

# CHINA

## I. Natural hazards in China

### 1.1 Natural hazards likely to affect the country

Earthquake, extreme temperature, flood, wind storm, wave surge, wild fires, drought, insect infestations, slides

### 1.2 Recent major disasters

year	dis_subset	killed	injured	total_affected	dam (US '000s)
2004	Flood	133	4026	33,652,026	1,100,000
2005	Flood	58	0	11,230,000	—
2005	Flood	138	0	16,700,000	1,600,000
2005	Flood	65	0	428,000	27,000
2004	Typhoon	188	4000	9,062,000	2,190,000
2005	Winter	36	0	8,000,000	300,000
2005	Storm	19	55	458,855	16,915
2005	Storm	0	0	90,000	6,000
2005	Typhoon	9	0	13,000	260,000
2005	Storm	8	223	825,223	—
2005	Typhoon	6	0	9,160,000	808,000
2005	Typhoon	159	0	19,624,000	1,900,000
2005	Typhoon	14	0	1,350,000	—
2005	Tropical storm	9	0	5,719,000	—
2005	Typhoon	95	0	2,487,000	148,000

*Source: "EM-DAT: The OFDA/CRED International Disaster Database, www.em-dat.net - Université catholique de Louvain - Brussels - Belgium"*

At 11:50, January 10, 1998, an earthquake (M6.2) occurred in the bordering area between Zhangbei County and Shangyi County in Hebei Province and four counties were affected. 136,000 houses collapsed, 49 were dead, 11,479 people injured. Some facilities for livelihood and production were seriously damaged. Within 5 minutes upon earthquake occurrence, the key staff members responsible for emergency response, earthquake analysis and forecast in China Seismological Bureau (CSB) were in their posts. The epic-center was located within 20 minutes after the tremors. It was announced after two and half hours by CSB that aftershocks would not yield serious effect on Beijing. The local governments and disaster reduction departments immediately implemented the emergency response pre-plan for earthquake and entered into the working situation after 20 minutes of the tremors.

Source: UN/ISDR Country Report

Hundreds of cadres were immediately divided into 6 groups and rushed into the disaster areas to conduct rescue and disaster relief operations, resettle victims and popularize the knowledge for earthquake prevention and resistance. In the afternoon of the earthquake day, Hebei Provincial Government sent work and medical teams to the disaster area. 2,000 PLA personnel rushed into the disaster stricken areas for carrying out rescue work. Tens of media agencies sent reporters to the disaster areas to make timely report of the disaster combat and rescue works. At 18 O'clock of the very day, the first lots of winter clothes were dispatched to the victims. Before 12 O'clock on January 11, the relief materials from Beijing, Tianjin, Zhangjiakou and Langfang arrived in the disaster areas one after another. On January 14, all the disaster victims had got winter clothes, food, temporary frost-proof shelters and the medical services. From January 15, about 3,000 PLA officers and soldiers were urgently sent to help more than forty thousand disaster victims to build houses for winter; the work was completed in February. Because of the timely response and effective measures, nobody died of frost and hungry under a temperature of 20-30 C (below zero).

## II. Disaster Management system

### 2.1 Administrative system

*Conventional long form:* People's Republic of China

*Conventional short form:* China

*Type of Government:* Communist State

*Capital:* Beijing

*Administrative Divisions:* 23 provinces (sheng, singular and plural), 5 autonomous regions (zizhiqu, singular and plural), and 4 municipalities (shi, singular and plural). 2 Special Administrative Regions (tebiexingzhengqu, singular and plural), Autonomous regions: Guangxi, Nei Mongol, Ningxia, Xinjiang, Xizang (Tibet). Municipalities: Beijing, Chongqing, Shanghai, Tianjin. Special Administrative Regions: Hong Kong, Macao.

### 2.2 Legal system, legal framework

More than 30 laws and regulations have been promulgated and implemented on disaster reduction, which include the following:

- Law on Water and Soil Conservation
- Law on Earthquake Prevention and Disaster Reduction
- Law on Fire-Fighting
- Meteorological Law

- Law on Production Safety
- Regulation on Forest Fire-Fighting, the Regulation on Preventing Forest Pests
- Regulation on Safety Management of Dangerous Chemicals

All these laws and regulations have legalized China's undertakings in water and soil conservation, earthquake prevention and disaster reduction, fire-fighting, flood-prevention and meteorology, and the working pattern of reducing disasters.

### **2.3 Structure of disaster management**

China National Commission for the International Decade on Natural Disaster Reduction was established in 1989. In 2000, it was renamed China Commission for International Disaster Reduction. In January of 2005, it was renamed as China National Committee for Disaster Reduction (NCDR), headed by a Vice Premier of the State Council. It is composed of 34 ministries and departments, including relevant military agencies and social groups. It functions as an inter-agency coordination body under the State Council, which is responsible for studying and formulating principles, policies and plans for disaster reduction, coordinating major disaster activities, giving guidance to local governments in their disaster reduction work, and promoting international exchanges and cooperation. Moreover, the leadership of the disaster reduction and relief efforts has been improved with the establishment of an expert panel consisting of 18 academicians and renowned experts.

