China National Report on International Decade for Natural Disaster Reduction

Appendix Three

NGOs and R&D Institutes in China

China Charity Federation

Donation Promotion

Founded in April 1994, China Charity Federation (CCF) is a non-governmental and nonprofit charity organization. Its mission is to help unfortunate individuals and groups of people in the society and to conduct various kinds of social relief relief work.

In 1998, severe disasters in Zhangbei-Shangyi area of Hebei Province and the basins of Yangtze River, Songhuajiang River and Nenjing River. In the same year, a strong earthquake happened in Zhangbei-Shangyi area of Hebei Province. 700,000 people suddenly became homeless. CCF appealed to the society and initiated the "98 first salvation action", which got great support from the society and some overseas charity organizations. Donation including cash, food and construction materials collected by CCF were quickly distributed to the quake-stricken area for restoring production and rebuilding the ruined houses and other welfare facilities.

In summer of 1998, severe floods swept the basins of Yangtze, Songhuajiang and Nenjiang rivers. CCF initiated the campaign of "98 Flood Relief Emergency Action", mobilizing our affiliate charity organizations in provinces to provide aid to sufferance. CCF , jointly with the National Federation of Commerce and Industry, All-China Entrepreneurs Association and All-China Individual Laborers Association appealed to their members for contributions. The National Federation of Commerce and Industrial had collected 850 million yuan RMB; All-China Entrepreneurs Association 800 million yuan RMB; and All-China Individual Laborers Association-nearly 700 million yuan RMB.

CCF had also developed its fundraising activities from routine solicitation to nationwide and worldwide media promotion. For example, CCF with China Central Television and other organizations sponsored a telethon called "Millions of People, All Having One Heart" to start a large-scale solicitation for donations to help the flood victims in August, 1998. Thereafter, two more benefit performances were organized together with Chinese People's Political Conference, the National Federation of Commerce and Industry and the central committees of the democratic parties with theme of "People in the Same Boat Help Each Other, Rebuilding Our Homeland" to collect money for flood relief.

The 1998 Flood Relief Emergency Action of CCF attracted attention of millions of people at home and overseas. Untill the end of 1998, CCF had raised a total of 627 million yuan RMB (365 million yuan in cash). Up-to-date 297 million yuan RMB of cash and 265 million yuan RMB worth relief materials had been allocated to ten provinces.

The CCF's major role in disaster relief is to raise fund and execute the disaster aid. To raise more money and to quickly and efficiently distribute to disaster victims are two important goals for our work. We also monitor the distribution process to make sure that contributions really reach the disaster victims. As always, to win the trust of both the donors and recipients, we stick to the principle of fairness, accountability and openess in our work, and guarantee that no single penny is lost or misused.

Donation

China Red Cross Society

Red Cross Society of China(RCSC) is a social relief and aid organization engaging in humanitarian work. Its mission is "to make preparations for disaster relief during natural calamities and emergencies, to offer relief and assistance to the sick, the injured and other victims".

The main tasks of RCSC are as follows:

- Making real-time disaster assessment and conducting relief activities based on the assessment.
- Sending medical teams to the disaster regions and providing epidemic prevention and treatment services to reduce mortality and prevent epidemic break;
- Carrying out legal fund-raising activities according to law;
- Managing donations from both domestic and international societies and helping the government move the victims to safer places;
- Special training for the victims to strengthen their self-rescue ability;
- Evaluating the relief work and reporting the necessary information;

To fulfill these tasks, RCSC established a nationwide Disaster Preparedness (DP) network and basic infrastructure

RCSC at all levels have carried out massive relief activities. From 1991 to 1998, RCSC had totally raised about 2 billion yuan RMB in cash and other kinds of relief materials. More than 100,000 medical teams were sent. About 50 million people benefited from RCSC's activities.

Distribute Relief Materials

Distribute Medicine

To improve disaster response capacity, RCSC drew up its own DP Preparedness work plan. Seven regional DP centers have been set up nationalwide. Some local DP centers with functions such as relief funds and material raising, manufacturing, warehousing, transporting and training were also setup.

