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PEASANTS, MARKETS AND AUSTERITY

State retrenchment and rural livelihoods in
Amazonas and São Paulo in the aftermath of
constitutional austerity (Brazil Post-2015)

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Statement of originality

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Dedication

To my dear grandfather Seiju Kanashiro – an Okinawan peasant immigrant to Brazil who always supports the losing football team or sumo wrestler. Arigato vô Seiju.
I think I am beginning to understand you now.

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Abstract

This thesis examines the politics and impacts of mediated markets for rural development in light of the austerity regime recently established in Brazil. Theory and praxis tend to overlook relational complexities between rural people and the state and their interplay with livelihood opportunities and self-reported wellbeing. Focused on Brazil's *Fome Zero* Food Acquisition Programme, we analyse the political economy surrounding its establishment and subsequent retrenchment and the impacts of this rise and fall on rural people in two contrasting study areas. Paying attention to geographical, economic and demographic differences, we adapt political ecology and livelihood frameworks to investigate how peasants in São Paulo and Amazonas have coped with austerity. The research uncovers an underlying tension in nested markets for rural development, in which principles of equity and social justice are to some extent subsumed as policy principles by a modernisation project represented by a 'pedagogy of marketisation'. Under this project, rural people are encouraged to move away from community self-provisioning to a market economy - which would transform them from being people belonging to the country (peasants or *camponeses*) into workers or controllers of the land (family farmers or rural entrepreneurs). This tension threatens to absorb peasants into the corporate food regime and undermine ecological and cultural diversity. Our findings suggest a complex set of impacts such as income-poverty alleviation, progress towards gender equality but limited effects on structural inequality or market integration. The significance of this thesis is that it informs our theoretical understanding of rural development through nested markets by introducing a political economy/ecology focus hitherto lacking – and informs our empirical understanding of wellbeing, public procurement, food, agrarian, environmental and social policy.

Keywords: Rural Development; Nested Markets; Public Procurement; Food Acquisition Programme; Brazil.

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Introduction

In 2003, Brazil's President Luis Inácio Lula da Silva signed the Food Acquisition Programme (FAP) fully into law.¹ A keystone of *Programa Fome Zero* (the Zero Hunger programme), the Food Acquisition Programme authorised the government to buy local produce from 'family farmers' or 'rural family entrepreneurs' without competitive bidding to provide for food security and hunger alleviation initiatives.² Although initially conceived as a measure to alleviate hunger and lift people out of extreme income-poverty, the Food Acquisition Programme became integrated into rural development policies. Family farming programmes were initiated with the end of the military rule in the 1980s, expanded in the 1990s and 2000s, having evolved into a complex policy regime comprising credit and loans, cash-transfers, housing subsidies, price guarantees, and public procurement programmes. Together, these programmes constituted an expanding body of policies for 'family farmers' or 'rural family entrepreneurs', as per the legislation terminology, effectively an emerging family farming welfare state.

The reference to an expanding body of policies situates family farm programmes within the context of political development in Brazil, which shifted towards austerity in the 2010s. First, as noted, the origins of family farm programmes followed re-democratisation processes after the military regime. Along with the 1988 Federal Constitution, the 2006 Family Farming Law³ is a fundamental milestone for recognising 'family farmers' and 'rural family entrepreneurs' as potential beneficiaries of public policies. Second, public policies initially aimed at boosting productivity but gradually expanded to encompass welfare, social policies and economic inclusion programmes. Cash-transfers operated as a social safety net, and micro-credit and public procurement programmes such as the Food Acquisition Programme operated as economic inclusion strategies in support of rural livelihoods. Third, like other central (or federal) policies, family farm programmes have been at the centre of debates over how to decentralise state action and, more recently, over how to cut spending and reduce government intervention in the economy. In the 2010s, the then emerging family farming welfare state started to shrink. In fact, the relationship between the state and rural peoples provides an example of the state's changing nature, particularly in its relationship with vulnerable and historically marginalised populations such as the peasantry. The Food Acquisition Programme has nevertheless been challenged from a variety of directions. Through World Trade Organization's forums, traditional advocates of open markets for agricultural goods such as the United States and Canada questioned the Brazilian government's mechanisms to purchase food domestically and distribute it to the poor (Chade, 2013). More recently, against the background of Dilma Rousseff's impeachment, the National Congress – which has been largely controlled by an 'alliance of elites' since 2013 (Saad-Filho and Boffo, 2020) – passed a New Fiscal Regime in 2016.⁴

¹ Brazil, Lei no. 10696 of 2003.

² The legislation does not mention peasants (*camponeses*) but 'family farmers' and 'rural family entrepreneurs'. The distinction between terms is quite stark, as further discussed in this thesis.

³ Brazil, Lei no. 11306 of 2006.

⁴ Brazil, Emenda Constitucional no. 95 of 2016.

This New Fiscal Regime, which is now embedded in the constitution, freezes primary fiscal spending in real terms until 2036. Although a central government role in family farming endures, the swift approval of the New Fiscal Regime transformed contextual austerity – which is a ‘policy of cutting the state’s budget to promote growth’ (Blyth, 2013a, p. 2) – into a long-term state of constitutionalised austerity, similarly to Spain in 2011, Italy and Austria in 2012 (see Bruff, 2014; Jessop, 2016). As in authoritarian neoliberal regimes, Brazil has embraced neoliberal policies and insulated the state from social and political conflicts (Bruff, 2014; Saad-Filho and Boffo, 2020). As David Harvey puts it, ‘the neoliberal state is necessarily hostile to all forms of social solidarity that put restraints on capital accumulation. Independent trade unions or other social movements (...) have therefore to be disciplined, if not destroyed.’ (Harvey, 2005, p. 75). Indeed, authoritarian neoliberalism in Brazil constituted in effect an organised action against minority groups and the poor (Bruff, 2014; Orair and Gobetti, 2017; Hunter and Power, 2019; Saad-Filho and Boffo, 2020), and further constrains to the livelihoods of the poor are expected following state withdraws from welfare provision (Navarro and Shi, 2001; Harvey, 2005). However, the question of how this retrenchment has impacted on rural peoples has yet to be addressed.

This thesis examines peasants’ positionality and the early impacts of constitutional austerity for their livelihoods and wellbeing. An overall aim of this thesis is to analyse the peasant condition and the vulnerabilities of their livelihoods through a focused analysis of the effects of the retrenchment of the Food Acquisition Programme and the rise of austerity in Brazil post-2015. It does so through the dual lens of a political ecology and sustainable livelihood theoretical framework, articulating methodological bricolage with critical and constructivist research paradigms. The Food Acquisition Programme is the focus here because of its originality and multi-scalar relevance. The Food Acquisition Programme (hereinafter the FAP, or simply the programme) is an innovative, pioneering institutional procurement programme that has set an original policy model (FAO, 2015, p. 73).⁵ Its relevance spans local and international levels. On the local level, the FAP aimed to directly benefit the most vulnerable and marginalised groups, including rural people and peri-urban and urban food insecure populations. Internationally, the programme became a policy benchmark endorsed by the United Nations which has inspired dozens of countries around the global South, mostly in sub-Saharan Africa, Latin America and the Caribbean (FAO, 2015; Miranda *et al.*, 2017; Milhorange, Bursztyn and Sabourin, 2019; Romualdi, 2019). Also, public procurement of food has been praised as an important instrument for addressing sustainable development challenges (Otsuki, 2011; de Schutter, 2014a; SCDB, 2014; UN, 2015). Indeed, the FAP tackles multiple Sustainable Development Goals (SDG): no poverty, zero hunger, good health and wellbeing, gender equality, decent work and economic growth, reduced inequalities, sustainable cities and communities, responsible consumption and production, peace, just and strong institutions, and partnerships for the SDGs.

⁵ ‘Many countries have a public food procurement scheme but fail to effectively target smallholders as the productive force’ (Nehring and McKay, 2013, p. 23). India, for example, has the Public Distribution System, which is said to have existed from before independence, but it does not source preferentially from small-scale food producers; also, local authorities of OECD countries have tried to source from ‘local’ producers rather than from ‘small-scale’ producers (de Schutter, 2014b; Qureshi, Dixon and Wood, 2015).

The Food Acquisition Programme

The Food Acquisition Programme was created in 2003 as a cornerstone of *Fome Zero* (Zero Hunger), which came to define the first Workers' Party (*Partido dos Trabalhadores, PT*) mandate in Brazil, led by Luis Inácio Lula da Silva. Schmitt (2015) succinctly summarised the operation and benefits of the FAP:

[T]he [Food Acquisition] programme makes available, through different mechanisms, food acquired by the Federal government, for consumption by people legally eligible, through different social programs, some of them implemented by the government and others by civil society organisations, in partnership with the State. On the production side, the beneficiaries of the PAA are family farmers (...), including people settled by agrarian reform policies, people working in forestry or aquaculture, agro-extrativistas (workers who extract natural resources, such as rubber tappers), small fishermen [sic], indigenous people, and members of rural communities that are remnants of quilombos, as well as other traditional communities or peoples. In the consumption side the beneficiaries of the programme are individuals facing food and nutritional insecurity, as well as people covered by the public social assistance network and by food and nutrition policies and programs, which can include, in a complementary manner, the National School Meals Program. (pp. 259–260)

Through the FAP, the federal government purchased R\$ 12 billion⁶ of family farm produce up to 2018 (Sambuichi *et al.*, 2019). The annual budget increased from its inception in 2003 to 2012, when it peaked at R\$ 1.2 billion (Ibid.) According to a former executive of the National Agency of Agricultural Supply (Conab)⁷, one billion per year was the target originally devised by policymakers. However, following the retrenchment of several social programmes in the 2010s, the FAP budget declined to R\$ 253 million in 2018, or a fifth of its peak budget, which is less than its starting budget (Sambuichi *et al.*, 2019). At its peak, in 2012, 180,000 family farm units were involved in the FAP, covering about five per cent, in a given year, of the estimated four million family farm units in Brazil (Soares *et al.*, 2013). In 2017, this number had already been reduced to about 45,000 families, equivalent to a quarter of the peak year (Brazil, 2017; Lima *et al.*, 2019).

Current scholarship

The Brazilian food procurement experience is usually seen as a pioneering case of innovation and institutional ethical consumption. The academic literature on public procurement is not extensive (Thai, 2001; Preuss, 2009; Bergman and Lundberg, 2013), with procurement in the public sector receiving much less attention than in the private sector (Seuring and Muller, 2008; Ashby, Leat and Hudson-Smith, 2012; Gimenez and Tachizawa, 2012; Miemczyk, Johnsen and Macquet, 2012; Bergman and Lundberg, 2013). However, under the current climate, development and Covid-19 related challenges, sustainable public procurement – or procurement with broader social purposes – is a promising research and policy topic (Walker *et al.*, 2012; Touboulie and Walker, 2015; Uehara, 2020). In particular, food procurement has received more attention since the 2008 global food crisis (see Schutter 2010; Paarlberg 2013). Since most scholarship on public procurement has portrayed the global North (e.g. Morgan & Sonnino 2008; Uttam & Le Lann Roos 2015; Lundberg *et al.* 2015), scholars have been

⁶ US\$ 3 billion. Value adjusted to December 2018 (INPC-IBGE).

⁷ Personal communication, 18 April 2017.

calling for research on innovation and institutional ethical consumption in the global South (Walker *et al.*, 2012; Ariztía *et al.*, 2014; Kleine and Brightwell, 2015). Also, while green procurement is a hot topic, particularly in Europe, public procurement with social purposes are more prevalent in the global South, but little has been studied on the effects of public procurement for the rural poor (Betioli *et al.*, 2015; Uehara, 2016; Stoffel *et al.*, 2019; Valencia, Wittman and Blesh, 2019).

Public procurement programmes for food assistance under social protection initiatives are understood to promote public good (Belik, 2015; FAO, 2015; Wittman and Blesh, 2017). The Brazilian case in particular has been praised as a successful pioneering example (Otsuki, 2011; de Schutter, 2014a; SCDB, 2014; UN, 2015; Wittman, 2015). These analyses have mostly focused on monetary and income benefits for family farmers, and on the benefits for food insecure populations; and for consumers of the supplied food, mainly regarding nutrition, health and food security indicators (Delgado, Conceição and Oliveira, 2005; Grisa *et al.*, 2011; Delgado, 2013; Sonnino, Lozano Torres and Schneider, 2014; Maluf *et al.*, 2015; Silva, Sant'Ana and Maia, 2018; Berchin *et al.*, 2019; Romualdi, 2019; Valencia, Wittman and Blesh, 2019). The scholarship published in Portuguese has examined the origins of the Food Acquisition Programme from a sociological, political and historical perspective and has portrayed multiple case studies drawing on fieldwork focused on selected livelihood or nutrition aspects (Belik and Chaim, 2009; Schmitt, 2011; Saraiva *et al.*, 2013; Moruzzi Marques, Le Moal and Andrade, 2014; Coca, 2015). More recently, the FAP case became better known internationally via articles and reports published in English. Most of these were written thanks to international cooperation (mainly with USA and UK scholars) and reports mediated by the International Policy Centre for Inclusive Growth (IPC-IG) (see Soares *et al.* 2013; Nehring & McKay 2013; Mendonça & Rocha 2015; Wittman & Blesh 2015; Schmitt *et al.* 2015; Schmitt 2015; Kleine & Brightwell 2015). In short, the Brazilian programme has been received well internationally. Despite this, little is known about the viability of government food procurement strategies, their impacts and their scalability (Wittman, 2015; Swensson and Klug, 2017).

What is perhaps most surprising is that the FAP has not been the object of any nationwide evaluation (Soares *et al.*, 2013; FAO, 2015; Romualdi, 2019). Assessments of the Brazilian experience have chiefly employed aggregated secondary data from official sources, and empirical studies based on interviews and small-scale surveys in one to five municipalities (Soares *et al.* 2013; Sambuichi *et al.* 2014). Convenience sampling and cases chosen because they were believed to portray a positive standard have been commonplace (Mendonça and Rocha, 2015; Romualdi, 2019). A few studies highlighted the role of civil society organisations, such as the MST (landless workers movement, *Movimento dos Trabalhadores Sem Terra*), multi-stakeholder councils, regional administrators, and Brazil's Agricultural Supply Company (Conab) (Wittman, 2009a; Altieri and Toledo, 2011; Almeida, 2014; McKay and Nehring, 2014; Blesh and Wittman, 2015). In sum, the available literature suggests that the Brazilian food procurement programmes 'have been instrumental in expanding family farmer incomes, production and organisation as well as contributing to food crop diversification' (Soares *et al.*, 2013, p. 14). For instance, some studies show how the FAP helped family farmers to increase income or to draw a steady income flow (Doretto and Michellon, 2007; Sparovek, 2007; Agapto *et al.*, 2012; Blesh and Wittman, 2015), while others also bring aspects regarding autonomy, sovereignty and agroecological transitions (Blesh and Wittman, 2015; Wittman and

Blesh, 2017; Valencia, Wittman and Blesh, 2019). These studies unveil some of the underlying political and institutional factors associated with the FAP but have not captured the latest developments regarding its retrenchment. Indeed, recent publications have largely ignored the evolutions and retrenchment of the FAP, and its repercussions (Bacha, 2018; Silva, Sant'Ana and Maia, 2018; Berchin *et al.*, 2019; Mesquita and Milhorance, 2019; Resque *et al.*, 2019; Swensson, 2019), though some have started to acknowledge that the impacts of retrenchment could be significant (Doniec, Dall'Alba and King, 2018; BRASIL Conab, 2019a; Lima *et al.*, 2019; Ministério da Economia, 2019; Sambuichi *et al.*, 2019; Vasconcelos *et al.*, 2019). Such studies have described budget reduction and conjectured gloomy forecasts for the poor, public health and food security (Doniec, Dall'Alba and King, 2018; Malta, 2018; The Lancet Global Health, 2019; Vasconcelos *et al.*, 2019). This predicament has not been substantiated, however.

Recently, Romualdi (2019) and Sambuichi *et al.* (2019) contributed to the field with meta-reviews on institutional food procurement programmes. Counting 158 publications, Sambuichi *et al.* (2019) indicate that the FAP has benefited farmers, their production, their organisations, and their families' quality of life. However, improvement in life quality is either reported in a broad sense (generically) or associated with financial gains and material well-being. For example, some studies accept income and material wellbeing as sufficient indicators of quality of life (see Rocha, 2015 apud Sambuichi *et al.* 2019). Romualdi (2019) systematically reviewed the evidence on the impacts of institutional FAPs in Brazil and Africa, having mapped peer-reviewed literature published in English from 2015 to May 2019. Ideas of 'development', 'wellbeing' and 'livelihoods' are rarely mentioned and always used in a rather vague sense (Romualdi, 2019). For example, 'development' is associated with economic or social development ideas without further explanation, and livelihoods have been used as a synonym to income – which is inaccurate and oversimplified. Therefore, the impacts of the FAP on development, livelihoods and wellbeing have been loosely framed in the available literature. In Romualdi's words, 'the most urgent measure (...) is creating an evaluation mechanism to assess the actual contribution of the programmes to smallholders' development' (p. 44). In sum, the current scholarship reveals that the phenomenon of austerity and its actual impacts on rural livelihoods remain unclear.

Research aims

This thesis explores the origins, politics and impacts of the development and retrenchment of the Food Acquisition Programme in Brazil alongside an analysis of the impacts of state austerity on peasant livelihoods and wellbeing. The thesis explores two broad questions:

Question 1: What are the politics which have given rise to the expansion and subsequent retrenchment of government family farm policies in Brazil? This question examines rural peoples' interests entangling with the state in the 1990s, expanding in the 2000s but retrenching in the 2010s. Jessop's Strategic Relational Approach to the state and van der Ploeg's argument that the peasantry condition is characterised by marginalisation and a struggle for autonomy form the basis for this analysis.

Question 2: (2.a) What have been the impacts of austerity on peasants' livelihoods and their sense of wellbeing? This question is framed within Scoones' sustainable livelihoods framework, focusing on the vulnerability and assets available for rural people, current strategies and devised pathways, and self-reported wellbeing across multiple life satisfaction domains. It examines the early impacts of the end of the Food Acquisition Programme for the livelihoods of rural people in Careiro da Várzea, Amazonas, and in Angatuba, São Paulo. These locations represent two extreme universes regarding social vulnerability and human development indicators, with the Amazonas case on the more vulnerable end of the scale. Through the appreciation of the programme across time and geographies, this research argues that austerity in Brazil has not given peasants any particular advantage but, in fact, further constrained their livelihoods, wellbeing and life prospects. And more specifically, (2.b) how have these impacts varied across geographies and demographics? The impacts of austerity were expected to vary by vulnerability contexts and by demographics. Some peasants have diversified to off-farm activities, while others have resumed subsistence agriculture and reliance on social security. And – not surprisingly – gender, age, location, vulnerability and income-poverty were relevant categories in the examination of the impacts of austerity.

By examining the peasant struggle amidst the retrenchment of government programmes, the FAP in particular, this research endeavours to show how the relationship between interest groups and the state structures people's livelihoods (in other words, to show how the relational state shapes livelihoods, and vice-versa). This thesis also provides a reflection on the findings to consider the workability of specific conceptual and methodological approaches. It presents, therefore, an original interdisciplinary account of the evolving relationship between rural peoples and the state in Brazil, and an initial examination of livelihoods that goes beyond financial and material wellbeing metrics in contrasting geographies.

Philosophical bases and research approach

The research presented here has both an evaluative and an exploratory character (see L. Given, 2008). It is evaluative since it advances the critical understanding of the qualities of a policy. It is also exploratory because it was designed to maximise discovery of particularisations and generalisations based on descriptions and direct understanding of an area of social and psychological life, i.e., the relationship between the state and peasants, and the impacts of austerity on rural livelihoods. Also, the work combines two complementary paradigms: a constructivist research paradigm and a critical research paradigm. A constructivist/interpretive approach – whose (ontological) understanding is that there is no single reality or truth (Gilgun, 2014) – informed the macro-analysis of policy and politics and the micro-analysis of livelihoods. Hence, this research offers an interpretation of events and their underlying meanings, focused on the relationship between the state and peasants. A critical evaluation complemented the analysis. A 'critical' research paradigm informed the evaluation of the retrenchment of the Food Acquisition Programme. A 'critical' theory distinguishes itself from 'traditional' theories 'to the extent that it seeks human emancipation and a disruption of the status quo' (Spencer, Pryce, & Walsh, 2014, p. 89). The ultimate (ontological) foundation of this critical research paradigm is that reality is socially – thus politically – constructed, shaped by values and mediated by power relations. Critical theory, following Horkheimer, is toward

transformation and provides ‘the basis (...) for research aimed at decreasing domination and increasing freedom’ (Spencer, Pryce and Walsh, 2014, p. 91). Examining the peasant struggle and their positionality as a social class acknowledged by the Brazilian state, as further discussed in Chapter 3, clearly position this research within the critical research paradigm.

In line with a constructivist epistemology, the researcher has been aware that the research outputs have been filtered through their interpretation of reality (see Schweizer, 1988 and Gilgun, 2014). Within a critical research paradigm, the researcher's relationship with participants is understood to be transactional, dialectical, and subjective – and, consequently, that what can be known is tied to the interaction of the researcher with those investigated. The researcher's positionality is discussed in Chapter 3. That said, this research adopted two strategies to maximise utility and replicability. Firstly, the criteria and methods are clearly presented, which allows for traceability, replication, and a demonstration of the reasoning process for the methodological choices and discussion. Second, this research offers an analysis/evaluation of the research object while encourages readers to undertake alternative interpretations.

Three principal considerations shaped this thesis. Firstly, Political Ecology frameworks and principles, with politics at the core of the analysis, takes centre stage. Secondly, different disciplines are valued and mobilised in this research, which were articulated in two entry-points: the condition of the peasantry within the state (which is referred hereinafter as part of the ‘macro-analysis of policy and politics’), and the livelihoods and wellbeing of peasants (which is part of the ‘micro-analysis of livelihoods’). Thirdly, the object of study is portrayed as a process embedded in history and possible futures. That is to say, this research addresses state action, public policies and the early impacts of austerity for rural peoples within a broader political economy context. Connecting all these elements – from the policy formation to a texturised analysis of changes at the individual level – was the main challenge of this research.

Dissertation outline

Chapter 1, ‘Political ecology and livelihood frameworks’, presents a series of concepts that structured this dissertation. Within a broad Political Economy of livelihoods framing, this research adapted and combined state theories and political ecology constructs to allow for an analysis of politics and impacts of public policies on rural livelihoods and on the wellbeing of rural people. Chapter 2, ‘Methodology’, details data collection methods and the qualitative and quantitative procedures that were found to better respond to the research design and suit the chosen theoretical frameworks.

The macro-analysis of policy and politics are object of chapters 3 and 4. Chapter 3, ‘The peasant struggle and the state’ discusses what is core in this dissertation: the relationship between rural peoples and the state in Brazil. This relationship had recently shifted from a phase of expansion (1985-2012), which followed the end of the military regime, to a phase of retrenchment (2013 onwards). Retrenchment was initially deployed under blame avoidance strategies, during Dilma Rouseff's presidency. In 2016, by the time Rouseff was impeached, austerity

became constitutionalised, and the election of President Jair Bolsonaro in 2018 deepened dismissiveness toward marginalised and vulnerable groups further still. Chapter 4, ‘The Political Economy of a nested market’ looks at the nature of the Food Acquisition Programme. It examines tensions between original policy visions and a compromised implementation, and discusses how it turned to dismiss cultural and ecological differences while emphasising the prospects of economic distribution through assimilation to dominant individualistic and market-oriented modern cultures.

The micro-analysis of peasant livelihoods and wellbeing is object of chapters 5 (livelihood resources), 6 (livelihood strategies) and 7 (wellbeing as a livelihood outcome). Chapter 5 ‘Contrasting rural worlds’ examines livelihood assets in Careiro da Várzea, Amazonas state, and in Angatuba, São Paulo state. These sites portray opposite universes with regards to social vulnerability and human development, but despite their presence in the opposite ends of development tables, rural peoples in both locations are united by extremely limited access to financial capital and to means to improve human capital, a robust social capital internally to communities and families, with the main differences being physical and natural capital. In these aspects, peasants in the Amazon floodplain are way more challenged than peasants in São Paulo. Chapter 6, ‘Livelihood pathways under austerity’ examines how peasants have coped with the termination of the FAP and how livelihood aspirations changed vis-à-vis its inception and termination. Chapter 7, ‘Peasants’ wellbeing’ maps what peasants understand as wellbeing, and through a more expansive lenses of multiple life satisfaction domains, which includes issues such as emotional wellbeing, productivity, intimacy and community issues. It examines how the FAP tried to address wellbeing issues, and how the peasants experienced the early impacts of retrenchment on their personal wellbeing. The conclusion to this thesis reflects on policy formation, the relationship between rural people and the state, and the consequences of retrenchment and the modernisation project, broadly reflecting on rural development questions.

Chapter 1 Political ecology and livelihood frameworks

Understanding the politics of policy change and the impacts of austerity on livelihoods requires methodological approaches and theoretical frameworks which allow us to make sense of the continuing persistence and struggle of the peasantry. Following the understanding that ‘good’ social science is problem driven and not methodology driven (Flyvbjerg, 2006, p. 242), this research combined frameworks and employed a variety of methods for data gathering and analysis consistent with the notion of ‘bricolage’. Bricolage – and pluralism at large – is a methodological approach that recommends flexibility in the selection of methods (Kincheloe, 2005; Jupp, 2006; Coyle, 2010), which is considered a ‘healthy’ approach for social science research (Bell and Newby, 1977; Kincheloe, 2005). ‘Bricoleurs’ actively combines theoretical and philosophical understandings as well as methods of inquiry in new ways to illuminate the complexity of the research focus (Coyle, 2010, p. 81). Bricolage in this research is organised in three layers, as illustrated in Figure 1.

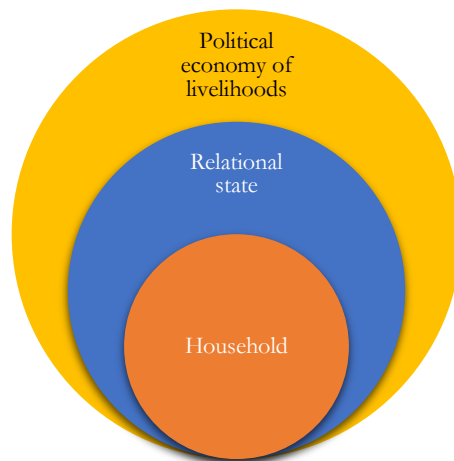


Figure 1. Research strategy in three layers and two entry-points: the household and the relational state.

The Political Economy of peasant livelihoods, the outer layer, is what gives this dissertation a broad structure. The inner layers give substance to this dissertation, with two entry-points: the household for a micro-analysis of livelihoods; and the relational state for a macro-analysis of policy and politics. Noteworthy, the household is not only a unity bounded by land, but mainly a primary site in which individuals negotiate interests, resources utilisation, and futures. The state, in its turn, is taken in its relations with rural peoples and society at large.

A series of interdisciplinary frameworks were adapted in this research (Figure 2). Political Economy, Political Ecology and Sociology were central to the macro-analysis of politics and policy. Sociology, Economics, Psychology and Development studies informed the micro-analysis of livelihoods, which is transdisciplinary at least in the sense it enabled inputs and scoping from non-scientific stakeholders, such as the peasants themselves. Since this research focuses on the peasantry, the peasant condition is also theorised, with particularisation of the

Brazilian case. There is a dedicated chapter on the peasant struggle and the state (Chapter 3), but other frameworks are also articulated in this chapter.

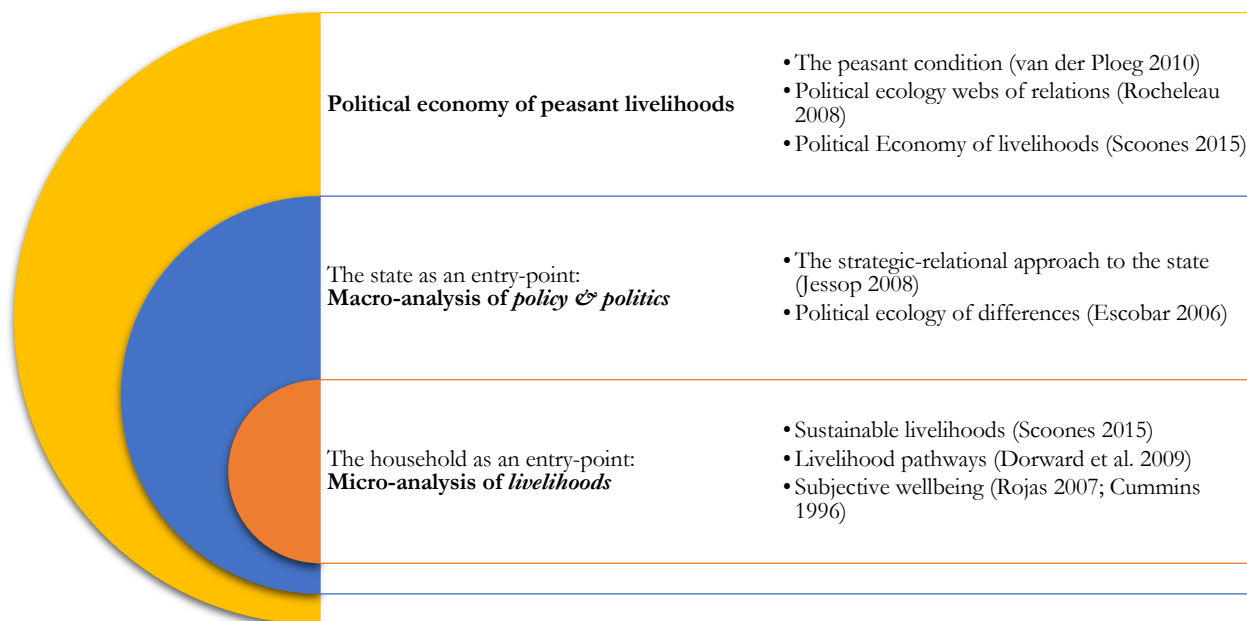


Figure 2. Theoretical constructs.

The micro-analysis of livelihoods was largely informed by a recently updated understanding of sustainable livelihoods, as per Scoones (2015), who has called for a political economy analysis of livelihoods. Indeed, livelihoods analysis within a political economy of environmental and agrarian change is increasingly deemed to be an essential lens through which to view questions of rural development (Scoones, 1998, 2015; Bebbington, 1999; Chronic Poverty, 2000; Ellis, 2000; Batterbury, 2008; De Haan, 2012; Levine, 2014). Livelihood analysis normally examines ‘the capabilities, assets (stocks, resources, claims and access) and activities required for a means of living’ (Chambers and Conway, 1991, p. 6). This includes an analysis of people's assets, i.e. their basis for building a livelihood, and people’s access to livelihood strategies (agricultural extensification and intensification, livelihood diversification, and migration), their livelihood portfolios and strategies, and resulting financial and non-financial outcomes (Chambers and Conway, 1991; Scoones, 1998, 2015). This research focused on the vulnerability situation of rural peoples, their livelihood aspiration and strategies, using a classification proposed by Dorward et al. (2009) and adapted by Mushongah (2009) and Scoones (2015), and an analysis of subjective wellbeing, which emphasised multiple dimensions of life, as proposed by Rojas (2007) and Cummins (1996).

All of these aspects of livelihoods are mediated by politics and power dynamics, but most livelihood studies have been based on static data and typically fail to engage with politics and power – with superficial or little engagement with a broader understanding of the political forces that influence society dynamics at large (Scoones, 2009, 2015; De Haan, 2012; Morse and McNamara, 2013; Waleign *et al.*, 2016). In order to overcome these flaws, Scoones (2015, p.115) has called for an analysis of the action and the politics of the individual

combined with the ‘wider, structural and relational dynamics that shape localities and livelihoods’.⁸ This research achieves this by adopting an understanding of the peasant condition as a politically constructed phenomenon, in which policy events such as the development and retrenchment of the Food Acquisition Programme bring into focus and problematise livelihood dynamics and choices. This requires an appropriately critical understanding of policy processes and the broader political economy of policy change in Brazil that is linked to an analysis of livelihood strategies and trends in wellbeing. The former will be looked at through an essentially political ecology lens in this thesis; the latter by adopting an extended notion of what sustainable livelihood are and the extent to which they can be disrupted by a sudden policy reversal or retrenchment.

Looking first at the nature of the state and state action, this research draws on Rochelau’s propositions to bring dialectics and complexity to the core of Political Ecology analysis (Rocheleau 2008). Following from this, the analysis presented in this thesis of policy and politics benefited from a Strategic Relational Approach (SRA) to the state, as per Jessop (2008). In the SRA approach, the state is as a social relation. As a social relation, the state can be interpreted as the site, the generator *and* the product of ‘strategies’, which are means for the coordination of power relations (Jessop 1990). The macro-analysis of policy also benefited from Escobar’s Political Ecology of Differences framework (Escobar, 1996). Although very useful in their original forms, in what follows, these frameworks are briefly explained and adapted to allow for a better integration with other frameworks, as in bricolage. The two sections of this chapter frame the macro-analysis of the study, in its considerations of power, politics and policies, and the micro-analysis of livelihoods regarding access to assets, coping strategies, and wellbeing.

1.1 Political Ecology and the state

Primarily rejecting dominant apolitical interpretations of human-environment relationship, Political Ecology was born out of detachments both from modern economic theory that unleashes degradation, and from biological theories, such as the Malthusian idea that links environmental collapse to population growth (Adams, 2009; Watts, 2000; Kallis, 2019). Political Ecology has been used in an exceptionally broad sense to refer to concerns imbricated in the relationship between societies and non-human environments (Bridge, McCarthy and Perreault, 2015, p. 3), but it gains distinction when it privileges the notion of *politics*: the practices and processes through which power is wielded and negotiated (see Jones 2008).

Political ecology is characterised by attention to the diversity of ecological environments; a sensitivity to the role of the state and the wider global economy in fashioning environmental change; contextual analysis of multiple scales of influence; emphasis on the diverse responses of decision-makers; and affirmation of the centrality of poverty, exploitation and inequality as causes of ecological deterioration (Jones, 2008, p.672).

⁸ Not only that, Scoones also advocates for ‘something that is worth fighting for’: the ‘right to a sustainable livelihood’ (Scoones, 2015, p116).

The research presented in this thesis mobilised Political Ecology frameworks: Arturo Escobar's framework of differences (Escobar, 1996) and Dianne Rocheleau's 'webs of relations' and principles for 'political ecology in the key of policy' (Rocheleau, 1998). These frameworks have been useful for numerous critical interdisciplinary studies (see Bryant and Goodman, 2004; Robbins, 2012; Watts and Scales, 2015), and in this research were embedded in Paul Robbins's call to treat the state as a complex, 'amorphous' character (Robbins, 2007, p. 216). These frameworks were combined with a theorised understanding of the role of the state, following Bob Jessop, in his 'strategic relational approach' to the state (Jessop 1990), which observes the state not as a fixed entity but as a social relationship.

1.1.1 Policy and politics in webs of relations

'Webs of relations', by Dianne Rocheleau (2008), is an useful construct not only to map actors, value flows and impacts related to dynamics of power, but also to develop a 'new situated science' with 'a radical empiricism that seeks to understand complex assemblages by treating them as networks, observing and evaluating them from multiple standpoints (nodes) within a given structure' (Rocheleau and Roth, 2007, p. 433). Building upon Piers Blaikie's (1995) 'chain of explanation', Rocheleau's webs of relations (2008) calls for furthering dialectics in Political Ecology studies. In other words, furthering dialectics implies in replacing 'the common sense notion of "thing", as something that has a history and has external connection with other things, with notions of a "process", which contains its history and possible futures, and "relation", which contains as part of what it is its ties with other relations' (Ollman, 1993, p. 11). For instance, dialectics in this study encourages a more comprehensive account of the nature of the state in its relationship with rural peoples and broader societal formations.

One of the crucial features of Political Ecology studies, which is retained in this research, is the combination of a grounded understanding of local realities and the role of agency with an examination of macro-politics and the role of structure in shaping realities. Attention to the relationships between actors at and across different scales for the analysis of policy interventions has long been advocated by critical social scientists, political economists and ecologists (see Robbins, 2012; D. E. Rocheleau, 2015; I. R. Scales, 2012; Stock et al., 2014). One of the ways to operationalise this is through the observation of Rocheleau's principles for 'political ecology in the key of policy': (1) multiple methods, objectives, actors and audiences (with critical explanation; practical analysis and problem-solving; testing and framing of policy); (2) integration of social and biophysical analysis of power relations and environment (with mixed methods; integrated analysis); (3) multi-scale analysis (international, national, regional, local, household; and policy, practices, effects); (4) empirical observation and data gathering at household and local levels; and (5) chains of explanation combining structure and agency (Rocheleau, 2008, p.718). Following this set of principles, this research focused on the understanding of a policy, and its politics, rather than on ecological processes.⁹

⁹ Although subsidiary to this research, analyses of environmental change and environmental sustainability would greatly complement this research.

1.1.2 Political Ecology of differences

Arturo Escobar's 'Political Ecology of difference framework' demystifies theories that ignore subaltern experiences and knowledges (Escobar 1996). Escobar's framework, presented in **Table 1**, problematises historical processes that negate differences and summarises typical responses that have emerged from the negation of economic, ecological, and cultural distribution conflicts. In this framework, Political Ecology appears as an alternative response to overcome reductionist science and technology contexts, and to overcome the modern colonial world system. Political Ecology relates then to intellectual and political projects in order to re-embed economy in society, ecosystems, and cultures.

Table 1. Economic, ecological, and cultural distribution conflicts.

Context/ historical process	Concept/ problem	Theoretical/ academic response	Intellectual/ political project	Social/ political response
Global capitalism	Economic distribution (negation of economic difference)	Internalisation of externalities Environmental economics	'Sustainable' capitalist development	Environmental management
Reductionist science and technology	Ecological distribution (negation of ecological processes and difference)	Highlight incommensurability of (modern) economy and ecology Ecological economics and political ecology	Need to re-embed economy in society and ecosystems	Struggles over the environment as source of livelihood Environmentalism of the poor
Dominant modernity (modern colonial world system)	Cultural distribution (negation of cultural difference)	Highlight incommensurability of (modern) economy and culture Political ecology, politics of place frameworks	Need to re-embed economy in society, ecosystem, and culture	Place-based struggles for economic, ecological, and cultural difference Cultural politics of social movements; social movements networks

Source: Escobar (2016)

In more practical terms, Political Ecology offers a way of understanding struggles over access and management of the environment as a source of livelihood, and to the role of social movements and networks struggling for economic, ecological, and cultural difference (Escobar, 2006). In a world that ignores differences – and even promotes homogeneity (see Scott 1998) – Escobar invites scholars to seriously take distribution conflicts into account. This framework was useful in this research to remind of the dynamics of distribution conflicts between sites (with diverse ecologies and vulnerabilities) and between groups of people (by gender, generational cohorts, and income levels, for example). Escobar (2006) has argued that a peaceful, just and balanced modern social world cannot deny people rights to their own cultures, ecologies, and economies, and, more recently, has advocated for 'a world where many worlds fit' – a 'pluriverse' that confronts a monistic paradigm predicated on

‘capitalistic hetero patriarchal modernity’ (Escobar, 2019, p. 121). The appreciation of subaltern experiences in this research were devised to feed into this kind of process, which foster plural civilisational foundations. Political Ecology frameworks are useful to the extent they allow for an engagement with the phenomenon in question, and in providing a soft structure to the dissertation. The human dimension (the peasant condition) of policy change (new austerity regime) was the principal object of this research. Rocheleau’s and Escobar’s frameworks, which give politics rather than ecology centre stage, influenced this PhD research substantially.

Some scholars claim political ecology should pay more attention to ecological processes, while others suggest greater attention to its political economy dimension (Escobar, 1998; Walker, 2005; Adams and Hutton, 2007; Blaikie, 2008; Bryant and Goodman, 2008; Rocheleau, 2008; Leff, 2015). In despite of this divide, most studies select particular observation points to depict and examine human-environment relationships.¹⁰ Indeed, political ecology studies can adopt one or multiple lenses and entry points. What was more relevant for a circumscribed research project, such as this PhD dissertation,¹¹ was to define its boundaries and acknowledge its limitations. It is clear, then, that multiple other frameworks could have been deployed in addition or in lieu of the chosen frameworks. For example, ecology could have been central to the work. One could have studied instead the implications of the policy on the landscape level, on ecosystems or even species diversity, or on any other dimension of ecology or climate-related dimension such as in Carbon accountability and life cycle analysis exercises. Alternatively, the relationship between actors could have been the sole focus of this research, for example, through stakeholder or network analyses, or using the actor-network theory. Understanding that this research could have been either broader or deeper in one specific dimension, the researcher understands that the chosen approach is limited but adequate in its focus on policy, politics and the living experiences of individuals.

1.1.3 The strategic-relational approach to the state

The nature and procedures of the state and state action is often overlooked, even in Political Ecology research (Robertson, 2015). Conventionally, the state is conceptualised as a territory or a coherent government, with some authors placing the state as an entity apart from or above citizens (cf. Tarrow 1994; Ioris 2014). At other times, the state is treated like firms or households; or depicted as neutral; or qua the ‘private property of self-interested political actors’ (Jessop, 1990, pp. 24–25). However, ‘the state in general’ does not exist (Jessop, 1990). State theories have therefore emphasised the reciprocal constitution and transformation of state and society. Overcoming the aforementioned flaws and archetypal categories about the state,¹² Jessop presents three basic components of a general state theory: the state should have bordered territory subject to control; state apparatus,

¹⁰ A diverse range of Political Ecology perspectives can be found in two handbooks by R. L. Bryant (2015) and McCarthy et al. (2015), as well as in the *Journal of Political Ecology*, a platinum open access journal.

¹¹ This is particularly relevant for circumscribed projects, such as this PhD dissertation – which is a single-authored 3-year project foreign to a established longitudinal research programme.

¹² Jessop’s definition of the state does not assign to the state the inherent role of preserving people’s right to individual freedom, as did Rousseau; it broadens the narrow Weberian focus on the managerial apparatus; and it escapes the Marxist and Milibandian suggestion that the state is, a priori, a ‘committee of the bourgeoisie’ (cf. Whitehead et al. 2007). As examples of archetypal state categories: structuralist and instrumentalist; reformist and revolutionary; capital logic and class logic; and Marxist and non-Marxist (cf. Jessop 1990, p.249-254).

which includes staff with division of labour and specific capacities; and a population (Jessop, 1990). More importantly, Jessop defines the state as a social relation:

The core of the state apparatus comprises a relatively unified ensemble of socially embedded, socially regularised, and strategically selective institutions and organisations (Staatsgewalt) whose socially accepted function is to define and enforce collectively binding decisions on the members of a society (Staatsvolk) in a given territorial area (Staatsgebiet) in the name of the common interest or general will of an imagined political community identified with that territory (Staatsidee). (Jessop, 2014, p. 5)

As social relations, states are more dynamic and porous than consistent and solid. For instance, state action is often contradictory in public affairs, from its support of neonatal care to mobilisations for war, with long term remarks on tensions between development, farming support, and environmental protection (Bridge and Jonas, 2002; Kleijn and Sutherland, 2003; Potter and Tilzey, 2007; Sutherland *et al.*, 2009; Peluso and Vandergeest, 2011; Ioris, 2014; A. A. R. Ioris, 2015; Coff *et al.*, 2015; Wittman *et al.*, 2017). Indeed, states struggle to integrate multiple roles (Walker 1989): as a developer, the state co-opts cultures whilst the world system engages indigenous economies, which in turn affect the way people relate to the environment; at the same time, as environmental managers, states struggle to mediate the interests of markets and communities (Adams, 2009; Sandbrook *et al.*, 2010).

The state system can thus be interpreted as the site, the generator and the product of ‘strategies’, which are means for the coordination of power relations (Jessop 1990). Following this understanding, Jessop (2014) proposes the Strategic-Relational Approach (SRA), a framework which allows for a thoughtful analysis of the modus operandi, socio-political bases and strategic selectivity of the state. The framework comprises *formal* and *substantive* dimensions. The *formal* dimensions that is the focus of this dissertation comprise different modes of representation – the build-up and break-down of channels of representation – and the modes of intervention, past and present. The *substantive* dimension refers to discursive and social features of the state (Jessop 2014), and in this dissertation the focus is on the social basis of the state and its associated hegemonic vision (see Table 2).

Table 2. State dimensions and state power

State	Definition	Significance
Formal dimension		
Forms of representation	These give social forces access to state apparatus and power	Unequal access to state; and unequal ability to resist at distance from state.
Forms of articulation	Institutional architecture of levels and branches of the state	Unequal capacity to shape, make, and implement decisions.
Forms of intervention	Modes of intervention into market-state-civil society relations	Different sites and mechanisms of intervention.

State	Definition	Significance
Substantive dimension		
Social basis of state	Institutionalised social compromise	Uneven distribution of material and symbolic concessions to ‘population’ to secure support for state, state projects, specific policy sets, and hegemonic visions.
State project	Secure apparatus unity of state and its capacity to act	Overcomes improbability of unified state system by giving orientation to state agencies and agents.
Hegemonic project	Defines nature and purposes of state for wider social formation	Provides external legitimacy for state, defined in terms of the ‘common good’, ‘general will’, while derogating other competing or contradictory interests.

Source: adapted from Jessop (2008, p.30; 2014, p.6)

The structure and modus operandi of the state are more accessible to some types of political strategies than others – a discriminatory system referred to as ‘strategic selectivity’ (Jessop, 1990). Indeed, the generation of strategies is contingent on how the state deals with ‘class(-relevant) struggles and contradictions’, and also with internal struggles and rivalries (Jessop 1990, p. 260-262; 2014, p.379-380). The interaction among these strategies results in the exercise of ‘state power’, which can be defined as a ‘complex social relation that reflects the changing balance of social forces in a determinate conjuncture’ (Jessop, 1982, p. 221). Consequently, even if the state ultimately benefits the capitalist class¹³, the state can be seen as *relatively* autonomous from it (Poulantzas, 1980). Building on Poulantzas’ ideas, Jessop suggests that ‘state power is capitalist to the extent that it creates, maintains, or restores the conditions required for capital accumulation in a given situation and it is non-capitalist to the extent that these conditions are not realised.’ (Jessop, 1982, p. 221).

Thus, the state is not capitalist (nor communist or socialist) by default – but an expression of society and an outcome of the balance of social forces. Even so, the expanding influence of global corporations and the rise of capital as the organising principle of political economy in the 21st century (Harvey, 2005; McMichael, 2008; Borras, 2009; Apostolopoulou and Adams, 2015) have led states, international organisations (Harvey, 2005; Escobar, 2006; Adams, 2009; Scales, 2014) and the United Nations 2030 Agenda for Sustainable Development to safeguard continuous economic growth (Hickel, 2019; Kothari *et al.*, 2019).¹⁴ This has underwritten a global race for (or even arguably an ‘obsession’¹⁵ with) continuous economic growth, with global GDP (global gross domestic product, or world global product) expected to continue increasing, by 4.6 trillion US dollars each year at least until 2020 (IMF, 2019). However, increases in GDP have not been accompanied by reduced inequalities; on the contrary, as income inequality within countries is on the rise (Korten, 1998; Bailey, 2011; Piketty, 2014; Neri, 2018; OECD, 2019). With inequality on the rise, social pressures have motivated state interventions such as the creation of welfare states in the global North, and the establishment of poverty alleviation measures and social

¹³ Here we refer to the capitalist class as the group of people who own the means of production and employ workers.

¹⁴ Target 8.1 of the Sustainable Development Goals reads: ‘Sustain per capita economic growth in accordance with national circumstances and, in particular, at least 7 per cent gross domestic product growth per annum in the least developed countries’.

¹⁵ See, for example, Ekins 1989; Korten 1998.

policies in the global South (Hartman, 2005; Mares and Carnes, 2009; Barr, 2012). In many developing countries, social policies have originated under authoritarian regimes, whose leaders struggled with the political organizations that brought them to power (Mares and Carnes, 2009). This is an evidence of the benefits of seeing the state as a social relation.

Adopting Jessop's theoretical perspective on the state and the attempts to address the predicament of the peasantry worldwide, this dissertation examines the evolving relationship between the state and rural peoples in one of the most unequal societies in the world: Brazil. Understanding this relationship in Brazil was particularly relevant not only because of its dimension and diversity, but mainly because of recent changes in poverty and inequality levels in the country, and in Latin America and the Caribbean region at large. Regionally, the rates of rural poverty and extreme poverty have increased since 2014, after almost 25 years of decline (FAO, 2018). The case of poverty and inequality in Brazil is intriguing and mirrors this outlook. Poverty rates have increased in Brazil in the past few years. For instance, income inequality has grown since 2014, following two decades of decline (Medeiros, 2016): 6.27 million people joined the poverty ranks in Brazil from 2014 to 2018, in just four years, which is equivalent to more than the entire population of Denmark. In 2018, 23.3 million persons lived with less than R\$ 233 BRL (61.65 USD, as per August 2018) – a population of poor in Brazil that is equivalent to almost all of the population of Australia (Neri, 2018).

