

Human development and land tenure in Brazil

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This study¹ proposes to investigate how living conditions and human development in the rural environment might be linked to a structural characteristic of the Brazilian countryside: the high concentration of land ownership. It offers statistical evidence that highlights how the markedly unequal land tenure structures in Brazil can affect the indicators of human development, especially of the rural population. It joins other studies that, with similar technical and methodological approaches, have analysed the relationship between the geographic distribution of well-being indicators and distinct patterns of land occupation.

A pioneering study by Victora and Blank (1980) examined, for the Brazilian state of Rio Grande do Sul, the correlation between child mortality and the agrarian structure. The authors identified higher mortality and malnutrition rates among children who resided in areas of large landed estates and cattle ranching, with a high proportion of rural wage workers, than children who resided in areas of smallholding, with subsistence agriculture and family labour.

Another important study by Hoffmann (2007) concludes that there is a statistically very significant association between inequality in the distribution of land ownership, and child mortality rates and life expectancy at birth. The author also states that the Gini Index is an imperfect measure for determining the economic inequality of land tenure because it does not allow variations regarding the quality of the soil and the location of land plots to be estimated, but it can be considered a good proxy for the inequality of this structure and understood as a conditioning element of the local socio-economic reality. This interpretation helps explain the strong correlation between this measure and variables that are indicative of well-being and human development, as well as health.

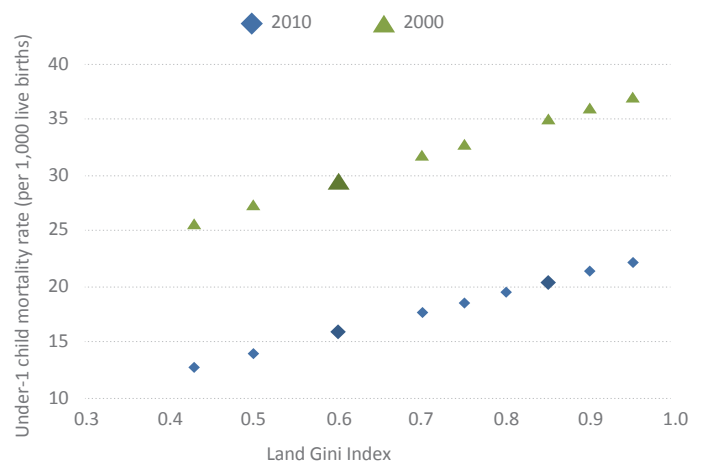
Our analysis was performed across two territorial levels: micro-regions and municipalities. At both levels, the results allow for the conclusion that this 'trademark' of Brazil's underdevelopment—the high concentration of primary assets (land, in this case) can be related to comparatively low standards of well-being. To reach these results, regressions were estimated for three synthesis variables of well-being: i) the Human Development Index; (ii) the under-1 child mortality rate; and (iii) the under-5 child mortality rate, for both territorial levels and across two distinct periods—1996/2000 and 2006/2010. Illiteracy rate, expected years of schooling, the Land Gini Index and the size of the rural population as a proportion of the total population were explanatory variables.

Figure 1 illustrates the results relative to the under-1 child mortality rate, by highlighting the expected values according to the Land Gini Index.² The positive effect of a better land tenure structure on child

mortality rates is evident, given that the predicted rates for the areas characterised by small properties are 16 per cent and 22 per cent lower in 2000 and 2010, respectively, than for those areas with a land structure that is similar to the rest of the country.

The results of our study join other studies on the social living conditions of rural populations, and reinforce the conclusion that the majority of the issues related to poverty and food and nutrition security in the countryside can be solved through more a decisive intervention in the land tenure structure, together with comprehensive feeding programmes and better policies for income distribution. Despite all the changes that have occurred in the Brazilian countryside and agriculture over the years, inequality in land tenure is an obstacle to human development, and the path to overcoming it must necessarily pass through agrarian reform.

Figure 1. Estimated values—predicted under-1 child mortality rate, according to the proportion of the rural population and the degree of concentration of land ownership in the micro-regions, 2000 (1996/2000) and 2010 (2006/2010)



Source: Authors' elaboration.

References:

- Hoffmann, R. 2007. "Distribuição da Renda e da Posse da Terra no Brasil." In *Dimensões do Agronegócio Brasileiro Políticas, Instituições e Perspectivas*, Vol. 1, edited by Pedro Ramos, 172–225. Brasília: NEAD.
- Valadares, A., F. Gaiger Silveira, and N. de Camargo Pirani. 2017. "Human Development and Distribution of Land Ownership in Brazil." *IPC-IG Working Paper No. 154*. Brasília: International Policy Centre for Inclusive Growth.
- Victora, C., and N. Blank. 1980. *Reforma Agrária* 6, Nov.–Dec.: 24–46.

Notes:

- This One Pager is based on a longer Working Paper (Valadares et al. 2017).
- The average micro-regional values for the two other co-variables (rurality and expected schooling) were considered.