## c. Earthquake Disaster Countermeasures in the Southern Kanto Region

### 【事前対策】(Preventive measures)

### (南側東地域直下の地震対策に関する大綱)

Points outlining the basic policy on earthquake countermeasures:

① 地震に強い南関東地域の形成

Formation of the Southern Kanto Region, an area highly resistant to earthquakes.

② 応急対策の備え

Preparation for emergency measures.

③ 地震危険性の特に高い地域の対策

Establishment of measures for highly dangerous zones by earthquakes.

④ 総合的な災害応急能力の向上

General improvement of ability to respond to earthquakes

⑤ 南関東地域に集積する特殊な機能に対する配慮

Taking into consideration the unique functions concentrated in the Southern Kanto Region.

⑥ 地域防災に関する調査研究の推進と成果の防災対策への活用

Promotion of survey research on disaster countermeasures and application of results when formulating countermeasures.

⑦ 对策の効果的な推進

Effective implementation of countermeasures

### 【災害応急対策】(Emergency disaster measures)

#### (南関東地域震災応急対策活動要領)

"Guidelines for Emergency Countermeasure Activities against Earthquake Disasters in Southern Kanto Region" 地震発生時に各関係機関が行うべき応急対策活動の内容とその手順を定めたもの

Points that set out the duties the various agencies and authorities involved are to carry out during earthquakes:

① 情報・広報活動

'Gathering and disseminating information.

② 緊急輸送のための交通の確保・緊急輸送活動

Securing the means for and providing emergency transportation.

③ 救助·救急·医療活動

Providing rescue, first aid and medical treatment.

④ 食料、飲料水及び生活必需品の調達、供給活動

Procuring and supplying food, drinking water and the basic necessities of daily life.

⑤ 応急収容活動

Providing emergency housing.

⑥ ライフライン施設の応急対策活動

Emergency measures to provide lifeline facilities

⑦ 保健衛生、防疫、遺体処理活動

Maintaining sanitation, preventing epidemics and handling corpses.

⑧ 二次災害の防止活動

Preventing secondary disasters.

⑨ 自主的支援の受入れ

Coordinating volunteer aid.

⑩ アクションプランの作成が必要となる課題の提示

Proposing challenges that require an action plan

#### 〔アクションプラン〕

応急対策の分野ごとに実践的な対応パターンを構築する

#### [Action Plans]

These establish practical response procedures for each area covered by an emergency measure.

輸送路、輸送拠点を含めた輸送ネットワーク

Transportation networks consisting of routes and bases

● 輸送拠点(特に広域的な輸送拠点)

Transport bases (over wide areas)

● 傷病者の搬送を含めた医療活動

Medical activities (including moving the wounded)

● 仮設住宅の建設場所

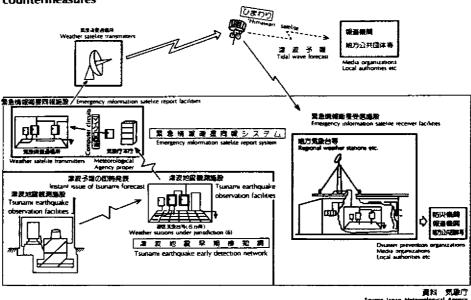
Areas for setting up temporary housing

● 帰宅困難者に係る対策

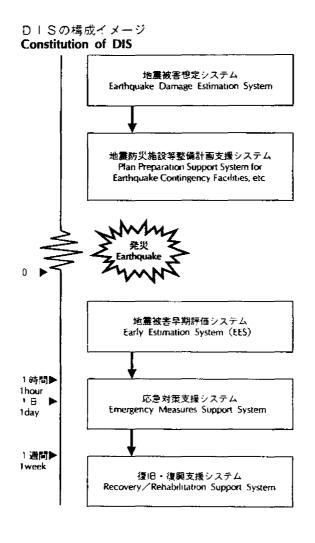
Measures for those facing difficulty in returning home

