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◆ Country Report

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2012-09



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◆ General information of china



the geographical location of china

Located in eastern Asia and the west coast of the Pacific Ocean, China has 9.6 million square kilometers of land area. Its eastern and southern continental coastal line lasts more than 18,000 kilometers.



It has 7,600 islands of various sizes, of which Taiwan is the largest, with an area of 35,798 square kilometers.





Forbidden City in Beijing



Tiananmen Square in Beijing



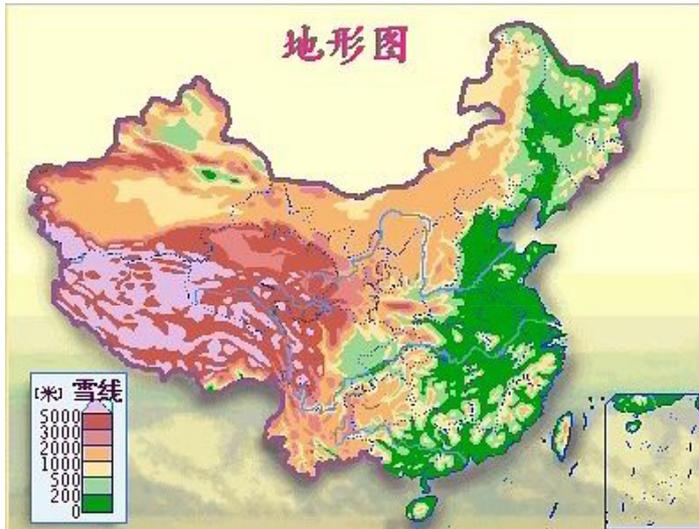
the administrative zone of china



China has 4 municipalities directly under the central government, 23 provinces, 5 autonomous regions and 2 special administrative regions.



the terrain of China

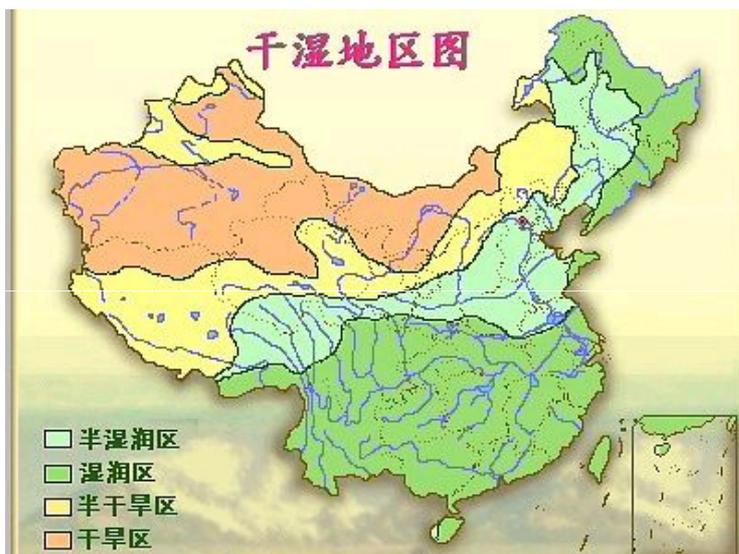


◆ The western part of China is higher than the eastern part of China. The mountains, plateaus and hills cover about 67% of the total land area, whereas the basins and plains make up near to 33% of the total land area.

◆ In the west is the highest Qinghai-Tibet Plateau, which stands more than 4,000 meters above the sea level and has been renowned as the “roof of the world”. The Qomolangma Mount, 8,844.43 meters high, is the world’s highest peak.



the precipitation of China



◆ In general, the eastern part of China has more precipitation than the western part of China.

◆ The southeast coast up to 1500 mm above, only 200 mm inland northwest.





the temperature of China



◆ Generally speaking, the south is warmer than the north.

◆ The temperature varied greatly from south of China to north of China and the greatest difference is up to approx 50 degree centigrade.



The population of China

◆ China is the most populous country in the world. April 28, 2011, the National Bureau of Statistics released the sixth national census data show that the country's total population of 1.3 billion people.





