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## Desertification mapping by Iranian Classification of Desertification (ICD) method (case study : Kohdasht watershed in Iran)

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**Key words :** desertification, human activities, environmental factors, ICD

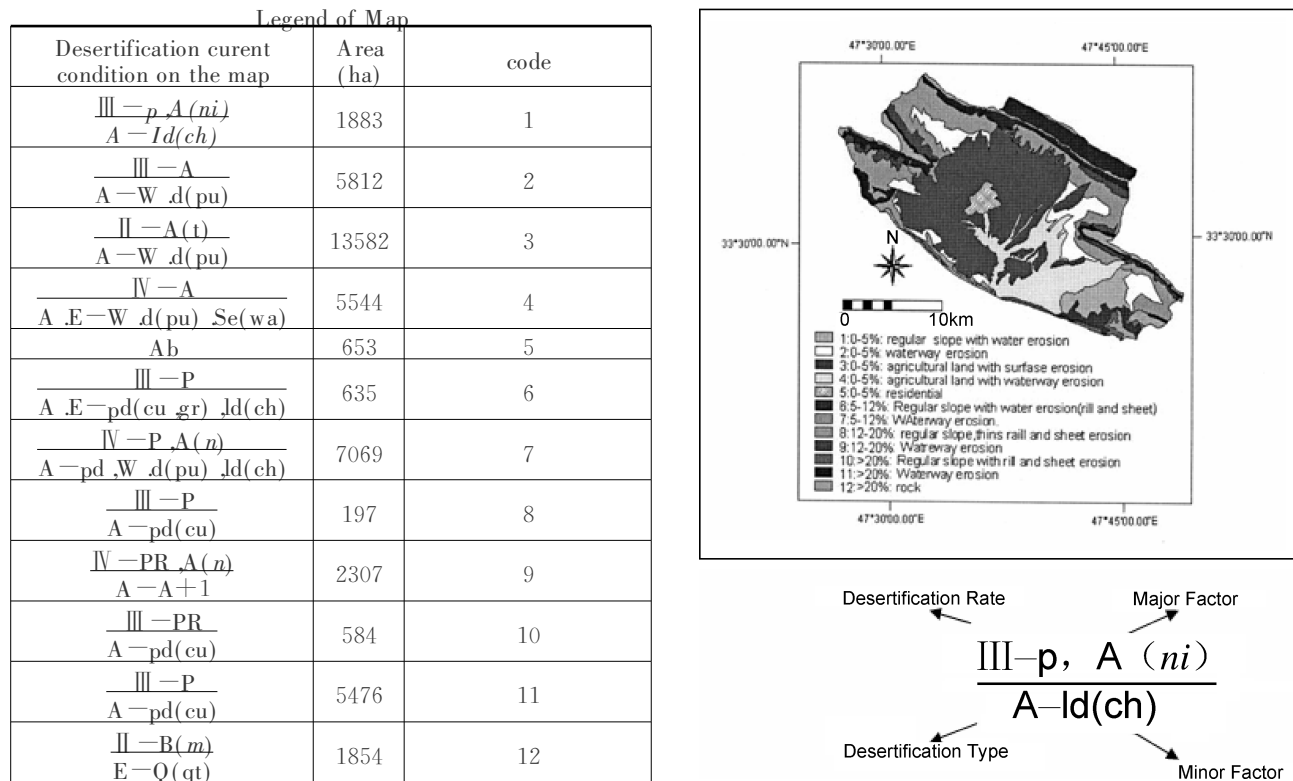
**Introduction** In order to challenging with desertification, it is necessary to do some scientific research and assessment in different parts of the world. The results may help to control and reduce the damages resulted from this phenomenon. In many regions of the world especially in arid and semi-arid ones, studies have been done to assess the land degradation rate, degradation status and mapping.

**Materials and methods** At the first maps of landuse and vegetation cover of the region were considered to determine natural desert lands and then work unit map consist of geology, topography and geomorphology were prepared. According to the ICD method the criteria used for assessment of desertification condition include environmental and anthropogenic factors as well as desertification indicators. With this frame work, several factors and sub-factors were considered.

**Table 1** The classification of desertification intensity in ICD method.

Sever	High	Medium	Low	Slow	Desertification Rate
76.8-9.6	57.6-76.8	38.4-57.6	19.2-38.4	0-19.2	Score
V	IV	III	II	I	Symbol

**Results and discussion** The results of scoring and evaluation of ICD method is summarizes in Figure 1.



**Figure 1** The map of desertification rate presented by ICD method in Kohdasht.

The appropriate criteria and factors were selected to evaluate desertification condition in Kohdasht basin. Anthropological factor is a major problem in the study area to environmental factor. Among the effective major factors of desertification, factors of water supply destruction, soil erosion, land degradation, vegetation destruction and quantities condition of water and soil resources have significant roles on desertification phenomenon respectively. The average quantitative factors of desertification intensity for the region is DR= 39.2 which shows medium of desertification class.