



**Asia-Pacific
Economic Cooperation**

2018/EPWG/SDMOF/015
Session 2f

**Deepening the Institutional Reform on Emergency
Management and Improving Disaster Monitoring and
Warning Capacity Building in China**

Submitted by: National Disaster Reduction Center of China



**12th Senior Disaster Management Officials
Forum
Kokopo, Papua New Guinea
25-26 September 2018**

Document of People's Republic of China
For 12th Senior Disaster Management Official Forum

**Deepening the Institutional Reform on Emergency Management and Improving
Disaster Monitoring and Warning Capacity Building in China**

(24th September, 2018, Kokopo of Papua New Guinea)

Distinguished Chairman,

Delegates,

Ladies and gentlemen,

According to the meeting schedule, I would like to brief you on deepening institutional reform on emergency management and improving disaster monitoring and warning capacity-building in China.

1. The institutional reform on China's emergency management

Since the beginning of this year, natural disasters in China have been dominated by floods, typhoon and earthquake. Such disasters as strong wind, hail, drought, mountain collapse, landslide, mud-slide and forest fire have also occurred to varying degrees. As of 20th September, 130 million people have been affected by natural disasters. 590 people were dead or missing. 4.831 million person-times were urgently relocated and resettled. 94,000 houses collapsed. 211,000 houses were seriously damaged. 1,175,000 houses were generally damaged. The area of affected crops was 18.393 million hectares. The direct economic loss was RMB 234.91 billion. Among them, severe floods in East China, Sichuan, Shanxi, northwest China and other places in July, typhoon No.18 Rumbia in August, typhoon No. 22 Mangkhut, 5.9-magnitude earthquake in Yunnan Mojiang county in September and other natural disasters have caused relatively serious impacts.

The Chinese government attaches great importance to disaster management. President Xi Jinping has repeatedly given important instructions on disaster prevention, mitigation and relief. In accordance with the unified deployment of central government, China has conducted the institutional reform on emergency management, streamlining the emergency management institutional mechanisms in order to carry out disaster prevention, mitigation and relief work more efficient and orderly. The losses caused by natural disasters this year were significantly less than the average of the same period of the past five years. Among them, the number of death and missing, the number of relocated people, collapsed houses and the direct economic loss reduced by 50% to 80%. Specifically, the disasters management work in 2018 present the following characteristics.

1. Deepening the institutional reform on emergency management and establishing the Ministry of Emergency Management. The central government has launched *Opinions of the Central Committee of the CPC and the State Council on Promoting the Reform of the System and Mechanism of Disaster Prevention, Mitigation and Relief*. At the National People's Congress held on March 17 in 2018, it was decided to establish the Ministry of Emergency Management as an important component department of the central government in accordance with the principle of "optimization, coordination and efficiency". A total of 13 responsibilities in 10 departments were integrated including the responsibilities of work safety, emergency response, firefighting, disaster relief, geological disaster governance, flood and drought disaster governance, grassland fire prevention and forest fire prevention. Combing the establishment of the Ministry of Emergency Management, the integration of disaster-involved functions and institutional reform, China aims to build

a national emergency response capability system with Chinese characteristics that has unified direction, professionalism and volunteerism, fast responsiveness, coordination and readiness. According to the principle of assigning responsibilities to different levels, local governments will bear the main responsibility in terms of small to moderate disasters while the Ministry of Emergency Management will respond to and provide assistance on behalf of the central government. In terms of large-scale natural disasters, the Ministry of Emergency Management will have a command of the situation with unified leadership so as to ensure the effective implementation of central government decisions. The Ministry of Emergency Management has been inaugurated on April 16 in 2018 and marks a milestone for China's disaster reduction efforts. It will further strengthen disaster risk management, strengthen international cooperation in disaster reduction and contribute Chinese wisdom and strength to the building of a community with a shared future for mankind.

