat waves/cold waves, famines, volcanic eruptions, wildfires, drought, and dust storms, and the less common such as asteroid/meteoroid impact phenomena.

Social disasters (or social accidents - 사회자난) relate to incidents which cause huge damage and devastation to society. Causes include: fire, explosions/blasts, building collapse, traffic accidents (including aviation and marine), crowd crushing incidents, radioactive chemical and biological disasters, environmental pollution, spread of infectious diseases as specified by the Infectious Disease Control and Prevention Act, spread of contagious animal diseases under the Act on the Prevention of Contagious Animal Diseases, damage caused by the spread of fine dust etc., as per the Special Act on the Reduction and Management of Fine Dust, and so on.

Thus, "disasters" have a broad meaning in the RoK's understanding, including all disasters caused by nature and society. There is a detailed list of all the natural disasters the country has often faced in its history, such as storms, floods, heavy snow, etc. Not only that, but disasters in the RoK's perspective also include catastrophes in modern society, such as chemical, biological, and radioactive accidents and environmental pollution incidents. In addition, disasters also include damage caused by paralysis of the country's core infrastructure (e.g. collapse of communication systems, etc.); or uncontrollable damage due to the spread of diseases from humans and animals, etc. In general, the number of social disasters experienced by the RoK is much more diverse than natural disasters. The latter are formed of six main types: typhoons, heavy rainfall, heavy snowfall, extreme wind, wind waves. and heatwaves. Social disasters, including 26 incidents related to forest fires, toxic chemical spills, large-scale water and marine pollution, large-scale, utility tunnel disasters, dam collapses, large-scale subway and high-speed train accidents, large-scale fires at multi-use buildings, radioactive spills from adjacent countries, marine accidents, large scale accidents in the workplace, the large-scale collapse of multi-use buildings, correctional facilities' disasters and accidents, livestock diseases, spread of infectious diseases, telecommunications, financial computing, nuclear safety, power, crude oil supply, healthcare, drinking water, land cargo transportation, GPS (Global Positioning System) signal disturbance, and space radio disaster (Young Seok Song, et al, 2020).

Secondly, in Chapter 2, from articles 9 to 21, the Act specifies three key organizations responsible for disaster and safety management in the RoK. The first one, the Central Safety Management Committee (CSMC), established under the authority of the Prime Minister, is responsible for reviewing issues related to safety and disaster management in the country. The Prime Minister is the Chairperson of the Central Safety Management Committee, and the heads of central administrative agencies or relevant organizations under the Presidential Decree are members of the Central Safety Management Committee (Korea Legislation Research Institute,

Framework Act on the Management of Disasters and Safety, Article 9). The Central Safety Management Committee establishes the Safety Policy Coordination Committee (SPCC) to pre-examine the agenda items submitted to the Central Safety Management Committee. The Minister of the Interior and Safety is the Chairman of the Safety Policy Coordination Committee. Regional disaster and safety management at each level includes the City/Do safety management committee and the Si/Gun/Gu safety management committee. (The RoK consists of eight provinces, one special self-government province, one special city, six metropolitan cities, and one special autonomous city. There are two self-governing bodies in the RoK: macro-level bodies such as the Special City, Metropolitan City, Special Autonomous City, Do or Special Autonomous Province (City/Do), and primarylevel bodies such as Si, Gun, Gu. Si/Gun/Gu are primary-level bodies within the nine provinces and eight cities above). Supporting disaster and safety management activities from central to local levels are the central and local Private-Public Cooperative Safety Management Committees and the Disaster Broadcasting Consultative Committee.

The second organization is the Central Disaster and Safety Countermeasures Headquarters (CDSCH), a government-level disaster response agency established under the authority of the Ministry of the Interior and Safety assigned to control and coordinate issues related to response, recovery, and general management of large-scale disasters according to the Presidential Decree and to implement necessary measures (Korea Legislation Research Institute, Framework Act on the Management of Disasters and Safety, Article 12).

