

Korea Country Report 1999

Ministry of Government Administration and Home Affairs

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I . Disaster Prevention and Preparedness Activities

1. Implementation of Disaster Prevention and Preparedness in 1999

To reduce the loss of life, property damage, and economic hardship caused by natural disasters such as floods and windstorms during the rainy season, the Korean government has designated the period from March 1 to May 31 in 1999 as the "Disaster Preparedness Period." Several action plans were put into practice during this period.

1) Inspection and Maintenance of the Disaster-Prone Areas

Inspecting and maintaining 399 Disaster-Prone Areas susceptible to inundation, collapse, or isolation by typhoons and floods.

2) Inspection and Maintenance of Large-Scale Construction Sites

Preparing the "Disaster Preparedness Plan" and assigning government officials to monitor 1,004 large-scale construction sites (\$5 million or more) such as subways, golf courses, dams, etc.

3) Inspection and Maintenance of Disaster Prevention Facilities

Inspecting and repairing 5,818 disaster prevention facilities including retaining walls, embankments, reservoirs, etc.

4) Securing Equipment and Facilities for Emergency Countermeasures

Equipment and facilities for emergency countermeasures have been secured according to need averaged over the last ten years.

5) Special Fund for Natural Disaster Countermeasures

The total of \$203 million (from 1997-1999) has been allocated in 16 cities and 232 districts for pre-disaster prevention activities and emergency recovery during severe natural disasters.

2. Disaster Prevention Education, Drills, and Public Relation

1) Disaster Prevention Education

42,984 staff members were educated from March 29 to May 14 of 1999 to enhance their ability to cope with natural disasters. The program included planning, managing critical situations, reporting damage, working on recovery plans, and studying relevant laws.

2) Emergency Drills and Practice

In order to enhance the prevention and rapid response to disasters, exercises under computer-simulated disaster conditions, a comprehensive exercise for disaster prevention, and emergency drills specific to each region were carried out with community residents and related organizations during the period from May 12 to May 14 in 1999.

a) Exercise under computer-simulated disaster conditions

To develop the ability for managing disasters, the exercise under computer-simulated disaster conditions by various related was carried out from May 12 to 14 in 1999.

b) Comprehensive exercise for disaster management

On May 25, 1999, a comprehensive exercise for disaster management was carried out at the Sumjin River basin under a simulated condition of a hit by a typhoon with the intensity of Typhoon YANNY (July 1998). The program of drills included life saving, emergency relief, recover measures, etc.

c) Emergency drills specific to each region

Local governments carried out their own emergency drills for conditions that are specific to their own regions on May 15, 1999.

To cope with earthquakes effectively, the government carried out an exercise under computer-simulated earthquake conditions on April 15, May 14, and September 15, 1999.

3. Public Relations for Disaster Prevention

Korea has designated May 25 as "National Disaster Prevention Day" to promote the public participation and awareness of disaster prevention.

The main events for the "National Disaster Prevention Day" are inspection of disaster prevention facilities and equipment, drills, a campaign for disaster prevention, photo display of disaster stricken areas and their recovery processes, and a contest for disaster prevention posters

4. Implementation of the Disaster Prevention Plan

To cope with disasters which are taking more diverse forms and larger in scale, the government has formulated the Basic Five-Year Disaster Prevention Plan and the Yearly Disaster Prevention Action Plan.

During the Fifth Basic Disaster Prevention Plan Period (1997-2001) the government will funnel more than about \$26 billion to 22 key areas such as afforestation, flood control, disaster prevention, technology development, etc.

Consistent with this plan, the government has invested more than \$4 billion to 22 key items in 1999.

5. Risk Assessment Evaluation System of Disaster Impact (RAESDI)

The *RAESDI* is designed to protect lives and property in downstream areas from the impact of large scale development.

Since the RAESDI was introduced in 1996, a total of 62 projects has been scrutinized by the end of August 1999. The result of deliberation was as follows; 53 projects approved, one project rejected, and 8 project drafts analyzed.

6. Implementation of Improvement of Disaster Prone Areas

Korea identified 399 sites most susceptible to inundation, collapse, and isolation by typhoons and floods, and labeled them as Disaster Prone Areas. A total of \$1.1 billion will be invested for wide-ranging improvements from 1998 to 2002.

Under this plan, \$30 million was invested to improve 44 disaster prone areas in 1998, and \$197 million is being invested to 108 areas in 1999.

7. Implementation of Improvement of Safety of Small Rivers

Small rivers in Korea are vulnerable to overflow and one of the main causes of flooding. Thus, from 1995 to 2016, 25,684 km is earmarked for improvement with the investment of more than \$9.5 billion. The first step is to refurbish 4,450km from 1995 to 2004 at the cost of about \$2.1 billion.

In 1999, 287 small river sites totaling 200km were refurbished at the cost of \$67 million.

8. Management of Disasters in 1999

The Korean government has designated the period from June 15 to October 15 as the "Disaster Countermeasures Period" and Korea National Disaster Prevention and Countermeasures Headquarters (KNDPCH) and competent local authorities are prepared to manage possible disasters during this period 24 hours a day.

During the period from July 31 to August 4, 1999, typhoon OLGA and heavy rainfall occurred due to climatic disturbance caused by a humid air inflow from the south and high pressure from the northern Pacific.

9. National Institute for Disaster Prevention

National Institute for Disaster Prevention (NIDP) was established on September 2, 1997 to conduct systematic and scientific research in the field of disaster prevention.

NIDP has spearheaded 17 research projects such as 「Development of Guidelines for Design of Flood Storage Reservoirs」, 「Study on the Development of the Flood Insurance Program」, 「Basic Study for Establishment of the Small River Design Guidelines」, etc.

NIDP is currently involved in 16 research projects such as 「Analysis of Water Management Effect based on the Disaster Impact Assessment」 and 「Effective Methods for Disaster Damage Estimation」.

10. Korea Disaster Prevention Association

The Korea Disaster Prevention Association has been established to strengthen the nation's capability to prevent disasters and to stimulate exchange of information on March 9, 1999.

It has 10 basic missions such as exchange of information with other research institutions at home and abroad and conducting academic symposiums, publication of relevant data, increasing public awareness, and delegating work related to disaster prevention

II. Disaster Statistics (Sep. 1998 - Aug. 1999)

1. Summary

During the period of September to December in 1998, 57 people died and \$229 million worth of property damage was incurred due to typhoons.

During the period of January to December in 1999, 79 people died and approximately \$886 million worth of property damage was incurred due to four major disasters (blizzards in January and heavy rains and typhoons in August).

Hence, during the period from September 1, 1998 to August 31, 1999, the total damage caused by five natural disasters was 136 casualties and \$1.115 billion in property damage. (Detailed damages are given in Table 1).

2. Reports on the Damage Caused by Typhoons and Floods

<Table-1> Total Damages caused by Natural Disaster during the Period from Sep. 1998 to Aug. 1999

Classification	Units	Sep.- Dec., 1998	Jan. - Aug., 1999	Total
Casualties (Dead or Missing)	Person	57	79	136
Displaced Person	Family/ Person	1,261/ 4,827	7,060/ 25,428	8,321/ 30,255
Farmland Lost or Buried	ha	982	3,925	4,907
House Destroyed or Damaged	Unit	308	1,913	2,221
Property Damage	U.S. \$ million	229	886	1,115