◆ the population of China

Index	2010population(million)	Proportion
The country's population	1328.02	100%
Among country: the urban population	606.67	46%
Rural population	721.35	54%
Among country: male	683.57	52%
Female	644.45	49%
Among country: age 0-14	251.66	19%
age 15-59	916.47	69%
age more than 60	159.89	12%



◆ Natural Hazards in China



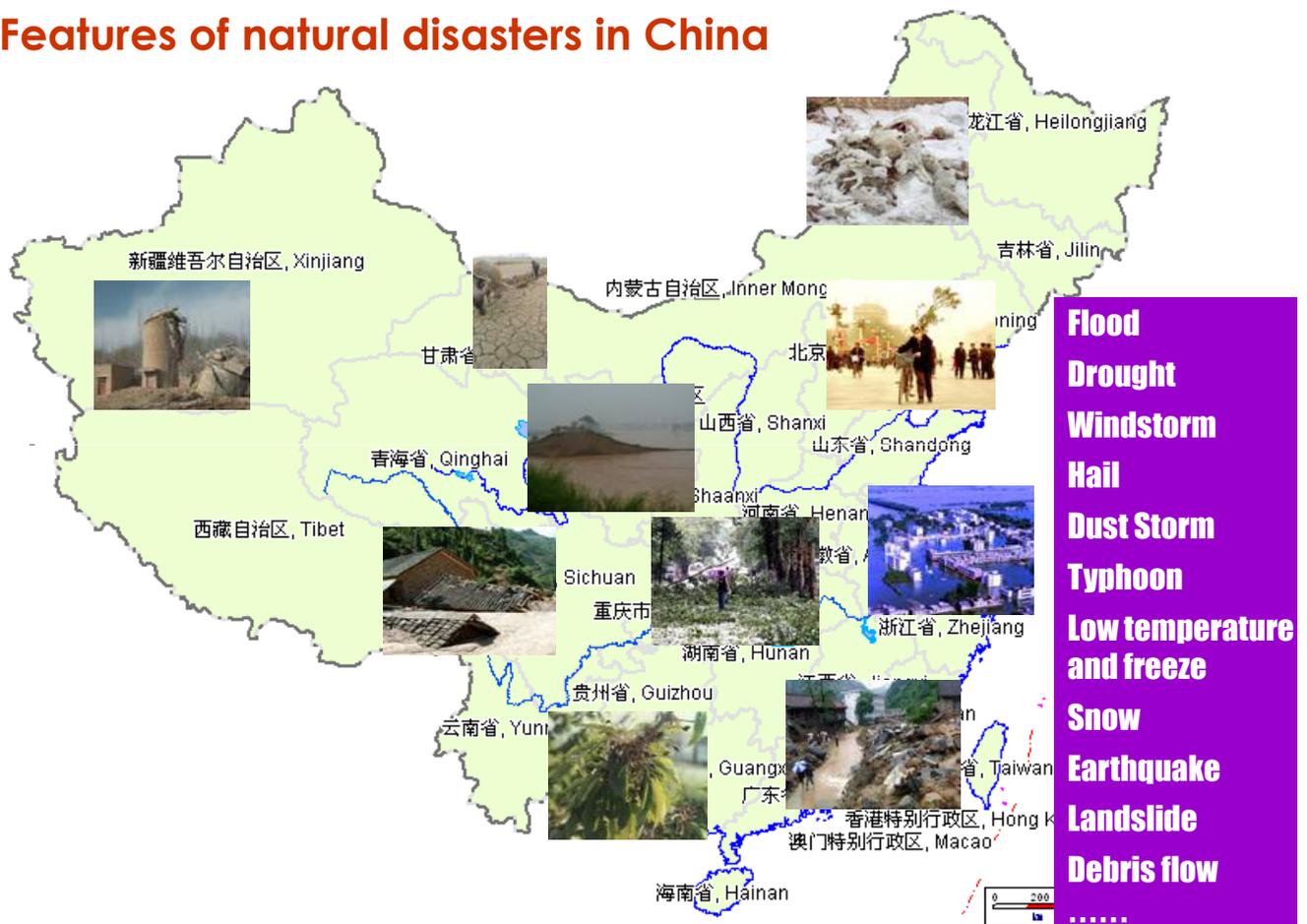


Brief Introduction on China's Natural Disasters

- ◆ China is one of the countries in the world that suffers from the most serious natural disasters due to its vast territory, complicated climatic, geographical and geological conditions and fragile ecological conditions.
- ◆ Over 70% of China's cities and 50% of the population are located in the regions frequently hit by major meteorological, seismological, geological and maritime disasters.