### **2.4 Priorities on disaster risk management**

- 1) The principle of putting people's interests first and the scientific concept of development should be carried out. Disaster reduction should be secured with an important status in national economic and social development. The principle of parallel development of economy and natural disaster reduction should be followed. Disaster reduction should be included in the strategic framework of sustainable development. A series of comprehensive disaster-reduction activities should be adopted to protect people's lives and properties.
- 2) Disaster prevention should be the major priority in combination with disaster resistance and relief. The disaster-reduction awareness of the general public should be further enhanced. Disaster reduction should be taken into account in constructing production and living facilities. Multiple methods and measure should be implemented to carry out disaster-reduction projects so as to display the overall efficiency of various disaster-reduction projects and step up relevant undertakings.

- 3) Overall interests should be borne in mind with set priorities. Key issues bearing on the overall interests of disaster reduction should be well settled. Limited resources should be concentrated on strengthening the development of key projects and comprehensive work on reducing disasters in key regions. Focus should be put on reducing natural disasters having major overall or regional impacts. In the meantime, efforts should be made to explore effective ways to reduce other natural disasters.
- 4) The role of science, technology and education should be fully displayed in disaster reduction. The process of transforming existing scientific results into actual capabilities of disaster reduction should be accelerated for better abilities to reduce disasters. Disaster-reduction education should be integrated with popularized and specialized education oriented towards whole society so as to uplift the level of disaster-reduction knowledge of the general public.
- 5) All positive elements should be mobilized. Initiatives of the central and local governments as well as all social sectors should be displayed. Under the unitary organization and deployment of the government, relevant departments should coordinate closely with each other and enterprises as well as cross-sections of society should be broadly involved for effectively reducing disasters.
- 6) International exchanges and cooperation on disaster reduction should be strengthened. Multi-channeled and multi-layered international exchanges and cooperation should be actively carried out to continuously improve China's disaster-reduction undertakings and China's standing in the international disaster-reduction community.

### **III. Disaster management plan**

In April 1998, the Chinese Government promulgated the National Natural Disaster Reduction Plan of the People's Republic of China (1998-2010), the first national disaster reduction plan formulated in accordance with the Ninth Five-Year National Economic and Social Development Plan and the 2010 Long-term Objective. It is based on past experiences to carry out its disaster reduction work.

The *Disaster Reduction Plan* has identified the following guiding principles:

- Disaster reduction should be deeply considered in national economic and social development;
- Prevention should be taken as the priority in combination with resistance and relief;

- The role of science, technology, and education should be incorporated in disaster reduction;
- The central and local governments as well as all social sectors should be to reduce disasters; and
- International exchange and cooperation should be strengthened.

Expected Outputs of the plan:

- Key disaster reduction projects which have a bearing on the overall interests of national economy and social progress will be built.
- Disaster-reduction technology will be widely applied.
- Public awareness and knowledge will be enhanced.
- A comprehensive working mechanism will be set up so as to alleviate impacts inflicted by disasters on the national economic and social development;
- Reduce direct economic losses and human casualties.

The *Disaster Reduction Plan* has also put forward the tasks of various key players, measures and major actions on disaster reduction. After its promulgation, it has been actively implemented while relevant departments and localities are accelerating their corresponding plans and implementation details.

#### **IV. Budget size on national level**

In 2005, The MCA has collaborated with relevant departments to earmark RMB 8.7 billion as the central budget for disaster rescue and relief initiatives, of which the MCA and the Ministry of Finance contributed RMB 4.048 billion in total to the reserve pool for devastating disaster relief programs.

#### **V. Progress and situations of the Hyogo Framework for Action (HFA)**

**Ensure that disaster risk reduction is a national and a local priority with a strong institutional basis for implementation**

National Natural Disaster Reduction Plan of the People's Republic of China (1998 -2010) was formulated in accordance with the Ninth Five-Year National Economic and Social Development Plan and the 2010 Long-term Objective. It is the road map of China for a long term effort on disaster reduction.

**Identify, assess and monitor disaster risks and enhance early warning**

The disaster monitoring and pre-warning system has been set up and improved. Currently the disaster monitoring and pre-warning system in

China has taken shape and relevant departments are able to timely forecast disasters in line with the rules of disaster management.

Throughout the country, a weather monitoring and forecast network composed of 2,511 ground meteorological stations, 124 high-altitude monitoring stations and more than 80 new weather radars has been set up. An earthquake monitoring network has been established made up of the national digital earthquake network of 48 earthquake stations, 23 regional digital remote-monitoring stations, 25 GPS stations and 56 crust movement monitoring networks composed of 1,000 mobile observatories and 400 stations.

