Reducing Poverty and Food Insecurity in Rural Brazil: the Impact of the Zero Hunger Program

Réduire la pauvreté et l'insécurité dans le Brésil rural : l'incidence du programme Faim Zéro

Die Verringerung der Armut und Ernährungsunsicherheit in ländlichen Regionen Brasiliens: Die Wirkung des Null-Hunger-Programms

Ely José de Mattos and Izete Pengo Bagolin

According to the last Brazilian Census (IBGE, 2010) in 2010, 15.6 per cent of the national population (more than 29 million people) lived in rural areas. The populations living in these areas are quite heterogeneous, differing not only from those in urban areas but also between regions and states. These differences include gender composition, age, education, income, living standards, working conditions and livelihood strategies.

The history of economic growth and development in Brazil is strongly linked to the agri-food sector. According to Mattei (2015), rural development activities in Brazil have often resulted in conflicting projects

operating in the same geographical space. Modern agribusiness, which is based around monoculture, produces around 23 per cent of national GDP and 40 per cent of national exports. On the other hand, family farmers are responsible for 84.4 per cent of the total number of farms in Brazil, covering an area of 80.25 million hectares, or 24.3 per cent of the occupied area (IBGE, 2006). Buainain et al. (2009) point out that, despite having relatively small areas of land, family farming uses that land intensively and accounts for 40 per cent of total national agricultural production, with gross value of R\$ 57.5 billion, thus making a substantial contribution to national food security. Despite the

importance of family farming in Brazil, the incidence of poverty and food security is greater in rural populations than in their urban counterparts.

Il reste un long chemin avant que le Brésil puisse affirmer que la pauvreté et la faim ont disparu dans le pays.

Over the last decade the Brazilian government has adopted a set of actions, framed within specific social and structural policies, which are aimed at improving living conditions across both urban and rural areas. One of the most important initiatives in this context is the Zero Hunger Program, a national initiative designed to tackle hunger and poverty across Brazil.

This article provides an overview of the scope of public policies designed to support access to basic food and to reduce poverty and hunger. The next section describes these policies, and the following section offers some insights into the success of measures designed to tackle poverty and food insecurity.



The rural population has been targeted by a series of specific measures aimed at combating food insecurity, through increasing agricultural production and empowering family farming.

The Zero Hunger Program

Brazilian policy on food security has its roots in the social movement led

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by the sociologist Herbert de Souza. The movement was based on civil engagement and solidarity actions and was funded through donations from a variety of sources (Silva et al., 2010). While this movement played a critical role in the creation of national policy in this area, this process demanded political and financial commitment, which in turn required the approval of civil society. The first step in the adoption of a national policy came in 1993–94 during the Itamar Franco administration, when the Workers' Party submitted the 'Citizen's Action against Hunger and Poverty and for Life' which itself led to the creation of the National Food Security Council -CONSEA (Maluf, 2007, 2010).

Even though hunger, poverty and inequality were recognised as serious and immediate problems in Brazil, public policies and initiatives during the 1990s and early 2000s were neither adequately articulated nor sufficiently organised to enable them to address the severity of the situation. It was not until 2003, with the election of President Luiz Inacio Lula da Silva, that

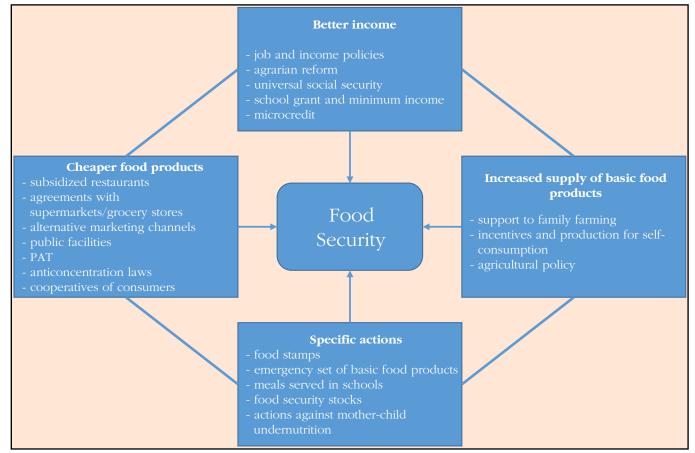


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a clear political decision was made and the Zero Hunger Program was initiated. This Program encompassed a set of initiatives delivering a range of actions targeted at those most in need.

