عنوان انگلیسی مقاله:
Safety inspections and seismic behavior of embankment dams during the 2011 off the Pacific Coast of Tohoku earthquake
5. Conclusions

The effects of the 2011 Great East Japan Earthquake on dams, especially embankment dams, and the features of earthquake motion observed at the dam foundations during the earthquake are summarized as follows:

a. As a result of special safety inspections conducted immediately after the earthquake, more than 10% of all inspected dams reported some damage. This ratio rose to 18% for embankment dams.

b. Major earthquake-induced damage to embankment dams included wide and long cracks on the crest and cracks at earthfill dams, cracks of the impervious facing at AFRDs and temporarily increased leakage.

c. Special safety inspections and subsequent detailed investigations confirmed that none of the dams under the jurisdiction of the MLIT sustained damage severe enough to threaten the safety of the dam, although careful monitoring and/or remedial work was required at certain dams.