

Article

Natural disaster Management:

Effective organizational management

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Abstract : In the process of dealing with natural disasters, can we ensure the safety of people's lives and property to the maximum extent possible? A big part of it is government leadership. A government with good leadership can deal with crises in an orderly manner when disasters occur. For example, during the 2008 Sichuan earthquake, the local rescue and post-disaster reconstruction were carried out under the leadership of the national government departments. China delivered an excellent answer to the world in the shortest possible time, which fully demonstrated that a country must have the leadership ability to respond quickly to the crisis. Therefore, only with effective leadership can we solve problems to the maximum extent and ensure the safety of people's lives and property when dealing with natural disasters.

Keywords: Natural disasters, earthquakes, rainstorms, effective leadership

1.Introduction

According to incomplete statistics since the 1970s, the number and death toll of natural disasters and man-made disasters have been on the rise globally [1]. Since the beginning of the new century, this trend has accelerated significantly. The September 11 terrorist attacks in the United States, the Indian Ocean tsunami, the SARS incident in China, the Wenchuan earthquake, the A/H1N1 influenza, the novel coronavirus pneumonia and other major disasters have occurred one after another, causing massive casualties, property losses and serious social disorder. Disaster and its management have become a public issue of great concern to governments and the public.

For China, where development is the top priority, disaster management is particularly urgent and important. In a sense, disaster and development are relative: on the one hand, the destruction of environment and resources in the process of development is one of the main reasons for the aggravation of disasters; Sustainable development, on the other hand, requires disaster control and reduction. With the increase of disasters and the intensification of their destructive power, disaster management research has been paid attention to and developed accordingly, and the following two points of consensus have been gradually formed:

First, disaster is the result of the interaction between nature and society. In 1978, Burton et al. co-authored the book *Environment as the Source of Disasters*, which for the first time extended people's focus on disaster prevention and reduction from the study of pure natural disaster factors and engineering defense measures to human behavioral responses to disasters, pointing out that the impact and damage of disasters can be reduced by adjusting human behaviors [2]. Second, the social nature of disasters overtakes the natural nature and begins to dominate. According to Giddens, "In all traditional cultures, in industrial societies, and to this day, humans worry about external risks, such as bad harvests, floods, pestilence, or famine." However, at some point (historically speaking, that is, recently) we begin to worry less about what nature can do to us and more about what we are doing to nature. This marks a shift from the predominance of external risks to the predominance of manufactured risks "[3].

The above consensus shows that disaster management, as an integrated management, has two important connotations. First, comprehensive management, that is, not only to manage the natural attributes of disasters, but also to manage the social attributes of disasters; The second is whole-process management, that is, it is not only necessary to manage the social environment causing the disaster, but also to manage the social consequences caused by the disaster. Because the social attributes of disasters include not only the social environment causing disasters, but also the social behaviors taken for disaster relief and reduction, which influence each other and jointly determine the social consequences of disasters.

If we take China's national conditions as the benchmark, the governance and recovery before, during and after the disaster are all carried out under the leadership of government organizations. Therefore, this paper will explore the role of effective organizational leadership in natural disasters, and how effective leadership should be formed and developed. Find effective methods and suggestions for future disaster response.

2. Previous Research

2.1. Disaster

(1)Disasters can be divided into natural disasters and man-made disasters. The common types of natural disasters include flood, earthquake, hurricane, drought, debris flow, dust storm, ice and snow, cold wave, etc. The common types of man-made disasters include various production accidents, environmental pollution, epidemic diseases, toxic food, etc.

(2)The main consequences of the disaster are casualties, property losses and social disorder;

(3) The basic strategy to deal with disasters is to understand the occurrence mechanism of disasters, and then to conduct early warning, prevention and response through engineering and technical means.