Takagi (2010) argues that policies aimed at achieving food security must deal with a complex range of issues across a number of areas, as illustrated in Figure 1. The general objective of the Zero Hunger Program was to tackle hunger and to replace existing development models with one that promoted growth, reduced income inequality, contributed to the expansion of the domestic market, generated employment and increased purchasing power.

Figure 1: Policy dimensions to achieve food security



Source: Translated and adapted from Takagi (2010, p. 21).



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That part of the Brazilian population vulnerable to food insecurity is heterogeneous and varies geographically as well as by age, gender, race and severity of deprivation. Taking this inherent variability into consideration, the policies of the Zero Hunger Program have been organised along three major lines of action: i) specific or emergency actions; ii) structural actions; and iii) local actions. The first set of actions were designed to provide direct assistance to individuals already experiencing hunger and to lower food prices for the low income population, through mechanisms such as food stamps and improved food distribution. The structural actions promoted inclusion, through a series of actions aimed at increasing production, creating jobs, generating income and reducing inequality. Finally, the local policies aimed, on the one hand, to maintain existing polices and, on the other, to support the development of new policies focused on local needs. In rural areas, for example, the priority was the support of family farming and associated production for self-consumption (Silva, 2010).

An important element of the Zero Hunger Program is Bolsa Família, the world's largest conditional cash transfer programme, which links payments to school attendance and health promotion. This has been considered one of Brazil's most successful initiatives for the alleviation of poverty and hunger (Soares *et al.*, 2010; Campello and Neri, 2013).

Although vulnerability, social exclusion, unemployment and inequality remain important social problems in Brazil, it has been acknowledged that the implementation of the policies outlined above has reached an important level of success (Campello and Neri, 2013). Now, 23 years after the launch of the Citizen's Action against Hunger and Poverty and for Life, there has been significant progress in addressing hunger and poverty in Brazil.

Food insecurity in Brazil

Food insecurity is closely related to poverty. It is reasonable to argue that poor people struggle much more to maintain adequate levels of food energy intakes than do the non-poor. Based on the official poverty line (US\$ 1/day), the rural poverty rate in Brazil was about 22 per cent in 2014. However, this varies considerably across the country. The state of Maranhão, for instance, has 38 per cent of its rural population below the poverty line, whereas the state of Santa Catarina has just 3 per cent. Although still relatively high, these numbers are much lower than some years ago. For example, in 2001, Brazilian rural poverty was around 52 per cent (with Maranhão state at 69 per cent and Santa Catarina at 22.1 per cent).

Es ist noch ein weiter Weg, bevor Brasilien sagen kann, Armut und Hunger besiegt zu haben.

This recent reduction in the level of rural poverty is part of a global pattern that has most often been observed in developing countries. Nevertheless, it is important to note that, in Brazil, these results can be



Cocoa crop in Brazil. Family farms still account for a significant share of food production and employment.

Level of food (in)security	Description
Food security	The family/household has regular and permanent access to good quality food in sufficient quantity, without compromising their other essential needs.
Mild food (in)security	Concern or uncertainty exists regarding future access to food; food quality is inadequate as a result of strategies aimed at maintaining the quantity of food consumed.
Moderate food (in)security	Quantitative reduction of food for adults and/or disruption of eating patterns as a result of lack of food for adults.
Severe food (in)security	Quantitative reduction of food for children and/ or disruption of eating patterns as a result of lack of food for children; hunger (when someone does not eat all day because there is no money to buy food).

explained by the implementation of policies designed to reduce hunger and poverty, particularly Bolsa Família (see Soares, 2012; and Campello and Neri, 2013). Other public policies that have had a positive impact on poverty reduction in rural Brazil also contribute to improvements in food security.

The most useful means of measuring food insecurity across Brazil is the National Household Sample Survey (PNAD), conducted by the Brazilian Institute of Geography and Statistics (IBGE). This survey covers around 150,000 households and 360,000 people are interviewed. Each year, PNAD conducts a basic survey along with a supplementary one covering different topics. For example, supplementary investigations on food (in)security have been performed in 2004, 2009 and 2013.

Food insecurity is measured by applying EBIA, the Brazilian Household Food Insecurity Measurement Scale (*Escala Brasileira da Insegurança Alimentar*), which was inspired by the North American version proposed by the United States Department of Agriculture in the 1990s. This psychometric scale assesses food insecurity in households and is based on a set of 14 questions asking respondents about the availability of food, eating habits, quantity and quality of food consumed, and concerns about

access to/procuring food in the future and is framed around household experiences over the previous 90 days. The level of household food insecurity is estimated using a specially derived algorithm driven by the answers given by households to the 14 questions. Table 1 provides a summary of the measurement scale used by EBIA.