Complementary to Political Ecology/Economy, which broadly framed the macro-analysis of policy and politics, scholarship on Sustainable Livelihoods was instrumental in framing the micro-analysis of this research, which centred on the living experiences of individuals and their livelihood struggles within a broader policy and political context.

1.2 Sustainable livelihoods – revisited

A widely disseminated definition of sustainable livelihoods, by Ian Scoones, posits that 'a livelihood is sustainable when it can cope with and recover from stresses and shocks, maintain or enhance its capabilities and assets, while not undermining the natural resource base' (Scoones, 1998, p. 5, 2015, p.6). As acknowledge by Scoones, this definition was adapted from previous work by Chambers & Conway (1991), which were in turn preceded by ideas dated back to the 1970s.¹⁶ Notably, this definition fortified a crucial aspect of sustainability: the conservation of natural resources. However key, other equity aspects of sustainability are implicit but not evident in this definition. For example, it indirectly addresses inter-generational equity (concern with the next generation and the long term), intra-generational equity (concern with other peoples' livelihoods), geographical equity (concern with the local and global levels, as in trans-frontier responsibility), and procedural equity (concern with openness and fairness in the way people are treated). These equity principles combined with concerns with environmental stewardship would

¹⁶ Of course, there are a plethora of working definitions for 'sustainable livelihoods', but none has gained momentum as the one put forward by the Institute of Development Studies. For a brief history of the idea, see Scoones (2015, pp.1-14), and Batterbury (2008), Scoones (2009), Levine (2014) and Vercillo (2017).

form a more comprehensive set of principles for sustainable development, following Graham Haughton (1998, 1999).

Therefore, this research aimed to tackle all five equity principles for sustainable development (as per Haughton, 1999) for the livelihood analysis. It did so by recalling Chambers' & Conway's (1991) definition, which directly tackles three of the equity principles (inter-generational equity, intra-generational equity, and geographical equity), and combines it with Scoones' concerns with environmental sustainability, besides the principle of procedural equity, which is often overlooked. Procedural equity is a sustainable development principle that 'holds that regulatory and participatory systems should be devised and applied to ensure that all people are treated openly and fairly', which 'requires balancing of democratic and participative methods of engagement with decision making' (Haughton, 1999, p. 236). In other words:

Procedural equity is about much more than legalistic and bureaucratic procedures for establishing and enforcing obligations and rights. It also needs to embrace wider processes of public engagement, where multiple democratic and participative forms and channels are brought into play to foster participation and engagement with processes of change. (Haughton, 1999, p. 236)

Procedural equity is particularly relevant since it helps 'bring politics back' to the analysis of livelihoods, as suggested by Scoones (2015, p. 109). By doing so, the sustainable livelihoods analysis became better intertwined with the Political Ecology and Political Economy frameworks aforementioned.

A definition of sustainable livelihoods that embraces politics could read: 'a livelihood is sustainable when it is resilient¹⁷ and either neutral or beneficial to the environment and other livelihoods over time and geographies, with people having opportunities to engage with processes of change'. This understanding is reprised in Figure 3, where it is related to Haughton's (1999) five equity principles for sustainable development. This concept of sustainable livelihoods tackles all equity principles of sustainable development, as per Haughton (1999), and integrates insights from both Scoones' and Chamber & Conway's concepts with one supplement and one cutback.

¹⁷ A livelihood is resilient when it can cope with a hazardous event or trend or disturbance, responding or reorganizing in ways that maintain their essential function, identity and structure while also maintaining the capacity for adaptation, learning and transformation (see IPCC, 2018).



Figure 3. A definition of sustainable livelihoods framed within equity principles for sustainable development

The concept adopted in this research enables an analysis which brings ideas of procedural equity (and politics) into the very definition of sustainable livelihoods. The inclusion of ‘opportunities to engage with process of change’ in the definition serves as a reminder of the relevance of power and politics in shaping livelihoods. If procedural equity was dismissed, the concept of ‘sustainable livelihoods’ can be easily appropriated by authoritarian regimes. The cutback in the concept concerns capabilities¹⁸ and assets¹⁹. Scoones, Chamber and Conway include the ‘maintenance or enhancement of capabilities and assets’ as intrinsic to the definition of sustainable livelihoods. But this was left out of the concept used in this research. In this research, the maintenance or advancement of capabilities, assets and welfare (see Dorward et al., 2009, p.242) were understood as livelihood aspirations rather than characteristics of sustainability. Moreover, as it happens, a continued accumulation of assets by a certain group at a fixed time may confront the principle of not hindering nor harming other livelihoods across time and geographies. Table 3 summarises the similarities and differences between these concepts.

¹⁸ Capability is a person's opportunity and ability to generate valuable outcomes (see Sen 1999).

¹⁹ Assets are the things that people have access to, but also what they believe, feel, and identify with (see Scoones 2015).

Table 3. Concepts of sustainable livelihoods

Sustainable livelihoods	Intra-generational equity	Inter-generational equity	Geographical equity	Inter-species equity	Procedural equity	Resilience	Assets and capabilities
Chamber & Conway (1991, p.6): '(...) a livelihood is sustainable which can cope with and recover from stress and shocks, maintain or enhance its capabilities and assets, and provide sustainable livelihood opportunities for the next generation; and which contributes net benefits to other livelihoods at the local and global levels and in the short and long term.'	Intrinsic (contributes net benefits to other livelihoods)	Intrinsic (provide sustainable livelihood opportunities for the next generation)	Intrinsic (at the local and global levels)	Extrinsic	Extrinsic	Intrinsic	Intrinsic
Scoones (2015, p.6): '(...) a livelihood is sustainable when it can cope with and recover from stresses and shocks, maintain or enhance its capabilities and assets, while not undermining the natural resource base.'	Extrinsic	Indirect (through environmental stewardship)	Extrinsic	Intrinsic (not undermining the natural resource base)	Extrinsic	Intrinsic	Intrinsic
In this research: A livelihood is sustainable when it is resilient and either neutral or beneficial to the environment and other livelihoods over time and geographies, with people having opportunities to engage with processes of change.	Intrinsic (neutral or beneficial to other livelihoods)	Intrinsic (over time)	Intrinsic (over geographies)	Intrinsic (neutral or beneficial to the environment)	Intrinsic (opportunities to engage with processes of change)	Intrinsic	Auxiliary

The concept of sustainable livelihoods that informed this research emphasised the need to keep politics at the core of empirical analyses. More importantly, the five equity principles are connected, albeit not necessarily positively at all times. For example, an improvement in intra-generational equity can positively or negatively impact inter-generational equity or environmental stewardship. Paying attention to trade-offs between societal goals and unintended consequences of development is perhaps the most sophisticated job in the development and sustainability industries. Finally, before advancing to a more detailed explanation of what a livelihood analysis entails, it seems relevant to highlight two aspects regarding conceptualisations and the politics of knowledge. Firstly, compromises around concepts/ideas can help with their popularisation, as it happened with the concept of ‘sustainable livelihoods’ in the 1990s. While simplifications can help to popularise ideas, these processes can lead to over-simplification and abandonment of essential principles of robust ideas. And this leads to engagements that lose touch with crucial subtexts of ideas – and therefore to unintended consequences. For example, the concept of ‘sustainable livelihoods’, as per Scoones (1998) gained momentum in the 1990s within the UK Department of International Development. At the time, a sustainable livelihoods framework was considered innovative by some, cumbersome by others, but also referred to as an instrument used for a neo-colonialist and imperialist strategy (see Morse & McNamara, 2013; Sidaway, 2007; Viteri Salazar, Ramos-Martín, & Lomas, 2018). While this kind of judgement is not part of the objectives of this research, what became clear is that Haughton’s framework of five equity principles for sustainable development (Haughton, 1999) was helpful for the reflections about sustainable livelihoods and to bring politics (and procedural equity) to the core of the analysis.

Second, discourses around ‘sustainable livelihoods’ have changed over time, and should be expected to change continuously – according to the priorities, conveniences and world views of their proponents and users. While some can highlight resilience and environmental stewardship, as Scoones has done, others can focus on the development of a single nation, or on procedural equity, whilst others can try to observe a broader range of sustainable development principles. In this sense, there is no ‘right’ or ‘wrong’ definition of sustainable livelihoods, but one should acknowledge that adopting definitions means siding with certain perspectives, with their flaws and particularities. One issue that this research was clearly limited was in its attempt to be expansive in scope while trying to go deep in certain aspects of the analysis of politics and livelihoods. One could argue that this research was superficial in several aspects, but since the Food Acquisition Programme retrenchment and constitutional austerity in Brazil are contemporary and understudied phenomena, the way this research was articulated effectively addressed the research questions.

Livelihood frameworks

A well-known and balanced heuristic model as in ‘the sustainable livelihoods framework’, formulated by the Institute for Development Studies (see Scoones 1998), allows for a dialectical analysis of livelihoods, in five interconnected components, namely, ‘context, conditions and trends’, ‘livelihood resources’, ‘institutional processes and organisational structures’, ‘livelihood strategies’, and ‘sustainable livelihood outcomes’ (Scoones 2015). These are also articulated in the form of a question:

Given a particular context (of policy setting, politics, history, agroecology and socio-economic conditions), what combination of livelihood resources (different types of ‘capital’) result in the ability to follow what combination of livelihood strategies (agricultural intensification/ extensification, livelihood diversification and migration) with what outcomes? Of particular interest in this framework are the institutional processes (embedded in a matrix of formal and informal institutions and organisations) which mediate the ability to carry out such strategies and achieve (or not) such outcomes (Scoones, 1998, p. 3).

This heuristic comprises the procedural equity dimension of sustainable development and therefore is in line with the definition of sustainable livelihoods adopted in this research. In this research, the *context* and *institutional processes* broadly corresponds to the macro-analysis of policy and politics, while the micro-analysis of livelihoods addresses *livelihood resources, strategies and outcomes*.

1.2.1 Livelihood resources

The analysis of availability and access to *livelihood resources* drew from complementary indicators of social vulnerability, human development, and the biophysical environment, including infrastructure. The biophysical and social environment were depicted with regards to ecologies and physical geographies, as well as with regards to the organisations that rural people associate with. The 2010 Municipal Human Development Index (HDI), which is the last available edition for Brazilian municipalities (PNUD, Fundação João Pinheiro and IPEA, 2013), includes indexes of longevity, education, and income. Since the HDI only concerns very basic peoples’ capabilities (Anand and Sen, 1994), indicators of social vulnerability compiled by IPEA, Brazil’s institute of applied economic research (IPEA, 2015), complemented this analysis with a greater depth. Vulnerability was understood as the ‘propensity or predisposition to be adversely affected’ (IPCC, 2012, p. 5), which can result from exposure to social, economic, political, and environmental change. The Social Vulnerability Index (SVI), by IPEA (2015), includes indicators of access, absence or hypo-sufficiency of three types of assets: infrastructure, human capital, income and labour. It includes indicators on infrastructure related to water, sanitation, waste collection, and urban mobility; on human capital related to health and education; and on income and labour, including rates of unemployment, informal occupation, type of jobs, dependence on others, and child labour. The analysis was crucial to understand the assets peasants have access to, which was in turn essential for the analysis of their livelihood aspirations and pathways.

1.2.2 Livelihood aspirations and pathways

The analysis of livelihood aspirations and trajectories, or pathways, was used to understand what has happened to people’s livelihoods in terms of activities, farm and off-farm, migration dynamics, and plans. Individuals were differentiated between four pathways, as proposed by Dorward et al. (2009) and complemented by Mushongah (2009) and Scoones (2015):

- ‘Hanging in’: ‘whereby assets are held, and activities are engaged in to maintain livelihood levels, often in the face of adverse socio-economic circumstances’ (Dorward *et al.*, 2009, p. 243);

- ‘Stepping up’: ‘whereby current activities are engaged in, with investments in assets to expand these activities, in order to increase production and income to improve livelihoods (...).’ (Dorward *et al.*, 2009, p. 243);
- ‘Stepping out’: ‘whereby existing activities are engaged in to accumulate assets which in time can then provide a base or ‘launch pad’ for moving into different activities that have initial investment requirements leading to higher and/or more stable returns (...).’; (Dorward *et al.*, 2009, p. 244);
- ‘Dropping out’: referring to those who are moving towards destitution, reliant on external support or in the process of migrating away (Mushongah, 2009; Mushongah and Scoones, 2012).

This simple heuristic had been proved useful as a general guidance for the analysis of livelihood pathways.

Mushongah and Scoones (2012), for example, used this framework as a reference to study longitudinal changes in livelihood strategies in Zimbabwe, and concluded that ‘accumulation of assets [which can be read as a proxy for welfare advancement] is often reliant on a combination of both “stepping up” and “stepping out” livelihood strategies’, and that dependence on either farming or off-farm employment is ‘always risky’ (p.1253). Different scholars have attributed slightly different meanings to the aforementioned typology of livelihood pathways, but this research focused on two dimensions: assets accumulation and diversification – as illustrated in Figure 4.

Alternative classification would have been proposed had these constructs proved inappropriate or insufficient, but this was not the case.

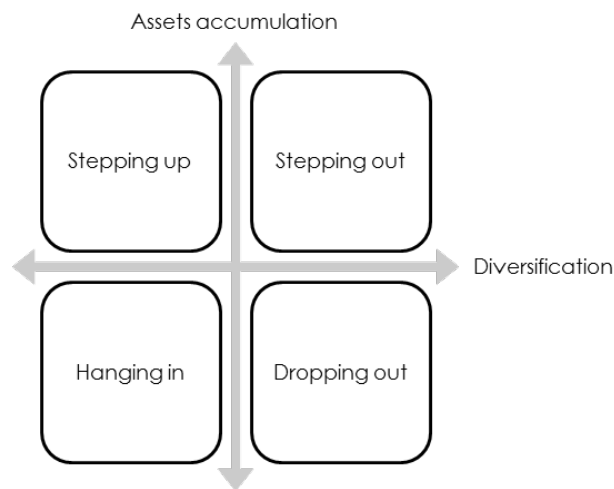


Figure 4. Livelihood pathways according to levels of diversification and assets accumulation.
Source: Original heuristic, based on Dorward *et al.* 2009 and Mushongah 2009.

Location (as a proxy to levels of access to livelihood resources), gender, generational cohorts or age, and income-poverty were used to examine if the patterns of livelihood aspirations and pathways were differentiated by geography or demographics. The methods and criteria for the definition of the groupings are detailed in Chapter 2 on Methodology.

1.2.3 Wellbeing as a livelihood outcome

Wellbeing issues and the impacts of the Food Acquisition Programme on life satisfaction were examined in this research. In opposition to normative top-down approaches that presume what a good life is and how to attain it, this research adopted a subjective wellbeing approach (Rojas, 2007). The subjective wellbeing approach follows a bottom-up approach to study wellbeing, which is inherently subjective, takes the person as the best authority for assessing it, adopts an inferential approach rather than normative, and is transdisciplinary, since it is participative and transcends disciplinary boundaries (Rojas, 2007). This allowed for the appreciation of financial and non-financial factors, since this combination ‘can provide insight into policies to sustain human welfare in the future.’ (Graham, Laffan and Pinto, 2018, p. 287).

Subjective wellbeing is commonly measured either in its life-satisfaction or in its happiness conceptions. This thesis followed a life-satisfaction construct for two main reasons. Firstly, a life-satisfaction approach can be used as a proxy for utility, which allows for greater exchanges with Economics research. Secondly, life-satisfaction constructs are deemed to be ‘less volatile and more cognitively oriented than happiness’ (Rojas, 2007). Then, a seven-domain partition of life satisfaction, as proposed by Cummins (1996) on the basis of a meta-study of the literature, is comprised of: material wellbeing, health, productivity, intimacy, safety, community and emotional wellbeing (see Figure 5). Using this framework allowed for the expansion of limited understandings that simply assign income or material wellbeing to the construct of wellbeing or livelihoods, as observed in several studies concerning food acquisition programmes.

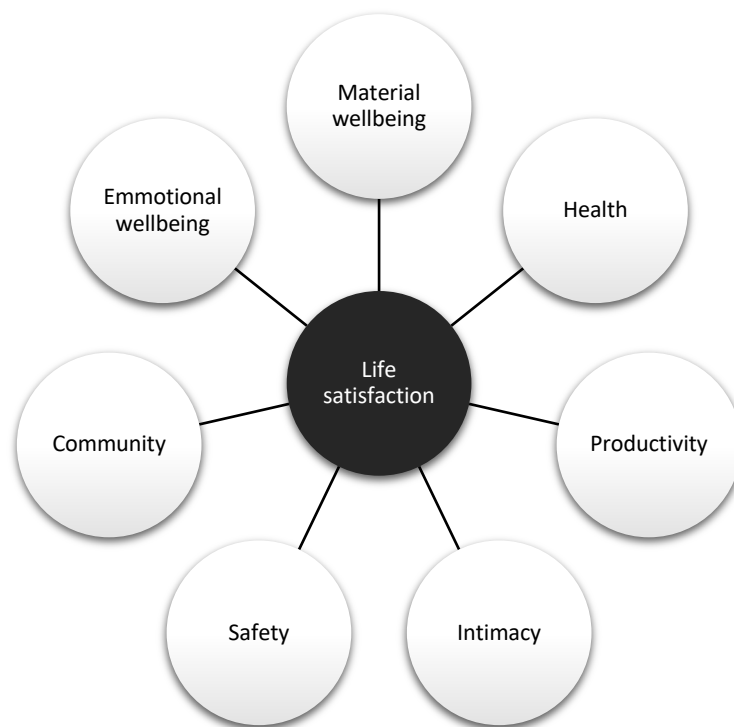


Figure 5. Domains of life satisfaction
Adapted from Cummins (1996)

The combination of theoretical frameworks – from political ecology to state theories to sustainable livelihoods and subjective wellbeing – called for an adaptive set of methods for data collection and data analysis (Kincheloe, 2005; Jupp, 2006), which is detailed in the next chapter.

Chapter 2 Methodology

This research employed several methods for gathering and analysing data. The chosen methods suited the empirical and theoretical nature of the research problem, and the evaluative and exploratory bases of this research – as in methodological bricolage. Key-informant interviews and documentary analysis were the key methods for the macro-analysis of policy and politics, while heterogeneous case study defines the micro-analysis of livelihoods. This chapter presents data collection methods in Section 2.1, sampling strategies in Section 2.2, methods for data analysis and interpretation in Section 2.3, and considerations on ethics, positionality and practicalities in Section 2.4. All data was collected and analysed by the author, without any research assistance, except for the Qualitative Data Analysis (QDA) conducted to classify the official objectives of the Food Acquisition Programme vis-à-vis wellbeing and life satisfaction issues. For this QDA, a second researcher contributed with an independent analysis followed by a conciliation. A pilot study was conducted in 2017, which proved useful to improve research protocols. Final data collection was conducted in the field between April 2017 and May 2018.

2.1 Data collection methods

Interviews, documentary analysis, case study, focus group and participatory methods were used in this research. Key-informant interviews and documentary analysis were used to collect data for both the macro-analysis of policy and politics and for the micro-analysis of livelihoods. The micro-analysis also drew from heterogeneous case studies, focus group interviews, and proportional pilling, which is a quali-quantitative method useful when working with people lacking numeracy. Table 4 summarises the data collection methods used in this research.

Table 4. Data collection methods

Method	Macro-analysis of policy and politics	Micro-analysis of livelihoods
Key-informant interview	x	
Documentary analysis	x	x
Case study		x
Focus group interview		x
Proportional pilling		x
Walking interview		x
Survey		x

Data collection started at the macro level, with documentary analysis and interviews with key informants in governmental, non-governmental and community levels. At the micro level, data collection started with focus group discussions at the household level, using proportional pilling for quantitative assessments. This was

followed by walking interviews with one or two members of the household, and individual interviews (survey style) with two members per household – always aiming for diversity regarding gender and age. The methods and research protocols are detailed further below.

2.1.1 Documentary analysis

Documentary analysis contributed to the macro-analysis of policy and politics, and to the micro-analysis of livelihood resources. It comprised finding, selecting, appraising, and synthesising data contained in documents in order to elicit meaning, gain understanding, and develop empirical knowledge of the issue at stake (Bowen, 2009). Table 5 lists the key documentary sources.

Table 5. Sources for documentary analysis.

Document type	Source
Regulation	Legislation: http://www4.planalto.gov.br/legislacao/ Resolutions, recommendations and other documents by the National Council for Nutrition and Food Security: http://www4.planalto.gov.br/consea/eventos/plenarias
Policy report/ assessment	FAP reports: https://www.conab.gov.br/agricultura-familiar/execucao-do-paa FAP database (PAA-data): https://aplicacoes.mds.gov.br/sagi/paa/ International Policy Centre for Inclusive Growth (IPC-IG) working paper series: https://ipcig.org/publications
Open letter and comments	Family farming and rural workers union (Contag): http://www.contag.org.br MST: http://mst.org.br Brazilian Forum on nutrition, food security and food sovereignty: https://fbssan.org.br
Atlas	Atlas of Social Vulnerability: http://ivs.ipea.gov.br/ Atlas of Human Development in Brazil: http://atlasbrasil.org.br/

Documentary analysis helped to understand context, policy change, and the ‘public face’ of the issues as presented by institutions (Taylor, 2016). This contributed to data triangulation with other methods, and provided evidence of confluence of ideas/interpretations with the data collected through case studies and interviews (Stake, 1994; Bowen, 2009).

2.1.2 Key-informant interviews

Since this study required in-depth information not available in published documents, the macro-analysis of policy and politics also benefited from face-to-face in-depth interviews with a selected (non-random) group of experts. This contributed to the examination of the Food Acquisition Programme in its design, implementation, and retrenchment. Several key-informants challenged official narratives and added information on the dynamics of policymaking and the FAP in particular. A relatively-structured (or semi-structured) interview method was chosen,

rather than structured or unstructured, which allowed for some degree of pre-determined order while maintaining flexibility in the way issues were addressed and raised by the informants (Dunn, 2005). An interview guide was developed with four key-themes: development views; role of the FAP; assessment of changes; assessment of livelihoods and land management practices (Appendix 1). Following Dunn's (2005) and Longhurst's (2016) recommendations, the topics were used to steer a conversation, with discussion allowed to unfold naturally – in a way that participants would have the chance to explore issues they felt were important. The interviewer, however, made sure the points of the guide were used to cover all key-themes of the guide. The interviews were audio-taped, following consent (see Section 3.4).

Face-to-face interviews were conducted with representatives of rural community organisations, grassroots organisations, civil society, research institutions and governmental bodies. Out of 25 solicited interviews, 21 were arranged (Table 6): of which nine with representatives of executive governments (from local to central administration), two with the Federal Parliament, and one national bank; four leaders of associations or cooperatives of rural peoples; two civil society organisations (umbrella organisations representing rural peoples) and three researchers (experts in agrarian change, public policies, and the FAP). All interviews were conducted by the author, face-to-face, between April of 2017 and May 2018. Figure 6 illustrates some of the actual places the interviews took place. Although the researcher tried to select experts to reflect diverse views, as recommended by Parsons (2011), all the interviews were conducted with stakeholders that had high interest in the FAP, having either advocated for or benefited from it. The four organisations/actors that were not interviewed did not respond to or declined the interview request. The author contacted these actors by email and phone calls repeatedly, without success. Although no definite explanation can be provided for this, one could hypothesise that these groups were uninvested in the topic or avoiding blame, which is a known retrenchment strategy (see Chapter 3). Three of these organisations have historical and personal ties with the agribusiness sector, and the fourth one was the Special Secretary of Family Farming and Rural Development. This Special Secretary is the former Ministry of Agrarian Development²⁰ whose status and apparatus has been weakened since 2016. It was finally merged with the Ministry of Agriculture in 2019.

²⁰ In Brazil, Secretaries are hierarchically inferior to Ministers. Secretaries report to Ministers, and Ministers report to the President.

Table 6. Key-informants.

Affiliation of key-informant	Type of organisation	Date
Banco do Brasil, farming unit	National bank	12 April 2017
National agricultural supply agency (Conab)	Central government	18 April 2017
Ministry of Social Development, Coordination for Acquisition and Distribution of Food	Central government	18 April 2017
National Fund of Education of Development (FNDE)	Central government	20 April 2017
Ministry of the Environment (MMA)	Central government	20 April 2017
National Confederation of family farming rural workers (Contag)	Civil society	24 April 2017
Ministry of Social Development, National Secretary of Nutrition and Food Security	Central government	24 April 2017
National Council of Nutrition and Food Security (Consea) Executive Secretariat	Central government	25 April 2017
Alessandro Molon, Chamber of Deputies	Congress	26 April 2017
Patrus Ananias, Chamber of Deputies	Congress	26 April 2017
Sergio Paganini, independent	Researcher	8 November 2017
Silvio Porto, UFRRJ	Researcher	8 November 2017
Sergio Schneider, UFRGS	Researcher	9 November 2017
Movimento dos Pequenos Agricultores (MPA), Movement of Small Farmers (affiliated with La Via Campesina)	Civil society	9 November 2017
Regional branch of Conab in the state of São Paulo	Regional office of Conab	21 March 2018
Regional branch of Conab in the state of Amazonas	Regional office of Conab	23 March 2018
Associação do Paraná do Careiro	Organisation of rural people	4 May 2018
Associação Monte das Oliveiras	Organisation of rural people	6 May 2018
Associação São Sebastião do Curuçá	Organisation of rural people	11 May 2018
Municipal Administration of Angatuba	Subnational government	11 May 2018
Cooperative of rural producers of Angatuba (Colang)	Organisation of rural people	29 May 2018
Ministry of Agriculture	Central government	Not available
Special Secretary of Family Farming and Rural Development	Central government	Not available
National Confederation of Agriculture (CNA)	Agribusiness confederation	Not available
Katia Abreu, Federal Senator	Congress	Not available



Figure 6. Key-informant interviews.
Top: the Brazilian Congress, Brasília. Centre: office of a cooperative in São Paulo and a representative of the organisation. Bottom: community facility and community leaders in the Amazonas.
Source: Personal Collection (2018)

2.1.3 Case study

The micro-analysis of livelihoods was pursued through a series of case studies which explored the complexity and uniqueness of austerity and retrenchment in ‘real-life’ (non-experimental) contexts. The case studies were evidence-led and allowed for qualitative and quantitative methods (Yin, 1984; Stake, 1994; Simons, 2014a). The design comprised the conceptualization of (i) the object of the micro-analysis study: the impacts of austerity for rural peoples; (ii) the key-issues: peasant livelihoods, and (iii) components of study: livelihood resources, livelihood strategies/pathways, and wellbeing. The theoretical frameworks for these components of the study were discussed in Chapter 1.

This research adopted a ‘collective’ case study strategy, in which a pair of locations were chosen to provide insight into a particular issue (Stake, 1994). Two contrasting locations were chosen because of their stark differences in social vulnerability and human development. The final study was conducted in the municipality of Angatuba, state of São Paulo, and in the municipality of Careiro da Várzea, state of Amazonas. In total, 42 family farming units were sampled and invited to participate in focus group conversations. Each family farming unit could then be seen as a case within a case. The sampling strategy is described in Section 2.2. Therefore, through a cross-section design, this research examined and compared several variables across multiple subgroups that were similar in other characteristics (see Cummings, 2018), i.e.: social vulnerability and human development situation (location), gender, generational cohort, and level of income-poverty. These categories are further explained in the Section 2.3.

2.1.4 Focus group

Focus group interviews with family farm household members were used to understand how they perceived the implementation and retrenchment of the Food Acquisition Programme, and to explore how they imagined their livelihoods unfolding into the future. The ‘intervention histories/futures’ approach, as proposed by the Steps Centre (2019), was particularly useful in shaping the focus group work. Through a relatively structured conversation, ‘intervention histories/futures’ as a method helped the appreciation of how policy changes has been interpreted and experienced by their intended beneficiaries (Steps Centre, 2019).²¹

The method enables the tracking of ‘intervention pathways’ – how the particular combinations of social, technological, environmental and institutional arrangements associated with interventions co-evolve over time – and how such interventions interact with, and perhaps alter the directions of, ongoing pathways of change around particular issues and settings. (Steps Centre, 2019).

²¹ Moreover, ‘(...) diverse intervention histories-futures can also be used as part of an opening-up of inputs to policy and practice – whether in evaluating past interventions, or appraising and designing new ones. It can help expose likely future clashes of interpretation, or distributional implications that may have gone unrecognised, thus enabling future intervention designs to take account of and mitigate these. And it can open up the ways that future intervention designs are conceived, to address a wider range, or a reconfigured set, of challenges, goals and desires. (...)’. (Steps Centre, 2019)

Household members were brought together to discuss their livelihoods and the history of the Food Acquisition Programme. Group size was normally two or three, with rare exceptions when a fourth household member joined the conversation. Most focus group interviews occurred with one parent and one of their descendants, or with partners, which allowed for gender and generation diversity. As mentioned, the author continuously encouraged all members to voice their opinions. Focus groups were preferred to individual interviews in order to reduce gender or age biases. It also allowed for a better representation of their collective experience (see Figure 7).



Figure 7. Focus group discussion.
Source: Personal collection (2018), Angatuba-SP.

A guide for semi-structured focus group interview was developed with four sections: identification of household members and demography; economics of the smallholding; and adaptation to policy change, both to the implementation of the Food Acquisition Programme, and to its retrenchment (Appendix 2). This protocol was piloted, improved, and the 42 final focus group interviews took place between March and May 2018.

2.1.5 Proportional piling

During the focus group, proportional piling was used to help quantify the relevance of assets and income, marketing channels and livelihood strategies (see Appendix 2). Proportional piling is a participatory, visualisation technique, in which informants took certain number of countable materials (i.e. beans) and divided them into relative proportions (Sharp, 2007), as illustrated in Figure 8. Proportional piling has been successfully used in several types of research, such as in resources management, wealth ranking, problem prioritisation, and income measurement from different sources (Chambers, 2007; Sharp, 2007). Since several research participants were numerically illiterate, this method helped in avoiding misunderstandings and embarrassment. Through

proportional pilling, this research obtained qualitative values of comparable items (Ahmed, 2011), which were then summarised and analysed using statistics tests, as recommended by Catley et al. (2012). Quantitative data analysis is explained in Section 3.3.



Figure 8. Using proportional pilling.
Source: Personal Collection (2018), Careiro da Várzea-AM.

2.1.6 Walking interview

Walking interview is a mix of interview with direct observation. It involved walking with one or more participants of a household while conducting an interview (see King & Woodroffe, 2019). Data collected in walking interviews allowed for the appreciation of how locational influences can impact on how individuals perceive, experience, and exercise agency over their wellbeing and the environment (King and Woodroffe, 2019), having helped the researcher to explore issues around people's relationship with others in a certain space and environment (Emmel and Clark, 2009; Salmons, 2015) – see Figure 9. Appendix 3 presents the protocol, which was piloted in 2017. The guide focuses on points for observation and a conversation on current and planned activities, and the natural environment. Photographs were taken along the way to provide visual material signifiers of the areas, as recommended by Emmel & Clark (2009). 42 walking interviews were conducted for this research, with rural peoples in Angatuba and Careiro da Várzea from March to May of 2018.



Figure 9. Walking interview.
Source: Personal Collection (2018), Careiro da Várzea.

2.1.7 Survey

A survey was used as a rigorous and systematic method (Ballou, 2011) to understand issues about wellbeing and life satisfaction. Using the theoretical framework of subjective wellbeing and domains of life satisfaction, as discussed in Chapter 1, a guide for the wellbeing survey was developed comprising open and closed questions covering diverse life satisfaction and wellbeing issues. A guide was piloted in 2017 and improved accordingly. During the pilot, the research tested questionnaire comprised of open questions, only, which proved inefficient and superficial, therefore ineffective. A systematic method (survey style) was then piloted, which worked well: it was effective and complied with best practices in the field (see Rojas, 2007). However, in the pilot study, some domains of life-satisfaction did not arise naturally. Therefore, the final survey included not only issues that arose in the pilot study but also by complementary issues that were derived from Cummins' (1996) review of issues across domains of life satisfaction, i.e.:

- Community wellbeing: Community relations; Education facilities; Alcoholism or drugs in the community; Social conflict or fights in the community.
- Emotional wellbeing: Life opportunities; Self-actualisation (life achievements); Motivation to work; Self-assurance under challenging times; Happiness.
- Health: Health (overall); Water contamination; Age; Hygiene in the community.

- Intimacy: Freedom to make decisions with family; Respect and communication in the family.
- Material wellbeing: Capital/money or jobs; Debt; Land tenure.
- Productivity: Marketing channel; Production incentive; Technical assistance; Labour availability; Animal quality/ cattle genetics; Quality of seeds.
- Safety: Freedom of speech; Physical or psychological abuse/ harassment; Climate and environmental security; Violence or terrorism.

In face-to-face interviews, individuals were asked about their wellbeing and satisfaction with 'life as a whole' and about specific issues across the aforementioned life issues. Following Veenhoven (1984), subjective wellbeing was measured on the basis of a person's answer to direct questions about their wellbeing – with 'no room for speculation based on a person's possessions, facial expressions or other extrinsic behaviours' (Rojas, 2007). The final research guide (Appendix 4) contains a mix of ordinal measures, nominal measures, and open-ended questions. The guide starts with ordinal measures of eight indicators. This allowed the respondents to become familiar with questions concerning wellbeing. The answering options appeared in a five-point scale ranging from never to always. This was followed by one open-ended question asking about the most pressuring issues, then by a list of 20 nominal items (yes/no questions) that participants could quickly respond to, with one more opportunity to add non-listed issues. Finally, a series of ordinal measures and open-ended questions were set to survey livelihood outputs in greater detail, as well as to understand livelihood pathways and their own assessment of the implementation and retrenchment of the Food Acquisition Programme. The face-to-face interviews were conducted between March to May of 2018, with a total of 78 individual respondents.

2.2 Sampling

This research drew from diverse sampling, also known as heterogeneous or maximum variation sampling (Morgan, 2008; Seawright and Gerring, 2008), in which a small number of cases are selected to maximize the diversity relevant to the research question (Patton, 2002). The objective was to identify commonalities and differences among diverse cases with the objective of achieving a maximum variance along relevant dimensions (Seawright and Gerring, 2008). The relevant dimensions for the micro-analysis were the early impacts of austerity (mediated by the end of the Food Acquisition Programme) on livelihoods of rural peoples and several independent variables: (i) location, as a proxy for the contrasting levels of social vulnerability and human development; gender, age and income levels. Diverse sampling was chosen because of its methodological advantages, and because of the diversity of realities that the FAP tried to address. Firstly, any attempt to portray a 'typical case' would fail. Brazil is one of the most unequal countries in the world, and therefore it made sense to portray heterogeneity rather than trying to find an 'average' or 'typical' case. Instead, the diverse sampling was useful to characterise and compare two contrasting cases, which can be considered as 'typical' in the extremes of a scale of social vulnerability and human development. Secondly, the FAP, which is a central government

programme, was implemented across all regions and states in Brazil, regardless of economic, social and environmental indicators. It was indeed implemented not only in remote and vulnerable regions, but also in sites of high human development levels and well connected with a greater range of marketing opportunities (Salgado *et al.*, 2017). Salgado *et al.* (2017), for instance, had proposed that there is a group of municipalities in Brazil that do not have a ‘demand’ for the FAP, which is something that this research will contend.

Diverse cases provide a good basis for theoretical generalisation, and are ‘likely to be representative in the minimal sense of representing the full variation of the population’ (Seawright and Gerring, 2008, p. 297). Therefore, the focus was on comparing and contrasting indicators between contrasting locations, and in comparing and contrasting the situation for individuals of different generational cohorts, genders, and income-poverty levels. As noted in the Introduction, the FAP was not object of any comprehensive evaluation or systematic review of its impacts or consequences. Most conclusions have been inferred or generalised from a single or a pair of case studies. These cases have often portrayed exceptionally successful cases, or extreme cases, although their authors not always acknowledge or disclose this bias. In a review of the literature, it was observed a bias in site selection, i.e. authors have chosen sites of favourable conditions in one of the following aspects: 1) social vulnerability and human development: most cases portray sites of low social vulnerability or high human development, with a prevalence of municipalities of the richer South and Southeast regions; 2) social and human capital: several of portrayed case studies had an extended network of organisations, benefiting from non-governmental and extension services of higher-education organisations that are not common elsewhere; several researchers adopted a convenient sample, by focusing on the vicinities of their offices, where they often provide unusual assistance to the local community (see Introduction, and Romualdi, 2019). Notably, these exceptionalities are rarely acknowledged in research methods, or as research limitation. Selecting a sample by convenience, or portraying deviant cases are not problematic *per se*; however, not reporting bias in sampling, not reflecting on its limitations, or, even worse, drawing generalising conclusions from deviant case studies are all very problematic (Flyvbjerg, 2006; Seawright and Gerring, 2008).

2.2.1 Sampling rural communities

Two locations were sampled for their contrasting status regarding their prospects for social prosperity. Social prosperity in this research is understood as the simultaneous occurrence of high human development and low levels of social vulnerability – following the latest report by Brazil’s National Institute of Applied Economics (IPEA, 2015) on the matter. Social prosperity, therefore, reflects a situation in which human development is based on robust social bases, and the availability of assets are conducive to economic prosperity and to prosperity regarding life conditions in a certain social environment (IPEA, 2015). The estimates of human development were based on the United Nations Development Programme (UNDP) protocol for the Human Development Index (HDI), which included indicators of health, education, and income. The Social Vulnerability Index, as developed by IPEA (2015), combined indicators of infrastructure, human capital, jobs and occupation opportunities. Figure 10 presents a cross-tabulation of the Municipal-Human Development Index (Municipal-HDI) with the Social

Vulnerability Index (SVI).²² It also shows the number of Brazilian municipalities classified in five bands of social prosperity, from very low to very high. The concentration occurs in the extremes, with 1,307 municipalities (23%) in the very low band, and 1,677 municipalities (30%) in the very high band. The sites sampled for this research belong to the clusters on the extremities of the social prosperity spectrum, which is shown in dark red (very low) and dark green (very high).

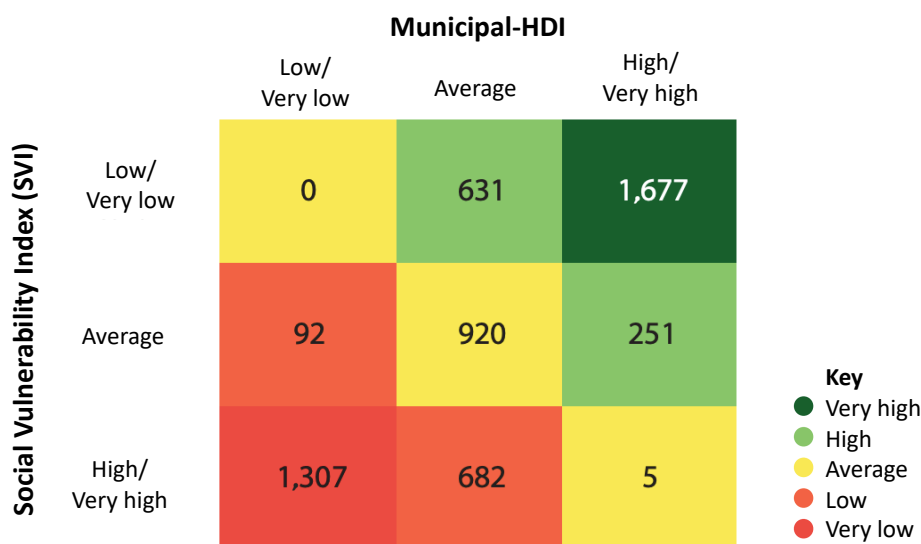


Figure 10. Number of Brazilian municipalities per level of social prosperity.
Source: adapted from IPEA (2015)

In terms of social prosperity, there is a clear North-South divide in Brazil, as illustrated in Figure 11. It made sense therefore to select one study site in each of these macro-regions. Each macro-region is comprised of several states and municipalities, and because of the large dimension of the country, for logistical reasons, this research sampled rural communities in one municipality in the South, and in one municipality in the North. The first step to identify the communities was to choose two contrasting states. The states were selected according to indices of food insecurity and family farmers' access to markets, following the index proposed by Salgado et al. (2017). In their study, out of the 26 states in Brazil,²³ Amazonas is the state with the highest 'necessity' for the Food Acquisition Programme, while São Paulo is the one with the lowest 'necessity' for the programme. The state of Amazonas has 63 per cent of its municipalities with substantial populations of family farmers, low economic dynamism and high risk of food security. It also features the highest prevalence of municipalities with very high social vulnerability.²⁴ On the other hand, the state of São Paulo has 88 per cent of its municipalities with 'very low risk of food insecurity' and relatively 'low necessity' of market access,²⁵ according to Salgado et al. (2017). São Paulo is also the state with the highest tax collection and highest GDP in Brazil. Not only that, São Paulo is the

²³ All federative units (26 states) were considered except for the Federal District, Brasília, because of its singularity. The Federal District is home to the federal government, does not contain municipalities, and assumes the competences of both a state and municipality.

²⁴ Ipea, 2015.

²⁵ Although the database of the study by Salgado et al. (2017) is not publicly available online, Rafael Salgado, the first author of the study kindly shared its database with the author.

Brazilian state with the highest drop in budget allocation for the PAA from 2016-2017, across all states in the Southeast and South regions.

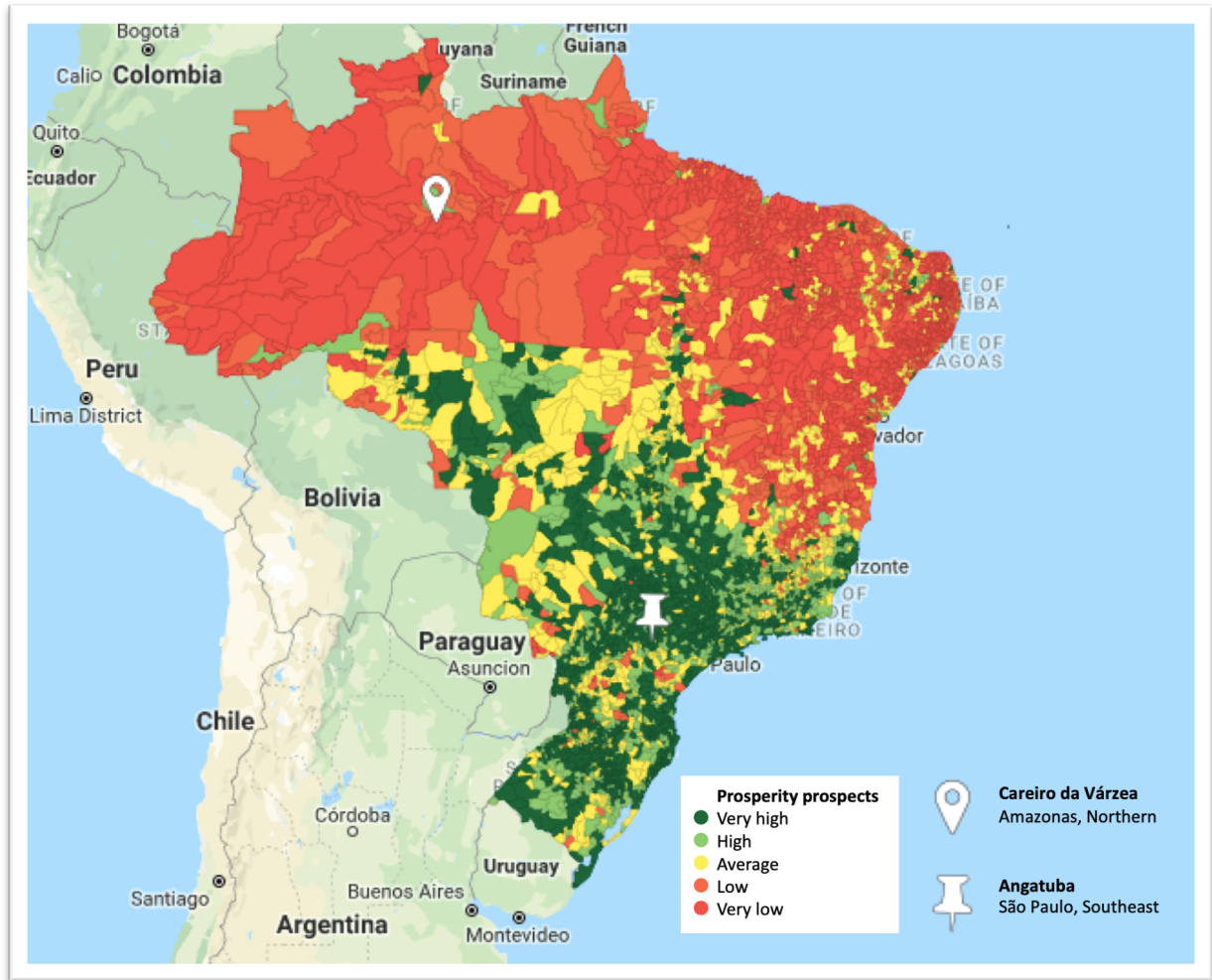


Figure 11. Location of the two sites for case studies: Angatuba-SP and Careiro da Várzea-AM.
Source: Adapted from IPEA (2015)

Once the contrasting states were identified, the researcher located a number of family farmers that had experienced the retrenchment of the Food Acquisition Programme. Official data from Conab was used to filter for rural communities/organisations that had experienced at least four consecutive years of programme implementation (2013-2016), and at least one year of interruption (2017). Municipalities with these characteristics were included in a long list. Then, the municipalities with higher number of family farming units involved in the FAP were short-listed. This would facilitate finding enough families and farmers for data collection and statistical analysis. In the state of Amazonas, the municipalities of Manacapuru, Beruri and Careiro da Várzea were short-listed. In São Paulo, the short list contained Álvares Florence, Capão Bonito, São José do Rio Preto, Angatuba and Promissão. Promissão was excluded from the short-list because its beneficiaries were predominantly settled

by agrarian reform, which is not a trait shared by the vast majority of rural peoples in Brazil (see Introduction).²⁶ The final choice was for the site with higher percentage of rural population, according to the Brazilian Institute of Geography and Statistics (IBGE): Angatuba in São Paulo (23°29'24"S 48°24'46"O), and Careiro da Várzea in Amazonas (03°13'15"S 59°49'33"O). The two markers in the figure above roughly show the location of these municipalities. These locations are highly contrasting, therefore satisfying a heterogeneous sampling strategy. Chapter 5 presents a detailed account of their geographies. Notably, these two locations do not portray global but national extremes. As a consequence, the analysis in this research is better appreciated within the understanding of the Brazilian context and conditions. Some of these features are detailed in Chapter 5, but it is also worth noting that Brazil is currently classified as an 'upper-middle income' country by the World Bank,²⁷ with a relatively high participation of the state in the economy,²⁸ and an overall 'high human development' but a very high level of inequality, which can be observed in the inequality-adjusted human development index.²⁹ Obviously, sites that underperform Careiro da Várzea in terms of prospects for social prosperity and surpass Angatuba can be found in Brazil and elsewhere.

2.2.2 Sampling family farms

The sampling of family farms aimed at theoretical saturation and was conducted as follows. First, two datasets comprising the name of the beneficiaries from 2010 to 2017 (BRASIL Conab, 2019a; BRASIL Ministério da Cidadania, 2019) were compiled. Second, the names of those who participated in the Food Acquisition Programme for less than two years were excluded, therefore only those with greater familiarity with the FAP would be sampled. Third, rural community leaders were contacted, interviewed (as key informants, see Section 2.1.2). The community leaders shared with the researcher the coordinates of the short-listed families. With support from community leaders, the researcher mapped the short-listed family farms, divided them in four regional groups. I aimed at having at least three family farming units per region. This purposive³⁰ sampling aimed at producing 'a sample that can be logically assumed to be representative of the population. This is often accomplished by applying expert knowledge of the population to select in a non-random manner a sample of elements that represents a cross-section of the population' (Battaglia, 2011, p. 645). The purposive sampling had two main objectives: to reach a heterogeneous sample regarding regions, and to reach heterogeneity regarding

²⁶ Nevertheless, the FAP in agrarian reform settlements have received significant attention in other studies (i.e. Blesh & Wittman, 2015; Godoi & Duval, 2019; Moruzzi Marques et al., 2014; Wittman & Blesh, 2017).