RCSC will enlarge its humanitarian relief scope, combine the Red Cross community philanthropy relief projects with the handling of the hard issues of the rural and urban areas, and help government and the mass conquer the difficulties.

China Association for Natural Disaster Relief (CANDR)

Buliding Agriculture Infrastructure

Chna Association for Natural Disaster Relief (CANDR) is made up of relevant departments being engaged in natural disaster reduction. The aims of CANDR are to help Chinese government develop disaster relief and reduction, to help the poor and needy as well as to organize social donations.

CANDR's main tasks are to undertake the routine work of accepting, managing and allocating donations in kind and cash for natural disaster and social relief, to develop programs for natural disaster reduction, to organize the production, storage and transportation of disaster relief materials and donated goods, to conduct research on disaster reduction, and to make various international cooperation on natural disaster reduction.

CANDR organizes disaster relief works from general public at home and abroad. During the 1991's flood in the Yangtze River and Huai River valleys, the 1997 earthquake in Zhangbei county of Hebei Province and the heavy 1998's flood in the valleys of the Yangtze River, Songhua River and Nen River, domestic and international donations in cash totaled 600 million yuan RMB. Material donations amounted to more than 200,000 pieces. CANDR has implemented over 200 projects for natural disaster reduction.

Disaster Reduction Engineering Work

In recent years, CANDR has conducted the following projects:

1. Improving the subsistence environment of some natural disaster victims.

CANDR has implemented a project to build new villages in Sichuan, Shanxi, Yunnan and Jiangxi. Those villagers, who inhabited in low-lying land and areas prone to drought, earthquake, landslides and mud-rock flows, have moved to places with better environment of production and subsistence.

2. Undergoing disaster reduction engineering works.

Supported by different levels of governments, CANDR has conducted engineering works for sandstorm control and water-drinking in provinces/autonomous regions such as Ninxia, Guizhou, Hebei and Gansu. The project of enclosing and controlling desert in Zhangbei county of Hebei Province has slowed down desert expansion. The water diversion works completed in Dingxi area of Gansu province has fundamentally solved the water-drinking problem for local people.

3. Developing planting and aquiculture projects.

CANDR has helped farmers in south China such as Guangxi and Guizhou provinces to plant banana and citrus trees; and helped farmers in the northwest and northeast of China to raise cows and sheep. The poverty-struck households are provided with various support to develop planting and aquiculture. They also receive scientific and technical guidance in preventing plant diseases and insect pests, and assistance to go to market.

People's Insurance Company of China (PICC)

Staff of PICC are Surveying the Disaster Damage

The People's Insurance Company of China (PICC), the largest property and casualty insurer in China, provides a wide range of insurances and services except life insurance. Insurance compensation has played an increasingly important role in China's economic and social development in the last 10 years. PICC has paid indemnities up to 12 billion yuan RMB for damages caused by flood disasters in the 1990s. This huge amount of indemnity serves an crucial role in reviving production, rebuilding houses as well as maintaining the political, economic and social stabilization in the country.

PICC lays great emphasis on risk management and focuses on disaster/loss prevention through designing disaster prevention plan, carrying on the research of risk based on modern techniques so as to control risk occurrence and take proper counter measures for minimizing losses.

During the past decade, PICC has actively supported a number of public campaigns such as "Protection of Students' Safety Campaign" in 1993, "For Your Happiness" – a feature telefilm made in 1996, "Public Campaign of Fire Safety for National Youth" in 1998. In addition, PICC helped to publish the "Disaster Management Manual". PICC's participating in all these activities aims to educate citizens with disaster prevention/alleviation to remove the hidden peril of disaster and raise the whole society's capability to prevent and alleviate disaster.

PICC works together with academic and research institutions on multiple programs to explore the measures against disaster. The programs include "Study on Flooding in Huai River Valley and the Measures", "Research on Insurance Technology Against Disaster in Rural Area", etc. The "Regionalization of China Natural Disaster and Insurance" was conducted by PICC and the working

Compensating Victims

group from the State Planning Commission, State Science & Technology Commission and State Economy & Trade Commission. The work has achieved useful and practical results, which enable us to further understand the nature and mechnanism of natural disaster and improve the protection measures.

