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ASSESSING THE EVOLUTION OF LAND USE IN BRAZILIAN AMAZONIA

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Human occupation in Brazilian Amazônia has been accompanied by persistent changes in Amazonian landscapes, ecosystems, and in demographic and socioeconomic conditions of people settling in the newly established frontiers. In this paper, we use 1985 and 1996 Census data to investigate how cattle ranching, annual and permanent crops have evolved in Amazônia. Our goal is to review some of the available data and discuss some characteristics of agriculture and cattle ranching that may have different impacts on land degradation and on sustainable land use. Census data show important regional differences in the relative importance of cattle and crops, frequently associated with Federal Government colonization programs but also depending on the evolution of the agrarian structure in different regions. Pastures do constitute the prevailing land use, at the same time as the total number of heads frequently increased faster than the total area of pasture. The relative area of crops decreased in some areas of agrarian reform and family agriculture colonization, while pastures increased their relative importance in such regions. At the same time, grain production and productivity have significantly increased in few areas where connections to the nation-wide grain networks were set up. In general, the data suggest a scenario of land use intensification in regions of more important settlement and agricultural production, where deforestation has also been concentrated. The analysis suggests that systematic research should be carried out on the carrying capacity of different regions and on the relationships between land use intensification, land degradation and sustainable land use.