Features of natural disasters in China





Multiple types, High frequency

- ◆ China has witnessed such disasters as flood and waterlog, drought, windstorm, hail, dust storm, typhoon, low temperature and freeze, snow, earthquake, landslide, debris flow and so on.
- ◆ Of all the natural disasters, flood, drought and earthquake have led to the most severe losses, accounting for 80% to 90% of the total.
- ◆ Since 1949, major drought would happen more than 8 times, flood and waterlog 7 times and typhoon 8 times each year.



Regional discrepancy

- ◆ The major hazards are droughts, snowstorms, and earthquakes in western and northern regions;
- ◆ The hazards are mainly floods, landslides, droughts, and earthquakes in northeast, southwest and central regions;
- ◆ The major hazards are floods, typhoons, subsidence, and droughts in southeast regions.





Severe losses in china

- ◆ Since 1990 to 2011, natural disasters have annually caused about 400 million people affected, 4 million houses collapsed and 10 million people evacuated, leading to the direct losses of nearly 200 billion Yuan.
- ◆ Natural disasters have become an important factor that restricts the harmonious and sustainable socio-economic development of China.



wenchuan earthquake

- At 14:28 on May 12 2008, 8 Earthquake occurred in Wenchuan County, Sichuan Province. The earthquake is the second serious earthquake disaster since the founding of China. A total of 10 provinces, 417 counties, 4,667 townships and 48,810 villages and 4625.6 million people were affected, 1510.6 million people emergency relocated, 69,227 people died, 17,923 people missing, 37.4 million people injured, 7967000 houses collapsed, 24543000 houses damaged, tolls 121 billion dollar losses.
- At 3:40 p.m. on May 12th, the National Disaster Reduction Committee, Ministry of Civil Affairs to start second emergency response, promoted to first emergency response at 22:15 on the May 12.





◆ 中华人民共和国民政部国家减灾中心
National Disaster Reduction Center of China

Low temperature and snowstorm in china

- Low temperature and snowstorm disasters affected 21 provinces in January 2008 to February. 136 people died and missing, 166 million people emergency relocated, 485,000 houses collapsed, 1,686,000 houses damaged, 21 billion dollar losses.
- January 21 to 28, the National Disaster Reduction Committee, Ministry of Civil Affairs start the four emergency response in 20 provinces.





◆ 中华人民共和国民政部国家减灾中心
National Disaster Reduction Center of China

Yushu earthquake in Qinghai Province

- At 7:49 on April 14th 2010, 7.1 Earthquake occurred in Yushu Tibetan Autonomous Prefecture of Yushu County .22.3 million people were affected, 2698 people died and 270 people missing, 188,000 emergency relocated, 246,000 houses collapsed, 51,000 houses damaged ,3 billion dollar losses.
- At 9:00 on April 14th, the National Disaster Reduction Committee, Ministry of Civil Affairs to start second emergency response.





五木县结古镇影像地图(局部)
(来源: 2010年01月15日)



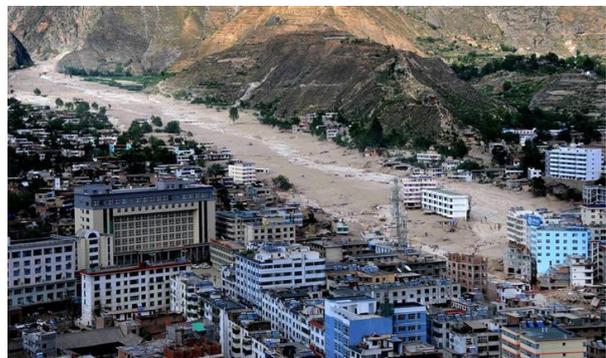
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◆ 中华人民共和国民政部国家减灾中心
National Disaster Reduction Center of China

zhouqu Mudslides

- At August 7, The Mudslides occurred in Zhouqu County, Gannan province, 1434 people died and 331 missing.
- At August 7, 2010, the National Disaster Reduction Committee, Ministry of Civil Affairs to start second emergency response.





