

Summary of Audit Report - 2004

Measures to protect against tsunamis and high tides in coastal projects

The managers of coasts, such as the Ministry of Land, Infrastructure and Transport, the Ministry of Agriculture, Forestry and Fisheries, and prefectural governors, have been carrying out coastal projects to prevent coasts from being damaged by tsunamis or high tides, using a large amount of project expenses. According to our audit of measures to protect against tsunamis and high tides, although 75% of the embankments in Japan are higher than the anticipated height of a tsunami, only 24% of them are earthquake resistant, and 68% of them have still not been investigated in terms of earthquake resistance. Embankments higher than the anticipated height of a high tide account for 74% of all the embankments in Japan. About 80% of the municipalities in Japan have not produced a tsunami hazard map, and 97% have not prepared a high tide hazard map. In the areas that need the strengthening of measures to protect these areas against the anticipated Tokai earthquake, many municipalities have still not made hazard maps, even though some embankments in the municipalities are not sufficiently high or earthquake-resistant. In addition, some municipalities have not properly established a system of keeping a coastal register to assess conditions of coastal preserved areas or a system of closing the gates at the openings of coastal protection facilities.

Therefore, the improvement of coastal protection facilities will still require a lot of time and considerable expense. Under this restriction, the Ministry of Land, Infrastructure and Transport and the Ministry of Agriculture, Forestry and Fisheries should take balanced physical and non-physical measures to reduce damage in order to achieve the effects of coastal projects earlier and to the greatest extent possible. In addition, both ministries should advise the managers of coasts to contribute to the reduction of disasters. Concretely, both ministries should: (1) steadily carry out more planned and concentrated measures by promoting investigations on the earthquake resistance of the coastal protection facilities; (2) support prefectures in making maps of anticipated inundation areas and municipalities in making hazard maps, and take measures to provide disaster prevention information to the users of coasts; and (3) take measures to properly establish a system of keeping a coastal register to contribute to the execution of coastal projects according to plan, and measures to establish a system of closing gates rapidly without fail in case of an emergency.