In the event of a large-scale disaster, the first port of call is the head and deputy head of the CDSCH - the Minister and Deputy Minister of the Interior and Safety. In the event a disaster requires a government-level response, the head of the CDSCH is the Prime Minister and his deputy is the Minister of the Interior and Safety, or the heads of relevant disaster management organizations (MOIS, 2021: 11).

Articles 15, 16, and 17 stipulate the authority of the Head of the Central Disaster and Safety Countermeasures Headquarters at the central and local levels. Accordingly, when a disaster occurs, the head of the disaster monitoring and management agency shall promptly establish and operate the central disaster management headquarters to manage the situation. At local level, the head of the central disaster management headquarters can form and operate an integrated volunteer support group to carry out the following tasks: recruitment and registration of volunteers; assignment and management; education, and volunteer training, etc.

The third organization covers the Disaster and Safety Management Centers, located in cities and localities. They collect and disseminate information about disasters, manage disaster situations, deploy measures, and provide initial command, etc., as soon as a disaster occurs. Accordingly, the Minister of the Interior and Safety heads the Central Disaster and Safety Management Center; the

city mayors/the province governors, and heads of Si/Gun/Gu are also heads of disaster and safety management centers in each region. Article 18 clearly states: "The head of any central administrative agency shall establish and operate a disaster and safety management center or a system for managing disaster situation in order to manage disaster situations in the business field under his or her jurisdiction" (Korea Legislation Research Institute, Framework Act on the Management of Disasters and Safety, Article 18).

Thirdly, in Chapter 3, from Article 22 to Article 25, the Act stipulates the formulation of a "Master Plan for National Safety Management". Accordingly, the head of the relevant central administrative agency shall prepare basic plans related to the tasks of disaster and safety management under his/her authority according to the guidance of the national safety management master plan, which are then submitted to the Prime Minister. The city mayor or province governor shall formulate a "City/Province Safety Management Plan" by combining the guidance from the Minister of the Interior and Safety and the disaster and safety management plan issued by the head of the relevant competent disaster management agency. The city mayor or province governor shall prepare guidelines for formulating a disaster and safety management plan in Si/Gun/Gu. The "Safety Management Plan" at the City/Do or Si/Gun/Gu level shall comply with the "Master Plan for National Safety Management" and be submitted to the Prime Minister. On this basis, the Prime Minister shall synthesize the Safety Management Plans of each region and prepare the Master Plan for National Safety Management. This covers two main areas: (1) countermeasures against disasters; and (2) measures to ensure life, road, and industrial safety; safety from crime; food safety; safety for vulnerable groups (persons vulnerable to disasters, such as children, older persons, and persons with disabilities), and other corresponding measures related to safety management (Korea Legislation Research Institute, Framework Act on the Management of Disasters and Safety, Article 22).

Fourthly, Chapter 8, Promoting Safety Culture, states that "heads of central administrative agencies and local governments shall proactively conduct the following activities on safety culture for enhancing citizens' safety awareness and promoting this in disaster and safety management affairs under their jurisdiction" (Korea Legislation Research Institute, Framework Act on the Management of Disasters and Safety, Article 66-4). In addition, the Act also stipulates that National Safety Day is April 16 every year. The Minister of the Interior and Safety will systematically collect and manage "safety index information" to protect people and property from disasters and other accidents. Accordingly, the Minister can develop a "safety index" that shows the level of safety and safety awareness by region. The safety index has a score from one to five, covering six areas: traffic accidents, fire incidents, crime situations, safety-related accidents, suicide, and infectious diseases. The announcement of the safety index by region aims to strengthen the safety culture in daily life ensuring good preparation in the event of a disaster. Emphasizing safety assurance is also affirmed in the vision of the Ministry of the

Interior and Safety: A safer Korea, ensuring public safety anytime and anywhere. The Ministry's activities are aimed at two goals, namely proactive on-site disaster management and effective safety policies (MOIS, Disaster and Safety Management, Overview). The Ministry also implements four strategies to coordinate with local and central authorities to respond to disasters, raise safety awareness, and ensure everyone's safety.