²⁷ The World Bank, *Brazil*, <https://data.worldbank.org/country/brazil>; Observing only Gross Regional Product per capita, as of 2016, the state of Amazonas can be compared with Suriname, which is an upper-middle income country, and the state of São Paulo with Chile, which is a high-income country. Therefore, the disparities portrayed in this research do not encompass international extremes such as what could be found between Norway and Niger, or Switzerland and Burundi.

²⁸ Brazil spent 20.2% of the country GDP on government procurement (IBGE, 2016, 2014-data).

²⁹ United Nations Development Programme, *Inequality-adjusted HDI*, <http://hdr.undp.org/en/content/inequality-adjusted-hdi>. Accessed in 10 Mar. 2020.

³⁰ Indeed, 'in practice, almost all qualitative research does rely on nonprobability samples (...) the common use of nonprobability samples in qualitative research matches an approach to data collection and analysis strategy that typically relies on the careful interpretation of a small number of very rich data sources' (Morgan, 2008, p.645).

gender and generation cohorts. But how many family farm units were necessary to be sampled for the purposes of the study?

Aiming at theoretical saturation – which occurs when ‘additional data do not lead to any new emergent themes’ (Given, 2016, p. 115) – the sampling strategy was one in which respondents were added until the researcher recognised that the addition of respondents did not contribute to new patterns or categories (Yang, 2014). In addition to this criteria, this research had pre-defined that at least 30 family farm units would be sampled, because this is a sample size that would, ‘in most studies’, provide a minimum of five for expected values in 2x2 crosstab analysis (McHugh, 2018, p. 418), thus allowing for a chi-square independence test (see quantitative data analysis in Section 3.3). In practical terms, I initially interviewed 18 family farm units per municipality (at least three per cluster/neighbourhood within the municipality). Then, I took stock of patterns and categories (please check session 3.4 on positionality and practicalities, which includes a discussion on access to individuals and transport). I interviewed three additional units in each municipality to verify if any new theme or difference would emerge, which did not happen. Therefore, the sampling effort was complete with 21 family farm units per municipality – 42 units in total. In fact, in retrospect, a dozen units per municipality had revealed a great deal of themes and standards – but a bigger sample was useful to reduce levels of uncertainty in the statistical analysis of independence and effect sizes.

2.2.3 Sampling individuals

Surveys were conducted with two individuals of each family farming unit, whenever possible. None of the units visited were inhabited by a single resident, but in rare occasions only one member of the family was available to respond to the survey. The purposeful sampling strategy aimed at obtaining a balanced mix in terms of location, age, gender and income levels.³¹ In total, 78 individuals participated in the survey.

2.3 Data analysis and interpretation

Data analysis started with a quantitative approach, in which numerical values were statistically described, summarised, cross-tabulated, and checked for statistical and substantial significance. The results of the quantitative analysis were then combined with the rest of the data to be qualitatively analysed. The qualitative analysis included coding, theming and categorising, reasoning and asserting, and auditing. Figure 12 illustrates the process.

³¹ This research does not include survey data for those younger than 16 years, for ethical reasons (see Ethics, Section 2.6)

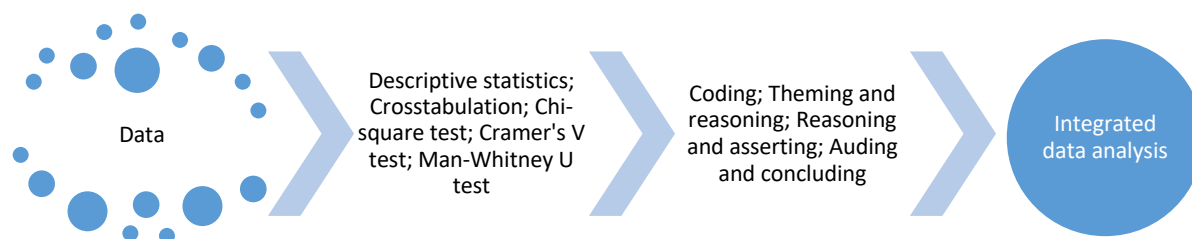


Figure 12. Strategy for data analysis.

Materials were analysed and interpreted according to the standard methods associated with data collection methods. Quantitative data analysis included descriptive statistics for data collected through focus group, proportional pilling and surveys. The survey data was also analysed with crosstabulation, Pearson's Chi-square test of independence, and Cramer's V test for strength of associations between variables, and Man-Whitney U test for ordinal values (income levels). Quantitative analysis was processed with the software SPSS Version 26.0.0.0. Atlas.ti was used to process data of the pilot research, but the final qualitative data analysis (QDA) was conducted using Excel. For the author, Atlas.ti did not prove more efficient or effective than a well organised spreadsheet, considering the relatively small sample.

2.3.1 Quantitative data analysis

For all the numerical analyses, the samples (either family farming units or individuals) were viewed/ assumed as independent. Of course, this is not 100% correct and dependencies between farmers exist (e.g., through nutrients soil nutrients, water flow dynamics, the overall surrounding and shared infrastructure), but this assumption is actually never fully met in statistical analyses.

Descriptive statistics

All quantifiable data collected through focus group interviews, proportional pilling and surveys were summarised in frequency; central tendency; and spread. Median and interquartile deviation (IQD) were reported whenever a non-normal distribution was found, since it is resilient to outliers.

Crosstabulation

Crosstabs were used to analyse the survey data, in order to measure the strength of the relationship between nominal variables (Wolf, 2011). Crosstabs, also known as crosstabulation and contingency tables, are frequencies and/or percentages of one variable tabulated separately across different categories of a second variable. They showed the frequency breakdown of categories in one variable as they are contingent upon values of another variable (Wagner and Gillespie, 2019). This research explored associations by location, gender, age and income groups. Contingency tables were collapsed when the fit of a particular statistical model was not significantly affected by combining some categories in a variable (i.e., reducing the number of response categories)

or when the statistical test was not appropriate because of sample size. In practical terms, this was only used for the analysis of generational cohorts. The observed frequencies in the cells of a contingency table were compared with what one would expect to see if the two variables were independent, with Chi-Square – as a measure of statistical significance – and Cramer's V – as a measurement of effect size.

Chi-square test for association and Cramer's V tests

As a measure of statistical significance of nominal variables, chi-square test of independence (χ^2) were used to test whether the nominal variables were related, and to make inferences about a larger population (see Wagner & Gillespie, 2019). The null hypotheses were that no relationship existed between livelihoods and location, gender, age or income groups. Notably, the chi-square test is only correlational, and no statement could be made about causal relationships. Two assumptions for a chi-square test of independence were guaranteed. First, any individual was in only one cell or group. Second, the result is relevant only when no more than 20% of cells with expected frequencies < 5 and no cell have expected frequency < 1 . In the case of generational cohorts, smaller groups were collapsed into larger ones.

As a measure of *substantive* significance, Cramér's V (also known as Cramér's ϕ) was used to measure the strength of association (also known as effect or effect size) between nominal variables. Cramer's V tests answer the question: 'How strong does the relationship appear to be?' (Marchant-Shapiro, 2017, p. 260). Based on Karl Pearson's chi-square statistic, the V was developed to measure the size of the effect for significant chi-square table. Values for the V can range from 0 to +1.0. A value of 1.0 means there is a perfect 1 to 1 correlation between the two variables. The interpretation of the results followed the standards proposed by Marchant-Shapiro (2017), which are normally used in social sciences (Table 7). Different authors may use different values for weak, moderate, and strong correlation measures, but this table was used as a general guide to interpret the strength of effect size represented by various values of the V.

Table 7. Effect size for Cramer's V and its interpretation.

Measure of Association (Cramer's V)	Qualitative Interpretation
$0 \leq X < 0.10$	Very Weak
$0.10 \leq X < 0.20$	Weak
$0.20 \leq X < 0.30$	Moderate
$X \geq 0.30$	Strong

Source: Marchant-Shapiro (2017)

Mann-Whitney's U test

The Mann-Whitney U test was used to compare differences between two groups that were assumed independent when the dependent variable was ordinal, but not normally distributed. In practice, this test was used to understand whether income change, measured on a continuous scale, differed based on location, gender, age and income. For effect size, r was calculated: $r = Z/\sqrt{Nobs}$, alongside r^2 ('r-squared'), which is a coefficient of

determination between two variables. The value of r^2 is standardized (ranges from 0 to 1), and indicates how well a model fits to the set of observations or the difference between observed and expected values. The higher the r^2 , the better the model's goodness of fit.

2.3.2 Qualitative data analysis

Qualitative data analysis (QDA) was used across all data, regardless of data collection method, and included the processed results of the quantitative analysis. Document analysis (which comprised finding, selecting, appraising, and synthesising data contained in documents) was examined together with interview transcripts, research log, pictures, and the results of the statistical analysis. The QDA was conducted in four steps: 1) coding; 2) theming and categorising; 3) reasoning, asserting; and 4) verifying.

Coding

A short phrase (or code) was assigned to each datum, representing a summative attribute for a portion of language-based or visual data (Saldaña, 2014). These codes functioned as way of organising, classifying, and then allowing for emerging themes and categories for further analysis (Saldaña, 2014). Two methods of coding were adopted in this research: descriptive coding and process coding. In 'process coding', the researcher used gerunds ('ing' words) to represent actions, mental processes, or conceptual ideas (Saldaña, 2014). The research question driving the process coding was 'how the end of the FAP has affected peasant livelihoods?'. All other questions were coded using 'descriptive codes', which are primarily nouns that summarize the topic of a datum (Saldaña, 2014). Coding was used in the analysis of pictures and data orally obtained on occupation/profession; formal education; emigration; association with groups; utility of groups; land tenure; land access; income variation; benefits of the FAP; drawbacks and challenges with the FAP; lessons learnt with the FAP; and wellbeing. With the codes in hand, this research themed and categorised the constituent elements of the data.

Theming and categorising: gender, income and age

The researcher constructed summative meanings from data through passages of text in order to represent 'the essences and essentials of humans' lived experiences'; which were then clustered in groups under theoretical constructs (Saldaña, 2014). There were several theoretical constructs used for categorisation in this research, including conceptualizations of livelihood aspirations and pathways and subjective wellbeing (as discussed in Chapter 1). Individuals were classified by the author as either women or men. Although alternative gender identities were not perceived first-hand by the author, this research may have failed in actively capturing gender-diversity beyond the classic binaries. It is true that the author could have asked each respondent to report their own gender identity, but this only appeared as an issue after completion of data collection. Also, since the sample size was limited, alternative gender categories would have to be ultimately collapsed into more generic categories for the tests of association and effect size.

Households and individuals were categorised as extreme income-poor or moderate income-poor. The Brazilian central government classifies family farmers' households with the lowest levels of annual income, with no permanent salaried worker, in the group Pronaf 'B'. Currently, Pronaf's group 'B' threshold is R\$20,000/year³² (or \$9,091 PPP in 2018). Individuals living in family farms classified in Pronaf's group 'B' were thus referred to as extreme income poor. Other households were classified as moderate income-poor, unless a member of the family stated that money was an issue affecting their wellbeing. For instance, one family classified in Pronaf's group 'A' – a family settled by the National Land Reform Program (PNRA) and beneficiary of the National Land Credit Program (crédito fundiário, PNCF) – was classified as extreme income-poor because its members stated that money was a major issue affecting their lives. The families officially classified in Pronaf's group 'V', with annual income from R\$20,000 to just under R\$360,000 (\$ 9,091 to \$163,636 PPP in 2018) were classified as moderate income-poor (BRASIL MAPA, 2019b).³³ Any family earning more than R\$360,000 in a given year (\$163,636 PPP in 2018) are not eligible to participate in family farming programmes in Brazil – therefore out of the scope of this research. As seen, the income bracket for a household to be classified as part of the 'family farming' category is quite large. Not surprisingly, there is great heterogeneity within this category: some are peasants, some are extremely income poor, others are not, and others can rather belong to rural middle-classes. The peasant condition and the Brazilian family farmer are discussed in detail in Chapter 3.

Individuals were classified in generational cohorts. While generations are determined by birth, 'generational cohorts' are determined by events experienced when becoming an adult, approximately between ages 17 and 23 (Debevec *et al.*, 2013). More importantly, 'cohort effects are life-long effects' (Debevec *et al.*, 2013, p. 22). In the global North, it is common to refer to a post-war cohort, and to baby-boomers, but individuals in Brazil experienced different defining moments, as shown in Table 8. The divisions of generation cohorts are not absolute, and the author of this research combined different sources and chose certain boundaries as presented in the literature. There would be room for finding different defining moments for populations in Southern and Northern Brazil, but this research opted to keep it with a generic classification for the Brazilian population. This allowed for comparison between populations in Northern and Southern Brazil using national rather than global North standards.

³² At its inception, in 1999, the threshold for Pronaf B was R\$1,500.00 of annual income, exclusive of rural pension (Maia *et al.*, 2012). This has progressively increased, and currently stands at R\$20,000.00 inclusive of all income sources (MAPA, 2019).

³³ The 23 families classified in Pronaf V have annual incomes ranging from R\$20,000 to 360,000, which means some families can be very close to the threshold of Pronaf B, of R\$20,000 /year. It also means that, some of the families of Pronaf V can be actually poor and very similar to the Pronaf B group..

Table 8. Generational cohorts in Brazil and their key values.

Cohort	Born	Coming of age	Age in 2018	Defining moments	Key cohort values
Vargas era*	1913-1928	1930-1945	90-105	Vargas' coup	Nationalism State as a solution Being is better than having Acceptance of authority
Post-war*	1929-1937	1946-1954	81-89	Vargas' deposition Dutra's election	Moral tradition Value of having
Optimism*	1938-1950	1955-1967	68-80	Vargas' suicide Kubitchek's election	Country of the future Youth culture and looking abroad
The Iron Years*	1951-1962	1968-1979	56-67	Dictatorship instituted Social crisis Institution Act no. 5 (abolished democratic congress)	Belligerence Alienation, silence Myth of grandiosity Value of education
The Lost Decade*	1963-1974	1980-1991	44-55	Amnesty for activists Crisis in economic growth Final years of the military regime	Fear Frustration Materialism and individualism Hopelessness
Be on your own*	1975-1994	1992-2011	24-43	Early phase of re-democratisation Collor's impeachment Change in currency to real Lula's election	Self-sufficiency Consumerism Recovery of ethical and moral value
Generation Z**	1995 and after	2012 and after	23 and under	Economic and political crisis Roussef's impeachment Bolsonaro's election	Committed to their world Diversity, equality and liberal values Pessimistic about the future

Source: Adapted from *Schewe and Meredith (2004) and ** the Varkey Foundation (2017).

Reasoning and assertion

Along statistical formulas and hypothesis testing, this research also used deductive reasoning. Reasoning, in QDA, meant to think in ways that would lead to causal probabilities, summative findings, and evaluative conclusions (Saldaña, 2014). 'The goal is not to look for "proof" to support the assertions but the plausibility of inference-laden observations about the local and particular social world under investigation.' (Saldaña, 2014, p. 600). As result, statements that summarise particular fieldwork and credible analytic observations were put forward in the form of assertions, or 'statements that credibly summarize and interpret participant actions and meanings, and their possible representation of and transfer into broader social contexts and issues' (Saldaña, 2014,

p. 602). A combination of the results from the quantitative analysis with the themes and categories of the QDA were particularly useful here.

Auditing and concluding

In qualitative data analysis, '(...) [one] can never conclusively “prove” something; [one] can only, at best, convincingly suggest' (Saldaña, 2014, p. 604). In order to suggest credible conclusions, this research followed a series of recommendations to build credibility and trustworthiness³⁴ which served as a form of 'quality control' to the analysis: (i) A thoroughly informed research processes, which included data collection methods, sampling, duration of fieldwork, amount of data gathered, analytic methods, and the encountered analytic and ethical dilemmas; (ii) A description of how findings were substantiated; (iii) An engagement with scholarship of key authors, and (iv) corroborated analysis with the participant themselves (Saldaña, 2014).

2.3.3 Particularisation, generalisation and transferability

Particularisation was obtained through the individual case studies, in sites of very low and very high prospects for social prosperity. Particularisation is key in policy analysis. A Simons put it: 'Grounded in recognisable experience, the potential [of particularisation] is there to reach a range of audiences and to facilitate use of the findings. (...) particular stories often hold the key to why policies have or have not worked well in the past.' (Simons, 2014b, p. 467). The rich descriptions in Chapters 5 to 7, with people's voices, theoretically framed, and with enough detail of place and context, provides a mediated experience to help readers discern what is similar and dissimilar to other contexts (see Robert E. Stake, 1978). Besides particularisation, the quantitative analysis and QDA allowed for statistical and analytical generalisations, and transferability.

Statistical generalisations were not made to all future cases, only to the known and finite population of cases from which the sample was drawn. And since the sampling strategy was for a diverse, heterogenous case study, the contrasts between sites and populations were highlighted and statistically tested. The combination of qualitative in-depth case studies and quantitative survey was particularly helpful in allowing for analytical generalisation and transferability. The research identified significant differences in processes between multiple cases, which are transferable to other contexts irrespective of the precise content of those other cases. This is known as 'process generalisation', or 'transferability', in which processes are generalised, not the substantive content or specific context (Simons, 2014b, p. 466).

³⁴ Rather than reliability and validity, which are stands from a positivist quantitative research paradigm.

2.4 Ethics and practicalities

2.4.1 Ethics

I conducted this research aware of my responsibilities and obligations to others – not only to Imperial College London, my supervisor and the general public, but mainly to the subjects of the research. Aiming for the highest standards of research practice, the researcher was guided by standards of responsibility, integrity, honesty, respect, and fairness. I followed the standards and ethics codes set by Imperial and the UK Economic and Social Research Council, which includes honesty and accuracy in reviewing, presenting, and interpreting evidence; being aware of and conforming to social norms; declaring and managing conflicts of interest, acknowledging support; avoiding poor scholarship; being accurate in reporting findings and methods; and considering and discussing any ethical challenge with my supervisor, Professor Clive Potter. Discussing ethics and fieldwork practicalities with my supervisor and with my early assessment examiners proved to be particularly useful to plan and implement a research plan that would minimise harm and boost potential benefits for the participants.

All participants of this research were given an overview of the research so they could make an informed decision on whether to participate. All contacted families and key-informants agreed to participate in this research. Regarding confidentiality and anonymity, I explained that the data would be anonymised by default, and used for academic research purposes, only, and not for commercial or any other reasons. They were informed that all data would be stored in an encrypted file that only I would have access to. I stored transcripts and field notes in a private, secure place, which were never distributed to others, complying with data protection legislation. All participants were encouraged to ask questions and were made aware they could withdraw consent at any time. If they agreed to participate, I asked for oral consent rather than written consent. I used oral consent for two main reasons: I wanted to create a comfortable zone for them to express themselves as freely as possible; and, more importantly, several participants were illiterate or functional illiterate. By doing so, I avoided uncomfortable situations and I actively refused to ask participants to sign forms that they would not be able to verify. All oral consent obtained in key-informant interviews (not in focus group or individual survey interviews) were taped, with their approval.

In the pilot study with peasants, some of them did not consent to be voice taped. Therefore, I adjusted the data collection method with the peasants and their families. I obtained oral consent to use the collected data, guaranteeing their anonymity. Consequently, family farms and individuals are identified by codes or pseudo-names. No names nor any other identifying feature were used in any document. Therefore, instead of taping the conversations and interviews with peasants, I used a simple database (built on MS Excel, which comprised all points for observations, topics for conversations and questions) to organise their inputs in the form of notes and

full transcription³⁵ of parts of their narratives and responses. Although I lost the accuracy of recorded interviews, I made my subjects feel more comfortable, I gained their trust and was able to process the data much faster.

This research makes reference to distressful situations, illegal activities such as drug dealing and classified research participants in income poverty groups. Therefore, although several research participants granted oral (non-recorded) consent for the use of pictures portraying their livelihoods in this thesis and other research outputs, the researcher opted to try and guarantee the anonymisation of individuals to avoid potential misuse of the pictures that could lead to bullying, harassment, or embarrassment of research participants.

2.4.2 Positionality

The research was affected by my positionality, since ‘interactions and access negotiations are heavily influenced by the researcher’s characteristics, by the relatively fixed ones like gender, age or ethnic appearance, or by characteristics that are culturally ascribed by actors.’ (Seale, 2012, p. 112). I had worked for the central government as a civil servant, and used to be associated with organisations related to the research object (i.e., the Ministry of the Environment, responsible for some land use policies, the Presidency of the Republic, which used to be in charge of rural development and food security policies, and the National School of Public Administration, responsible for providing training and education to public servants). This facilitated my access to policymakers, since I understood some of their codes of conduct and culture. Also, as a male young-adult, nipo-Brazilian native from Southern Brazil (which is relatively wealthy and well-resourced), there were a few aspects that I was aware of and discussed with my supervisor. I introduced myself as a doctoral student from a London university, and I did refer to my previous work while introducing myself. I specified that I worked as a tenured civil servant non-affiliated to any political party, which means in Brazil that I was an employee of the government by virtue of public entrance examinations, and not by political or personal influence, and that I was not affiliated with any political party. With this, I hope to have raised respect, interest, and trustworthiness. I expected to be inquired if I would retake my position in the Federal Government after concluding my PhD research. And it happened indeed. My response was that I would try a research career outside of the government. By doing so, I intended to minimise the creation of false expectations.

I am used to working with people of various ages, and from diverse socio-economic, gender and cultural backgrounds. I had positive and engaging experiences working with waste pickers, small farmers, NGOs, bureaucrats, researchers, diplomats, State Secretaries and with international organisations. The fact that I am relatively small may have facilitated access to places and to individuals in rural communities, as I am not usually regarded as threatening. As Japanese-Brazilian, I may have experienced positive discrimination, which is common in Brazil where Japanese are often regarded as honest and trustworthy; however, nipo-Brazilian are occasionally regarded as patriarchal and sexist. Aware of this issue, I was careful in handling gender issues and made sure to give equal speaking opportunities to both women and men. In interviews, I emphasised the value of participants’

³⁵ Since I am proficient in instantaneous typing I kept eye contact with my interviewees while taking notes or transcribing their speech. Had it not been the case, the quality of interviews and ethnographical observations would be harmed.

experience, and illustrated the importance of their knowledge for my research. By doing so, I sought to minimise power imbalance. Also, I was vigilant about variations in the influence of position and power and tried to minimize them throughout the research process. This entailed, for example, observing and following dressing codes and being quieter than I would normally be. My ‘uniform’ for the fieldwork in rural communities was a plain white T-shirt, a pair of regular jeans or bermudas and a simple pair of trail shoes. My ‘uniform’ to interview elites was business casual.

2.4.3 Language and access to fieldwork

All fieldwork was conducted in Brazilian Portuguese, which is my native language. I developed research protocols in Portuguese, collected and processed the information in the original language in order to avoid loss of information. The results are presented in English.

One of the major challenges of researching a contemporary phenomenon is gaining access to research subjects and fields. I took advantage of my positionality to start my fieldwork in Brasília, the federal capital, where I had contacts within the organisations responsible for the programmes. I also had contacts with rural development organisations, and with experienced scholars specialised in rural development, which helped me with introductions to policymakers and unions. As I hold Brazilian citizenship, my stay in the country was not limited. I flew to the capital city of São Paulo, hired a vehicle and drove to Angatuba. Access to people in Angatuba was done through roads, mainly dirt roads. I stayed in a local hotel in the city. For the Amazonas case, I flew to the capital city of Manaus and travelled to Careiro da Várzea by public boat. In Careiro da Várzea, I travelled by small aluminium or wooden boats owned and steered by locals. I shared fuel costs and the driver’s fee. I slept in hammocks in five different households, normally in the household of a community leader, and shared meals with them, and accompanied their routines. Although not charged, I paid the householders for my stay – but only after I had finished the entire data collection so not to create expectations. I interviewed and surveyed all families and individuals on my own. I tried to pre-schedule focus group interviews with family farm units, but soon realised that directly knocking on their doors was more effective. Mobile phone service was rare in Careiro da Várzea, and often times unavailable in the rural areas of Angatuba. Scheduling focus group interviews worked with a few families in Angatuba, but never in Careiro da Várzea.

Final comments

Combining research paradigms was particularly challenging for a graduate student working in a STEMS university, particularly one such as Imperial College London. Imperial is known for deploying technological and numerical modelling as its primary approach to most research questions – irrespective of field/discipline. While acknowledging that disciplinary approaches have merit and utility on their own, this research adopted a flexible interdisciplinary approach to a defined research problem. There were at least two risks for such a research. One is that it could result in an overly superficial thesis, void of insights in any of its components; and the other one is that it would never be completed. A balance between width, depth and utility was constantly on the radar for

thesis completion. It should be noted that outlining the aims of this research and combining comprehensive theoretical frameworks with appropriate methods for data collection and analyses was key in managing such risks.

In retrospect, all data collection and data analysis methods used in this research proved to be functional and appropriate for the type of research questions. Indeed, the phenomenon under analysis is a very recent one, with no available census or large data set. Therefore, an approach combining case studies, qualitative and quantitative analyses proved to be a robust research strategy. Obviously, this research was not experimental since real-life circumstances and the Food Acquisition Programme could not be controlled/manipulated by the researcher. The main limitation of this research, however, is that it is not longitudinal. It was not longitudinal since this would require previous data-collection efforts with a similar research protocol, which was not available, or a follow-up (or continued) research following the 2018 data collection effort. Two opportunities have been missed, though. One, was to have a dedicated session about the role of remittances in the analysis of livelihoods. This theme did not emerge spontaneously in the pilot or in the final data collection, but the author could have embedded a directed question covering this issue in the research protocol. Second, this research could have captured more information about succession, so to understand likely scenarios for the rural world. However, this was only noticed after the conclusion of data collection. These are all areas worth exploring in future research.

Chapter 3 The peasant struggle and the state

Peasants still constitute a large proportion of the world's population and produce a substantial part of its food and raw materials. Of the underprivileged majority of mankind they are the most underprivileged, and in many countries they suffer severe exploitation and poverty. No social class has a longer history of struggle against such conditions (...). Moreover, the way in which peasantries disappear has a decisive influence on the nature of the society to come. (Byres, Curwen and Shanin, 1973, p. 1).

This assessment, which was published some fifty years ago in the first editorial of the *Journal of Peasant Studies*, in many respects still remains valid today. Peasants and other types of family farmers cultivate a significant part of the planet and provide multiple services to society. Out of more than 570 million farms worldwide, 84 percent are less than two hectares in size (small farms cultivate about 12% of all agricultural land), and more than 90 percent are so called 'family farms' (cultivating about 75% of all agricultural land) (Lowder, Scoet and Raney, 2016). Compared with large-scale farming, the small-scale sector – which includes peasant agriculture – has been argued to be more resource-efficient, more productive, more diversified, and more labour intensive, providing more jobs, on average, per unit of land (Browder, Pedlowski and Summers, 2004; Lowder, Scoet and Raney, 2016; Hebinck, 2018). In terms of global food security, family farming supports roughly one-third of the global population, produces more than half of the food calories, as well as more than half of the production of major crops such as rice, millet and cassava (Samberg *et al.*, 2016). Small farmers are often deemed to be 'good stewards of natural resources', committed to maintaining long term soil fertility (Rosset, 2000, p. 10). As evidence, diversified peasant occupations in the Amazon were found to have lower deforestation rates than landscapes dominated by large-scale extensive farming (Pacheco, 2009). With regards to the climate and environmental crisis, small farmers are seen as being more likely to move away from the conventional dependence on agrochemicals and synthetic inputs, which would offer more resiliency to climate change (Rosset, 2011). However, despite a global relevance and the multiple economic, social, and environment services provided by peasants, the 'peasant predicament' persists.

Peasants continue to struggle to survive in difficult conditions and this struggle remains the defining characteristic of the peasantry (van der Ploeg, 2010; Bernstein *et al.*, 2018). According to many scholars, the persistence of these problematic conditions is not accidental but a consequence of the role of states and the neoliberalisation of the economy (Rosset, 2000; Petras and Veltmeyer, 2003; Potter and Tilzey, 2007; Vergara-Camus, 2009; Fletcher, 2010; Altieri and Toledo, 2011; Andreucci and Radhuber, 2014; Higgins *et al.*, 2014; Stock *et al.*, 2014; Pahnke, Tarlau and Wolford, 2015; Hebinck, 2018). These tendencies have shifted agricultural policies away from the provision of state-led, pro-poor agricultural support towards giving more prominence to the market (Harvey, 2005). As a consequence of neoliberal policies, markets have become more volatile, with increased risks associated with farming, now more exposed in market terms (Ellis, 2000; Samberg *et al.*, 2016; Hebinck, 2018). This neoliberal approach to food and agricultural policies, and the pressures imposed by the Bretton Woods system on the global South to reduce and eliminate domestic protection for food production, negatively affected land-based livelihoods (Bebbington, 1999; Altieri and Toledo, 2011; Jarosz, 2011; Renfrew,

2011; Stock *et al.*, 2014; Samberg *et al.*, 2016; Hebinck, 2018). This added an additional burden to the social reproduction of the peasants. In a thorough reflection on the contemporary peasantry, van der Ploeg (2010) remarks that neoliberal food regimes established from the 1990s onwards have largely prescribed what might be termed an ‘agricultural modernisation script’. This modernisation script comprises continued scale expansion, agricultural specialisation, input-intensive intensification, adoption of genetically modified organisms, for example (van der Ploeg, 2010). Neoliberalism has exacerbated the production principles of monoculture, and promoted vertical integration along the agribusiness chain (Pahnke, Tarlau and Wolford, 2015). The adoption of this neoliberal, modernisation script sought to transform peasants into agrarian entrepreneurs. But the effects have been uneven and detrimental to most of them (Mcafee, 1999; van der Ploeg, 2010; Nally and Taylor, 2015; Pegler, 2015).

A history of persistence rather than disappearance

Despite predictions of their demise, peasants have nevertheless been remarkably resilient in the face of these and other pressures (Wittman, 2009b; Altieri, Funes-Monzote and Petersen, 2012; Hall *et al.*, 2015; Pahnke, Tarlau and Wolford, 2015; van den Berg, Hebinck and Roep, 2018). Following the Green Revolution, together with industry and state propaganda for agricultural modernisation, the peasantry converted massively into entrepreneurial family farmers in the 1960s and 1970s as part of a well-documented process of de-peasantisation (see, for instance, de Janvry, 1981). However, a new process of ‘re-peasantisation’ has been evident over recent decades (van der Ploeg, 2010; Rosset and Martínez-Torres, 2012; Hebinck, 2018). This is a process in which people hold on and/or return to rural and land-based activities and ‘(re)construct a social-material infrastructure that allows rural producers to farm and construct livelihoods that are to a degree autonomous’ (Hebinck, 2018, p. 6). Peasants have found various ways to resist and adapt to globalisation and neoliberalism and their persistence in the face of all these pressures has long puzzled agrarian and peasant studies scholars (Potter and Tilzey, 2007; van der Ploeg, 2010; Hebinck, 2018). In effect, some peasants have become aware of the drawbacks of entrepreneurship under the modernisation script. Based on a series of cases from around the world, van der Ploeg (2010, p. 2) remarks that, in times of economic and financial crises, income generated by peasant-like farms (which includes those who are partially integrated to incomplete markets, as further discussed) is often greater than the income of larger, entrepreneurial family farms who are by definition fully integrated into the market economy. Indeed, some entrepreneurial farmers have actually retreated from elements of the market, stepped back to a more peasant-like agriculture by means of gaining greater autonomy from banks, external inputs, and corporate middlemen (van der Ploeg, 2010; Rosset and Martínez-Torres, 2012).

Peasant agency to the fore

Taking collective agency into account, peasants can be defined and analysed as a class (Bernstein *et al.*, 2018). It is indeed this collective agency that helped van der Ploeg update a theoretical proposition on ‘the peasant condition’, or the ‘peasant principle’. According to this principle, a struggle for autonomy is central to the peasant condition, which happens in a context of dependency relations, marginalisation and deprivation (van der Ploeg,

2008). As put by van der Ploeg (2008):

[the peasant struggle for autonomy] aims at and materializes as the creation and development of a self-controlled and self-managed resource base, which in turn allows for those forms of co-production of man [sic] and living nature that interact with the market, allow for survival and for further prospects and feed back into and strengthen the resource base, improve the process of co-production, enlarge autonomy and, thus reduce dependency. Depending upon the particularities of the prevailing socio-economic conjuncture, both survival and the development of one's own resource base might be strengthened through engagement in other non-agrarian activities. Finally, patterns of cooperation are present which regulate and strengthen these interrelations. (p. 23).

In contrast to the many other scholars of agrarian change who suggest that pluriactivity – a part-time engagement in the labour market – was a sign of the disappearance of the peasantry, van der Ploeg indicates that it is frequently associated with improved wellbeing and with efforts to generate non-farm income for investment in farming. Similarly, he argues that repeasantization could be ‘a politically and economically appropriate way out of underdevelopment in many developing world countries’ (van der Ploeg, 2008, p.54). This frequently involves minimizing monetary costs and, in a reprise of age-old peasant practices, it is also associated with crop diversification that reduces economic and environmental risks. Multifunctional farms that emerge from processes of repeasantization, van der Ploeg suggests, also generate new networks that thicken social capital and deepen the development process.

In short, peasants have increasingly had to find new ways to extract value from their resource base by engaging in co-production with nature, farming, and by resorting to non-agrarian activities. These strategies have been central to their struggle for autonomy and their efforts to reduce dependency. As a result, one of the key characteristics of peasant agriculture is that it is mainly based on so called internal resources, i.e. the ‘living nature that embraces fields, animals, crops, seeds and water; skilled labour; knowledge; savings; networks and more’ (van der Ploeg, in Bernstein et al., 2018, p.695-6). That said, the peasantry has also moved from subsistence – a system of self-sufficiency in food, focused on *consumption* – to self-provisioning, which embraces not only the food *consumed* but also the resources required for the unit of *production* (van der Ploeg, 2010). Consequently, peasant agriculture is characterised by a lower, limited dependence on the market for both inputs and commercialisation (van der Ploeg, 2010). ‘[T]he chief unifying and distinguishing characteristic of the peasantry’ is indeed their *partial* integration into markets (Friedmann 1980, p.166). In other words, ‘peasants are partially integrated into incomplete markets, (...) which function sporadically and in a disconnected way across location and time’; while non-peasant, commercial farms, in contrast, are wholly integrated into markets (Ellis, 1993, p. 4,10).

3.1 Farming and the state in Brazil

A series of pro-growth policies³⁶ has transformed Brazil into a powerhouse of food, fibre and biofuel production. This has been achieved on the basis of intensive mechanization and a growing utilisation of agrochemicals such as pesticides and fertilisers (Martinelli *et al.*, 2010; Schmitt, 2015). Agricultural powerhouse status, however, has been achieved at high social and environmental costs. Brazil is the world's second-largest agricultural producer but the largest consumer of fertilisers and pesticides, a leader in deforestation, with one of the highest rates of tropical deforestation occurred since the beginning of farming by humans around ten thousand years ago. It also has one of the highest rates of inequality in dietary energy consumption, income, and land distribution in the world (Martinelli *et al.*, 2010; Strassburg *et al.*, 2014; Chatham House, 2020).

Brazilian agriculture since colonial times has differentiated between the large-scale commercial *latifundia* specialised in export crops, and the subsistence peasants, producers of staple food at the margins of large properties (Altieri and Toledo, 2011; Pahnke, Tarlau and Wolford, 2015; Schmitt, 2015; Ioris, 2018). This division resulted from a long standing politico-economic alliance between rural elites and the apparatus of the colonial and, later, national state (Oliveira, 2007; Schmitt, 2015). This alliance paved the way for the emergence, in the 1980s, of a powerful agribusiness sector, fully integrated into global commodity markets but with peasants left behind (Wanderley, 1996, 2003; Grisa and Schneider, 2014; Ioris, 2018). The Brazilian economy has indeed favoured a group of powerful political elites in charge of agro-neoliberal reforms (Ioris, 2018). This social compromise is a key-characteristic of the social basis of the state, and one of the *substantive* characteristics of the Brazilian state, as per Jessop (as further developed in Section 3.3), which links to the uneven distribution of material and symbolic concessions in favour of rural elites, mainly through public policies focused on productivity gains and economic growth. In many respects, peasants have not fared well under this neoliberal, pro-growth regime. To quote Ferguson (2010, p.166), 'the powerless, it seems, are getting the short end of the stick'. This section introduces what differentiates the agribusiness from the formally constituted social category of 'family farmer' – which includes the peasant family farmer – and clarify who amongst the Brazilian family farmers undergo the universal peasant condition.

3.1.1 The family farmer

'Family farmer' and 'the rural family entrepreneur', as per the Brazilian legislation, are those who engage in activities in the rural environment and fit certain criteria of size, labour, income, and management, i.e.: 1) the size of a family farm is limited to an area which varies from five to 110 hectares, depending on the municipality; 2) labour force of a family farm must be predominantly familial; 3) the family's income must derive predominantly from activities carried out on the farm; and 4) the family has to manage the farm unit (Law 11326 of 2006 and

³⁶ This includes macro-economic adjustments, fiscal incentives, trade policies, agricultural research, and the integration of farming and industry.

Decree 9064 of 2017). According to Brazilian legislation, therefore, family farmers have a common relationship to the means of production (land, labour and capital) but are not defined a social class in a Weberian sense, which would include dimensions such as status and power.³⁷ In this research, the term ‘family farmer’ is used, at least initially, in the broad legal sense, encompassing peasants and non-peasants.

The peasant family farm in Brazil is more diversified, complex, and multifunctional than non-peasant family farms (Schmitt, 2015; Schmitt, Maluf and Belik, 2015). Indeed, in line with the definition of the peasantry and of the state previously discussed, peasant-like family farmers belong to a social class characterised not only by their common relationship to the means of production (as defined in law) but mainly by their struggle for autonomy in contexts of dependency relations, marginalisation and deprivation, with sporadic interaction with markets across time and location. In contrast, the non-peasant family farmers fully operate in dynamic markets, and a struggle for autonomy is not their central predicament. In turn, non-peasant family farmers are integrated into wider circuits of capital (such as global markets) and are normally specialised (producing as per the standards defined by the agri-food industries), and dependent on agribusiness capital and controversial modern technology-intensive techniques (Schmitt, Maluf and Belik, 2015; Favareto, 2016). The non-peasant family farmers belong to ‘real agribusiness’ alongside corporate farming operators: they are united by their integration into global agribusiness (Favareto, 2016). Interestingly, several authors have remarked that some ‘modernised’ family farmers keep features of the peasantry and occasionally struggle for autonomy, occasionally shifting (intermittently or not) to peasant-like conditions (van der Ploeg, 2010; Schmitt, 2015; Schmitt, Maluf and Belik, 2015; van den Berg, Hebinck and Roep, 2018). Notwithstanding,

Figure 13 represents an archetype of this layered social structure of production in Brazilian farming.

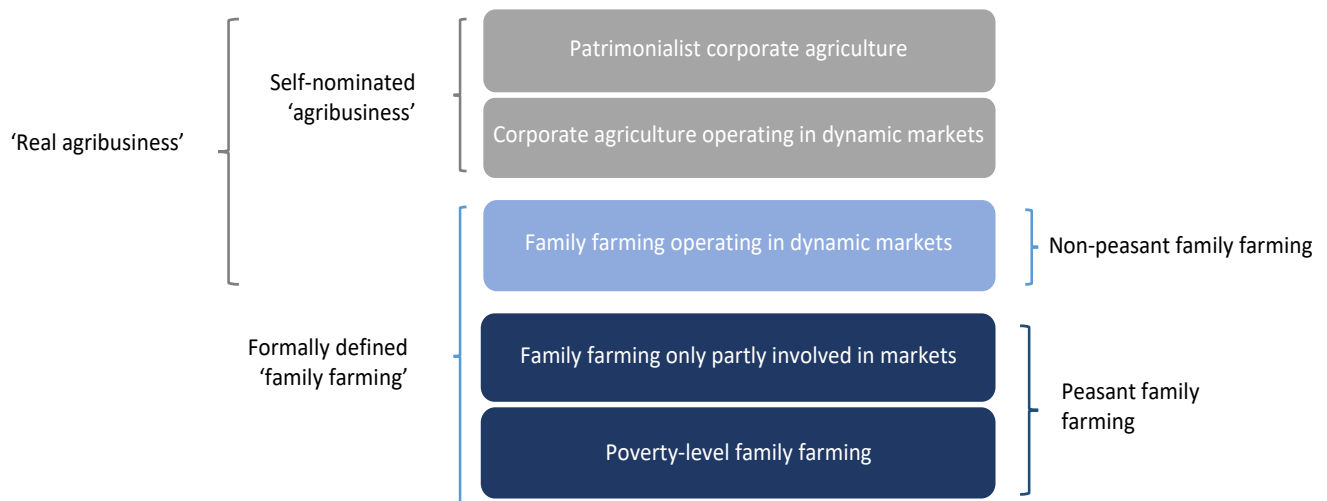


Figure 13. Schematic representation of the social structures of production in Brazilian farming. Source: Adapted from Favareto (2016, p.11), with an original distinction of the peasant-like family farmers.

³⁷ See Jones (1975).

The distinction between peasant and non-peasant family farmer is crucial for the identification of the most marginalised within the legal category of ‘family farmer’. In spite of this, official data concerns the more generic category of ‘family farmer’ and most studies do not make this distinction (Grossi, 2012; Picolotto, 2015; Favareto, 2016; Aquino, Gazolla and Schneider, 2018). In this dissertation, peasants and non-peasants are differentiated whenever possible. In this chapter, the broader definition of ‘family farmer’ is often recalled, since it relied, primarily, on official data and secondary literature.

3.1.2 Family farmers’ positionality in Brazil

In line with the contribution of smallholders and family farmers around the world, family farmers in Brazil employ more than 10 million people (or two-thirds of the agricultural workforce) on around 4 million family farm units (IBGE, 2019a). Family farmers in Brazil produce 70 percent of the food consumed domestically on around 30 per cent of the agricultural land, with higher production with less funding – in other words, family farmers utilise credit more efficiently than the self-baptised agribusiness, exhibiting higher production per unit of applied capital (Grossi, 2012; Guanziroli, Buainain and Di Sabbato, 2012; IBGE, 2012; Schmitt, 2015; Wittman and Blesh, 2017). In contrast to the agribusiness sector, smallholders’ contribution to deforestation tends to be lower where they maintain diversified production systems (Pacheco, 2009), which is a characteristic of the peasantry in Brazil. However, despite their social, economic, and environmental relevance, Brazilian family farmers receive less government support than the commercial agriculture and agribusiness sector (Guanziroli, Buainain and Di Sabbato, 2012; Graeub *et al.*, 2016; Wittman and Blesh, 2017; Ioris, 2018)³⁸.

Resonating with the universal predicament of the peasantry, a high proportion of family farmers in Brazil face marginalisation and deprivation. As of 2009, a-third (33%) of the Brazilian rural population lived with less than R\$ 140 (USD 108, PPP 2009) per capita, a boundary used by the central government to identify the poor (Grossi 2012). Poverty is indeed prevalent in rural areas, with the highest rates in the North and Northeast regions of Brazil (Soares *et al.*, 2016). As an example of their struggle, financing services are available to family farmers, but can rarely be used for purposes they deem necessary. Loans and lines of credit are normally conditioned on subscription to an agricultural ‘modernisation’ plan. These conditions have forced peasants to claim they would invest in cash-crop production (rather than staple or subsistence agriculture, or to whatever they see fit) and commit to buying seeds and synthetic inputs from the market – which contradict the very premise of a peasant livelihood, not to mention food sovereignty principles. Some family farmers, in their struggle for survival and autonomy, divert credit from agricultural modernisation to their actual life priorities – which is something they keep from bankers.³⁹ As a result of their struggle for autonomy, family farmers have become more reliant on

³⁸ Using the federal budget as a proxy, the budget allocated for family farming in 2013-2014 was of US\$ 23 billion (2014 PPP), which corresponds to a-quarter of the budget for the agribusiness sector (of US\$ 80 billion, 2014 PPP value) (Wittman and Blesh, 2017).

³⁹ Information from interviews with family farmers (of Ipora-Goiás, interviewed in the pilot-phase of this research, 2017, personal communication) and from a credit manager of a national public bank (Banco do Brasil, a public bank co-responsible for the implementation of the national programme for the family farming, 2017, personal communication).

social policies, not only in the form of cash-transfer benefits (Nehring and McKay, 2013) but also pensions and unemployment benefits.

The resistance of the peasantry in Brazil has been quite effective (Wolford, 2004; Schneider and Niederle, 2010; Blesh and Wittman, 2015; Pahnke, Tarlau and Wolford, 2015), with family farmers managing to access and mobilise the state in a variety of ways over past decades. Jessop's strategic-relational approach to the state helped structuring the analysis of the relationship between peasants, family farmers and the state, as discussed in Chapter 1. The analysis of *formal* dimensions of the state, particularly the modes of representation and modes of intervention, is object of Section 3.2. *Substantive* dimensions of the state, namely, the social basis of the state and the hegemonic vision for state action, are examined in Section 3.3.

3.2 State access and forms of intervention

A long-standing partnership between rural elites and governments has shaped the Brazilian countryside and its economy since colonial times, with the peasantry often finding it difficult to negotiate with state actors. The political environment and state selectivity have largely favoured a more capitalised rural elite and neglected the rural poor, at least until the beginning of democratisation in the late 1980s (Grisa and Schneider, 2015; Picolotto, 2015). Before that, during the military dictatorship, which lasted from 1964 to 1985, demonstrations and social movements were not part of the political process (Grisa and Schneider, 2014). Of course, the state was permeable to selected actors, such as public managers, academics, and interest groups aligned with the military dictatorship (Grisa, 2012). But a consequence of restricted access to (and selectiveness of) the state have been policies biased towards a productivist approach to agriculture (Schneider, Shiki and Belik, 2010; Rocha, Burlandy and Maluf, 2012; Ioris, 2018). The military regime extended social security entitlements to rural workers in 1971 – in a clear effort to win the allegiance of alternative political bases – but these benefits to the rural people lagged far behind those enjoyed by urban workers in factories and in the civil service (Mares and Carnes, 2009). It was only by the very end of the 1970s that one of the main rural workers' union, Contag (*Confederação Nacional dos Trabalhadores na Agricultura*) challenged the military regime (Grisa and Schneider, 2014; Favareto, 2016).

Following processes of (re)democratisation after 1985, a new Federal Constitution promulgated in 1988 opened opportunities for social participation which assimilated the workers of family economies into the national social security system, both as contributors and beneficiaries, and allowed for the emergence of several civil society organisations, including those demanding state support for family farmers (Grisa and Schneider, 2014; Picolotto, 2015). Indeed, at a time when advances in democratic practice allowed for open contestation, opposition to neoliberalism was an effective rallying call for mobilisation (Wolford, 2007).

Contesting neoliberalism

In response to the struggle of peasants to survive, institutions have emerged out of grassroots resistance, mobilising counter-movements against deprivation and marginalisation, mostly around criticisms of economic

neoliberal measures (Wolford, 2004, 2005; McMichael, 2008; Cohen, 2012). These movements not only criticised the accumulation imperative but provided an alternative paradigm, currently articulated around ideas of agroecology and food sovereignty (McMichael, 2008, 2009; Aguiar, 2020). Food sovereignty can be defined as ‘the right of nations and peoples to control their own food systems, including their own markets, production modes, food cultures and environments’ (Wittman, 2011, p. 2). This idea emerged in clear opposition to neoliberal and industrial modes of agriculture (which specialise in providing cheap calories to consumers irrespective of social and environmental externalities), particularly after the observation that ideas about food security have been deployed by neoliberal institutions to promote biophysical-technical solutions⁴⁰ that, ultimately, neither reduced hunger nor improve rural livelihoods (Sen, 1981; Jarosz, 2014; Glamann *et al.*, 2015; Nally, 2016; Uehara, 2016).

Food sovereignty resonates with one of the most important transnational movements: *La Via Campesina* (‘the peasant way’). *La Via Campesina* is a social movement that emerged during the 1980s and 1990s out of autonomous organisations, first in Latin America and then globally (Wittman, 2009b, 2011; Martínez-Torres and Rosset, 2010). Currently, *La Via Campesina* is seen as the international benchmark for the peasant struggle, for its defiance of neoliberal institutions (such as the World Trade Organisation and the World Bank), the small group of transnational corporations that dominate the global agriculture market, and for the construction of proposals and direct actions which go hand-in-hand with sustainability ideas⁴¹ and the food sovereignty paradigm (Martínez-Torres and Rosset, 2010; Larking, 2019). For instance, one of the members of *La Via Campesina* in Brazil, the MST (*Movimento dos trabalhadores sem terra*, or the landless workers’ movement) has embraced agroecology and fought for land redistribution (Wolford, 2006; Wittman, 2009a; Borsatto and Carmo, 2013). Not only that, the MST has negotiated public policies with government representatives, organised demonstrations, trained and shared knowledge in its own network of schools (see Vergara-Camus 2013; Wittman 2009). But as argued in Section 3.3, resistance to authoritarianism and a push to increase participation in policymaking and in negotiating public policies is not always a possibility for peasants in Brazil.

