

GEOSCIENCES AND SUSTAINABLE LAND DEVELOPMENT IN AMAZONIA

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The development of a worldwide environmental conscience is relatively new and today few people unknow the environmental importance of the Amazon land as a planetary element of climate equilibrium. The aim of this paper is to illustrate the most recent efforts and advances achieved by geoscientists on the understanding of the environmental equilibrium and the development of conservation and preservation models,.

Application of modern concepts about sustainable development to Amazonia requires much more geoscientific information and research than those existing. Moreover, it is necessary to develop new tools to integrate the existing data and modeling the fluxes of energy and mass through the environmental components, including the antropic media. Sustainable development can be understood as those who preserve the environment for the next generations, but it becomes difficult to precise, in real situations, the equilibrium conditions existing before and after anthropic intervenence. Surface of Earth is in constant transformation, sometimes fast and catastrophic to the affected geossystems. Everything changes as times go by, the size and the speed of changes are the first consideration to be made. Geossistems are characterized by a constant flux of energy and mass through their components. Therefore, the state of equilibrium of a given geossystem is given by all interactions among their physical, biological and anthropic components, as they represent the eternal flux of energy and mass that permeates the whole system.