

# Research on the Coordination Mechanism of Public Organizations in Response to Natural Disaster Crisis from the Holistic Perspective

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## Abstract

**In recent years, natural disasters coexist with suddenness and coupling, presenting a chain-like development, which has seriously affected people's life and property safety and the stable development of social economy. As an organization for the purpose of managing social public affairs and coordinating social public interest relations, public organizations are the main body of post-disaster relief. The coordination mechanism among public organizations has not been straightened out, and there are problems such as weak awareness of coordination, lack of relevant systems, lagging operating mechanisms, and insufficient information sharing. Under the guidance of holistic governance theory, and by drawing on the advantages of the coordination mechanism of the United States, Japan, Britain, and Australia, four suggestions are put forward for the coordination mechanism of my country's public organizations to respond to natural disasters: coordination value concept, integration of related systems, and perfect operation Mechanism and use of information technology.**

## Keywords

**Public organization; Natural disaster; Holistic perspective; Coordination mechanism.**

## 1. Introduction

Natural disasters are natural processes that occur in the ecosystem, which can cause the social economic system to lose stability and balance, cause social property losses, or cause a serious imbalance between supply and demand in the society in terms of various resources [1]. Since ancient times, my country has been one of the countries with the most severe natural disasters in the world. There are many types of natural disasters, which are widely distributed and occur frequently. According to the fifth report of the IPCC, human beings have a significant impact on the climate system [2], especially in the past few hundred years, global climate changes have been significant [3], and various human behaviors have caused frequent extreme climates in recent years. The occurrence of natural disasters often breaks through geographical restrictions, coexists with suddenness and coupling, and may induce other secondary disasters, presenting a chain-like development, which puts forward higher requirements for emergency cooperation and coordination among public organizations. Improving the coordination capabilities between public organizations is not only conducive to improving emergency response capabilities, but also helping to protect the interests of the people and maintain social stability. Therefore, in the face of the ensuing natural disasters, how to establish a rapid, efficient and orderly coordination mechanism for natural disaster relief is an urgent problem that needs to be solved at the moment.

As an organization for the purpose of managing social public affairs and coordinating social public interest relations, public organizations are undoubtedly the main body of post-disaster relief, including government organizations and non-governmental organizations [4]. In the face of natural disasters, the government cannot meet the huge demand in disaster areas in terms

of rescue forces, emergency material reserves, and financial support. Non-governmental organizations themselves have the advantages of flexibility, wide coverage, and diversified assistance, and actively get in touch with all walks of life. Establishing cooperative relations and extensively participating in natural disaster emergency rescue work, playing an increasingly important role. At present, the mode of public organization in our country is mainly affected by the bureaucracy and the concept of new public management. Traditional bureaucracy pays attention to bureaucratic structure. Under its guidance, public organizations in my country have a relatively sound operating network. New public management emphasizes the introduction of market mechanisms to improve work efficiency. Under the guidance of its philosophy, the business of public organizations is refined. Improve operational efficiency by decomposing business units. However, the current natural disaster crisis is often cross-regional and comprehensive, and the fragmented management under the traditional concept has become out of date. Therefore, based on a holistic theoretical perspective, this article explores the coordination mechanism between government organizations and non-governmental organizations in responding to natural disaster crises.

## **2. The Theory of Holistic Governance: A Basic Perspective of the Innovation of the Collaborative Mechanism of Public Organizations**

### **2.1. The Connotation of Holistic Governance Theory**

The holistic governance theory is a new governance theory gradually formed on the basis of reflecting on and making up for the departmentalization, fragmentation and fragmentation caused by the new public management. The main points of the theory of holistic governance are as follows: first, it emphasizes prevention and result orientation; second, it emphasizes holistic coordination and integration, and integrates the public and private sectors; advocates de-departmentalization and fragmentation, and implements large-departmental governance; The process is integrated. Third, focus on coordinating the relationship between goals and means, so that the goals and means are mutually enhanced, and promote the development of the overall government. Fourth, attach importance to trust, responsibility and institutionalization. The basis of trust between organizations is the relationship of commission and agency, and the sense of responsibility generally manifests itself in honesty, efficiency and effectiveness [5].