According to the Framework Act on the Management of Disasters and Safety, disaster management in the RoK includes four main elements: prevention, preparedness, response, and restoration.

Firstly, prevention of disasters (stipulated in 16 articles)

The first element in the disaster management cycle is prevention. This specifically includes disaster prevention measures; development and implementation of national core infrastructure protection plans; management of disaster prevention facilities; educating people to participate in the field of disaster and safety; emergency safety inspections to prevent disasters, etc. In addition, there are activities such as applying disaster prevention safety measures, environmental support for vulnerable groups, and assessment and disclosure of the disaster management status of each region.

Secondly, preparedness for disaster (stipulated in 10 articles)

Preparing for disaster prevention activities includes managing resources for disaster management; preparing on-site emergency communication when a disaster occurs; establishing and applying national disaster management standards; formulation and utilization of action plans for disaster response action plans according to functions; preparation and operation of risk management manuals in the field of disasters, etc. In this step, the Minister of the Interior and Safety shall establish and operate a safety and disaster communication network to systematically manage disasters, formulate a master plan for disaster preparedness drills, and establish a system for consolidated management of safety standards (Korea Legislation Research Institute, Framework Act on the Management of Disasters and Safety, Article 34).

Thirdly, disaster response (stipulated in 26 articles)

This is the most difficult step in disaster management, aiming to reduce or eliminate the negative impacts of disasters and mitigate human, economic, and social losses. Accordingly, the Minister of the Interior and Safety may declare the state of disaster after consideration by the Central Safety Management Committee. Then, the Minister and the head of the local government may take the following measures for an area where a state of disaster is declared: mobilizing disaster management resources, establishing a danger zone, and ordering evacuation and emergency assistance, etc.

From articles 49 to 57, the legislation also clearly refers to the central and local emergency rescue teams, command work at the scene during emergency

rescue operations, evaluates emergency rescue activities, formulates emergency response plans, etc.

Fourthly, restoration of disasters (stipulated in 13 articles)

In Chapter 7, disaster recovery includes three main activities: damage investigation and recovery plan, declaring special disaster areas and supporting special disaster areas, and financing and compensation for the damage caused by disasters.

5. Conclusions and some implication for Vietnam

5.1. Practical value of the Framework Act

After 20 years of promulgation and implementation, the Framework Act on the Management of Disasters and Safety has not only helped the RoK reduce human and property damage but also helped improve its image as a safe country.

Firstly, the RoK's government has been actively implementing projects to reduce damage caused by disasters. By June 2020, disaster risk management was carried out in 8,626 locations. Thanks to continuous investment in disaster damage reduction efforts, from KRW 225.5 billion in 2008 to KRW 657.7 billion in 2018, the loss of life and property has significantly reduced. Specifically, the average number of deaths and missing people per year over a 30-year period (1989-2018) totaled 123, falling to 15 in 10 years (2008-2017), a decrease of 108 people (equivalent to 87.8%). The annual average damage to property over the corresponding period decreased from KRW 887.1 billion to KRW 361 billion, a decrease of KRW 526.1 billion yearly (59.3%) (MOIS, 2021: 57).

