# Social Policy Effectiveness in Rural Minas Gerais

Measuring the Success of Conditional Cash Transfers and Low-Income Pensions inImproving Standards of Living for the Rural Poor

#### **Abstract**

As a means of evaluating the success of Brazilian social policy in permanently ameliorating poverty, this investigation examines the effectiveness of three federal programs –Bolsa Família, Benefício de Prestação Continuada, and Previdência Social Rural — in raising standards of living between 2011-2013 forthe rural poor of Minas Gerais. This study finds that while these programs reach their target populations, program receipt has had an insignificant effect on improving standards of living for rural mineiros. This investigation identifies factors that account for this inefficiency: low-quality services, dependency, misinformation, misdistribution, bureaucracy, and divergent local and federal interests.

**Keywords:** Minas Gerais, rural social policy, conditional cash transfers, *Bolsa Família* 

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#### INTRODUCTION AND OBJECTIVES

In current Brazilian federal social policy, conditional cash transfers ("CCTs or CCT programs") have become increasingly popular since the 1988 Constitution. With the aim of raising standards of living for the poor, CCT programs provide liquid capital directly to target populations with provisional aims, hence their "conditionality" (Lindert et al., 2007; Fenwick, 2009; Vieira Santos, 2010).

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Initially founded as the *Fome Zero* ("Zero Hunger") program, the predecessors of modern Brazilian CCTs functioned as separate subsidy schemes for basic goods or schooling (Lindert et al., 2007; Fenwick, 2009; Vieira Santos, 2010). The most famous, *Bolsa Escola*<sup>1</sup>, grantedmonthly stipends to underprivileged families with the condition that its youngest members remain in school until the age of fourteen(de Janvry et al., 2006; Glewwe & Kassouf, 2010). The Cardoso and Lula administrations of the 1990s and early 2000s favored CCTs as an efficient means of diminishing income inequalities while consuming a marginal proportion of public spending (Hunter & Sugiyama, 2009).

In 2003, the former method of fractured subsidy distribution was condensed into the Bolsa Família program, converted into Federal Law No. 10.836 in January of the following year(Fenwick, 2009). Bolsa Família encompasses the former Bolsa Escola, Bolsa Alimentação<sup>2</sup>, Auxílio Gas<sup>3</sup>, and Cartão Alimentação<sup>4</sup> initiatives(Fenwick, 2009: 114). While there have been changes to eligibility of receipt since its inception, the functionality of BolsaFamília has remained largely unchanged. The program targets the poorest families of Brazil, with the official aim of aiding families who earn less than 140 reais (~45 USD) per month per capita. A large portion of this demographic lives in extreme fiscal poverty and earns less than 70 reais (~23 USD) per month per capita. This demographic is eligible for the additional *Benefício para Superação da Extrema Pobreza*<sup>5</sup>, agrant intended to create a minimum national standard of living and ensure food security forthose living in abject poverty (Osorio & Soares, 2014). Multiple incremental cash stipends per child and per teenagerare available to any eligible recipient as well (Soares et al., 2010; Osorio & Soares, 2014). These cash stipends are, by nature, conditional; in the case of Bolsa Família, recipient families must ensure that children up to age seventeen attend school with a minimum attendance rate, that all children are immunized, and that all mothers are given pre-natal and child development monitoring. Failure to comply may, and often does, result in the suspension of transfers (Lindert et al., 2007; Vieira Santos, 2010; Barrientos, 2013).

Alongside *Bolsa Família*, Brazil administers two low-income targeted pension programs. The *Benefício de Prestação Continuada*<sup>6</sup> aids older, disabled, or decommodified individuals, while the *Previdência Social Rural*<sup>7</sup> is destined for informal rural agricultural workers (Brumer, 2002; Guimarães, 2008; Defensoria Pública do Estado de São Paulo, 2011). Functioning in a similar manner to a CCT program by providing direct monthly wages to recipients who meet certain eligibility requirements, these programs have strengthened the notion of universal entitlements across Brazil (Vaitsman & Paes-Sousa, 2007; Barrientos, 2013).

While advances have been made across Brazil to lower its poverty rate through social policy initiatives(Lindert et al., 2007; Fenwick, 2009; de Bem Lignani et al., 2011; Osorio & da Souza, 2012; Osorio & Soares, 2014)— evident in the reduction of indigence by up to 4.1 million individuals through pensions alone (Barrientos, 2013)—progress must be contextualized. In terms of income, Brazil is one of the most unequal countries in Latin America, with dark-skinned, female, rural, informal workers

<sup>1 &</sup>quot;School Grant"

<sup>&</sup>lt;sup>2</sup> "Food Grant"

<sup>&</sup>lt;sup>3</sup> "Gas Assistance"

<sup>&</sup>lt;sup>4</sup> "Food Card" – similar to food stamps.

<sup>&</sup>lt;sup>5</sup> "Benefit for the Eradication of Extreme Poverty," one of the varieties of stipend installments within the Bolsa Família

<sup>&</sup>lt;sup>6</sup>"Continued Installment Benefits" – low-income social pension.

<sup>&</sup>lt;sup>7</sup> "Rural Social Security"

having the lowest human development levels across the nation (Hunter & Sugiyama, 2009; Fahel et al., 2012). A recent estimate suggests a rural poverty headcount of over 50% (Barrientos, 2013). Despite this imbalance of wealth, Brazilian social policy historically did not aid the poor, who were forced to rely on systems of *coronelismo*<sup>8</sup>, until the 1988 Constitution (Fenwick, 2009; Teodosio et al., 2012).

The state of Minas Gerais may be seen as a microcosm of historical Brazilian social policy. While the state was founded on the agricultural backbone of sugarcane plantations, and later gold mining, the shift of its economic focus to the industrial south engendered immense discrepancies in human development between urban and rural populations(Kohli, 2004; Teodosio et al., 2012; Figueiredo & Silva, 2012). Smaller and poorer municipalities of Minas Gerais, largely concentrated in the rural northern half of the state, have struggled to implement adequate CCT and pension distribution due to the historical distance between government officials and powerful local figures(Flynn, 1979; Kohli, 2004; Monteiro et al., 2009; Andrade and Zimmerman, 2011; Figueiredo and Silva, 2012). Thus, while direct income transfer from the federal government has aided many disadvantaged mineiro families(Fahel et al. 2012), a lower proportion benefit in rural, impoverished, and isolated municipalities throughout the state(Monteiro et al., 2009; Andrade and Zimmermann, 2011). While federal government assistance has continued to expand (Veras Soares, 2013; Osorio & Soares, 2014), low-income rural populations continue to lag behind their urban equivalents(Brumer, 2002; Monteiro et al., 2009; Figueiredo & Silva, 2012; Teodosio et al., 2012).

Given the discrepancies between urban and rural populations in terms of income and resources, coupled with the shift in federal social policy since the 1988 Constitution, one must question the effectiveness of social protection programs in guaranteeingdecent standards of living for the rural poor of Minas Gerais. This study strays from substantively meaningless income and public spending analyses by assessing poverty through material standards of living, such as presence of electricity and running water, challenging the definitions of poverty implicit within the rhetoric of CCT and pension programs that suggest basic food security, minimal education, and wages are equivalent to a permanentexit from poverty(Vaitsman & Paes-Sousa, 2007; Glewwe & Kassouf, 2010; de Bem Lignani, 2011).

Ultimately, this investigation seeks to ascertain the relative success of these initiatives for the rural poor of Minas Gerais. This study seeks to answer the following questions: who are the individuals most likely to benefit from Brazilian federal CCT and pension programs in rural Minas Gerais between 2011 and 2013? Have these programs been significant in improving material standards of living for the rural poor of Minas Gerais between 2011 and 2013? And finally, why have these programs been successful or unsuccessful in improving standards of living for poor, rural residents of Minas Gerais?

#### THEORETICAL REVIEW AND BACKGROUND INFORMATION

As a landmark in the path towards democratization after decades of military rule marked by inequality and imbalanced economic growth (Kohli, 2004), the 1988 Brazilian Constitution set a new national precedent of universal social rights and poverty reduction. Legislation supporting these ideals quickly followed, including the 1993 Organic Law of Social Assistance ("LOAS") establishing the *Sistema Único de Assistência Social* ("SUAS") as the distribution system of government assistance (Fenwick, 2009). The rise of social movements combating destitution, the electoral success of the Brazilian Social Democratic Party ("PSDB") and the Workers' Party ("PT"), and the increase in the democratic weight of the votes of the Brazilian poor soon accompanied the canonical pledge for comprehensive coverage.Brazil began to cultivate a series of social policy initiatives with the intention

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<sup>&</sup>lt;sup>8</sup> A historical reliance on military elite and wealthy landowners in rural areas, upon whom the poor were dependent and bound as a political leader and service distributor (Teodosio et al., 2012).

<sup>&</sup>lt;sup>9</sup> The demonym of an individual from Minas Gerais.

<sup>&</sup>lt;sup>10</sup> The "Single System for Social Assistance"

of overcoming the historical patronage- and discretion-based programs that maintained a powerful national elite (Huber, 1996; Teodosio et al., 2012). Social assistance programs focusing on combating poverty proliferate today, acting perhaps as a response to the social 'debt' of the human rights abuses of the former dictatorial regime. Social assistance emerged as fully distinct from the Bismarckian contributory principles that had once dominated Brazilian public policy, affording the federal government responsibility for the procurement and upkeep of citizens' rights across class and demographic barriers (Huber, 1996; Hunter & Sugiyama, 2009; Soares et al., 2010; Barrientos, 2013).

Brazilian federal CCT and low-income targeted pension programs are the contemporary manifestations of this ideological shift. Eligibility is determined by means of a generic application process known as the *Cadastro Único para Programas Sociais do Governo Federal* "Cadastro Único"], distributed through municipal networks and validated by the federal government through income (cash-based) assessment(Lindert et al., 2007; Amaral, 2014). The keyenrollment and distribution mechanism is SUAS. This decentralizing model affords responsibility for social assistance administration directly to the federal government, via municipal management and distribution.

