

Chapter Five International Cooperation in Disaster Reduction

Section 1 China's Positive and Responsible Attitude towards International Cooperation in Disaster Reduction

Natural disasters, being a kind of serious constraints on socio-economic development, are a great challenge to the international community. Disaster reduction is a great undertaking which is a basic policy that has great bearings on people's livelihood and the prosperity and wellbeing of a country, and which serves the interests of future generations and, indeed, of mankind as a whole. Therefore, reduction of the adverse impacts of natural disasters is a common responsibility of humankind and calls for the concerted efforts and close cooperation of all nations.

The Chinese Government has always attached great importance to the international cooperation in disaster reduction and is deeply aware of her obligations as a member of international community, accounting for 1/5 of the world's population and encompassing a vast territory. China's historical, geographical, cultural and socio-economic conditions make it possible for her to play a unique role in international disaster reduction activities:

— Most parts of China are located in the joint areas between the two regions where natural disasters of various types occur, with very high frequencies. These being rather typical in the world, offer a best venue for conducting study of natural hazards.

— China is densely populated and her national economy is in the stage of accelerated development. For many years, with relatively limited financial input, China has been engaged in disaster reduction and have accumulated substantial experience in promoting what is beneficial and minimizing what is harmful caused by natural disasters, thereby promoting the nation's sustained socio-economic development. Such experience can be of some value to other developing countries, especially to those in Asia.

— Having a very long history, China has in store a wealth of disaster-related information in her various historical documents. A thorough screening and analysis of such historical information will provide valuable information sources for discovering the objective laws

governing the occurrence and trends of natural disasters, and provide some scientific basis for predicting the relevant disasters in the Asian and Western Pacific-rim region.

China has scored tangible achievements in disaster reduction which have won the attention of and favourable comments from the international community. China is ready to introduce her relevant experience to other countries and to strengthen cooperation with them in disaster reduction. Meanwhile, as a developing country, China is aware of the gap between her state-of-art and that of developed countries. And China is ready to learn from the advanced experience, effective management and methodologies, and advanced technologies from other countries in disaster reduction. True, China's disaster reduction undertakings will, as always, depend primarily on her own efforts. However, as a developing country with a vast population, extensive disaster-stricken areas, and with natural disasters occurring frequently and bringing heavy losses—a developing country which is still at an initial stage of national economic development, China needs international cooperation in respect of preventing natural disasters and reducing their damage. Through such international cooperation, China hopes to make new contribution to the global disaster reduction undertakings in the interests of mankind as a whole.

Section 2 China's International Cooperation in Natural Disaster Reduction

1. History and Current Activities

The cooperation relating to disaster reduction between China and relevant UN organizations and agencies dated back to 1972 when China restored her legitimate seat in World Meteorological Organization(WMO). Since 1977, following China's participation in UNESCO Intergovernmental Oceanographical Committee(IOC) and Hydrological Programm, China's international cooperation in disaster reduction has been unfolded extensively.

— In mitigating drought, 13 large-scale agricultural water-conservancy projects have been implemented by using the 1.3 billion dollar loans from the World Bank.

— In mitigating damage from earthquakes, in cooperation with World Bank and UNDP, a number of seismic-monitoring networks and experimental sites, have been established, including the project on the Upgrading of Seismic Network in the National Capital Area.

— In forest-fire prevention, with the financial support from the Canadian Government and loans from the World Bank, a modern fire-prevention system in northeastern China to harness forest fires has been established.

— In disaster relief, from 1988 to 1989, China on the one hand donated 7 million *yuan* to more than 40 developing countries through World Meteorological Organization. On the other hand China has dispatched experts to some requesting countries to help formulate disaster reduction plans, and has participated in the Integrated Global Ocean Services System (IGOSS) and Global Ocean Observation System (GOOS), and has hosted quite a few workshops and conferences on natural disaster reduction.

— In prevention and control of crop diseases and pests, FAO cooperated with China in implementing the 1988 approved project on the Integrated Pest Management(IPM) of rice diseases and insect pests, involving the training of 60000 farmers in 14 counties of 9 provinces from 1989 to 1991. And as a result, about 158000 farmers have been mobilized to join in the IPM activities.

2. New Progress in International Cooperation

Since its establishment in 1989, CNCIDNDR has regarded the promotion of international exchanges and cooperation in disaster reduction as an important aspect of its work, with emphasis on non-engineering undertakings, such as the study and programming of comprehensive disaster reduction and the disaster relief relating to major natural hazards.

— Since 1989, while increasing China's participation in comprehensive international conferences and meetings on natural disaster reduction held abroad, China has hosted 21 large-scale conferences on disaster reduction. These have not only helped China to know more about the new progress and new experience in international IDNDR activities, but have enabled China to make her share of contribution to the IDNDR.