### **2.2. The Role of Holistic Governance Theory**

The theory of holistic governance focuses on solving the problem of "fragmentation". Fragmentation problems will bring about the following consequences: various departments transfer problems and let other agencies take responsibility; project conflicts; project duplication; target conflicts affect the overall results; lack of communication leads to lack of intervention by departments or agencies; when they need to respond and jointly resolve When there is a problem, it is their own affairs; when citizens need help, they don't know which department to seek and cannot get help; when problems arise, they do not consider the cause of the problem but instead pay attention to what is available or use the inherent mode to intervene, which makes the problem difficult to solve [6]. This is what the theory of holistic governance pays attention to and tries to solve. The guidance based on the theory of holistic governance is conducive to urging government departments and non-government departments to adhere to the overall view of overall interests when dealing with natural disaster crisis management, promote the improvement of institutional norms, and further straighten out the operating mechanism.

### 3. The Status and Causes of Coordination of Public Organizations in Response to Natural Disasters

At present, the Chinese government and non-governmental organizations continue to accumulate experience in the process of responding to natural disaster crisis management, and have achieved some results, but there are still many problems that need to be further improved.

#### 3.1. Situation Analysis

Scholars have done some theoretical research on the coordination of public organizations in the crisis management of natural disasters. For example, in 2011, Xie Zhengchen pointed out in his research on the post-disaster recovery and reconstruction of the Wenchuan earthquake that the government and social organizations actively participated in rescue and launched various forms of cooperation, so that the post-disaster reconstruction work has a variety of resources, the best reconstruction efficiency, and reached The goal of maximizing reconstruction benefits[7]; In 2015, when studying the Ya'an earthquake, Liu Fengtao pointed out that my country's NGOs are not legalized enough and have no reasonable status in the rescue process, and their management, coordination and execution capabilities are relatively lacking, making Its participation in rescue activities is restricted [8]. Regarding the role of NGOs, Huang Min believes that NGOs are closer to the people in natural disaster emergency assistance, can respond quickly, and their actions can meet a variety of special needs [9]; Meng Tian pointed out that NGOs are participating in natural disasters. When responding to emergency assistance, it has the advantages of rapid response, wide range of service areas, and meticulous work [10]; Yang Na believes that NGOs have the advantages of flexibility, initiative and diversified rescue methods, which can make up for the government's shortcomings in disaster relief [11] ; Zhang Jinping pointed out by studying the case of mudslides in Zhouqu, Gansu that China's non-governmental organizations participating in natural disaster emergency relief have problems such as the public's lack of awareness of disaster prevention and mitigation, uneven disaster relief capabilities of participants, and insufficient awareness of participation. NGO assistance should be improved [12]; Wang Hui, through his research on reconstruction after the Wenchuan earthquake, pointed out that China's major natural disaster emergency assistance has imperfect social donation mechanisms, multiple constraints on systems and resources, slow development of social organizations, and lack of effective volunteer rights. Protection and rescue personnel are not high in professional ability [13].

With years of accumulated experience, public organizations have continuously improved their ability to respond to natural disaster crises. my country's non-governmental organizations have developed rapidly, their numbers have continued to increase, relevant laws and regulations have been continuously improved, and their role has become increasingly prominent. As of the end of 2017, there were 762,000 non-governmental organizations nationwide, absorbing 8.647 million people from all types of society, including 355,000 social organizations, 6,307 various foundations, and 400,000 private non-enterprise units [14]. At the same time, the government also attaches great importance to the emergency management of natural disasters, and the legalization has been continuously improved. For example, the "Emergency Response Law of the People's Republic of China" stipulates that the government should strengthen the cooperation between professional emergency rescue teams and non-professional emergency rescue teams for joint training and exercises; the "Regulations on Army Participation in Rescue and Disaster Relief" require that the government and the implementation of rescue and disaster relief tasks should be carried out well. Coordination work between the troops; the "National Emergency Plan for Natural Disaster Relief" clarifies the responsibilities of government organizations and the obligations of social organizations. Our country now has a complete emergency plan system. Provincial, prefectural and county-level governments and most of the

towns (subdistricts) and villages (communities) have completed the preparation of disaster relief emergency plans [15]. In addition, in the process of responding to natural disaster emergency management, government organizations and social organizations also signed emergency management cooperation agreements, and carried out joint emergency drills.

