

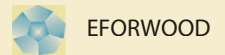
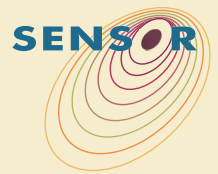
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Territorial planning of Juquiá municipality (State of São Paulo, Brazil), using an integrated analysis of the land cover and slope

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Developing countries face problems due to the lack of planning of their territory occupation, resulting in environmental damages and decrease in quality of life of the population. In the Juquiá municipality (in the southeastern region of Sao Paulo State, Brazil), the disorganized land occupation has resulted in an increase of the Serra do Mar hillside deforestation. The region is characterized by very high slopes, fragile soils and high precipitation rates, which are concentrated in the months of November through February. This scenario is a perfect condition for soil erosion and landsliding. The objective of this study was to present an integrated analysis of the land-use/land-cover map and slope, aiming at the best territorial planning of the Juquiá municipality, in São Paulo State, Brazil. The land-use/land-cover map was produced by supervised digital classification (Maximum Likelihood Algorithm) of CBERS images (CCD camera). The slope map was generated by the interpolation of the digital elevation model got from SRTM images. The analysis indicated that 61% of the urban areas present slopes up to 8%; urban areas with slopes between 8% and 20% sum 30%; and only 8% of the urbanized area are on terrains with the highest slopes. Juquiá is covered by 45% of pastures and 43% of agriculture. These areas are concentrated in the intermediate hillsides, in slopes between 8%

and 20%. The native forest occupies areas with the most elevated slopes (87% of the forest remnants are located in regions with more than 20% of slope). Finally, it is concluded that spatial distribution of human activities in the municipality has been concentrated in regions with the lowest slopes, since the river navigation beginning in the first half of the XVI century, privileged the occupation of the plains instead of hillsides, mostly for cultivation of rice and, later, banana.

Keywords: Territorial planning, Slope, Land cover, Serra do Mar