— Following the occurrence of severe flood in eastern China in 1991, the Chinese Government for the first time in history appealed to the international community for urgent relief assistance, and received considerable donations of funds and relief-supplies from more than 60 international organizations and foreign countries, as well as from Hong Kong and Macao.

— China has in recent years obtained loans from the World Bank for flood control and for river harnessing and management in some lesser river valleys.

Section 3 China's Principled Position on Strengthening International Cooperation in Disaster Reduction

The Chinese Government holds that international community should further strengthen cooperation in disaster reduction. While making concerted efforts in mitigating natural disasters, it is necessary to take into account the following basic principles:

— It is essential to closely integrate disaster reduction with socio-economic development. Only by mitigating the negative effects of natural disasters in the course of development, can national economic construction achieve optimal benefits. And, only with progress in socio-economic development, can mankind enhance their overall capability in preventing and combating natural disasters.

— National effort at disaster reduction should be combined with the disaster reduction activities of the relevant region or subregion. As some disasters tend to affect many countries and region, it is hardly possible for one individual country or region to effectively mitigate such disasters. Therefore, to carry out international cooperation in disaster reduction in the relevant regions or subregions is of great importance to both the global programme and the national activities on natural disaster reduction.

— Disaster reduction should primarily depend on self-reliance and national efforts, however, intensified international cooperation is vital, especially to developing countries, whose economies are not well-developed, whose science and technology levels are generally backward, and who are caught in the vicious circle of backwardness and heavy losses caused by frequent natural disasters usually of a trans-boundary magnitude. Therefore, developed countries and international organizations/agencies should provide the requisite assistance to help the developing country in disaster reduction and to promote their socio-economic development. This is in the interests of both the developing and the developed countries.

— The national policy, programme and priority in disaster reduction formulated by each country must be fully respected. As countries differ in national conditions, economic development level, cultural background and historical traditions, it is a country's sovereign

right to decide on her own disaster-reduction policy and priorities in accordance with her country-specific conditions and the realities of her socio-economic development. And this sovereign right, too, should be fully respected.

Section 4 China's Expectation for World Conference on Natural Disaster Reduction and the IDNDR

1. World Conference on Natural Disaster Reduction

China actively supports the convening of the World Conference on Natural Disaster Reduction in Yokohama, Japan in May 1994. In China's view, the convening of the Conference, which reflects the great importance attached by the international community to the issue of disaster reduction, will have a far-reaching impact upon both the disaster reduction undertakings of the world and socio-economic development. And China hopes that the Conference will meet the following expectations:

— The Conference will reach a common understanding on natural disaster reduction and development, and will adopt a document which fully reflects the views of all parties and which will provide guidance to international disaster reduction undertakings and development for the coming five years.

— Practical international cooperation in disaster reduction will be intensified. In this connection, developed countries will provide substantial financial resources and technological assistance to help developing countries mitigate natural disasters, will adopt practical measures to improve the international economic environment which has been unfavourable to the developing nations, and will assist the latter in their efforts at socio-economic development and S & T advancement, so as to substantively help enhance their capability in preventing and mitigating natural disasters.

— Relevant international organizations/agencies should play even greater roles in international disaster reduction. Coordination and cooperation among them and with the disaster-affected countries should be strengthened and work efficiency should be further raised.

The Chinese Government has attached great importance to this conference. China has taken

part actively in the preparations for the Conference and has set up the national preparatory group for World Conference on Natural Disaster Reduction, with the participation of CNCIDNDR, State Planning Commission, State Economy and Trade Commission, Ministry of Civil Affairs, Ministry of Foreign Affairs, Ministry of Finance, Chinese Academy of Sciences, State Seismological Bureau etc. to coordinate the relevant work, with the cooperation and help of other departments concerned.

2. IDNDR

Since UN adopted its Resolution on launching the IDNDR in 1988, the international community has made notable progress in both awareness of and practice in disaster reduction. Whether a good job can be done to implement IDNDR in the remaining years of this century is an issue which has direct bearings on whether there will be a good beginning of world disaster reduction undertakings in the 21th century. In this context, our hopes are inter alia the following:

— Recognizing that natural disaster reduction calls for concerted actions of the world, the IDNDR Committee and developed countries should give priority consideration to increasing their financial support and technological and equipment assistance to developing countries.

— Global or regional funds for disaster reduction can be established through the joint contributions from relevant UN agencies and developed countries.

— It is hoped that IDNDR Committee can promote and facilitate the exchange and sharing of management expertise and of relevant science and technology, and set up a Disaster Reduction Information Center for the Asia-Pacific Region;

— IDNDR can initiate the establishment in China of some international demonstration projects on disaster reduction, so as to promote further development of disaster reduction undertakings.