2. Strengthening risk governance and better preparedness in advance. In disaster management work, the Ministry of Emergency Management sets disaster prevention as a priority, in conjunction with disaster prevention, responding and relief. After the establishment of the Ministry of Emergency Management, in accordance with its new functional missions, it has formulated a major disaster contingency plan, developed SOP on emergency response covering 8 major types of accidents and disasters, such as earthquake, flood, fire, forest fire, traffic, coal mine, non-coal mine and hazardous chemicals, and compiled work plans for safeguard mechanisms such as transport, communication, resources, experts and rescue teams, and information platforms. It issues flood preparedness arrangements before the floods, deploys working teams before the landing of typhoon, conducts safety inspections beforehand

in key areas including high probability earthquake sites, flood-prone areas and hazardous chemicals production bases. It timely activates contingency plan when faced with emergency situations and natural disasters, highlights disaster prevention and preparedness, vigorously promotes the identification and rectification of major potential risks in various localities in order to avoid major working safety accidents resulted from natural disasters.

3. Building a multifunctional Search & Rescue team and enhancing S&R capabilities. The Ministry of Emergency Management coordinates the firefighting troops with local emergency rescue forces, regarding the public security firefighting unit, the armed police forest unit and the safe production team and other teams as a comprehensive and standing emergency backbone force, which has greatly improved the disaster relief ability. We give full play to the leading role of the firefighting unit in emergency search and rescue, require firefighting troops at all levels to form into groups with early actions, quick response and sense of responsibility. In the process of disaster response this year, such as the flood in Sichuan Province, typhoon and flood in Shandong Province, super typhoon Mangkhut, the firefighting force and mine rescue force from all parts of the country were deployed to participate in emergency response and rescue. Up to now, they have participated in 5,771 disaster relief operations, rescued and evacuated 59,000 people, and saved and protected property worthy of 1.01 billion yuan.

4. Timely activating emergency response and allocating relief fund and supplies. Since the beginning of this year, in response to 14 times level-IV national disaster relief and emergency response actions, consulted with the Ministry of Finance 1.275 billion yuan of living subsidies and 96 million yuan of mega geological disaster

relief fund from the state revenue were urgently allocated to cope with natural disasters, 19,200 tents, 34,500 folding beds, 241,000 bedclothes, 30 sets of site lighting and other central government relief supplies to support the affected area. 29 working teams consisted of disaster relief, firefighting, earthquake and geological disaster emergency rescue, working safety supervision and other forces have been sent to the disaster-hit area to strengthen comprehensive guidance and support the local disaster relief work. Substantial human resources and relief supplies have been arranged to organize emergency rescue operations, ensure the basic livelihood of the affected people and minimize the disaster loss and influence.

2. Improving disaster monitoring and warning capacity

Disaster early warning is the precondition of disaster prevention and response. The Ministry of Emergency Management consistently puts the risk governance on the top agenda, in conjunction with disaster prevention, responding and relief. It adheres to the unification of routine disaster reduction and emergency disaster relief, strives to enhance disaster monitoring, forecasting and early warning abilities so as to minimize casualties and losses resulted from disasters.

1. Strengthening the building of natural disaster monitoring networks. The Ministry of Emergency Management has played an active role in building 3D natural disaster monitoring networks for natural disasters at the national, provincial, municipal and county levels. As the China Earthquake Administration moved under the Ministry of Emergency Management, various earthquake networks made up of seismic survey stations and group survey and prevention observation points have been established across China. Some regions have become capable of reporting earthquakes within seconds. In terms of flooding, 113,000 hydrological observatories

and 75,000 monitoring points for precipitation and water levels resulting from mountain flood disasters have been put in place. It has also developed a flood forecasting system to enable routine reporting of major river floods. For geological disasters, 288,000 hazard points have been identified nationwide and in response, a group survey and prevention system has been established. Comprehensive monitoring stations have also been set up in forest regions across China to guard against forest fires, and a 3D monitoring network has been enabled via a combination of satellite remote sensing, drones, video surveillance, mountain lookouts and ground patrol. As for meteorological disasters, the meteorological authority has built a 3D monitoring network composed of weather radars, ground weather stations, applied meteorological observation stations, high altitude image observation stations and Fengyun weather satellites. The timeliness and capabilities associated with disaster prediction have improved significantly compared with the past.