PICC has worked out a set of measures on non-engineering disaster alleviation.

- Increasing communication with meteorological, hydrological and flood-control agencies to exchange relevant information promptly;
- Establishing an in-house flood-control coordination network across or within the province;
- Implementing scientific management and seting up practical flood-control plan, maps of risks for flooding and waterlogging prevention;
- Making flood inspection and supervising the preparation works of insured companies;
- Working out plan for emergency, exercising rescue and relief work, determining the consequential losses scientifically and settling claims promptly;
- Drawing on the expenses of disaster prevention rationally to increase the capability of disaster prevention and loss prevention.

Through all above measures, PICC has successfully prevented some 800,000 tons of insured goods from the extraordinary flooding damage in 1998, saving insured property valued at 7.6 billion yuan RMB.

Research Center for Disaster Reduction of Ministry of Water Resources

The Ministry of Water Resources of China established the Research Center for Disaster Reduction (RCDR) in 1990. During the past decade, REDR has conducted a lot of researche projects on the basic theories of flood risk management and flood risk analysis techniques.

During IDNDR, RCDR edited and published a "Handbook of Flood Prevention and Mitigation for the Whole People". This handbook provides rudimentary knowledge and the initial results of flood risk research in China since 1980's. RCDR introduced to China advanced theories and methods of risk assessment and its application experiences from western countries by translating technical books and articals on natural hazards risk assessment and disaster mitigation countermeasures.

A flood simulation model with non-structural irregular grids has been developed by RCDR The model took advantages of both Finite Volume Method and Finite Difference Method to help hydrology, dynamics of silt sedimentation and flood control works. With the function of imaging display and operator-computer communication, results of flooding and silting processes can be shown on screen and the operator is now able to inquire the information during the calculation and to deal with the sudden accidents such as levee break. It has been used in the fields of flood predicting and forecasting, flood risk analysis, flood damage assessment, flood control planning and flood fighting decision support systems. RCDR combine flood numerical simulation, database and GIS to set up a flood risk information management system.

RCDR helped the Office of State Flood Control and Drought Relief Headquarters organizing the Flood Risk Map-making activities. RCDR was in charge of editing "A Guideline for Making Flood Risk Map" and "A Guideline for Flood Damage Investigation and Assessment". A lot of research work on historical features, variation trends of flood disasters have been done Results, such as the "Tentative Research on Flood Prevention and Hazard Reduction Strategies in 21st Century", "On the Historical Features of Flood Disasters in China", etc. have been published.

Computer technologies has been enhanced in the field of information management of historical flood hazards. There are historical records of flood and drought disasters for the past 2,000 years Combining the historical records and mathematical methods, a new way for regional flood risk assessment has been brought out. Several projects, such as "Quantization of Historical Flood Records and the Regional Flood Risk Analysis", "On the Chronicle of Ancient Natural Disasters and Abnormal Phenomena in China", "Theoretic Approach on the Historical Model and Its Research Methods" have been completed.

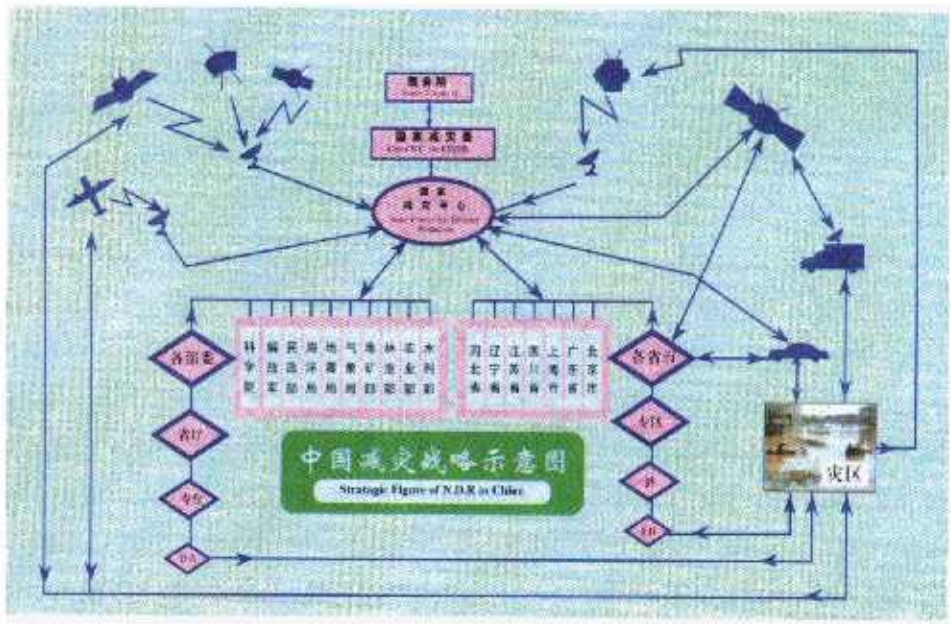
Remote Sensing Technology Application Center of Ministry of Water Resources

