Emergency Relief Efforts of 2008
China Extreme Ice-snow Storms

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The 2008 China extreme ice-snow storms were a series of winter storm events that affected large regions of southern and central China starting on January 10 until February 6. Hunan, Guizhou, Jiangxi, Anhui, Hubei, Guangxi, Zhejiang and Sichuan provinces were worst hit.

The disasters affected most of the areas with cold temperatures, freezing rain, heavy snow and ice causing extensive damage and transportation disruption for hundreds of thousands of travelers. It was China's worst winter weather event in half a century.
Impacts and Losses
The ice-snow storms directly resulted in 129 dead, and 4 missing. About 1.6 million people were evacuated.
About 500,000 houses were destroyed and 1.6 million houses were damaged.
Among 178 million mu of crops which were affected, 25.3 million were destroyed. 870,000 pigs, 450,000 sheep and 85,000 cattle were killed by the storms. The huge loss of crops, vegetables and livestock resulted in a substantial inflation of food prices.
The direct economic losses were about RMB 151 billion yuan.
Transportation was heavily affected as the storms hit during the busiest travelling season of the year, Chunyun preceding the Lunar New Year. Nearly 180 million people traveled throughout the country during the holiday. In early February, millions of Chinese are travelling from the major cities to the countryside to celebrate the Spring Festival. For many Chinese who migrate from the countryside to cities to work in factories, the holiday is maybe the only time during the year for them to return to hometowns to meet their relatives.
Tens of thousands of people were stranded at several railway stations across southern China, including Guangzhou railway station. It was estimated that nearly 6 million railway passengers in total were stranded during the period.
19 major airports at 10 cities were also closed at one point. 10,000 at Baiyun Airport in Guangzhou City were stranded after 55 flights were cancelled. In total, about 4,000 flights were cancelled and another 10,000 were delayed throughout the country.
The power supply and telecommunication systems were severely affected by the storms.
In Chenzhou City, which has a population of 4.6 million, the entire city had no power or water supply for over nearly two weeks, including government buildings and hospitals, meanwhile, telecommunications cables and Internet networks were also damaged.
Disaster Relief Efforts
At the central level, National Commission for Disaster Reduction (NCDR) is the highest coordination agency for disaster relief. The coordinating mechanism covers 34 disaster-related ministries or agencies.
# National Criteria on Emergency Response for Disaster Relief

<table>
<thead>
<tr>
<th>Response Level</th>
<th>Death Toll ((\times 1\text{ person}))</th>
<th>Evacuated Population ((\times 10000\text{ persons}))</th>
<th>Collapsed Houses ((\times 10000\text{ houses}))</th>
</tr>
</thead>
<tbody>
<tr>
<td>I – Level</td>
<td>&gt; 200</td>
<td>&gt; 100</td>
<td>&gt; 20</td>
</tr>
<tr>
<td>II – Level</td>
<td>100–200</td>
<td>80–100</td>
<td>15–20</td>
</tr>
<tr>
<td>III – Level</td>
<td>50–100</td>
<td>30–80</td>
<td>10–15</td>
</tr>
<tr>
<td>IV – Level</td>
<td>30–50</td>
<td>10–30</td>
<td>1–10</td>
</tr>
</tbody>
</table>
National Disaster Emergency Scheme

Four-grades System of Emergency Response for Disaster Relief

Ⅰ - Level Response

Ⅱ - Level Response

Ⅲ - Level Response

Ⅳ - Level Response

Vice Premier of State Council

Minister of Civil Affairs of China

Vice Minister of Civil Affairs of China responsible for disaster relief

Department of Disaster and Social Relief, Ministry of Civil Affairs of China

国务院副总理（减灾委主任）

民政部部长

民政部主管救灾部长

民政部救灾救济司
According to the extreme ice-snow storms, NCDR and MCA launched 7 times IV-level responses and 2 times II-level responses in turn.
The winter storms marked the largest national mass mobilization since the 2003 SARS crisis and is comparable in size to the relief efforts of the 1998 Yangtze River Floods.

