Poverty profile: the rural North and Northeast regions of Brazil

by Sergei Soares (Ipea/IPC-IG); Laetícia De Souza (IPC-IG); Wesley J. Silva, Statistics Consultant and Fernando Gaiger Silveira (Ipea/IPC-IG)

Rates of poverty and extreme poverty have decreased significantly in Brazil over the last 10 years. The prevalence of poverty dropped from 20 per cent to just over 9 per cent of the population, while the prevalence of extreme poverty fell from 7 per cent to 4 per cent in the same period. A continued decrease is unlikely in the future, however, as two of the factors driving the decrease face limitations or significant problems: the labour market and social spending—most notably, social insurance and assistance.

The reduction in poverty has not been accompanied by changes in its principal characteristics or profile. There has been little change at the regional level: the North and Northeast regions still demonstrate the highest rates of poverty (as do rural areas in all regions).

Before discussing our key findings about the poverty profiles of the North and Northeast regions of Brazil, we must first clarify certain concepts that form the basis of the analysis that follows. First, we define the poverty and extreme poverty lines; second, we offer an alternative to the official 'rural/urban' definition set forth by the Brazilian Institute of Geography and Statistics (IBGE).

In 2003 the Federal Government set the monthly per capita income of BRL50 and BRL100 as the thresholds for defining extreme poverty and poverty, respectively, under the *Bolsa Família* (BF) programme. Since then, these thresholds have been used by many scholars as nearly official poverty and extreme poverty lines, adjusted only by consumer inflation each year. They are quite useful for often being similar to the lines commonly used in international comparisons—i.e. USD1 and USD2 per capita per day. In June 2011, with the institution of the *Brasil sem Miséria* programme, the extreme poverty and poverty lines were officially set at BRL50 and BRL100 (or BRL70 and BRL140 when adjusted for inflation) in Presidential Decree 7492 of 2 June 2011. We have adopted these poverty and extreme poverty lines for the purposes of the study.

A peculiarity of Brazil is the fact that 'rural' is a concept just as complex as 'poverty'. It is up to municipal mayors to determine whether a given region constitutes a rural area; the IBGE is legally obliged to accept the designation declared by a municipality. If a mayor defines a given area as urban, they will be entitled to collect taxes on urban properties. Not only do rural areas yield significantly fewer taxes, but the mayors must also share half of their tax revenue with the Federal Government. This agreement gave rise to a controversial and somewhat unreliable definition of what constitutes 'urban' and 'rural' in Brazil.

In our analysis of the poverty profiles of the North and Northeast regions of Brazil, we have adopted four definitions for 'rural settings' and used the official rural/urban seals issued by municipalities as one of the three criteria. The other criteria refer to our classification of a household as agricultural or not. Our categories are as follows:

- *Agricultural households*: where at least one household member is employed in agriculture, and 67 per cent or more of labour income originates from agricultural activities

- *Pluriactive households*: where at least one member of the household is employed in agriculture, but less than 67 per cent of labour income is derived from agriculture

- *Non-agricultural rural households*: households located in officially designated rural areas but without any household members working in agriculture

- *Non-agricultural urban households*: households located in officially urban areas but without any household members working in agriculture.

With the concepts of poverty and rurality duly clarified, an analysis of the main characteristics of poverty and extreme poverty in the North and Northeast regions follows.

First, let us go over the content of our full report on the poverty profiles. We begin the report with a relatively detailed analysis of the evolution of poverty according to the two aforementioned semi-official poverty categories and the four analytical categories of rural areas. In addition to concluding that poverty and extreme poverty have decreased, while simultaneously quantifying this reduction, the poverty profile report also investigates the relationship between this decrease and changes in 'rurality'—that is, demographic changes in the four previously defined groups.

The full report also estimates a comprehensive set of indicators and their evolution for extremely poor, poor and non-poor households in each of the four rural categories. This was done for each state in the North and Northeast regions of Brazil, and for each year between 2004 and 2013—with the exception of 2010.

Municipal poverty maps were generated for all 16 states for 2000 and 2010. Poverty maps are also available for each of the four rural categories.

Notable findings from the poverty profile report are as follows.

