Analysis of Phenomenon of Desertification by using Algerian Micro Satellite Data (ALSAT-1) in the North African Steppe

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The degradation of the natural resources in the arid and semi arid land has drastically been emphasized during this century because of the demographic growth and the transformation of the land use systems. The extension of the cultivated areas in the marginal land and the cattle growth led to different processes of degradation, green cover struction, over pasture land erosion and their fertility deterioration. The steppe in Algeria is presented in the form of pathways or Alfa and for the majority; these pathways are degraded with low recovery. This, under the aridity affect of the medium and the over pasture which is being forced on this pathways makes the degradation process worse for the physical medium and then lead to desertification. All the time, the politicians have been searching with more or less success to master the natural resources and to diminish the aggressive effects exerted by man in a conscience or no conscience manner on the medium. With all these problems, to which the Algerian steppe, allowing the determination of the lands being damaged by desertification and also to better use the pastoral resources. The work is mainly based on the classification criteria of the arid lands and the steppe, these criteria are numerous, climatic, phytogeographic, pedology and agronomic. The approach is based on the ALSAT-1 data images completed with terrain observation. With regard to the ecosystem fragility a synthesis chart was designed classifying land in to five classes. A deserted class, a very sensible to desertification class, a sensible to desertification class, a more or less sensible to desertification class, a little or most sensible to desertification class.