Figure 2 depicts levels of food insecurity in Brazil for 2004, 2009 and 2013 using the scale in Table 1.

From 2004 to 2013 the number of households classified as experiencing food security has increased by 12.3

per cent, exceeding 77 per cent in 2013. While this is an important achievement, the pace of improvement was not a great as was observed when looking at improvements in monetary measures of poverty. This may be an artifact of the psychometric approach which reflects the impressions and feelings of the individuals which may not accurately mirror current experiences. Alternatively, this difference could reflect the relative complexity of the food security problem: improving the quantity and quality of food consumed by a household requires a much more elaborate approach in terms of public policy than that which is required when dealing with income transfer alone (Silva et al., 2010).

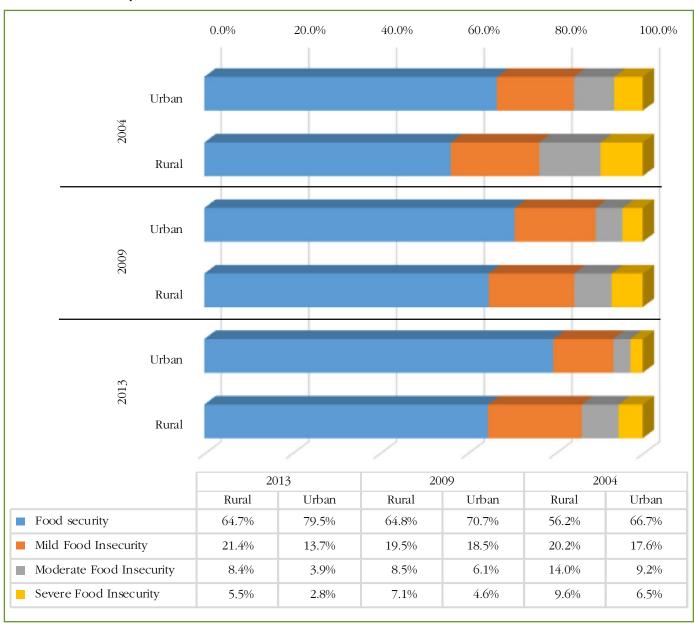
Figure 3 reports food insecurity levels across rural and urban areas for 2004, 2009 and 2013. Rural areas registered higher levels of food insecurity (for all socioeconomic classes) than urban areas for each of these years. It is worth noting that the pace of improvement for rural areas is even slower. From 2004 to 2013, the percentage of households proving to be food secure in urban areas increased by 12.8 per cent, while the improvement in rural areas was only 8.5 per cent. In addition, by 2013, 79.5 per cent of households in urban areas were food secure, compared with only 65 per cent in

Figure 2: Food insecurity levels, Brazil, 2004, 2009 and 2013 (percentage of households at each level of food insecurity)



Source: Data from PNAD (2014).

Figure 3: Food insecurity levels across rural and urban areas, Brazil, 2004, 2009 and 2013 (percentage of households per level of food insecurity)



Source: Data from PNAD (2014).

rural areas. This means that more than one in three rural households in Brazil is still subject to some level of food insecurity.

Despite significant reductions in levels of severe and moderate food insecurity, between 2004 and 2013, further evidence that rural populations struggle more than their urban counterparts is found in the level of mild food insecurity. In 2004, 20.2 per cent of rural households faced mild food insecurity, as opposed to 17.6 per cent in urban areas. By 2013, the gap between urban and rural households had increased to 7.7 per cent, with 21.4 per cent of rural households facing mild food insecu-

rity compared to 13.7 per cent of urban households.

Various studies (e.g. Silva et al., 2010; Soares, 2012; Souza et al., 2015) have demonstrated that policies such as Bolsa Família, implemented under the Zero Hunger Program, have played a significant role in reducing poverty

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and food insecurity. However, according to Souza et al. (2015) they are still insufficient to solve the problem of food deprivation. We argue that it is far more challenging to address food insecurity in rural areas than in urban ones, requiring policies that provide credit facilities and technical assistance for family farms, as well as infrastructure programmes that bring water and electricity to small properties all over the country (Miranda and Tiburcio, 2012; Buainain et al., 2013). Furthermore, the better developed institutional structures and denser populations in urban areas ensure that the delivery of programme measures tends to be more straightforward than in rural areas.

A long way to go

Brazil has proved that it is possible to reduce rural poverty and at the same time improve the nutritional status of people living in rural areas. As already demonstrated by the literature, the Zero Hunger Program has played a significant role in achieving these positive results. However, while poverty and hunger in rural areas have been reduced over the last decade, there is still a long way to go before Brazil can claim that is free from poverty and hunger. As is the case in many countries, rural Brazil remains very heterogeneous and family farms still account for a significant share of food production and employment.

