Applying Revised Universal Loss Equation Model to Forest Lands Central Plateau of Morocco

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Erosion is among natural phenomena with the most concern regarding hydraulic policy that our country undertakes to promote the social and economic development. At a landscape scale erosion causes loss of nutrients and a decline of productivity. Several methods have been development to study this phenomenon and to reduce it's ectent. Mathematical models remain however the most used method and the most adequate to quantify erosion

This model integrates all the factors that govern erosion phenomenon. It translates it as a function of rain and runoff erosivity (R); soil erodibility (K); land topography (LS); vegetation factor and operations factor (P).

Adaptation of the model goes through several steps: A first step would be to convert in the software English units to SI units, as well as, translate English screns to French. The second step, is related to the development of three data bases proper to Morocco conditions. The last step, consists of validation of the model by comparing simulated soil loss with direct measurements of erosion. These are collected in the region of teouan, Al Hocaima, Fes, Rabat, Marrakech and Agadir.

The present paper presents some results undertaken in the region of Rabat, on forest land, during the year 1997. R values given by a data logger were 168 MJ*mm/ha*h and 185,75 MJ*mm/ha in two sites close to Rabat and their soil losses were between 2819,99 kg/ha and 48,77 kg/ha.