

SOIL UNIT: AN ENVIRONMENTAL SYSTEM TO EVALUATE INCOMPATIBILITIES BETWEEN LAND USES

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The area is located in the west side of the municipality of Rio de Janeiro. This region is characterized predominantly by occupation of low income. Inhabitants the area also has a rural tradition and suffered an accelerated process of urbanization and an increase in population in the last years. The incompatibility between land uses is the main cause of the environmental degradation and generation of areas of risk, besides the degradation of the rivers and lost of the agricultural soils. The “soil unit” can be used to define norms of appropriate land use as well as of planning. This methodology, through geoprocessing with help of the software Idrisi for Windows 2.0, makes possible the combination of maps, environmental evaluation and environmental analysis. This is a modern analysis system which has produced results like incompatibility land use map, land use planning map, multitemporal analysis, ideal land use maps. The areas of major incompatibility are concentrated within the units of slopes and plains. The areas along slopes formed by granitic and gneissic of red yellow podzolic soil are vulnerables, to landslides, where, as in the plains, susceptible inundations, occur gley soils. The high frequency of areas presenting incompatible land uses and the inadequate handling of the soils (rural and urban) constitute the main degradation cause.