Chapter Six China's Disaster Reduction Programmes

Section 1 China's National Goals and Strategies of Disaster Reduction

1. National Goals of Disaster Reduction

— Minimizing economic losses, human casualties from natural disasters and their adverse impacts upon national economy and social development.

— Formulating the overall national and key regional programmes for disaster reduction, increasing the financial input, and implementing part of the programmes as appropriate.

— Setting up a national comprehensive management and coordination mechanism for disaster reduction to improve the nation's disaster management system.

— Improving and further developing the disaster monitoring, warning and telecommunication system for the nation and key regions to further enhance the capability of contingency response.

— Setting up comprehensive analysis and assessment system at the national level for key regions; improving the capability of collecting, processing and transmission of disaster related information; improving the disaster-related data base at the national, local and sectoral levels.

2. China's Strategy of Natural Disaster Reduction

— The guiding principle of China's strategy to mitigate natural disasters is: in the light of China's country-specific conditions and proceeding from the need to promote sustainable economic development and social stability, to minimize losses and human casualties caused by natural disasters.

— Increasing the financial input for disaster reduction and enhance the comprehensive

ability of the government in disaster reduction management through appropriate institutional and financial support.

— Implementing a number of key projects and integrated pilot projects in areas that are of great significance to national economic development and social progress, focusing on those categories of natural disasters which are capable of causing severe losses.

— Mitigating natural disasters by relying on application of relevant science and technology.

— Further expanding mass education in disaster reduction and publicity in this regard.

Section 2 Action Plan for the Second Half of the Decade

Adhering to the principle of "Promoting what is beneficial and minimizing what is harmful", and the step-by-step approach "from the easier to the more difficult", China is ready to continue taking part in relevant activities for the second half of the decade-IDNDR.

1. Non-engineering Undertakings

— On the basis of the experience gained over the first half of the Decade, continuing to incorporate disaster reduction into the overall national plan for socio-economic development, and to increase financial input for disaster reduction progressively in pace with the progress in national economic development.

— Setting up a national center on natural disaster reduction to conduct comprehensive analysis and assessment of the nation's various types of natural disasters.

— Establishing step-by-step more than 10 national and provincial education and training bases as well as 10 demonstration models across the country.

— Formulating laws and regulations on disaster reduction and further raising public awareness of disaster reduction.

— Developing and improving disaster related information collecting and processing systems

and the comprehensive satellite application system, developing the dissemination system of disaster warning.

— Carrying out geological pre-disaster survey in the big cities and zonal construction areas of the eastern coastal region; and conducting disaster survey and research into response measures in regions prone to severe geological disasters.

— Conducting research into technologies on seismic isolation, mitigation and control, and promoting their application.

2. Engineering Construction

— Continuing with the construction of physical infrastructure in water conservancy and sea-dike, such as the large-scale water-conservancy key engineering projects at the Three Gorges of the Yangtze River and Xiaolangdi of the Yellow River as well as the comprehensive flood-control engineering works of the Huaihe River and Taihu Lake catchment area.

— Raising the capability of flood prevention and seismic resistance in urban areas.

— Raising the comprehensive disaster prevention capability in large and medium-sized enterprises.

— Bringing major geological disasters under comprehensive prevention and control.

— Raising the overall control areas free from crop disease and pests from the current 10% to 20% in the field of agricultural production (of paddy, cotton, vegetables, etc.), from 40% to 60% in the case of forest, and from 21% to 35% in the case of grasslands.

— Completing the on-going construction of the 5 shelter-forest systems by an increase of 15 million *ha* of additional afforestation, expanding the acreage of grass-planting to a total of 13 million *ha*, expanding the area of desertification prevention and control by 4 million *ha*, increasing the Taihang Mountains Greening Projects (additional tree-planting and grass-planting) by 3 million *ha*, and basically implementing the programme whereby the fire-brigades in forest areas and grasslands will be staffed with trained professionals and will be well-equipped.

Section 3 Priority Areas of International Cooperation in Natural Disaster Reduction

1. Re. Basic Study on and Implementation of Natural Disaster Response Measures:

- Study of the impacts of natural disasters on China's economic and social development;
- Formulation of the nation's integrated disaster reduction programme;
- Establishment of a national center for natural disaster management;
- Establishment of the National Data Base on Natural Hazards.

