The influence of soil, hydrology, vegetation and climate on desertification in El-Bayadh region (Algeria)

Karima Belaroui*, Houria Djediai, Hanane Megdad

Laboratoire des Sciences, Technologie et Génie des Procédés (LSTGP), Université des Sciences et de la Technologie, Med-BOUDIAF d'Oran, B.P. 1505, EL M'nouer, Oran, Algeria
Tel./Fax: +213 41500056; email: kbelaroui@yahoo.fr

ABSTRACT

There has always been a link between water and desertification. Water, whether from rain or other sources, provides the ground moisture needed for the growth of vegetation cover. The availability of water resources directly affects the distribution of vegetation cover. Any damage to the vegetation cover is almost always accompanied by silting, which accelerates the desertification process. The phenomenon of desertification affects the arid and semi-arid areas of all continents. Its expansion is one of the major environmental problems of our times. According to the United Nations Convention to Combat Desertification, the term desertification signifies ''land degradation resulting from various factors including climatic variations and human activities''. The problem of desertification, which is known as being the process of land degradation resulting principally from anthropogenic factors (plowing of steppe, overgrazing, land clearing, fires, deforestation (illegal logging), etc.) and leading to often irreversible repercussions, is a particular and urgent problem in the arid and semi-arid bioclimatic zones of the Tell Atlas. This work is part of the monitoring of desertification and of the impact of natural factors (soils, hydrology, vegetation and climate) in an area in the heart of south Oran's high steppe plains, in the El Bayadh region of Algeria.

Keywords: Desertification; Hydrology; Climatic factors; Soil (Algeria)

*Corresponding author.