On the global level, following seventeen years of negotiations within the United Nations, *La Via Campesina* celebrated in 2019 the adoption of the United Nations Declaration on the Rights of Peasants and Other People Working in Rural Areas (Res. 73/165 of 21 Jan. 2019). This United Nations declaration not only acknowledges the peasants right to define their own food production systems (Art. 15), but also establishes roles for state intervention in guaranteeing fair prices and wages; in facilitating logistics and equitable access and participation in local, national and regional markets; in stimulating sustainable production, including agroecological and organic production; and in strengthening the resilience of peasants and other people in rural areas against natural disasters and market failures (Art. 16). Of course, this declaration was not approved without objections: 119 voted for it, 49 countries abstained – including Brazil – and seven countries voted against it: Australia, Hungary, Israel, New Zealand, Sweden, the United States and the UK – some of the countries where the interest of industrial and financial modes of agriculture concentrate (Larking, 2019). Therefore, understanding the peasant

⁴⁰ Biophysical-technical solutions have emphasised productivity, volume and availability of food while overlooking accessibility, utilisation, acceptability, adequacy, agency, and other socio-political aspects (Glamman *et al.*, 2015).

⁴¹ I.e.: sustainable use of natural resources, such as water and biodiversity; along with sustainable production, including agroecological and organic production.

condition should be seen in context, understanding the relationship it has with other institutions and structures, such as processes of capital accumulation, the broader economy and, in particular, the state (Soiffer and Howe, 1982; McMichael, 2008, 2016; Ioris, 2014; Stock *et al.*, 2014; Scoones, 2015).

A relationship in two phases

After a long period away from centres of power, rural people gained access to the state apparatus and power from the end of the military regime in 1985 to 2012 but this has been retrenching ever since. This research frames this recent history in two phases. The first phase is of expansion (an ‘opening-up’ phase), from 1985-2012; and the second phase is of retrenchment (a ‘closing-down’ phase), which started around 2013. To use Jessop’s schema (cf. section 1.2), this phenomenon represents changes to the *formal* dimensions of the state. The opening-up phase (1985-2012) comprises three milestones, as identified by Grisa and Schneider (2014): the first milestone in 1994 corresponds to the emergence of agrarian and farming policies for the family farmer; the second milestone in 1997 corresponds to the emergence of welfare and social policies; and the third milestone in 2003 corresponds to the emergence of structured market opportunities for the family farmer. These three milestones signal historic moments during the early phase of redemocratisation in Brazil, in which the state ‘opened up’, or augmented its permeability to the interests of family farmers – for the transformation of peasants into rural family entrepreneurs, as further argued. Significantly, these milestones did not replace each other. Rather, each milestone brought new policy benchmarks which occur simultaneously in the policy arena – with the balance between these types of public policies as part of the disputes and different views about the role of rural people in Brazilian society (Grisa and Schneider, 2014).

The closing down phase is more recent and contemporary. It consists of a process of retrenchment which began around 2013. Retrenchment has been gradual, and has materialised in several forms, such as in direct cutbacks to policies and programmes for the family farmer, a decision to transfer responsibilities from the central government to subnational governments without a binding financial commitment, and closure of state channels for the representation of the interests of family farmers. The analysis of the *formal* dimensions of the state is of particular relevance for this research due to its focus on the politics and consequences of retrenchment and austerity for rural people in Brazil. Table 9 summarises this short history under Jessop’s schema (cf. Chapter 1), which is followed by its substantiation.

Table 9. Formal dimensions of the state in relationship with the so-called family farmers.

Relation	Milestones	Modes of representation of family farmers' interests to the state (inputs)	Modes of state intervention for the family farmer (outputs)
Expansion (opening up)	1994 onwards: Agrarian and farming policies ^{42,43}	Demonstration of grassroots organisations and workers' unions; Proposition of alternative plans by workers' unions with rural studies academics; Academic criticisms; Government-led task-forces with civil society participation. ^{43,44,45}	Rural credit (Pronaf); Price and production insurance; Agrarian reform settlements and market-led agrarian reform. ^{43,44}
	1997 onwards: Welfare and social policies ⁴³	Addition of a dedicated high-level interlocutor, the Ministry of Rural Development, in 1999 ⁴⁴	Infrastructure credit for sites of high concentration of smallholdings and low farming productivity; Micro-credit for socially vulnerable family farmers; Income-tested cash-transfer benefits; Family allowance (child and student support) cash benefits; Farming insurance; Housing subsidies. ⁴³
	2003 onwards: Market opportunities within food and environmental sustainability policies ⁴³	Co-management practices, in which unions and grassroots organisations participate in policy design, implementation, and evaluation, such as Consea (the national council for nutritional and food security) and through Conab (a decentralised federal agency that implemented programmes in closer contact with local struggles) Addition of the Ministry of Food Security and Fight Against Hunger ^{43,44,45,46}	Institutional public procurement (or structured markets in which government bodies buys) from the family farmer, such as the Food Acquisition Programme. Fiscal and commercial incentives for companies that buys oilseed crops for biodiesel from the family farmer; Price subsidy (guarantee) policy; Information policies (family farming label; community and geographical indication of origin); Organic farming certifications. ^{43,44,45}
Retrenchment (closing down)	2013 onwards: Programmatic and institutional retrenchment	Retraction of co-management and civil society participation; downgrading of dedicated state interlocutors: retraction to levels similar or previous to that of 1994. Consea dismantled in 2018 and regional and national conferences of nutrition and food security with popular participation not been planned since 2015.	Reduction of credit allocation for the family farming ⁴⁷ ; reduction of the budget for marketing opportunities mediated by the federal government ⁴⁸ ; Bureaucratization of the Food Acquisition Programme ⁴⁹ ; Welfare and social policies under revision from 2016. ⁵⁰

⁴² Schneider, Shiki, Beliki 2010

⁴³ Grisa, Schneider 2014

⁴⁴ Picolotto 2015

⁴⁵ Sabourin 2017

⁴⁶ Muller, Silva, Schneider 2012

3.2.1 The expansion phase – 1985 to 2012

Public policies targeted at rural people emerged due to social mobilisation and new processes of democratisation – with a combination of protests and negotiations by rural labour movements (Welch and Sauer, 2015), as well as due to governments’ interest in keeping order (soft controlling rural workers’ unions), and to a positive image that small-scale farmers in Brazil borrowed from the family farming sector of the global North (Veiga, 1991; Grisa, 2012; Muller, Silva and Schneider, 2012). The first three milestones of the expansion phase fell within a period in which the state was ‘opening-up’ for rural people.

The first milestone is in 1994 during Itamar Franco’s presidency. It followed-on the beginning of re-democratisation processes, when representatives of rural people managed to gain some access to the state apparatus to claim, propose, and negotiate public policies (Grisa and Schneider, 2014). This was crucial for the representation of rural people. Rural people demonstrated to raise public awareness of their relevance in society and formulated a proposal with state bureaucrats. For instance, in 1994, Contag – a rural workers’ union – worked with the Ministry of Agriculture, Supply, and Agrarian Reform (*Ministério da Agricultura, Abastecimento e Reforma Agrária*) to propose a farming policy for the ‘small rural producer’ (Contag, no date; Grisa and Schneider, 2014; Picolotto, 2015). Their claim resonated within the state and led to the creation of the first milestone of public policies targeted at rural people, which is characterised by the emergence of agrarian and farming policies (Grisa and Schneider, 2014). While a ‘true agrarian reform was never implemented’ (Favareto, 2016, p. 6)⁵¹, the programme for ‘strengthening’ family farming, known as Pronaf (*Programa Nacional de Fortalecimento da Agricultura Familiar*), has been the flagship national programme for the family farmer or rural family entrepreneur. Pronaf was created in 1995 as rural credit policy known for its neoliberal nature, which is a financialisation programme that encourages rural people to tie-in with more dynamic markets (Grisa and Schneider, 2014). The idea here was framed within the mainstream hegemonic vision at the time in which peasant livelihoods were not seen as economical nor viable nor socially desirable, and that the model rural people should pursue was one of de-peasantisation through integration or assimilation to the real agribusiness, through modernisation and financialisation of farming practices and of their own livelihoods. Excluding inflation,⁵² the Pronaf budget grew from R\$1.4 billion in 1996 to 34 billion in 2014, when it peaked (Grisa, Wesz Junior and Buchweitz, 2014; Ministério da Economia, 2019).

The second milestone in the expansion phase came in 1997 and the conclusion of Fernando Henrique Cardoso’s presidency. It emerged thanks to the expansion of the public arena in Brazil in the mid-1990s to incorporate historically marginalised voices, including those calling for basic health services for lower-income

⁴⁷ BRASIL 2019

⁴⁸ BRASIL Conab 2019

⁴⁹ Porto 2014

⁵⁰ The Lancet Global Health 2019

⁵¹ ‘The means of controlling land conflicts in Brazil consisted principally of transporting agricultural workers who were demanding land in the south of Brazil to the interior of the Amazon region, in areas that were remote and without infrastructure’ (Favareto 2016, p.6). Also, a government-led agrarian reform was quickly replaced by a market-led agrarian reform, which did not challenged the political and economic power of large landowners and did not meet the land needs of the rural poor and landless (Grisa & Schneider, 2014) .

⁵² All values monetary restated to February 2020 values (IPCA-IBGE rate).

groups, social rights, poverty alleviation, and, to a certain extent, agroecology (Mares and Carnes, 2009; Grisa and Schneider, 2015); for instance, the actors linked with the 'Parallel Government' (*Governo Paralelo*), which proposed a national policy on food security (not implemented) in 1991; the campaign Action of Citizenship Against Hunger, Misery and Life, the National Campaign to Fight Hunger in 1993; as well as Consea, the national council for food and nutrition security established in 1993 (Grisa and Schneider, 2014). The creation of the Ministry of Rural Development in 1999 represented a new high-level channel for the family farmers. This milestone is characterised by the emergence of welfare and social policies, such as micro-credit for the income-poor rural people and cash transfer programmes such as school and food stipends (*Bolsa Escola* and *Bolsa Alimentação*). The stipends were later combined in the *Bolsa Família* (family grant cash transfer programme) and in the *Fome Zero* (Zero Hunger) programme (Grisa and Schneider, 2014).

The emergence of structured markets

The third milestone in 2003 coincides with the beginning of the first mandate of Luis Inácio Lula da Silva. In addition to demonstrating and occasionally proposing policy ideas, representatives of rural peoples were given the opportunity to formally advise the central government and to co-design, co-implement and co-assess public policies (Grisa and Schneider, 2015; Picolotto, 2015). That was when new arenas gained relevance in policy making, such as a multi-stakeholder advisory group to the Presidency, Consea – the national council for nutrition and food security (*Conselho Nacional de Segurança Alimentar e Nutricional*) – and a series of regional and national conferences with civil society participation (Müller, 2007; Grisa and Schneider, 2015; Grisa and Zimmermann, 2015). In its latest edition, in 2015, 27 subnational conferences counted almost nine thousand participants, and the national conference 2.1 thousand participants (Consea, 2015). Figure 14 illustrates a meeting and a plenary of Consea, and Figure 15 the latest national conference with participation of rural people and other civil society organisations. The national council for nutrition and food security, Consea, had two-thirds of its representatives nominated by civil society organisations. These included representatives of some of the most vulnerable populations (e.g. ASA, *Articulação do Semi-Árido Brasileiro*, and *La Via Campesina* represented by the landless movement MST). Although created in 1993, Consea gained momentum in 2003, when it promptly devised rural people as part of the solution to alleviate hunger and to reduce rural poverty in Brazil (Grisa and Zimmermann, 2015), which were key aspects of the Millennium Development Goals.



Figure 14. Meeting and plenary of Consea, the National Council of Nutrition and Food Security.

Consea was a multi-stakeholder platform that advised the Presidency and was a formal mode of representation of the interests of rural people within the state. Consea was abolished by Bolsonaro on the first of January of 2019, in his first day in office, but it was losing power and influence since at least 2013, during Rousseff's administration.

Photos: Michele Andrade/Ascom-Consea 2007 (top); Ascom-Consea 2007 (bottom).



Figure 15. The National Conference of Nutrition and Food Security. Conferences used to be one of the main modes of representation of the interests of rural people within the state. Its latest edition occurred in November 2015. Photos: Bruno Mota/Ascom-Consea; Felipe Costa/ Ascom-Consea; Consea MG Ascom, respectively.

Patrus Ananias, former *Ministro* (equivalent to Secretary of State in the UK cabinet rank) of Social Development and Fight Against Hunger (2004-2010) under Lula's Presidency and *Ministro* of Agrarian Development (2015-2016) under Rousseff's Presidency, highlighted the role of the *Diálogos da Terra*, which were meetings with several civil society organisations focused on the social function of land that were convened during the administration of the Workers' Party (personal communication, 26 April 2017):

We created a relationship with social movements based on dialogues. (...) We had regular meetings, the 'land dialogues' (*diálogos da terra*), in which we tried to discuss the development of family farming from the perspective of value-adding to production, and from the perspective of agroecology and cooperativism. We also worked and sought to mobilise society around the principle of the social function of land – remembering that property is a right, but it cannot be an absolute right: it has to be adequate to higher demands of the common good, of the public interest, of the right to life – which is the greatest good – of social justice, and also linked to the issue of property with fundamental contemporary issues, for instance, issues about water, biodiversity, ecosystems, and the issue of the production of healthy food. (Patrus Ananias)

A series of conferences and Consea became prime modes of representation for rural people, and perhaps the most effective channels for rural people to access the state. They functioned as a crucial input channels to state action and policy change and became the main locus for state power negotiation on food and nutritional security matters from 2003 to 2016, when some members withdrew from the national council following the parliamentary impeachment of President Dilma Rousseff (Representative of a rural union, Contag, personal communication, Apr. 24, 2017; and former executive of the agricultural supply agency, Conab, personal communication, Nov. 9, 2017). In terms of policy outputs, this milestone is characterised by the emergence of structured market opportunities for rural people (Grisa *et al.*, 2003; Müller, 2007; Delgado, 2013; Porto, 2014; Coca, 2015; FAO, 2015; Wittman and Blesh, 2017).

The ultimate example of structured market opportunities for rural people is the Food Acquisition Programme (*Programa de Aquisição de Alimentos, PAA*), which was one of the key components of the Brazilian Zero Hunger programme (*Programa Fome Zero*).⁵³ The Food Acquisition Programme is an innovative, pioneering institutional procurement programme that connects a guaranteed demand for local small family farm produce with a federal food policy (FAO, 2015, p. 73). Initiated in 2003, the FAP's key feature was to waive a highly bureaucratic, competitive bidding process, so that governmental bodies could buy directly from rural people and their organisations (Soares *et al.* 2013; Sambuichi *et al.* 2014). The FAP revamped the positionality of rural people within the Brazilian society, and became a blueprint for food security policies worldwide (FAO, 2015; Swensson and Klug, 2017; Milhorange, Bursztyn and Sabourin, 2019; Romualdi, 2019)⁵⁴. This programme is central to this dissertation and is discussed in detail from Chapter 4. In 2013, however, not only this programme but all policy arenas and programmes for family farmers entered a phase of retrenchment, a phase in which the state started closing down its permeability to certain groups such as peasants.

⁵³ The Fome Zero strategy and the other policies that comprised the initiative are discussed with some detail in Chapter 4.

⁵⁴ The deemed successful implementation of the programme led other countries around Latin America, the Caribbean, Asia and Africa to replicate similar arrangements to tackle food insecurity and rural poverty (PAA-Africa 2015; FAO 2015; BRASIL 2016; Swensson & Klug 2017; Grisa & Schneider 2014; Milhorange, Bursztyn & Sabourin, 2019).

3.2.2 The retrenchment phase – 2013 onwards

The beginning of Dilma Roussef's second mandate in 2013 marks a shift in the relationship between rural people and the state, from expansion to retrenchment. Material changes in this relationship can be observed in the retrenchment of policies and programmes for the family farmer, in the form of direct cutbacks. For instance, between 2014 and 2018, excluding inflation⁵⁵ the values agreed in contracts for the rural credit programme for family farmers (Pronaf) decreased 21 per cent from R\$ 31.2 billion to 24.6 billion, the budget of the Food Acquisition Programme decreased 75 per cent from R\$ 1.7 billion to 431 million, and the budget for technical assistance and rural extension decreased 78 per cent from R\$ 841 million to 185 million (Vasconcelos *et al.*, 2019). These direct cutbacks in programmes and public policies produced immediate effects, and fall within '*programmatic retrenchment*', or '*policy retrenchment*' (see Pierson 1994; Elmelund-Præstekær & Klitgaard 2012). *Programmatic retrenchment* materialised not only in budget cuts, but also in a far-reaching measure: an amendment in the federal constitution, in 2016, which limits the growth of the government's primary expenditures to the rate of inflation for two decades (Ladi, Lazarou and Hauck, 2017; Orair and Gobetti, 2017; Doniec, Dall'Alba and King, 2018). This limitation to the state budget in social protection was proposed by Michel Temer during his short Presidency, quickly approved by the legislative, and has continued ever since. *Programmatic retrenchment* is relatively transparent, visible to the public, with immediate effects for the targeted populations (Elmelund-Præstekær and Klitgaard, 2012). But less transparent and far-reaching retrenchment measures have also been deployed since 2013.

Less transparent forms of retrenchment are known as *systemic* or *institutional retrenchment* – which are general changes in the broader political economy – manifested in concrete changes in the institutional structures of programmes, which endorse further retrenchment (Pierson 1994; Elmelund-Præstekær & Klitgaard 2012). With regards to the relationship between the state and rural people in Brazil, *systemic retrenchment* progressed from a mild form in 2013, under Roussef, to a fierce form in 2019, under Bolsonaro. *Systemic retrenchment* appeared in the forms of (1) reduced participation of rural people in policy-making processes and (2) decentralisation. According to an executive of a rural workers' union, Contag (personal communication, Apr. 24, 2017), the openness of the state to dialogue with representatives of rural people decreased from Lula (2003-2010) to Roussef (2011-2016), then to Temer (2016-2018). This was endorsed by two executives of the state, one in charge of the national agricultural supply agency (Executive of Conab, man, personal communication, Nov. 8, 2017), and the other one in charge of the secretariat of the national council for nutritional and food security (Consea), who said: 'The government has appreciated civil society insights and criticism, particularly during Lula's administration, less so during Dilma's presidency but still.' (Executive of the secretariat of Consea, woman, personal communication, Apr. 25, 2017). These direct reports endorse a broader political economy observation, by Saad-Filho (2020), for example, that Dilma Roussef was not as close to social movements as her predecessor Lula da Silva, even if they belonged to the same political party.

⁵⁵ All 2014 values monetary restated to December 2018 values (IPCA-IBGE rate)

Systemic retrenchment was also manifested in the federal government decision to reduce its direct involvement in the implementation of programmes – such as the Food Acquisition Programme through the national supply agency in direct dealings with organisations of rural people (Porto, 2014). The reduction of the direct involvement of the federal government in the implementation of the FAP resulted from an alternative view within the federal government, mainly expressed by Patrus Ananias, current Federal Deputy (parliamentary representative) and previous Minister of Agrarian Development (from 2015 until Rousseff's impeachment in 2016), who said: 'We seek to decentralize, and to integrate actions with states and municipal governments' (Patrus Ananias, personal communication, 26 Apr. 2017). Ananias was a long-standing defender of decentralisation in the 'federative pact' and encouraged the transfer of the implementation of the FAP from the federal agency Conab to states and cities (Executive of the national agricultural supply agency, Conab, man, personal communication, Nov. 8, 2017). Although the rhetoric for decentralisation was to strengthen the federative pact (ibid), this led to retrenchment of central/federal action without being accompanied by budget or commitments of subnational governments to continue working with farmers' organisations. Also, at the same time, a rigorous internal and external audit on the activities of the national agricultural supply agency (Conab) was ongoing. The rigour of the audits was particularly stringent towards programmes benefiting the family farmer, but lenient towards programmes benefiting the capitalised agribusiness sector, according to one of Conab's executives (man, personal communication, Nov. 8, 2017). The combination of selective, rigid measures against programmes for rural people, the push for decentralisation and reduction of the participation of the family farmers in policymaking deepened the *systemic retrenchment* of public policies.

From cooling down to closing down

This 'cooling-down' was followed by a 'closing down' period under the presidencies of Michel Temer (2016-2018) and Jair Bolsonaro (beginning 2019). Temer reduced budgets for family farming programmes and food and nutrition policies (Favareto, 2016; BRASIL Conab, 2019a; Vasconcelos *et al.*, 2019) and reducing the modes of representation of rural peoples, for example, downgrading the Ministry of Agrarian Development in 2016. Referring to Temer's government, a representative of a small cooperative of rural people stated the following (edited for clarity):

The federal government does not care for rural development. They have been cautious not to terminate the FAP at once. By doing so, people will not associate it with their administration and won't spread the news [thus not damaging the government's reputation]. The government is squeezing the family farming class. This government has not done anything for the family farming (...) They are not ignorant. They lack sensitivity and wisdom: they are abandoning people, leaving them with no support (Leader of a local rural producers' cooperative, woman, personal communication, Mar. 2018).

This community leader clearly expresses a view that rural development has been retrenched gingerly to avoid blame. This is a type of retrenchment associated with the 'liberal' welfare world (Pierson, 1994; Levy, 2010): a retrenchment that is conducted surreptitiously (relying on stealth), resorting to 'blame avoidance strategies, dodging or deflecting responsibility for unpopular programme cuts' (Levy, 2010, p. 557).

At least two blame avoidance strategies have been used since 2013: decrementalism and burden sharing. Decrementalism is manifested in the progressive reduction of the federal budget for family farming programmes. Burden sharing has been used to reduce traceability, that is, ‘to blur the link between programme cuts and the public policies that caused them’ (Levy, 2010, p. 558). Burden sharing has been done through the transfer of responsibility from federal to subnational governments and to a decentralised network of federal organisations (which is referred to as the Institutional Food Acquisition Programme, or *PAA institucional*). These federal organisations are largely established in state capitals and city hubs, therefore not reaching the most marginalised rural communities, nor the less organised local peasants. This transfer of responsibility was not accompanied with adequate funding, training, nor with the co-management practices that the agricultural supply agency (Conab) had established with civil society. In theory, this kind of retrenchment based on blame avoidance would lead to ‘strongly regressive consequences’ (Levy, 2010, p. 565).

Systemic retrenchment has significantly reduced the state permeability to the rural peoples’ interests, and, more importantly, it has facilitated continued welfare state contraction, as prevented by Elmelund-Præstekær and Klitgaard (2012, p. 1092). Indeed, Jair Messias Bolsonaro continued the ‘closing-down’ trend, by reducing the access rural people had to the state even more. Bolsonaro’s presidency has reduced co-management practices and abolished several channels of representation of organised interests within the central government. Bolsonaro dissolved the national council for nutritional and food security, Consea, on his very first day in office, the 1st of January of 2019⁵⁶. It is true that the representation of rural people through Consea had already suffered cutbacks during Dilma’ and Temer’s administration, but Consea’s full dismissal by Bolsonaro ratified the *systemic* retrenchment. For instance, the latest series of public conferences on nutrition and food security took place in 2015, during Dilma’s presidency. That was the latest time (up to at least early 2020, the time of writing of this dissertation) in which civil society was formally supported by the state to participate in public conferences, which had formative and consultative functions. Four years later, in July 2019, without any state support, civil society called for an autonomous and popular conference in defence of democracy, rights, nutrition and food security and sovereignty – to take place in the first half of 2020 (FBSSAN et al., 2019). In their public letter, the Brazilian forum of nutrition, food security and sovereignty (FBSSAN), together with key-organisations of rural people such as *La Via Campesina*, *Movimento dos Trabalhadores Sem Terra* (MST, the landless workers’ movement), a rural workers’ union (Contag), and the *Movimento dos Pequenos Agricultores* (MPA, small-farmers movement) stated:

Social participation in councils and commissions for monitoring and improvement of public policies in different areas was severely attacked, with the extinction of forums or limitation of its operations. On January 1, 2019, Provisional Measure (PM) 870 was issued, which proposed a new structure for the federal government. Among the measures contained in this Provisional Measure, the Law on Food and Nutritional Security (no. 11346 of 2006) was dismantled and, consequently, the National System of Food and Nutritional Security (Sisan) itself, revoking items that defined the place of Consea, its functions, composition and presidency. Immediately after the dissemination of this proposal, national and international civil society and several institutions began a broad mobilization. (FBSSAN et al., 2019, p. 2, freely translated and edited for clarity)

⁵⁶ Also, Bolsonaro created a unit within the Presidency charged with monitoring non-governmental organisations (Medida Provisória n. 870/2019).

This quote is indicative of ongoing tension between rural people and the state in Brazil. The ways rural people have to represent their interests within the state has been reduced since 2013, and one of the remaining ways to try to resonate their interests within society at large is through protests and demonstrations. The latest outing of *Marcha das Margaridas* ('march of the daisies', in a literal translation) occurred on August 2019, with an estimated 100,000 women from all over the country who gathered in Brasília, the federal capital, to fight for their rights and citizenship (Figure 16). This march is one of the largest women's mobilisation in Latin America, with strong involvement social movements, feminists, rural workers unions, such as Contag, and organisations affiliated with *La Via Campesina*, such as the Peasant Women's Movement (MMC), the National Coordination for the Articulation of Rural Black Quilombola Communities (CONAQ), and the Landless Workers Movement (MST). Beyond gender equality within the movement and in society at large, the *Marcha das Margaridas* also try to claim public policies and rights that benefit rural women and the working classes in general. Since the movement realised the government in 2019 was openly attacking progressive social movements and was closed to negotiation, the movement decided not to bother with handing the government a written manifesto or political agenda (Teixeira and Motta, 2020). This is symptomatic of an advanced level of *systemic retrenchment* in the modes of representation of the state for rural people in general, and of women in particular.



Figure 16. Thousands of peasants from all over Brazil joined the *Marcha das Margaridas* in Brasília.
 Photo: Richard Silva/ PCdoB/ Câmara (CC BY-NC 2.0, <https://www.flickr.com/photos/pcdobcamara/48537258862/>)

Clearly, the relationship between rural people and the state has deteriorated since at least 2013. Dedicated high-level ministries, multi-stakeholder platforms and popular conferences – which were part of the key *formal*

dimensions of the state – have either been reduced or disbanded altogether. In his first act as President (*Medida Provisória* no. 870 of 2019), Bolsonaro dismantled Consea and expressed an intention to distance his government from civil society organisations. He also proposed to mobilise the Presidency to monitor non-governmental organisations. Although demonstrations remain a channel for popular expression, guaranteed by constitution, since 2013 the Brazilian state has strengthened all its instruments to suppress and silence dissenting voices; consequently, the public perception has been shifting against protests (Article 19, 2019). That is to say, even the viability and effectivity of demonstrations and protests in Brazil have been threatened by the state apparatus. These are some of the major recent changes in the relationship between rural people and the state in its *formal* (and more evident) dimension. All of these changes stem, of course, from *substantive* changes in the nature of the state, which are the discursive and social features that give states certain coherence (Jessop, 2014).

3.3 State's social basis and hegemonic visions

The dominant power block in Brazil has been led by the bourgeoisie, which can be divided into the national, 'internal bourgeoisie' and the 'internationalised bourgeoisie', following Boito and Saad-Filho (2016) and Saad-Filho (2016). These divisions have disputed hegemony around process of accumulation, with their differences expressed in the 'cleavages between industrial and banking capital, domestic and foreign capital, and large and medium-sized capital, as well as national, regional, sectoral, political, and other imperatives that can generate variegated outcomes in practice' (Farias, 2009; Boito and Saad-Filho, 2016, p. 193). These groups have controlled policymaking in Brazil, alternated in power in different coalitions, but have formed a new alliance in recent years, an alliance that has been referred to as 'the alliance of elites' (Saad-Filho and Boffo, 2020, p.3).

3.3.1 Market failures and the internationalised bourgeoisie lead in the 1990s

The internationalised bourgeoisie comprises representatives of economic groups owned by foreign capital and the domestic firms directly dependent upon them, i.e., international banks, insurance companies, large consultancy and accountancy firms, transnational and internationally integrated manufacturing capital, and the mainstream media (Boito and Saad-Filho, 2016).

[The internationalised bourgeoisie's] political project is anchored institutionally by policies of inflation targeting, central bank independence, the liberalization of international capital flows, privatizations and market 'deregulation', the dismantling of state capacity to allocate resources and steer development, and the rejection of state-led (re)distribution. (Boito and Saad-Filho, 2016).

The interests of the internationalised bourgeoisie prevailed in the 1990s (see Table 10), during Fernando Henrique Cardoso's presidency (Boito and Saad-Filho, 2016), when the first two milestones of public policies for rural people emerged, i.e. the 'farming and agrarian policies' in 1994, and the 'welfare and social policies' in 1997 (as discussed in the previous Section).

In the 1990s, the hegemonic vision was that the state should minimise social unrest and intervene to correct market failures (Grisa and Schneider, 2014; Antonio A R Ioris, 2015; Picoletto, 2015; Sabourin, 2017). This was expressed in two ways. Firstly, the nature and purpose of the state was to support the transition of rural people like peasants to a commercial, ‘modern’ farming model, and to encourage them to establish stronger ties with the market. This corresponds with the first milestone of public policies for rural people initiated in 1994. It started with the provision of financial services (such as rural credit and insurance) to ‘qualified’ family farmers – which initially benefitted the better-off family farmers – and an agrarian reform that neither challenged the power of large landowners nor met the land needs of the rural poor and landless (Grisa and Schneider, 2014; Welch and Sauer, 2015; Favareto, 2016). As put by Favareto, ‘A true agrarian reform was never implemented. The means of controlling land conflicts in Brazil consisted principally of transporting agricultural workers who were demanding land in the south of Brazil to the interior of the Amazon region, in areas that were remote and without infrastructure.’ (Favareto, 2016, p.6).

Table 10 summarises the changes in the socio-economic basis of the Brazilian state and associated hegemonic visions.⁵⁷

Table 10. The Brazilian state in relationship with public policies for rural people.

Phase	Milestones	Socio-economic basis of the state	Hegemonic vision for state action
Expansion	1994 onwards: Agrarian and farming policies (1994 onwards) ^{58,59}	International bourgeoisie allied with the urban upper-middle class ⁶⁰	The state should correct market failures and support the assimilation of rural people to a commercial model ⁵⁹
	1997 onwards: Welfare and social policies ⁵⁹		The state should correct market failures and provide basic support for the poor ⁵⁹
	2003 onwards: Marketing opportunities within food and environmental sustainability policies ⁵⁹	Internal, or national bourgeoisie allied with the lower-middle class, unionised workers, and most peasants and marginalised workers ⁶⁰	The state should protect national corporate interests, boost domestic markets and create commercial/market opportunities for the poor ^{59,60}
Retrenchment	2013 onwards: Programmatic and institutional retrenchment	Both national and internationalised bourgeoisie (‘alliance of elites’) plus right-wing middle classes; all but the poor ⁶¹	The state should adhere to an austerity regime, and rethink/question the effectiveness of anti-poverty and social policies ^{61,62}

This vision changed in 1997 in response to the failure of the first generation of emerging policies (i.e. agrarian and farming policies) to substantially improve the conditions of the poorer and peasant family farmers. Therefore, the 1997 milestone (i.e. welfare and social policies) is a benchmark for poverty alleviation (Grisa and Schneider, 2014).

⁵⁷ Naturally, the *substantive* dimensions of the state are entwined with its *formal* dimension, which was discussed in the previous section. These were presented in separate tables to facilitate a progressive argumentation.

⁵⁸ Schneider, Shiki, Beliki 2010

⁵⁹ Grisa, Schneider 2014

⁶⁰ Boito, Saad-Filho 2016

⁶¹ Boschi, Pinho 2018; Saad-Filho, Morais 2018; Saad-Filho, Boffo 2020

⁶² Ladi, Lazarou, Hauck 2017

This materialised in the form of ‘welfare’ and social policies (such as income-tested cash-transfers, housing subsidies), but also micro-credit and infrastructure credit for sites of high prevalence of smallholdings and low farming productivity. The hegemonic idea here was that the state had to support the poorer and most marginalised, particularly those who were too peripheral to access the financial services designed in the first generation of emerging policies for rural people (Wanderley, 2000; Guanziroli, 2007; Gazolla and Schneider, 2013; Grisa and Schneider, 2014; Souza, Ney and Ponciano, 2015).

3.3.2 State protection and the domestic bourgeoisie lead in the 2000s

In 2003, the ‘internationalised bourgeoisie’ was replaced by the national, ‘internal bourgeoisie’ as the dominant social basis of the state, with Lula da Silva’s presidency (Boito and Saad-Filho, 2016). The internal bourgeoisie – comprised of the owners of large firms across manufacturing, construction, agribusiness, food processing, shipbuilding, banking, and other sectors – demanded ‘state protection’ to support its leadership of domestic markets and its expansion abroad (Boito and Saad-Filho, 2016). The relationship of the internal bourgeoisie with the state is rather contradictory:

While it [the internal bourgeoisie] tends to support neoliberal labour-market and social policies for ideological reasons, it also recognises that government intervention, basic social protections, and rising minimum wages increase social cohesion and political stability, boost the domestic market, and provide a protective umbrella against imperialist pressures (Boito and Saad 2016, p.3).

The internal bourgeoisie partnered with the lower-middle classes and part of the marginalised populations during Lula’s presidency (Boito and Saad-Filho, 2016). Consequently, while rural people expanded representation in public arenas, as seen, the representations of traditional business, agri-export and banking elites were largely untouched if not expanded (Petras and Veltmeyer, 2003; Grisa and Schneider, 2015). Accordingly, the hegemonic vision was that the state should protect the national corporate interests, to boost the domestic market, to create marketing opportunities for the poor, and to boost local economic development (Muller, Silva and Schneider, 2012; Grisa and Schneider, 2015; Boito and Saad-Filho, 2016). This vision can be framed within Hartman’s (2005) understanding that the welfare state has underpinned the existence of neoliberalism. In Hartman’s words: ‘Far from operating to the detriment of the neoliberal cause, the welfare state appears as one of the necessary conditions of its existence by underwriting the flexible labour market and managing populations such that the fabric of society remains intact’ (Hartman, 2005, p. 70). This hegemonic vision resulted in a series of market opportunities generated by the state within food security and environmental sustainability policies, such as the Food Acquisition Programme. This hegemonic vision and the developmental ideas underlying the FAP are discussed in detail in Chapter 4.

3.3.3 Austerity on the rise in the 2010s

At around 2013-2014, Brazil was hit by a major economic and political crisis. This crisis was caused by multiple factors, mostly endogenous – such as fall in growth rates, reduced fiscal capacity and corruption scandals – which gave room to fiscal adjustment and austerity (Boschi & Pinho 2018). This crisis also links to the paralysation of the Workers' Party presidency (Ladi, Lazarou and Hauck, 2017; Magalhaes, 2017; Orair and Gobetti, 2017; Boschi and Pinho, 2019) and Dilma Rousseff's impeachment by the Parliament in 2016, which resulted from a strong opposition by the *internationalised* bourgeoisie and the upper middle class, whose interest controlled the judiciary and the media (Boito and Saad-Filho, 2016). Some of the recent accounts for this event links Rousseff's impeachment to a strong support of 'tradition' and conservatism in the lower chamber of the Parliament – for example, by the Evangelical caucus (Prandi and Carneiro, 2018). Also, Rousseff's impeachment is portrayed by Van Dijk (2017, p.199) as a 'coup of the economically dominant conservative oligarchy against the leftist Workers' Party, in power since 2003',⁶³ which counted on a decisive support from a media that 'systematically demonized and delegitimized Dilma, as well as ex-President Lula and the PT [the Workers' Party], in their news reports and editorials by selectively associating them with pervasive corruption and attributing the serious economic recession to them.' (Van Dijk, 2017, p.199).

Constitutional austerity

The first fiscal austerity measures took place at the end of Rousseff's presidency, in 2014-2015. But it was during Michel Temer's presidency (2016-2018)⁶⁴ that austerity gained purchase and became ingrained in the hegemonic vision for state action (Ladi, Lazarou and Hauck, 2017; Orair and Gobetti, 2017; Boschi and Pinho, 2019). The argument held since 2015 is that austerity fiscal adjustment would be necessary in order to recover credibility and resume economic growth in Brazil (Orair and Gobetti, 2017). Indeed, according to Blyth (2013a):

Austerity is a form of voluntary deflation in which the economy adjusts through the reduction of wages, prices, and public spending to restore competitiveness, which is (supposedly) best achieved by cutting the state's budget, debts, and deficits. Doing so, its advocates believe, will inspire 'business confidence' since the government will neither be 'crowding-out' the market for investment by sucking up all the available capital through the issuance of debt, nor adding to the nation's already 'too big' debt. (p. 2)

Austerity was presented in a positive light during Temer's presidency, when conjunctural austerity policies – initially introduced as temporary measures – turned into an enduring politics of austerity in the form of constitutional austerity (see Blyth, 2013; Jessop, 2016; Ladi, Lazarou and Hauck, 2017; Farnsworth and Irving, 2018).

Austerity is expected to be long-lasting, especially after a constitutional amendment passed in 2016 (*Emenda Constitucional* no. 95 of 2016) limiting the growth of the government's primary expenditures to the rate of

⁶³ Lula run two consecutive presidential mandates, from 2003 to 2010, and supported his ally, Dilma Rousseff, as his successor. Dilma Rousseff was elected for two consecutive mandates, sworn in office in 2011 then impeached and removed from office on the 31st of August of 2016.

⁶⁴ Michel Temer, vice-President to Dilma Rousseff, supported her impeachment and became President from 2016-2018.

inflation for two decades (Ladi, Lazarou and Hauck, 2017; Orair and Gobetti, 2017; Doniec, Dall’Alba and King, 2018). Austerity has already led to significant cuts in public spending on health, food security, education, science and technology and left most disenfranchised communities more vulnerable (Malta, 2018; Vasconcelos *et al.*, 2019). More importantly, austerity has penalised low-income and marginalised groups more than the bourgeoisie and their allies (Orair and Gobetti, 2017). Quoting a leader of a rural community in the Amazonas (edited for clarity):

(...) under Temer’s government, there is nobody with a political vision to defending the small but the big rural producers of the Amazon. For the North region, the state only supports the industrial district and the Manaus free trade zone. Nothing arrives to us [rural people].
(Community leader, Careiro da Várzea, man, 42y, personal communication, 6th May 2018)

In more theoretical terms, this vision of austerity is intertwined with the retrenchment process discussed in the previous section. Linking these ideas back with the relational state (as Jessop proposes), the processes of retrenchment materialised in changes to the *formal dimension* of the state (i.e. budget cuts and reduced participation of civil society); whilst austerity is observed in changes in the *substantive dimension* of the state (i.e. the dominance of an alliance of elites, dismissiveness of the poor; and an attempt to boot capital accumulation and preserve the neoliberal capitalistic model).

In October 2018, Jair Bolsonaro won the Presidential election among all income groups except for the poor and very poor (Hunter and Power, 2019). In his inaugural speech, Bolsonaro promised to fight ‘socialist ideologies’ and did not address poverty and inequality: this is the first inaugural speech since the end of the military dictatorship not to mention the need to address poverty and inequality (The Lancet Global Health, 2019). This was symptomatic of a suggestion by Hunter and Powel (2019) that two cleavages favoured Bolsonaro’s election: an anti-establishment cleavage and an anti-Workers’ Party cleavage. The current social basis of the state is therefore clear – which is one that ignores the disenfranchised. However, the hegemonic vision for the state is yet to be determined,⁶⁵ though likely towards further austerity. This may be deduced from the observation of Brazil’s dominant power blocs (the social basis of the state, as per Jessop), the constitutional amendment that limits government expenditures (as a demonstration of *programmatic* retrenchment), and the difficulty of representing the interests of rural people before the state (as a demonstration of *institutional* retrenchment). In fact, the retrenchment processes even before Bolsonaro’s Presidency, such as in the cutbacks on the Food Acquisition Programme, were signs of rising austerity.

⁶⁵ While Bolsonaro himself displays signs of military national-developmentism, his main economic advisor, Paulo Guedes, graduated from the University of Chicago School of Economics, is known for his orthodox economic views and for its role in implementing neoliberal policies in Chile under Pinochet.

Chapter 4 The Political Economy of a nested market

As we have seen, peasants in Brazil have rarely participated in policy processes, but state support to a newly established legal category of ‘family farmer’ or ‘family rural entrepreneur’ has gained shape in the past 20 years or so. In the early 2000s, the Brazilian central government expanded its relationship with rural peoples, which was based on political compromises that resulted into a new direction when the procurement power of the state was mobilised to create new, nested markets. The Food Acquisition Programme can be seen as a key component of this market turn. Indeed, as discussed in the previous chapter, the FAP was part of a wave of innovation in rural and food policies, which saw the introduction of market opportunities to ‘strengthen’ rural livelihoods. The academic literature has been mostly supportive of the FAP, as discussed in the Introduction. Nevertheless, subsequent evolutions and adjustments to the programme and its broader policy context justify a closer look at how it has been implemented, particularly in the aftermath of constitutional austerity in the second half of the 2010s. The analysis presented in this chapter complements and extends previously published studies exposing the rationale, procedures and results of the FAP (i.e. Delgado, 2013; Nehring and McKay, 2013; Grisa and Zimmermann, 2015; Sambuichi *et al.*, 2019; Swensson, 2019).

This chapter examines ideas and conceptualisations of development, the interests underlying the conception of rural development policies, and the confluence of all these into a policy narrative which has shaped, and continues to shape, the relationship between farmers and the state. Specifically, the chapter offers a political economy understanding of the narratives and institutional filters that have been at play and have influenced and informed the FAP’s design and some of its implementation’s critical decisions. The first section introduces the theory of ‘new, nested markets’ for rural development, which are markets mediated or structured by the state. It challenges some of the mainstream views about the FAP, showing how it can be seen as a new approach to rural development or as a partial accommodation with the interests of certain elites or the corporate food system. The second section sets out to demonstrate how radical ideas about development and equity were simplified through time and how the FAP ended up as a marketisation strategy. This marketisation strategy was supported by a theory of change that the researcher refers to as ‘the pedagogy of marketisation’, which is the object of the final section of this chapter. In conclusion, drawing on Escobar’s Political Ecology of differences framework (see Chapter 1) – the chapter posits that the FAP has in many respects offered an effective fix to some of the uneven economic consequences of global capitalism. At the same time, cultural and ecological considerations were overlooked in its implementation. Bureaucracies discouraged ecological farming and *realpolitik* meant that the programme increasingly converged in its ambition and implementation with established pro-market views about agriculture and rural development.

4.1 Rural development within a corporate food system

With their controlling influence over food production and consumption, corporations have largely determined the technologies to be used in agriculture and the quality, quantity, and price of food (van der Ploeg, Jingzhong and Schneider, 2012; Altieri, 2015). This control has been referred to as a ‘food empires’ approach to production and consumption (van der Ploeg, 2010), ‘corporate food system, or ‘corporate food regime’ (McMichael, 2016). Under such empires, ‘operations act on a global scale, with strategic alliances between input suppliers, processors, traders, supermarket chains, and finance banks to form agri-food complexes’ (Rosset and Martínez-Torres, 2012, p. 2). What is more, these agri-food complexes are closely tied with oil, chemical, biofuel and car companies, along with land grabbing interests (Altieri, 2015). Critics argue that the growing financialisation, industrialisation, and integration of agriculture into world markets has contributed to the current environmental and climate breakdown and associated poverty traps (e.g. biodiversity loss, deforestation, erosion, water pollution) – all of which are drawbacks concentrated in the global South (Adger *et al.*, 2003; Power, 2010; UK Government Office for Science, 2011; Rosset, 2011; Tschardt *et al.*, 2012; Woods, 2012; Chappell *et al.*, 2013; Hunsberger *et al.*, 2014; SCDB, 2014; Stock *et al.*, 2014; Wittman, Powell and Corbera, 2015; Osborne, 2015; International Food Policy Research Institute, 2016; Rocha, 2016).

The corporate food regime triumphs worldwide. As Nierderle puts it, this systems takes place when financial and industrial institutions, alongside governments, ‘accept and stimulate forms of accumulation by over-exploitation of labor and dispossession of natural resources (land, water, and green grabbing)’ (Niederle, 2017, p. 17). Indeed, an industrial order of agriculture is based on a set of technical and institutional apparatuses, as just noted, which is complemented by a financial mode of agriculture (Nierderle, 2017). The strategy of agri-food corporations depends on the interests of investment funds (Nierderle, 2017). However, other social orders have fought for space with food empires, such as domestic, civic, and aesthetic modes of agriculture (Nierdele, 2017). A domestic mode of agriculture is characterised by traditional forms of production and consumption in local and regional food supply circuits. This can entail the cultivation of crops chosen to be consumed or sold following the needs of the family and market conditions. A civic mode of agriculture is mainly represented by ‘agroecology’ in its polysemic concept that encompasses biodiversity-friendly practices, defence of the peasant identity, and promotion of food security and sovereignty. An aesthetic mode of agriculture comprises new markets for traditional and localised products. Notably, these orders can overlap to some extent, as Niederle (2017) explains. That is to say, in practice, multiple and contradictory ordering processes of modes of agriculture coexist (Niederle, 2017).

‘Social movements comprising peasants and other rural peoples are actively defending spaces from, and contesting with, these agribusinesses and other private sector actors and their allies in governments’ (Rosset and Martínez-Torres, 2012, p. 2). As evidence, after 17 years of struggle and lobbying, the international peasant movement celebrated in December 2018 the approval of the United Nations Declaration on the Rights of Peasants and Other People Working in Rural Areas, which is seen as a counter-proposal to neoliberal policies and practices (Claeys and Edelman, 2020). Social movements and rural peoples gained a voice to negotiate public

policies in Brazil in the 1990s and 2000s, which gave room to a series of policies for rural people that accommodated some of their interests (Wolford, 1996; van der Ploeg, Jingzhong and Schneider, 2012; Grisa and Schneider, 2014; Niederle, 2017). Also, as noted in the previous chapter, the last series of innovations in public policies for rural people in Brazil emerged in 2003 with new, nested market opportunities to promote rural development and sustainable food production – at least in theory.

4.1.1 Rural development through mediated or nested markets

According to many scholars, rural development policies have emerged as an antidote to the hegemony exerted by food empires and, more recently, their social and environmental consequences (see, for instance, Schneider, van der Ploeg and Hebinck, 2015). In this research, rural development policies are understood as those focused on ‘building the conditions that enable people in vulnerable situations to get access to assets that help them to improve and strengthen their livelihoods’ (van der Ploeg, Jingzhong and Schneider, 2012, p. 136). This concept challenges prevailing ‘rural development’ frameworks, such as the World Bank’s market liberalisation framework of the 1970s and 1980s, and current hegemonic discourses by the Organisation for Economic Cooperation and Development (OECD), for example, in which rural development is seen as a state-driven process for the provision of public goods (Ellis, 2002; van der Ploeg, Jingzhong and Schneider, 2012). Alternatively, following the political economy conceptual framework adopted in this research, rural development has resulted from contestation and does not aim exclusively to strengthen agricultural growth but mainly redefine the role of agriculture in society (van der Ploeg, Jingzhong and Schneider, 2012). Notably, rural development policies can contribute to reducing social inequality in general and, by adopting this concept, rural development is distinguished both from agrarian policies and from social welfare policies for the rural poor (van der Ploeg, Jingzhong and Schneider, 2012). This distinction is important in the appreciation of Brazil’s history, where farming, agrarian, and social welfare policies for rural people were created during the late 20th Century, preceding the emergence of rural development policies through new, nested markets, which emerged at the beginning of the 21st Century, as discussed in Chapter 3.

Rural development through the construction of ‘new, nested markets’ has emerged in response to ‘market failures’ in ‘places that do *not*, for example, provide enough food to the hungry and undernourished, or do *not* deliver food with the desired qualities’ (Schneider, van der Ploeg and Hebinck, 2015, p. 196). In more theoretical terms:

(...) a nested market is a common pool resource that is (a) grounded in a commonly shared set of rules. This set of rules (b) links specific producers and consumers (through shared expectations, quality definitions, specific infrastructure, reputation, trust, etc.). It (c) specifies resource use (also beyond the nested market) and thus (d) allows for the transaction of specific products.’ Nested markets results from a social struggle and are created for a purposed, typically belonging to the public sphere. (Schneider, van der Ploeg and Hebinck, 2015, p. 195).