In the case of *Bolsa Família*, SUAS relies on matriarchal socio-familiar assumptions, in which resources are distributed to families with children, usually directly to mothers, and shared by their members as a means of boosting income per capita and attempting to combat long-term poverty through accompanying health and educational components (Andrade and Zimmermann, 2011). In the case of pensions, SUAS provides for those who can prove long-term productive service, formally or informally (Brumer, 2002).SUAS is a shift away from syndicate-based or patronage-linked systems that once dominated rural Brazil, in which federal institutions were imperceptible and rural residents often relied on "coronéis" for fiscal, educational, or health-related aid (Huber, 1996; Fenwick, 2009).Municipal systemsin Minas Geraiswere often vestiges of "coronelismo," led by wealthy military figures or landowners who independently controlled local resources by offering benefits to the poor in exchange for political support (Teodosio et al., 2012; Figueiredo and Silva, 2012).

Ultimately, however, while CCT and pension programs have penetrated rural zones of Minas Gerais (Monteiro et al., 2009; Brasil Ministério da Saúde, 2012; Fahel et al., 2012; Braga et al., 2013), their long-term effects on local poverty and standards of living remain relatively unknown. Thus, as Hunter and Sugiyama fittingly inquire in Democracy and Social Policy in Brazil (2009), "will the short-term nature of conditional cash transfers like the Bolsa Família strengthen notions of personal gratitude towards a [new] generous patron [the federal government], which in turn could undermine collective efforts to claim a greater share of entitlements and access to public services in the medium-to long-term? Are conditional cash transfers an effective way to address poverty and build human capital in the long term, or do they allow governments to avoid making difficult decisions to restructure education and health in ways that would have a more fundamental and enduring impact?"

Social policy evaluation has become increasingly importantworldwide as social protection provisions expand, forming immense domestic networks of welfare. The 1990 Gøsta Esping-Andersen work, "The Three Worlds of Welfare Capitalism" served as a landmark classification of the welfare state and has influenced the field of social policy analysis since its initial publication. Esping-Anderson identifies key characteristics of a welfare state through which its specific typology may be defined as conservative, liberal, or socialist. Most of the nations of the world, he argues, embody one of these frameworks in their approach to social policy. This typology offers a methodology for classifying the welfare state and a formula for evaluating its effectiveness along a limited selection of variables. Decommodification, the most salient of these factors, is a measure of "the degree to which individuals, or families, can uphold a socially acceptable standard of living independently of market participation" (Esping-Andersen, 1990: 37). Huber places Brazil within the spectrum of classification that Esping-

<sup>11 &</sup>quot;Single Registry for Social Programs of the Federal Government"

<sup>&</sup>lt;sup>12</sup> Literally "coronels," meant to describe wealthy male landowners and local politicians.

Andersen outlines, noting a historically hybrid structure of conservative and socialist regimes that has resulted in a progressively more effective universal protection systemin the nation (Huber, 1996).

However, many scholars have criticized the Esping-Andersen approach, finding its evaluative methodology to be exclusively applicable to developed Western nations. Gough and Wood, in "Insecurity and Welfare Regimes in Asia, Africa and Latin America," are strong proponents for alternative methods of social policy evaluation in the developing world. They argue that many individuals in emerging economies are unable to be commodified by means of a federal welfare state (a precondition of the Esping-Andersentypology) due to the prevalence of informal markets and lack of social protection. Accordingly, the scholars propose alternative social policy assessments, centered on measuring the satisfaction of basic needs among targeted low-income populations, without the common discourse surrounding monetary assets and government spending (Gough & Wood, 2004).

The Gough and Wood approach is especially pertinent to rural Minas Gerais, where a poverty headcount based on income tests is unable to signify long-term shifts in levels of indigence(Hunter & Sugiyama, 2009; Barrientos, 2013). A family may receive a monthly monetary stipend, but this may only offera basic subsistence, insufficient for permanently lifting that family out of the cycle of poverty. The claimed increase in productive capacity afforded by Brazilian CCT and pension programs in rural Minas Gerais likely falls short (Monteiro et al., 2009; Fahel et al., 2012; Matthew, 2014).

The number of studies that examine the satisfaction of basic human needs in rural Brazil and Minas Gerais – access to clean water or proper sanitation, for example – is shockingly low.Brazilian and international scholars alike focus almost exclusively on economic indicators, generating countless studies examining the decreasing income gap and levels of inequality across Brazil (Barros, Carvalho, & Franco, 2007; Soares et al., 2010; Clementi & Schettino, 2013; de Andrade et al., 2014).Others have depicted the success of Brazilian CCT programs through assessments of school enrollment and dropout rates (de Janvry et al., 2006; Glewwe & Kassouf, 2010).The federal government continues to tout statistics that suggest an enormous reduction in poverty as well, evidenced by income-based studies and increases in food security(de Bem Lignani et al., 2010; Osorio & Souza, 2012).While these studies are evidence of the short-term success of CCTs and pensions in reducing hunger and income differences, they do not reflect long-term and permanent poverty amelioration.

Recently, there has been increasing demand for a more appropriate strategy for social policy evaluation, specifically for CCTs and low-income pension programs (Barrientos, 2013; Vaitsman, Ribeiro, & Lobato, 2013; Matthew, 2014). Hunter and Sugiyama go as far as to question the claim that Braziliansocial policy initiatives significantly amplify universal rights, or if instead they simply provide a proportionately small, "barebones" social protection mechanism that allows impoverished families to stay afloat while being careful not to disrupt the historical entitlements of the elite (Hunter & Sugiyama, 2009). Barrientos delineates a similar challenge, focusing as well on the creation of a new, hybrid system of patronage through CCTs and pension schemes, particularlyacute in rural areas, in which social protections may be contingent on political allegiance (Barrientos, 2013).

# **METHODOLOGY**

The first two questions of this study, which seek to predict probability of receipt and measure the effectiveness of CCT and pension programs in improving standards of living among the rural poor of Minas Gerais, necessitate separate quantitative analyses. The final question of this investigation, which seeks to explain measured program efficiency, requires qualitative analysis.

# QUANTITATIVE METHODOLOGIES

Taking into account the general lack of studies focusing on the material impact of *Bolsa Família*, *Benefício de Prestação Continuada*, and *Previdência Social Rural*,in addition to the low focus on rural areas, this investigation analyzes data from the *Pesquisa Nacional por Amostra de* 

*Domicilios*<sup>13</sup>("PNAD") (IBGE, 2015)so as to reveal their effects on standard of living indicators in rural Minas Gerais. This investigation examines factors that contribute to the probability that an individual receives a CCT or pension, considering both recognized prerequisites for eligibility(Lindert et al., 2007; Osorio & Soares, 2014) and supplementary variables that may affect likelihood of receipt.

The PNAD dataset is a product of the Brazilian Institute of Geography and Statistics ("IBGE"). This household survey, conducted annually, is the largest nationally representative survey of its kind, and since 2003 it covers both urban and rural sectors of all twenty-seven Brazilian states(IBGE, 2015). Seeing as the PNAD continuously monitors population, education, labor, income, and housing characteristics based on random sampling techniques, the dataset is the most suitable body of statistics available for this investigation. However, urban centers tend to be a greater focus of the collected sample, primarily as a result of accessibility. In Minas Gerais, for example, over a third of all individuals sampled from 2011 to 2013 come from the greater metropolitan area of Belo Horizonte(IBGE, 2015). This fact brings into question the full reach of the PNAD survey in rural communities, especially in terms of identifying and properly representing the poorest and most marginalized individuals of these regions (Hall, 2008; Fahel, 2012; IBGE, 2015).

In order to adapt the dataset to best fit the needs of this investigation, it is necessary to isolate relevant observations. The datasets, available to the public on the IBGE website, compriseover 300,000 unique annual observations detailing the characteristics of individuals surveyed, along with household characteristics for each participant(IBGE, 2015). While the microdata for these characteristics must be uploaded separately to R<sup>14</sup>(R Core Team, 2014), the two sections can be stitched together by means of the unique per-household identification code that unites them. Once the household data has been grafted to the corresponding individual observations, the population examined by this investigation can be isolated long the following demographic limitations:

TABLE 1: DEMOGRAPHIC LIMITATIONS

CHARACTERISTIC	PNAD Variable Equivalent
Minas Gerais resident	Observations for which UF(Federal Unit) is equal to 31
Over age 18	Observations for which V8005(age)is greater than or equal to 18 <sup>i</sup>
Rural resident	Observations for which V4728(rural)is greater than or equal to 4
Below poverty line	Observations for which V4743(per capita income)is less than or equal to 3 <sup>ii</sup>

<sup>&</sup>lt;sup>i</sup>While children below the age of 18 may technically be considered recipients, Institutional Review Board Approval for the qualitative section of this investigation forbade human subjects younger than 18. The quantitative sample was adjusted accordingly.

After isolating this data subsection, the resulting sample sizes are: for 2011, 2,140 observations; for 2012, 2,242 observations; and for 2013, 2,185 observations. While these numbers are small in relation to the population of rural Minas Gerais (IBGE, 2014), the random sampling provides for the most accurate and accessible data representation of this populace.

Given that no variable exists within the PNAD data set to define whether or not an individual is a recipient of CCTs or pensions, this investigation utilizes a method of estimation popularized by Brazilian scholars (Barros, Carvalho, & Franco, 2007; Soares et al. 2010). Soares et al. (2010) isolatethe

<sup>&</sup>lt;sup>ii</sup>While Brazilian CCT and pension programs have an eligibility cap lower than one minimum monthly wage, all individuals within this income bracket were considered to account for misreported income and mis-distributed program benefits.