Considering the economic crisis that Brazil is currently facing, it is important to recognise that some of achievements of the Zero Hunger Program may be in jeopardy, especially those tightly connected to the



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emergency actions. This is because one of the most perverse scenarios of the crisis is the combination of unemployment and inflation, which can severely erode the standard of living of the poorest.

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Summary

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Réduire la pauvreté et l'insécurité dans le Brésil rural : l'incidence du programme Faim Zéro Die Verringerung der Armut und Ernährungsunsicherheit in ländlichen Regionen Brasiliens: Die Wirkung des Null-Hunger-

Nearly one in six people in Brazil live in rural areas, representing a diverse population facing a variety of challenges that often differ from their urban counterparts. Access to basic food and the alleviation of poverty are key issues in many rural communities and this article provides an overview of the scope of public policies designed to improve food security and support poverty reduction in rural areas of Brazil. In particular we discuss actions implemented since 2003 under Brazil's Zero Hunger Program. The context for this important programme is described by reporting various indicators of poverty and food insecurity used for both rural and urban areas in Brazil. We argue that Brazil has been successful in reducing rural poverty and in improving the nutritional status of many people living in rural areas and that the Zero Hunger Program has played a significant role in achieving these positive outcomes. However, although poverty and hunger have been considerably reduced in the last decade, and there have been important improvements in rural areas, there is still a long way to go before Brazil can claim to have eliminated poverty and hunger.

Pratiquement une personne sur six au Brésil vit dans des zones rurales. Ces personnes représentent une population diverse, confrontée à une variété de problèmes souvent différents de ceux de leurs concitoyens urbains. L'accès à une alimentation de base et la réduction de la pauvreté sont des questions clés dans de nombreuses communautés rurales. Cet article présente une vue d'ensemble du champ des politiques publiques conçues pour améliorer la sécurité alimentaire et aider à la réduction de la pauvreté dans les zones rurales du Brésil. Nous examinons en particulier les actions mises en œuvre depuis 2003 dans le cadre du programme brésilien "Faim Zéro". Pour présenter le contexte de cet important programme, nous examinons divers indicateurs de la pauvreté et de l'insécurité alimentaire pour les zones rurales et urbaines du Brésil. Nous avançons que le Brésil a bien réussi à réduire la pauvreté rurale et à améliorer la situation nutritionnelle de nombreux habitants des zones rurales, et que le programme "Faim Zéro" a joué un rôle important dans ce succès. Cependant, si la pauvreté et la faim ont été considérablement réduites au cours de la dernière décennie, et si les zones rurales ont connu des améliorations importantes, il reste un long chemin à parcourir avant que le Brésil puisse déclarer avoir éliminé la pauvreté et la faim.

Etwa eine von 6 Personen in Brasilien lebt in ländlichen Regionen. Diese ländliche Bevölkerung ist vielfältig und steht einer Vielzahl von Herausforderungen gegenüber, die sich häufig von denen der städtischen Bevölkerung unterscheiden. Der Zugang zu Grundnahrungsmitteln und die Minderung von Armut sind zentrale Anliegen vieler Gemeinden in ländlichen Regionen. Der vorliegende Beitrag gibt einen Überblick über den Umfang staatlicher Maßnahmen zur Verbesserung der Ernährungssicherheit und zur Unterstützung der Armutsreduzierung in ländlichen Regionen Brasiliens. Wir betrachten insbesondere Maßnahmen, die seit 2003 im Rahmen des brasilianischen "Null-Hunger-Programms" eingeführt wurden. Dieses wichtige Programm wird im Kontext verschiedener Indikatoren für Armut und Ernährungsunsicherheit beschrieben, die sowohl für die ländlichen als auch für die städtischen Regionen Brasiliens genutzt werden. Wir legen dar, dass Brasilien erfolgreich die ländliche Armut reduziert und den Ernährungszustand vieler Menschen, die in ländlichen Regionen leben, verbessert hat. Das Null-Hunger-Programm hat eine wichtige Rolle für die Erzielung dieser positiven Ergebnisse gespielt. Armut und Hunger konnten im letzten Jahrzehnt erheblich reduziert werden und es kam zu wichtigen Verbesserungen in den ländlichen Regionen. Es jedoch noch ein weiter Weg, bevor Brasilien sagen kann, Armut und Hunger besiegt zu haben.