Markets mediated by the state, structured markets, sustainable food systems, shorter-circuits of commercialisation, slow food, food sovereignty, the right to food, localised and alternative food circuits – all of these have gained attention in the past two decades or so, and reflect the growth of new markets and ethical consumption and

institutional procurement for equity and sustainability goals (Lehtinen, 2012; van der Ploeg, Jingzhong and Schneider, 2012; Reisch, Eberle and Lorek, 2013; Marsden and Morley, 2014; Smith *et al.*, 2016; Uehara, 2016, 2020; Wittman and Blesh, 2017; Resque *et al.*, 2019; Valencia, Wittman and Blesh, 2019). Other authors prefer using ‘institutional demand’ because it focuses on state ownership over procurement policies, and emphasise that it can promote synergies between social protection and smallholder agriculture for income generation, price stability, and food security (Miranda, Thiam and Klug, 2017; Nehring, Miranda and Howe, 2017; Swensson, 2019). Notwithstanding the emergence of nested markets or institutional demand, the industrial and financialised agricultural food markets continue to dominate the policy landscape. For example, in the Brazilian case, the neoliberalisation of food systems has privileged agribusiness production, ‘consolidated capital accumulation approaches, (...) and the subordination of agriculture to wider, globalised politico-ecological demands’ (Ioris, 2018, p. 70). Newly emerging markets can be seen as alternatives to the general agricultural and food markets, presenting contrasting features regarding the distribution of activities and benefits, as summarised in Table 11.

Table 11. A schematic comparison of the general agricultural and food markets and newly emerging markets.

	General agricultural and food markets	Newly emerging markets
Who owns what?	Food empires control most linkages between production, processing, distribution and consumption of food	Short circuits that interlink the production and consumption of food. These short circuits are owned or co-owned by farmers
Who does what?	The role of farmers is limited to the delivery of raw materials for the food industry – leading to a large-scale, intensive and specialised agricultural pattern	The role of farmers is extended to embrace on-farm processing, direct selling and the redesign of production processes that better meet consumers’ expectations – leading to a more diverse and peasant-like way, with greater value-added per unit produced
Who gets what?	The distribution of value added is highly skewed; most wealth is accumulated in food empires, in the Global North	Farmers get a higher share of the total value-added
What is done with the surpluses?	Accumulated wealth is used to finance the ongoing imperial conquest (take-over of other enterprises, for instance)	Extra income is used to increase the resilience of food production, to strengthen multifunctional farming and to improve livelihoods

Source: Adapted from Ploeg *et al.* (2012) and Schneider, van der Ploeg, & Hebinck (2015).

Although Schneider *et al.* (2015) acknowledge the irony of constructing markets to address market failures, they posit that nested markets differ from general agricultural markets. In their words: ‘nested markets sustain processes of rural development that differ sharply from continued and/or accelerated modernisation based on scale-enlargement, specialisation and technology-driven intensification.’ (Schneider, van der Ploeg and Hebinck, 2015, p. 197).

This research adds to this debate by conjecturing that rural development through nested markets or institutional demand creates survival spaces (in state-controlled niches) embedded within (if not marginal to) the corporate food regime. Nested markets can help rural populations cope with – or comply with – the dominance

of the corporate food regime and other processes that contribute to the reproduction of systemic inequalities. Coping or compliance strategies materialise in reforms that accommodate some of the interests of the margins (the very creation of mediated markets, for instance) while validating the dominance of the corporate food regime. Moreover, since the corporate food regime goes hand-in-hand with agricultural modernisation based on specialisation and technology-driven intensification, one should not be surprised to realise nested markets converging towards this conventional modernisation paradigm. At this stage of the research, however, this is a relatively weak proposition. In order to clarify these issues, the next sections examine the rationale, origins, politics and evolution of an exemplary case of a nested market: Brazil's Zero Hunger FAP.

4.1.2 Food procurement before the Zero Hunger Strategy

In the 1980s and 1990s, the food industry specialised in producing highly processed, powdered, and canned feeding for a public procurement market that was all centralised in Brasília [the federal capital] and then redistributed to the entire country (...) through food programmes such as the National School Feeding Programme. Decentralization took place in the 1990s when food procurement responsibilities were transferred to subnational governments (...). Subnational governments kept purchasing industrialised food, roughly benefiting the same food and agribusiness industries. Also, it benefited local and regional retailers – whose owners oftentimes had personal ties with local administrators (Marília Leão, Consea's Executive Director, 2017, personal communication, in a free translation).

Before the Food Acquisition Programme, food procurement in Brazil was based on a standardised, mostly industrialised diet. Consequently, food procurement primarily benefited the agribusiness sector, the food industry and associated industrial and financial modes of agriculture, according to key-informants from the government and a family farming union (personal communication with representatives of Consea, Conab and Contag, 2017). Indeed, public procurement procedures lacked sensitivity to economic, cultural, or ecological distribution conflicts, not to mention sustainability. A representative of the national confederation of rural workers and family farmers (Contag) said:

The food procurement procedure that preceded the FAP was exclusive to people in business with the capability to supply food in scale (...). Local and small organisations were not competitive. (...) Once a businessman won a bid, where do you think they would source food? Of course: it was bought from the food industry and retailers, (...) in bulks... There was no dynamism promoted through food procurement. (...) That is why the FAP represented a significant rupture (Alessandra Lunas, Contag's Secretary of Women, personal communication, 2017, free translation).

As seen, public procurement of food before the FAP lacked social control, did not consider equity and was conducive to economic consolidation rather than distribution. Public procurement would exclude family farmers and consolidate its benefits to intermediaries, retailers, and the food industry. This happened not only because of practical issues (such as easiness, efficiency, or the convenience of buying everything from a single businessperson) but also because of systems of tradition and privilege within the state apparatus that went hand in hand with the interests of the elites.⁶⁶

⁶⁶ See Chapter 3, on the peasant struggle and the state.

Contesting neoliberalism?

Acknowledging the economic dominance of the agribusiness and food empires over alternative social regimes and modes of agriculture, Brazil's Zero Hunger FAP emerged as a social/political response to some of the uneven consequences of historical processes of global capitalism: the marginalisation of non-industrial and non-financial modes of agriculture, such as domestic, civic, and aesthetic modes of agriculture. These alternatives encompass what has been referred to as more sustainable, adapted, or locally-embedded food systems, which includes ecological agriculture, or agroecology, along with the promotion of food sovereignty and security, defence of peasant identities and diversities, short-circuits of commercialisation, and traditional and localised products, adapted to local cultural and environmental identities (Chambers and Conway, 1991; McMichael, 2008; Pretty, 2008; Jackson *et al.*, 2010; Martínez-Torres and Rosset, 2010; Garnett, 2014; Blesh and Wittman, 2015; Daw *et al.*, 2015; Altieri and Nicholls, 2017; Niederle, 2017).

While fighting poverty and hunger were the primary justifications for the FAP, another implicit agenda was also present: contesting neoliberalism, as noted in Chapter 3. To illustrate this point, Marília Leão said:

Behind the creation of the FAP lies an ideology, which is the resistance of the peasantry [camponeses], and national food sovereignty. Within the current system – and the established agribusiness – there is no concern with the small producer's survival (sic). The global agribusiness is focused on commodity exchanges, driven by the logic of profit and capital. Within this logic, the small producer (sic) disappears. Thus, fundamentally, what motivated the formulators [of the FAP] was to resist [the logic of profit and capital] and strengthen family farming. (Marília Leão, Executive Director of Consea, 2017, personal communication, free translation, emphasis added).

In its origins, the Food Acquisition Programme expressed resistance to the marginalisation and disappearance of the peasantry. It was seen by its champions as a way to contest the neoliberal accumulation imperative (Delgado and Theodoro, 2005). This contestation came associated with the idea of food sovereignty, as explained in the previous Chapter and mentioned by the former director of the now-extinct Brazil's council for nutrition and food security (Consea). However, this thesis argues here that the implementation of the FAP was also heavily predicated on structuring the economic side of the equation, resulting in an overshadowing of other aspects of food sovereignty, namely, the rights of peoples to control their own food cultures, environments and production modes. Designed to restructure markets to favour family farmers, the original regulation of the FAP revolved around the economics of the food supply chain. A succinct launching legislation was passed by the Legislative chambers during Lula's first year in the presidency, in 2003. Primary legislation, *Lei* number 10696 of 2003, attributed FAP a single purpose: to encourage family farming.⁶⁷ However, as further discussed, this was on the surface of a dispute between policy ideas.

⁶⁷ Lei no. 10696 of 2003, Art. 19.

4.2 The Zero Hunger's Food Acquisition Programme

Although many countries worldwide run public food procurement programmes, the Brazilian case stands out by effectively targeting family farmers as 'the productive force' (Nehring and McKay, 2013, p. 23). For instance, India's Public Distribution System does not source preferentially from small-scale food producers; instead, it was captured by the elites and their rent-seeking interests (Khera, 2011). Likewise, local authorities of OECD countries have sourced from 'local' producers rather than small-scale, family farmers (de Schutter, 2014b; Qureshi, Dixon and Wood, 2015). In contrast, Brazil's Food Acquisition Programme is an innovative, pioneering institutional procurement programme that sought to connect a guaranteed demand for local small family farm produce with a central food security policy (FAO, 2015, p. 73).

[The FAP] (...) consists in direct government procurement of food from family farmers, from people settled under the agrarian reform program, and from traditional peoples and communities to supply programs meant to assist populations facing food insecurity, to distribute food free of charge to populations facing more extreme situations of social vulnerability, and to establish strategic government stocks. The program has two main objectives: supporting the marketing of the agricultural/livestock produce of family farmers, stimulating food production, and providing easier access to these food products to families facing food insecurity. It is an action aimed at developing closer bonds between farmers and consumers. The food bought from family farmers' associations with the operational support from state and municipal governments and from the National Food Supply Company [Conab] is donated to supply the social protection and promotion network and public facilities such as subsidized restaurants, food banks and community kitchens, as well as to supply the public school network and to be used in food baskets (...) (Silva, Grossi and França, 2010, p. 106)

By waiving highly bureaucratic competitive bidding for family farmers and their organisations, the state engaged rural people in a new, nested market. Indeed, public procurement is not merely a bureaucratic, neutral instrument and it is well known that the purchasing power of states can be used to leverage transformations (Edler and Georghiou, 2007; Sumberg and Sabates-Wheeler, 2011; Uehara, 2020). More importantly, public procurement is considered more effective in fostering innovation than other instruments, such as supply-side policies, as demonstrated by Guerzoni and Raiteri (2015) in a study comparing more than five thousand cases. For instance, supply-side policies such as rural credit, price and production insurance were part of the first generation of public policies for rural people in Brazil, which proved insufficient to cease the peasants' marginalisation.⁶⁸ The change in the procurement procedure for the FAP is considered its key instrumental innovation (Soares *et al.*, 2013; Regina Helena Rosa Sambuichi *et al.*, 2014; Uehara, 2020) – which was crucial to the formation of a new, nested market, exclusive to family farmers. The FAP addressed at least two instrumental freedoms, as per Amartya Sen (1999), serving as an economic facility to peasants and other smallholder family farmers; and as a form of a social safety net that helped reduce or prevent starvation, as in protective security (Uehara, 2020).

⁶⁸ See Chapter 3.

Embarking rural people into a food security strategy

The Food Acquisition Programme was created in 2003 when the relational state embraced some of the grand development challenges of the time: extreme poverty and hunger, which was then endorsed by the multilateral, United Nations Millennium Development Goals' call for halving hunger and poverty by 2015. Zero hunger and extreme poverty eradication were indeed flagship policies of three consecutive presidential mandates of *Partido dos Trabalhadores* (PT, Workers' Party), from 2003 to 2014: *Fome Zero* (Zero Hunger) with Luis Inácio Lula da Silva (2003-2010) and then '*Brasil sem miséria*' (Brazil without extreme poverty) under Dilma Rousseff's first presidential mandate (2011-2014). Brazil's *Fome Zero* (Zero Hunger) strategy aimed at bringing regular supplies of food and cash aid to Brazil's estimated 44 million living below the official poverty line (Hall, 2006; Rocha, 2009; Silva, Grossi and França, 2010; Schmitt, 2015). In order to do so, *Fome Zero* assembled a series of programmes in four axes of intervention, i.e. access to food; strengthening family farming; income generation; and fostering accountability and social mobilisation (Figure 17). Initially, its budget included a US\$ 400 million condition cash transfer programme (*Bolsa Família* programme), a \$125 million program to purchase food from family farmers (the FAP); a \$54 million health and nutrition program for the elderly, children, and nursing mothers to address illnesses caused by vitamin and micronutrient deficiencies; an expanded school feeding program (the National School Feeding Programme); a programme to monitor food intake; a food and nutrition education programme; and a food supply and distribution programme targeting low-income population in larger cities (Paarlberg, 2013, p. 39).

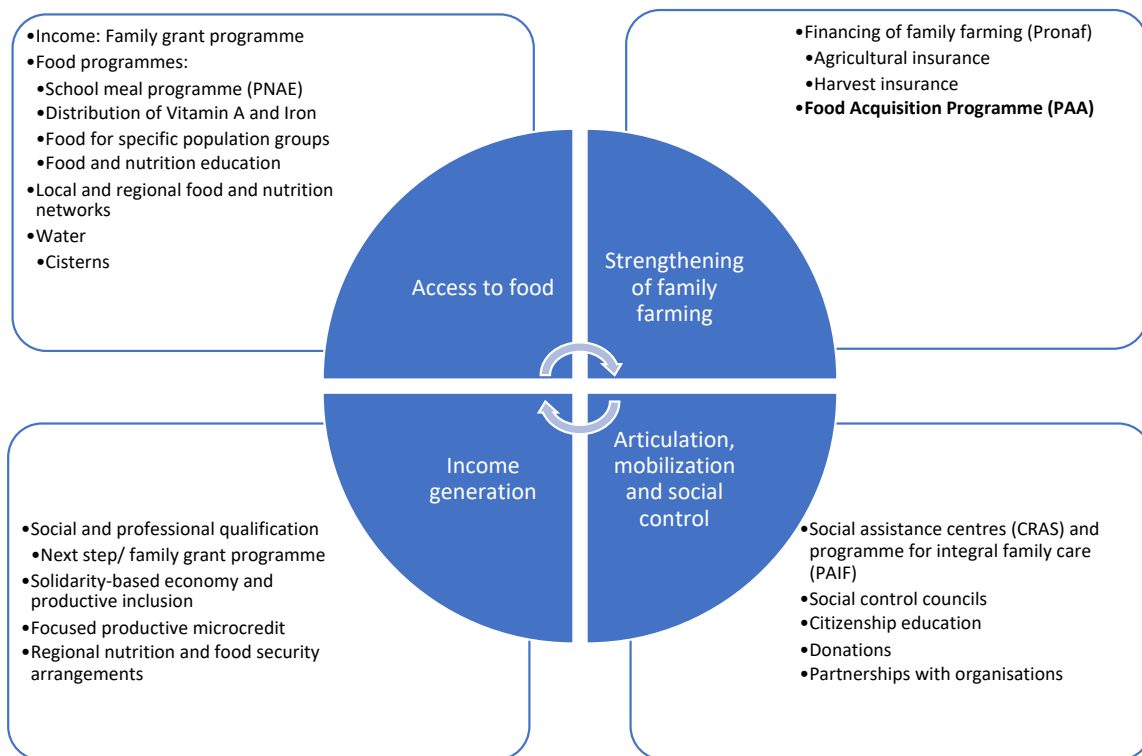


Figure 17. Brazil's Fome Zero strategy
Source: Adapted from Silva, Grossi and França (2010)

If most of the social safety net programmes of the *Fome Zero* strategy were already in place during Fernando Henrique Cardoso's presidency (1995-2002) – including, famously, the conditional cash-transfer programmes like Bolsa Família –⁶⁹ what made the *Fome Zero* strategy innovative was the combination of programmes run by several public organisations in close cooperation with civil society organisations, as highlighted in Chapter 3. As noted, the new forms of relationship between the state, academics, and civil society in the 1990s and 2000s allowed for a great deal of creativity in policy design to tackle issues on and around hunger, poverty, social and rural development. Initially, *Fome Zero* was a programme focussed on nutrition and food security, then part of a strategy to fight poverty, and finally a metaphor for inclusive socioeconomics policies (Paes-Sousa and Vaitsman, 2014). Later on, on the international sphere, *Fome Zero* was translated to Zero Hunger, and it has expanded to the global governance of food and agriculture, mainly through the United Nation Food and Agriculture Organisation (Qureshi, Dixon and Wood, 2015; Miranda *et al.*, 2017; Milhorange, Bursztyn and Sabourin, 2019).

Regulations and distribution conflicts

The inauguration legislation attributed the Food Acquisition Programme a single purpose: to encourage family farming (Lei number 10696 of 2003). It was only eight years later, during the first year of Dilma Rousseff's presidency, in 2011, that an amendment to the primary legislation specified seven purposes for the FAP. Lei no. 12512 of 2011, establishes the following purposes, in a free translation:

- i. To encourage family farming, promote their economic and social inclusion, promote sustainable production, food processing and industrialization and income generation.
- ii. To encourage consumption and the appreciation of food produced by family farmers.
- iii. To promote access to food in quantity, quality, and regularity necessary to people in food and nutritional insecurity, from the perspective of the human right to adequate and healthy food.
- iv. To promote food supply, comprising government food purchases, including school feeding.
- v. To constitute public stocks of food produced by family farmers.
- vi. To support the formation of stocks by cooperatives and other formal organisations of family farming, and
- vii. To strengthen local and regional circuits and marketing networks.

One year later, in 2012 – shortly after the conclusion of the Rio+20, the United Nations Conference on Sustainable Development – a secondary legislation, *Decreto* 7775 of 2012, added two other purposes to the FAP:

⁶⁹ Conditional cash-transfers such as *Bolsa Escola* for boosting school attendance, *Bolsa Alimentação* for maternal nutrition, along with *Auxílio Gás*, a cooking gas subsidy. All of these were merged into the rubric of *Bolsa Família* (family grant, stipend, or allowance, in a literal translation) which has been extensively researched. See, for example, a review by Veras, Ribas, & Osório, (2011).

- viii. To promote and value biodiversity and organic and agroecological food production, and encourage healthy eating habits in the local and regional level.
- ix. To encourage work in cooperatives and associations.

Social inclusion and sustainability were accommodated in the Food Acquisition Programme's primary legislation eight years after its inception, in 2011, with some particularisation in 2012 through a secondary legislation (*Decreto*). The amendments encourage social capital formation (through the encouragement of organisation of groups of people for a common purpose) and promote specific farming methods (i.e., organic and agroecological food production, which includes several techniques related to ecological, biodynamic, natural, regenerative, biological, agroecological, permaculture and others). Farmers have to have a proper certification – either in participative guaranteeing systems, by auditing, or by a social control organisation – as per the Organic Agriculture Act (*Lei* 10.831 of 2003). Nevertheless, despite the inclusion of some ecological and cultural aspects of the food system in the 2011 and 2012 legislation,⁷⁰ most of its expected effects did not occur because of the retrenchment phase.

In reality, the implementation of the Food Acquisition Programme and associated policies primarily focused on the provision of an economic facility for family farmers, designed in the first instance to tackle the systemic uneven distribution of economic benefits in the country. For instance, since 2008, within the FAP's scheme, family farmers have been exempted from paying taxes on the circulation of goods and services (ICMS)⁷¹ and exempted from contributing to the pension and social security system (the INSS, the National Institute of Social Security). However, the pricing mechanics of the FAP were not conducive to reduce ecological or cultural conflicts, as further discussed.

Subaltern voices mediated

Investigating the dynamics of the social network that created the Food Acquisition Programme, Muller, Silva, & Schneider (2012) concluded that neither bureaucrats nor direct representatives of social movements were central to the network. Instead, the central individuals in the formation of the FAP were the ones who sympathised and had good relationships with social movements representatives, according to the interviews conducted for this research. Several key-informants interviewed in this research endorsed this assessment, including representatives of a family farmers' union, government bodies, and the national council of food security, Consea.⁷² They reported that grassroots movements participated in important meetings that gave shape to the Zero Hunger programme and the FAP, but that the direct representatives of grassroots and rural social movements were not the most central actors in its conceptualisation. The key-informants interviewed for this research emphasised that academics and representatives of advocacy non-governmental organisations (NGOs)

⁷⁰ Encouragement of agroecological and organic production was part of tertiary legislation of the FAP since 2004 (i.e. Resolução 12/2004, GGPAA), then integrated to secondary legislation in 2012. In this case, primary legislation is a law (*lei*) approved by the Parliament and sanctioned by the President. Secondary and tertiary legislation are delegated, administrative legislation: secondary is sanctioned by President, and tertiary by a collective body of representatives of Ministries.

⁷¹ This is a value-added tax (VAT) collected by state governments that is partially redistributed amongst municipalities.

⁷² Consea, Conab, Ministry of Social Development, Contag, and MPA, the movement of smallholder farmers; personal communication, 2017; 2018

were the essential voices and central actors in the making up of the FAP within Consea, which confirms what was found by Muller, Silva and Schneider (2012).

In this sense, the Food Acquisition Programme can be seen as a policy devised within a state that was permeable to rural and other marginalised peoples' interests, and mediated by an apparatus that allowed for the participation of under-represented groups in policymaking. The evidence suggests that the FAP was not necessarily a grassroots-led innovation but rather an initiative mediated by the state with increased participation of NGOs, academics and the organised civil society. In policymaking, one can expect that the mediation of citizens' interests are likely changed (simplified, amplified or compromised) during its translation into ideas and policy solutions. The process of translation of ideas to policy is discussed below.

4.2.1 Disputing policy ideas

The network that conceptualised the Food Acquisition Programme widely supported the regulation of public procurement to create nested markets for family farmers. However, the final utility of the programme was disputed. After an investigation of the social network that designed the FAP, Muller et al. (2012) distinguished two groups: one group was focused on the role of the FAP in fostering economic dynamism, locally, and economic distribution: it viewed the FAP as a way to '*stimulate*' or '*encourage*' *the local economy*;⁷³ the other group viewed the programme as an *alternative development plan*, which would comprehend social justice and equity⁷⁴ in food systems and would be expansive to all domains of life besides the economy (Delgado and Theodoro, 2005; Muller, Silva and Schneider, 2012).⁷⁵

From equity and localism to marketisation

The evidence I collected from documentary analysis and interviews suggests that the group who viewed the Food Acquisition Programme as a mechanism to *encourage local economies* was linked to a prevalent idea of the time, framed within the 2000-2015 Millennial Development Agenda. Meanwhile, the group that viewed the FAP as a mechanism to promote *development with equity and justice* can be seen as linked up with ideas that were to some extent incorporated in the 2030 United Nations Agenda for Sustainable Development. Some scholars have emphasised how these agendas have lacked appreciation of local realities the geopolitical complexities, and pointing that principles of equity for sustainable development in a finite planet have not been thoroughly addressed (i.e. Hickel, 2019). Then, to what extent has the FAP embedded economic development and equity principles in its design and implementation? The FAP was created in 2003, and it has evolved ever since. The two

⁷³ This group was comprised of people with stronger ties with the *Fome Zero* programme and the Special Ministry of Food Security (*Ministerio Extraordinario de Seguranca Alimentar*) (Muller, Silva and Schneider, 2012).

⁷⁴ This second group was comprised of members of the national council for nutrition and food security (Consea), and the implementing agency (Conab) (Muller et al., 2012).

⁷⁵ The idea of promoting development with social justice and equity were not directly mentioned by any of the key-informants. However, some of them recommended the work by Delgado and by Muller as a reference to understand the origins of the FAP under the Zero Hunger umbrella.

original policy ideas are portrayed in the left side of Figure 18, referred to as ‘original visions’, i.e., ‘stimulate the local economy’ and ‘development with social justice and equity’.

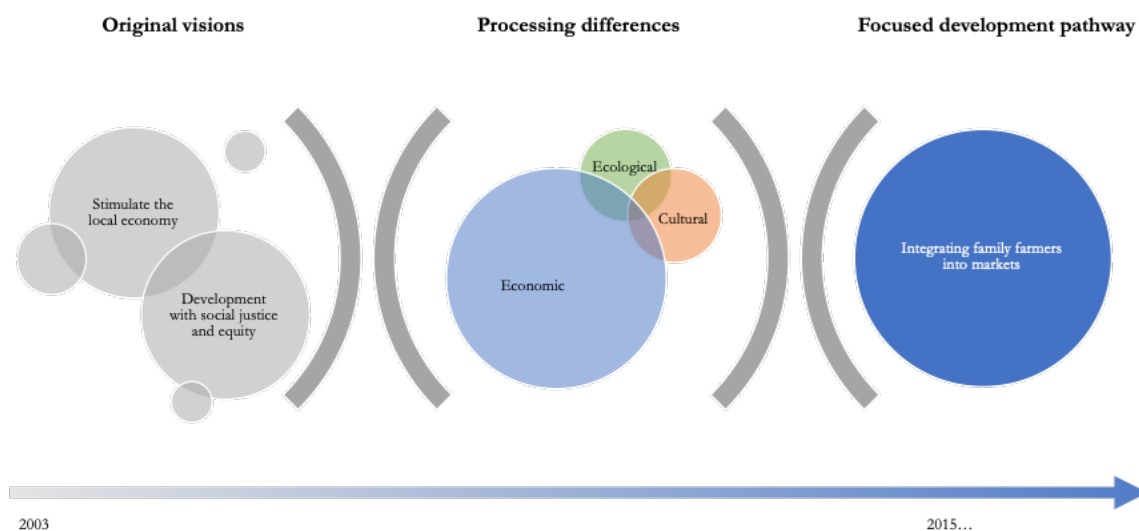


Figure 18. Translating policy ideas into the Food Acquisition Programme.

Evidence from primary interviews and the literature suggests that original policy visions were not effectively combined once their differences emerged and clashed. The critical difference in the visions was that *development with social justice and equity* required a more significant paradigm shift than *stimulating the local economy*. Unsurprisingly, the latter, more conventional approach focused on economic development, prevailed (see ‘processing differences’ in Figure 18). Throughout time, the original ideas were negotiated, mainly under the umbrella of Consea, in processes that would primarily focus on economic differences. Hence, the development pathway mediated by the Food Acquisition Programme became one which primarily encouraged the integration of rural peoples into markets (see ‘focused development pathway’ on the right side of Figure 18). This research did not try to identify when, precisely, this shift occurred. However, this likely occurred in the very beginning of the FAP, in its four to five initial years (2003-2007), when the Worker’s Party converged to alliances with centre to centre-right parties, which was conducive to the establishment of an ‘ideologically moderate’, ‘accommodated’ and ‘adapted’ central government, according to Amaral (2010).

Market integration became (and remains) a central discourse about the relevance and expected long-term legacy of the Food Acquisition Programme, as per the key informant interviews. The discourse of market integration is perhaps the remaining hope for policymakers in Brasília, amidst Brazil’s current polity, when they attempt to make a case for the continuation or re-establishing a robust FAP. As discussed in Chapter 3, the Brazilian polity since 2016 has been mostly dismissive of the poor. Therefore, trying to make a case for a FAP

anchored in ‘poverty alleviation’, ‘zero hunger’ or an ‘alternative’ or ‘inclusive’ model of development (one which is embedded in ideas of equity and justice) would unlikely resonate well within the prevailing political/social basis of the state. On the other hand, a discourse based on markets, its expansion, and peasants’ transformation into farming entrepreneurs integrated into markets blended well with the dominant policy discourse embedded in constitutional austerity.

Economic facilities for (the accommodation of) the poor

Consequently, the Food Acquisition Programme became a function of provision of economic facilities for rural peoples, which is one of the kinds of ‘instrumental freedoms’ proposed by Amartya Sen (1999). While seemingly positive, this can also be regarded as essentially accommodationist. For instance, David Harvey posits that neoliberal economic imperatives have been mixed with ‘alleged’ humanism ‘in the name of freedom’ (Harvey, 2005, p.208). Following Harvey, the FAP has progressively lined up with a system of support of the continued expansion of neoliberalism, in its accommodation of the poor and marginalised not only as consumers but also as producers. Admittedly, according to a member of Consea⁷⁶, the FAP was thought of in a much broader and more strategic way than it was implemented in reality (Muller, Silva and Schneider, 2012). This research refers to the development idea of market integration as the ‘pedagogy of marketisation’.

4.2.2 Commodifying rural peoples

Pricing is one of the main, if not the dominant, feature of tertiary legislation of the Food Acquisition Programme: the word ‘pricing’ (*preço*) appears 158 times in the compiled legislation from 2003 to 2018 (BRASIL Conab, 2018). The FAP’s benchmark price followed the standards of free markets, which is ruled by commodity exchange prices, then adjusted to current local or regional market prices. Initially, in 2003, the local/regional average price would be the cap for the FAP (i.e. Resolução no. 6 of 2003, GGPPA). However, the average local/regional market price soon became the standard, no longer a cap. Pricing for organics also followed the market price.

Ecological and cultural differences had only an indirect or secondary influence in shaping the Food Acquisition Programme. For instance, the participation of organic and agroecological production in the FAP has been low. From 2007 to 2015, the participation of organics was about two percent, varying from one and three percent (BRASIL MDS, 2014; Sambuichi *et al.*, 2017). In 2018, the government announced that the participation of organics in the FAP had raised to six percent (BRASIL MAPA, 2019a); however, in absolute terms, the spending on organics fell 3,5 times in five years: from R\$13.4 mi in 2012 to R\$3.8 mi in 2018 (BRASIL Conab, 2019c; BRASIL MAPA, 2019a).⁷⁷ Nehring and McKay (2013) had once verified that family farmers in the states of Piauí and Ceará, Northeast Brazil, were not aware that organic or agroecological produce could benefit from a premium price. Also, Blesh & Wittman (2015) have associated the FAP with a shift towards organic production in

⁷⁶ Who had sided with a development paradigm shift towards equity.

⁷⁷ While the total budget of the FAP fell by 9 times, from R\$ 586.6 mi in 2012 to R\$ 63.3 mi in 2018.

rural settlements in Mato Grosso, which is a particular case in which an important movement, the *Movimento dos Sem Terra* (the landless workers' movement), a member organisation of *La Via Campesina*, had a strong influence.

The constant low participation of agroecological or organic products in the Food Acquisition Programme is clear evidence that several years of programme's implementation did not encourage production (or transitions towards) ecological agriculture. Just two percent of the programme's budget was spent on organics. The remaining 98% were allocated to procuring food most likely to contain residues of (if not contaminated by) pesticides and other chemicals grown on non-differentiated farming systems. This is the opposite of what a food sovereignty strategy – which was part of the founding ideals of the FAP – would pursue. When it comes to commercialising food, and within the FAP's procedures, the evidence found in this research can suggest that the burden of proof has been put on the side of agroecological and organic producers.

Reasonable prices for organics, even better for non-organics

This was further substantiated in the interviews. Key informants widely acknowledged that the pricing mechanics of the Food Acquisition Programme was one of the factors that impeded the effective promotion of organic and ecological agriculture. As noted by peasants, a prime reason for this is that the FAP's 'premium' price for conventional agriculture was perceived as better than the premium price for organic and agroecological production. A peasant in Angatuba explained:

Without the FAP, I would sell conventional cabbage [chemically farmed] for R\$0,10 per head to intermediaries, but I could make R\$1,00 per organic head sold directly in the farmers' market.⁷⁸ With the FAP I can make R\$1,00 per cabbage head produced with all sorts of agrototoxics (sic), or R\$1,30 for an organic cabbage head. You make the calculation... It does not pay to produce organics... It is very complicated to get those [organic] labels. (Man, 51, Angatuba-SP)

The logic is simple: the Food Acquisition Programme has rewarded a higher premium for produce farmed with unknown methods than for certified organics. In this particular case, the government through the FAP would pay a 900% premium for chemically farmed cabbage or a 30% premium for organically farmed cabbage, when compared to locally available markets. Moreover, this does not factor for the costs of organic certification required by the national legislation. Sambuichi *et al.* (2017) have also revealed that family farmers note that FAP prices for organics are lower than what they could obtain in free markets. Not only that, several agroecological practices are not verified nor certified, then paid as conventional, industrial produce (see, for example, Sambuichi *et al.*, 2017). Sustainable harvested fruit, mostly Amazonian fruit (such as açai, babaçu, bacaba, bacuri, buriti, cacau, cagaita, caju, cupuaçu, graviola, jambu, murici e pupunha) have been acquired by the FAP but paid as conventional (non-agroecological) – mainly because they were not certified (Sambuichi *et al.*, 2017), and thus not verifiable by the way the state sees things.

⁷⁸ The standard (non-nested) commercialisation channel for ecological agriculture is often shorter (and fairer) than commercialisation channels for industrial agriculture, which tend to accumulate/consolidate profits away from producers (mostly benefiting intermediaries/middlemen, the food industry and retailers). See, for example, Abreu *et al.* (2012).

The burden of proof on ecological agriculture

Conventional (non-organic) produce is exempt from checks, but organic production must be officially verified and certified under Brazilian legislation. The process of organic certification is costly, highly regulated and controlled by the state (Santos *et al.*, 2014; BRASIL MAPA, 2019a). In Brazil, there is common agreement that it is easier to gain regulatory approval for synthetic fertilisers and pesticides than to obtain certification for organic produce (Coelho *et al.*, 2019; Gonzales, 2020): in 2019 alone, the central government approved the registration of 474 new pesticides, the highest number in 14 years, and pesticide imports broke a record, with almost 335,000 tons of pesticides purchased in 2019 (Gonzales, 2020). On the other hand, organic farming in Brazil, particularly for family farmers, have a series of barriers such as lack of technical assistance, limited credit, a costly certification process, even when done through participatory means, and a general lack of knowledge by family farmers about the marketplace, certification, and agroecological techniques (Vriesman *et al.*, 2012; Moraes and Oliveira, 2017). Agroecological production has received less support than organic production since the state has no means for verifying agroecological practices beyond the basic standards of organic production.

Regulations and the implementation of the Food Acquisition Programme have not facilitated or encouraged organic or agroecological production at scale. For instance, if a community of rural people opted for agroecological or organic production, they would have to face extra burdens. Firstly, they would have to face a costly certification process of organics, or otherwise, accept low prices for their produce. Secondly, they would have to accept that the premium they would receive for their organics is not as good as the premium they would receive to supply conventional, industrially farmed produce to the FAP. That is to say, although the FAP pricing mechanics has contributed to making fairer payments directly to family farmers, it has failed in shifting the bulk of incentive from industrial to ecological farming. This is a piece of evidence that while the FAP worked well to level up the distribution of economic benefits, it has overlooked ecological and cultural distribution conflicts – to use Escobar’s language. As seen, the benefits of cleaner, healthier and more sustainable production, alongside with the additional inputs of knowledge and labour into organic and agroecological systems, are not reflected in the pricing mechanics of the FAP. In this sense, one could say that the FAP allowed organic and agroecological production but mostly encouraged conventional (chemical, industrial and financial) modes of agriculture.

4.3 The pedagogy of marketisation

Many of the interviewees pointed to the emergence of a compelling narrative about the role of mediated or nested markets established by the state as an ‘education pathway’ for rural peoples. Under this narrative, rural peoples with limited participation in markets are assumed to need encouragement to achieve increased integration. In this narrative, the Food Acquisition Programme would be the first step to leverage rural peoples into markets, thus helping them to ‘develop’ economically. As evidence, the hope that the FAP would launch peasants into markets and transform them into rural producers was expressed in interviews with key agents of the central government – including a policymaker responsible for the allocation of most of the programme’s budget (from the *Ministério do*

Desenvolvimento Social, MDS, Ministry of Social Development, currently integrated to the Ministry of Citizenship), and a policymaker in charge of programme’s implementation (from Conab, the Agricultural Supply Agency).⁷⁹ This narrative was also endorsed in a news story published by the Ministry of Agriculture, Livestock and Supply (*Ministerio da Agricultura, Pecuaria e Abastecimento*, 2019), in which a representative of a regional agricultural planning and extension service (Emater-DF, *Empresa de Assistência Técnica e Extensão Rural do Distrito Federal*) expressed the following:

We understand that the Food Acquisition Programme is a school. Through the FAP, a producer begins to make the first sale with an invoice, begins to process the product, and starts to understand the market. (Blaiton Carvalho, in Brasil MAPA, 2019, in a free translation).

In this development narrative, reforms in food procurement have a pedagogical, education or training utility. The education process would follow a relatively linear training pathway, which envisioned rural peoples integrated into competitive markets. This research refers to this narrative as ‘the pedagogy of marketisation’. In this narrative, the state – through nested markets – tries to ‘teach’ skills to enable rural people to thrive in free markets (non-nested markets). A heuristic of the ‘pedagogy of marketisation’ is illustrated in Figure 19. The baseline of this pedagogy is the understanding that peasants are loosely connected to markets, and a normative analysis, which has been prevalent in policy discourses, prescribes the accommodation of the poor and marginalised as consumers and producers amid a neoliberal framing, as discussed in the previous section.

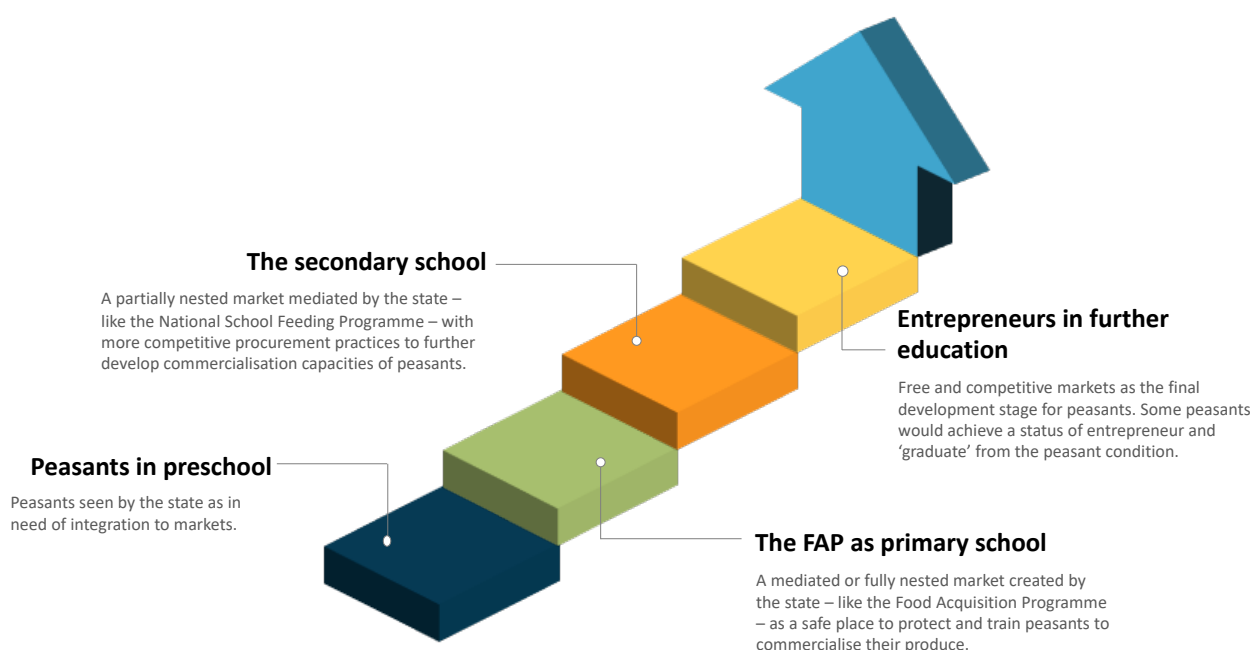


Figure 19. A ladder for market integration in the ‘pedagogy of marketisation’.
Source: Author’s own analysis. Design adapted from PresentationGo.com

⁷⁹ Personal communication with Lillah Rahal, former deputy Secretary of the Ministry of Social Development, and Tiago Horta and Gustavo Viegas, coordinators for the FAP at Conab, 2017.

The Food Acquisition Programme would act as the ‘primary school’, in which rural people participate in a lenient form of procurement – a fully nested market mediated by the state – that allows flexibility in contract negotiations and delivery terms. The FAP, for instance, does not directly penalise those who fail to deliver, or just decide not to deliver.⁸⁰ For example, a farmer may not manage to produce surpluses in a particular harvest – so their food security can be prioritised rather than deliveries to the FAP. Wilful misconduct and bad faith would be sanctioned as usual, as per the legislation. That is to say, just like in primary school, the FAP provides a safe place: a fully-nested market in a protected environment. As noted, the FAP is a fully nested market since it shows all features of newly emerging, nested markets, as per Van der Plough et al. (2012, p.140), i.e., 1) a clear price differential; 2) a different distribution of value-added, resulting in a higher price for farmers; 3) a different infrastructure; 4) a different location of transactions in time and space, and 5) a different governance pattern. Through the FAP, rural people would be expected to learn lessons that would help them compete in more complex markets.

Having acquired some commercialisation skills, the theory of the ‘pedagogy of marketisation’ included a ‘secondary school’ with programmes such as the *Programa Nacional de Alimentação Escolar* (PNAE, the national school feeding programme). PNAE provides a daily meal for more than 40 million students enrolled in public schools, which corresponds to over 20 percent of the Brazilian population (BRASIL FNDE, 2016; Machado *et al.*, 2018), with a budget of R\$3,9 billion in 2019 alone (US\$1,5 billion PPP).⁸¹ Since 2009, family farmers have enjoyed a preferential status in the procurement of school meals (Schmitt et al. 2015), with at least 30% of the PNAE transfers from the central government to subnational governments having to be used to procure food from family farmers (Lei N° 11947 of 2009). The PNAE is older than the FAP, but it was the experience with the FAP that made policymakers in Brazil to establish in 2009 that PNAE’s public bidding procedure should be avoided for the procurement of food from family (Swensson, 2015). Compared with the Food Acquisition Programme, PNAE has stricter procurement standards regarding quality control, frequency of delivery and often pay less than the FAP (Oliveira, Batalha and Pettan, 2017; Wittman and Blesh, 2017). The FAP and the PNAE are both institutional markets mediated by the state, but the PNAE is a market that is relatively more complex than the FAP.

Marketisation has been the default development pathway and current narrative imagined and disseminated by state agents interested in bettering rural livelihoods. This narrative has prevailed since the early years of the Food Acquisition Programme, and got stronger under the first mandate of Dilma Rousseff (2011-2014), when ‘productive inclusion’ became part of the macro-strategy of the nation under the slogan ‘*Brasil: País rico é país sem pobreza*’ (Brazil: Rich country is a country without poverty). Nested markets mediated by the state can indeed serve as channels for ‘productive inclusion’ (see Mariotti, Ulrichs and Harman, 2016), since it can change the terms of engagement with the local economy (facilitating access to a nested market) and provide higher returns to capital and labour. In 2020, the FAP remained framed as a governmental ‘action’ for the ‘rural productive inclusion’ of the most impoverished families (in a literal translation from *inclusão produtiva rural das*

⁸⁰ This could happen, for example, in the case of a harvest fail, or any other decision made by the family farm.

⁸¹ Liberações, *Consultas Gerais*, <https://www.fnde.gov.br/sigefweb/index.php/liberacoes>, access in 2 Aug. 2020.

famílias mais pobres), as in communications by the *Ministério da Cidadania*.⁸² ‘Productive inclusion’ is often proposed as a way to ‘graduate the poor out of social assistance’, even though there is little evidence regarding the long-term impacts of large-scale, government-led productive inclusion programmes (Rigolini, 2016). In the Brazilian case, the hope was that the ‘pedagogy of marketisation’ would contribute to the economy, without necessarily considering potential drawbacks, such as reducing their long-term resilience and autonomy.

In brief, the rationale for the ‘ladder of market integration’ is that a series of new, nested markets – mediated by the state – would help to transform peasants (marginal to markets while focused on self-provision) into competitive agricultural entrepreneurs operating in open markets. The main problem is that assumptions of this theory of change are not necessarily validated. For instance, there is no clear evidence of the long-term impacts on economic and non-economic indicators, such as in the autonomy individuals and communities could enjoy and on wellbeing indicators.

A pedagogy for autonomy or dependence?

The relevance of this view/narrative has become increasingly dominant under current political circumstances. As discussed in Chapter 3, civil society participation and influence through Consea was most successful during Lula’s presidency (2003-2010) but had declined throughout Rousef’s and Temer’s mandates (2011-2018), until it was terminated under Jair Messias Bolsonaro’s presidency (2019-). If programmatic or policy retrenchment has been in place since 2013, institutional retrenchment informed Bolsonaro’s first executive act to terminate Consea’s activities in 2019. Since then, the voices and visions of rural peoples have been largely dismissed as a result of *institutional retrenchment*, which is associated with authoritarian and less transparent governments (see Elmelund-Præstekær and Klitgaard, 2012). With the closing down (or reduced permeability) of the state to the struggle of marginalised populations, the ladder of market integration in the ‘pedagogy of marketisation’ is fundamentally the current, mainstream narrative that frames the Food Acquisition Programme.

One could argue the pedagogy of marketisation, as articulated by the relational state, is a patronising narrative that infantilises rural peoples and exact on them a neoliberal world view void of diversity – a view that sees them as unsophisticated, undesirable or underdeveloped: a view that promotes lifestyles which are known to be unsustainable while ignoring diverse cultures and ecologies, and their contribution to food security, job creation, efficiency in capital utilisation, agro-diversity and environmental stewardship, as discussed in the first section of Chapter 3. This view fits into and is consistent with the interests of the corporate food system, which understands that peasants need to be encouraged to join the current food system as a positive outcome for society or give room to financial and industrial modes of agriculture. In this narrative, the rural poor’s solution is to steer them to go to the markets without necessarily caring for their self-sufficiency and struggle for autonomy. Furthermore, this is a place in which a class struggle combines with identity politics in global capitalism. Indeed, peasants in the global South have been further marginalised and impoverished primarily due to the financialisation

⁸² Brazil, Ministério da Cidadania. Programa de Aquisição de Alimentos. Available at: <https://www.gov.br/cidadania/pt-br/acoes-e-programas/inclusao-productiva-rural/paa>. Latest access 2 Aug. 2020.

of land and nature and the high levels of subsidies and overall state support to the ‘family farming sector’ in the global North (see, for instance, Altieri and Toledo, 2011; Paarlberg, 2013).

The Food Acquisition Programme as a modernisation project

This chapter has examined tensions in the negotiation of policy ideas which led to the compromised evolution and implementation of the Food Acquisition Programme. The tensions have primarily concerned the nature of the impact that a programme such as the FAP could have on individuals and communities: Would it help rural peoples develop economically? Would it contribute to local and regional economic development? Would it serve as a paradigm shift towards development processes based on equity and sustainability principles? As discussed, the programme evolved emphasising marketization and correcting economic distortions of global capitalism, contributing to alleviate some of the economic predicaments of rural peoples. The Food Acquisition Programme, therefore, has successfully acknowledged some of the uneven distributive effects of the corporate food regime for the economies of rural peoples. This chapter argued that the state has largely considered cultural and ecological differences of the rural world, particularly those associated with the peasant condition which does not necessarily benefit from strong ties or dependence on markets (see Chapter 3). As discussed in this chapter, the FAP ended up as an instrument that would not always promote food sovereignty or the autonomy of peasants. Not only that, the FAP has largely failed to encourage environmentally-sound farming practices. This is of particular concern in the long-run, since it may lead to the transformation of place-based, local cultures into cultures that increasingly resemble dominant modern cultures. This is fundamentally what Escobar (2006) problematised for how cultural and ecological differences are not thoroughly appreciated.

Resisting global capitalism, keeping modernism

The Food Acquisition Programme’s implementation focused on enabling economic distribution by creating a nested market exclusive to family farmers. By doing so, its implementation tried to mitigate some of the economic inequalities engendered by global capitalism. Indeed, increase in income levels has been the most commonly observed outcomes of the FAP (Soares *et al.*, 2013; Assis, Priore and Franceschini, 2017; Romualdi, 2019; Sambuichi *et al.*, 2019).⁸³ While trying to resist global capitalism, the FAP kept loyalty to tricky paradigms: of reductionist science and technology, which negates ecological processes and differences; and of dominant modernity (modern colonial world system), which negates cultural differences and conducive to mass consumption.⁸⁴

The Food Acquisition Programme implementation was indeed designed with a broad understanding of place-based struggles but evolved within a narrower framework of the modernisation theory, which frames development and poverty through the prism of economic growth and technological advancement.⁸⁵ As Escobar

⁸³ See also Romualdi’s (2019) literature review on the impacts of FAPs.