The Remote Sensing Technology Application Center of the Ministry of Water Resources was setup in 1980. The flood disaster monitoring is its main task. Since 1985, flood monitoring and assessment by means of remote sensing have been widely carried out in the Songhuajiang, Nenjiang, Liaohe, Haihe, Huanghe, Changjiang, Pearl River Basins, Taihu Lake and its surrounding area where floods occurred frequently, especially the flood occurred on Liaohe River in 1987, flood on Huaihe River in 1991, flood on West River, branch of the Pearl River in 1994, flood on the Changjiang River and the Nenjiang River in 1998. Because traffic and communication are usually difficult to get through during flood seasons, remote sensing can play an important role that other measures are not able to do. It can provide latest information of inundated area to decision makers on time. With the accumulation of data, it plays an important role to study regularity of flood occurrence, to work out flood prevention planning and operation alternative of flood diversion basins, and to reconstruction destroyed water projects due to flood.

To monitor floods, information from different sources, i e data from high resolution and low resolution, and from visible, infrared and microwave sensors, are combined A three-step procedure is conducted. At first, it is based on dynamic and low resolution observations from meteorological satellites. It is used as prewarning for whole country and forecasting precipitation together with the observations on ground surface. Secondly, middle resolutions observations from spaceborne SAR can be obtained in 48 or 72 hours and are used for monitoring the area with serious flood disaster. Finally, high resolution observations from a real-time transmission system of airborne SAR is used for monitoring the destroyed areas.

The application of remote sensing has now been developed from purely monitoring to the combination of monitoring and assessment. For flood disaster assessment, the first stage is the initial disaster assessment compeleted in 48 hours after obtaining remote sensing data. The results are the image after processing, the inundated area, inundated cultivated land area and resident area of each county, thematic maps, as well as analysis report. The second stage is on the basis of all data obtained during flood season. A report on flood disaster monitoring for the whole country is then written for each county in China.

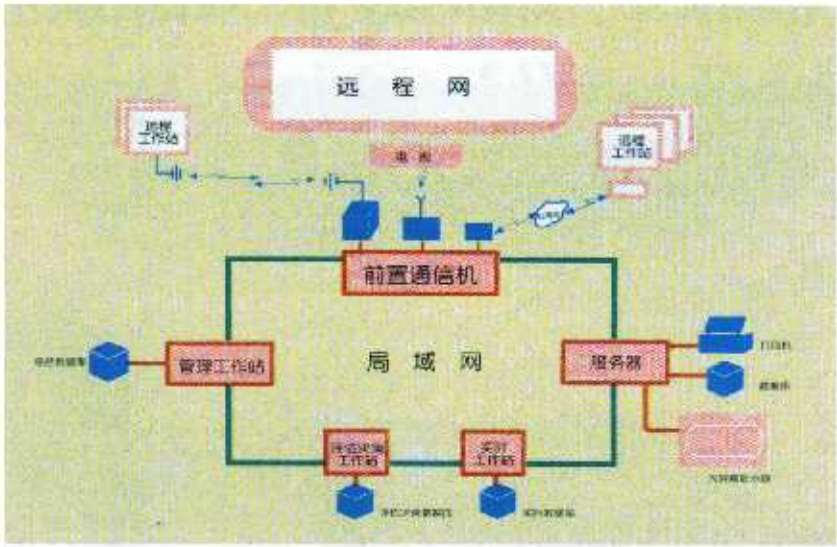
The Center for Disaster Reduction Chinese Academy of Sciences



China Disaster Reduction Center

The Center for Disaster Reduction, Chinese Academy of Sciences is an union of scientific and technological research of over forty Institutes which are engaged in the study of disaster reduction for long time. The Center engages specially the study of science-technology and strategy on disaster prevention and reduction, and to promote modern disaster reduction in China and all World.