In the field of natural disasters, the most studied are earthquakes, floods and hurricanes (typhoons). Through the systematic study of the mechanical mechanism of the earth's lithosphere, and the collation and analysis of a large number of earthquake disaster cases, researchers have reached the level of earthquake early warning and earthquake risk assessment applied to architectural design. In this regard, Japan's seismic scientific research, seismic structural design of buildings, earthquake engineering defense research and so on are at the world's leading level. European and American researchers are good at the mechanism simulation and risk assessment of flood disaster, and improve the monitoring and prevention ability of flood process through the study of flood dynamic mechanism and flood forecast model. In the field of man-made disasters, safety science for industrial production accidents has been the most systematic development.

2.2. Crisis management and leadership

There are three different concepts of crisis. One is called an emergency, the second is an emergency, and the third is a crisis. An emergency is a process in which an event occurs that is very sudden and not gradual; Emergency is whether the event is sudden or not, once it occurs, it will certainly put urgent pressure on us in time, and we need to deal with it immediately; Crisis situation means that once a situation occurs, no matter it is sudden or urgent, its consequences may be serious.

The above three situations, in theory we can recognize this, but the reality is often complex, they often may be intertwined. In fact, the real public crisis situation has the characteristics of sudden, harmful, urgent, highly uncertain, two-sided (danger and opportunity), public or social.

We can understand crisis management as follows: crisis management is an organized, planned, continuous and dynamic management process in which an organization uses relevant forces and resources to take effective measures to deal with adverse situations based on the understanding and judgment of potential or current crises, so as to reduce the destructiveness of crises and even transform crises into opportunities.

In terms of crisis management, Robert Heath, an American crisis management expert, proposed the 4R theory, namely Reduction, Readiness, Response and Recovery. The first two "R" is before the event, the third "R" is a requirement during the event, and the last "R" is after the event, covering the concept of the whole process before, during and after the event. The 4R theory mainly describes the basic requirements of crisis management in four stages: reduction, preparation, response and recovery. For example, the first is to reduce the aggressiveness and impact of the crisis situation, the second is to prepare for the crisis situation, the third is to do the best to deal with the crisis that has occurred, and the third is to recover. 4R theory gives us the biggest management enlightenment, that is, to actively manage risks instead of passively waiting for risks to turn into crises; In addition, in the whole crisis process management, time, information and leadership are particularly important.

In crisis decision-making, information is an important foundation and core element of crisis decision-making. However, under crisis conditions, limited by time and resources, our information is often not complete. Under such conditions, we must also make responses, make decisions and implement management behaviors. In fact, crisis decision-making is also a process of information input, processing and output.

As a crisis manager, a key element that cannot be ignored is leadership. Because when we face a crisis, when multiple subjects suffer at the same time, and participate in treatment at the same time, we need to organize, we need to command, we need to make unified decisions, and we need to coordinate. In this process, leadership and leadership are very important, indispensable. In short, leadership is the ability of a leader to exert a directional or decisive influence on an organization or group.

3 . Case Analysis

By means of comparative analysis, this paper will discuss the leadership of China and other countries in the face of two different types of natural disasters, such as earthquakes and rainstorms, and explore effective leadership practices suitable for China's national conditions.

3.1. Selection criteria:

Earthquakes: China (Wenchuan Earthquake), Japan (Great East Japan Earthquake)

Rainstorm: China (Henan Rainstorm in 2021), South Korea (Central concentrated rainstorm in 2022)

Earthquake:

China (Wenchuan Earthquake)

The May 12 Wenchuan earthquake, also known as the "Wenchuan Earthquake", occurred at 14:28 minutes and 4 seconds on May 12, 2008, Beijing time. The epicenter was located in Yingxiu Town, Wenchuan County, Aba Tibetan and Qiang Autonomous Prefecture, Sichuan Province (31.0° N, 103.4° E) [4]. According to the revised data of the China Earthquake Administration, the surface wave magnitude of the May 12 Wenchuan earthquake was 8.0 [5]. According to the data of the Japan Meteorological Agency, the seismic waves of the May 12 Wenchuan earthquake were confirmed to have circled the earth six times [4]. The earthquake affected more than half of China and many countries and regions in Asia, China to Inner Mongolia in the north, to Shanghai in the east, to Tibet in the west, to Hong Kong in the south, Taiwan in China and other regions, and outside China, Thailand, Vietnam, the Philippines and Japan were also felt.