<sup>&</sup>lt;sup>13</sup> "National Household Sample Survey"

<sup>&</sup>lt;sup>14</sup> Common statistical computing program utilized for this analysis (R Core Team, 2014).

specific values of reported non-work-based incomesthat align with program stipend amounts, revealing reasonably accurate estimates of CCT and pension receipt.

According to this methodology, observations with a value equal to one monthly minimum salary in Brazil at the time of survey administration for variables V1252 or V1255, representing income from social insurance benefits(IBGE, 2015), are expected to be recipients of either *Beneficio de Prestação Continuada* or *Previdência Social Rural*. Observations with a value equal to any of the possible *Bolsa Família* stipend amounts or the Brazilian federal minimum wage (the latter considering misreports of low-income pensions) at the time of survey administration for variable V1273, representing non-work based income from 'other' sources (IBGE, 2015), are considered to be beneficiaries of one of these programs (Soares et al, 2010: 38). For this investigation, status as a recipient is determined by the following values (IBGE, 2015; Osorio & Soares, 2014):

TABLE 2: PROGRAM RECIPIENT IDENTIFICATION

SURVEY	VARIABLE REQUIREMENTS TO BE CONSIDERED A "RECIPIENT"
PNAD 2011	Observations for which V1252 or V1255 are equal to 545 reais; Observations for which V1273 is equal to 32, 38, 64, 70, 76, 102, 134, 166, 198, 230, or 545 reais.
PNAD 2012	Observations for which V1252 or V1255 are equal to 622 reais; Observations for which V1273 is equal to 32, 38, 64, 70, 76, 102, 134, 166, 198, 230, or 622 reais.
PNAD 2013	Observations for which V1252 or V1255 are equal to 678 reais; Observations for which V1273 is equal to 32, 38, 40, 64, 70, 76, 80, 102, 120, 134, 166, 198, 230, or 678 reais.

The application of the Soares et al. (2010) estimation methodology resulted in a new dichotomous variable labeled "Recipient," in which an observation of "1" signifies an individual who receives a conditional cash transfer or low-income pension and an observation of "0" signifies an individual who does not. The divisions of the annual samples by recipient group are as follows: for 2011, 616 recipients and 1,524 non-recipients; for 2012, 605 recipients and 1,637 non-recipients; and for 2013, 627 recipients and 1,558 non-recipients.

Given the scope of the sample, which includes all observations of per capita household income less than minimum wage, it is likely that some individuals represented by the non-recipient figures may not be eligible for or seeking any of the three programs investigated. However, many identifiable recipients within thesedata are over the maximum income threshold as established by the three programs(Lindert et al., 2007: 71; Monteiro et al., 2009; IBGE, 2015). This is likely a combination of two factors: first, incomes misreported by *Cadastro Único* (Lindert et al., 2007; Monteiro et al., 2009) that may, however, be correctly self-reported here; and second, the incentive for municipalities to overenroll beneficiaries in programs such as *Bolsa Família* so as to claim a greater portion of federal government spending and solidify electoral bases (Lindert et al., 2007: 71; Hall, 2008: 813; Fenwick, 2009; Andrade & Zimmerman, 2011; Barrientos, 2013). Thus, the categories of "recipient" and "non-recipient" determined for this study are representative only, expressing the estimated standard of living changes for these factions as a whole. The ability of this investigation to determine the causality of CCT and pension receipt in standard of living improvements, therefore, limited.

To proceed with answering theleading question of this investigation, it follows to first determine the observed individuals who are most likely to be program beneficiaries, thus establishing a known demographic from which to interpret later comparative analysis between recipient and non-recipient samples. This first question requires an analysis of individual probability of receipt when

considering a multiplicity of demographic and employment factors. Accordingly, logistic regressions are the most fitting models of analysis(Hosmer & Lemeshow, 1989; Everitt & Hothorn, 2006).

Continuada, and Previdência Social Rural, as well as the family- and income-centric ideology that dominates social policy distribution in Brazil, seven variables were chosen for inclusion in the regression models. These were added and tested progressively, arriving at a final logistic regression model that considers both demographic and work-related factors affecting likelihood of receipt. The first four – gender, marital status, age, and level of education – comprise demographic data applicable to all residents of rural Minas Gerais. Females and married couples tend to be targeted in family-centric, matriarchal CCT distribution (Andrade & Zimmermann, 2011), while older individuals receive pension stipends(Brumer, 2002; Guimarães, 2008; Braga et al., 2013). Finally, the widely acknowledgedpositive relationship between increased education and better socioeconomic standing is considered through the variable of years of education(Arnold & Jalles, 2014).

The remaining three variablestake into account employment-based factors as a means of measuring whether or not participation in the workforce confers a higher probability of receipt.Discourse against CCT and pension programs often cites their discouragement of productivity and employment(Brumer, 2002; Hall, 2008; Teodosio et al., 2012). As such, the primary variable examined is whether or not an individual has a steady job, with the additional variables of syndicate membership and reported work-based income taken into account.Work-based income(self-reported here, and thus subject to misreporting and inclusion of informal sources) would suggest an obvious effect: as work income increases, likelihood of income-targeted assistance receipt should decrease(Lindert et al., 2007).Syndicate membership may be more nuanced, reflecting older social policy trends of distribution in Brazil(Huber, 1996; Fenwick, 2009; Figueiredo & Silva, 2012).

For the second question of this investigation, the quantitative methodology must be altered. The second question seeks to determine *causality* of CCT or pension program receipt in improving standards of living for the rural poor of Minas Gerais. This is measured across eight factors selected from the PNAD household dataset: indoor running water; indoor sanitary plumbing; household electricity; a household water filter; sanitary waste disposal; a household refrigerator; a household telephone; and household internet access (IBGE, 2015). These variables were selected so as to distance this investigation from the poverty indicators of income and food security often found in assessments of Brazilian CCT programs. The selected variables indicate a social mobility that is more likely to be permanent, rather than a negligibly increased standard of living (Vieira Santos, 2010; Matthew, 2014).

In order to ascertain whether or not recipient status is a causal factor in improving the standards of living of low-income, rural *mineiros*, the isolated dataset must undergo a form of non-parametric processing known as "matching." By preprocessing data through matching and proceeding to construct justifiable logistic regression models, resulting causal inferences will be less model-dependent and more accurate overall. Modeling assumptions often influence causal inferences, with final models conforming to the results that best suit the hypotheses. The process of matching, however, formulates a "treatment variable" within an observational dataset tested against chosen controls (King et al., 2006).

The treatment variable for this study, therefore, is the constructed 'Recipient' variable, while the control variables are the factors that may affect probability of receipt (gender, marital status, age, education, unemployment, syndicate membership, and work-based income). Matching diminishes the impact of these variables on chosen outcomes by retroactively discerning a "treatment group" and a "control group" from within the data. As a result, "the treatment variable [becomes] closer to being independent of the background covariates, which renders any subsequent parametric adjustment either irrelevant or less important" (King et al., 2006: 2). Thus, the treatment variable of recipient status, if significant, can be seen as almost causal in improving standards of living.

Following the methodology of King (2011) using R, the original datasets necessary in the prior methodology underwent coarsened exact matching (CEM). This allows for a degree of causal inference without the tedious process of balance checking found in other approaches. Seeing as "the key goal of matching is to prune observations from the data so that the remaining data have better balance between the treated and control groups" (Iacus, King, & Porro, 2012: 1), CEM blocks covariates from assuming disproportionate imbalance. CEM guarantees relatively equal balance across variables, forming balanced datawith minimal inference and model dependency (Iacus, King, & Porro, 2012).

The application of CEM entails a few basic steps. First, data frames were constructed for each year studied, containing the "treatment" variable of recipient status, the "control" variables (the seven aforementioned demographic and work-based factors), and the eight "outcome" variables (the selected standard of living factors). After running the CEM coding for the treatment variable against the control variables, balance vastly improves; for each control, the balance improvement for the difference in means between the "treated" and "control" samples ranges from 95-100%. After "pruning" observations, the divisions of sample size by recipient group are as follows: for 2011, 346 recipients ("treated") and 525 non-recipients ("control"); for 2012, 133 recipients and 190 non-recipients; and for 2013, 148 recipients and 186 non-recipients. The sample size is smaller than that of the receipt probability analysis, apparently challengingits significance given increased standard error. However, matchingincreases significance, even for smaller sample sizes (King et al., 2006). Program receipt is then tested for causality through logistic regression analysis. This regression analysis is done twice per year for each of the standard of living variables, first with the "treatment" recipient variable alone and then with all seven control variables.

# QUALITATIVE METHODOLOGIES

The final question of this investigation seeks to determine why Brazilian CCT and pension programs have been successful or unsuccessful in improving standards of living of the rural poor of Minas Gerais. Qualitative data analysis is necessary in policy evaluation, so as to identify the social realities and tangible effects of these programs (Bauer et al., 2000; Garbarino & Holland, 2009). The quantitative data analysis of this investigation is sufficient in determining the result of these programs on standards of living in rural Minas Gerais, but an understanding of the reasons behind this inefficacy demands a qualitative study examining perceptions of rural *mineiros* about Brazilian social policy.

The extent of qualitative data collection was confined to three weeks during January 2015. Accordingly, the design of the qualitative methodology was largely shaped by this time restriction. The largest portion of the advanced preparation for this investigation encompassed the demarcation of participant eligibility, the choice of a location for research, and the outline of interview content.

