

# Geohazard and geoethics assessment - a way for sustainable cities: a case study from the well accident in Shafshon, Morocco

by Kholoud Mohamed AbdelMaksoud | Wael El Metwaly | Department of Natural Resources, Faculty of African postgraduate Studies- Cairo University, Giza 12613, Egypt | Geography department in the Faculty of African postgraduate Studies - Cairo University

---

A Moroccan child, aged five, was found trapped in a 32-meter deep, old dry well near Shafshon district on the 2nd of February 2022. Due to the complicated geology, topography and landslide hazard of the area, the rescue team struggled for 5 days to get the boy - called Rayan - out of the well.

The rescue team as specialized didn't contain a geologist or geophysicist. In the context of the complicated geology and the hazard produced due to the landslides, the presence of geo-specialists would help the rescuer team make a better selection of suitable locations to dig in. In the current contribution, we evaluate the process used to recover the boy. Moreover, the contribution aims to produce a risk map for the Shafshon district based on evaluation of a big data set. This includes hazard parameters of the slope, geologic formation, structural data, lateral models, satellite imaging analysis of the study area, and spatial analyses.

The current contribution highlights the importance of using big data analysis techniques in order to prepare such evaluation maps. These evaluation maps help make cities and human settlements inclusive, safe, resilient and sustainable. Moreover, these maps can be used for better land-use planning to build resilient infrastructure, promote inclusive and sustainable industrialization and foster innovation. Therefore such techniques contribute to the UN's 2030 Sustainable Development agenda.

Please cite this abstract as

Kholoud Mohamed AbdelMaksoud & Wael El Metwaly (2022) "Geohazard and geoethics assessment – a way for sustainable cities: a case study from the well accident in Shafshon, Morocco". CloudEARTH Conference series, Eisenstadt, Austria (18th to 19th May, 2022). Stable URL - [https://conference.cloudearthi.com/wp-content/uploads/2022/05/ID\\_21.pdf](https://conference.cloudearthi.com/wp-content/uploads/2022/05/ID_21.pdf)

---