# d. Tidal Wave Countermeasures

# Arrangement of an emergency information infrastructure for tsunami countermeasures



# e. Disaster Information System



- 7. Countermeasures against Storms and Floods
  - a. Improvement of Meteorological Observation and Warning System
  - b. Promotion of Comprehensive Flood Control Measures
  - c. Promotion of Landslide Disaster Countermeasures
  - d. Promotion of Seashore Conservation

# PROMOTION OF COMPREHENSIVE FLOOD CONTROL MEASURES

For the rivers, flood control projects are systematically promoted according to the 9th Flood Control Project Seven Year Plan which started in 1997, with emphasis on the development of safe social infrastructure, risk management against the flood exceeding the designed level, etc.

# IMPROVEMENT OF METEOROLOGICAL OBSERVATION AND FORECAST AND WARNING SYSTEMS

To prevent the storm or flood damage or to reduce the damage, it is important to know exactly and as soon as possible the meteorological conditions including typhoon, depression and front activities causing such damages, precisely forecast the influence and promptly announce and disseminate the forecast and warning. For such purposes, the Meteorological Agency has been conducting meteorological observation with meteorological radar, meteorological satellites and meteorological observation instruments distributed throughout the country and, based upon such data, announcing forecasts and warnings. The information of the river waterlevel and rainfall amount in basins is provided by the river/basin comprehensive information system and is used extensively.

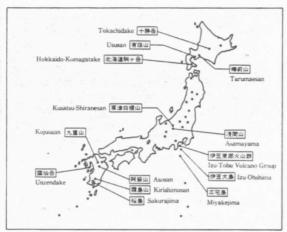
### PROMOTION OF SEASHORE CONSERVATION

To prevent disaster or seashore erosion due to high tide and tsunami, improvement of seashore conservation facilities and the seashore environment are systematically carried out according to the 6th Seashore Projects Seven Year Plan with 1996 as the first year.

### 8. Volcanic Disaster Countermeasures

- a. Improvement of Volcanic Activity Observation and Investigation System
- b. Countermeasures upon Active Volcano Disaster Countermeasures Special Measures Act
  - 1) Improvement of evacuation facilities
  - 2) Improvement of disaster prevention farming facilities
  - 3) Improvement of volcanic ash control facilities
  - 4) Volcanic ash removal
  - 5) Promotion of forest conservation and erosion control projects

### 火山分類地図 Classification of volcanos



- 注: 「別人だ13火山が「活動的で特に重点的に觀測研究を行うべき火山」。それ以外の24火山が「活動的火山及び潜在的爆発活力を有する火山」である。
- note: Volcanos which are active and for which observation and investigation be made selectively, others active volcanoes or volcanoes having explosion potential

# IMPROVEMENT OF VOLCANIC ACTIVITY OBSERVATION AND INVESTIGATION SYSTEM

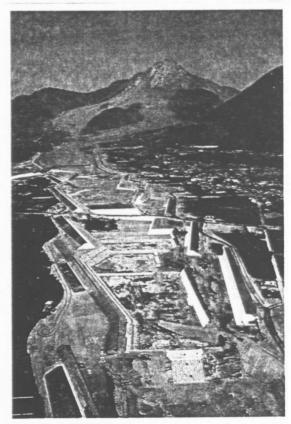
By the activity of a volcano, the area in the vicinity sustains damage from lava flows, pyroclastic flows, mud flows, volcanic ashes and volcanic earthquakes. To cope with such volcanic disasters, it is required, first of all, to predict the volcanic activity. Presently observation and investitation of volcanos are being carried out under the "Sixth Volcanoes Eruption Prediction Plan (1999-2003)". Of 86 active volcanoes in Japan, 13 volcanoes including Sakura-jima and Aso-san are classified as "volcanoes which are active and for which observation and investigation be made selectively" and 24 volcanoes as "active volcanoes or volcanoes having explosion potential".

The "Coordinating Committee for Prediction of Volcanic Eruption" is set up for comprehensive judgement of volcanic activities.