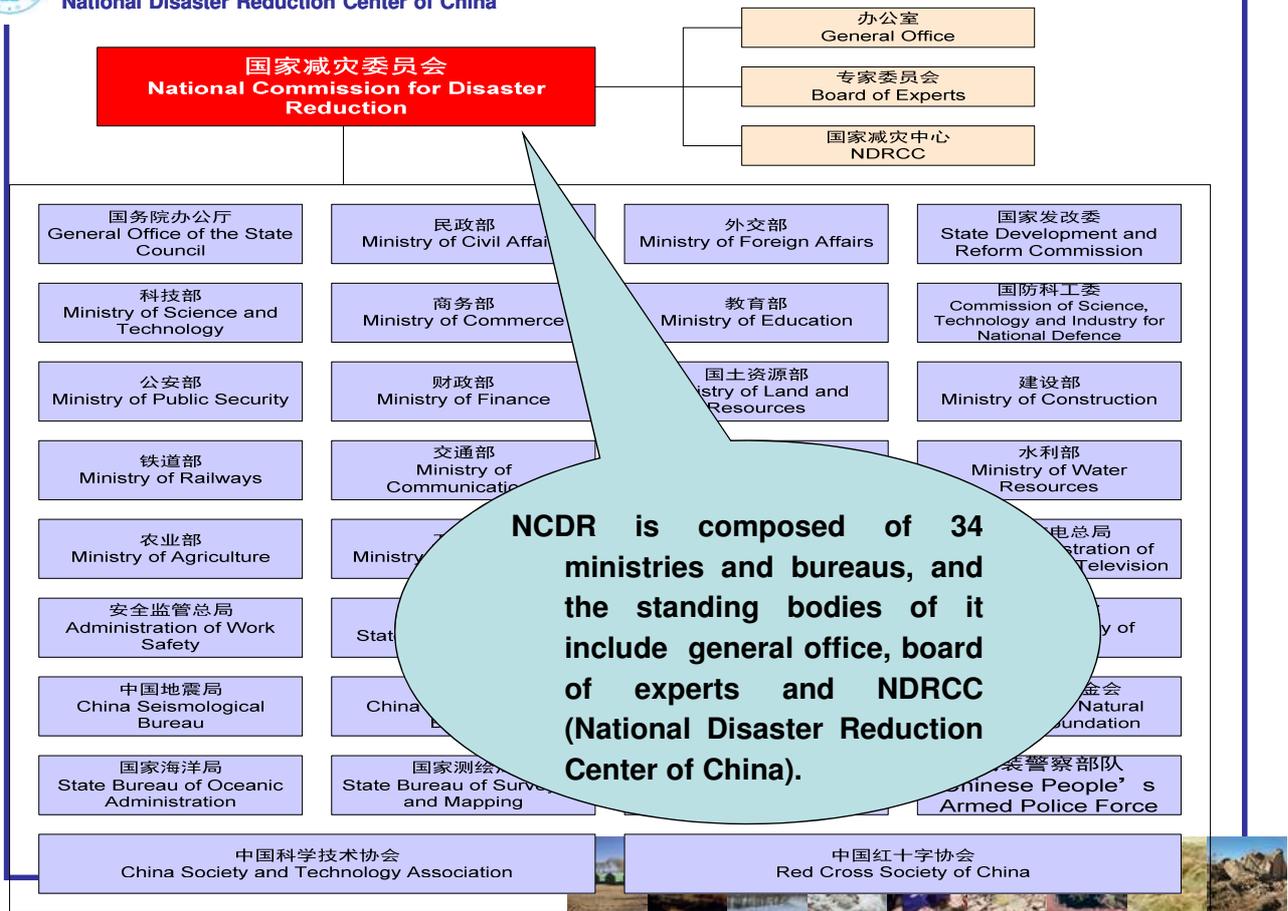
◆ Disaster Management System



Administrative System in china

- ◆ National Commission for Disaster Reduction (NCDR) is responsible for establishing state policies, regulations, guidelines and action plans on disaster mitigation. Besides, It is also responsible for organizing major national disaster reduction activities, directing local efforts and facilitating cross-border interactions & collaborations.





Legal System and Framework

- ◆ So far, more than 30 laws and regulations have been promulgated on earthquake preparation, fire prevention, flood preparation, weather forecast and sandstorm prevention and management.