⁸⁴ See Chapter 1 on Theoretical Frameworks, particular Escobar’s Political Ecology of differences framework

⁸⁵ The modernisation theory includes Rostow’s stages of logic of stages that would lead to an age of high-mass consumption. See Rostow, W. W. (1960). *The Stages of Economic Growth: A Non-Communist Manifesto*. Cambridge: Cambridge University Press.

puts it: attempts to account for economical processes is a ‘worthy aim to some extent, but it contributes to consolidate neoliberal market-driven ideologies of environment and development’ (Escobar, 2006, p. 9), and these attempts have been associated with the destruction of diverse cultures in favour of a Westernised one. Therefore, this chapter concludes that Brazil’s Zero Hunger FAP converged into a modernisation project of ‘sustainable’ capitalist rural development. Sustainability appears in inverted commas to allude to its weak form – ‘weak sustainability’ – in which natural, human and social capital are interchangeable with (even replaced by) human-made capital, such as manufactured and financial capital. Again, resorting to some of Escobar’s words, the FAP tried to deal with some of the economic externalities associated with economic processes ‘without altering in any significant way the current parameters of the market, the capitalist economy and, in the last instance, modernity’ (Escobar, 2006, p. 9). The Food Acquisition Programme was one of the first of its kind: it has been transformed throughout the years following changes in the Brazilian polity. As a theoretical construct, the idea of nested markets could benefit when viewed at perspective, for instance, using complementary lenses such as Escobar’s Political Ecology of differences. Future policy interventions should take class- and place-based struggles into account.

Chapter 5 Contrasting rural worlds

It has been argued above that public policies for rural development have largely lost sight of the ecological, cultural and even economic differences that characterise the vast and diverse rural world in Brazil. As noted, the Food Acquisition Programme has been over-simplified, with the modernising ‘pedagogy of marketisation’ overshadowing ideas of social justice and food sovereignty. In order to explore a range of contrasting levels and context-specific set of predicaments of the peasantry, this chapter and the next two contribute to this thesis with thick descriptions of differentiated contexts, differentiated livelihood pathways and prospects, and differentiated wellbeing levels, which are observed in locations of contrasting social vulnerability and human development levels, as well as by demographic groups. This chapter will show some of the key livelihood resources and marketing channels available to rural people in the municipality of Careiro da Várzea in the state of Amazonas (AM), and in the municipality of Angatuba in the state of São Paulo (SP),¹ both locations where the FAP has recently undergone significant retrenchment.

The main purpose of the analysis is to understand the extent to which the peasant condition, as discussed in Chapter 3, applies to rural people in different locations. Besides documentary analysis and 21 key-informant interviews, this chapter drew on 42 focus group discussions with family farming units, walking interviews, and 78 individual surveys. The results of the quantitative and qualitative analyses are integrated into a composite analytical piece rather than in a serial form, in an attempt to make it easier to compare and contrast several issues between and within cases. In the first section of this chapter, this research examines indicators of human development and social vulnerability, and characterises physical and cultural geographies, demographics and the support networks available to rural people in Careiro da Várzea and Angatuba. The second section focuses on economic facilities, such as land tenure, income levels and technical assistance, which were found to be associated with educational opportunities, marketing channels, bartering, systems of self-provision, shorter and longer supply chains through intermediaries and the agribusinesses are characterised in the third section. Some of the uniqueness in cultural, environmental and economic diversity of the rural world become evident at this stage in the analysis. The final section of this chapter considers the extent to which the sampled rural peoples can be described as peasants. This is presented alongside a rough heuristic summarising what was found to be the levels of family farmers’ access to a range of capitals in the early years of constitutional austerity.

¹ A ladder of Social Prosperity is proposed by the National Institute of Applied Economy (IPEA), which is a combination of the Social Vulnerability Index (SVI) and the Municipal-Human Development Index (M-HDI). This ladder of social prosperity comprises nine categories, ranging from very low to very high prospects for social prosperity (IPEA, 2015). Careiro da Várzea (AM), and Angatuba (SP) fall in the extremes of this ladder. Please refer to Chapter 2 for details on methodology.

5.1 Geographies of vulnerabilities and development

Differentiated processes of occupation, exploitation and development have led to the emergence of a financially rich, economically diversified but highly deforested South and a financially poor, largely agrarian, environmentally threatened but ecologically still relatively well-preserved North. Clearly, regional differences in terms of vulnerability and human development potential are shaped by ecological, economic, social and political factors. Figure 20 and Figure 21 illustrate some of the differences found in the Brazilian countryside. The first picture was taken from the waterways of the Amazonian floodplains, in Careiro da Várzea, and the second from a dirt road in Angatuba, São Paulo.



Figure 20. A typical landscape in the floodplains of Careiro da Várzea, Amazonas.
Photo: Personal Collection (2018).



Figure 21. A typical landscape in the countryside of Angatuba, São Paulo.
Photo: Personal Collection (2018).

These landscapes reflect local geographies and the political economies that gave shape to patterns of production, capital accumulation, and thus regionally differentiated development of infrastructure and social opportunities in the South and in the North. For detailed cultural and historical studies, Brandão (1983) and Candido (2010) offer a thorough overview of the occupation and culture of the countryside of the state of São Paulo, while Lisboa's dissertation (2008) offers a sociological account of the occupation of Angatuba, with particular emphasis on social differentiation in the countryside. A thoughtful account of poverty in rich Amazonian ecosystems can be found in Guedes et al. (2012) and Ioris (2018); and a historical and geographical account of Careiro da Várzea from its formation and development up to the end of the 20th Century can be found in Sternberg (1998). Rather than detailing history, this research opted for a broader interdisciplinary framework, bringing together a wider range of disciplines and knowledge perspectives, including geography, demography, sociology and economics.

Amazonas (AM) is the Brazilian state with the highest prevalence of municipalities with very high social vulnerability (IPEA, 2015). Careiro da Várzea is one of such *municípios*, which is not only distant from centres of power, but also particularly challenged regarding infrastructure, education, with limited opportunities and capacities for people to create and find jobs: in brief, Careiro da Várzea is a site of '*very low prospects for social prosperity*' (IPEA, 2015), with a low municipal-Human Development Index (HDI), of 0.568 in 2010, when it was last measured (PNUD, 2013b). The state of São Paulo (SP) is positioned at the other extreme of this spectrum, with the municipality of Angatuba classified as a location of '*very high prospects for social prosperity*', with low index of

social vulnerability (IPEA, 2015) and a high municipal HDI, of 0.719, in 2010 (PNUD, 2013a). São Paulo state is considered a prime example of development in Brazil, with good infrastructure standards and social opportunities.

Table 12 abridges key indicators of social vulnerability and human development for both municipalities and for Brazil as a whole.

Table 12. Social vulnerability and human development indicators.

Dimension	Careiro da Várzea (Amazonas)	Angatuba (São Paulo)	Brazil
Social Vulnerability Index (SVI) (0-1)	0.603	0.227	0.326
Social vulnerability for infrastructure	0.710	0.092	0.295
People in households with inadequate water supply and sewage	72.60%	0.60%	6.12%
Population living in urban households without garbage collection services	11.29%	0.38%	2.98%
People living in households with per capita income lower than half of minimum wage (2010) and that spend more than an hour to commute to work	15.28%	3.78%	10.33%
Mortality, up to 1 year old (1/1000)	20.70	15.40	16.70
Social vulnerability for human capital	0.595	0.335	0.362
Children of 0 to 5 years old who do not attend school	71.57%	55.59%	56.85%
People aged 6 to 14 who do not attend school	5.15%	1.73%	3.31%
Women aged 10 to 17 years who had children	5.56%	4.87%	2.89%
Mothers heads of household, without elementary school completed, and with a child under 15 years old	31.94%	12.04%	17.23%
Illiteracy rate age 15 years and over	16.46%	6.63%	9.61%
Children living in households where none of the residents have completed elementary education	48.88%	24.86%	30.39%
Social vulnerability for income and occupation	0.505	0.256	0.362
People aged 15 to 24 who neither study nor work, with a household income per capita equal to or less than half the minimum wage (2010)	24.75%	9.92%	11.61%
People with per capita household income equal to or less than half a minimum wage (from 2010)	75.23%	23.75%	32.56%
Unemployment rate of the population aged 18 years or over	4.44%	4.68%	7.29%
People 18 years of age or older without elementary education and in informal occupation	63.86%	37.79%	35.24
People in households with income per capita less than half of minimum wage (from 2010) and dependent on the elderly	3.89%	1.24%	2.42%
Activity rate of people from 10 to 14 years old	13.67	7.38	7.38
Municipal Human Development Index (M-HDI) (0-1)	0.568	0.719	-
Longevity M-HDI	0.779	0.827	
Life expectancy at birth (in years)	62,31	74,60	
Education M-HDI	0.450	0.648	-
Population aged 18 or older who graduated from primary school	34,09%	47,30%	
Population aged 5 to 6 years attending school	86,43%	100,00%	
Population aged 11 to 13 years in the final year/graduated from primary school	72,45%	91,55%	
Population aged 15 to 17 years graduated from elementary school	34,16%	66,62%	
Population aged 18 to 20 years graduated from secondary school	13,91%	44,91%	
Income M-HDI	0.523	0.693	-
Per capita income (in R\$)	R\$ 207,18	R\$ 597,99	

Source: Adapted from IPEA (2015; 2010 data)

5.1.1 Careiro da Várzea and the Amazonas' ribeirinhos

Careiro da Várzea is a municipality in the Amazon basin, in the state of Amazonas (AM), Northern Brazil, at 3°13'15"S 59°49'33"W. It lies 25km Southeast of Manaus, the state capital, across the river Amazonas, in the largest tropical forest in the world. Highly biodiverse, the Amazon offers a wealth of resources and services to society – from agricultural and timber commodities to carbon storage, climate resilience, fresh water and river flows regulation, biodiversity, rare languages and cultures (Fearnside, 2006; Foley *et al.*, 2007; McAlpine *et al.*, 2009; Schroth *et al.*, 2015). The landscape of Careiro da Várzea is continuously transformed by annual floods, which result from a tropical monsoon climate.² Annually, after heavy seasonal rainfall, the rivers overflow from six to twelve meters for periods of up to eight months, with floodplains (or *várzea*) covering 80 percent of its territory (Castro *et al.*, 2009). Despite this instability, the floodplain is one of the most inhabited and farmed areas of the Amazon basin, thanks to its navigability and nutrient-rich sediments brought over by the floods (Pinedo-Vasquez and Sears, 2011; Schor and Azenha, 2017; WWF, 2019; Yale, 2019). A fertile floodplain is normally available for seasonal agriculture, from August to January, with naturally occurring pastureland (Sousa, Rocoda and Araujo, 2014). Farming is indeed the main component of the municipal economy, accounting for 54 percent of the 2016 gross value added at current prices (R\$156M), while services account for 43 percent and industry for three percent in 2016 (IBGE, 2019b). The industry contribution has remained stationary in the past five years or so, while both farming and services sectors have grown (IBGE, 2019b).

Refugees rather than indigenous peoples

Amazonian family farmers have sometimes attempted to replicate forms of resource-use that characterised their indigenous predecessors, but they have few significant cultural continuities with indigenous peoples (Nugent, 2002, p. 173-4).³ Indeed, the Amazonian peasantries has been described as being chiefly made up of 'refugees from other quarters of the colonial project' (Nugent, 2002, p. 173). By the end of the 19th Century, vulnerable people and refugees migrated to the Amazon, following the declining plantation economy of the Northeast and taking advantage of land distributed by the governor of the Amazonas province (Sternberg, 1998). At first, the unstable conditions of the Amazon wetlands, particularly the annual floods, drove some of the migrants away, but those who remained soon came to appreciate the great fertility of the flooded soil, which eventually attracted more people to Careiro da Várzea (Sternberg, 1998). That is to say, the state sponsored the relocation of vulnerable populations from one site of high social vulnerability to a remote site of equivalent if not greater vulnerability, in the heart of the Amazon (Fearnside, 1984; Godfrey, 1990). The Amazon was an environment alien to hopeful newcomers. The relocated, or displaced populations, however, could not rely on infrastructure or social programmes. In fact, the newcomers got little to no support from the state throughout the

² Tropical monsoon climate (Am), or tropical wet climate.

³ The contemporary 'Indian' population of Brazil as a whole (with the majority living in Amazonia) is around 300,000 (out of a national population of 160 million), who live in relative isolation in remote interfluvial areas' (Nugent, 2002, p. 164). While this study acknowledges indigenous populations have struggled for autonomy, perhaps to a greater extent than the peasantry, this research opted to focus on peasants, who also face a series of differentiated challenges.

20th century (Castro *et al.*, 2009; Schor and Azenha, 2017), as discussed in Chapter 3. Figure 22 illustrates a typical local stilt house and Figure 23 a fisherperson.



Figure 22. A typical household in Careiro da Várzea, Amazonas.
Source: Personal Collection (2018)



Figure 23. A fisherman in the Amazon floodplains.
Source: Personal Collection (2018)

The Amazonian floodplain peasants are known as *ribeirinhos*. They have engaged in multiple management and extractive activities, such as selective logging, fisheries, non-timber products, pastoralism and agriculture (Castro *et al.*, 2009; Pinedo-Vasquez and Sears, 2011). Previous studies show that *ribeirinhos* have produced for their own consumption (Schor and Azenha, 2017), but they have also intermittently accessed markets. Not only that, beyond farming, the *ribeirinhos* have also engaged in wage-labour and non-farming activities (Nugent, 2002). In Careiro da Várzea, most families not only farm, fish and harvest but also engage with nonfarm wage such as transporting school children by boat, cooking meals for school children, teaching, studying, retailing, and providing community services as health agents and community leaders.⁴

5.1.2 Angatuba and caipiras in São Paulo

Angatuba is a municipality in the Paraná river basin, in the state of São Paulo (SP), Southeast Brazil, at 23°29'24"S 48°24'46"O. Angatuba is located 214Km West of São Paulo city, the state capital, at around the latitude of the Tropic of Capricorn, with a temperate climate.⁵ Angatuba sits in the transition between the Atlantic Forest and the *Cerrado*, two of the most threatened biomes of the planet. Both biomes are considered 'biodiversity hotspots', or biogeographic regions with significant levels of biodiversity that are threatened by humans (Myers *et al.*, 2000). The added gross value of the farming sector in Angatuba (of R\$ 154M) is similar to Careiro da Várzea (of R\$156M) (IBGE, 2019, 2016 data). However, unlike Careiro da Várzea, the services and industry sectors in Angatuba are economically significant, accounting for 57 percent and 23 percent, respectively, of the gross value added at current prices. The farming sector contribution is the lowest, at 20 percent (R\$154M). From 2010 to 2016, the services and farming sectors in Angatuba more than doubled, while the industry shrank by around 30 percent (IBGE, 2019b). The GDP of Angatuba is around three times the GDP of Careiro da Várzea (IBGE, 2019).

There are several farming models in Angatuba. Some rural units are farmed by peasants under subsistence economies, others are partly focused on subsistence, partly to produce commodities for the regional market; and others still are latifúndia, which in the past exploited slave labour (Lisboa, 2008), moving to cheap labour provided by migrants and other impoverished groups. For the latifúndia model, the commodity cycles have changed from coffee for export in the 1880s, cotton in the early 20th century, and more recently, cattle and citrus farming (*ibid.*). More recently, since the 1970s, temperate fruit production and afforestation (eucalyptus and pine) have increased participation in the local landscape (*ibid.*), mainly in monocultural plots, as observed in the fieldwork.

The peasant family farmer in São Paulo is known as *caipira*. *Caipiras* are the offspring of colonisers (mainly Portuguese since the 16th Century) and native indigenous populations (Candido, 2010). *Caipiras* have worked the land as farmers, initially self-sufficiently with their families and few close friends (Brandão, 1983; Pires, 1987), with little commercial objective (Candido, 2010). More recently, however, with the advancement of capitalism, *caipiras* have increasingly engaged in markets mediated by capital and labour (Mariano, 2005; Candido, 2010). Although

⁴ Primary data from interviews and direct observation. Their livelihood strategies are discussed in Chapter 6.

⁵ Humid subtropical climates (Cfa), bordering Cfb (Temperate oceanic climate) and Cwb (Subtropical highland climate).

some of them converted into agricultural entrepreneurs and fully assimilated into the agribusiness model – which would make them no longer peasants – several keep a lower, limited dependence on the market, preserving some level of self-sufficiency, partly adopting the protocol of longer supply chains, but still struggling against underprivileged conditions. This is the case of all the visited peasant family farmers, *caipiras*, in Angatuba, in São Paulo. The term *caipira* is used not only in sociology and anthropology but also in literature and in the popular culture, often times in a detrimental way, from an external, urban perspective that observe the peasantry as rustic, uncivilised, untidy and underdeveloped (Brandão, 1983; Brandenburg, 2011). This is, by no means, the notion adopted in this research, which relies on a sociological one.

5.1.3 Demographics and generation cohorts

People living in the countryside make up 95.8 percent of the population of 23.930 inhabitants of Careiro da Várzea, spread over 76 scattered communities (Castro *et al.*, 2009; IBGE, 2019b). In Angatuba, 28.2 percent of the 22.210 inhabitants live in 62 rural neighbourhoods (Angatuba, 2009). Both sites have a greater prevalence of people living in the countryside when compared with other municipalities in their states, but also when compared with the national average of 15.6 percent (*ibid.*). The population density is 9.09 hab/km² in Careiro da Várzea and 21.6 hab/km² in Angatuba (*ibid.*). In both cases, women account for 47 percent of the rural population, which is similar to the Brazilian average, and both sites are medium municipalities in terms of population size, where greater levels of poverty are found (*ibid.*, Barros & Mendonça, 1995; Grossi, 2012). The Brazilian population has aged, and the last census was conducted in 2010. With limited availability of secondary data, this research resorted to mapping basic demography indicators of a sample of 42 households, comprising 211 individuals in total.⁶ The results are presented here. A typical household in Careiro da Várzea has five members, three men and two women. Family size is smaller in Angatuba (SP), which is typically four individuals per household, two men and two women. The former expansive age pyramid – which is characteristic of fast-growing sites – has turned into a constrictive pyramid, in both sites (Figure 24). Constrictive pyramids are associated with sites of ageing population, longer life expectancy, and also lower birth rates. The age distribution found in the primary data reflect regional differences in birth rates and an overall improvement in neonatal and early life healthcare across the country (as shown in Table 12 above).

⁶ 2018 data. N=42 families; all families had participated in the FAP for at least two consecutive years. In total, 112 individuals belong to the 21 families surveyed in Careiro da Várzea, and 99 individuals to the 21 families of Angatuba. For details, please refer to Chapter 2.

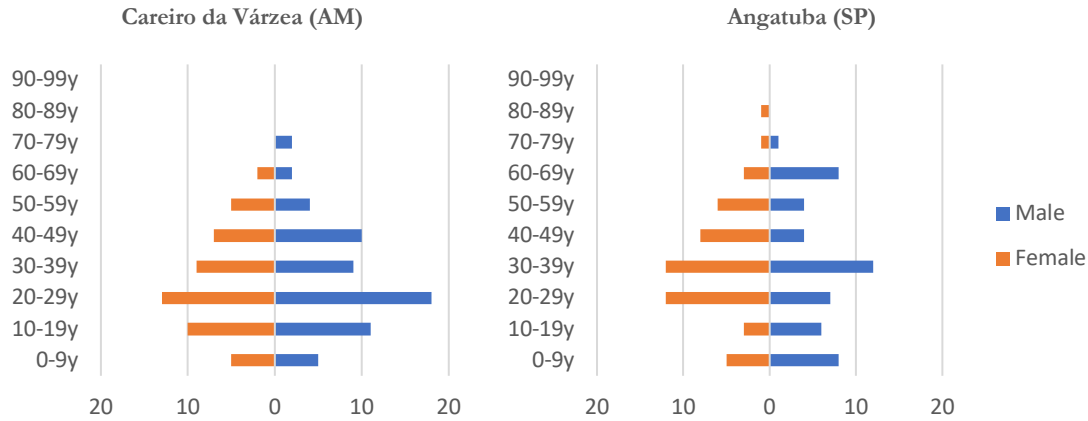


Figure 24. Population pyramid for Careiro da Várzea-AM and Angatuba-SP, 2018
 Primary data: n(AM)=112, n(SP)=104

Our Amazonas sample is younger. Using the generation cohort categories, as described in the Methodology (see Chapter 2), 44 percent of the Amazonas sample belong to ‘generation Z’ (0-23yo in 2018), with the oldest aged 70 in 2018 (see Table 13). The São Paulo sample is on average older, with 26 percent of the sample in generation Z and the oldest aged 80 years. This research did not identify any individual belonging to the ‘post-war’ or ‘Vargas era’ cohorts, aged 81 years or above in 2018. The ‘be on you own’ cohort of young adults (born between 1975-1994) is quite large in both cases: 34 percent in Amazonas and 40 percent in São Paulo. This generation roughly corresponds to the global ‘generation Y’, but in this research is referred to as the ‘be on your own’ generation, as discussed in the Methodology.

Table 13. Generational cohorts.

Generational cohort	Born	Age in 2018	Careiro da Várzea (AM)	Angatuba (SP)
Vargas era	1913-1928	90-105yo	0	0
Post-war	1929-1937	81-89yo	0	0
Optimism	1938-1950	68-80yo	2	3
The Iron Years	1951-1962	56-67yo	5	16
The Lost Decade	1963-1974	44-55yo	18	14
Be on your own	1975-1994	24-43yo	38	40
Generation Z (of which under 16yo)	1995-2001	17-23yo	25	8
Generation Z (16yo and under)	2002-	0-16yo	24	18

Source: Primary data: n(AM)=112, n(SP)=104

This sample mirrors the general pattern observed for the Brazilian population as a whole, which is ageing. One of the implications of this demographics is that Brazil has no longer a rising labour, but rising spending pressures for social security benefits (OECD, 2015). The classification by age cohorts will permeate the analysis of livelihoods.

For statistical validity, the cohorts were combined in two groups, with the younger division comprising the generation Z and the be on your own cohorts, up to 43 years old.

5.1.4 Health and the environment

Health indicators are better in Angatuba than in Careiro da Várzea (see Table 12), but a closer look reveals nuanced similarities and differences. Health is a concern for about half of the interviewed individuals (51% of the Amazonas, 46% for São Paulo, survey data). In the Amazonas, rural people are particularly concerned with water quality and logistics to access health services.⁷ Water quality in Careiro da Várzea is very poor. Despite abundant flow through the rivers Amazonas and Solimões, the local population has to source potable water or use chlorine tablets from the administrative village or from a neighbouring municipality, Iranduba, across the river Solimões (Figure 25). Most toilets in Careiro da Várzea are external (outhouses, pit latrines), with no wastewater treatment.⁸ Health service provided in Careiro da Várzea is rudimentary, with most procedures outsourced to the state capital, Manaus (Filho *et al.*, 2011; IBGE, 2019b).



Figure 25. Sourcing potable water is part of the everyday struggle of rural people in Careiro da Várzea. Photo: Personal Collection.

⁷ Focus group discussions, 2018.

⁸ Officially, 72.60% of the population lived with inadequate water supply and sanitation (PNUD, 2013b); unofficially, however, these numbers are likely higher.

In Angatuba, most rural households rely on septic tanks (Angatuba, 2009), but air and water pollution, along with chronic headaches and other diseases, such as cancer, are the most common health-related concerns, particularly in the remote *Banco da Terra* – the most recent settlement. According to respondents, this has been caused by excessive application of synthetic pesticides and fertilisers in neighbouring industrial orange farms. In their own words (edited for clarity):

The groundwater has been contaminated because of the application of pesticides by aircrafts [crop dusting over the neighbouring orange plantation]. I think this has contaminated my water, my pastureland, my home. My home sits only 500 metres away from the pulverisation [just across the stream]. You can see the mist of poison, which remains in the air for quite a while. Crop dusting has contaminated everything... When I was young, I used to drink water from the stream, using my own hands. (...) Pesticides can reduce our longevity. We die poisoned. (...) It causes cancer. It causes cancer in children as well. It will reduce our longevity. (Man 60yo, family 20-SP).

Intensive aerial application of pesticides (air dusting) and fertilisers (aerial topdressing) have been a common practice in industrial agriculture, such as orange plantations in São Paulo. The state of São Paulo is indeed one of the largest exporters of oranges in the world, with increasing use of agricultural aviation (Mherieb and Norder, 2018). More importantly, the drawbacks and benefits of industrial orange farming has been unevenly distributed. The financialised and industrial modes of agriculture have brought economic benefits to the agribusiness, but since the investors do not live there, it is only the resident rural people who suffer from direct pollution and health problems. Health, pollution, air and water quality are obviously intertwined, and these are common issues for rural populations in the North and in the South, no matter how different their human development and social vulnerability indexes are.

5.1.5 Support networks and organisations

Interpersonal relationships, a shared sense of identity, cooperation and reciprocity within families, between neighbours and across communities are robust, as highlighted by locals in interviews, focus group discussions, and direct observation. Informal ties have been a key asset for rural people in Careiro da Várzea and in Angatuba, with greater intensity at the former –

Figure 26, for instance, illustrates rural community gatherings in the Amazonas.



Community meeting of the Association of the Paraná do Careiro da Várzea



Rural people gathering in the community of Baixo Curari

Figure 26. Community gatherings in rural Careiro da Várzea.
Photos: Personal Collection, 2018

Responding to an open question on who they would resort to for assistance or advice to achieve personal goals, relatives and family members were listed by the majority of respondents, 32 out of 41 of the respondents in the Amazonas (78%) and 24 out of 37 in São Paulo 37 (65%). Communities, national and subnational governments, God and banks were also spontaneously listed, but by less than 10 percent each. Non-governmental organisations and the private sector were not listed in the open question. When probed with a list of actors, however, respondents reported they would seek help from several of them, as illustrated in

Figure 27. More in-depth questions confirmed that family is their most common source of support, which supports the responses to the open question but also add more layers to the analysis.

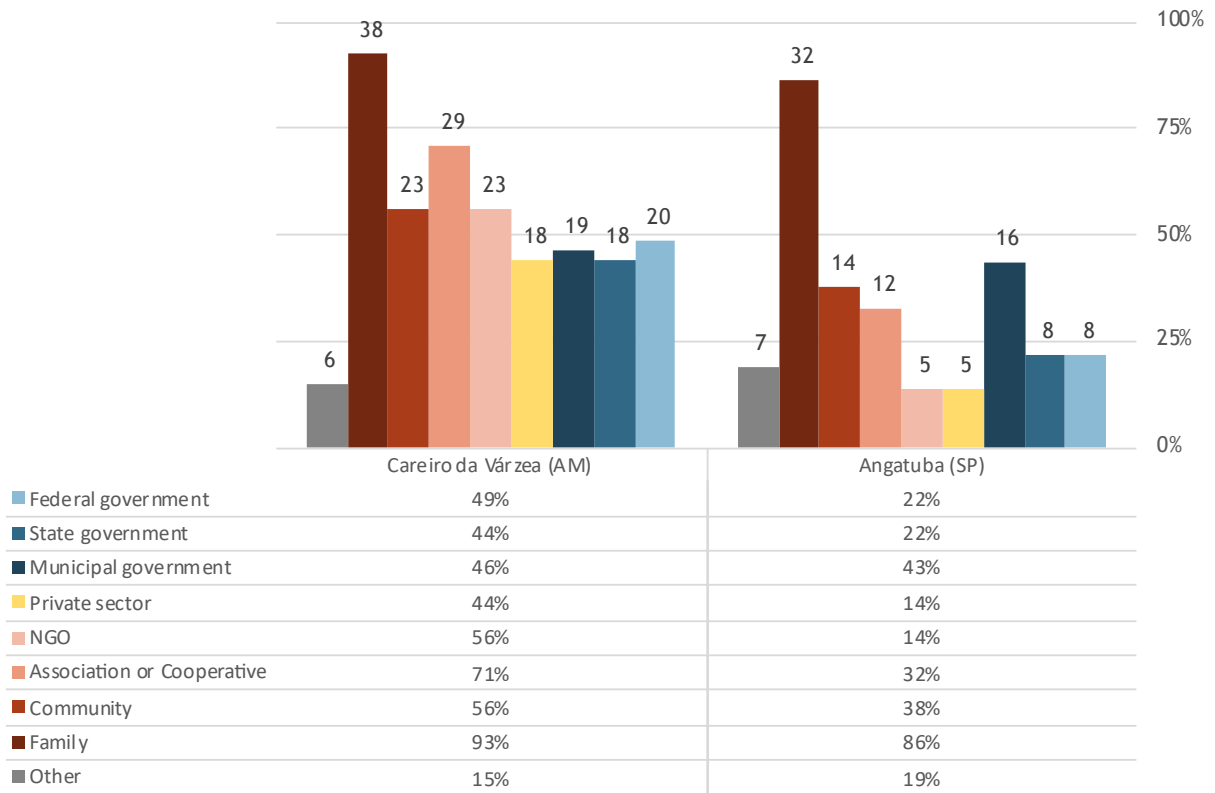


Figure 27. Support network for family farmers.
Source: Primary data, coded and categorised (2018)

Only one individual in each site, a man in Careiro da Várzea and a woman in Angatuba, reported political party affiliation. However, they reported not being satisfied with their party affiliations. In their own words (edited for clarity):

[a local] representative of a party had promised [that my affiliation] would translate into benefits. However, nothing happened (...). I want to withdraw my affiliation (Man, 43, family 53-AM).

I got affiliated with the political party in 2000, when the mayor (...) showed interest in investing in agriculture (...). The mayor invited me to join the party, so I did. My affiliation has been continued. I have not withdrawn from the party, but I do not have a stake in it (group discussion, woman, 45; man, 46, family 21-SP).

In Angatuba, the municipal government is the most common source of support and advice, after family members. One aspect that differentiates the municipal governance in these cases is the presence of a municipal council for rural development in Angatuba (IBGE, 2019b). Using Jessop’s terminology,⁹ rural people in Angatuba have an established formal ‘mode of representation’ within the municipal government, which is not the case for those in Careiro da Várzea.¹⁰ Angatuba’s municipal council for rural development meets a few times per years,

⁹ Please refer to Chapter 3.

¹⁰ Since the FAP is a central, federal government enterprise mediated by local organisations and by the federal agency of supply (Conab), the absence of a municipal council of rural development in Careiro da Várzea-SP was not crucial to its development. In this sense, the FAP in this modality implemented by Conab has been interpreted as an enterprise that, somehow, detoured local authorities.

serving as a consultative and deliberative multi-stakeholder platform, with half of its membership from civil society organisations and half from the government (IBGE, 2019b).

Careiro da Várzea is home to nine not-for-profit organisations,¹¹ while Angatuba is home to 90 (IBGE, 2019, 2016 data). Despite this, nonprofits in Careiro da Várzea are more frequently considered a source of help and advice than in Angatuba (see

Figure 27).

Local organisations

Communities, associations, worker's unions, cooperatives and fishers' colonies have granted family farmers access to opportunities to improve their quality of life and wellbeing, as well as access to markets, financial and production services, people, land, and to services provided by the state, such as social security and nested markets – according to the results of the focus group discussions (Figure 28). Access to protective security and marketing channels were the main utilities provided by local organisations to rural people. Fishers' colonies in the Amazonas and workers' unions in São Paulo have been key in helping rural people access protective security, such as unemployment benefits and old age pension. These organisations are responsible for enlisting and managing part of the bureaucracies involved in the Brazilian social protection system. This system includes a non-contributory rural old age pension (*aposentadoria rural*), and an unemployment benefit for artisanal fishers during periods in which fishing is limited (*seguro-defeso*). This is particularly relevant for the Amazonian family farmer. Although crucial for their access to social protection, rural people often refer to these organisations as gatekeepers (or an extension of the bureaucracies of the state), rather than actually supportive of their livelihoods or defenders of their interests. For example, one family posited the following:

The workers' union help with everything we need in terms of bureaucracy and paperwork. For example, they help us with procuring receipts of what we sell. Nevertheless, in reality, it does not have a great influence in our [current] lives (group discussion, woman, 52; man, 56, family 12-SP – edited for clarity).

Access to marketing channels – including the Food Acquisition Programme – have been facilitated mainly by community associations in Careiro da Várzea and by producers' cooperatives in Angatuba. Beyond access to markets, community associations have helped rural people to access land, in improving life quality, and as an arena for networking, or a locus for people to meet, discuss, and eventually cooperate. For instance, a community association was praised for its role in 'strengthening the collective, because working as a collective makes us stronger' (woman, 52, family 12-SP). Regarding producers' cooperatives in Angatuba, beyond access to markets, they have brokered deals for farming inputs.

¹¹ NGOs, not-for-profit foundations, cooperatives and associations.

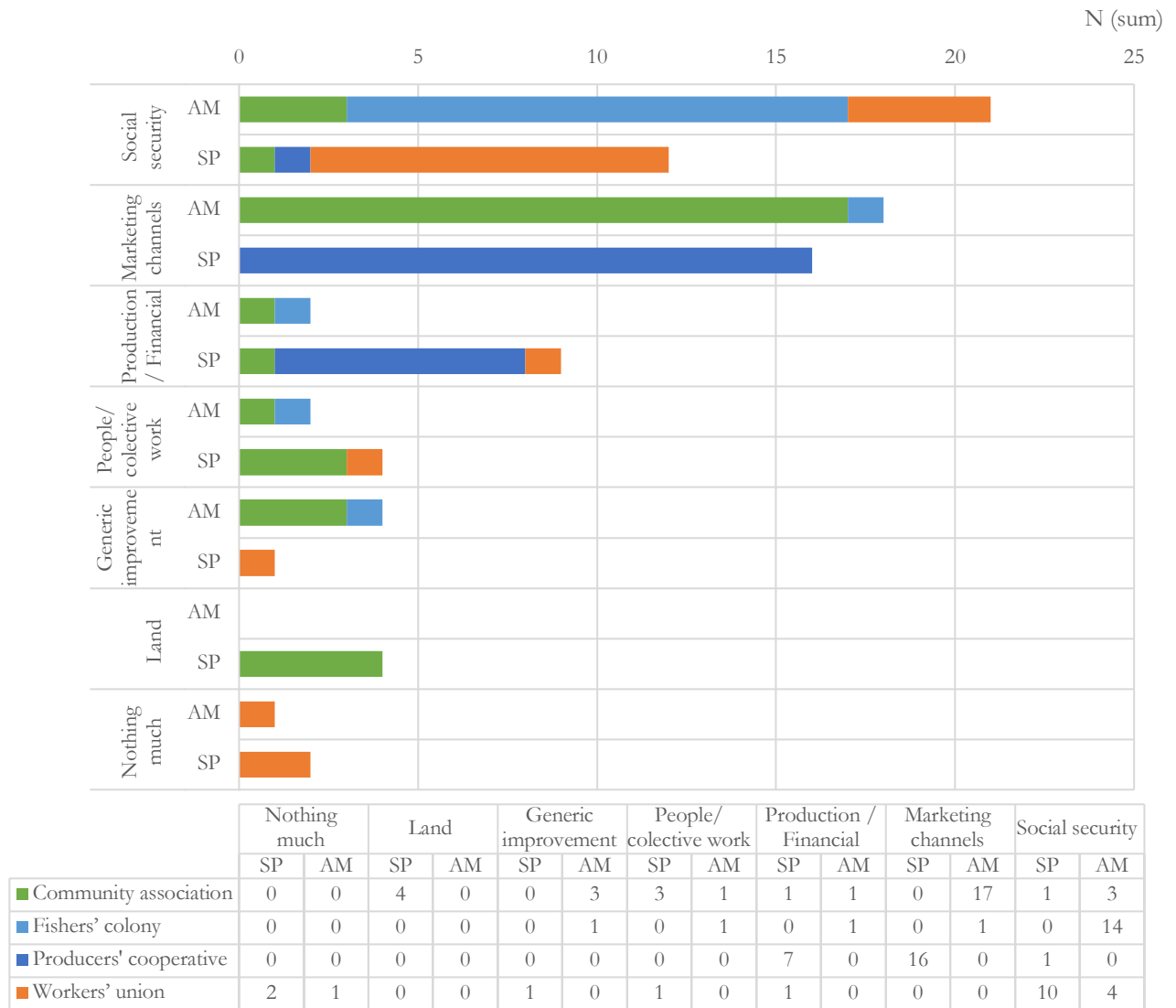


Figure 28. Access to assets and utilities provided by local organisations.

Source: Primary data from focus group discussions, coded and categorised. (N=42 family farming units, 21 in Angatuba; 21 in Careiro da Várzea, 2018)

5.2 Economic and education facilities

5.2.1 Land tenure

Official recognition of land tenure makes rural people eligible to access a suit of public policies, including financing services and public procurement programmes, such as the Food Acquisition Programme (see Chapter 3). Several of the sampled individuals only obtained official recognition of land tenure in the 2010s, such as most of the Amazon family farmers, and a quarter of those in São Paulo. Land is unevenly distributed both in the North and in the South, but it differs between cases. The land Gini index for the state of Amazonas is similar to the index for the state of São Paulo, at 0.754 and 0.783, respectively (BRASIL MDA, 2001, 2000 data). Family

farm units in this research sample vary from one to 87.1 hectares, 13.9 hectares on the median.¹² The median is higher in Careiro da Várzea-AM, at 20 hectares (ranging from one to 70ha), and lower in Angatuba-SP, at 12.7h hectares (ranging from two to 87.1ha).¹³ In the Amazonas case, land used by rural people are mostly owned by the state. In São Paulo, private ownership prevails.

Public land provides for a living in the Amazonas

Land tenure has long been a complex issue in the Amazon region as a whole,¹⁴ with lack of ownership, land grabbing and speculation, and cattle-ranching often associated with careless land management, deforestation and ecosystem degradation (see Coff et al., 2015; Reydon et al., 2020; Soule et al., 2000; Stabile et al., 2020; Walker & Homma, 1996). In Careiro da Várzea, land is mostly publicly owned and controlled by the state. In the early 2010s, the central government granted permits to several families traditionally living there – a permit known as *Termo de autorização de uso sustentável* (TAUS)¹⁵ (BRAZIL IPEA, 2016; Schwarzer et al., 2016). Most of the sampled households in Careiro da Várzea have received the permit to ‘sustainably use’ the land, 16 out of 21. Two other households had members registered as fishers¹⁶ and lived and managed land lent by their parents; two were registered as private landowners, and one was missing from the governmental database.¹⁷

The permit for sustainable use has allowed rural people to express their cultures, gain legal recognition as farmers, artisanal fishers and gatherers (IPEA, 2016; Schwarzer, Panhuys and Diekmann, 2016). Also, it has granted rural people access for the first time to rural development policies (see Chapter 1), and therefore allowed traditionally marginalised populations living in the Amazon floodplains to participate in public policies and programmes, such as the Food Acquisition Programme. Land, under this tenure regime, can be used and even transferred by successors, but not commercialised. Land is then closed for rent-seeking in land speculation but an asset for housing and rural livelihoods. The respondents in Careiro da Várzea emphasised their respect and gratitude for the possibility of living off the land and have not demonstrated fear of losing their rights, since the TAUS is not time bound.

Private tenure in São Paulo

Family farmers in Angatuba have had two main forms of access to land: inheritance, which dates back to the 17th century and the agricultural and infrastructure expansion of São Paulo (Lisboa, 2008) and, more recently, through a market-mediated agrarian reform programme, in which people purchased land mediated by the state and international financial institutions (Nogueira *et al.*, 2007). Out of the 21 sampled families in Angatuba, 16 own land privately and five participated in a collective loan scheme. Amongst the 16 families who own land privately,

¹² 20.5ha on average, SD 18.845.

¹³ 21ha on average in Careiro da Várzea (SD 18.906); 19.8ha on average in Angatuba (SD 18.755).

¹⁴ For an authoritative analysis of this issue, see Pacheco (2009).

¹⁵ TAUS regulation: Secretaria do Patrimônio da União, Portaria no. 89 of 2010.

¹⁶ Another important inclusion mechanism for Amazon *ribeirinhos* has been their registration as ‘artisanal fishers’ within the state bureaucracy, which has allowed them access to public policies for rural people, including unemployment benefits and the FAP. More detail in the next two sections.

¹⁷ Brasil, *Extrato DAP*, <http://smap14.mda.gov.br/extratodap/>. Access 10 Jan. 2020.

eight hold a public deed in their own names and eight are leaseholders, most of them renting from immediate relatives and expecting to inherit all or some of the land.¹⁸ For these families – which are numerically the majority in the São Paulo case – land tenure is not an issue.

The market-mediated agrarian reform programme known as *Banco da Terra* (lit. Bank of the Land) was made available by the state in 2010. This financing mechanism allowed some of those interested in moving or returning to the countryside to collectively apply for a loan to purchase land, regardless of income (Ribeiro *et al.*, no date; Nogueira *et al.*, 2007). That is to say that reduction of income-inequality was not an essential part of the programme. The *Banco da Terra* participants were settled in the far Northwest of the municipality, as a newly created and remote rural community with little infrastructure and no public transportation. The collective estate was split into small plots of 10.9ha on average (SD=1.784) independently managed by each family. The five families in Angatuba that do not enjoy land security carry a collective mortgage that interferes with decisions to invest in households and agricultural fields, which is particularly not conducive to cultivation of perennials. Since they were not sure the collective would be able to meet its debt, families in the *Banco da Terra* have opted to limit investment in infrastructure, and they do feel secure about land tenancy.¹⁹ Figure 31 (bottom left), portrays a household in this community.

Limiting usufruct: floods in Amazonas, debts in São Paulo

Natural and economic factors have limited family farmers from a full usufruct of land, such as after annual floods affecting all Amazonian family farmers in Careiro da Várzea, and resulted in insecure land tenure for some family farmers in Angatuba. The naturally occurring floods in the Amazon basin, usually from March to July, render some land inaccessible at times, allowing for only short-cycles of farming when the water recedes, usually from September to February (Castro *et al.*, 2009). The Amazonian floodplains cycle requires constant adaptation. This includes: farming where and when feasible; fishing when allowed; processing and storing dry food staples, such as cassava flour; living in floating houses or stilt houses (Castro *et al.*, 2009; Soares, 2012; Rios and Matos, 2017); moving houses upland and replacing stilts from time to time; building adaptable houses, and transforming a stilt house into floating house (and vice-versa); complementing income with non-farm wage; deciphering how social security operates and trying to find access to the state and public policies.²⁰ Adapting to the fluctuation of available land throughout the year is key to livelihood strategies in the Amazon floodplain. Also, some family farmers reported increase in land available to them, year after year, while others experience the opposite. Families of the communities *Divino Espírito Santo* and from *São Sebastião do Curuçá*²¹ have reported annual gains of land, while all families of the community *Monte das Oliveiras* and one family of the community *Sagrado Coração de Jesus at Sítio Santo Antônio*²² reported losses. Naturally, the latter families are more vulnerable.²³

¹⁸ Ibid.

¹⁹ Focus group discussions (2018).

²⁰ Primary data from key-informant interviews, focus group discussions, and direct observation. More details in Chapter 5.

²¹ Families AM55, AM57, AM61, AM61.

²² Families AM50, AM62, AM63, AM64, AM65, AM66, AM67.

²³ Naturally occurring change in land availability should be taken into account by the state, in their management of concessions of territories for traditional people. Again, families who experience continuous loss of land are particularly vulnerable in the medium and long run.



Figure 29. The floodplains with typical stilt houses in Careiro da Várzea
Source: Personal collection (2018)

Another striking difference between cases is the price of land. The estimated price of land in the region of Angatuba-SP is about 15 times higher than in the region of Careiro da Varzea-AM.²⁴ Land in Angatuba-SP is mostly held privately. And the private market has allowed for the consolidation of 43 percent of all farming land in the municipality (equivalente to 37 thousand hectares) by 17 joint-stock corporations or limited liability companies²⁵ (IBGE, 2019, 2017 data, Censo Agropecuario). Careiro da Várzea-AM does not have any land owned or controlled by this kind of capital (ibid.). Since most of the land in Careiro da Várzea is owned by the state, it has served purposes of housing and livelihoods for traditional people in small scale family farms.

5.2.2 Income poverty

This research used the standards of the National Programme for Strengthening Family Farming (Pronaf) to identify the income poor or income poorer families. Family farmers' households with the lowest levels of annual

²⁴ Estimated from data available at Gasques, Bastos, & Valdes (2008). More recent and finer estimates are available at, <https://www.angatuba.sp.gov.br/prefeitura/itr/> and BRASIL MDA (2015).

²⁵ Sociedade anônima ou por cotas de responsabilidade limitada.

income (under R\$20,000/year)²⁶ that do not hire permanent salaried workers are officially classified in the Group ‘B’ of Pronaf (Pronaf B). And family farmers settled by the National Land Reform Programme (PNRA) and beneficiaries of the National Land Credit Program (*crédito fundiário*, PNCF) are classified in the Group ‘A’ of Pronaf. All family farmers categorised in the group A and B of Pronaf are referred to as ‘extreme income-poor’ or in extremely low-income households. At least one family member of all families in Pronaf A and B declared, in individual interviews, that they faced money issues and debts. Households with annual income from R\$20,000 to R\$360,000 are classified in Pronaf ‘V’ (BRASIL MAPA, 2019b).²⁷ These family farmers were classified as ‘moderate income-poor’ or in moderate low income households. Farms with annual income above this threshold of R\$360,000 are not ‘family farms’, as per the legislation (see Chapter 3).

Using this classification, 14 of the interviewed families in the Amazonas sample (66%) and four families in the São Paulo sample (19%) were extreme income-poor (Figure 30). The other family farming units are the ones with income from R\$20,000 to R\$360,000 per year, and they are referred to, in this research, as moderate income-poor.²⁸

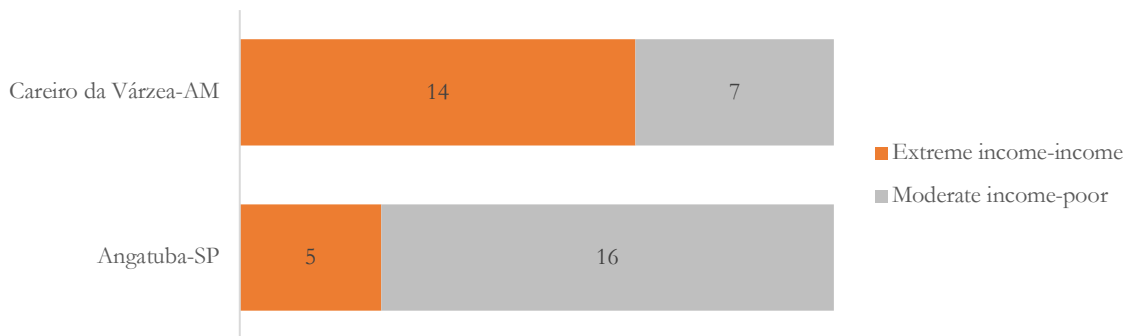


Figure 30. Income levels of family units in Careiro da Várzea-AM and Angatuba-SP.
Source: Primary data, classified according to governmental standards²⁹

Income poverty relates to several other conditions and opportunities available to people and families. For instance, housing conditions are strikingly differentiated not only between locations but also between income groups. Figure 31 illustrates housing conditions in the Amazonas (top) and São Paulo (bottom) for moderate income-poor (left) and extreme income-poor (right) households.

²⁶ At its inception, in 1999, the threshold for Pronaf B was R\$1,500.00 of annual income, exclusive of rural pension (Maia *et al.*, 2012). This has progressively increased, and currently stands at R\$20,000.00 inclusive of all income sources (MAPA, 2019)

²⁷ The 23 families classified in Pronaf V have annual incomes ranging from R\$20 to 360 thousand, which means some families can be very close to the threshold of Pronaf B, of R\$20 thousand/year. It also means that, some of the families of Pronaf V can be actually poor and very similar to the Pronaf B group. Since classification inevitably results in simplification, this research considers that families classified in Pronaf A and Pronaf B are income-poorer than those classified in Pronaf V.

²⁸ Individuals of larger families in the lower end of this threshold (R\$20,000 or \$8,881 PPP in 2019, \$1=R\$2.252 PPP in 2019) could be under the ‘upper middle class poverty line’ of \$5.50 PPP, as defined by the World Bank. This would be the case of families of five or more. In Careiro da Várzea, the mean and mode size of a family farming unit is of five members, while in Angatuba it is of four members. Therefore, there are greater chances to find individuals that would fall into the World Bank category of income poverty but not into the national classification in Careiro da Várzea than in Angatuba. Nevertheless, the most important aspect in this research was to identify the income-poorer, and the official classification did allow for this.

²⁹ Brasil, Casa Civil, *Extrato DAP*, Available at: <http://smmap14.mda.gov.br/extratodap/PesquisarDAP> (access in 10/07/2019).



Extreme income-poor in the Amazonas



Moderate income-poor in Amazonas



Extreme income-poor in São Paulo



Moderate income-poor in São Paulo

Figure 31. Extreme income-poor and moderate-income poor rural households.
Source: Personal collection (2018)

Notable is the extent to which Angatuba is classified by the state (IPEA) as a municipality of *very high social prosperity* despite the presence of income-poverty, which might be enough justification for retaining social protection and safety nets in municipalities and regions that, on average, perform better than others. A number of income poor family farmers do exist in the relatively wealthy state of São Paulo. At the same time, there are family farmers in the Amazonas who are not income poor. That is to say: income poverty is widespread in Brazil, with inequality occurring not only between regions – e.g., North versus South – but also within a municipality. This is particularly relevant in terms of how well policy is targeted in order to ensure that the poor in more affluent societies are not neglected by the authorities.

