

Chapter 6. Securing Safety

[Measures against natural disaster]

○Making safe land resistant to disasters

Japan's topography is inherently prone to natural disasters. Recently there is the increasing possibility that urban development will cause major damage from disasters.

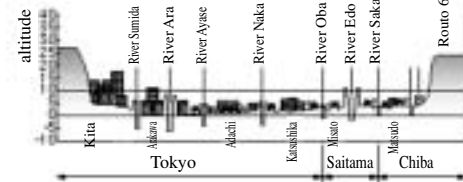
New challengers make it increasingly necessary to implement such policies as the promotion of measures that take local residents' wishes into consideration, and prevention measures against disasters in harmony with the natural environment.

92. (Cities in Japan where most of the ground is lower than the floodwater level)

London and the Thames



Tokyo and River Edo, River Ara & River Sumida

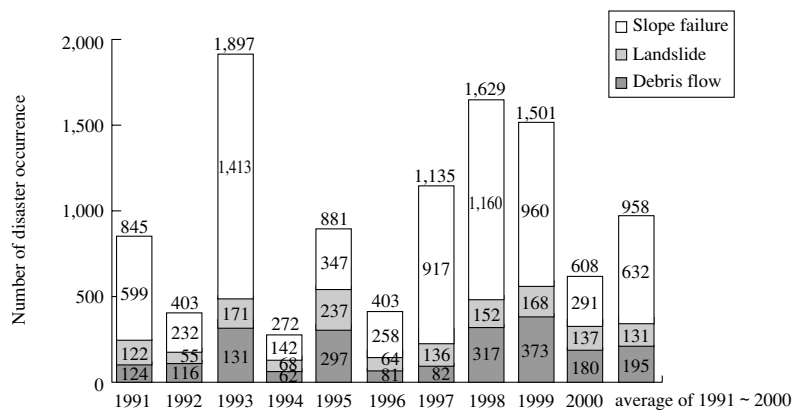


Most Japanese cities lie lower than the water level of their rivers in times of flood and are prone to flooding disaster as a result of geographical conditions.
Data: Prepared by Construction Ministry

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Data: Prepared by Ministry of Land, Infrastructure and Transport

93. (Recent occurrence of sediment-related disasters)

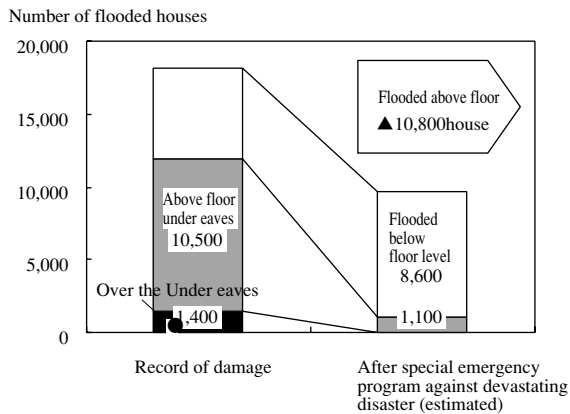


Note : (until 1999) The Sediment-related Disasters 1999
(Incorporated foundation) SABO Technical Center
(In 2000) Survey by SABO Department, MLIT

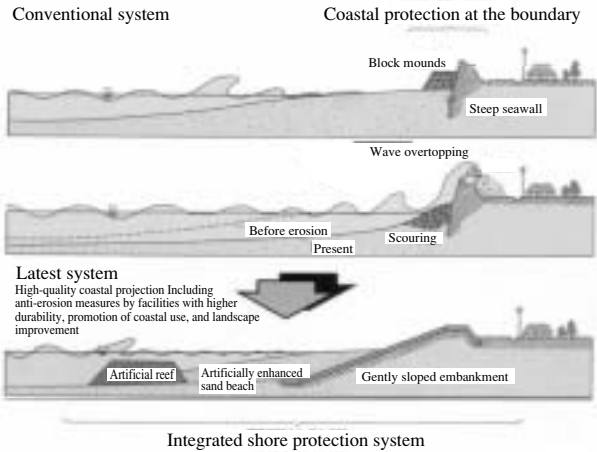
Therefore, countermeasures have been taken such as (1) Taking residents' opinions into consideration when implementing various projects and planning of river improvement and coastal management; (2) putting priority on heavily damaged areas: Tokai area by torrential rains, Hiroshima by sediment-related disasters and so on, to prevent recurrence ; (3) measures against disasters, taking into account the natural environment and its use and (4) formation of road networks resistant to disasters

94. (Decrease of flooded houses)

Effect of special emergency program against devastating disaster in rivers (decrease of flooded houses)



95. (Integrated shore protection system)



In the Great Hanshin-Awaji Earthquake, there occurred much damage centered on old buildings which do not meet current earthquake-proof standards. Therefore, reforming houses and buildings for higher earthquake-resistance has been promoted by way of earthquake-proof diagnosis and many kinds of subsidy systems, but the reforms are not yet sufficient, needing further promotion. And higher earthquake-resistance of construction of rivers, roads, ports, etc. is being promoted.