Secondly, towards building a safer society, the role of local governments in disaster response is of the utmost importance. To enhance responsibility and encourage competition among cities and provinces, an objective index comparing the safety level among governments is needed. Therefore, the Ministry of the Interior and Safety developed the "regional safety index" (from 2012 to 2014), which started implementing in 2015, to measure regional safety and encourage local governments to address their weaknesses. This index, on a scale of 1 to 5, includes six categories: fire, traffic accidents, daily safety, suicide, and infectious diseases. Thanks to this, and the application of amendments to the Framework Act on the Management of Disasters and Safety, the death rate from safety-related accidents out of the total number of deaths has decreased over time. Specifically, the rate declined from 12.4 and 12.6 (in 2008 and 2011) to 10.4 and 9.4 in 2015 and 2018 (MOIS, 2021: 21). In addition, the safety culture has also been strongly promoted since the National Safety Diagnosis Program was implemented in 2015. This is an in-depth inspection program for core infrastructure conducted annually by central government, local governments, state agencies, and the people. In 2015, the program inspected 1,073,374 infrastructure facilities and repaired and renovated 36,804 sites. In 2020, the number of inspected and repaired infrastructure facilities was 47,746 and 6,898 (MOIS, 2021: 23) respectively.

For these reasons, the Framework Act on the Management of Disaster and Safety has made certain contributions to the RoK in practice by reducing damage and promoting a safety culture. It is hoped future studies will be carried out on other aspects of the Act in the country.

5.2. Some policy implications for Vietnam

From the practical implementation of the Framework Act on the Management of Disasters and Safety in the RoK, one can draw some key implications for Vietnam in perfecting the legal basis related to natural disasters.

Firstly, in 2004, the RoK's Ministry of the Interior and Safety issued the Framework Act on the Management of Disasters and Safety, which has then been amended many times. This Act has become increasingly complete, specific, clear, consistent, and synchronized with other legislations. Meanwhile, after multiple efforts to build a system of legal documents on natural disaster risk management, for the first time, the Law on Natural Disaster Prevention and Control in Vietnam was passed in 2013 and then took effect in 2014, and, to date, it has only been amended twice - in 2020 and 2023. Therefore, researching and understanding the legal basis related to natural disaster management activities and the actual implementation of the Framework Act on the Management of Disasters and Safety in the RoK not only provide valuable experience for Vietnam in the process of perfecting the legal basis, but also help improve the effectiveness of the law and minimize damage in natural disaster prevention and control in practice.

Secondly, compared to Vietnam, the RoK takes a more comprehensive approach and emphasizes more on "safety" in its fight against natural disasters. The country's government enacted the Natural Disaster Countermeasures Act in 1967 which has undergone several amendments and is known as the Countermeasures Against Natural Disasters Act. Many provisions of the Act originate and/or quoted from the 2004 Framework Act on the Management of Disasters and Safety. For example, in Clause 2, Article 2, "natural disaster" refers to any damage caused by a natural disaster as defined in Subsection 1, Article 3 of the Framework Act.

Similarly, in Clause 1, Article 3, the State is obliged to develop and implement comprehensive plans for prevention and preparedness for natural disasters to protect people, property, and core infrastructure from natural disasters by the provisions of the Framework Act on the Management of Disasters and Safety. It is also required to provide maximum financial and technological support to implement such plans. Therefore, when considering the legal framework for natural disaster management in the RoK, it is necessary to refer to this Framework Act. The Act consists of 10 chapters and 136 articles, while the Law on Natural

Disaster Prevention and Control of Vietnam consists of only six chapters and 47 articles. Specifically, the RoK's legislation distinguishes natural and social disasters. Meanwhile, although the Vietnamese legislation takes a direct approach, clearly stating "natural disasters", it is not as detailed or specific, including when put into practice, as in similar RoK's laws. Or, the RoK approaches "management", and "disaster and safety management" according to a cycle of four elements: prevention, preparedness, response, and restoration after natural disasters while Vietnam's approach focuses on the "prevention" of natural disasters, including three elements: prevention, response, and remediation of natural disaster consequences (National Assembly, 2013). And, although Vietnam has integrated "preparedness" activities into the first element "prevention" in Article 13 of the Contents of Natural Disaster Prevention, it has not focused on "safety", which is different from the RoK's approach. This keyword only appears in Vietnam's Law on Natural Disaster Prevention and Control, with general implications such as "ensuring safety", and "social safety" and there is no provision for a "safety index". While the RoK focuses on disaster management combined with safety management, Vietnam has not yet established or built a safety index for natural disaster prevention and control. Among the 10 chapters of the Framework Act on the Management of Disasters and Safety, the RoK devotes an entire chapter - Chapter 8 - to promoting a safety culture (seven articles). Therefore, to proactively respond to natural disasters against continuous climate change, Vietnam needs to review, revise, and supplement specific safety criteria and enhance effective safety in legal documents, mechanisms, and policies on natural disaster prevention and control, thereby, strengthening the practical effectiveness of the legal basis in the process of preventing and responding to natural disasters in Vietnam.