The demographic of individuals eligible to be interviewed for the qualitative portion of this study must overlap with the demographic examined in the quantitative analysis section. As such, only individuals over the age of 18 and residing in rural communities of Minas Gerais were eligible 15. Individuals from *all* income brackets, however, were welcome to participate in the interviews, given that this portion of the investigation seeks to discern*community* perceptions of Brazilian federal assistance programs. This tactic has been echoed by similar research(Silva Parsons, 2009; Fraga Rios, 2011). It is likely that the perceptions of the local eliteand community leaders about government assistance programs affect their reception as much as the opinions of the rural poor do, and in turn impact their efficiency(Monteiro et al., 2009; Fraga Rios, 2011). Any interested participant from across this broad range of eligible candidates was read an oral statement and then required to sign a consent form delineating the benefits and risks of participating in this study, as well as affirming their eligibility and granting the necessary rights to include their statements within this publication. To

<sup>&</sup>lt;sup>15</sup> The age limit was imposed by Institutional Review Board human subject restrictions.

curtail the sensitivity of the topic, participants wereassured that their names would not be associated with the research, and that digital recordings of the interviews would not be publicized.

All interviews were realized within the same rural community, São Gonçalo do Rio das Pedras ("São Gonçalo"), in the micro-region of Jequitinhonha and Mucuri, the poorest subdivision of Minas Gerais(Andrade & Zimmerman, 2011). This community was chosen in part thanks to investigator connections with a local community group known as *Funivale*(Funivale, 2012). *Funivale* engages communities throughout the micro-region in sustainable agricultural projects and offers local services, such as free access to a natural pharmacy. Associates of this group facilitated access to the community.

São Gonçalo is a village within the municipality of Serro, located roughly 30 kilometers away from the seat of the prefecture and home to approximately 1,522 individuals. São Gonçalo is entirely rural, with a small population cluster of colonial-era dwellings concentrated around the town churches and a few foods and clothing stores. The focal points of the local economy are agriculture and tourism, the latter thanks to the unique microenvironment of the Brazilian *cerrado* <sup>16</sup> and an abundance of waterfalls(Machado et al., 2004; Governo de Minas, 2012). In addition, a *quilombola* community resides within the district of São Gonçalo, known as the community of *Vila Nova* (Serro Prefeitura, 2014). *Quilombola* communities comprise the descendants of runaway slaves who established isolated settlements in the regional highlands, subsisting for centuries off the land(Mattos, 2006). *Quilombola* communities are common in this part of Brazil and are often targeted by programs such as *Bolsa Família*(Amaral, 2014). Within the municipality of Serro, an estimated 66.77% of eligible families benefit from this initiative, compared to 79.29% across the state (Brazil, Ministério da Saúde, 2012).

The selection of a unique rural population within Minas Gerais, functioning as a case study, allows for greater access to community perceptions and relationships among residents. Spending three weeks in a small rural settlement maximized engagement with the community, solidifying familiarity and trust between the researcher and the subjects while maintaining, acknowledging, and honoring these roles. The fact that all interviewees hail from the same village allows potential local factors that may affect perceptions of program efficiency in the area, such as a recent natural disaster, to be accounted for in the preceding analysis (Stake, 2000; Scott & Russell, 2005; Garbarino & Holland, 2009). The case study methodology for similar impact evaluation aims has been applied in rural Brazilian communities with notable success (Silva Parsons, 2009; Fraga Rios, 2011; Ansell, 2014).

Twenty-five individuals were interviewed, representing a spectrum of community members: farmers and regional organization leaders, unemployed mothers and local patriarchs, maids and supermarket owners. Among them were men and women, young and old, program recipients and non-recipients, rich and poor. This sample group and their recorded perceptions serve as an arguably fair representation of typical rural communities across the state. Preliminary questions were drafted prior to the start of the data collection period, centered on accessing perceptions of government programs and general community assistance dynamics (Scott & Russell, 2005; Garbarino & Holland, 2009). While all interviews were based on the same questions, the interview design was flexible, following an inductive grounded theory methodology (Glaser & Strauss, 1967; Strauss & Corbin, 1975).

The associates at *Funivale* suggested individuals willing to participate, and arranged a meeting with members of the *quilombola* community at which the details and objectives of the study were presented. The affiliation with *Funivale* was key to being seen as trustworthy and approachable. With this foundation, interviewees were easier to procure, and they responded receptively. Participants were found through word-of-mouth as well as by means of random introductions at their homes, places of work, or on the street. Nevertheless, there were some limitations in terms of access. The research only took place over the course of three weeks, which truncated the interviewer-interviewee relationship. In addition, the principal investigator was an obvious foreigner, thus lackingfull knowledge and context.

<sup>&</sup>lt;sup>16</sup> Similar to semi-arid highlands: see Machado et al., (2004).

Some interviewees felt more comfortable conducting the interview in a more public setting or in the presence of their family members, which undoubtedly affected their responses. The interviews followed the natural direction of conversation with the interviewees, so as to put participants at ease and allow unprompted perceptions to surface. Interview ime ranged from ten minutes to over an hour. The same questions were touched upon in each of the interviews. All participants were eager to be heard, and were vocal about important issues. Adhering to the inductive nature of grounded theory (Glaser and Strauss, 1967; Strauss and Corbin, 1975), the interviewswere transcribed, translated, and coded by hand. Common themes were identified, analyzed, and interpreted.

## **RESULTS AND DISCUSSION**

## QUANTITATIVE RESULTS AND DISCUSSION

To answer the first question of this investigation, which examines the characteristics that confer a higher probability of CCT or pension receipt, the logistic regression analysis results are depicted annually, showing the changes of variable significance between 2011 and 2013 along with transformations upon the addition of further factors to the regression models.

Table 3: Probability of Receipt Regression Analysis, 2011(n = 2,140)

VARIABLE	1	2	3	4	5	6	7
Female	0.821***	1.28***	1.41*** (0.195)	1.43*** (0.195)	1.22*** (0.205)	1.2*** (0.205)	1.08*** (0.21)
Married	-	0.662* (0.301)	0.224 (0.354)	0.194 (0.356)	0.271 (0.361)	0.256 (0.362)	0.286 (0.37)
Age	_	_	0.082***	0.074***	0.07***	0.068***	0.068***
Years of education	_	-	_	-0.074* (0.029)	-0.072* (0.03)	-0.072* (0.029)	-0.06* (0.03)
Unemployment	-	-	-	_	0.751***	0.82***	0.403
Syndicate member	_	_	_	_	_	0.367	0.26 (0.293)
Reported work income	_	-	-	-	-	_	-0.001* (0.001)

Statistical significance levels: \*\*\* = <0.001, \*\* = <0.01, \* = <0.05,  $^{o}$  = <0.1

Standard error of each regression coefficient shown in parentheses

Perhaps the most prominent finding from among the logistic regression results for 2011 is the significance of gender across all seven models. Within regression model four, an impoverished female resident of rural Minas Gerais is estimated to be over 2% more likely than her malecounterpart to receive CCT or pension benefits when controlling for other factors. After controlling forthreeadditional work-related variables in the final regression model, this same female is estimated to be 3% more likely to be a recipient than her male equivalent. While this difference is not immense, it verifies that CCTs and low-income pensionsare gender-targeted (Brumer, 2002; Hall, 2008; Moreira, 2013).

Other notable variables among the demographic factors areage and years of education, both of which remainsignificant throughout the logistic regression models. An increase in age predicts an increased probability of receipt. Given the inclusion of pensioners, who tend to be individuals of advanced age, this result aligns with policy intent and identified indigence (Brumer, 2002). The variable of years of education follows an expected trend as well, wherein while controlling for other variables in the final regression model, each additional year of education predicts a reduction in probability of receipt. Substantively, the demographic factors in the final regression imply that females

and individuals with lower educational levels are more likely to be recipients of income-targeted social protection programs. This result echoesthe rationale for eligibility behind CCT and pension administration both in Brazil and on a global scale (Moreira, 2013). These individuals tend to be one of the most underprivileged groups in Brazilian and *mineiro* society in terms of standards of living due to the lowered access to income and resources (Brumer, 2002; Fahel et al., 2012).

Upon adding the employment-related variables, unemployment is initially significant. In the sixth regression model, an individual without a steady job is predicted to be more likely to benefit when controlling for five other variables. Substantively, this increase in probability is less than 1%. However, with the addition of the variable reported work-based income, this factor is no longer significant. Instead, a positive relationship appears between reportedwork-based income and probability of receipt, suggesting that it is more common for wealthier individuals within the lowest income bracket to refrain from, be barred from, or misreport receipt (Lindert et al., 2007).

Table 4: Probability of Receipt Regression Analysis, 2012(n = 2,242)

VARIABLE	1	2	3	4	5	6	7
Female	0.94***	1.26***	1.67*** (0.187)	1.71*** (0.188)	1.45*** (0.199)	2.36***	2.14*** (0.291)
Married	-	0.742*	0.353	0.329	0.394	1.02*(0.442	1.18* (0.464)
Age	-	_	0.082***	0.071***	0.067***	0.077***(	0.074***(
Years of education	-	-	_	-0.088** (0.03)	-0.08** (0.03)	-0.097* (0.04)	-0.079° (0.041)
Unemployment	-	-	-	_	0.823*** (0.191)	0.477°(0.26 4)	0.298(0.322
Syndicate member	-	_	-	-	_	0.677*(0.29	0.578° (0.3)
Reported work income	_	-	-	-	_	_	0.002***( 0.001)

Statistical significance levels: \*\*\* = <0.001, \*\* = <0.05, ° = <0.1

Standard error of each regression coefficient shown in parentheses

Demographically, there are no major changes from 2011. The variables of gender, age, and years of education remain significant throughout each of the models they are present in. This result suggests that, when controlling for other relevant factors, women, individuals with fewer years of education, and older people are among the groups most likely to benefit from CCT and pension programs. This again aligns with social policy targets from the federal government, which define the needy as undereducated, female, and old enough to have children that require support or to be in need themselves (Brumer, 2002; Fahel et al., 2012; Moreira, 2013; Amaral, 2014). Interestingly, the influence of gender and marital status increases by the final model of the 2012 data. While in 2011, a female was only 3% more likely to be a recipient when controlling for all other factors, that same low-income, rural *mineira* is almost 6% more likely in 2012. While marital status is significant in the final regression model, married individuals are only about 1.5% more likely to benefit in substantive terms.