The management capabilities of government organizations and non-governmental organizations to respond to natural disaster crises are constantly improving, but because in the management of social public affairs, the government relies on the resources and powers it has to act as a parent [16], the coordination between the two. There are many problems. First, the division of labor is fragmented. The role of government and non-governmental organizations in emergency management is not clear, and the division of labor is in the dilemma of fragmentation. Second, the collaborative process is fragmented. Emergency management can be divided into four stages: prevention, early warning, disposal and recovery. The government and NGOs have a higher coordination ratio in the emergency response stage, while the government and NGOs have a lower coordination ratio in the prevention, early warning and recovery stages. In the process of formulating emergency plans, the government lacked cooperation with non-governmental organizations. In the emergency response process, the government decision-making structure and public organization experts lack a long-term and stable cooperative relationship. At the same time, there is a lack of joint emergency drills and training between the government's full-time emergency rescue team and various part-time emergency rescue teams in the society. In the recovery and reconstruction phase, NGOs lack continuous attention and assistance to post-disaster reconstruction, and their professionalism has increased. Third, the fragmentation of collaborative resources. In the emergency management process, the resources held by the government and non-government have not been fully integrated and utilized.

## **3.2. Causes**

### **3.2.1. A Weak Sense of Collaboration**

After the crisis, government organizations took care of almost all disaster relief tasks, such as medical rescue work, and provision of disaster relief materials. They completely ignored the role and advantages of NGOs, lacked the sense of collaboration with NGOs, and suppressed NGOs' participation in emergency response. The space of management makes it difficult for the collaboration between the two to continue. In addition, non-governmental organizations have a weak sense of coordination. As non-governmental organizations have been suppressed and governed by the government for a long time, most of them obey the orders of the government, lack an independent attitude, and have the idea of relying on government departments to obtain development.

### **3.2.2. Lack of Relevant Systems**

The cooperation between local governments and social organizations lacks institutional norms, the responsibilities, rights, and interests of the cooperation subjects are not clear, and there is a lack of comprehensive legal protection, and confusion is prone to appear in cooperation. There is no special emergency management law to divide the responsibilities of the government and non-governmental organizations in detail, which directly affects the cooperation between the government and non-governmental organizations and prevents the establishment of a synergistic relationship between the two. The participation of social organizations often takes two forms: one is to organize actions spontaneously after a natural disaster occurs, and it lacks effective interaction and coordination with government emergency organizations, showing greater arbitrariness; the other is based on the call of local government for political mobilization. Cooperative action is a kind of temporary cooperation, lacking legalized or negotiated agreements and norms, and it is prone to incoordination issues in cooperation such

as emergency jurisdiction, information collection and processing, division of responsibilities, and resource reserves.

### **3.2.3. The Operating Mechanism Is Lagging**

The development of non-governmental organizations is inseparable from the support of government funds. However, in reality, the funds provided by the Chinese government to non-governmental organizations are far less than their actual needs. The phenomenon of shortage and dispersion of funds is very common. my country has not included the funding of non-governmental organizations into the special budget of public management; the government currently does not have clear laws and systems to stipulate the funding that the government needs to invest, resulting in the government's great arbitrariness in funding subsidies; In the public fiscal policy and taxation policy, the government did not give certain tax incentives to NGOs. The lag of the funding guarantee mechanism has caused the development of NGOs to stagnate, making it difficult to have better room for growth, and hindering the coordination between the government and NGOs.