The May 12 Wenchuan earthquake severely damaged about 500,000 square kilometers, of which 10 counties (cities) in the worst-hit areas, 41 counties (cities) in the worst-hit areas, and 186 counties (cities) in the general disaster areas. As of September 25, 2008, a total of 69,227 people were killed, 17,923 missing, 374,643 injured, 19,930,300 people lost their homes and 46.256 million people were affected by the May 12 Wenchuan earthquake. As of September 2008, the May 12 Wenchuan earthquake had caused a direct economic loss

of 845.14 billion yuan. Since the founding of the People's Republic of China, the May 12 Wenchuan earthquake is the most destructive, the most widespread, the heaviest loss, and the most difficult earthquake for disaster relief [4]. Approved by The State Council of the People's Republic of China on March 2, 2009, May 12 has been designated as National Disaster Prevention and Reduction Day since 2009 [6].

In addition, before the Wenchuan earthquake and after the Tangshan earthquake in 1976, China had more abundant experience in dealing with natural disasters. Therefore, choosing Wenchuan earthquake as the analysis object can better reflect China's rapid response ability in the face of natural disasters.

The 2011 earthquake of the Pacific coast of Tōhoku (Great East Japan Earthquake)

The Great East Japan Earthquake refers to a strong earthquake that occurred at 14:46:21 local time (13:46 Beijing time) on March 11, 2011 in the northeast Pacific Ocean area of Japan (known as "Sanriku" in Japan). The earthquake had a moment magnitude of 9.0 Mw (Mw9.1 according to the US Geological Survey), making it the fifth largest earthquake in history. The epicenter is located in the Pacific Ocean east of Nichijo Prefecture, about 130km from Sendai, the focal depth of 20 km. The earthquake triggered a huge tsunami that devastated Iwate, Miyagi and Fukushima prefectures in northeastern Japan and triggered a nuclear leak at the Fukushima Daiichi nuclear power plant.

On March 11, 2019, it has been eight years since the "March 11" earthquake in Japan. Japan's National Police Agency's data show that the death toll in Iwate, Miyagi, Fukushima 3 prefectural centers reached 15,897 people, the missing reached 2,533 people; At the same time, due to the tsunami and Fukushima nuclear accident, about 52,000 people still have to evacuate their lives at present (March 8, 2019). [7]

So far, the nuclear radiation problem has not only affected the lives of the Japanese people, but also affected the normal life of other countries around. Therefore, it is of great research significance

Heavy rain: China and South Korea

China: Zhengzhou heavy rain in 2021

In mid-July 2021, due to the rare continuous heavy rainfall in Henan Province, China, many projects such as Changzhuang Reservoir, Guojiazui Reservoir and Jialu River in Zhengzhou City were in danger, and serious waterlogging occurred in Zhengzhou city, causing serious impact on railway, road and civil aviation traffic in Zhengzhou city. According to the relevant provisions of the Henan Flood Control Emergency Plan, the Henan Provincial prevention Index decided to upgrade the flood control emergency response level from level II to level I at 3 am on July 21.

Heavy rain caused the Zhengzhou subway line to be suspended. The heavy rainfall caused serious water phenomenon in Wulongkou parking lot of Zhengzhou Metro Line 5 and its surrounding areas. At 18:00 on July 20, the water rushed out of the water retaining wall of the entrance line into the main line section, resulting in the suspension of the Zhengzhou Metro Line 5 train at the beach Sijie Station and Shakou Road Station tunnel. At 18:10, Zhengzhou Metro issued an order to shut down the entire network, organized forces, and evacuated the masses, a total of more than 500 people evacuated, of whom 12 died and 5 were injured after rescue.