2. Organizing comprehensive consultations and investigations into disasters.

The Ministry of Emergency Management and the Office of the China National Commission on Disaster Reduction have established a disaster consultation and liaison network involving over ten disaster-related departments responsible for natural resources, meteorology, water resources, transportation and shipment, agriculture, healthcare, maritime affairs and the Red Cross. Disaster consultations and investigations analyzing disaster trends are to be convened each month and may grow in frequency in the event of major disasters. Information on major disasters are to be shared promptly. In dealing with Super Typhoon No. 22 Mangkhut in September this year, the Ministry of Emergency Management held daily consultations on the typhoon's trends with the meteorological, water resources and transportation and

shipment departments among others. As the typhoon was approaching to land, these consultation and investigation meetings were held twice per day, and a system of video connection and command and dispatch was set up by the disaster site and frontline commander personnel and the Ministry of Emergency Management Command Center. This enabled the relevant authorities to stay updated with the latest developments and to carry out emergency disaster relief in an efficient and orderly manner.

3. Promptly releasing disaster early warning information. Upon receiving disaster early warning information, the China's National Commission on Disaster Reduction and the Ministry of Emergency Management are to arrange for the relevant departments to release warning information. If a major disaster is predicted, communication must be made promptly by SMS, the Internet, radio, televisions, community electronic screens, rural speaker broadcasting and so on to all people and households across the potentially affected region. Disaster early warning information should promptly reach the information reporters as well as being reported to the local government. The local government should receive assistance in helping urgent evacuation of the local population prior to the disaster and also with prevention work. Through early warnings and timely evacuation of personnel in potentially affected areas, the number of people who have died or gone missing due to disasters has been greatly decreased compared with the same period last year.

4. Conducting disaster risk identification and risk mapping. China carries out national population censuses and also investigations on land, water resources, the economy, forest resources and geographical conditions. The Ministry of Emergency Management has organized pilot projects for disaster risk identification and

assessment based on county-level units, and completed 74 fault detections in cities above prefecture level as well as over 16,000 seismic safety assessments for major infrastructure projects. The relevant departments have investigated dangerous reservoirs and major river dams across China, and performed disaster risk assessments into major river basins and urban drought and flooding. They have also conducted flooding risk zoning and general inspections of geological disaster hazard points across 1517 counties (cities, districts) nationwide.

3. Suggestions for enhancing cooperation of disaster prevention, mitigation and relief

Distinguished delegates,

Development is a journey with no end, but with one new departure point after another. President Xi Jinping proposed to "build an Asia-Pacific partnership featuring mutual trust, inclusiveness and mutually beneficial cooperation" at the APEC Summit. Disaster is beyond borders. For the next step, China is willing to work with relevant economies to advance the "Belt and Road" disaster prevention and reduction cooperation under the APEC framework, promote the building of a community with a shared future, and focus on the following tasks.

1. Reinforcing major disaster monitoring and warning cooperation. The Ministry of Emergency Management is willing to cooperate with emergency management departments of other Asia-Pacific economies in terms of disaster monitoring and warning, focus on and timely report disaster situations and risk factors which may trigger serious consequences, establish disaster early warning and disaster information sharing mechanism, improve the ability of major disaster risk monitoring and warning.

2. Enhancing the cooperation on responding and S&R of major disasters.

Asia-Pacific economies are confronted with the threat of major natural disasters including floods, drought, typhoon and earthquake. Member economies should keep close communication and cooperation with each other, timely report relevant disaster information after major disasters, provide necessary emergency disaster relief assistance in time based on own capability, improve disaster response collaboration and jointly coping with challenges stemming from special major disaster risks.

3. Promoting people-to-people exchange and enhancing mutual understanding. The Ministry of Emergency Management is willing to promote personnel exchanging among disaster relief departments with other economies, strengthen mutual visits between government officials, experts, scholars, technical personnel, rescue forces and others, hold symposiums and training sessions of disaster management, reinforce the communication and collaboration in fields such as emergency rescue, disaster relief and recovery, constantly enhance mutual trust and understanding.

4. Strengthening scientific and technological cooperation in disasters. China has accumulated rich experiences in risk monitoring, disaster early warning, disaster information statistics, damage and loss assessment and other fields, laid a solid foundation for the scientific research of relevant disaster management. China is willing to cooperate with Asia-Pacific economies in disaster science and technology, share the technologies, standards and methodology systems of disaster management, continuously reinforce the ability and performance of disaster management, and jointly safeguard the economic and social stability in Asian-Pacific region.