### **3.2.4. Insufficient Information Sharing**

The lack of a complete emergency management information system makes the government and non-governmental organizations unable to know any basic information and plan information of the crisis after the occurrence of a crisis event, resulting in information islands, directly affecting their judgments, and unable to accurately make response plans and measures. This led to the inconsistency between the two. At present, my country's media reports are basically the contributions of the government, individuals, and international rescue organizations in the disaster response process. There is basically no focus on publicizing the emergency management practices of non-governmental organizations and the emergency management practices of government and non-governmental organizations. This not only makes non-governmental organizations The participation of government organizations in emergency management fails to obtain social recognition, and the victims are used to relying on the help of the government. It is difficult to be sure of the NGOs. This makes the support of NGOs low, and indirectly leads to the lack of social approval for the collaboration between the government and NGOs.

## **4. The Coordination Mechanism of Foreign Public Organizations to Respond to Natural Disaster Crises**

Foreign developed countries started early in the study of natural disaster crisis response, and the theoretical and practical results on the construction of emergency coordination mechanisms between government organizations and non-governmental organizations are quite rich. This article selects the United States, Japan, the United Kingdom, and Australia as representatives to introduce their typical good practices in order to provide a reference for my country's natural disaster management.

### **4.1. United States**

The disaster response system in the United States pays great attention to the role of non-public organizations, regulates the way the society participates in disaster response, and raises the level of volunteer service through education and training. The first is to promulgate laws to incorporate the coordinated relationship between the government and non-governmental organizations into the national emergency management legal system, and to specify various disaster relief organizations, command systems, operating standard procedures, and rewards and punishments; the second is to focus on the Red Cross and Red Crescent The role of charitable non-governmental organizations such as the Salvation Army and the Salvation Army, such as the coordination and integration of the Red Cross and the International Disaster

Volunteer Action Organization; the third is to establish partnerships with the community, and local governments, enterprises, volunteer organizations and other representatives form cooperation. The group bears certain responsibilities for disaster reduction in the community. Fourth, the government has provided economic assistance to non-governmental organizations for a long time to promote their development. At the end of the 19th century and the beginning of the 20th century, it was not uncommon for the U.S. government to fund private hospitals. M]. Beijing: The Commercial Press, 2008]]. The fifth is to build OEA projects to promote information communication between the government and non-governmental organizations.

#### **4.2. Japan**

In the emergency management of natural disasters, Japan emphasizes that the government assumes limited liability, advocates the concept of "self-help, mutual rescue, and public rescue", and encourages non-governmental organizations to cooperate with government organizations. The first is to adopt pre-disaster contracts, sign contract agreements, and formulate rules. The second is to designate non-profit disaster prevention institutions and incorporate various professional groups such as the Red Cross, the Medical Association, and the Truck Guild into the disaster prevention and relief system. The third is to emphasize strengthening the sense of solidarity among local residents, promote mutual cooperation among administration, enterprises, communities, and volunteer groups, and establish a social system of mutual assistance. Fourth, the government has given a lot of support to non-governmental organizations.

#### **4.3. United Kingdom**

British NGOs have a long tradition of charity and mutual assistance, and have formed their own unique development model. The first is to standardize the methods of obtaining legal status of non-governmental organizations. The promulgation and revision of the "Charity Law" and "Relief Law" earlier regulated the behavior of non-governmental organizations and confirmed the legal status of non-governmental organizations. The second is to sign the "Government and Volunteer and Community Organization Cooperation Framework Agreement" to clarify the respective functions of the government and non-governmental organizations and provide guarantee for subsequent actions. The third is to build diversified information communication channels. Fourth, government funding has become the dominant model. The development of British NGOs relies heavily on public sector funding.

#### **4.4. Australia**

Australia focuses on expanding the areas of cooperation between government organizations and non-governmental organizations. After the "community revolution" broke out in the 1970s and 1980s, social organizations in Australia have developed rapidly and have become an important force participating in social governance, cooperating with government organizations in many fields. Not only in the field of public crisis management, but also deepening cooperation in public service provision and public policy formulation. The two sides cooperate in various fields to promote the stable development of society.

### **5. From the Perspective of Holistic Perspective, the Optimization Path of the Coordination Mechanism for Public Organizations to Respond to Natural Disaster Crises**

Starting from the theory of holistic governance, this research aims at the fragmentation problem arising from the collaboration between the government and NGOs, and proposes suggestions for the optimization of the emergency coordination mechanism between the government and NGOs.

