

## Preparation of Mineral Potential Map by Geographic Information System With Fuzzy Logic Method Khezr Abad sheet

Ehsan Haj Molla Ali<sup>1</sup>, Mohammadreza Ghodsi<sup>2\*</sup>, Mohammad Boomeri<sup>3</sup>

<sup>1</sup>Islamic Azad University (North Branch), <sup>2</sup>University of Sistan & Baluchestan, <sup>3</sup>University of Sistan & Baluchestan

**Abstract:** In this study that has done with exploratory goal, it has been tried to declare the effective criteria in knowing mineralization by study's instruments & with paying attention to mines & indexes in the area.

In the direction achieving to this goal, khezr Abad's sheet has been chosen from the Urumiyeh ? Dokhtar's Zone and in such a vast study has been done in the following fields; Petrography, Tectonics, Geochemistry, Geophysics, Remote Sensing, Geology.

And the mineral potential map has been produced from the results of these studies.

After information gathering & preparation of data bases, these data has been entered in GIS & their information has been ordered in different layers.

After that, data has been processed. it has been paid attention to this fact that in the real word these is nothing fix & every thing is continuous, so the fuzzy logic method has been used to integrate the different layer and the value of different classes has been determined by expert's idea of different majors. After combination & giving the final map of study area & determination of proposed area all the consequences has been controlled in field. In this study proposed area of GIS has been determined with high reliability that this subject has been proved in field studies.

**Keywords:** Urumiyeh ? Dokhtar, Geographic Information System, fuzzy Logic Method