

RURAL POVERTY AND SOIL DEGRADATION: SOME EVIDENCES FROM LAND REFORM SETTLEMENTS IN BRAZILIAN STATE OF GOIÁS

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The objective of this study was to analyze the relationship between rural poverty and soil degradation in land reform settlement in the Brazilian Center West region. Therefore, farmers were interviewed and data was analyzed through an econometric analysis of the probit model. Our hypothesis was that environmental degradation can worsen the rural poverty in the farm enterprises. The binary and dependent variable was the adoption of natural resource saving practices like crop rotation. As independent variables that explain the probability to occur ($y=1$ or $y=0$) we considered the total (farm and nonfarm) income, the total herd size of cattle, the land ownership and the education level of farmers (years of school visit). The estimated model was significant at 5% level. The independent variables explain 50.41% of the variation in the probability of adoption of crop rotation in the farms. Three of the independent variables had negative signs: total income, herd size and land ownership, meaning that increasing the values of those variables decrease the probability of the adoption of conservation practices. On the other side, the education level of farmers was positively related to the likelihood of adoption of soil conservation practices.

Keywords: soil erosion, land reform, crop rotation, agroforestry.