In addition, kindergartens, schools, residential areas, etc., are also trapped because of water. It was the worst rainstorm in China in recent years.

South Korea: Heavy rain concentrated in central South Korea in 2022

On August 8, 2022, rain in the South Korean metropolitan area caused multiple disasters and heavy rains [10]. According to the Central Disaster and Safety Countermeasures Center, as of 6:00 a.m. on August 12, the heavy rain that began on August 8 has caused 13 deaths, including eight in Seoul, three in Gyeonggi Province, and two in Gangwon Province. Six people are missing, including one in Seoul, three in Gyeonggi Province, and two

in Gangwon Province. (As of August 10, a total of two Chinese nationals were confirmed dead in the torrential rain in the South Korean capital region.) The rain also left 1,492 people homeless due to damage to their homes, and 4,807 people were evacuated.

On August 9, 2022, according to the Central Disaster and Safety Countermeasures Headquarters, 441 people have to temporarily stay in school gymnasiums, resident centers, and homestays due to flooding in their homes. In Seoul, 10 subways were flooded and three embankments were breached. On the residential side, 741 homes and businesses were flooded, most of them in Seoul. In addition, 20 riverside parking lots and 45 riverside roads are under control. A total of 156 national park routes and nine cruise lines are also under control. [8]

3.2 Case analysis

1, Wenchuan earthquake

Immediately after the Wenchuan earthquake, the Chinese government proposed to "use all means, at all costs, in the fastest speed and in the shortest time to identify the disaster situation." An earthquake relief headquarters was quickly set up, and the entire army quickly entered a first-level combat readiness. Under the command of the government, in accordance with the national Law on Earthquake Prevention and Disaster Reduction and other laws and regulations, the active troops stationed in the disaster-hit areas have used military communication equipment as soon as possible to establish a local communication and liaison mechanism, and sent personnel to contact the local government and organize local cadres and masses to carry out self-rescue work.

(1) decentralization, flexible response (grass-roots officers and soldiers can make effective judgments directly according to the situation on the scene)

After the earthquake, the armed police engineers, mobile armed police, fire armed police, army, air Force and other active forces stationed in the disaster area, in the case of their own disaster, put the safety of the people in the disaster area in the first place, the ministries quickly assembled troops, carrying satellite phones, radio and other communication equipment, to carry out rescue and disaster relief work. What needs to be emphasized here is that the rescue and relief command of the PLA is delegated to the grass-roots level, and the disaster situation is the order, in the case of the needs of the people, the grass-roots officers and soldiers can participate in the action without asking for instructions from higher organizations. This is what makes the PLA different from other militaries, and what makes the PLA admired by all militaries

(2) clear leadership ideas (grasp the disaster situation in the disaster area - restore disaster relief routes - provide disaster relief items)

In the process of carrying out search and rescue work, the active troops in the disaster area organized the masses to open up the tarmac, establish temporary shelters, and evacuate the masses, so that the Party Central Committee soon had a deeper understanding of the disaster area, and laid the foundation for the next rescue and relief work.

After the initial identification of the disaster, the county, city, provincial and central earthquake relief headquarters were set up, and under the unified coordination of the central government, roads, railways and air routes were quickly put under military control. After knowing the disaster situation, the central government formulated two emergency transport plans. One is to use air force as the backbone and combine local transport capacity to airlift personnel and various materials to the disaster area. The second is to dispatch personnel and materials from the surrounding areas of the disaster area through a combination of rail and road transportation