Structure of Disaster Management

◆ National platform for Disaster Risk Reduction

◆ China established the National Commission for Disaster Reduction (NCDR), the Office of State Flood Control and Drought Relief Headquarters (SFDH), the National Disaster Reduction Committee is responsible for all natural disasters Risk Reduction, It composed of 34 ministries and bureaus. Office of State Flood Control and Drought Relief Headquarters (SFDH) only in charge of flood and drought disaster Risk Reduction, It composed of 5 ministries and bureaus.



Structure of Disaster Management

◆ National and Local Organizations for Disaster Risk Reduction

◆ There are 7 national organizations for Disaster Risk Reduction in china. It included the Ministry of Civil Affairs, the Ministry of Agriculture, Ministry of Water Resources, Bureau of Forestry, Bureau of Oceanic, Bureau of earthquake, Bureau of Meteorology, The Ministry of Civil Affairs is responsible for all natural Disaster Relief, the Ministry of Agriculture is responsible for biological disasters risk reduction, the Ministry of Water Resources is responsible for flood and drought disasters risk reduction, the Bureau of Forestry is responsible for forest fires risk reduction, , Bureau of Oceanic in charge of marine disasters risk reduction, , Bureau of earthquake in charge of earthquake disasters risk reduction, the Bureau of Meteorology provide other six Ministries and commissions meteorological Technical Support.



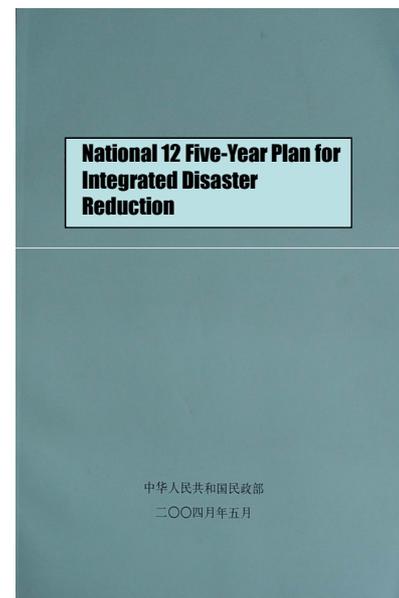


◆ Disaster Management Strategy, Policy, and plan



1. Integration of Disaster Reduction into National Development Plans

- ◆ the disaster reduction has been included into the state's development plan. The Chinese government has placed disaster risk reduction as a top priority on the agenda of the state and local socio-economic development plan.
- ◆ A state emergency response system has been gradually built and improved. The “*State 12th Five-year Plan for Disaster Reduction*” has been formulated.



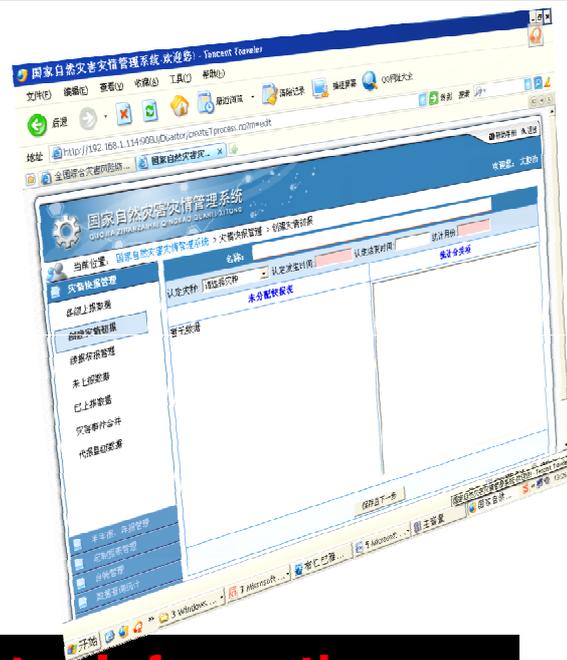


2. Improvement of disaster information management

- ◆ With the development of disaster management, Chinese government pay more attention to Disaster Information Management. So MCA and NDRCC developed National Disaster Information Management System in 2008. Since 2008, All disaster management using the system submitted the disaster information to the National Commission for Disaster Reduction, each county in China have one user by National Disaster Information Management System, There are 5000 disaster management user at present,
- ◆ According to the Regulation on Natural Disaster Statistics, civil affairs departments at county level are required to report disaster information within two hours after the disaster occurs. All disaster Information will be collected and published by county user in National Disaster Information Management System.