# COUNTERMEASURES UPON ACTIVE VOLCANO DISASTER COUNTERMEASURES SPECIAL MEASURES ACT

According to the "Act concerning Improvement, etc. of Refuges etc. in Vicinal Areas of Active Volcanoes" promulgated in July 1973 (Revised to "Active Volcano Disaster Countermeasures Special Measures Act" in Apr. 1978), the following measures are taken.

- ① Improvement of evacuation facilities
- Improvement of disaster prevention farming facilities
- 3 Improvement of volcanic ash control facilities
- Volcanic ash removal
- 3 Promotion of forest conservation and sabo project



雲仙岳 土石流対策 Unzendake countermeasures against debris flow.

- 9. Other Disaster Countermeasures
  - a. Countermeasures Against Snowfall Disaster
  - b. Countermeasures Against Large Accidents
    - 1) Maritime disaster
    - 2) Aviation disaster
    - 3) Railroad disaster
    - 4) Nuclear disaster
    - 5) Disaster due to hazardous materials, large-scale fire and forest fire

豪雪地帯及び特別豪雪地帯指定地域 High snowfall area and special high snow area



### COUNTERMEASURES AGAINST SNOWFALL DISASTER

The area constituting about one-half of the national land of Japan has high snowfall in winter and designated as "high snowfall area" under the "High Snowfall Area Countermeasures Special Measures Act". Thus, it has various countermeasures carried out, including security of transportation and communications and improvement of national land conservation facilities.



昭和59年 世田谷ケーブル火災 Telecommunication Cables Fire in Setagaya, Tokyo 1984

### COUNTERMEASURES AGAINST LARGE ACCIDENTS

Along with the sophistication, complication, and diversification of our society and industry, for the purpose of strengthening prevention measures against accidents and disasers, the Basic Plan For Disaster Prevention was revised in june 1997, to add measures against accidents and disasters (Maritime Disaster, Aviation Disaster, Railroad Disaster, Road Disaster, Nuclear Disaster, Disaster due to Hazardous Materials, Large-Scale Fire, Forest Fire). Thus, it has various countermeasures carried out.



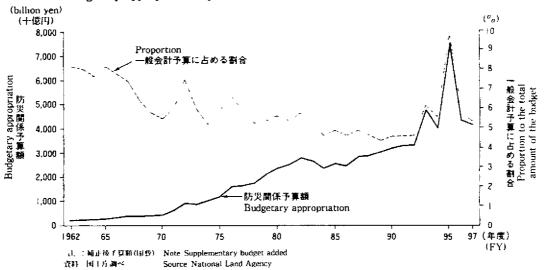
昭和54年 静岡駅前地下街ガス爆発 Gas explosion in underground of Shizuoka Station 1979 (写真提供:静岡県)

(Source: Shizuoka Pref.)

### 10. Disaster Prevention Related Budget

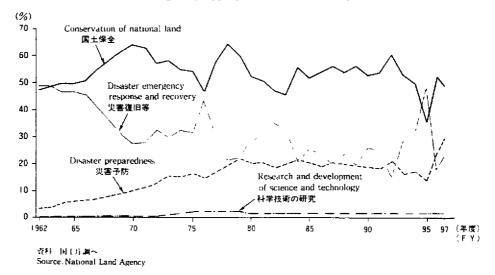
- a. Budgetary appropriation by the Government for disaster prevention
- b. Classification of the budgetary appropriation for disaster prevention

防災関係予算の推移
...
Budgetary appropriation by the Government for disaster prevention



Budgetary appropriation by the Government for disaster prevention is about 3.8 trillion yen for FY 1997 accounting for about 5% of the total amount of the budget for general accounts.

防災関係予算内訳の推移 Classification of the budgetary appropriation for disaster prevention



The budgetary appropriation for disaster prevention can be classified into 4 categories. ① research and development, ② disaster preparedness. ③ conservation of national land and ④ disaster emergency response and recovery. Their proportions to the total budget are shown in the graph below