As in 2011, with the addition of the variable of reported work-based income in the final regression model, the prior significance of the other two work-related factors plummets. Substantively, however, the estimated effect of this variable is miniscule: a work-based income of 500 reais decreases expected probability of receipt by less than 0.5% from a work-based income of 50 reais. Curiously, syndicate membership remains significant at the <0.1 level in the final model when controlling for all

covariates. This result could depict a return to syndicate-based structures of assistance that the federal government has attempted to reduce (Fenwick, 2009; Monteiro et al., 2009; Andrade and Zimmerman, 2011; Braga et al., 2013), perhaps in response to program inefficacy (Vieira Santos, 2010).

Table 5: Probability of Receipt Regression Analysis, 2013(n = 2,185)

VARIABLE	1	2	3	4	5	6	7
Female	0.916***	1.07*** (0.143)	1.32*** (0.18)	1.34*** (0.18)	0.758***	1.26*** (0.259)	1.02*** (0.265)
Married	_	0.558* (0.264)	0.011	-0.002 (0.3)	0.166 (0.331)	0.256(0.384)	0.201 (0.39)
Age	-	_	0.091***	0.082***	0.073***	0.086**(0.011)	0.085***(0.011)
Years of education	-	-	_	-0.072* (0.03)	-0.07* (0.031)	-0.017 (0.04)	0.0004(0.041)
Unemployment	-	-	_	_	1.89*** (0.215)	1.67***(0.251)	0.831**(0.314)
Syndicate member	-	_	_	_	_	0.499°(0.294)	0.364 (0.302)
Reported work income	-	-	-	-	-	-	0.002***(0.001)

Statistical significance levels: \*\*\* = <0.001, \*\* = <0.01, \* = <0.05, ° = <0.1Standard error of each regression coefficient shown in parentheses

Changes from the models for 2012, along with similarity to the models for 2011, are apparent in the analysis of 2013 data. While gender and age remain significant for each regression of demographic data, the variable of years of education fails to maintain significance. The reasoning behind this phenomenon is difficult to identify. This could suggest the decreasing or stagnant quality of education over time (Oliveira & Duarte, 2005; de Janvry et al., 2006; Fahel et al., 2012), seeing as individuals with more years of schooling are no longer less likely to seek government assistance, or it could be a response to the greater significance of covariates. A return to the 2011 effect of gender, in which a female is about 0.5% more likely to be a beneficiary than her male counterpart in the final model, may indicate that program targeting has strayed from the constructed historical assumption within both Brazilian and global social protection schemes that women are often in greater need due to their dependent nature (Fraser & Gordon, 1994; Hall, 2008; Teodosio et al., 2012).

The employment-related variables also witness a major shift in significance from the 2011 and 2012 models. Instead of an increased probability of receipt based onwork-based income, 2013 data suggest that unemployment is a significant factor in predicting expected probability of CCT or pension receipt. According to the final regression, unemploymentincreases probability of receipt by roughly 0.5% when controlling for other relevant variables. While the substantive effect of this significant factor is minimal, its potential cause could represent a variety of new trends in CCT and pension receipt. This change may simply be the result of an increased prevalence of pension mechanisms for the elderly and underemployed, whichwould also help to explain the significance of age (Brumer, 2002; Vaitsman & Paes-Sousa, 2007; Guimarães, 2008; Barrientos, 2013);or, it may be a result of increased focus on providing benefits for individuals working in informal economies, a population of heightened need due to lack of access to public resources. An estimated 80-90% of the Brazilian poor work in the informal sector(Lindert et al., 2007: 78). This shift could also depict rising labor disincentives and the creation of dependency within the rural poor of Minas Gerais(Hall, 2008).

Finally, it is valuable to note the rate of error for each year examined. The final regression models of the 2011, 2012, and 2013 data correctly predict whether or not an observed individual will benefit from Brazilian federal CCTs or low-income pension schemes for 85-90% of observations.

Having identifiedfactors affecting individual probability of program receipt, this investigation returns to the second question: have Brazilian federal CCT and pension programs been significant in improving material standards of living for the rural poor of Minas Gerais between 2011 and 2013? To provide estimates of the causal effect of program receipt on improved standards of living among this demographic, 48 logistic regressions were tested for the unmatched and matched data.

TABLE 6: REGRESSION ANALYSIS FOR RECEIPT AS A "CAUSAL" FACTOR (UNMATCHED DATA)

Variable	2011 (n = 2,140)		_	012	2013 (n = 2,185)	
VARIABLE	RECEIPT ALONE	Controls	RECEIPT ALONE	CONTROLS	RECEIPT ALONE	CONTROLS
Lack of running water	0.321*	0.143	0.391*	0.319	0.243	0.147
	(0.145)	(0.185)	(0.157)	(0.233)	(0.182)	(0.266)
Lack of plumbing	0.195	0.314°	0.166	-0.028	0.34*	0.768**
	(0.149)	(0.186)	(0.144)	(0.24)	(0.139)	(0.272)
Lack of electricity	0.54 (0.395)	-0.424 (0.532)	0.884° (0.488)	0.534 (0.733)	-0.89 (0.625)	-2.09° (1.13)
Lack of water filter	-0.321**	-0.126	-0.367**	-0.244	-0.32**	-0.006
	(0.121)	(0.147)	(0.118)	(0.184)	(0.112)	(0.183)
Lack of waste disposal	0.402***	0.207	0.411***	-0.017	0.382***	0.332°
	(0.109)	(0.135)	(0.109)	(0.175)	(0.105)	(0.184)
Lack of refrigerator	0.21	-0.334	0.174	0.031	0.461*	0.355
	(0.162)	(0.209)	(0.182)	(0.278)	(0.194)	(0.319)
Lack of telephone	0.527***	0.164	0.489***	0.008	0.63***	-0.043
	(0.101)	(0.13)	(0.102)	(0.163)	(0.105)	(0.177)
Lack of internet access	1.59*** (0.318)	-0.012 (0.386)	1.46*** (0.251)	0.307 (0.38)	2.03*** (0.301)	0.389 (0.402)

Statistical significance levels: \*\*\*\* = <0.001, \*\* = <0.01, \* = <0.05, o = <0.1 Standard error of each regression coefficient shown in parentheses

TABLE 7: REGRESSION ANALYSIS FOR RECEIPT AS A "CAUSAL" FACTOR (MATCHED DATA)

Variable	2011		20	12	2013	
	(n = 871)		(n =	323)	(n = 334)	
VARIABLE	RECEIPT ALONE	CONTROLS	RECEIPT ALONE	CONTROLS	RECEIPT ALONE	CONTROLS
Lack of running water	-0.699**	-0.779**	0.126	0.09	0.164	0.164
	(0.244)	(0.252)	(0.461)	(0.496)	(0.457)	(0.462)
Lack of plumbing	0.859***	0.897***	-0.257	-0.262	0.258	0.27
	(0.197)	(0.202)	(0.379)	(0.397)	(0.373)	(0.379)
Lack of electricity	-1.6**	-1.64**	-1.11	-1.17	-0.729	-0.818
	(0.62)	(0.626)	(1.112)	(1.15)	(1.18)	(1.19)
Lack of water filter	-0.171	-0.163	0.241	0.243	0.073	0.098
	(0.174)	(0.178)	(0.269)	(0.271)	(0.252)	(0.261)
Lack of waste disposal	-0.001	-0.009	-0.124	-0.155	0.239	0.263
	(0.159)	(0.163)	(0.258)	(0.284)	(0.263)	(0.277)
Lack of refrigerator	0.303	0.302	-0.235	-0.227	0.036	0.035
	(0.273)	(0.278)	(0.486)	(0.493)	(0.523)	(0.535)

Lack of telephone	0.154	0.158	-0.382	-0.431	-0.088	-0.138
	(0.147)	(0.152)	(0.264)	(0.277)	(0.262)	(0.274)
Lack of internet access	0.702	0.835	-0.222	-0.426	0.236	0.272
	(0.476)	(0.536)	(0.529)	(0.631)	(0.534)	(0.606)

Statistical significance levels: \*\*\* = <0.001, \*\* = <0.01, \* = <0.05, ° = <0.1 Standard error of each regression coefficient shown in parentheses

The logistic regression results of the unmatched data in Table 6 show immense shifts in significance between the models testing the variable of receipt alone against standard of living indicators and the models that account for the seven control variables. These changes imply that control variables have a greater effect than recipient status on improved standards of living for the rural poor of Minas Gerais. However, because of the inability of these models to provide any result that approaches causality – let alone few of any significance – this investigation will assess Table 7.

The regression results of the matched data in Table 7 are meaningful for their *lack* of significant conclusions. While these results may be partially attributed to small sample size, the effect of CEM should largely counteract this, thanks to its ability to form well-balanced treatment and control groups from the original observation data(Iacus, King, & Porro, 2012). The intended result of matching is the ability to infer causality, in spite of reduced sample size and greater standard error.

Given this knowledge, the insignificance of the variable of receipt in 42 out of 48 regression models, with only six models of significance, is overwhelming. This result suggests that there is no significant effectfrom CCT or pension receipt on standards of living among the rural poor surveyed in Minas Gerais. The only significant results are found in the logistic regressions run for each of the first three standard of living variables tested in the 2011 matched data: absence of running water, absence of indoor plumbing, and absence of electricity. The former two suggest that Bolsa Família or low-income pension recipients are more likely to reside in householdswith running water electricity. Chronologically, these results align with the final months of the first four-year distribution phase of the Luz para Todos 17 and Agua para Todos 18 programs of the Brazilian federal government. Originally initiated by former President Lula, these federal proposals intended to provide access to electricity and clean water for impoverished Brazilians, many residing in rural and marginalized areas(Camargo et al., 2008; Kloos et al., 2012; Campos & Alves, 2014). Beneficiaries of these programs likely overlap with recipients extracted from the 2011 data(Kloos et al., 2012), further affected by an increase of eligible beneficiaries due to program enlargements (Veras Soares, 2013; Osorio & Soares, 2014).