2. Improvement of disaster information management



◆ National Disaster Information Management System





3. Enhancement of disaster response management

- ◆ The State Council issued the “*State Overall Contingency Plan for Emergent Public Events*”.
- ◆ The Ministry of Civil Affairs made the “*Contingency Plan for Disaster Relief*”, the “*Operation Procedures for Abrupt Natural Disasters*” and the “*Operation Procedures for Emergent Disaster Relief*”.
- ◆ Contingency Plans at provincial level, city level and county level were issued.
- ◆ Contingency Plans of towns, factories and schools were made.



A national contingency plan system has been basically established.



3. Enhancement of disaster response management

According national contingency plan system, when disaster happened:

- ◆ Related staff were on duty to keep close contact with affected areas;
- ◆ Joint workgroup was established as soon as possible and reached affected areas in 24 hours;
- ◆ Emergency material was disseminated to victims in 24 hours;
- ◆ Central emergency fund was allocated to disaster areas in 72 hours;

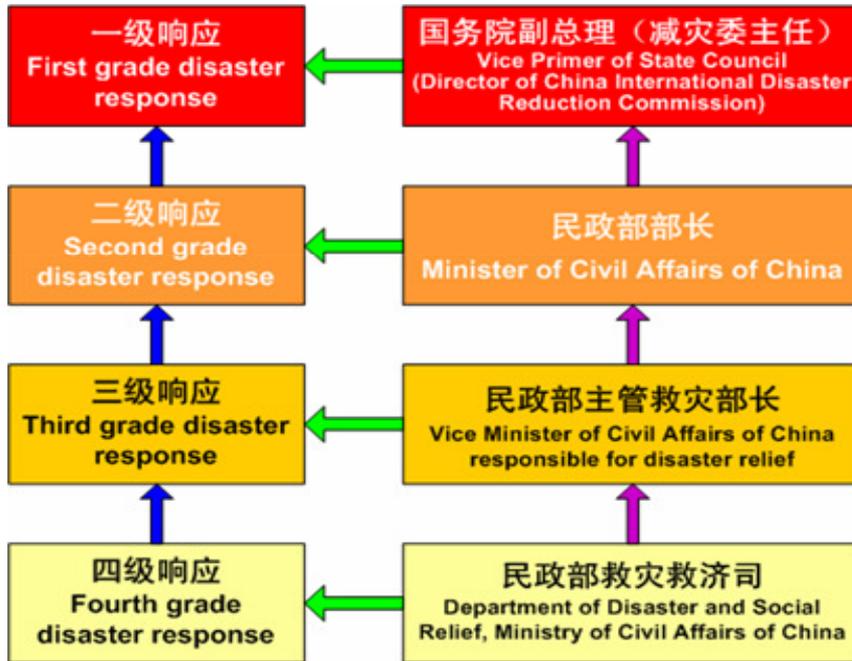




3. Enhancement of disaster response management

disaster response level

the leader of the workgroup



- ◆ Disaster management staff
- ◆ Experts
- ◆ others



3. Enhancement of disaster response management

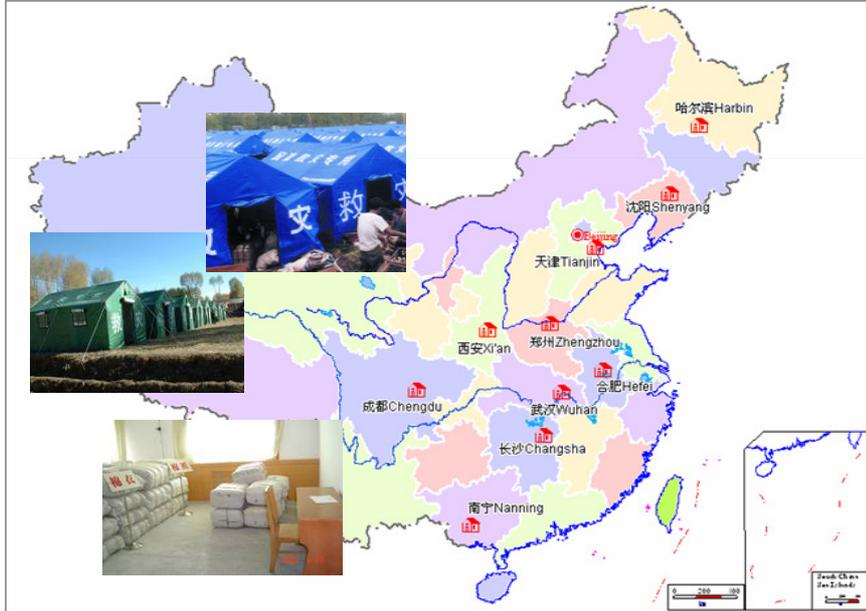
Standards of National Emergency Response

