

# **LANDSLIDES IN JAPAN**

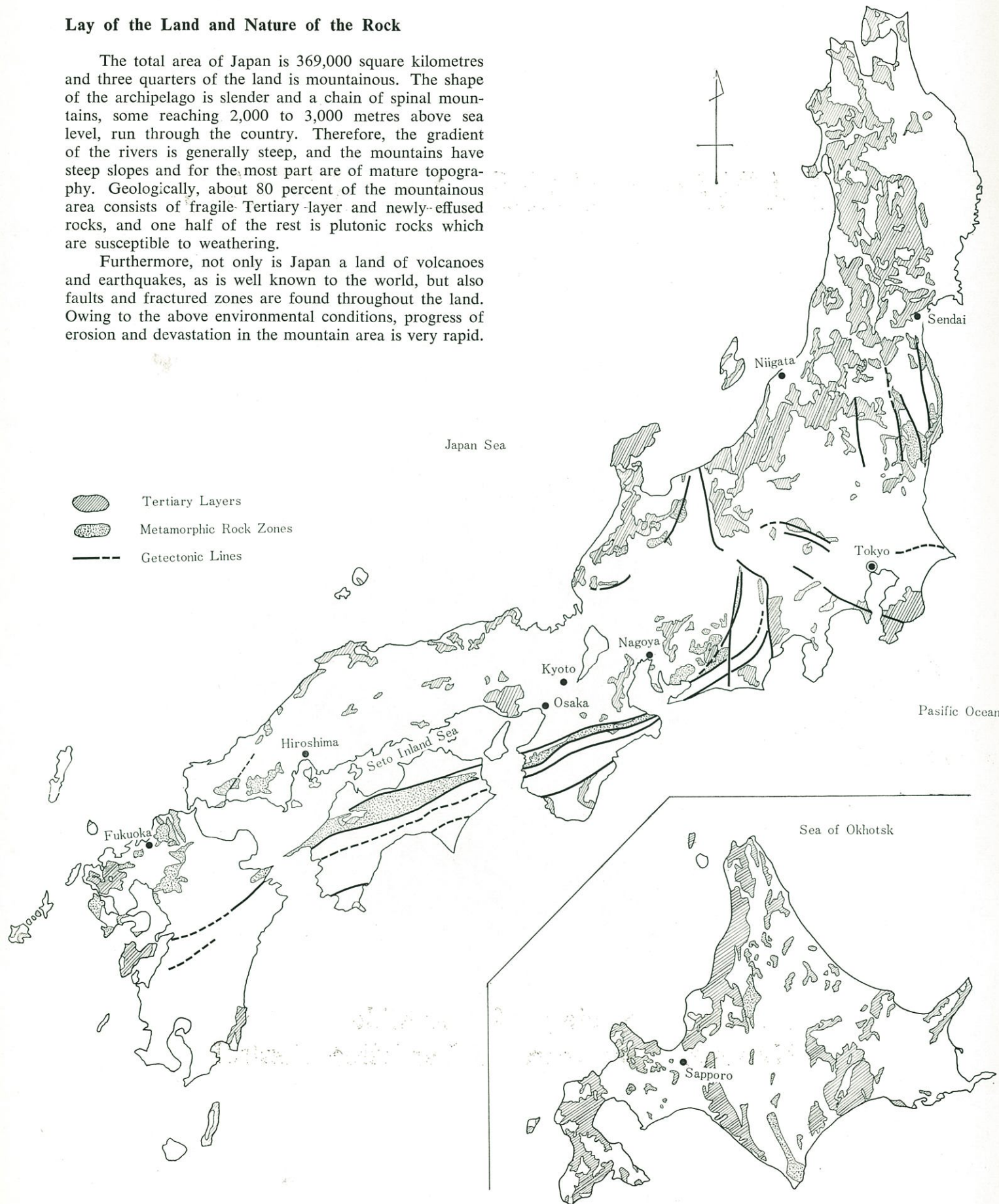
**The Japan Society of Landslide  
National Conference of Landslide Control**

# Geological Feature and Distribution of Landslide in Japan

## Lay of the Land and Nature of the Rock

The total area of Japan is 369,000 square kilometres and three quarters of the land is mountainous. The shape of the archipelago is slender and a chain of spinal mountains, some reaching 2,000 to 3,000 metres above sea level, run through the country. Therefore, the gradient of the rivers is generally steep, and the mountains have steep slopes and for the most part are of mature topography. Geologically, about 80 percent of the mountainous area consists of fragile Tertiary layer and newly-effused rocks, and one half of the rest is plutonic rocks which are susceptible to weathering.

Furthermore, not only is Japan a land of volcanoes and earthquakes, as is well known to the world, but also faults and fractured zones are found throughout the land. Owing to the above environmental conditions, progress of erosion and devastation in the mountain area is very rapid.



## Distribution of Landslide Zones in Japan

Some kinds of soil or weathered rocks in areas of the Tertiary layer, fractured zone or rocks altered by hot-springs are easily turned into clay, and soon softened when soaked with water. Such soil sometimes creeps down the mountain slope when saturated with underground water. This is called landslide in narrow sense and distinguished from general landslide.

The damage caused by a landslide depends on its type; damage of a slow landslide is generally not very big, but sporadic landslides which occur repeatedly over a long period of time may cause much damage when they occur.