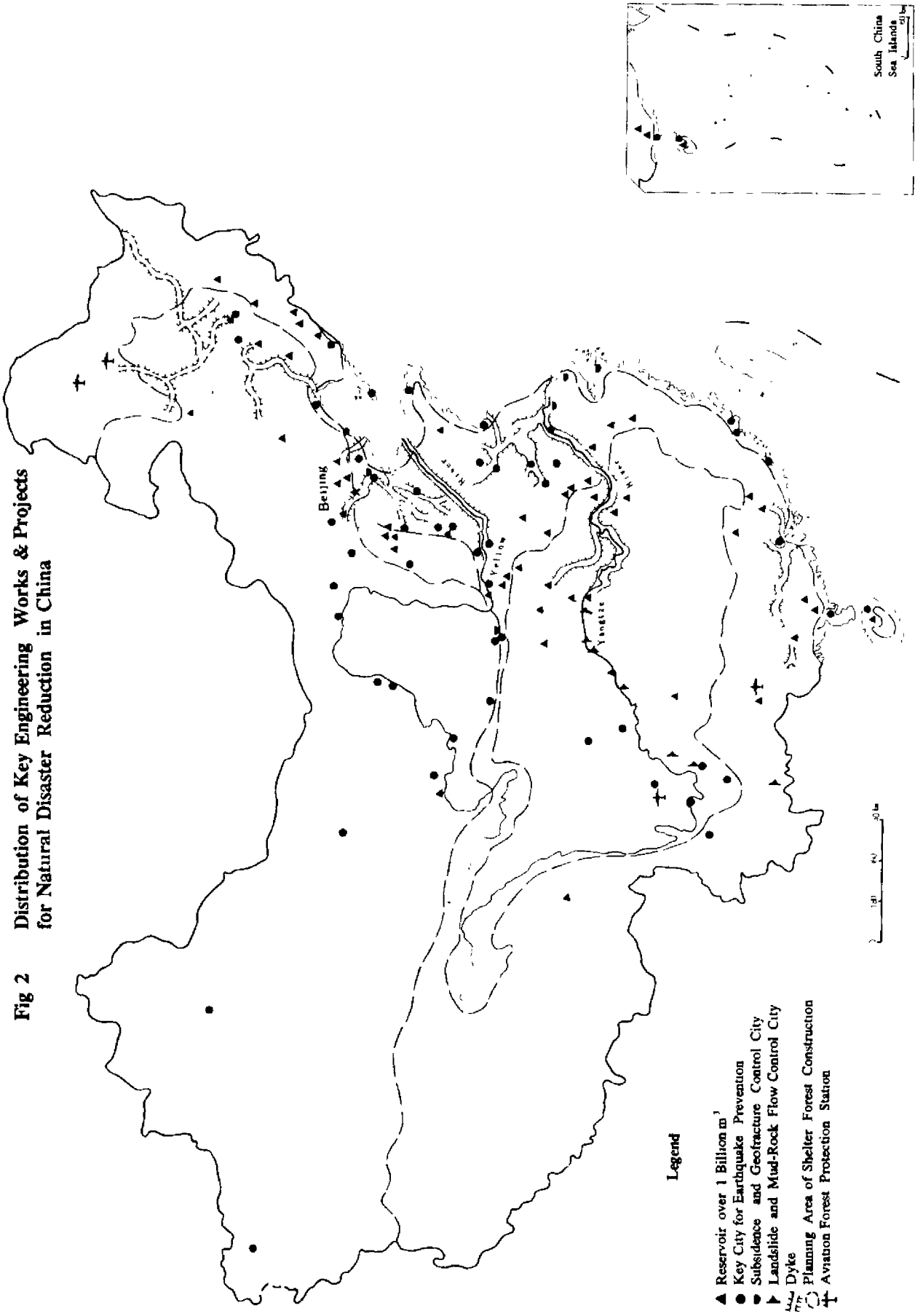
2. Re. Education and Training for Natural Disasters in China and the Asia-Pacific Region:

- Formulation of plans for education and training programme in China and the Asia-Pacific Region;
- Establishment of a training centre on disaster reduction for China and the Asia-Pacific Region;

3. Formulation of Demonstration Projects on Disaster Management at Provincial, Prefecture and County Levels;

4. Joint Cooperative Plan for Observation and Warning of Natural Hazards with Asia-Pacific Countries and the International Community as a whole.

Fig 2 Distribution of Key Engineering Works & Projects for Natural Disaster Reduction in China



Legend

- ▲ Reservoir over 1 Billion m³
- Key City for Earthquake Prevention
- ◐ Subsidence and Geofracture Control City
- ▶ Landslide and Mud-Rock Flow Control City
- ▬ Dyke
- ⊖ Planning Area of Shelter Forest Construction
- ⊕ Aviation Forest Protection Station

0 100 200 300 km

South China Sea Islands

Fig 1 Distribution of Central Places for Major Natural Disasters in China (1900-1992)