CDRCAS consists of over forty Institutes, for example Institute of Atmospheric Physics, Institute of Remote Sensing Applications, Institute of Geography, China Satellite Remote Sensing Ground Station, Institute of Geology, Chengdu Institute of Mountain Disaster and Environment, Institute of Oceanology in Qingdao, Institute of Zoology, Institute of Biophysics, The University of Science and Technology of China, Institute of Systems Science and so on. The Center have eight Academicians, more than one hundred professors, and more than thousand scientists and engineers on the disaster prevention and reduction. The Center is one of the largest and actual most strengthening union on disaster prevention and reduction in China and all World The Center established Academic Committee of CDRCAS, Nanjing Branch Center, North-Western Branch Center, Marine Branch Center, Branch Center for Man-made Disaster and Biological Professional Committee of CDRCAS etc. The Director of this Center is Prof. Wang Ang-Sheng, who awarded world award— UN Disaster Prevention Award and he is the Director of Experts Group of China National Committee for IDNDR.



Synthetic Information System of Disaster Reduction

The aims and tasks of CDRCAS are that by making full use of the advantages of disaster prevention and reduction in CAS such as long history, multiple subjects, rich advanced technology, strong research theory, and comprehensive coordination etc. actively partaking in the synthetic, ahead, high scientific and technological tasks of China government and UN system and other union; and contribute our efforts to disaster prevention and reduction for China and all World.

During the recent many years, The Center presented strategic suggestion on modern disaster prevention and reduction for china government; promoted to establish " China Center of Disaster Reduction"; actively partook and finished " National Report of the People's Republic of China on Natural Disaster Reduction ", "China Plan on Disaster Reduction" and " China Decade Report on Disaster Reduction" etc; to organize and finish "Atmospheric-Hydrosphere Synthetic Scientific System on Disaster Reduction", "Remote Sensing System on Disaster Reduction " etc. important scientific and technological programs; to cooperate with UN IDNDR, UNDP and World Bank etc., to study basic theory on Disaster Reduction; to present new suggestion of " China Modern Setup of Disaster Prevention and Reduction" and so on. The Center made himself contribution for China and all World. So, as the represent of the Center, Prof. Wang Ang-Sheng, the Director, awarded UN Disaster Prevention Award in 1998.

The Center of Disaster Reduction of Chinese Academy of Sciences is willing to cooperate sincerely with all countries in the world, all organizations and all union, and contribute our efforts to disaster prevention and reduction for China and all World.

China Association for Science and Technology

China association for science and technology (CAST) is a mass organization for scientists and engineers, comprising 163 national scientific and engineering societies and associations at all levels. Over the past decade, CAST has organized specialists and scholars to conduct an comprehensive investigation on mechanisms and characteristics of all kinds of disasters in China and their interactive relations, as well as the countermeasures and measures for the disaster relief and prevention.

The CAST hosted three national-wide academic conferences for the natural disaster relief in 1990.1992 and 1998. Specialists and scholars discussed on issues such as the monitoring, predicting and evaluating of disasters, measures for disaster prevention and rescue, legislation, etc. They reached a common cognition that all kinds of natural disasters do not happen independently but in the form of a Disaster Chain effect among the underground, the surface and the air. They also concluded that the further research of the interaction among all the spheres of the earth and the interactive mechanism among various disasters should be paid more attention in the future disaster science research.

In 1991, a severe flood calamity occurred in Jianghuai region. CAST successively organized 16 national associations to make on-the-spot investigations of the damage caused by waterlogging in the Huai river and the Tai lake valley, bringing up ten strategic countermeasures for disaster relief in Jianghuai region.

Workshop on Disaster Reduction