Meteorites and Impact crater in between Geohazards Loss and Geotourism Gains

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Abstract

Meteorites are extraterrestrial objects (rocks) as traveler through the atmosphere striking the Earth and other planets. The origin is related to asteroid belts which is located between Jupiter and Mars Planets. They have two major types according to their origin; Martian (most common) and Lunar ones (less common). Almost meteorites have very high velocity, according to the meteorite size, when they come from outer orbitals to elsewhere (ranging from 4 to 40 km/second), therefore they embrace very strong energy of pressure and temperature. The tentative field classification of meteorites is **Finds** (most common) and **Falls** (less common) where the second type is more favorable for researchers. The age of meteorites has long term from 1.85 billion years to the present day, passing through all geologic eras. They found in all over the world, in particular, the northern pole of the Earth. In addition, they were found in almost Arab countries to be as fragmental rocks and/or impact craters. Regarding the meteorites attack on the Earth, Geohazards loss have caused atmosphere combustion, forest burning (if falls on woody area), very strong damage of the entire area and tsunami of variable intensity if slammed into marine environment. On the other hand, geotourism gains include impact craters (if present) that are considered to be as touristic area, valuable iron-nickel and gem types that have been sold in international meteorites trade and shops, meteorites museums and geoparks. We conclude that the advantages of the meteorites are more valuable and constructive if compared with their disadvantages related to geohazards loss.

Keywords: Meteorites, Martian and Lunar types, Impact craters, Geohazards and Geotourism implications