On 3 February 2008, the State Council established the emergency operation center to command and coordinate the nationwide disaster relief efforts.
About 1 million policemen were dispatched to keep the roadways open but numerous trucks were stranded in many areas. The electrical system would be first to be fixed before restoring normal train operations.
About 300,000 troops and 1.1 million reservists were deployed to assist relief efforts and ice-snow removal across various parts of affected regions.
Airlift disaster relief goods by military aerotransport
Airlift disaster relief goods by military helicopters
Volunteer services in disaster-hit area
Temporary disaster relief station in disaster-hit area
About 60,000 bus riders were stranded at various highways.
Relief goods were distributed to stranded travelers including free water and foods.
Governments encouraged some travelers to abandon their travel plans and nearly half a million of them cancelled their trips after a lengthy waiting. 11 million migrant workers in the Guangdong province received ticket refunds alone.
National Policy on Disaster Relief Funds

Local government’s assistance + Self-support + Re-production + Social Donation → Central government’s assistance → Disaster Relief

The central government spent over RMB 6 billion yuan for local disaster relief operations.
At the central level, about 4700 tents, 1.9 million quilts (clothes), 2 million candles, 6500 flashlights had been sent to the disaster-hit areas.
At the local level, 2,084 tonnes of fast foods, 56,500 tonnes of grain, 2,066 tonnes of edible oil, 584,000 boxes of drinking water, 4,271 tonnes of coal, 4.31 million quilts, 5.57 million clothes were allocated to the disaster-hit areas.
As of Feb. 29, domestic and foreign donations had reached nearly RMB 3 billion yuan in cash and kind including food, medicine, quilts, coats and tents.
Governments spending on reconstruction had exceeded RMB 2.3 billion yuan, including 1.1 billion yuan from the central budget and 1.2 billion yuan from the local budget. About 200,000 households have finished rebuilding their dwellings, in addition, 1.48 million houses have been repaired.
Lessons from Disasters
1. Establishment of the national emergency plan for coping with large-scale disasters is a priority.
Disaster Relief Emergency Plan

Since 2004, the emergency plan system of disaster relief has been established in China. The State Council promulgated the National Emergency Relief Plan on Natural Disasters in 2005. So far, all of the provincial governments and most of county governments have promulgated the emergency plans of disaster relief.
2. To improve the capacities of disaster monitoring and early warning.
Early Warning System
3. To improve the emergency management capacity of governmental officials at various levels.
A Chinese adage: a good snow means a harvest in the coming year.
icy roads in Guizhou Province
The thickness of ice brick which covered roads’ surface reached 10 cm.
4. To established the national disaster relief funds for response to large-scale disasters.
5. To enhance the national reserve system of disaster relief materials.
6. To improve the capacity of disaster resistance of infrastructures, especially, focus on the systems of transportation, telecommunication and power supply.
collapsed iron tower of power supply
7. To improve the capacity of national emergency rescue, especially, the rescue equipments urgently need to be enhanced.
The freak storms hit warmer parts of China that have little experience with snow. Many communities lack necessary equipment to handle the heavy snowfall and ice.
The construction of emergency communication and commanding system on disaster relief.
Unmanned Aerial Vehicle (UAV) has also been used in disaster efforts so as to monitor disaster situation and collect information at larger-scale areas.
UAV ground control system
on the ground

from the sky
8. To formulate the household’s emergency plan for nature disasters.
Ensure victims’ basic living demands in the remote and mountainous rural areas.
Grain → Rice

- **Grain**
- **Rice**
- **No power supply**
9. To formulate the recovery plan of ecological system in disaster-hit areas.
About 18.6 million acres of forest were destroyed, including 6.8 million acres of bamboo, 11.5 million acres of wood and 15,000 acres of saplings.
damaged forest in ice-snow hit areas
10. To further facilitate the international exchange and cooperation in the field of disaster relief.
Thanks!