### 5.1. Collaboration of Values

The theory of holistic governance emphasizes the value of coordination, advocates abandoning traditional hierarchical concepts between subjects, strengthening coordination and cooperation, and promoting mutual benefit and win-win results. The government should change the concept of "omnipotent government", establish the concept of cooperating with NGOs to cope with the crisis, and hand over to NGOs what they don't have the energy to do or can't do well but what NGOs can do well, and give them to NGOs. Organize certain assistance to form a coordinated situation and improve the ability of the entire society to respond to crises.

### 5.2. Integration of Related Systems

At present, the emergency coordination mechanism of public organizations lacks the guarantee of the system, and the holistic governance theory emphasizes the legalization and standardization of the system, and the emergency coordination mechanism between the government and non-governmental organizations should be optimized from the system level. Improve laws on non-governmental organizations. Draft basic laws on NGOs and their management; improve existing laws and regulations on NGOs, revise them based on actual developments, increase their specificity and operability, and improve their convergence with other laws; Improve the law on emergency coordination between government and non-governmental organizations. Integrate the government information disclosure system. The disclosure of government information is an important prerequisite for collaboration between the government and non-governmental organizations. After a crisis event, the government should use television, newspapers, Weibo and other channels to disseminate information about the disaster to the public and NGOs. NGOs can quickly communicate with the government and establish coordination based on the news released by the government. Relationship, rationally allocate disaster relief tasks, coordinate the use of resources, and promote the efficient conduct of disaster relief operations.

### 5.3. Improvement of Operating Mechanism

The theory of holistic governance emphasizes that on the basis of trust and recognition, coordination and integration are the governance mechanisms to strengthen the integration of public organizations. A funding guarantee mechanism should be established to guarantee the financial support of non-governmental organizations; a reward and punishment mechanism should be established to mobilize the enthusiasm of non-governmental organizations to participate; an organization and coordination mechanism should be established to coordinate the efficient work of government organizations and non-governmental organizations; a resource coordination mechanism should be established to promote resource development Optimize configuration and integration; establish a trust mechanism for exchanges and mutual trust between the government and NGOs; establish a long-term cooperation mechanism to integrate NGOs into emergency management.

### 5.4. Application of Information Technology

The theory of holistic governance pays attention to the construction of information systems, and believes that the realization of holistic governance largely depends on the application of information technology. Strengthen the use of information technology, establish an information communication and sharing system between the government and non-governmental organizations, and use electronic media for vigorous publicity to promote collaboration between the government and non-governmental organizations. Establish an information communication and sharing system to quickly find relevant information and make timely decisions; use network information technology to build an electronic information communication and sharing platform to ensure the high-speed transmission and sharing of emergency management information, forming an overall social linkage system[18].

## 6. Conclusions and Prospects

As a country with frequent occurrences of natural disasters, various natural disasters such as earthquakes, tsunamis, and landslides in my country have been continuously affecting people's lives and property safety and the stable development of society. With the evolution of natural disasters in groups and across regions, the local government's emergency management of natural disasters has become more difficult. How to promote the coordination and cooperation of public organizations, so as to achieve rapid and effective response to various natural disasters, has become an important practical problem currently facing. Guided by the theory of holistic governance, this paper discusses the problems and causes of my country's public organizations in responding to natural disaster emergency crises from the four aspects of cooperation awareness, related systems, management mechanisms, and information communication, and draws lessons from the United States, Japan and the United Kingdom through comparison. The successful experience of organization and coordination in the emergency management of natural disasters in public organizations, and suggestions for countermeasures: the coordination of values, the integration of related systems, the improvement of operating mechanisms, and the use of information technology.

Studying the coordination mechanism of public organizations to respond to natural disasters is of great significance to improving emergency response capabilities, but the coordination mechanism proposed in this article is only for all natural disasters. Natural disasters have different causes and different forms of damage. Individual research should be conducted on typical natural disasters. The first national natural disaster risk survey [19] will be launched in 2020. It is believed that with the thorough investigation of the risks of various natural disasters, it is possible to conduct targeted research on certain types of natural disasters in the future.

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