Degree	People Died	People Evacuated	houses collapsed	Earthquake Magnitude Scale
I State Council	Above 200	Above 1 million	Above 200,000	Above 5 M.S.
II Minister	100-200	Above 800,000	150,000-200,000	Above 5 M.S.
III Vice-Minister	50-100	300000-800,000	100,000-150,000	Above 5 M.S.
IV Director-General	30-50	100,000-300,000	10,000-100,000	Above 5 M.S. 20-50 people dead

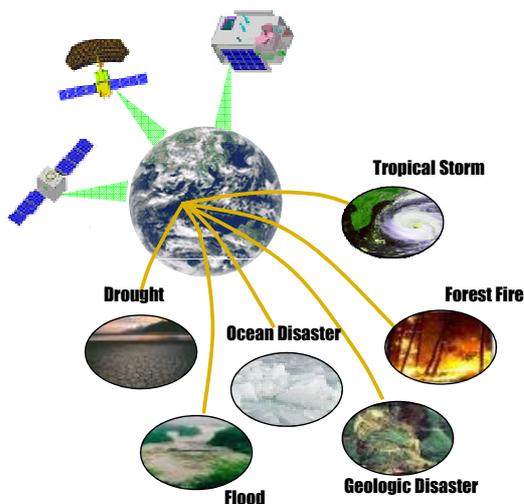




- ◆ China has also established disaster relief material reserve system. Central-level stockpiles of disaster relief material have been built in 22 cities including Shenyang, Tianjin, Wuhan, Nanning, Chengdu, Xi'an and so on. Meanwhile, local stockpiles in some disaster-prone areas have also been set up.



4. Application of RS into disaster reduction

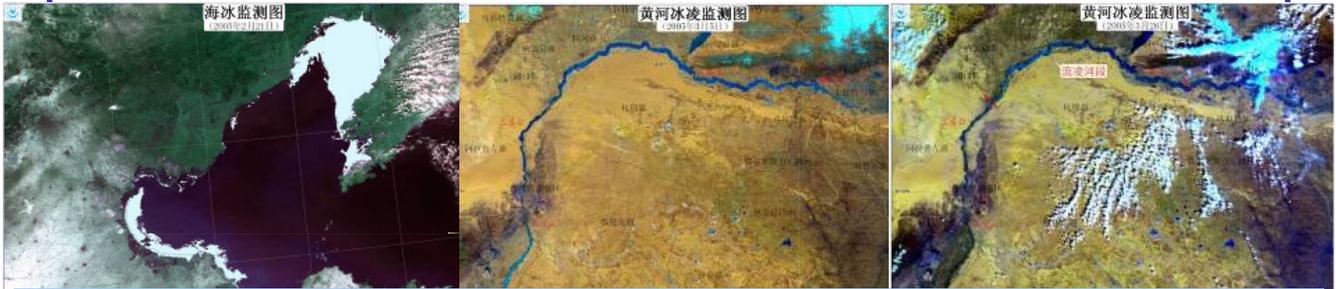


China plans to launch two small optical satellites and one small SAR satellite recently, called the "2+1" Project, and also will launch another 4 optical satellites and 4 SAR satellites later.





4. Application of RS into disaster reduction



The remote sensing technology and geographical information system have been used in disaster monitoring and assessment, which have provided technical support for comprehensive disaster reduction, disaster relief and post-disaster rebuilding.