Extreme poverty fell by almost half (from 7.6 per cent of Brazilians in 2004 to 4.0 per cent in 2013), and poverty fell by more than half (from 22.4 per cent to 8.9 per cent). Even more impressive than the overall decrease of poverty in the country, however, is the decrease in poverty among agricultural households. In 2004 the rate of extreme poverty in agricultural areas was nearly three times the rate of overall extreme poverty; by 2013 the two rates were nearly identical.

Almost as impressive as the rapid decrease in poverty in agricultural households is the stability of poverty rates in pluriactive households. The extreme poverty rate of pluriactive households in 2013 was almost the same as a decade earlier, in 2004. This may be partly due to intergroup migration. These households derive a small share of their income from agriculture and seek to supplement it through other economic activities. However, despite considerable intergroup migration, 94 per cent of the decrease in extreme poverty and 91 per cent of the decrease in poverty are due to changes within the groups, rather than intergroup migration.

In this context, it is important to analyse the characteristics of both agricultural and pluriactive households to better understand what leads these families to poverty and what may have contributed to such a significant drop in poverty among agricultural households. The variables that define the main problems we have selected are:

- insufficient land (area is smaller than the average Tax Module for the Unit of the Federation);

- households with no BF beneficiaries;

- households with one or more elderly individuals but no recipients of retirement or other pensions from the Federal Government;

- informal work;

- underemployment (fewer than 20 working hours a week); and

- job search during the reference week, considering the economically active population (EAP).

Nearly all residents in extremely poor agricultural or pluriactive households in the Northeast region have insufficient land, work informally and live in households with one or more elderly individuals but no retirement pension. Job search does not seem to differ between the household types (around 11–13 per cent in both cases). Among residents of pluriactive households, a fifth work fewer than 20 hours a week; in agricultural households, this share rises to almost a full third. In the Northeast region, the biggest difference lies in the residents in pluriactive households concerning the receipt of BF benefits. In 2013, 37 per cent received the benefit, whereas only 22 per cent received the benefit in agricultural households.

In the Northeast region, pluriactive households seem to be the only survival alternative for families living under extreme poverty. Assistance benefits (such as BF) do help but are not enough to pull these families out of extreme poverty. There must be social policies in place that focus on smallholder farmers and take into account the vulnerabilities of families who make their living out of family farming.

In the North region, the drop in poverty has been less pronounced than in the Northeast and in Brazil as a whole. The persistence of extreme poverty in the North—particularly among pluriactive and non-agricultural households—remains of particular concern. Their poverty rates are almost the same in 2013 as they were in 2004. No doubt, this a worrying trend, considering the widespread fall of poverty during this period.

Although the North region is less poor than the Northeast, it has seen slower progress when compared to other regions of the country. Poverty among agricultural households in the Northeast fell from 65 per cent to 36 per cent—a fairly significant decrease—but many people remain in poverty. Extreme poverty among agricultural households dropped from 30 per cent to 8 per cent in the Northeast. However, it remains the region with the highest extreme poverty rate among agricultural households in the country.

These results suggest that pluriactive families may be a problem. They present high poverty rates that are not declining. Agricultural households are also a problem, considering that they remain the poorest category in the North and Northeast regions. The fact that agricultural households in other regions have reached the same levels of poverty and extreme poverty as the general population, and that poverty has fallen more quickly among them than any other category, suggest that agricultural households may also be a solution.

The characteristics of poor households are a crucial part of any poverty profile. As such, the report also includes an analysis of the characteristics of the heads of the households, household infrastructure and access to public services.

While men and women are, almost by definition, equally as likely to be subjected to poverty or extreme poverty, one potentially important gender issue refers to households headed by women. In 2006 the levels of extreme poverty of households headed by women were the same as those of all households; from 2007 onwards poverty decreased faster among the latter

compared to households headed by women. This led to a feminisation (here we define feminisation according to the gender of the head of household) of extreme poverty that was unprecedented in Brazil's history.

Essentially, our analysis shows that the feminisation of extreme poverty in Brazil appears to be a result of migration to urban areas and the declining advantage of agricultural households headed by women compared with the other types of households also headed by women. In the North, the situation is relatively the same. When we analyse each region separately, the feminisation of extreme poverty seems to be a more prevalent phenomenon in the other regions of Brazil than in the Northeast.

