

THE ATLANTIC FOREST OF RIO DE JANEIRO – FRAGMENTS OF HOPE

DER ATLANTISCHE REGENWALD VON RIO DE JANEIRO – FRAGMENTE DER HOFFNUNG

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SUMMARY

The Atlantic Forest of Rio de Janeiro state has been pushed back by agricultural and infrastructural development, so that formerly contiguous forests were divided into numerous fragments. Deforestation and forest degradation have been accompanied by land degradation, which is reflected in the loss of habitats and biodiversity, in soil erosion and other forms of soil deterioration and in negative changes in the water balance. Pasture lands that dominate the rural landscape in the interior of the state, i.e. the lee of the coastal mountain range ‘Serra do Mar’, are particularly vulnerable to droughts, whereas the steep mountain slopes facing the wet leeward side are frequently affected by heavy rainfall, resulting in landslides and flooding. Climate scenarios project an increase in extreme weather and climate events, which could further aggravate the risk of natural hazards. The German-Brazilian research project INTECRAL and the Rural Development Program Rio Rural aim at increasing social-ecological resilience in rural areas. In this context, forest fragments play a crucial role as stabilizing landscape features and providers of ecosystem services. We present implemented pilot measures as well as land management strategies and tools that contribute to more resilient rural landscapes in Rio de Janeiro state.

Keywords: Forest fragments, Atlantic Forest, Rio de Janeiro, ecosystem services, social-ecological resilience, connectivity, rural development, INTECRAL project

ZUSAMMENFASSUNG

Der Atlantische Regenwald im brasilianischen Bundesstaat Rio de Janeiro wurde durch agrarische und infrastrukturelle Entwicklung zurückgedrängt, so dass vormals zusammenhängende Wälder heute in zahlreiche Fragmente zersplittert sind. Mit der Entwaldung