(3) Be good at using technology and information technology

Within three hours after the earthquake, the PLA General Staff Headquarters obtained a large amount of disaster image data through aerial photography and military satellite technology. The local garrison set up emergency communication base stations and turned on satellite navigation and positioning equipment, ensuring the smooth development of communications and mapping work. Around 5:30 PM, the first batch of 4400 engineers who rushed to the disaster area to carry out communications support, medical protection,

civil engineering and other tasks have been urgently airlifted from the Jinan Military Region more than 1,000 kilometers away to Chengdu Airport, and are quickly changing vehicles to the disaster area. The troops are equipped with professional tools and equipment such as life detectors and wall penetrating radar, accompanied by rescue experts and medical experts, and a group of search and rescue dogs. In order to speed up the march, the helicopters in the service of the military regions and major military regions around the disaster area have been mobilized, and the first batch of 34,000 soldiers to support the disaster area are entering the disaster area through emergency airlift channels. In order to further ascertain the disaster situation of all villages in the disaster area, after 7 p.m., the General Staff of the PLA under the authorization of the Central Military Commission, and gathered more than 6,000 paratroopers in the military area, and planned to implement the parachute landing on the morning of the 13th.

(4) good at inter-departmental cooperation

After the rapid rescue force composed of active duty troops arrived in the disaster areas to participate in rescue operations, the reserve troops, Party and government departments at all levels, and professional rescue forces from all walks of life also rushed to the disaster areas to participate in rescue operations in accordance with the unified deployment of the earthquake relief headquarters of The State Council. Since these rescue forces do not have the ability to quickly and remotely deliver, the army then provides transport support for them.

Great East Japan Earthquake

(1) Building a response mechanism after the Great East Japan Earthquake (to facilitate central leadership over local governments)

The Reconstruction Agency is a time-limited central disaster response entity established in response to the March 11 earthquake. As the window of the central government, it uniformly accepts and handles the reconstruction and financial assistance of the affected areas. Its members are composed of the heads of the relevant provincial offices and local governments and experts, responsible for coordinating and communicating the reconstruction affairs of the central and local governments, and is the headquarters for the recovery of Japan after the Great earthquake. The reason for the establishment of the agency is that after the 1970s, Japan had a small number of trans-regional disasters, and local rehabilitation and reconstruction operations and funding applications for ordinary and extraordinary disasters were handled by departments to the corresponding provincial offices, and the provinces approved and gave guidance according to the situation. The provincial offices were divided into administrative and financial powers, and there was a lack of interaction and coordination between them. Not conducive to the centralized and effective use of funds. The reconstruction office was established to save time and costs and reduce communication links, and to directly accept requests from disaster-affected autonomous bodies to assist disaster-hit areas in a timely manner, so as to facilitate unified command, unified arrangement of reconstruction funds, and completion of various reconstruction plans. The specific operational plans remain under the supervision and inspection of the provinces concerned. By the rehabilitation department to communicate and coordinate with other provinces, help ensure that the disaster area government focus on promoting the entire rehabilitation work. The Office has also established rehabilitation bureaus, branches and offices in the affected areas to facilitate local intelligence gathering, local problem solving and efficiency improvement.

(2) Three-level response system (strengthen central leadership)

Japan is an earthquake country, more than 20% of the world's earthquakes occur here. In the long-term response process, Japan has gradually explored and established a relatively complete set of earthquake disaster response systems (responsibility and obligation sharing mechanisms), which have played a major role in the process of disaster prevention and reduction, recovery and reconstruction, and are also a symbol of Japan as a mature advanced country in disaster prevention.