96. (Multi-functional transport satellite [MTSAT], which contributes to prevention and reduction of meteorological disasters)

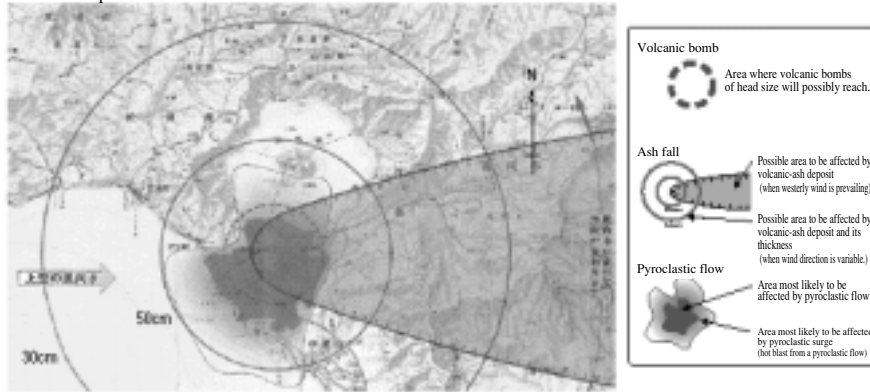
○Improving system against disasters

To build a safe country, it is essential not only to promote the hardware infrastructure but to complete preparedness of the system by software, so the followings are being worked on: (1) enriching observation and monitoring systems by Japan Meteorological Agency, Japan Coast Guard and Geographical Survey Institute; (2) Providing detailed information on meteorological disaster and distributing hazard maps, etc. for residents to know more about disasters; (3) establishing a quick initial action system including crisis management systems; and (4) sufficient maintenance and administration of older facilities.



97. (Hazard map)

Hazard map of Usu volcano



Date : Usu volcano disaster prevention map

Note : The assumed condition is a summit eruption of the same scale as that of 1822.

○Securing disaster-proof transportation system

Effort is being made to promote development of disaster-resistant facilities in maintaining the infrastructure primarily used by transporters, as well as to enrich the emergency transport network utilizing multiple transport modes in cooperation with transporters. Disaster prevention measures in each transport facility are also being encouraged.

“Stepping up crisis control capability in accidental disasters and serious incidents”

As for large-scale accidental disasters in the field of traffic, precise and quick disaster emergency measures are to be taken with Ministry of Land, Infrastructure and Transport in a leading part.

Taking into consideration a suspicious ship that appeared off the Noto Peninsula in 1999, measures against suspicious ships are taken by disposing special security high-speed vessels and revising laws enabling the Japan Coast Guard to shoot at such ships under certain circumstances. Adequate measures were also taken toward the suspicious ship incident off south western Kyushu which took place in December, 2001. Furthermore, considering

IT progress, our measures against cyber-terrorism have been strengthened.

Taking into consideration the terrorist attacks in United states in September 2001, preventive measures against terrorist attacks on important facilities including public transportation have been implemented to ensure security. Measures against hijackings have been reviewed.

98. (Special security high-speed vessel)

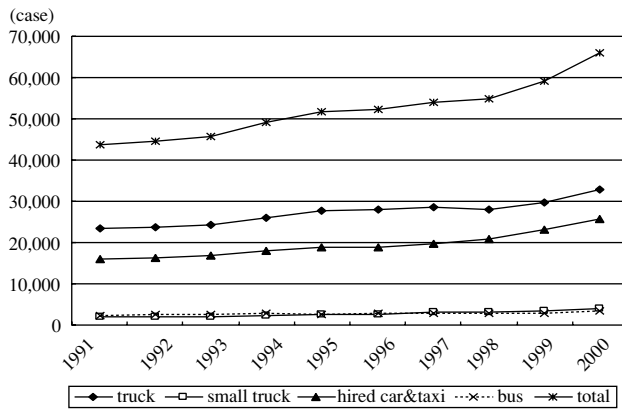


[Strengthening traffic safety measures]

