

## عنوان مقاله:

SEISMICALLY TRIGGERED LANDSLIDE POTENTIAL IN THE RESERVOIR OF GOTVAND DAM, IRAN

## محل انتشار:

هشتمین کنفرانس بین المللی زلزله شناسی و مهندسی زلزله (سال: 1398)

تعداد صفحات اصل مقاله: 2

## نویسنده:

Arash BARJASTEH - Ph.D., Khuzestan Water & Power Authority (KWPA), IRCOLD Member, Ahvaz, Iran

## خلاصه مقاله:

Moderate to large earthquakes can trigger landslides, and these landslides commonly cause a significant proportion of total earthquake damage. The ability to predict slope stability during earthquakes is especially important for seismic hazard analysis of dam projects. Earthquakes having magnitudes greater than about 4 can trigger landslides on very susceptible slopes near the epicenter (Keefer, 1984). The situation will be more critical if the landslide prone body is saturated. The Gotvand dam is the highest rock-fill dam of Iran with a clay core and was constructed over the Karun River, in Khuzestan Province. The Gotvand dam region was basically a geohazard-prone area prior to the construction of the Gotvand Dam Reservoir (GDR) due to the wide exposure of Gachsaran Formation and closeness of Lahbari and Pir-Ahmad active faults (Barjasteh, 2018). The occurrence of an exposure of salt piercement in its reservoir known as Ambal salt pillow or ridge (Figure 1) imposed some problems to the project including subsidence and land sliding of highly soluble layers within the dam reservoir regarding its neotectonic setting (Barjasteh, 2017). The piercement is accompanied by eleven landslides (Ls1–Ls11) with an estimated cumulative volume of 20–70 mcm. The highly elongated N–S-oriented landslide Ls3 is related to the collapse of the over steepened western flank of the Ambal ridge associated with the Karun River, where the strata have a dominant strike parallel to the valley ((Gutiérrez and Lizaga, 2016.

## کلمات کلیدی:

Seismic triggering, landslide potential, Ambal ridge, Gotvand dam

## لینک ثابت مقاله در پایگاه سیویلیکا:

<https://civilica.com/doc/1121348>