The selected standard of living indicators may require long-term investment in order for the rural poor of Minas Gerais to achieve them, and as such the three-year scope of this investigation may not be sufficient for full understanding of material poverty trends. Ultimately, one must recall that the intent of these regressions is not to determine whether or not the rural poor of Minas Gerais have what might be considered a "good" standard of living overall, but instead to seek whether or not benefitting from Brazilian federal CCT and pension programs engenders improved standards of living. As such, the results suggest that while controlling for covariates and within the time frame fixed by this study, participation in these programs does not confer an improved standard of living.

## QUALITATIVE RESULTS AND DISCUSSION

When asked about perceptions of government assistance programs during the interview process, the twenty-five participants continually identified similar issues that are likely to influence Brazilian federal CCT and pension program effectiveness for the rural poor of Minas Gerais. While the majority of the interviews began with general assessments of the programs, the discussions quickly

<sup>&</sup>lt;sup>17</sup> "Light for All"

<sup>18 &</sup>quot;Water for All"

gained more depth. Some participants were more reserved than others. While many of them were beneficiaries, there was still a large number of recipients, former recipients, and low-income or program-eligible individuals who conveyed important critical insights into the role and the perceptions of government assistance within the community.

When asked the leading question "What do you know about federal government assistance programs within your community?" and prompted to provide examples, almost all participants immediately identified the Bolsa Família program or its current and former subsidiaries, such as Bolsa Escola. Other programs, ranging from federally sponsored cistern installations to federal university grants, were discussed less frequently. One participant described the "intense publicity" that the government organizes for the Bolsa Família in particular, in which he notes how "people don't even need to seek out the program itself, as the government goes to each house, one by one." In spite of the heavy focus on Bolsa Família, the opinions of these twenty-five individuals provide invaluable information about program structure, distribution, and reception pertinent to understanding the rural inefficacy of Brazilian federal CCTs and low-income pensions in Minas Gerais.

Most interviewees initially showed positive reactions to government assistance programs, especially in response to the intentionality behind them. The townspeople overwhelmingly identified federal programs as helpful, backed by a government that sought to afford improved conditions to its underprivileged citizens. "It's a stipend that helps families quite a lot," one young recipient said. "The intention is to truly help." Another interviewee, an older male and community leader who does not receive government assistance, was largely convinced by the objectives of the programs as well:

"Here there's no longer misery, but everyone is poor and lives a simple life... before, people were between poverty and misery, and now people are more stable... the government's proposal to abolish poverty is noble, and it did diminish... in a purely economic sense."

This quote reveals the praise that most interviewees offered the government, as well as the nuances that shape this acknowledgement. Most salient is the idea that while programs such as *Bolsa Família* afford better conditions to recipients, the difference it makes ismarginal. Many people in the community still live in poverty(da Silva, 2005; IBGE, 2014). While their tangible, cash-based income has been enhanced, there are many factors missing that prevent them from enjoying a comfortable standard of living. One woman explained: "when we benefitted, we could only buy food. It's not enough to buy anything else." Another female recipient placed her experience with the *Bolsa Família* within the commiserations of the community as a whole. "We all got a lot better with the stipend that we received," she affirmed, "but government services are still weak."

Given the negligible benefit gained from *Bolsa Família*, few of the needy have been able to exit poverty or gain social mobility. As a result, many of the impoverished residents of São Gonçalo remain poor. The lack of an improved standard of living derived from *Bolsa Família* and other CCTs is exacerbated by the less than favorable quality of the services that they are connected to(Oliveira and Duarte, 2005; Hall, 2008; Monteiro et al., 2009; Vieira Santos, 2010; Fahel et al., 2012). While *Bolsa Família*mandates that all recipients ensure minimal school attendance and a health record for their children, all but two of the individuals interviewed for this investigation evaluated local education and health services as decent at best. A large proportion of subjects stated that students often attend school with the sole intention of maintaining *Bolsa Família* or *Bolsa Escola* benefits, and that the quality of education itself has seen no positive development since the programs launched:

"I think what is most lacking is education. Here people are not educated adequately. The program [Bolsa Família] is a huge project for Brazil... But it doesn't favor local realities."

The local rural health system has been further wrought with problems. One young male recipient, who praised the efforts of the government, noted that access to health remains incredibly challenging:

"The local medic's office got better, but health in general is still very much unstable... if anything serious happens, you have to leave the town because here there is still no solution."

There is currently no hospital within São Gonçalo, nor is there a public ambulance service to carry sick individuals to Serro or Diamantina, each at least an hour away over unpaved roadways. There is a local health post but only one government medic, who gives consultations just two days a week. One recipient gave an example of the fallacies of this scheme:

"The medic, for example. The medic right now is on holiday. [The government] is going to leave the community without a medic? There's one other woman who's a medic. She charges 180 reais. So when there's no government medic, are people going to go running to that woman? And if you don't have the money, where are you going to get 180 reais to pay her?"

Frustrations with education and health were rife, and certainly suggest why government assistance programs may be ineffective. One woman, whose benefits were cut after she began earning a small salary as a part-time cook, had needs much simpler than health and educational improvements. During her interview, she said that she would love to receive assistance again just to "buy a little bit of milk."

The simplicity of this need demonstrates both the poverty of the community and the minimal extent to which *Bolsa Família* and other CCTs have actually helped. While food isguaranteed, assistance programs have been largely inadequate in ameliorating poverty(Hunter & Sugiyama, 2009; de Bem Lignani et al., 2010; Vieira Santos, 2010). This is a common sentiment throughout rural Minas Gerais (Fraga Rios, 2011), and this insufficiency is felt across the community. A female storeowner and active community leader claims that "the government should have another program that helps people have a better quality of life. Not just some food. Education, sanitation... a better quality of life." One male recipient openly recognizes that "the stipend isn't enough to live on if you rely on it alone."

While this may be part of the intention of the program – to help out the poor to some extent, but not through a stipend large enough that recipients no longer require additional incomes – the execution of this concept has not materialized (Moreira, 2013). Jobs are not present, are informal, or depend on daily or seasonal need, just as in many other rural communities across Minas Gerais (Lindert et al., 2007; Fraga Rios, 2011). Recipients and non-recipients alike notice the problem of unemployment, with both sides wishing for more local opportunities. "Instead of investing in this scheme of simply giving out money, we need to offer resources so that an individual can make his or her own means," says a male non-recipient, echoed by many others who proposed an employment prerequisite. "We just need some sort of program for employment," an older female recipient stated flatly. Part of this rationale came from the fact that most subjects had no conception of how long they could benefit from the programs, nor whether or not the programs would remain in existence. However, a lack of alternatives has forced some individuals to rely on government assistance much more than envisioned.

"The *Bolsa Família* was good. Useful. People are no longer needy in terms of food security. But I think it could help a lot more, it can't just stay like this. If it doesn't change, families will get used to it and stop caring, stop working and studying, because they have the very basic."

Many of the interview subjects voiced concerns that the failure of government assistance to provide pathways for exiting poverty has engendered unhealthy dependency among recipients. "You have people who rely on the small stipend that they have and so they stay quiet and leave it as it is," says one former recipient. Since that individual accepts the monthly government stipend as his or her only income, he or she is likely to learn how to live with that alone and become content with 'stabilized' poverty. A prominent local leader explained the situation of beneficiaries in her community: "what happens often is that you know you'll get the check, and so you become accustomed to it." She and a

number of the other interviewees continually utilized the Portuguese verb "acomodarse" to describe this tendency. "In the case of many people who receive these benefits," another prominent community figure contends, "se acomoda," – that is, the beneficiary becomes dependent on – "the allowance. It's difficult for the country to move forward if everyone is comfortable and satisfied with so little."

There were many illustrations of this complacency that some recipients in the community were said to have gained on account of the programs. One male interviewee, who is eligible to receive certain CCT programs from the government but has declined to, explains the dependency effect that the *Bolsa Família* has had on others, and his subsequent decision to refrain from benefitting:

"Five years ago, people who were able to grow crops planted them because they knew they would harvest. Now, because of the programs, I know people who have farmed for three generations, who now won't grow an ear of corn because they won't even sow the seeds."

Many agreed, with one female stating that "on the contrary, [the *Bolsa Família*] is just going to worsen someone's situation, because that person isn't working to increase his or her income." Within São Gonçalo, and within many other rural communities across Minas Gerais, government assistance is often perceived as being a disincentive for work(Hall, 2008; Fraga Rios, 2011). In regions where agricultural labor was commonplace for centuries(Kohli, 2004; Teodosio et al., 2012; Figueiredo and Silva, 2012), this change may be jarring. A small business owner, for example, described how many recipients began losing their incentive to be productive: "I've seen plenty of people in the community who don't study, who don't train, because they figure if they get a better job, they'll lose the *Bolsa Família*." Another woman, a part-time cook, complementedthis sentiment with a portrayal of the stagnancy that recipients might slip into: "*Bolsa Família* made people dependent on the government. It became a dependency, and people do nothing. They just wait each month for the money to come."

While arguments exist both for and against the programs, one of the damaging effects of the negative community stereotypes is that individuals in need are reported to have refrained from seeking help. Even when the aid of government assistance programs was insufficient, one recipient described how "plenty of people are too shy to ask. They feel embarrassed for asking so much." Others, including recipients and former recipients, admitted that they would only seek assistance from the government "as a last resort." One young female recipient asserted:

"If we got help from the government, it would be a lot better. But unfortunately people who are in great need can't go asking for help. They don't have the courage to ask."