References

Asian Disaster Reduction Center (ADRC). (2024). *Information on disaster risk reduction of the member countries*. https://www.adrc.asia/nationinformation.php?NationCode=410&Lang=en&NationNum=21

Bo-Young Heo, Ji Hyeon Park, Won-Ho Heo. (2018). Sustainable disaster and safety management of government: Integrated disaster and safety budget system in Korea. *Sustainability*, 11(10). https://www.mdpi.com/2071-1050/10/11/4267

Dong Keun Yoon. (2014). Chapter 9: Disaster policies and emergency management in Korea. *Disaster and development: Examining global issues and cases*. Springer.

Junho Choi, Chongsoo Cheung, Dongkwan Lee. (2021). Improvement plan of framework act on the management of disasters and safety for effective evacuation strategies in South Korea. *International Journal of Human & Disaster*, 6(4). https://scholar.kyobobook.co.kr/article/detail/4010028681628

Korea Legislation Research Institute. (2024). *Framework act on the management of disasters and safety*. https://elaw.klri.re.kr/kor_service/lawView.do?hseq=63021&lang=ENG

Luong Hong Hanh. (2019). Social disaster management in South Korea: Case study of the Sewol ferry sinking in 2014. *Vietnam Review of Northeast Asian Studies*, 225(11).

Ministry of Government Legislation [of Republic of Korea] (MOLEG). *Policy research service data, title of the report on improvement of disaster safety-related legislation*. https://moleg.go.kr/board.es;jsessionid=auCqGQa1nRHWfFipyXEGR1Ya.mo_usr20?mid=a10401 000000&bid=0006&act=view&list no=69241&nPage=7

Ministry of the Interior and Safety [of Republic of Korea] (MOIS). (2024). *Disaster and safety management. Overview*. https://www.mois.go.kr/eng/sub/a03/disasterAndSafety/screen.do

MOIS (2021). Disaster & safety management in Korea. https://www.mois.go.kr/eng/bbs/type002/commonSelectBoardArticle.do?bbsId=BBSMSTR 00000000022&nttId=83751

Organization for Economic Co-operation and Development (OECD). (2020). *OECD reviews of public health: Korea*. https://www.oecd-ilibrary.org/docserver/7ba9cad3-en.pdf?expires=1721384800 &id=id&accname=guest&checksum=6A2C5ACB9DA48AD6F067E321E8C82A29

Seung Yup Kyen. (2023). A study on re-establishment of the framework act on the management of disasters and safety. Korean Public Land Law Association. https://scholar.kyobobook.co.kr/article/detail/4010037112209

National Assembly. (2013). *Law on natural disaster prevention and control*. https://thuvienphapluat.vn/van-ban/EN/Van-hoa-Xa-hoi/Law-No-33-2013-QH13-on-natural-disaster-prevention-and-control/265185/tieng-anh.aspx

VnExpress. (2010). *Korean Air tragedies*. https://vnexpress.net/cac-tham-kich-cua-korean-air-2706103.html

Young Seok Song, Moo Jong Park, Jung Ho Lee, Byung Sik Kim, Yang Ho Song. (2020). *Improvement measure of integrated disaster management system considering disaster damage characteristics: Focusing on the Republic of Korea*. https://www.mdpi.com/2071-1050/12/1/340