5. Elevation of public awareness of disaster reduction

- ◆ Central government issued the “Overall Implementation for Publicity of the Knowledge Concerning Emergency Management”.
- ◆ Central government initiated a nationwide campaign to “reduce disasters at communities”.
- ◆ NCDR, Ministry of Education and Ministry of Civil Affairs jointly distributed the “Views on Improving the Work of Disaster Reduction in Schools”.
- ◆ NCDR compiled the “Handbook of Disaster Prevention and Self-Rescue”.

- ▶ to spread disaster prevention knowledge
- ▶ to enhance the public awareness of safety
- ▶ to help people have the knowledge on first aid and mutual aid





The opening ceremony of “reduce disasters at communities”



The drill on disaster reduction in the school



National TV disaster reduction competition



6. Development of Cooperation Mechanism on Regional Disaster Mitigation

◆ Since 2008, the annual level disaster officials over the Minister to attend the International Conference on Disaster Reduction at least 25 more times to strengthen the communication and cooperation between the organization of the International Disaster Reduction.





◆ the main countermeasures for the next step Research Topic



the next step(Research Topic)

1. Improvement of natural disaster monitoring, early warning and forecasting abilities
2. Reinforcement of the construction of major disaster reduction projects
3. Advancement of non-project disaster mitigation activities
4. Elevation of the comprehensive research on greatly destructive disasters
5. Improvement of international cooperation to cope with global climatic changes





1. Improvement of natural disaster monitoring , early warning and forecasting capabilities

- ◆ Developing a full-fledged network of natural disaster monitoring, early warning and forecasting by modernizing meteorological, hydrological, seismic, geological, marine and environmental monitoring infrastructure and properly increasing monitoring frequency
- ◆ Building a satellite remote-sensing disaster monitoring system to raise the data gaining and applying ability.
- ◆ Applying new science and technology into disaster relief so as to build an all-round natural disaster monitoring system.
- ◆ Building a sound pre-warning information release mechanism in order to issue timely information.



2. Reinforcement of the construction of major disaster reduction projects

- ◆ Putting in place special plans of disaster resilience and giving more weight to comprehensive harness of medium and small-sized rivers & reservoirs and areas vulnerable to landslide and mud-rock flows
- ◆ Focusing on backbone projects of disaster mitigation including programs for flood control, drought relief, earthquake prevention & emergency response, typhoon & storm surge prevention, sand prevention & control, plant diseases & insect pests control, forest & grassland fire control and Sanbei Shelter Forest Project & coastal shelter forest initiatives





3. Advancement of non-project disaster mitigation activities

- ◆ Compiling the countryside disaster reduction, industrial and urban disaster reduction and key area disaster prevention plans to raise the comprehensive prevention capacity
- ◆ Four-level command system should be improved to establish an orderly, efficient and quick-response management and operation system
- ◆ The central and local disaster relief material reserve networks and their equipment and facility construction should be intensified
- ◆ The construction of backbone, professionalized and volunteer relief teams such as the civil-affairs disaster relief team, army, armed police, public security firefighting teams should be strengthened so as to build up and better the public mobilization mechanism
- ◆ Community disaster-reduction knowledge should be better publicized to raise the public's self-rescue abilities.



4. Elevation of the comprehensive research on greatly destructive disasters

- ◆ Asian Greatly Destructive Disaster Research Center will be set up to study the causes and routines of greatly destructive disasters and the relationship between them and their subsequent disasters; and simulation of mutations of major natural disasters and simulation experiments on emergency response to greatly destructive disasters will be carried out.
- ◆ Sound systems, mechanisms and policy measures will be developed and improved to deal with greatly destructive disasters. Contingency plans should be made for the city clusters in the Yangtze River Delta, the Pearl River Delta and the Pan-Bohai area and other key cities and disaster-prone areas. Relevant disaster relief drills should also be conducted.





5. Improvement of international cooperation to cope with global climatic changes

- ◆ The Chinese Government has instituted & promulgated China's National Climate Change Program.
- ◆ A portfolio of policy-measures will be taken to facilitate economic restructuring and transform economic growth pattern. Efforts will be made to achieve energy conservation & efficiency, develop renewable energy and deliver ecological improvement projects. All these will help fight climate change.
- ◆ China is on target to boost exchange and collaboration with other developing countries.



Thank you!