A hydrometric network composed of 3,130 basic hydrometric stations, 1,073 water level stations, 14,454 precipitation survey stations and 11,620 underground water observing wells has been put in place. A forest fire-fighting and pest preventing forecast network has been set up composed of 2,867 inspection and quarantine stations, 3,151 forest fire-fighting headquarters, 11,222 forests fire-fighting watch towers, 300,000 kilometers of fire-separation roads and 1.03 million kilometers of fire separation zones.

A pest monitoring network has been established composed of 400 regional forecasting stations, 15 monitoring centers and 300 regional monitoring stations. The constant improvement of monitoring and pre-warning system targeted against various natural disasters has guaranteed the timely organization of disaster reduction and relief work by governments at different levels.

Small-satellite constellations for environment and disaster monitoring were built. In 2007 two small optical satellites and a radar satellite will be launched for forming a “2+1” constellation, which will have preliminary capabilities of timely monitoring and forecasting disasters and environment developments in most of regions in China.

Before 2010, a “4+4” small satellite constellation composed of 4 small optical satellites and 4 small radar satellites will be completed, which will change the current mode of disaster monitoring in China and realize 24-hour and all-weather monitoring on environment and disasters. Currently, the research on the satellite effective load is well underway.

### **Use knowledge, innovation and education to build a culture of safety and resilience at all levels**

Information Management, Public Awareness

A National Disaster Reduction Center of China (NDRCC) has been set up. In April 2002 the Chinese Government approved the founding of the National Disaster Reduction Center, which serves as a center for

disaster information sharing, technical services and emergency relief decision consultancy. Its main functions are specified as follows: to assess and analyze the occurrence and development of major disasters, and provide services on forecast, assessment and supporting disaster reduction decisions and information; to collect and analyze disaster reduction information both at home and abroad for information sharing; to provide technical assistance and supporting decisions for major emergency relief work; to organize international disaster reduction exchanges and cooperation.

The Chinese Government has raised public awareness by timely reporting of disasters and relevant disaster reduction activities, holding specialized lectures, columns and programs on TV, radio as well as newspapers. Various charity shows for disaster reduction and poverty relief, disaster-reduction summer camping activities for middle school students and national quiz shows on disaster reduction were carried out throughout the country.

In line with the theme of the International Day of Disaster Reduction, multiple publicity campaigns on disaster reduction were launched. Educational departments were added into the curriculum disaster-reduction knowledge in primary and middle schools. In higher education, different levels of disaster-reduction education have been carried out in combination with disaster-reduction research.

### **Strengthen disaster preparedness for effective response at all levels**

A national emergency-response plan system for natural disaster management has been set up. In order to improve various pre-warning and emergency-response mechanisms and governments' capabilities to handle emergencies and risks, the Chinese Government has promulgated *the national Natural Disaster Emergency-Response Plan*.

Relevant departments under the State Council have basically completed their emergency-response plans. 31 provinces and 2,347 counties have also released their plans. As a result, a national emergency-response plan management system for natural disasters has already taken shape.

Since 1998 China began to set up a central-level material reserve system for disaster relief. Central-level material reserve points for disaster relief have been built in Shenyang, Harbin, Tianjin, Zhengzhou, Hefei, Wuhan, Changsha, Nanning, Chengdu and Xian. Provincial-level material reserve warehouses for disaster relief have been set up in almost all of provinces, autonomous regions and municipalities.

## **VI. Projects on disaster reduction headed by Ministry**

### **Community-based Disaster Reduction Outreach Campaign**

Community-based Disaster Reduction Outreach Campaign has been launched, handbook series of *Save Yourself From Disaster* published and TV promotion of *Emergency Rescue* broadcast, all of which have gone a long way with enhancing the public awareness. Information dissemination and education programs have been carried out at the local level, focusing on “disaster reduction and the community”, “disaster reduction in classrooms” and “disaster reduction in the rural areas”. Thereby, China has been disseminating knowledge related to disaster reduction, raise public awareness for disaster reduction, strengthen vocational training for the managerial staff, build a pool of volunteers, and improve the overall knowledge base of the general public for disaster prevention, in an effort to set up a disaster prevention and disaster reduction network engaging the whole society.

### **International Cooperation**

As part of the endeavors to bring closer and stronger international cooperation, China has been a signing party to The *SCO Agreement on Inter-governmental Mutual Assistance for Disaster Relief*, attended World Disaster Reduction Conference and sponsored the Asian Conference on Disaster Reduction, the first ever ministerial meeting of its kind in Asia. On top of that, China has provided relevant training programs for 31 officials from 11 tsunami-hit countries and organized governmental and non-governmental donation programs in the wake of the earthquake-turned tsunami in the Indian Ocean and the devastating earthquake in Pakistan.

## **VII. ADRC Counterpart**

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