Individuals who do receive may become dependent; this dependency may, in turn, generate a lack of productivity or underemployment. On the other hand, an individual who does receive, but finds the financial or service-based assistance from the government to be insufficient, may be reluctant to pursue additional aid due to the shame in admitting to need. Alternatively, this individual in need may decline to enroll in *Bolsa Família* or pension programs altogether, thus losing that fiscal support and potentially further aggravating his or her poverty. One female interviewee summarized the dilemma:

"The program doesn't help enough, or no program exists, or a program exists and people just don't know anything about it, and then those people, out of shame or a lack of information, don't benefit from the program, and the program in the end doesn't solve any problem!"

In this vein, perhaps a better description of the 'dependency' effect described by many subjects would be a 'coerced complacency,' in which recipients and non-recipients alike are bound by both government- and community-based norms that prevent them for seeking higher standards of living.

<sup>&</sup>lt;sup>19</sup>Literally, "to conform"

Whether "out of shame or a lack of information," the ultimate effect is stagnancy, in which poverty fails to be ameliorated (Hall, 2008; Monteiro et al., 2009; Vieira Santos, 2010; Barrientos, 2013).

All interviewees did mention a lack of detailed information about the programs they were familiar with. Outside of the widely heralded *Bolsa Família*, many programs are underpublicized both by name and in terms of access, as one female CCT recipient described:

"Sometimes the government comes up with something, some program, and you never even hear about it! Once they came out with some scholarship programs and some paperwork to enroll, and I never found out about it! The way I found out was after enrollment had passed!"

Often government assistance programs were described as arriving to the town suddenly, with little forethought and hasty distribution. Thanks to this hurried nature, many individuals expressed their inability to both comprehend and benefit from them, or to even find out about them at all:

"Sometimes there are things that happen here, where they start and all of a sudden finish, without warning, without anyone knowing why. It always happens. There's such little information, you know? Such little dialogue between the prefecture and the community."

Given the key role of the municipal government in distributing federal programs within rural communities(Lindert et al., 2007; Fenwick, 2009; Andrade & Zimmerman 2011), a truncated dialogue between administrators and potential program beneficiaries diminishes their effective propagation (Monteiro et al., 2009). "Communication is lacking," an older male beneficiary made clear.

Most townspeopleidentified the most profound deficiency as the lack of information about program administration and distribution. "Everyone knows the programs," elaborated one female beneficiary, "but not everyone has access." More often than not, the largest impediment in gaining access is the lack of knowledge about how to enroll. Recipients and non-recipients alike fail to understand prerequisites due to a lack of dissemination (Monteiro et al., 2009; Fraga Rios, 2011).

The lack of knowledge about eligibility is exacerbated by what many interviewees referred to as a bad distribution system. A female community leader asserted that "the government does not use its own criteria well to define who should and should not receive." Many CCT recipients or individuals who are eligible to benefit shared their frustrations with this outcome. The majority of them claimed to have witnessed families who had no true need, and who were nevertheless benefitting from *Bolsa Família* and other government stipends (Fraga Rios, 2011). One male pensioner even exclaimed, "as for Bolsa Família, those who need it don't receive it, and those who don't, do!" Another male beneficiary described his feelings as an observer of this alleged misallocation:

"Bolsa Família doesn't provide equal support. There are people who earn five or six minimum salaries who receive... There are others who don't even earn a salary, and they don't receive!"

As a result of this inappropriate allotment, government assistance programs are often interpreted as unpredictable. Multiple individuals who described themselves as eligible for receipt were denied access to the programs despite adhering to their requirements, as one man recounted:

"We went to go see what we need and don't need from the government. But out of most of what we gathered from the conversation, we understand that we won't even be considered for anything! But I know plenty of couples with a financial situation that is much better than ours, and they've received! So there's still that question of 'why?""

Townspeople were often left confused by the distribution process. "You find out if you're going to receive or not, but you don't find out why," a non-recipient who had applied for assistance confessed. "You just find out that you don't have the right to receive. And if you don't receive, you have to back down." Some went as far as to attribute the selection of beneficiaries to "a matter of luck."

The ultimate result of this lack of information, coupled with the dearth of transparency, are frustrations directed at 'unreliable' local and federal government administration(Monteiro et al., 2009; Andrade & Zimmerman, 2011). Fewer people benefit due to their lack of knowledge of the intricacies of programs like *Bolsa Família*, and some who do benefit perplex needier members of the community. Accordingly, through under-enrollment and misdistribution, federal CCT programs struggle to achieve poverty reduction in rural communities (Hall, 2008; Monteiro et al., 2009; Hunter & Sugiyama, 2009; Vieira Santos, 2010; Barrientos, 2013).

Many of the townspeople highlighted the complex bureaucracy of federal government assistance programs as one of the largest deterrents for successful distribution. For many individuals who request or have requested assistance from federal CCTs and pensions, the bureaucratic process is often overwhelming(Lindert et al., 2007). One man, self-described as eligible to benefit from the *Bolsa Família* program but averse to pursuing it, described his perceptions of the enrollment process:

"I think that the Brazilian government is incredibly bureaucratic. There's a lot of bureaucracy. To prove that I need help from the government, I need to chase them with so many documents, and in the end I end up spending more than the government will even help me with!"

In this example, the incomprehensible bureaucracy described by an array of interviewees was enough of a hindrance that an eligible individual abstained from claiming benefits. Seeing as this may be the case for other rural and underprivileged *mineiros*(Fraga Rios, 2011), the willing nonparticipation of needy individuals likely limits the success of the federal CCT and pension programs. The experience for those who do approach government representatives can be equally frustrating:

"It becomes a question of this or that, bring this or that, but when you go there with everything they asked, all of a sudden you don't receive any more! It happened to my own mother!"

While the challenges of comprehending an overly complex bureaucracy are not endemic to this demographic, they are exacerbated in the rural communities of Minas Gerais on account of the greater presence of informal employment and a lower average level of education(Monteiro et al., 2009). A part-time cook explained these difficulties and the problems they engender:

"People who live in rural areas can't perceive or don't know what they have as income. What even is income? Income isn't just money, it's what you have as well. There are people who have cattle and farmland, but they don't have cash or credit cards, so these people think they're in need, but they aren't!"

In rural communities, the concept of 'income' can be irrelevant to daily life, especially in a subsistence economy. The complexity of defining income in rural areas alone fuels under-enrollment and misguided distribution (Monteiro et al., 2009; Fahel et al., 2012). Forms and documents further hamper distribution in the rural context, in which much of the population is undereducated (Fahel et al., 2012):

"There's a lot of bureaucracy, which also makes access more difficult. It's related to the question of being a rural community. In our community, for example, there are many people who are illiterate. And the process required for some government programs involves a lot of bureaucracy... filling out papers, forms... it makes access to the programs more challenging."

Due to historically limited access to education, and a quality of education that continues to lag behind that of urban Minas Gerais, the general lack of knowledge about government assistance programs is amplified by the local inability to comprehend their most basic components. Subsequently, as an outcome of convoluted bureaucracy, many interviewees emphasized their inability to rely on the

government for help. The majority reiterated the many faults of the government that have consistently deterred them from pursuing better conditions through assistance programs:

"It's very hard to go to the government for help. For example, there are problems that have gone plenty of time without being solved. And if five or six people go to complain, they still achieve nothing. And so there are plenty of people who don't even lodge complaints!"

Thus, an intriguing dichotomy exists: poor rural beneficiaries rely on federal CCT and pension programs for meager support, but are unable to rely on them to permanently exit poverty(Vieira Santos, 2010; Fraga Rios, 2011). As such, they stay afloat, but without an amelioration of overall standards of living. In response, the community finds other, more local, solutions to its needs:

"In terms of the government, the most challenging part is the bureaucracy. You can't just go and ask for something directly, and so you do this instead among the people of the community. For the most part, everyone knows everyone. It's like a giant family."

Whether as a response to bureaucratic faults, assistance insufficiency, or as a mere continuation of rural values, every person interviewed agreed that São Gonçalo possesses a strong network of community support. "The community has a lot of solidarity," reported one woman, "and if anyone is having any difficulty, we all go to his or her house with a few things to help... the whole community gets together to help out." The rest of the community members interviewed echoed what she said; even the interviewee who previously criticized the complacency of her community concurred:

"If someone says that they're in need, that they need food, medicine, anything, the community mobilizes. The community is very strong in that sense. It's enough to say that someone is in need for everyone to come and help."

It is likely that the solidarity of communities like São Gonçalo formed in response to a historical lack of confidence in the support of the federal government, allowing intimate, if exploitative, networks of *coronelismo* to flourish (Flynn, 1979; Kohli, 2004; Teodosio et al., 2012; Figueiredo & Silva, 2012). It is perhaps in light of the increase of federal presence in rural communities (Kohli, 2004; Fenwick, 2009) that many of the interviewees attributed their current reliance on local solidarity networks to the inadequacies of the new and oft touted CCT and pension programs. One female recipient repeated the fact that "people help each other out a lot here," and added: "I think that it works a lot better than the government!" This network of solidarity tends to be the preferred source of assistance (Fraga Rios, 2011). "The best way to get help here is through the community association," one woman insisted. "What we are most thankful for here is the association. The association brings the little information that we have." Another woman, who works promoting sustainable community agriculture, elaborated:

"It's something fixed. We construct this. The government assistance programs stop coming, they change, but this here, what we made, is ours. It's going to stay. It's going to continue on. It builds itself on our real day-to-day needs, not on the ideas of someone far away."

Local networks have limitations, such as inbuilt hierarchies, but townspeople ultimately favor them, as they have historically been more reliable and address local needs(Ansell, 2014). While federal CCT and pension distributionserr in measuring individual level of need (Lindert et al., 2007; Monteiro et al., 2009), community networks can immediately pinpoint and remedy the hardships of their members.

