

4) They know that the area looks dangerous but the land price is very cheap.

In general, countermeasures always come after disasters. Then the point is how we can have preparedness before disasters. We have had new regulation to prevent land failures several years ago in Japan. Now the Japanese government is identifying vulnerable conditions into several categories to make sure the priorities for protection countermeasures. It looks very well but the only problem is that there are huge number of dangerous slopes those may cause land failures in the near future.

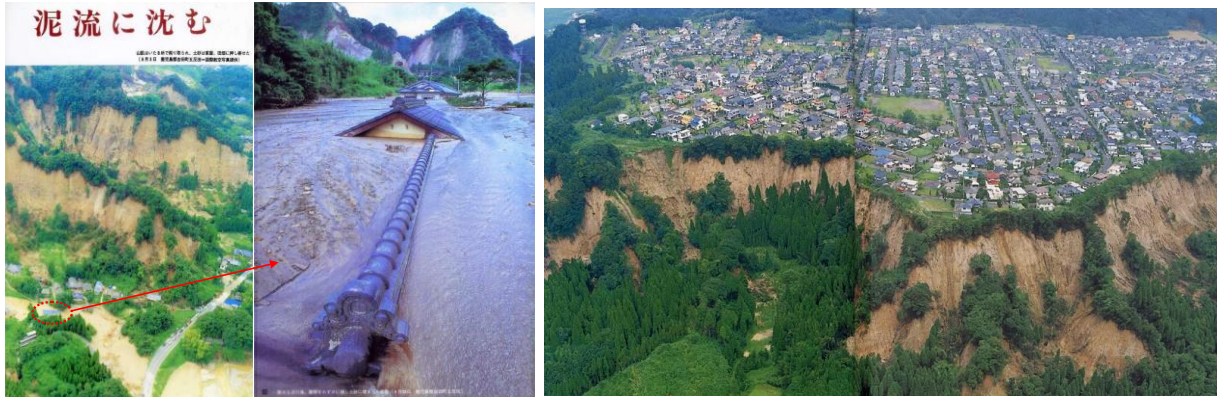


Photo.6 Typical slope failures in Kagoshima those were brought by three typhoons in 1993. Very thick volcanic deposits often show sudden slip during heavy rainfalls.



Photo.7 Geological and topographical condition in El Salvador is quite similar with Kagoshima. Surface ground is covered with very thick volcanic ashes so-called «tierra blanca». In this case, land failures in huge scale had been brought by the 2001 earthquake. But a heavy rainfalls also have the possibility to do the same thing next time.



Photo.8 Vargas district along the Caribbean bay coast, near Caracas in Venezuela, was suddenly attacked by unexpected heavy rains in December 1999. After the discussion how to prevent such amount of water and avalanches, the most economic way was to prepare an early warning system for rainfalls instead of heavy concrete protection walls.



Photo.9 Damascus, the capital of Syria, is located in a sedimentary basin, and the northwestern direction faces to the mountain wall. Syrian seismologist says that it is a seismic active fault. But strangely enough, people are building illegal houses on the fault surface and climbing the slope one by one. Another example (the right hand photo) shows Malula town where the oldest Christian people are living on a foot of rocky mountain. It looks also vulnerable, but they say there is no rain in this area.



Photo.10 An active fault is found near the traditional monument named Apamea in Syria. The face of the fault looks very clear like a mirror although origin time is not known when the earthquake had occurred. But it is said that some earthquakes might contribute to destroy the traditional culture in addition to human enemies.

References

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