Japan's disaster response responsibility mechanism, based on the country's administrative system - the state (central government), prefectures and counties, cities and villages of the administrative division, the formation of three levels of government responsibility, each shoulder the corresponding power and obligations, with cities and villages as the main body, the upper and lower linkage, vertical coordination of the characteristics of the three-level response mechanism. In accordance with the scale and nature of disasters, the Prime Minister (Cabinet Office), the administrative heads of prefectures, counties, cities and villages, and the heads of relevant public agencies have been established as the main statutory responsible persons. Through relevant organizations, the government has formulated and implemented national and regional disaster prevention plans and business plans, carried out disaster prevention responsibilities, and taken legal measures in the event of disasters and recovery and reconstruction. Mechanisms for disaster relief and reconstruction activities. Generally, small scale common disasters should be dealt with independently by the grass-roots cities and villages; The state or prefectures and counties shall provide all possible assistance to the disaster-stricken autonomous bodies in case of extraordinary or emergency disasters of a large scale which are beyond the capacity of municipalities and villages to cope with; When there is a regional catastrophe and disaster emergency across the prefectures and counties, the national emergency disaster order will coordinate the joint response of the relevant autonomous bodies. (Strengthen the leadership of the central government)

Heavy rain: South Korea and China

China (Henan Rainstorm in 2021)

(1) Accountability to ensure people's trust in the government

The investigation determined that the overall disaster was natural, but there were also man-made disasters, especially in the subway, the tunnel occurred should not have occurred casualties. The report pointed out that the Zhengzhou Municipal Party Committee and government had insufficient prevention deployment, "seriously lagging" emergency response, ineffective response measures, lack of unified command, lack of effective organization and mobilization, and multi-level underreporting of the death toll when the meteorological department had issued an early warning. According to the report, in addition to the lack of responsibility of some leaders and the lack of effective leadership of local governments, the disaster also reflects the inadequate deployment of urban emergency management system reform, the deviation of urban development concepts, the incomplete early warning and linkage system, and the lack of disaster prevention and self-rescue knowledge of cadres and the masses.

It was learned from the relevant departments of Henan Province that after the "July 20" heavy rain disaster in Zhengzhou, the CPC Central Committee and The State Council attached great importance to it and made arrangements for flood prevention and relief and disaster investigation at the first time. The public security organs of Henan Province investigated and arrested eight enterprise personnel suspected of violating laws and crimes, and the discipline inspection and supervision organs of Henan Province seriously held accountable 89 public officials suspected of violating laws and regulations in accordance with the authority of cadres management.

(2) Learn lessons and improve the urban crisis management mechanism

The post-disaster seminar pointed out a number of weaknesses in disaster response in Zhengzhou and Henan (lack of multi-sectoral coordination).

The meteorological department issued a warning, and whether other departments were aware of their responsibilities and took appropriate measures (Editor's note: The Henan rainstorm investigation report showed that the emergency action was clearly out of line with the release of forecast information). For example, the "Zhengzhou Flood Control Emergency Plan" clearly activated one of the seven conditions for the level I response is "Changzhuang reservoir occurred a major danger", Changzhuang reservoir began to appear at 10:30 on the 20th, but Zhengzhou did not start the level I emergency response

according to the regulations. It was not until 16:01 on the 20th that the meteorological department issued the fifth red warning, and Zhengzhou City launched the level I emergency response at 16:30, but it did not declare an emergency flood control period according to the requirements of the plan. In fact, the disaster had already occurred at this time, and more than 90% of the 251 dead and missing people in four cities in the mountainous region were concentrated between 13:00 and 15:00 before the launch of the Level I emergency response. In emergency management, this is called a response based on the same picture, everyone is seeing the same thing, but it is important to do [their own work] to be effective.

South Korea (Heavy rain in the metropolitan area in 2022)

(1)Demarcation of "Special disaster Zones"

On August 12, 2022, South Korean Prime Minister Han Duck-soo instructed government officials to designate the area hit by heavy rains as a "special disaster zone" as soon as possible. According to Yonhap News Agency reported on August 12, if these areas are designated as "special disaster zones", the South Korean government will provide financial support in terms of providing relief funds for victims. "The government will do its best to stabilize the lives of residents in the affected areas and will provide support for the quick restoration of (normal life) in the affected areas," Han Duck-soo said at a disaster response meeting.