Despite community networks being the most common form of assistance in São Gonçalo, the majority of interviewees wished to be able to look to the government for more support. "The prefecture should be a lot more present in the community," one woman demanded. Many agreed, citing the fact that while community solidarity was helpful for many things, a dramatic and permanent change to local poverty would require federal and local government resources. With this support, the community

could channel these resources into meeting the specific needs and demands of its people. The presence of municipal government in distributing federal and local assistance, however, is lacking(Monteiro et al., 2009). One male pensioner delineates the unsuccessful trickle-down:

"Communication is lacking... the federal government feeds into the state government, and the state government feeds into the municipal government. If the municipal government doesn't develop anything, everything is at a stand still. The municipal government has to follow up."

Fault at both a federal and local level, therefore, helps to explain why the most pressing needs of a community like São Gonçalo are not met. Locally, this is largely attributed to a lack of resources and corruption. But seeing as CCT and pension programs are designed in and administered from Brasília(Lindert et al., 2007; Vieira Santos, 2010), many individuals interviewed saw the federal problem as a misunderstanding of local realities. "These programs come from the federal government," one man acknowledged, "and so they have to deal with the federation as a whole... but the North of Brazil is like one country, the Northeast another, the Central West another...." It therefore becomes impossible for a federal program like *Bolsa Família* to address such a diverse range of regional problems.

"In relation to the government programs, in my opinion, they are very distant and faraway things, and that's why it's so hard to adjust them to each community's reality. Who am I going to talk to? Who will I complain to? And why? Because someone has to do something."

Community members need greater assistance from the government, but face difficulties in communicating the reality of their situation to officials. While programs are federally organized and administered locally through SUAS, they currently play a minimal role in the region, with diminished feedback and program monitoring (Monteiro et al., 2009; Fraga Rios, 2011; Andrade & Zimmerman, 2011). As a result, less significant improvements are achieved.

For example, poor rural communities often lack permanent sources of income, which inhibits long-term poverty amelioration(Lindert et al., 2007). "What's lacking here is work," a female community leader noted. "Employment, something permanent, something that generates jobs in the region to support its people." This need is obvious in São Gonçalo, where the majority of townspeople and interviewees held part-time or day-to-day jobs in agriculture and tourism. However, federal programs had not adjusted to fit local needs. In local schools, there is "no class on agriculture" as one woman observed, despite that being the dominant sector of the economy. While CCT and pension programs offer an equal stipend to the poor throughout Brazil, the supplementary skillset intended to accompany them may only be useful for a fraction of the individuals who benefit.

While many of the interviewees still credited the federal government for making an effort and partially excused this fault, others were skeptical of the decision behind the centralized structure:

"The government throws around whatever it finds, there's problem X in this place, and so it generalizes that problem for everyone! I think that the government almost always does this wrong, thinking that problem X over there exists here as well and so reproducing one program over and over. All for statistics! If you turn on a TV or a radio, they're always there smiling about the wonderful programs, just to sell an image of the country to the rest of the world."

While the discussion of federal power in local realities is pertinent, interviewee attitudes towards the Brazilian government may be tainted by recent election results and corruption scandals. The 2014 federal elections saw Dilma Rousseff defeat *mineiro* Aécio Neves, perhaps generating concern regarding the preservation of local interests. Furthermore, Brazil'scurrent wide-reaching corruption scandal, dubbed *Lava-Jato*,may affect confidence in the federal government (Tribunal Regional Eleitoral de Minas Gerais, 2014; Veirano Advogados, 2014).

Some of the townspeople interviewed, many of whom were non-recipients, refused to believe that the errors of the programs and the lack of a real change in poverty were accidental. Many accused the federal government of establishing CCT and low-income pension programs for the sole purpose of generating positive statistics about poverty in Brazil. One woman stated that "the government thinks people have become better off, just because they have food and other basic remedies," as publicized in reports in which the government displaysits success(Vaitsman & Paes-Sousa, 2007; Arnold & Jalles, 2014). A self-proclaimed critic of the government suggested the following:

"The most important thing for the government is not that a student finishes school, or that incomes improve... the most important things are the statistics! Pretending to be [a] developed [country], when in reality, that's not what's happening."

This accusation is common in relation to education in underprivileged communities across Brazil, especially within rural zones. According to most interviewees, the majority of educational content is irrelevant to the quotidian reality of rural Minas Gerais. This correlates with common criticisms of *Bolsa Família* in particular, given its prerequisite of minimum school attendance for recipients. While physical participation has undoubtedly increased, the quality of education has not matched this trend(Oliveira and Duarte, 2005; de Janvry et al., 2006; Fahel et al., 2012). A few townspeople told stories of children who therefore attended school with the sole purpose of gaining the stipend; if the stipends were cut, they dropped out. The government critic from above continued his diatribe:

"The majority of the Brazilian people are still illiterate, poor, and dependent... those who refrain from gaining the knowledge are those who are favored by the government! And so what's going to happen? We will remain the same way."

This claim also introduces further rationale for the faulty CCT and pension programs: the purposeful creation of a dependent citizen. Some interviewees believed that not only did misleading statistics benefit the external image of Brazil, but also that the federal government saw value in stabilizing poverty by means of administering an insufficient and ill-conceived program.

While not all interviewees believed in such forged dependency, there was a correlation between increased assistance distribution and the proximity of local and federal elections. This relationship is certainly insufficient corroborate that Brazilian federal officials seek a poor and dependent society, but aligns seamlessly with the constant power struggleof politicians (Hunter & Power, 2007; Hall, 2008; Teodosio et al., 2012; Ansell, 2014). The townspeople presented a common method of government manipulation for maintaining influence in rural areas: through programs such as the *Bolsa Família*, which, according to some scholars, was used by former President Lula for this aim (Hunter & Power, 2007; Zucco & Power, 2013). As one female non-recipient observed, justifying the logic behind misdistribution, "they often use the programs to support some people who should not be receiving, just as a way of assuring their vote in the elections." Thekey component of this strategy, according to interviewees, is the role of dependency. Another female non-recipient spoke of this:

"They use the Bolsa Família a lot in their campaigns. Officially they don't, but behind the scenes, a politician comes to a place like this and tells everyone: 'if you don't vote for this party, you won't receive any benefits!"

In order to 'buy' the vote of the rural poor, government representatives encourage reliance on social programs. The communication between politician and voter diminishesonce elections have passed, echoing traditional networks of *coronelismo* (Hall, 2008; Teodosio et al., 2012; Figueiredo and Silva, 2012; Ansell, 2014). One female interviewee explicitly made this connection:

"The people here always used to work the land of others. Today, they don't do this anymore, but now they've stopped being dependent on local landowners only to become dependent on the government itself. All of rural Brazil is centered on government dependency. The system hasn't changed. Just those who control it."

Political scheming paints government assistance programs as unreliable, intermittent, and poorly distributed, either pushing the rural poor to avoid them, become complacent with them, or seek alternative community structures of assistance. The result is the same: federal CCT and pension programs are unable to ensure improved standards of living for the impoverished rural residents of Minas Gerais. 'Vote-buying' is not even the problem. On the contrary, the people of São Gonçalo *want* someone who will earn their votes; someone who makes good on promises and effects tangible change.

#### **CONCLUSIONS**

This investigation posed three questions: who are the individuals most likely to benefit from Brazilian federal CCT and low-income pension programs in rural Minas Gerais between 2011 and 2013? Have these programs been significant in improving material standards of living for the rural poor of Minas Gerais between 2011 and 2013? And finally, *why* have these programs been successful or unsuccessful in improving standards of living for the rural poor of Minas Gerais?

Quantitative data analysis found that the individuals most likely to benefit from CCTs and pension programs in rural Minas Gerais are overwhelmingly the populaces that the federal government has defined as eligiblethrough its social policy programs. Gender, age, and education are recurring factors that significantly affect probability of receipt.In addition, employment-centric factors are significant, withthe greatest effect derived from reported work-based income. While its substantive effect may be small, the correlation between increased income and decreased likelihood of program participation is a favorable change given the historical federal tendency to benefit the affluent over the poor. This shift may also reflect some success in straying away from historical networks of patronage by directly benefitting participants through SUAS.Finally, the significant effect of unemployment in 2013suggests a greater targeting of those in need, while bringing about questions about programdependency and work disincentives. Despite these correlations, the question persists as to whether or not groups with high probabilities of receipt represent the poorestindividuals of rural Minas Gerais.

Ultimately, correlations between receipt and improved standards of living do *not* exist in the majority of indicators selected. While causality is impossible to prove insofar as the role of CCTs and low-income pensions in ameliorating material poverty, the use of CEM-pruned data and logistic regression models depicted no causal relationship between the treatment and the outcome variables. As such, the investigation concludes that CCT or pension receipt has not resulted in improved standards of living for the rural poor of Minas Gerais in 2011-2013. This conclusion, however, may be partially affected by asmallsample and the likelihood of misreporting, among other limitations.

The results of the qualitative analysis portion of this study suggest multiple reasons why federal CCT and low-income pension schemeshave been unsuccessful in improving standards of living for the rural poor of Minas Gerais. The case-study interview data revealed a multiplicity of inhibiting causes common throughout rural communities of the state, the most salient being insufficient program support, low-quality services, coerced complacency, a lack of program information, misdistribution, extensive bureaucracy, and divergent local and federal interests. Many of these deficiencies led to a greater reliance on better-established and historically constant community networks.

Furthermore, some of these obstacles in program efficiency were attributed to the political agenda of the federal government. Irrespective of the intentionality behind their development, these problems help to explain the overall ineffectiveness of federal CCT and low-income pension programs in the rural communities of Minas Gerais between 2011 and 2013. While the data again face

limitations due to sample size and restricted geographic distribution, the results of this investigation nevertheless provide valuable insight into the efficacy of federal social policy in rural Minas Gerais.

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