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**The thesis**  
**Submitted for the Degree of Master of Science**  
**(In the field Combat Desertification)**

**The Source Identification of aolian  
Sediments and Determination of the  
Sensitivity of Geomorphological Facieses to  
Wind Erosion in konarak region**

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## **Abstract:**

Over vast areas of our country has been out of ecological balance caused by various natural and anthropological effects from past years and has followed by desertification or land degradation. Wind erosion, movement of its deposits and accruing sand and dust storm is the clear result of such destruction.

The study area with ۴۵۰۰۰ ha is located in konarak township (In the south of Sistan and Baluchestan Province and east-south of country) that limited from the north to nikshahr uplands from the south to Oman Sea from east to Parak River and from the west to Sergan River. This region contains a geomorphologically unit, ۳ types and ۱۶ geofacies. Determining of the origin of sand dune is the most important step for wind erosion control. In order to determine the origin of these hills we used Ekhtesasi- Ahmadi method that is based on two steps: find the source (is consist of gathering regional data about wind erosion, study and comparison of aerial photos, satellite images in different periods, study of general morphology and region winds) and determine direction of dominated winds (is consist of studying region geomorphology and sampling of geofacies, morphoscopic granulometry and mineralogy).

According to the research results, erosion winds of the region blow from southwest to west and southeast respectively. and the most important erosion geofacies are barren lands and dry river's bed. Also the intensity of wind erosion of region according to ERIFER method shows that it's not different between various geofacies in this regards. thus In order to control wind erosion in the region, no geofacies has priority but according to dominated wind's direction we recommended control implementation has to do notice to this regards.

**Keywords:** sand dune, wind deposits, finding origin, determining of source, geofacies