(2)Improve drainage system

Existing structural measures such as the expansion of excellent drainage facilities and river repair should be strengthened. In order to raise the disaster prevention target to more than 100 millimeters per hour in areas where flooding is still possible under the same rainfall conditions, it is necessary to expand disaster prevention facilities in urban Spaces such as large-scale rainwater storage and drainage facilities. ° Restoration of water flow function through urban river coverage of demolition, construction of AI-based intelligent flood management system, and establishment of rapid response and information sharing system during concentrated rainstorm.

4. Effective Organizational Leadership

China is one of the socialist countries. But also a world power. Therefore, when dealing with natural disasters, China must have a unique way that suits China's national conditions. China has always adhered to the people-oriented approach in leadership. From the point of view of the masses, everything for the people. Such leadership is more flexible than that of other democratic countries. When dealing with natural disasters such as floods and earthquakes, we can maximize the ability to recover the loss and pain caused by disasters.

For example, the earthquake relief and post-disaster reconstruction in Sichuan Province are the embodiment of China's leadership in positive congestion mobilization, resource allocation, overall coordination and management of complex situations. Both the abnormal leadership arrangement and the normal leadership practice vividly reflect the superiority of the Chinese government leadership and the Chinese socialist system.

The reason why Japan's disaster relief activities appear relatively orderly is closely related to the formulation and implementation of these systems and norms. Of course, there are also those who have expressed dissatisfaction and criticized the nature and content of the above-mentioned mechanism, as well as the problems and shortcomings in the implementation process. For example, Masumi Murozaki, a scholar of disaster research, believes that from the nature of the system, the relevant legal system should first be set up from the perspective of the disaster victims, but the existing degree of legal aid for disaster victims is low. In the process of implementation, the relevant response should be comprehensive and flexible, and should give local governments more flexibility to cope with the special requirements of emergency times and reconstruction. Although the government

stresses the need to deal with the relationship between self-help, mutual assistance, public assistance and joint assistance, there is no mechanism that can accurately reflect the responsibility and burden of each other. There are also problems in the correlation and systematization between disaster response mechanisms and other institutions. In particular, the legal guarantee of the source of reconstruction funds is the core of institutional construction, but the legal guarantee in this respect is not perfect.

Whether it was a '21 rainstorm in Henan, China, or a '22 rainstorm in central Korea. The root cause is that the government leaders did not predict the danger well, resulting in the emergency system did not play to the expected results. Therefore, the government departments should strengthen the leadership in coping with the crisis, and leave professional matters to professional people to solve, and do not cover up the actual damage. Secondly, there should be leadership to actively identify problems and solve problems. There are more than a dozen long-standing problems in South Korea's drainage system, and if they are solved as soon as possible, the losses at that time will be reduced to a lower level.

5. Conclusions

In the process of dealing with natural disasters, can we ensure the safety of people's lives and property to the maximum extent possible? A big part of it is government leadership. A government with good leadership can deal with crises in an orderly manner when disasters occur. For example, during the 2008 Sichuan earthquake, the local rescue and post-disaster reconstruction were carried out under the leadership of the national government departments. China delivered an excellent answer to the world in the shortest possible time, which fully demonstrated that a country must have the leadership ability to respond quickly to the crisis.

On the contrary, the local government, fearing responsibility, lied about the actual number of casualties and did not timely communicate the urban crisis caused by the rainstorm in Henan in 21, which led to such heavy losses. Therefore, a good government requires leadership that faces mistakes and accepts responsibility. A group that is afraid of taking responsibility from the top is bound to be a failing group.

Similarly, the root cause of the torrential rains in central Korea in 22 years was a problem with the drainage system, which was not discovered in this storm. The drainage system has been a problem for a long time, but the government has not solved it until this heavy rain came to light. Thus, it can be seen that an organization must have the leadership to actively solve problems after finding them.

Therefore, only with effective leadership can we solve problems to the maximum extent and ensure the safety of people's lives and property when dealing with natural disasters.

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