○Road traffic

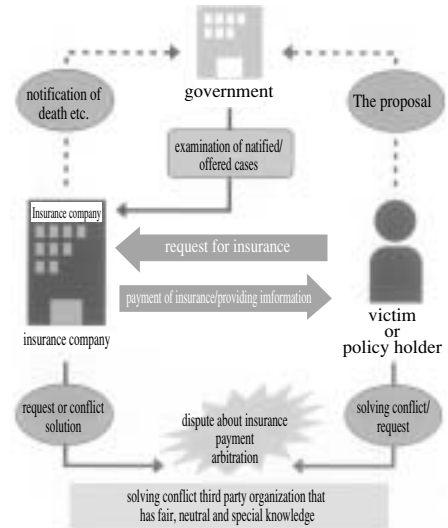
With traffic accidents still increasing, promotion is focused on the improvement of intersections where traffic accidents occur frequently and the maintenance of sidewalks. As accidents by vehicles for business use are increasing recently, reinforcement of the safety management system for transportation workers, and expansion and improvement of safety measures are planned. In addition, substantial relief measures for victims were designed by reviewing the automobile reparations security system, including promotion of new mechanisms for victims' relief.

99. (Number of accidents of commercial vehicles)



Note: Made by the Police Agency's "Annual Report of Statistics on Traffic Accidents"

100. (After revision of the automobile reparations security system)



○Railway traffic

With the increase of delay and suspension of trains, safety operation is being maintained by putting into practice safety inspections of railway companies. Prevention of accidents at railroad crossings is promoted by active equipment of crossing poles and high-standard safety facilities. In addition, we are trying to improve safety at platforms after an accident in which 3 people fell from a platform at JR Yamanote Line in January 2001.

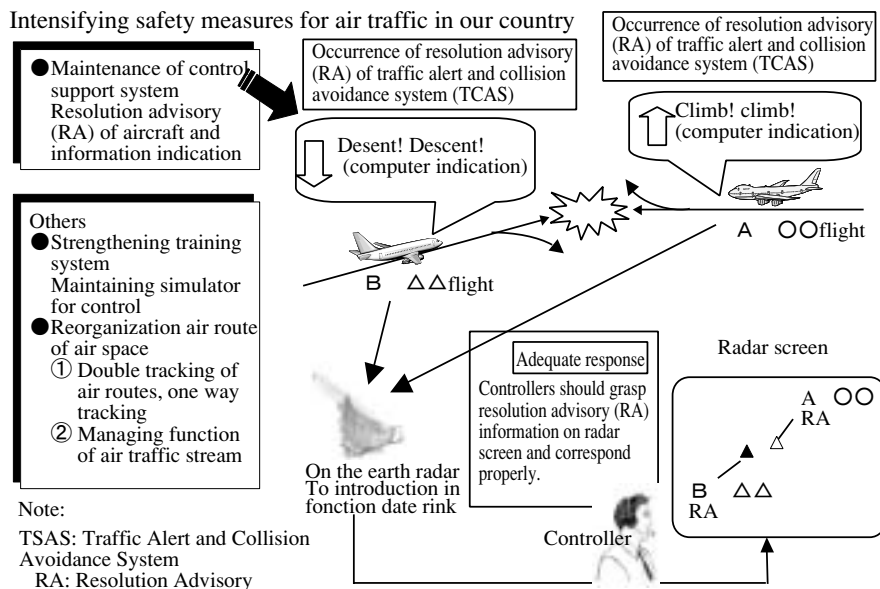
○Marine traffic

Securing safety of ship navigation by improving signals and strengthening the rescue system is being promoted, while heightening safety of ships by setting targets for marine traffic safety and maintaining AIS (Automatic Identification System).

○Air traffic

In consideration of the accident by JAL907 in January, 2001, the following measures have been undertaken: (1) strengthening the control system, such as promoting training and study systems for controllers; (2) maintaining the control support system by improving functionality of radar information; and (3) drastic reorganization of airspace and airways.

101. (Intensification of safety measures for air traffic)



○Strengthening of accident investigation system

In consideration of the train derail-collision accidents in the Nakameguro station yard of Tokyo Metro Hibiya Line, we are at work on the investigation of the causes of serious railway accidents and any sign of aircraft / railway accidents (near miss, etc.), as well, in order to strengthen the system. The title of the commission was changed to “Aircraft and Railway Accidents (5) Investigation Commission”

102. (Establishing aircraft and railway accidents investigation commission)