5.2.3 Education and technical assistance

Formal education achievements per age cohort are similar for rural people in Careiro da Várzea and Angatuba. The older individuals, born before 1975 have not completed primary school; some of them have never attended school. Half of the younger adults (born 1975 to 1994) have not completed primary school, just like their elders, but half of them have completed secondary education. Most of the younger individuals ('generation Z' cohort)

have attended school, but very few have enrolled in higher education. School attendance has increased across generations,³⁰ in both sites, but education quality is still very poor.

Problem solving, reading and interpretation skills amongst graduates tend to be poor.³¹ In 2017, only four percent of elementary school graduates in Careiro da Várzea adequately learnt problem solving skills (Mathematics), and less than a-quarter adequately learnt reading and interpretation skills (Portuguese) (QEDu Fundação Lemman, 2019). According to community leaders, secondary schools in Careiro da Várzea rely heavily on video-lessons and provide students limited contact with teachers, which does not encourage scholarship. Angatuba elementary school graduates perform relatively better, with 22 percent having adequately learnt problem solving skills and 57 percent reading and interpretation skills. Only eight percent of the sample (N=212) have graduated from higher education, most of them women and non-income poor. In other words, men and income-poor peasants have the lowest rates of higher education completion. This comes as no surprise, since women across Brazil have a higher mean of education years than men (Costa, Silva and Vaz, 2009), and higher education in Brazil is to a large extent restricted to higher socio-economic groups – it is indeed hard for students without quality secondary education to progress to high education (McCowan, 2007).

Careiro da Várzea does not house any technical or higher-education facility, and the only way to study for a higher degree has been mainly through online degrees, such as Pedagogy and teaching degrees. The alternative is to commute or move to Manaus, the state capital, according to focus group discussions. Angatuba is not home to any higher education facility but the local administration provides transport to neighbouring cities of Tatuí, Itapetininga and Sorocaba, which host higher-education facilities, including public, tuition-free universities. In 2018, only four out of the 212 family farm members (2% of the sample) were enrolled at secondary or tertiary education. Although this study does not aim to explain this vacuum, two factors are likely to be associated with it: the social policy regime, availability and access to education facilities. For instance, the conditional cash-transfer programme (*Bolsa Família*) encourages school attendance – to some extent. The *Bolsa Família* provides extra cash benefit to families whose children aged six to 17 have at least 75 percent school attendance record. However, by the time teenagers turn 18 this cash incentive is interrupted.

³⁰ In Careiro da Várzea, 86.43% of the children aged five to six years were attending school in 2010, and 72.45% of children aged 11 to 13 years were attending the final years of elementary school in 2010 (PNUD, Fundação João Pinheiro and IPEA, 2013). The rates for Angatuba-SP are, respectively, 100% and 91.55% (PNUD et al., 2013, 2010 data).

³¹ Adequate learning means students who reached at least proficiency, or the ability to pursue further studies, according to the indicators of the national education evaluation system.



Figure 32. School building in Careiro da Varzea, Amazonas.
Source: Personal Collection (2018)

Training and informal education is also considered problematic by the respondents. The availability of qualified labour is considered an issue by 34 percent (14/41) and 19 percent (7/37) of the respondents in Careiro da Varzea and Angatuba, respectively. In Angatuba, four individuals in the sample completed technical diplomas (in education, management, nursing, and mechanics). These levels of achievement are not found in the Amazonas. No farming degrees have been obtained by anyone in the sample, either in the North nor in the South. Members of those communities, of all age cohorts, have reported difficulties in improving productivity and in dealing with plant diseases and pest control, for example, which have happened more frequently since the rise of agricultural specialisation and intensification, according to the walking interviews.³²

Concerning technical assistance, the last census reported less than 18 percent of all farming units in Angatuba and less than 10 percent in Careiro da Varzea had received technical assistance (IBGE, 2019, 2017 data, censo agropecuário). The municipal administration in Careiro da Varzea reported not having any kind of infrastructure dedicated to promoting direct sales from farmers to consumers, whereas the local administration in Angatuba provides infrastructure for a marketplace (open, street market) for local farmers (ibid.).³³ Nevertheless, a representative of a local producers' cooperative understands that local and regional government provisions to rural people are not sufficient. In their own words:

³² This is further explored in Chapter 5.

³³ This was confirmed by direct observation during three visits to the marketplace (April and May 2018).

The municipal and state administrations [subnational governments] could have provided more technical assistance [to family farmers]. Instead, they only audit and control what family farmers are doing. The [subnational] state agents for technical assistance [CATI] sit behind the computer. The agronomist of the municipal administration only collects data for their registry and control vaccination of cattle herds. (personal communication, representative of a family farming cooperative, March. 2018)

Technical assistance and education are explored in detail in Chapter 7, alongside a more expansive analysis of wellbeing and the impacts of the end of the Food Acquisition Programme.

5.3 Markets and self-provision systems

Rural people in Careiro da Várzea and Angatuba have traditionally had limited access to marketing channels to sell their production and surpluses. Figure 33 shows the number of households accessing different marketing channels, roughly organised according to the length of the chain, from shorter supply chains to longer supply chains. As seen, the available marketing channels are mostly local and informal – i.e. bartering with neighbours – or integrated in longer supply chains mediated by intermediaries or the agribusiness. Direct sales and trade in the municipality or surroundings (i.e. street markets and local groceries) are not accessed by rural people in Careiro da Várzea but by very few in Angatuba. More importantly, perhaps, is to notice that none of the family farms in the sample were supplying to the School Feeding Programme (PNAE), as shown in the graphic below. Therefore, the links imagined between the FAP as ‘the primary school’ leading to the PNAE as ‘the secondary school’ in the ‘pedagogy of marketization’ (as explained in Chapter 4) were not realised for any of the family farm units sampled in this research.

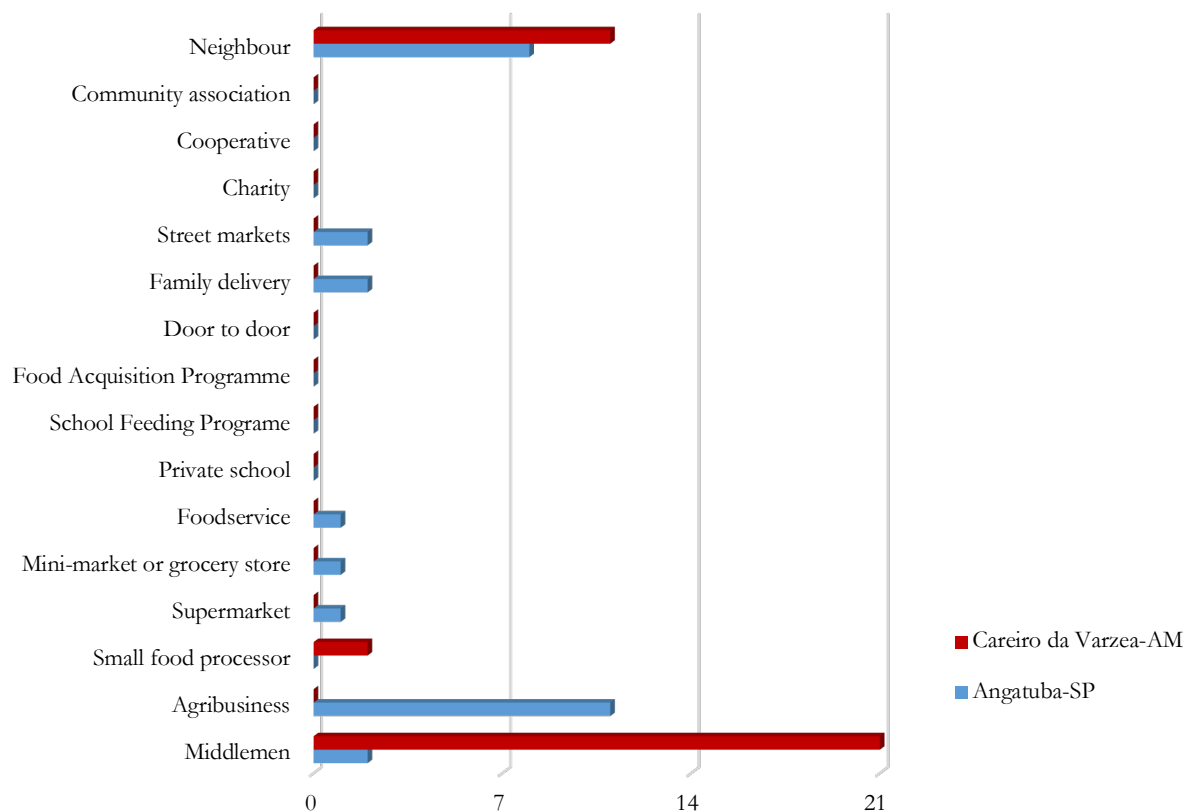


Figure 33. Marketing channels accessed in 2017-2018.
 Source: Primary data, focus group discussions; N=42; 21 in SP; 21 in AM.

5.3.1 Bartering and intermediaries in Careiro da Várzea

Careiro da Varzea’s rural people enjoy limited access to external markets but a thriving informal exchange and trade economy within and between rural communities. Most families trade locally, often in the form of exchange, barter, or simple donations, as revealed from the analysis of primary data.³⁴ Rural people informally commercialise and exchange labour and produce from gathering, fishing, farming, handcraft, artisanal skills of woodwork construction and repairing, and fishnet knitting, for example (Figure 34). As said by a respondent: ‘(...) we exchange whenever one needs help. We trade with cousins, with neighbours... We exchange day-labour as well’ (Woman, 37yo, Family 59-AM, edited for clarity).

³⁴ Focus group discussions, interviews, and direct observation; see Methodology.



Figure 34. Specialised services in Careiro da Várzea.
 To the left, a fisher repairing a fishing net. To the right; a fisherman repairing a wooden boat.
 Pictures: Personal Collection, 2018.

Farming, fishing and gathering in Careiro da Várzea serves the households' own consumption needs, with surpluses mostly traded informally in short commercial circuits, circumscribed within the municipality and surrounding communities (Sternberg, 1998; Filho *et al.*, 2011; Soares, 2012).³⁵ Self-sufficiency in food staples, such as manioc, is intrinsic to rural livelihoods in Careiro da Várzea – and fundamental to their struggle for autonomy. As indicated by many families, *casas de farinha* – a facility for processing manioc flour from roots (Figure 35) – is a key resource for peasants in Careiro da Várzea. *Casas de farinha* are key for food security in Careiro da Várzea: stocks of manioc flour are kept for the entire year, having to last throughout the flooding season.³⁶ *Casas de farinha* are also as a place for socialisation, cultural and knowledge formation and transfer (Velthem and Katz, 2012). They are venues in which women and men, younger and older can gather in what can be seen as a cultural, environmental, and economic expression of their livelihood.³⁷

³⁵ Also confirmed through focus group discussions and interviews.

³⁶ Focus group discussions, 2018.

³⁷ Field observation, walking interviews and key-informant interviews with community leaders.



Figure 35. Casa de farinha in Careiro da Várzea.
Source: personal collection, 2018.

Opportunities to ship produce beyond the municipality are limited to intermediaries, even if Manaus lies just a few miles upstream the Amazon river. Cargo boats are not affordable for most local people. Most locals can only afford small wooden boats, which are used for fishing and short trips. Owning a motorised aluminium boat is a sign that a family is doing well, according to a local community leader. Fuel is expensive, and cargo boats are owned by very few families, mainly by middlemen (Cardoso and Nogueira, 2005).³⁸

³⁸ Primary data: key-informant interviews with community leaders, triangulated with survey research concerning marketing channels, see Figure 33.

Intermediaries: making their living off fellow farmers?

Indeed, because of their limited infrastructure and access to markets, all respondents in Careiro da Várzea accepted the need for intermediaries to facilitate access to markets where needed, even where this entails accepting lower prices for their goods. Intermediaries ship their produce to public markets in the state capital, Manaus, remunerating producers, who have no bargain power, low prices (Oliveira *et al.*, 2012). As some respondents put it (edited for clarity):

Intermediaries come and collect our produce. Our task is to supply our produce. By the end of the week, they [intermediaries] pay whatever they want to pay. We have to accept whatever they offer. There is no way we can dispute or complain. It is done this way. One has to say, “thank God”, and this is it. That is the life of a farmer. (woman, 60, Family 61-AM)

We worked a lot for the intermediaries. (...) We never knew how much we would get in return. Sometimes the [middleman’s] payment would not even compensate for what we had invested in the production’. (woman, 29, Family 57-AM)

While rural people view intermediaries at best as neutral agents, some of the community leaders interviewed offered an alternative, perhaps more sympathetic view: ‘Intermediaries can be a disaster (...) but one can see that intermediaries as a necessary evil. Some people become intermediaries to make a living (...).’ (Focus group interview with two community leaders, one woman, one man, age not registered, Careiro da Varzea-AM)

Indeed, prices of supply chains operated by food empires are defined by buyers and the financial industry (Najera, 2017; Zhang & Donaldson, 2010). Alternative markets to bartering and intermediaries were accessed in 2017-2018 by only two families. These families supplied to small food processors in Manaus – one fishmonger and one artisanal cheese producer – with logistics arranged with regional dealers. In summary, the local dynamics of exchange in Careiro da Várzea are vibrant, but commercialising produce and surpluses beyond borders has rarely been economically viable. The Food Acquisition Programme, which did not operate for very long in Careiro da Várzea, was an exception to this.

5.3.2 Agribusinesses and direct sales in Angatuba, São Paulo

Like their counterparts in the Amazon floodplains, rural people in Angatuba have also traded and exchanged their produce with neighbours. But unlike in the Amazonas, rural people in São Paulo have themselves accessed a variety of marketing channels without a need for intermediaries. These range from shorter chains, such as in farmers’ markets (street markets), to longer chains, mainly through agribusiness channels (see Figure 33). Supplying to agribusiness is the most common marketing channel, used by 11 out of the 21 families. They have supplied cereals (whole grains such as dent corn, wheat and soybeans) and dairy (fresh milk) under formal and informal schemes of contract farming.

Partial integration in agribusiness' chains

Interview data confirms that family farmers in Angatuba supply to four companies, two specialised in storage and commercialisation of cereals (RFA Agropecuária and Ouro Safra), and two in processing milk (Vigor and Exceleite). *Ouro Safra* presents Basf, Monsanto, DuPont and other chemical and seeds companies as their 'partners'.³⁹ Rural people are not acknowledged as part of their business model, at least not publicly on their website. One could infer that this is a sign of the power dynamics in some contracting farming schemes, where financial and industrial interests dictate farming recipes and reap most of the benefits of farmers' labour and land. Indeed, prices were determined exclusively by the storage and commercialisation companies, according to interviews. *Vigor*⁴⁰, a subsidiary of *Grupo Lala* – the largest dairy company in Latin America – and a regional dairy factory, *Exceleite* – a family-owned company – are the two cited companies that family farmers have supplied refrigerated raw milk to (see Figure 36). As a respondent put it, dairy farming is a traditional activity in Angatuba and has long been the focus of the activities of the first local producers' cooperative.⁴¹ Whereas the cereal market offered no margin for negotiation, there is a narrow margin of negotiation with dairy factories, to the extent to which cooperatives manage to bundle producers and bargain for better prices.



Figure 36. Dairy farming in Angatuba.
Source: Personal Coleccion (2018)

³⁹ Ouro Safra, <https://www.ourosafra.com.br/>. Access: 20 July 2020.

⁴⁰ The local cooperative has played a key role as mediator for the commercialisation of milk, see next section (4.1.2).

⁴¹ Personal communication, representative of *Colang*, May 2018.

The income-poorest farmers are rarely included in contract farming schemes across the developing world (Ton et al. 2018), and this applies to the cereal market channel in Angatuba. The markets through RFA Agropecuária and Ouro Safra have not been accessed by none of the extremely low-income⁴² family units in the research sample. Unlike the cereal chain, the dairy chain has been accessed by both extreme and moderate income-poor households.

Dependent autonomy

Critical academic accounts within rural sociology characterise longer chains as part of the unfair, hegemonic dominance of the food empires associated with corporate, neoliberal food regimes. These long chains are often regarded as antithetical to sustainability and food sovereignty principles (e.g. Altieri & Toledo, 2011; Ioris, 2018; McMichael, 2008; Stock, Forney, Emery, & Wittman, 2014; Wittman, 2011). As Narotzky puts it: ‘capital’s control over the fruits of labor will be executed through the market, but not only in the labor market. It will be extracted through surplus value but also through rent and unequal exchange.’ (Narotzky, 2016, p. 311). In contract farming, ‘independent producers are trapped in a continuous simple reproduction squeeze and pushed toward multi-occupational precarious livelihoods’, according to Narotzky (2016, p.311), in which ‘surplus is extracted from them through rent (debt financing, taxes) and unequal exchange (below-cost prices)’. This phenomenon is what Narotzky (2016) refers to as ‘dependent autonomy’. Contract farming is a contentious matter. Although several studies have promoted contract farming as a form of rural development – often drawing on econometric studies showing short term income growth of ‘successful’ cases (see Briones, 2015; Ton et al., 2018) – positive gains to farmers have been limited to an initial start-up stage (McMichael, 2013; van der Ploeg, 2014; Narotzky, 2016).

Rural people themselves, however, expressed mixed views partial integration to the agribusiness⁴³, which was seen by some respondents as stable therefore good, and for others as unfair, hard to overcome or to leave. Notably, these two groups differ in their ability to generate income: the ones who also draw on nonfarm wage or old-age pension see integration with the agribusiness as positive; but for those with no alternative income source, integration to the agribusiness, even if partial, is like a locked-in model.⁴⁴ Indeed, after investing in fit-for-purpose buildings, specific machinery to milk cows, certain seeds and agrochemicals – as prescribed by the agribusiness buyers – rural people gets into a locked-in system dictated by the business model of the cereal or dairy agribusiness.⁴⁵ Within this system, rural people enter into a loop of repayments of investments and production costs, which are rarely useful outside the agribusiness model.⁴⁶ This unequal system has been reported by several respondents and by a producers’ cooperative in Angatuba, which has been discouraging local people from investing in dairy machinery and encouraging them to diversify from dairy.⁴⁷

⁴² Cf. income-poverty categories in Section 5.2.

⁴³ i.e., processes of modernisation and financialisation of farming practices and of livelihoods – see Chapter 3.

⁴⁴ Focus group discussions and key-informant interviews.

⁴⁵ Focus group discussions, and key-informant interview with a representative of a producers’ cooperative.

⁴⁶ Several other authors have also pointed to this phenomenon, e.g. Farina (2002); Li (2011); McMichael (2013); Narotzky (2016); van der Ploeg (2014).

⁴⁷ Personal communication with a leader of a local cooperative, Angatuba, May 2018.

Autonomy is lost, at least to some extent, when farmers become mere suppliers and invisible partners of plantation-corporations driven by financial interests (see, for example, Li, 2011). Borrowing from the domain of the sociology of work (see Lair, 2019), and observing the peasants' struggle for autonomy (please refer to Chapter 1), it seems reasonable to argue that dependent autonomy has at least two associated risks for rural people. First, the arrangement can lead to a loss of internal capabilities and auto-sufficiency. Second, rural people can lose control of their ecological, agricultural and food systems.

There is little evidence from the interviews conducted for this research that agribusiness interests have assimilated any of the family farming units. None of the units surveyed drew income exclusively from their participation in the agribusiness in 2017-2018, for instance. They have kept farming for own consumption (i.e. animal husbandry, vegetable gardens, fruit and staples production) and have tried alternative marketing channels in the past 20 years (details in the next Chapter).⁴⁸ Their income were also comprised of a mix of farm sales, nonfarm wage and pensions. Having multiple income sources, these families had a buffer to protect them from complete dependence on a single market – neither agribusiness, nor the Food Acquisition Programme.

A few of the family farmers in Angatuba were selling directly to consumers in street markets (marketplaces partly fixed by the municipal government), to local food services, groceries and supermarkets. In these shorter and more personal supply chains, family farmers enjoy better prices in comparison with intermediaries but have to spend more in logistics and time, according to a respondent interviewed in the central marketplace. Local supermarkets in Angatuba are still owned by locals, not by multinationals or anonymous investors.⁴⁹ Yet, local supermarkets have been highly competitive, having set a predatory pricing policy – or undercutting – to eliminate direct sales from rural people in the public marketplace. This was summarised by a respondent as follows:

After we started selling directly to consumers in the marketplace [weekly in the city centre public square], the supermarkets set an unfair competition, in which they reduce prices of fresh groceries to below market prices for the day. They want to remove us from the market. We cannot compete with them. Some of the farmers gave up on the marketplace, but others decided selling something else, such as ready meals, cheese, fried pastries (pastel frito), sugarcane juice (garapa). (Woman, 40).

As seen, access to markets have significantly varied between the Amazonas and São Paulo cases.

5.4 Peasants, markets and livelihood resources

If, as Van de Ploeg (2000) puts it, the struggle for autonomy is a key-feature of the peasantry in the 21st Century and if the partiality of integration to markets remains central to the peasant condition, as proposed by Ellis (1993) and Friedmann (1980), then all family farming units sampled in this research are peasant family farming units. Nevertheless, the researcher has been careful not to label or assume a family farmer is a peasant by default –

⁴⁸ Original survey data.

⁴⁹ Interview with a representative of a local producers' cooperative, 2018.

marginalised and struggling for autonomy *tout court*. Although the general context in Careiro da Várzea in the Amazonas and Angatuba in São Paulo are diametrically opposites, the family farmers sampled in this research have one thing in common: they are all peasants. They continue struggling for autonomy, aiming for self-sufficiency, with some of them partly integrated to longer supply chains mediated by the agribusiness. What is clear, the municipal-Human Development Index (HDI) and the municipal-Social Vulnerability Index (SVI) dilute the peasant condition experienced by rural populations. This is particularly true in more affluent parts of Brazil, like in Angatuba and other sites of high HDI and low SVI – where rural populations are not only numerically minority but still marginalised and shadowed by a growing urban population in the services economy.

All family farmers in this research sample can safely be referred to as peasants, or peasant family farmers. The peasants in the Amazonas are also identified as *ribeirinhos*, and those in Angatuba *caipiras*, as culturally identified in the first section of this chapter. Referring back to the social structures of farming in Brazil (see Chapter 3,

Figure 13), the family farmers sampled in this research are not part of the ‘real agribusiness’ (integrated to externally-driven demands, specialised, and dependent on agribusiness capital and techniques) but ‘poverty-level family farmers’ or ‘family farmers only partly involved in markets’ (see Favareto, 2016).

Conclusion

São Paulo and Amazonas are in many respects positioned at extreme ends of the human development and social vulnerability scales. This research confirms that market openings and social opportunities are relatively better in Angatuba than in Careiro da Várzea. Based on the previous discussion, Figure 37 illustrates a rough attempt to present a heuristic of peasants’ access to assets. Financial services have been rarely accessed by these peasants, regardless of location. Caipiras in Angatuba have had access to better infrastructure, education, health, and more stable ecological dynamics than ribeirinhos in Careiro da Várzea. Because of their support networks and local organisations, social capital is estimated to be higher in the Amazonas case than in São Paulo. Although crucial for their livelihoods, social capital in Careiro da Várzea does not compensate for the lack of other types of capital, for example, in its very poor quality of education and infrastructure. Likewise, more reliable physical and natural capital in Angatuba has not been sufficient to move caipiras out of marginalisation and struggle for autonomy. In Angatuba, the income poor caipiras without secure land tenure – the ones trying to pay debts to purchase a collective estate – have been particularly marginalised, with sub-standard infrastructure, public and private. Sub-standard infrastructure is the norm for all ribeirinhos in Careiro da Várzea. The assets peasants have had access to have not been sufficient for the elimination of social reproduction of inequalities. In fact, the developments in São Paulo, with its strong agribusiness, is part of an opportunity as well as a threat to caipiras, as discussed in this chapter.

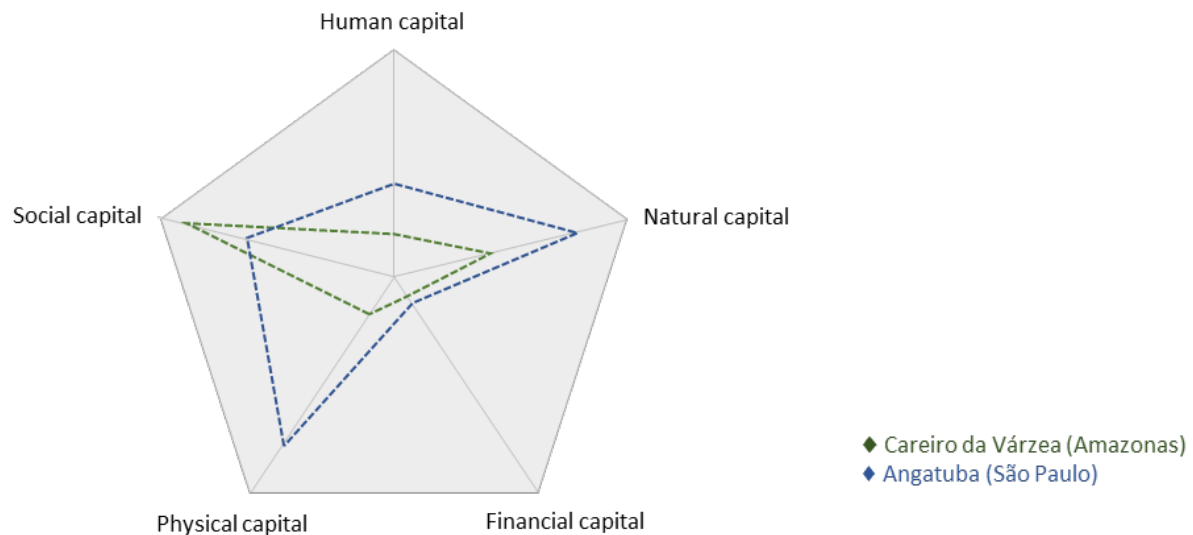


Figure 37. Schematic representation of peasants' access to assets.

The contrasting levels of human development and social vulnerability between locations becomes less salient when the overall peasant condition is considered. As seen above, peasants have not done well even in Angatuba, which is a municipality featuring high HDI and low SVI. This reinforces van der Ploeg's thesis (2010) concerning the peasant struggle: it is not exclusive to geographies associated with low human development and high social vulnerability indices (such as in several sites in the Brazilian Northern and Northeast regions), but encompasses rural people all over Brazil. This condition has been exacerbated by the rise of an institutional and programmatic retrenchment since 2013, and a regime of constitutional austerity since 2016, as discussed in Chapter 3. If the broader economic, social, and political systems remain oblivious to inequalities between and within social groups and geographies, marginalised populations such as the peasantry will remain underprivileged, with very limited means to access and mobilise assets, even in sites officially classified as highly developed or prosperous.

If the predicaments of the peasantry in the 21st Century can be taken as a universal condition of marginalised rural peoples, the specificities in national and subnational contexts of deprivation were crucial to understand similarities and differences between locations and demographic groups. Peasant cultures as expressed by *ribeirinhos* and *caipiras* were found to be tied with local environmental dynamics, for instance, with the close relationship between *ribeirinhos* in the Amazonas with the river, fishing and farming according to the flooding dynamics and community needs; and the increasing engagement of *caipiras* in markets mediated by capital and labour in São Paulo, where physical capital is relatively more abundant, and processes of modernisation have been in place for longer. Notwithstanding unequal distribution of assets, a relatively expansive manner to identify 'family farmers' in Brazil allow very different rural households to be classified as 'family farming units', officially, which makes them eligible to participate in the Food Acquisition Programme and other rural policies. This chapter has made clear how livelihood resources are unevenly distributed. Unsurprisingly, these differences would influence what is possible or not in terms of livelihood aspirations in different locations and for different groups of people. This will be explored in the next two chapters.

Chapter 6 Livelihood pathways under austerity

Rural development policies such as the Food Acquisition Programme have to some degree supported rural livelihoods, but little is known about the consequences of their retrenchment. What is known is that peasants have been resilient and persistent even in the face of chronic marginalisation pressures. But how have they recently adapted to the rise of austerity in Brazil? How have they attempted to keep away or escape poverty, to maintain or improve wellbeing without a reliable mediated market? To what extent have livelihood aspirations and trajectories changed for those who experienced the termination of the Food Acquisition Programme? This chapter explores the livelihood aspirations of peasants in order to understand what the early responses to austerity have been. It compares and contrasts livelihood aspirations and strategies in the two locations presented in the previous chapter, as well as by gender, age and income levels. Occupation of 185 individuals in 42 family farming units were examined alongside the coping mechanisms and livelihood dynamics for 78 individuals who had recently experienced the retrenchment of the Food Acquisition Programme. The family farming units and individual peasants were purposefully sampled – aiming for diversity in location, gender, age and income groups, as discussed in Chapter 2. Primary data was collected in 2018 through focus group conversations, proportional pilling, key-informant interviews, walking interviews and a survey. The livelihood aspirations were classified into four broad types of aspirations, as discussed in Chapter 1 and reprised below:

- ‘Hanging in’: ‘whereby assets are held, and activities are engaged in to maintain livelihood levels, often in the face of adverse socio-economic circumstances’ (Dorward *et al.*, 2009, p. 243);
- ‘Stepping up’: ‘whereby current activities are engaged in, with investments in assets to expand these activities, in order to increase production and income to improve livelihoods (...).’ (Dorward *et al.*, 2009, p. 243);
- ‘Stepping out’: ‘whereby existing activities are engaged in to accumulate assets which in time can then provide a base or ‘launch pad’ for moving into different activities that have initial investment requirements leading to higher and/or more stable returns (...).’; (Dorward *et al.*, 2009, p. 244);
- ‘Dropping out’: referring to those who are moving towards destitution, reliant on external support or in the process of migrating away (Mushongah, 2009; Mushongah and Scoones, 2012).¹

Few studies of the Brazilian peasantry have to date systematically applied this framework, and official institutions have classified rural people basically by income levels and as economic agents, with limited consideration of their cultural and ecological diversities (see Chapter 3). One critical study, by Guedes *et al.* (2012), summarised what poverty and inequality looked like in the rural Brazilian Amazon in the beginning of the 21st Century, having identified that the main struggles were over access and control of land and forest resources with large capital enterprises and cattle ranchers. Peasants had three options, according to Guedes and others: ‘(1)

¹ Please refer to Chapter 1 on Theoretical Frameworks.

selling farm lots and migrating to marginal lands or new settlements, (2) moving to peri-urban areas or commuting to urban centres in search of off-farm employment, and/or (3) adapting their portfolio of economic activities to benefit from changing market opportunities.’ (Guedes et al., 2012, pp.41-2). These authors identified potential for diversification but did not explore the possibility for a ‘hanging in’ pathway, which one could expect to be a common expression of the resistance (and continued marginalisation) of the peasantry. The aforementioned four-fold typology was a better fit for this research since it is clearly anchored on two dimensions, i.e., diversification of activities and mobilisation of assets, whose contextual aspects were explored in Chapter 5.

The analysis of livelihood aspirations and trajectories is organised in five sections. The first section takes a broad perspective on occupations and income portfolios, and the second section presents the results of the analysis of livelihood aspirations. A quantitative analysis was intertwined with a qualitative data analysis to allow for an examination of the relative role of on-farm and off-farm activities, social security, the types of pluriactivity that has gained shape under the new wave of austerity, and the differences by location, gender, age and income. The third and fourth sections are thick descriptions of two contrasting yet typical peasant family farming units, one in Angatuba and one in Careiro da Várzea. The less typical cases are by no means neglected. In each of these sections, less typical cases are compared and contrasted with what was found to be more prevalent in terms of livelihood trajectories. The short final section sets the findings of this chapter in a broader political economy framework.

6.1 Occupation and income

6.1.1 On-farm and beyond

Besides farming, peasants also fish, study, housekeep and engage in off-farm activities, low-skilled (i.e. factory worker, welder, cleaner) or skilled (i.e. carpenter, driver, boat driver, cook, nutritionist, teacher, community or religious leadership, and the civil service), as shown in the results of the self-reported occupations for the 185 members of the 42 households surveyed in this research (see Figure 38). This finding is in line with the peasant condition in the 21st Century, as discussed in Chapter 3, in which non-farming jobs, pluriactivity or part-time farming are commonly ingrained in rural livelihoods. Respondents in Careiro da Várzea and Angatuba have engaged in diverse activities, with a closer look at Figure 38 revealing fundamental differences.

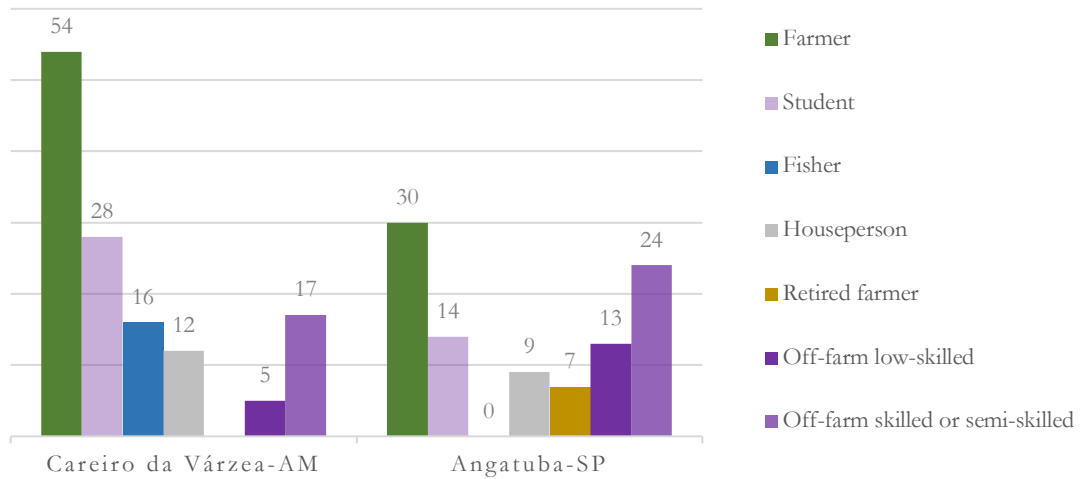


Figure 38. Occupations as declared by the interviewees.
Source: Primary data. (N=185; n_{AM}=100; n_{SP}=85)

Respondents in Careiro da Várzea were found to be more engaged in on-farm activities than their counterparts in Angatuba. None of the respondents in Angatuba presented themselves as fisher, and no one in Careiro da Várzea presented themselves as a retiree. However, subsequent interviews revealed that some of the respondents in Careiro da Várzea were officially retired, received a pension, kept active, and chose to introduce themselves as farmers – not as retirees (see Figure 39). It seemed that ceasing to work after retirement age was not part of the livelihood and culture in the Amazon floodplains.



Figure 39. An older farmer in Careiro da Várzea.
He is officially retired, but introduced himself as a farmer, not as a retiree.
Source: Personal Collection (2018)

Gendered division of labour

Labour division, as well as out-migration, were found to be highly gendered. In this research sample, 19 men and 31 women had out-migrated already.² Men prevailed in farming and fishing (69%) and in low-skilled jobs (72%) while women held the more skilled jobs (63%) and undertook most housekeeping (95%) – see Figure 40 and Figure 41. The results corroborate Riley' study (1997), which identified that women held more professional jobs than men in Brazil.³ Indeed, in patriarchal cultures men are expected to provide for the family – being the breadwinner – while women are expected to keep house, look after children, cook, grow plants and keep animals (Silva *et al.*, 2011). Although this gendered division has diminished, it is still prevalent in peasant families such as *ribeirinhos* (Silva *et al.*, 2011). Moreover, this research found that men were more likely to inherit land than women, according to the focus group conversations. Men have been privileged with access to land, while women have been encouraged to find alternatives, such as qualifications for skilled jobs or marriage.⁴ This uneven distribution of assets and opportunities by gender is therefore likely a factor that may help explain differentiated livelihood aspirations by gender and other groups, which are discussed later in this chapter.



Figure 40. Fishers and family farmers in the Amazonas floodplains.
Source: Personal Collection (2018)

² Compilation of data from 42 focus group discussions.

³ This pattern was also found by Costa et al. (2009) regarding non-farming jobs in Brazil.

⁴ Focus group discussions and walking interviews.



Figure 41. Housekeeping in Careiro da Várzea, Amazonas.
Source: Personal Collection (2018)

6.1.2 Income portfolios

According to an analysis of the focus group discussions, peasants typically draw their incomes from diverse sources, ranging from on-farm activities (dairy cattle, beef cattle, poultry, egg, pig, fish, annual crops, vegetables, fruits, gathering), off-farm activities (nonfarm wage, real estate rental, day-labour, including agricultural day labour) to social security (the conditional cash transfer *Bolsa Família*, the old-age pension *Aposentadoria Rural* and the unemployment benefit for fisher *Seguro-Defeso*). In 2017-2018, each household in Careiro da Várzea drew from three to eight (Mdn=5) different income sources, and from one to seven (Mdn=4) in Angatuba. The income portfolio varies by location and by income groups, as evident from a visual inspection and statistical tests. Figure 42 and Figure 43 shows the median composition of household income. On the median, income from on-farm activities was the most significant source for peasant family farmers in 2017-2018 (56%), followed by social protection (23%) and off-farm income (5%). This scenario is after the termination of the Food Acquisition Programme, which happened between 2016-2017 for all families interviewed in this research.

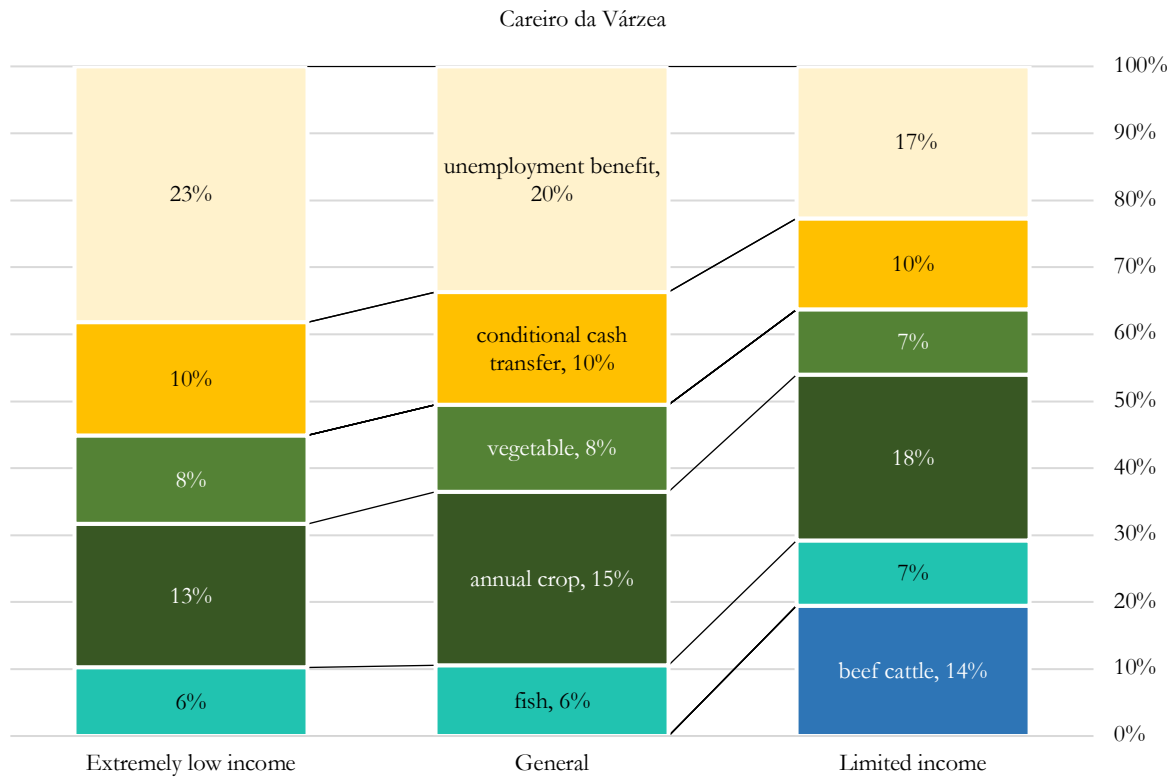


Figure 42. Median income portfolio in Careiro da Várzea (2017-2018, stacked columns).
Source: Primary data, N=21, of which 14 were extremely low-income.

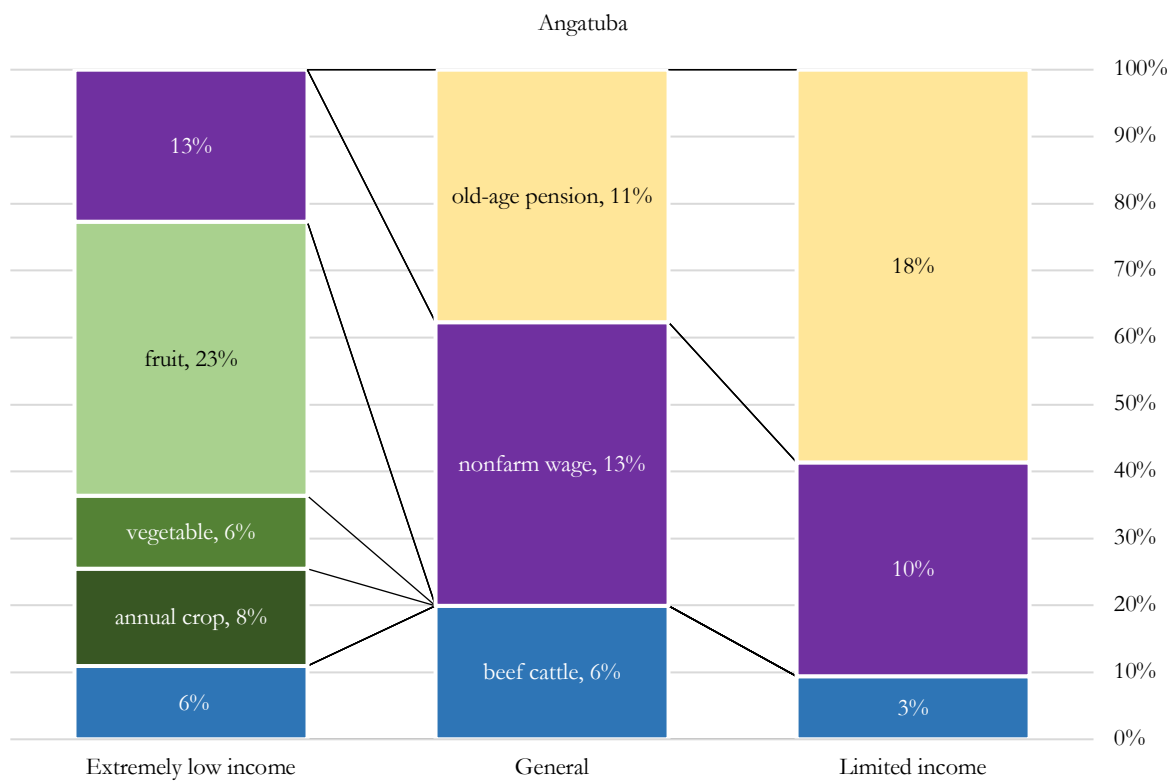


Figure 43. Median income portfolio in Angatuba (2017-2018; stacked columns).
Source: Primary data, N=21, of which five were extremely low-income.

Some of the differences can be easily captured in a visual analysis, for instance: unemployment benefit, conditional cash transfer and fishing were typical in Careiro da Várzea; old-age pension, nonfarm wage and fruit were typical in Angatuba, and old-age pension was typical for those on moderate income-poverty in Angatuba. The participation rates of income sources are shown in Table 14 by location, and in Table 15 by income group. The participation rates of income sources were not found to be normally distributed, therefore non-parametric measures are reported, with medians (Mdn) and the interquartile range (IQR) as a measure of variability. IQR is reported as a range (first quartile and third quartile) rather than a value to allow for the observation of symmetry by the reader, at the same time it gives clarity of where the middle 50 percent of scores reside.

Table 14. Household income source by location

Income source	Careiro da Varzea-AM		Angatuba-SP		Total (N=42)	
	Median	IQR (%)	Median	IQR (%)	Median	IQR (%)
On farm	56%	40-70	57%	37-78	56%	40-72
Livestock	14%	0-32	6%	0-50	10%	0-43
dairy cattle	0	0	0	0-24	0	0
beef cattle	0	0-29	6%	0-14	3%	3-22
Poultry	0	0	0	0	0	0
Egg	0	0	0	0	0	0
Pig	0	0	0	0	0	0
Arable farming and horticulture	24%	18-38	30%	15-50	29%	17-43
arable farming	15%	0-21	0	0-22	4%	0-20
Horticulture	8%	0-21	0	0-14	6%	0-20
fruit*	0	0	0	0-20	0	0-10
Fishing*	6%	0-12	0	0	0	0-6
Gathering	0	0	0	0	0	0
Off-farm	0	0-8	20%	0-46	5%	5-30
Day labour*	0	0	0	0	0	0
Nonfarm wage*	0	0-3	13%	0-46	0	0-28
Real estate	0	0	0	0	0	0
Social protection	33%	20-45	11%	0-28	23%	0-42
Bolsa Família (cash transfer)*	10%	4-15	0	0	0	0-10
Aposentadoria rural (old-age pension)*	0	0	11%	0-28	0	0-17
Seguro-defeso (unemployment benefit)	20%	0-30	0	0	0	0-20

Source: Proportional pilling (N = 42; n_{SP}=n_{AM}=21).
The significant differences by location are marked with an asterisk (*)

Table 15. Household income source by income group

Income source	Extremely low-income		Moderately low income		Total (N=42)	
	Median	IQR (%)	Median	IQR (%)	Median	IQR (%)
Onfarm	57%	50-76	50%	33-70	56%	40-72
Livestock	19%	0-39	6%	0-44	10%	0-43
dairy cattle	0	0	0	0-17	0	0
beef cattle	0	0-24	6%	0-21	3%	3-22
Poultry	0	0	0	0	0	0
Egg	0	0	0	0	0	0
Pig	0	0	0	0	0	0
Arable farming and horticulture	24%	10-47	29%	18-43	29%	17-43
arable farming	10%	0-20	0	0-21	4%	0-20
Horticulture	8%	0-20	0	0-20	6%	0-20
Fruit	0	0-12	0	0-10	0	0-10
Fishing*	0	0-13	0	0	0	0-6
Gathering	0	0	0	0	0	0
Off-farm	6%	0-30	0	0-50	5%	5-30
Day labour*	0	0	0	0	0	0
Nonfarm wage	0	0-13	0	0-50	0	0-28
Real estate	0	0	0	0	0	0
Social protection	25%	0-41	21%	0-43	23%	0-42
Bolsa Família (cash transfer)	8%	0-11	0	0-7	0	0-10
Aposentadoria Rural (old-age pension)*	0%	0-0	0%	0-30	0	0-17
Seguro-defeso (unemployment benefit)*	17%	0-33	0%	0-0	0	0-20

Source: proportional pilling (N = 42; nextremely low-income=19; nmoderately low income=23).

The significant differences by income group are marked with an asterisk (*)

Location and income-poverty matter

Variances in income sources can be explained by location and level of income-poverty. Table 16 shows all income sources that were found to be explained by location, after Mann-Whitney U tests. Two of the social protection benefits were found to explain most of the variation between locations, i.e. the cash transfer Bolsa Família and the unemployment benefit Seguro Defeso. These income sources were relatively higher in Careiro da Várzea (at 10% and 20% on the Median, respectively) than in Angatuba (where the Median values were zero). The old age pension, on the other hand, is the social security mechanism that was found to be more central in

Angatuba (Mdn = 11%) than in Careiro da Várzea (Mdn=0). Besides social protection sources, the participation of income from fishing and day labour were relatively higher in Careiro da Várzea, while the participation of income from fruit and non-farm wage were relatively higher in Angatuba.

Table 16. Income source composition by location.

