B33E-0513

SELECTION OF PROPERTIES AS REFERENCES FOR ECOLOGICAL RESTORATION IN BRAZILIAN SEMIARID

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The São Francisco River has suffered over many years with the deterioration of its margins. Degradation is more intense when it removes native vegetation for logging, for livestock or expansion of arable land. It is remarkable the loss of biodiversity in degraded areas, increased erosion, siltation of the river, among other negative aspects. In the Lower Middle São Francisco River Valley this degradation is very worrying, especially because this semiarid region is the most populated in the world and has an uncontrolled growth of urban areas along the river margins. When compared to other regions along the river, there is more irrigated agriculture area. The application of ecological restoration models faces the process of selection of properties. The universe of analysis is very large because there are several areas with different degrees of degradation. In addition most farmers do not accept the environmental police and management. This study aimed to select 2 properties per city for pilot implementation restoration ecology in two ways. Firstly, it was defined a series criteria for choosing areas through GIS techniques. After, questionnaires were applied for selecting the properties in the cities. The study involved the Integrated Network of Economic Development (RIDE) composed by 4 cities in the state of Pernambuco and 4 in Bahia. Land use and land cover type were diagnosed in the counties from the images processing, which served as basis for defining a cutout of 3 km (1:50.000) band Riverside. The use land and land cover was classified into six main categories (shrubs, forest, grassland, water, urban area and desert) based on IBGE and the interpretation key which was established previously for PROBIO/MMA. Then, 759 units were processed and degradation degree was evaluated using the vegetation cover index. This index was used as orientation to preselect the areas to be checked in field. After field checking, 68 farms were selected in eight counties of the RIDE for the application of the questionnaires. The criteria were established and took into account qualitative and quantitative aspects, such as total area, conservation area, length margin, location, land ownership, conservation actions, the owner's interest in preserving, the neighbors' interests in participating of the plan, awareness actions for conservation, availability of human resources, recognition of the landscape, perception of interactions between humans and other coastal and river subjective factors. Based on these criteria, 16 properties were selected.