

STUDY OF MINERAL EXPLOTATION ACTIVITIES IN SANTO ANTÔNIO DE PÁDUA COUNTY, RIO DE JANEIRO STATE, BRAZIL

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The mineral exploitation activity in Santo Antônio de Pádua, northwest of Rio de Janeiro State, has been characterized by predatory quarrying which has resulted in environmental problems, causing a strong reaction of environmental organizations. With resources from FECAM - Fundo Estadual de Conservação Ambiental, the DRM - Mineral Resources State Agency - has carried out a study aiming at gathering, processing and releasing geologic, mineral and environmental information to support the organization and disciplining of mineral exploitation. Thematic maps at the scale 1:50 000 were produced with the support of the Nucleus of Eletronic Computing of the Federal University of Rio de Janeiro - NCE/UFRJ, including: (a) an imagemap of the region using SPOT orbital imagery; (b) a topographic basemap; (c) a geological map; (d) a soil map; (e) a vegetation cover and land use map; (f) a mineral exploitation map; (g) a mosaic of aerial photographs at the scale of 1:20.000 taken in 1970 and (h) mosaics of low altitude small format aerial photographs at the scale 1:3.000. As an immediate result has been implemented analysis for environmental licensing in cooperation with the Environmental State Agency. In addition, a series of strategic goals have been established to manage the mineral exploitation activities. In continuity it has been formed a Technological Network (RETCMIN) joining the DRM, the NCE/UFRJ, the Centro de Tecnologia Mineral, the Instituto Nacional de Tecnologia and other institutions. Also, among other studies, a M.Sc. thesis is being carried out in this area.