The integration of youth into the economic system is a global issue. However, when we look at rural poverty, the youth appear to be more vulnerable than any other group—both in Brazil as a whole, as well as in the North and Northeast specifically. That does not mean, however, that there are no important specificities to Brazilian youth in the North and Northeast regions; it just means that they are not directly related to poverty. Young people face significant unemployment problems and challenges in education, in addition to being a group notoriously at risk of certain criminal behaviours. All this poses a significant challenge for youth-oriented public policies, although these facts are not directly related to their poverty **status** as defined by the poverty lines adopted here.

We know that defining poverty purely in terms of income fails to account for all that poor people lack. There are still challenges, both in terms of access to certain goods by the Brazilian population—such as refrigerators and computers —as well as access to public infrastructure services, such as sewage and piped water supply.

The increase in the population's access to private infrastructure significantly outperforms access to public infrastructure. In particular, universal sewage coverage—either through the general sewage network or septic tanks—remains a challenge in the North and Northeast regions, as well as in Brazil as a whole.

Between 2004 and 2013 the proportion of agricultural households with refrigerators in the North increased from 42 per cent to 78 per cent; the proportion with access to sanitation increased from 20 per cent to 26 per cent. The Northeast achieved better results: access to public infrastructure is higher in this region than in the North, probably because the governments in the Northeast do not have to contend with the vast geographical distances faced by governments in the North. Agricultural households' access to sanitation increased from 24 per cent to 36 per cent between 2004 and 2013, placing the Northeast 10 percentage points ahead of the North, a relatively richer region. Regarding refrigerator ownership, 89 per cent of households in the Northeast own at least one refrigerator; in the North the proportion is 78 per cent, and in Brazil as a whole it is 92 per cent. These figures reflect a regional difference that goes beyond the income gap.

An analysis of the poverty and extreme poverty maps at the municipal level reinforces the fact that the rural poverty problem in Brazil largely affects agricultural households in the North and Northeast regions.

Few municipalities in the other three regions of Brazil have poverty rates higher than 30 per cent; in many, it is below 15 per cent. In the North and Northeast, however, the situation is quite different. Many municipalities have poverty rates higher than 60 per cent; in some municipalities they may be as high as 90 per cent. Especially notable are the very poor areas in the northwest of both the North and Northeast regions. These are the poorest of the poor areas; the differences are very pronounced among agricultural households. The western Amazon and the state of Maranhão present very high rural poverty rates.

We also performed an analysis of poverty **clusters**, with the following objectives: first, to describe the spatial distribution of the incidence of poverty and extreme poverty in households with some agricultural activity (pluriactive and agricultural) and non-agricultural rural households, and, second, to investigate the existence of poverty conglomerates— contiguous sets of municipalities where the poverty rate is higher than in other regions. This effort was especially important in listing the priority regions for implementing public policies that are easy to disseminate to neighbouring municipalities (taking into account the social, political, economic and geographical characteristics of each region).

Based on the analysis of poverty conglomerates across the country, the general trend is for clusters of high poverty rates to be concentrated in the North and Northeast regions, while the south of the country boasts clusters of low poverty rates. When we look only at the conglomerates in the North and Northeast, the change in the pattern of low clusters versus high clusters is remarkable, especially in the south of the state of Pará. This area has high poverty conglomerates only when we include non-agricultural rural households. On the other hand, this same region does have low poverty **clusters** when we analyse pluriactive and agricultural households jointly.

The main findings of this study—namely, that the decrease in rural poverty was due to a decrease in agricultural poverty; the existence of marked differences between the North and Northeast and the rest of Brazil; and that the differences are most striking among agricultural households—show that investing in family farming may be paramount in reducing extreme poverty in the North and Northeast regions—and particularly relevant in reducing regional differences in poverty rates. When we compare the differences in family farming between the North and Northeast and the rest of Brazil, it is clear that family farming is undercapitalised in these regions: both the share of family farming establishments that receive funding as well as the average number of tractors per family farm are considerably lower than in the rest of the country. ■

Reference:

Soares, Sergei, et al. 2016. "Poverty profile: the rural North and Northeast of Brazil". IPC-IG Working Paper No. 138. Brasília: International Policy Centre for Inclusive Growth.