ISSN 0970-9274
JOURNAL OF HUMAN ECOLOGY
International Interdisciplinary Journal of Man-Environment Relationship

 J Hum Ecol, 36(3): 205-209 (2011)

Assessment of Soils Susceptibility to Erosion Menace in Calabar Metropolis, Cross River State, Nigeria

Egbai O. Ohon*, Samuel U Ukata, Eric J. Ndik, Ewa E. Ewa and Uquetan U. Ibor**

Department of Geography and Regional Planning, University of Calabar, Calabar, Cross River State, Nigeria
E-mail:egbaioruk@yahoo.com*, < jemikeric@yahoo.com*>**

KEYWORDS Soil Degradation. Soil Susceptibility. Soil Erosion. Land Use

ABSTRACT This study on the assessment of soils susceptibility to erosion menace was carried out in Calabar Metropolis. Four representative sample sites were randomly selected from where soil samples were collected and subjected to laboratory analysis for the determination of physical properties. The physical measurement of erosion sites was accomplished with the aid of appropriate measuring instruments. The physical properties of soil showed that sand values ranged from 81 – 92% with a mean value of 8.7% and a coefficient of variation of 4.5%. The clay fraction ranged from 2 – 12% with a mean value of 6.5% and a coefficient of variation of 4.7%. The bulk density ranged from 1.35 g/cm^3 to 1.64 g/cm^3 with mean value of 1.55 g/cm^3 and coefficient of variation of 4.04%. Particle density ranged between 2.43 to 2.60 g/cm^3 and a coefficient of variation of 0.071 g/cm^3 were all recorded respectively. Porosity values ranged from 56 to 67% with mean value of 60.83% and coefficient of variation of 11.30%. The coefficient of variation shows that the area has identical soil characteristics hence; there is no marked difference in soil of the selected study locations. The result of this study shows that the soils consisted of huge percentage of sand and because sand lacks cohesion, soil sharing was facilitated giving rise to erosion menace. It is necessary to forestall further degradation scenario by inculcating some important soil protection mechanics among which include the land cover protection and adequate land use planning and management.