Income source	Careiro da Várzea (n=21)	Angatuba (n=21)	Mann-Whitney U test and coefficient of determination (r^2)
Cash transfer Bolsa Família	Mdn=10% Mean rank: 29.50	Mdn=0 Mean rank: 13.50	U = 52.500, n1 = n2 = 21, p<.001 two-tailed $r^2 = .56$
Unemployment benefit Seguro Defeso	Mdn=20% Mean rank: 29.00	Mdn=0 Mean rank: 14.00	U = 63.000, n1 = n2 = 21, p<.001 two-tailed $r^2 = .51$
Fishing	Mdn=6% Mean rank: 28.00	Mdn=0 Mean rank: 15.00	U = 84.000, n1 = n2 = 21, p<.001 two-tailed $r^2 = .42$
Old age pension Aposentadoria Rural	Mdn=0 Mean rank: 16.62	Mdn=11% Mean rank: 26.38	U = 118.000, n1 = n2 = 21, p=.001 two-tailed $r^2 = .25$
Fruit	Mdn=0 Mean rank: 17.71	Mdn=0 Mean rank: 25.29	U = 141.000, n1 = n2 = 21, p=.015 two-tailed $r^2 = .14$
Day labour	Mdn=0 Mean rank: 23.50	Mdn=0 Mean rank: 19.50	U = 178.500, n1 = n2 = 21, p=.038 two-tailed $r^2 = .10$
Nonfarm wage	Mdn=0 Mean rank: 18.12	Mdn=30% Mean rank: 24.88	U = 149.500, n1 = n2 = 21, p=.044 two-tailed $r^2 = .10$

With regards to income-poverty levels, variance in income source participation was found to be significant for old age pension, unemployment benefit, fishing and day labour. As shown in Table 17, the most income poor households tended to rely more on unemployment benefit, fishing and day labour, while those on moderately low income were relatively more reliant on the old-age pension Aposentadoria Rural.

Table 17. Income source by income-poverty.

Income source	Extremely low income (n=19)	Moderately low income (n=23)	Mann-Whitney U test and coefficient of determination (r^2)
Old age pension Aposentadoria Rural	Mdn=0 Mean rank: 16.42	Mdn=0 Mean rank: 25.70	U = 122.000, n1 = 19, n2 = 23, p=.002 two-tailed $r^2 = .22$
Unemployment benefit Seguro Defeso	Mdn=17% Mean rank: 26.45	Mdn=0 Mean rank: 17.41	U = 124.500, n1 = 19, n2 = 23, p=.006 two-tailed $r^2 = .18$

Income source	Extremely low income (n=19)	Moderately low income (n=23)	Mann-Whitney U test and coefficient of determination (r ²)
Fishing	Mdn=0 Mean rank: 25.26	Mdn=0 Mean rank: 18.39	U = 147.000, n1 = 19, n2 = 23, p=.027 two-tailed r ² = .12
Day labour	Mdn=0 Mean rank: 23.92	Mdn=0 Mean rank: 19.50	U = 172.500, n1 = 19, n2 = 23, p=.022 two-tailed r ² = .12

Notably, location explains more of the variation in income composition than the level of income poverty per se, which should come with no surprise. The locations purposefully chosen in this research portray distinct peasant universes and embrace a diverse range of poverty and vulnerability indicators, which go way beyond income levels.

6.2 Livelihood aspirations

When asked about the future, the majority of individuals were found to be aiming to maintain current activities (88%) and advance welfare (65%), see Table 18, even in light of the termination of the Food Acquisition Programme. This finding was based on a QDA of data from individual interviews, in which respondents reported on where they saw themselves in five years; on what would be their relationship with the family farm; on what barriers and facilitators would affect their vision; and how feasible that would be (see Methodology, Chapter 2). None of the respondents in the sample envisaged destitution and off-farm diversification ('dropping out'). This finding does not mean all respondents were fully secure. Rather, that they did not believe or did not want to say that they might in future become destitute. Faith in God, supportive networks (such as family and community support, as explained in Chapter 5) and the old-age pension Aposentadoria Rural were presented as justifications for their aspirations to maintain or advance welfare, diversifying (or further diversifying) to off-farm activities or not.

Table 18. Livelihood aspirations.

Livelihood aspiration	Off-farm	Wellbeing	Careiro da		Total
	diversification		Várzea (AM)	Angatuba (SP)	
Dropping out	Yes	Destitution	0	0	0
Stepping out	Yes	Advancement	12 (29%)	3 (8%)	15 (19%)
Hanging in	No	Maintenance	14 (34%)	17 (46%)	31 (40%)
Stepping up	No	Advancement	15 (37%)	17 (46%)	32 (41%)

Source: Qualitative analysis of survey results (N=78; n_(AM)=41; n_(SP)=37)

The majority of respondents were aiming to keep and not (further) diversify to off-farm activities (81%), with half of them aiming to maintain wellbeing ('hanging in', at 40%) or advancing it ('stepping up', at 41%). The other 19 percent were aiming to diversify to off-farm activities and advance wellbeing ('stepping out'). Although there was no significant association between site and livelihood aspiration at 95% confidence level,⁵ there was a significant association between location and diversification, which is one of the components of livelihood aspiration.

More respondents in Careiro da Várzea expressed a wish to diversify than respondents in Angatuba. The proportion of respondents who wished to diversify was 29 percent in Careiro da Várzea and eight percent in Angatuba. There is a statistical difference between these proportions, as indicated by a Chi-square test of independence ($\chi^2(1, N = 78) = 5.606, p=.018$), and the association between the wish to diversify and location was found to be moderate (Cramer's $V = .268$). For details on the quantitative analysis, please refer to Chapter 2. The statistical tests also showed that aspirations varied by age and gender, but not by income, as follows.

6.2.1 Gendered and age-related aspirations

Hanging in was more frequently aspired by women and older respondents; stepping up by men and older respondents; and stepping out by women and younger people in the sample.⁶ In more detail, 'hanging in' was aspired by 18% of the younger (born 1975 onwards) and 64% of the older (born before 1975); 'stepping up' was aspired by 49% of the younger and 31% of the older; and 'stepping out' was aspired by 33% of the younger and 5% of the older. There is a statistical difference between these proportions by and age ($\chi^2(1, N = 78) = 19.722, p<.001$), and the association between age and livelihood aspiration was found to be strong (Cramer's $V = .503$). With regards to gender, 'hanging in' was aspired by 51% of women and 33% of men; 'stepping up' by 23% women and 54% men; and 'stepping out' by 26% of women and 14% of men. There is a statistical difference between these proportions ($\chi^2(2, N = 78) = 7.618, p=0.22$), and the association between livelihood aspiration and gender was found to be strong (Cramer's $V = .313$).

6.2.2 Location and self-assurance

When asked about their degree of confidence or self-assurance in realising aspirations in five years' time, respondents chose between the very unlikely, unlikely, neutral, likely or very likely options. Gender, age and income-poverty were not found to be associated with self-assurance, but location did. The fruition of aspiration was deemed 'very unlikely' by none of the respondents; 'unlikely' for 2% in Careiro da Várzea and 8% in Angatuba; 'neutral' or unknown for 7% in Careiro da Várzea and 27% in Angatuba; 'likely' for 63% in Careiro da Várzea and 24% in Angatuba; and 'very likely' for 27% of the peasants in Careiro da Várzea and 41% in

⁵ $\chi^2(2, N = 78) = 5.742, p=.057$.

⁶ Age cohorts had to be combined until all $fe\sim$ s were greater than 1 and there were no more than 20% of $fe\sim$ s less than 5. In this two-category solution (younger and older, with the birth year cutpoint at 1975), 0 cells (0.0%) have expected count less than 5. The minimum expected count is 6.92.

Angatuba. There is a statistical difference between these proportions, as indicated by a Chi-square test ($\chi^2(1, N = 78) = 13.472, p=.004$), and the association between location and self-assurance was found to be moderate (Cramer's $V = .268$). Most respondents in Careiro da Várzea (63%) were confident (but none was *very* confident) in accomplishing aspirations in five years. In Angatuba, self-confidence levels were more disperse, with no clear mode. This is an indication that respondents in Careiro da Várzea experienced more equal opportunities than respondents in Angatuba. More importantly, this kind of equality – with people living under marginalisation in a location of meagre prospects for prosperity – is not one to be celebrated, since it is linked to the reproduction of poverty in contexts of limited freedoms. At the same time, the results show that opportunities in Angatuba are unevenly distributed, which is a mirror to the highly unequal systems of provision and infrastructure found in São Paulo and Latin America at large. Therefore, the self-assurance levels found in this research is in line with the overall vulnerability context found between the two contrasting universes.

6.2.3 Enablers and barriers

Policies and politics, human and financial capital were frequently associated as enablers or barriers to the realisation of livelihood aspirations, according to the survey results. Changes in structures and policies, such as state support and the return of the Food Acquisition Programme, were mentioned by 40 percent of the respondents (see Figure 44). For example, a respondent said: 'Politics and policies are what make the difference. Today we live at the mercy of politicians. They are the ones who dictate how our lives will be.' (Man, 60, family 20-SP on moderately low income). Education and good health (social opportunities that contribute to human capital) were widely seen as key determinants of the future, by just under 40 percent of respondents. These were often associated with the need for financial capital. In addition to these three main types of enablers or barriers, access to natural capital such as land for agriculture and housing and rivers to fish were mentioned by a quarter of respondents; family and community support (social capital) was listed by six individuals, and better infrastructure and housing conditions (physical capital) by three respondents.

Financial capital was deemed a barrier or facilitator for livelihood aspirations by 50% of younger respondents (born after 1974) and by 22.5% of older respondents (born before 1975). There is a statistical difference between these proportions, as indicated by a Chi-square test ($\chi^2(1, N = 78) = 6.404, p=.011$), and the association between age and the understanding that financial capital is a barrier or facilitator to livelihood aspirations was found to be moderate (Cramer's $V = .287$). The other types of enablers and barriers were not found to vary by location, gender or age groups.

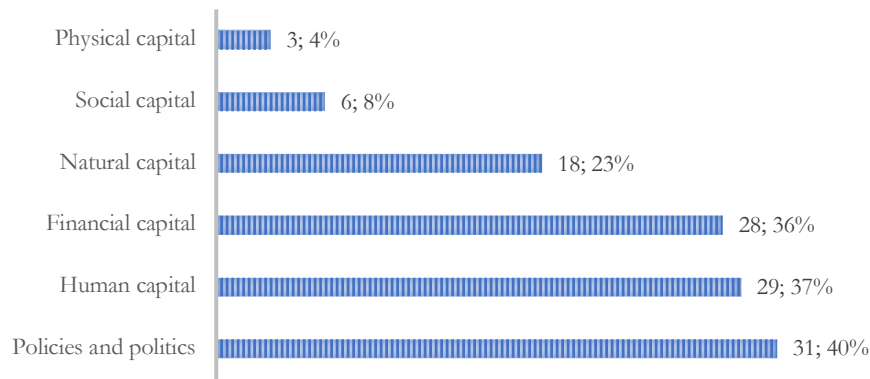


Figure 44. Enablers and barriers to livelihood aspirations
Source: QDA of survey data. N=78=100%; n(SP)=37; n(AM)=41

The findings reported in this chapter fully endorse the sustainable livelihoods' framework, where emphasis is placed on livelihood resources and vulnerability contexts and their interrelationship with livelihood aspirations and strategies. The diversity in livelihood strategies is explored in more detail in the next two sections, in light of, first, the rolling out of the Food Acquisition Programme as a set of nested market opportunities and then its subsequent retrenchment. The main story in each section was chosen to illustrate typical families and individuals in each of the contrasting universes of this research. Section 6.3 focuses on Luciana's family in Angatuba, but also examines less common livelihood strategies that were found to be pursued by members of other households. Section 6.4 focuses on Eduardo's family in Careiro da Várzea, which is also followed by stories of other individuals who have taken different trajectories. Except for respondent names, which were changed to preserve the anonymity of research participants, the life stories reported below are real, as accurate as the research could process them collection and analysis of data from focus group conversations, proportional pilling, walking interviews and a survey.⁷

6.3 Livelihood trajectories in Angatuba, São Paulo

This case study centres on Luciana's family in Angatuba, São Paulo, a study area in which there are generally good prospects for continued prosperity. Luciana, 39, lives in Bombom, which is a rural community northeast of downtown Angatuba. She introduced herself as a family farmer. Yet, besides farming, she also worked as a cleaner in the informal economy. Luciana is married to Pedro, 49, construction worker. Luciana is relatively young, part of the 'be on your own' cohort, while Pedro is part of the older 'the lost decade' cohort. Both were born and raised in the countryside. The couple does not own land, but Luciana has been farming her parents' estate. Luzia, 66, and Lauro, 63, are Luciana's parents. They are part of the older cohort 'the iron years'. Luzia and Lauro privately own land, which sums six hectares and is perceived as secured. They had another child, Saulo, 33, who left the farm in

⁷ See Chapter 2 for methodological detail on the intervention histories/futures method.

2008. Saulo had dropped out – he migrated to Angatuba downtown and has remained off-farm. At the time of the interview, Saulo worked as a welder in the local industry and was not perceived as part of the nuclear family. Saulo was the only member of the family who completed secondary school. Regarding income, Luciana’s family farm is classified in the Pronaf ‘B’, with income lower than R\$20,000 per year – therefore referred here as an extremely low-income household. However, as just noted, income poverty is not associated with livelihood aspirations.

Back to the countryside

Luciana had once stepped out from the family farm to work as a freelance cleaner in the informal economy – with no contracts or social security. For a few years, that was her only source of income. The introduction of the Food Acquisition Programme in 2014 changed Luciana’s pathway. That was when Luciana farmed for the first time in her life. In 2018, Luciana was aspiring to step up – to improve wellbeing through farming – and wanted to stop working as a cleaner, even in light of the retrenchment of the FAP. Luciana’s story is a case of re-peasantisation (see van den Berg, Hebinck and Roep, 2018, and the discussion in Chapter 3): she has attempted to construct a rural livelihood in co-dependence with her husband and parents, who in turn aspired for different (and complementary) livelihood pathways.

Luciana’s family engaged in diverse activities – on-farm and off-farm. Some of the farming enterprises were for self-consumption, some to generate income. Labour was divided in the household. Luciana was in charge of horticulture and perennial fruit farming, growing sweet pepper and passion fruit at time of interview. Luciana’s father, Lauro, was the main responsible for livestock farming (cattle and pig), fishing (*pacu, tilapia, trairão*), and arable farming (annual crops such as corn, manioc, squash, beans). Lauro’s production has been used for self-consumption and bartering. Dairy cattle farming was the primary income source for the family up to 2014-2015 when Lauro retired. In 2018, dairy cattle farming was no longer central in their income portfolio. Luciana’s mother, Luzia, was housekeeping and looking after the family. Luciana’s husband, Pedro, was a construction worker. Family income in 2017-2018 was drawn from multiple sources, whose proportions were estimated by the family using proportional pilling (Figure 45).

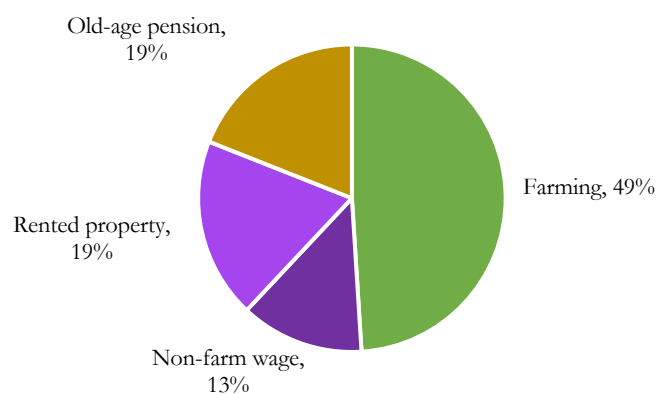


Figure 45. Income composition of Luciana’s family in Angatuba.

Source: Primary data collected through proportional pilling (annual income up to March 2018 as estimated by family 3-SP)

Family income had increased in the past 20 years through farming, off-farm wage and social security, particularly after 2014, when Luzia and Lauro retired and started drawing from the old-age pension *Aposentadoria Rural* and the family accessed the Food Acquisition Programme as a nested market, through the local cooperative Colang. Besides, the family drew income from real estate rent (from a property they acquired in the municipality of Angatuba), from nonfarm wage (Luciana as a freelance cleaner and her husband in the construction industry), as well as from agricultural sales to intermediaries ('middlemen') and supermarkets. Notably, the Food Acquisition Programme and supermarkets were not perceived as stable marketing channels or income channels, according to the focus group discussions.

6.3.1 The impact of the Food Acquisition Programme

According to the focus group discussion, the Food Acquisition Programme and the old-age pension were together important determinants of the income level and overall dynamics of Luciana's family. Prior to this, Luzia and Lauro were the only ones managing the farm. They were 'hanging in': trying to maintain their level of wellbeing, farming for own consumption, trading with relatives and neighbours, and supplying raw milk to the dairy industry. Luciana's parents had no plans to do anything different.

Luciana had never looked at farming as a promising pathway. She said: 'I was never interested in farming... I was not even interested in growing one single head of lettuce, but the Food Acquisition Programme made me feel like farming.' (Luciana, 39, family 3-SP). The FAP as a mediated market encouraged Luciana to invest in farming. With the support of the family and neighbours, she built a greenhouse in a plot of cultivated pastureland formerly dedicated to dairy cattle ranching. The greenhouse had a basic wooden structure and plastic covering, and was built to grow sweet pepper, cucumber and courgette for the FAP (Figure 46). 'I built the greenhouse because of the FAP', said Luciana, who continued: 'I do not think I would have built it otherwise'.



Figure 46. A greenhouse built by Luciana in response to the introduction of the Food Acquisition Programme.
Picture: Personal Collection, 2018 (Angatuba, family 3-SP).

Farming without official technical assistance

Luciana learnt greenhouse cultivation from a neighbour, without technical support from any agricultural extension service, agronomist or technician. Angatuba is under-resourced with regards to technical assistance, according to representatives of the local administration, to the local farmers' cooperative, and the national 2017 census. What is more, if the level of access to technical assistance is low at the national level (9% for the extremely low-income households; 39% for those on moderately low income; and 29% for the non-family farmers or farmers in the agribusiness), Angatuba has an even more unequal distribution of access to technical assistance.⁸ In 2017, technical assistance was accessed by only five percent of the extremely low-income family farms, 26 percent of those on a moderately low-income but not extremely poor – which are below the national average – but by 29 percent of the non-family farms, which is above the national average.⁹ These results are evidence of the levels of inequality in Angatuba, which is paradoxically classified as a site of 'very high prospects for social prosperity'.

Alongside the family's greenhouse, Lauro kept a plot to cultivate staples such as manioc and corn for self-consumption and Luciana started a passionfruit plantation for the Food Acquisition Programme market (Figure 47). Intensification rather than extensification was relied on to increase productivity. Extensification was not pursued, and the legally protected areas were spared, according to the focus group discussion and direct observation. A mix of organic manure and NPK (nitrogen, phosphorus and potassium) fertilisers that were used for pastureland were also used for growing courgette and sweet pepper for the FAP. Synthetic pesticides –

⁸ IBGE (Instituto Brasileiro de Geografia e Estatística), Censo Agro 2017 – Database, <https://sidra.ibge.gov.br/pesquisa/censo-agropecuario/censo-agropecuario-2017>, accessed 20 Nov. 2020.

⁹ Ibid.

fungicides and insecticides – were added to the farming practices, together with organic solutions such as oil and detergent, to control whiteflies. This was something Luciana learnt from her neighbour. Old irrigation equipment was put into use again. Erosion was not visible and not seen as an issue by the farmers.



Figure 47. Diversified farming system in Angatuba.

Farming for own consumption (corn and manioc, left-side), for markets (passionfruit, right-side), with land spared for nature (background).
Picture: Personal Collection, 2018 (Angatuba, family SP-03).

In 2017-2018, half of Luciana’s contribution to the family income was coming from farming and half from her job as a freelance cleaner. The FAP used to contribute 15 percent of the annual family income, but income was by no means the only nor principal benefit of partaking in the FAP.

Lauro associated the Food Acquisition Programme with gains in wellbeing and quality of life, Luciana and Luzia each reporting benefits in overall wellbeing and intimacy. Luzia said: ‘The FAP was very helpful to my daughter and to myself too because we are now together’. (Luzia, 66, family 3-SP). Luciana said: ‘The FAP was very good (...). My relationship with my parents improved. We are together every day... I used to work in town. Therefore, I think it [the FAP] helped a lot. It bounds us together.’ (Luciana, 39, family 3-SP). Luciana also highlighted her satisfaction in participating in the FAP. She said: ‘My greatest satisfaction was to see my products being given to underprivileged people’. Notably, the FAP was helpful to Luciana’s family not only as an economic facility and source of income but also as an opportunity to strengthen family ties and improve the overall wellbeing of the family (see details on wellbeing in the next Chapter). The FAP allowed Luciana to draw satisfaction from realising she was contributing to the social protection of people experiencing food insecurity. It becomes clear, therefore, that the FAP helped in the provision of at least two instrumental freedoms, as per

Amartya Sen (1999), namely: economic facilities for rural people, on the supply side, and protective security for food insecure populations, on the recipient side – all of which mediated by the state through the FAP (Uehara, 2020). As such, following the termination of the programme for Patrícia's family, in 2016 to 2017, they had to rethink their livelihoods.

6.3.2 Coping with austerity

Luciana was not expecting the sudden termination of the Food Acquisition Programme in 2016-2017, but she had heard rumours in the community about an eventual cut. In her opinion, this happened because the government was dismissive of those in need of state support. She said:

The end of the FAP was unexpected. (...) I believe the government does not like us. They want our votes, but they do not want to help us. They started providing some support, but then stopped. I do not know why... Maybe to cut expenses? (...) There is no excuse to remove things from the people. The FAP helped us, who supplied food, and the people in need. (Luciana, 39, extremely low-income, family 3-SP).

Luciana's initial reaction to the termination of the Food Acquisition Programme was one of 'great concern', in her own words. She continued: 'we had to rely on middlemen to sell our produce (...). Intermediaries paid for our produce half of what the FAP would have paid.'

Luciana's family has tried alternative private marketing channels, but none lasted. With the disappearance of the Food Acquisition Programme, the family reported food losses, reduced investment in production and reduced agrobiodiversity. In 2018, intermediaries and local exchanges were the only channels. However, Luciana managed to keep a reasonably stable income because of unusually high demand for sweet pepper, which she was producing in the greenhouse at the time. According to Luciana (edited for clarity):

Passion fruit is rotting in the fields [Figure 48]. I stopped growing cucumber and courgettes because it does not pay. We have reduced diversity and quantity [since the end of the FAP]. (...) I was augmenting my production, but I have reduced it since the end of the programme. [Also,] we have wasted food. (...) The FAP accepted products that were very ripe or almost over-ripe. They were quickly transported and consumed in Angatuba. (...) We have also lost money. (...) Before the FAP, as a freelance cleaner, I did not use to make much money. My income increased during the FAP, and this year we managed to keep a reasonably stable income because the price of sweet peppers was fair, even selling through intermediaries. (Luciana, 39, extremely low-income, family 3-SP)



Figure 48. Food waste in Angatuba. 'Passion fruit is rotting in the fields', said Luciana in Angatuba. Picture: Personal Collection (2018)

Luciana aimed to continue in her stepping up pathway, despite the termination of the Food Acquisition Programme. Notably, she wanted to stop working as a freelance cleaner and did not contemplate dropping out. She said:

I want to be here [on-farm] working, planting sweet peppers, tomatoes, passion fruit... using the land, infrastructure and equipment that we already have. [I do not want to work in] anything out of the farm. I imagine I will be living here (...), keeping what we have, improving production, harvesting more, increasing production, seeking resources to make improvements. (Luciana, 39, extremely low-income, family 3-SP).

'This is the best way for my family to prosper', Luciana continued. Luciana understands that her desired pathway is bound to the existence of marketing channels, but she believes she is 'likely' to succeed in her stepping up aspiration. 'Several of our neighbours abandoned their greenhouses because they did not find a good price to sell their produce', said Luciana. The context could sound harrowing, hopeful, or (very) optimistic, depending on the perspective. Nevertheless, Luciana appreciated that pluriactivity and the diverse income portfolio of the family was a buffer.

Complementary pathways and diverse perspectives

Luciana's relatives were living and aspiring to follow somewhat different pathways. Her husband continued working in the construction industry, which was his version of a stepping *out* trajectory. In Luciana's view, her husband's job was complementary to the family livelihood, although the construction sector seemed to be under crisis as well – according to the focus group discussion. Luciana's parents have sustained hanging in pathways, in which they aimed at keeping levels of welfare and occupations. This meant subsistence farming in Lauro's case, which he believed likely to happen. For Luzia, this meant housekeeping and looking after her children. Luzia wanted to keep her life as it was, but she could not say if this were likely or unlikely to materialise. As seen, self-assurance was considerably unequal in Angatuba. Luzia and Lauro said (edited for clarity):

I would like to do a lot, but only God knows [where I am to be in five years]. I would like to help my daughter [Luciana]... I see myself here, on-farm. (...) The property size will not change. (...) Agricultural production will depend on my daughter. (Luzia, 66, family 3-SP).

I hope to continue [living] as I live now. If this is the way it is going forward, this is fine... I mean, living here, keeping the land. We should keep producing the way we do (...) since it proved to be good. (Lauro, 63, family 3-SP).

For Luzia, prosperity and development for the family meant her children would be ‘thriving and improving their lives: having more stuff and work opportunities.’ Luciana, as we have seen, was generally optimistic about farming as a means to improve wellbeing. Her father, however, an experienced farmer, was less hopeful. Lauro understood that government and markets had not been favourable. In Lauro’s view, prosperity and development for his family partly depended on the government, and he observed that opportunities for small farmers had been diminishing. Lauro said (edited for clarity):

Life is getting more challenging for the small [farmer]. Actually, everything is being terminated. In this way, I do not know how people from small farms will survive. Nowadays, most small farmers do not farm anymore (...). The government has to pay attention to this. I do not think the government has to give people money, but the government could fix prices for some agricultural produce. There are no fixed prices for what we farm. It would be good if the prices were somewhat fixed. (Lauro, Luciana’s father, 63y, Pronaf B, family 3-SP).

In the context of constitutional austerity, a stepping up pathway – such as Luciana’s – is perhaps now much more difficult to achieve. Her success is something that only a future study could determine, but this research suggests that the termination of the Food Acquisition Programme as a nested market prompted Luciana to reduce agrobiodiversity and rely on intermediaries to transport and sell her produce. This result, arguably, implies reduced resilience for the agricultural sub-system she manages. Despite this risk, Luciana’s aspired pathway of increased production and income through farming is buffered by a family with members following diverse livelihood pathways, which includes farming for own consumption and the market, off-farm income, and social security as the old-age pensions. Again, this diversified structure is likely to support Luciana in case she fails in her aspired livelihood.

6.3.3 Diverse pathways

Luciana’s family drew on a variety of income sources, with family members engaged in diverse activities, frequently having different and complementary livelihood aspirations and strategies. Luciana’s household was found to be typical of peasant family farmers, particularly of those on an extremely low-income. They relied on income sources from farming, nonfarm wage and old-age pension. As most extremely low-income caipiras, they did not draw income from beef cattle, which is more common for those in Angatuba on a moderately low-income but not for those who are extremely poor. Unlike the other 20 family farms in Angatuba in this sample, however, Luciana’s family drew income from rented properties. Otherwise, they are typical of the family farm households experiencing the Food Acquisition Programme retrenchment in Angatuba. This singular family encapsulated the types of aspirations that most peasants in Angatuba were pursuing after the end of the FAP. As seen in Table 18,

out of the 37 respondents in Angatuba, 17 were aiming to ‘hang in’ (like Luciana’s parents), 17 were aiming to ‘step up’ (like Luciana herself), and three were aiming to ‘step out’ (like Luciana’s husband).

Stepping up pathways, such as Luciana’s, is one which is not common for women but is typical of younger people like her. Very few younger respondents aspired to follow a ‘hanging in’ pathway. Yet, three out of 14 younger peasants interviewed in Angatuba did aspire for a subsistence livelihood or a complementary or supporting role to a family member. This is the case of Ana, 29, for example. That is how Ana saw herself in five years:

The idea is that my husband will not need to leave the farm. The plan is that he will be working on the farm, which is something he likes a lot. I want to live here, absolutely, until my last day – God permitting. The plan is to support my father-in-law, who currently supports us (Ana, 29, extremely low-income, family 15-SP).

Ana’s husband, meanwhile, planned to ‘step up’. He said: ‘In five years, I see myself in a much better position than now (...), right here [on-farm], dealing with beef cattle and producing crops to feed the cattle. The dream is to be working with what is ours.’ (Marcos, 36, extremely low-income, family 15-SP). Partnerships between individuals with ‘hanging in’ and ‘stepping up’ aspirations were indeed common, which normally appeared with a gendered division, with women ‘hanging in’ and men ‘stepping up’ – or at least aiming at these pathways.

Limited diversification opportunities

Only three respondents in Angatuba aspired to follow a stepping *out* pathway – that is to say: to diversify to off-farm activities and improve wellbeing levels. The three individuals were young adults from the ‘be on your own’ cohort, but unlikely Luciana, they struggled in making a living as farmers. They were planning, at the time of the interview, to improve welfare through off-farm diversification: one as a confectionery maker and seamstress; another one as a schoolteacher; and the other as an entrepreneur in the construction sector.¹⁰ They were all encouraging their Generation Z children to attend university and engage in nonfarm jobs since they did not believe that family farming was any promising.

Pedro is one of the respondents who aspired to step out. He had once left his parent’s farm after realising that farming was not economical. The Food Acquisition Programme affected his life as it did to Luciana, at first instance. Pedro returned to his parents’ farm in 2015 because of the opportunity to produce to a nested market – again, just like in Luciana’s story. While the FAP was active in Angatuba, Pedro trailed a ‘stepping up’ pathway, while his parents ‘hanged in’. His parents were drawing from social security (old-age pension) and kept farming for self-consumption – similarly to Luciana’s father. However, with the end of the FAP, Pedro gave up on farming. In 2018, after the interruption of the FAP, he was aspiring to step *out* instead. Pedro said (adapted for clarity):

I imagine myself taking care of my construction business in a more stable situation. (...) I no longer see myself in the farm. The market does not improve. There is no structure for commercialisation. I do not see myself surviving on-farm. There is no market, no price, no place to sell our produce. (...) The supermarkets do not even look at your price list... I tried everything... I tried to plant what others were not growing, such as radish and watercress, which

¹⁰ Respectively, family 17-SP, limited income; family 5-SP, extremely low-income; family farm 14-SP, limited income.

were in high demand. Even so, it [commercialisation] is hard. The businesspeople from large commercialisation centres keep an eye on what you have, so they find something cheaper and better elsewhere – cultivated in greenhouses, with machinery. Therefore, you lose in the market. (Pedro, 29, moderately low-income, family 14-SP).

Re-peasantisation during and after the Food Acquisition Programme

Re-peasantisation dynamics were found to be often profoundly affected by the Food Acquisition Programme and its life course as a policy intervention. As illustrated by Luciana's case, the introduction of the FAP encouraged her to farm for the first time in her life, which she found satisfactory and superior to her previous occupation as a free-lance cleaner. Luciana's case is a classical portrait of the re-peasantisation: she shifted pathways towards greater autonomy and based on a 'new social-material infrastructure' (as put by Henbick, 2018, p.6). In this case, the FAP was a trigger for a change that was also enabled by pluriactivity at the household level, with her relatives drawing complementary income from off-farm wage and social protection.

Re-peasantisation processes were also reported in the survey following the termination of the Food Acquisition Programme. This time, however, they are linked to constrained opportunities in farming and reduced opportunities for income growth through the sale of farm products. For example, following the end of the FAP, Sérgio's family in Angatuba increased their time working in a pizza restaurant in town, reduced on-farm agrobiodiversity and shifted the farming system to be complementary or subsidiary to the off-farm work, according to a focus group discussion (family SP-6, moderately low-income). They also decided to interrupt their son's training in farming techniques (Ibid.). The family was already pluriactive, engaged in onfarm and off-farm activities, but the end of the FAP shifted their livelihood towards off-farm activities. In short, the family was aiming to keep wellbeing levels through an increase in off-farm activities, taking advantage of the availability of jobs in town, while reducing farming activities to subsistence levels. In their own words:

With the end of the FAP we started working more time in town. During the FAP, I worked in a pizza restaurant [as a cook] in the weekends, but now [after the end of the FAP] I work in the restaurant every day... My son was enrolled in a 6-months farming training course (...) that he had to stop... There is no future in farming... My son is about to conclude secondary school, and he is now working in the pizza restaurant as a waiter. (...) My wife is commercialising sugarcane juice [garapa] in the marketplace, which is not a good place to sell anything else because of the unfair competition with local supermarkets... We therefore abandoned our vegetable garden. We are not producing vegetables, not even for our family, but we continue to grow fruit for the family, and we plan to grow beans and other things for our consumption. (Sérgio, 36, Family SP-6; his son is 19yo, his wife is 43yo, moderately low-income household).

Not always disruptive

The ending of the Food Acquisition Programme was reported as a disruptive event, not only by Sérgio's family but by the majority of families in Angatuba (15 in 21) – and by all 21 families in Careiro da Varzea, for

reference.¹¹ The six families that have not reported negative consequences after the end of FAP had two commonalities: they lived in Angatuba, and they were not in extremely low-income households.¹² They said:

The end of the FAP did not make any difference [for our family] ... It was a tiny extra income we had... (Women, 25; Man 25; moderately low-income, Family 7-SP)

We have lived on state pensions that the two of us receive. We have agricultural products available to sell, although there is no way to commercialise it. (Women, 60; Man, 64, moderately low-income, Family 16-SP)

In our case, the end of the programme was not impactful because we had other means. However, the programme is likely to be greatly missed by those who exclusively lived off it. (Women, 30, Man, 29, moderately low-income, Family 19-SP) – see Figure 49.

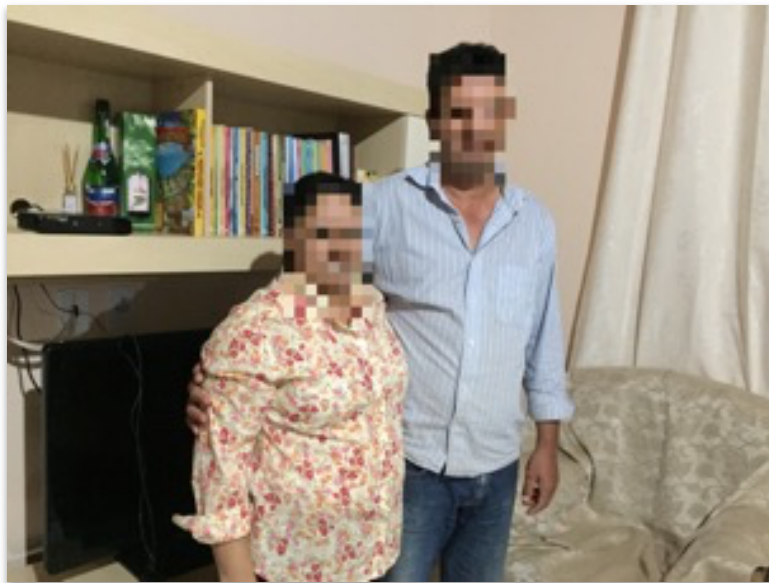


Figure 49. A family in São Paulo that has not experienced drawbacks after the end of the FAP. Off-farm activities and not being extremely poor are associated with the resilience of some family farmers. Source: Personal Collection (2018).

These families drew on stable income sources, either from off-farm wage, old-age pensions (for example, Family 16-SP made 83% of their annual income from the pension)¹³, which was found to be associated with the non-extremely poor in Angatuba, or from partial integration to the agribusiness in contract farming schemes, as discussed in the previous chapter.

¹¹ QDA analysis of 42 focus group discussions.

¹² Families 7-SP, 8-SP, 9-SP, 16-SP, 19-SP and 20-SP.

¹³ Proportional piling conducted during focus group discussion.

6.4 Livelihood trajectories in Careiro da Várzea, Amazonas

This case study centres on Eduardo, 23, fisher and farmer, and his family in Careiro da Várzea – which is a location of meagre prospects for social prosperity, as discussed in the previous chapter. Eduardo (see Figure 50) is married to Julia, 20, student and farmer, both from the ‘Generation Z’ cohort.¹⁴ They lived at Eduardo’s parents’ house but wanted to be living in their own house, a change that would have been significantly facilitated by the Food Acquisition Programme, according to the focus group discussion with Eduardo and his parents. In 2018, Eduardo and Julia aspired to improve their quality of life, build and move to their own house in the community. In order to advance wellbeing, Eduardo and Julia wanted to keep farming but were also planning to diversify to off-farming activities. In five years, they saw themselves farming while studying for their higher education degrees. Cattle farming would be their preference.



Figure 50. Interview with a young family farmer in Careiro da Várzea.
Source: Personal Collection (2018)

Eduardo and Julia said, respectively (edited for clarity):

I see myself at my own house with my wife, with a better quality of life, well... if Conab's project [the FAP] comes back... I see myself going to college. I would like to study medicine. I wish to be living here or living in Manaus to go to college. It is more likely that I will be here working with beef cattle ranching and with [vegetable and annual crop] farming – a little bit of both. (Eduardo, 23, extremely low-income, family 58-AM)

¹⁴ All names have been changed. Eduardo and Julia are members of Family 58-AM, one of the 21 families sampled in Careiro da Várzea in a fieldwork conducted from March to May 2018. All data refers to 2018. The focus group discussion included Julia, Eduardo, Iraci and Joaquim; individual surveys were conducted with the three family farmers; and the walking interview was conducted with Eduardo and his father.

In five years, I see myself going to college, living in my own house, and having cattle in the field, with or without children. I see myself with plenty at home, including plenty of food, and our own belongings. I see us with our land, with our own things, living in the community. (Julia, 20y, extremely low-income, family 58-AM)

Maintaining activities

Eduardo's parents had little desire to diversify their income sources. Eduardo's mother, Iraci, 44, aspired to 'hang in', to continue farming and fishing, doing the same jobs, but less intensively. Eduardo's father, Joaquim, 46, fisher and farmer, aimed to 'step up', mobilising resources and improve wellbeing. Iraci and Joaquim have studied for three years at primary school.

Figure 51 shows father and son farming the land. Joaquim said (adapted for clarity):

I wish to be in a better situation, to finish my house, to build houses for my sons. (...) I wish to have more land, and I aim for a better future for us. (...) I expect to be doing the same activities as now: farming and fishing. It is very good here. (Joaquim, 46, extremely low-income, family 58-AM).

Eduardo's brother, 21, married and left his parent's house in 2017. Eduardo and his wife, 22, live in the same rural community with their one-year-old child. They are farmers as well. Iraci' and Joaquim's two sons and two daughters-in-law have graduated from high school, but as discussed in Chapter 5, the quality of education in Careiro da Várzea is very poor.



Figure 51. Father and son farming in Careiro da Várzea.
Source: Personal Collection (2018)

Land use and other income-generating activities

Farming practices were diversified, which included animal husbandry (beef cattle, chicken, eggs), annual crop farming (corn and watermelon), backyard/vegetable farming (white cabbage, chives, *jambú*, onion, green onion and parsley) and fruit (banana) at the time of walking interview (2018). Peasants here also fished artisanally (*curimatã*, *pacú*, *jaraqui*, *surubim*, *caparari*, and many other species, according to the focus group interview), as illustrated in Figure 40.

Eduardo's family managed 35 hectares in the Amazon wetlands in 2018. His parents, Iraci and Joaquim started managing three hectares of land, which they had bought in the informal market, then they incorporated land with time, informally. The land belongs to the state, which has authorised them to 'sustainably' use it. The state authorisation for sustainable use (TAUS), which was obtained in the 2010s, is perceived as stable, according to the focus group discussion. This authorisation entitled the family to be officially family farmers, which granted them access to public policies such as the Food Acquisition Programme (see Chapter 5).

Eduardo's family lived on an extremely low-income, as per the state standards ('Pronaf 'B', with income lower than R\$20,000 per year). In 2017-2018, besides income from farming and fishing (beef cattle, fishing, annual crops, vegetable farming), the family also drew income from day labour wage (Eduardo and his father worked for neighbours in farming) and from social protection (Figure 52), according to the analysis of the focus group discussion and proportional pilling method. Eduardo and his mother, who were officially registered as fishers, drew from the unemployment benefit for fishers Seguro Defeso. Iraci and her daughter-in-law Julia drew from the means-tested conditional cash-transfer Bolsa Família.

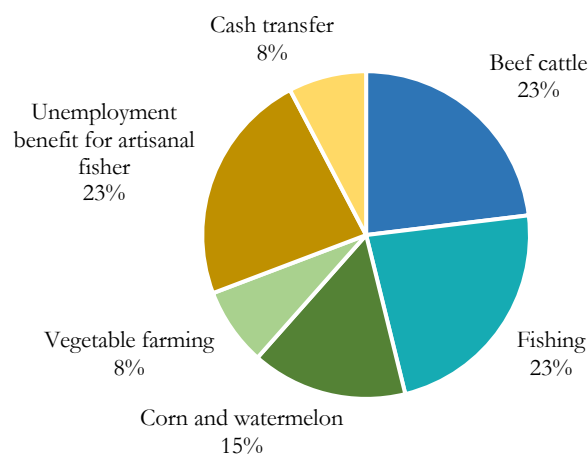


Figure 52. Income composition of Eduardo's family in Careiro da Várzea.
Source: Primary data from proportional pilling (annual income up to May 2018 as estimated by family 58-AM)

The household has experienced little stability over the past 20 years, 'with some good and some bad years', according to the focus group discussion. With regards to commercialisation channels, in the past 20 years, the only marketing channel available to them was the Food Acquisition Programme, besides intermediaries. Informal intermediaries have been shipping their produce to Manaus in a rather anti-economical manner, as noted in the previous chapter. However, most of the exchanges were localised in the form of bartering and donations between

relatives, friends, and within the community, as discussed in Chapter 5. More recently, from 2013-2018, the payments for unemployment benefits for fishers Seguro-Defeso had not been consistent. The FAP as a nested market was equally not consistent. It started in 2014 but was terminated with little advance notice in 2016.

6.4.1 The impact of the Food Acquisition Programme

Eduardo's family participated in the Food Acquisition Programme through the community association of São Sebastião, which they joined because of the FAP as a guaranteed marketing channel (focus group discussions). They were initially excited about the programme. 'It could improve our lives', said Eduardo, who supplied watermelon and corn to the FAP. They were used to grow watermelon and corn but had to adapt land management practices and post-harvest processing. They replaced pastureland and *capoeira* (secondary woody fallow vegetation) with annual crop cultivation. Soil and water management were reported not to have changed. They used to rotate cultures before the FAP and kept doing so after its inception. The same is true for the application of NPK fertilisers in addition to cow manure. Regarding pesticides, the family expressed awareness of the drawbacks of its application on consumers' health. Joaquim said (edited for clarity):

We used fewer agrochemicals because our product was sent to children through the FAP. We use cow urine and tobacco to restrain pests, like flies. We already used these before the FAP. However, to fight borers and caterpillars, we now use [chemical] insecticides. (Joaquim, 46, extremely low-income, family 58-AM)

Quality control also changed. 'We had to improve quality, and we started cleaning our harvest, cleaning the corn and washing the watermelon', said Eduardo. Figure 53 illustrates the farming system.



Figure 53. Farming in Careiro da Várzea.
Source: Personal Collection (2018)

During its three years of implementation, the Food Acquisition Programme represented up to 70 percent of Eduardo's family income, and it benefited the entire family equally according to the focus group discussion. Eduardo stated that he did not learn much with the FAP, since his role was basically to deliver what he had to deliver. Nevertheless, Eduardo acknowledged financial and physical benefits from it: 'It improved our lives. We bought an Aluminium canoe with a *rabeta* [a long-tailed outboard motor]. We built a house... Now [after the end of the FAP], we cannot afford to buy fuel for the canoe (laughs).'

(Eduardo, 23, extremely low-income, family 58-AM). After three consecutive years participating in the FAP, Eduardo's family were confronted with retrenchment. Eduardo's family expected the interruption of the FAP. They had been watching TV news reporting that the government was reducing state budgets. TV is one of the key sources of information for the rural communities in Careiro da Várzea, where broadband and mobile phone network were reasonably unstable. For instance, mobile coverage was available by the riverbank and at floating houses, but only intermittently.

6.4.2 Coping with austerity

According to Eduardo's father, Joaquim: 'Everybody in the community was sad (giggles)... Everybody had objectives for the money they would get from it [the FAP]. My son's project was to buy a *flutuante* [floating house], but then he came to live with us.' (Joaquim, 46, extremely low-income, family 58-AM). Eduardo had to adapt his plans and live with his parents for longer than he wanted. Food was wasted. Farming area and overall production were reduced. Income was reduced by 65 percent, as estimated through proportional pilling, as well as their quality

of life – as it emerged in the focus group conversation. Nevertheless, the family’s attitude is one of adaptation and resignation, which one could associate with a survivalist mentality. Joaquim said:

We have to get used to it. (...) We have to learn how to live without the FAP. (...) When things are reasonable, we carry on. When we have to restrain, we control our expenses. (...) We keep working and carrying on. (...) Sometimes we send our products to the market; other times they throw our produce in the water. Our surpluses we either throw away, or we try selling through intermediaries. ¹⁵ (Joaquim, 46, extremely low-income, family 58-AM).

Intermediaries were the only marketing channel available to them after the termination of the Food Acquisition Programme. Intermediaries, in the family’s view, were not reliable and did not pay a fair price for their produce. According to Joaquim, ‘Life is now slow, in crisis... This year we produced cabbage, but nobody wants to buy it’. He continued (adapted for clarity): ‘We live off fish and cassava flour (...) We save the money we receive from the Seguro-Defeso to buy food during the flooding period, a period in which we have no income, except for fishing.’ (Joaquim, 46, extremely low-income, family 58-AM). Beyond food security, there are a series of other issues currently affecting their wellbeing, which is explored in the next chapter.

As a result, their lives went back to the way it was before the inception of the Food Acquisition Programme, according to the focus group discussion. In 2018, family members had different livelihood aspirations: stepping *out* for the Generation Z couple, stepping *up* for the father, and hanging in for the mother. Although diverse, these are linked by one commonality: a belief each of them has that they are ‘likely’ to achieve their aspiration.¹⁶ They keep optimistic, but they do realise that opportunities for further studies and transformations in structures and processes as in public policies interfere in their abilities to succeed. For instance, Julia, Iraci and Joaquim individually expressed that the return of the FAP would enable their aspirations. Also, Julia, Iraci and Joaquim have similar views on development and prosperity. For them, prosperity has to do with the return of the FAP. Julia said: ‘the best way forward is to have the FAP so we can work’. ‘The governmental project was very good for us’, added Joaquim, who continued: ‘Our greatest difficulty is to sell our produce’. Eduardo pointed to a different development issue. He said: ‘More resources for education, courses, and higher education would be a good start for greater prosperity and development’. In other words, human capital would be helpful in Eduardo’s view. Also, for Eduardo, the ‘best way’ forward for his family is through opportunities in the countryside. Eduardo said: ‘The ideal is not to have to go to the city... The local demand is for health and education. We need more opportunities for people to study Pedagogy and Nursing degrees, for example. These are the chances you have if you want to remain here’. (Eduardo, 23, extremely low-income, family 58-AM, adapted for clarity).

¹⁵ ‘A gente tem que se acostumar. (...) Temos que aprender a ficar sem ele [PAA] (...) Quando a coisa está mais ou menos, a gente vai. Quando tem que manejar, a gente controla os gastos. (...) vai trabalhando e levando. (...) Às vezes mandam pro mercado jogam na água. (...) [o excedente] a gente jogou fora, hoje atravessador (...). A gente vive com o peixe e a farinha’.

¹⁶ Level four on a self-reported scale from one to five; one being ‘very unlikely’ and five being ‘very likely’.

6.4.3 Diverse pathways

Eduardo's family trajectory illustrates some of the typical features of the peasantry in Careiro da Várzea, where social protection plays an important role in the family's annual income, as observed in the results of this research and in several other studies (i.e. Costa *et al.*, 2003; Soares, 2012; Lui and Molina, 2013; Campos and Chaves, 2014). Social protection has been understood as having a double role in the Amazon region: it contributes to the immediate quality of life of beneficiaries while diverging them from farming (Lui and Molina, 2013). It would however be incorrect to conclude that Amazonian peasants, even those on extremely low-income, fully-depend on social security to survive. Peasants in the Amazon have developed a way of living rich in community ties and linked to the local environmental and cultural dynamics (see Chapter 5). As noted, they have come to understand and adapt to seasonality; they have cultivated, processed and stored staples for self-consumption during the flooding season, which have been combined with gathering and fishing and sometimes with off-farm jobs. Also, rural populations have realised the benefits of cooperating with neighbours and the community association, which included facilitated access to nested markets such as the FAP, as observed in the fieldwork for this research. Indeed, non-farming activities is part of the common livelihood of rural populations in the Amazon (Lui and Molina, 2013). Unlike the majority of extremely low-income families in Careiro da Varzea, Eduardo's family drew a significant part of their 2017-2018 income from beef cattle, which was infrequent among extremely low-income families. However, this does not mean they were privileged or well-off by any means. Eduardo's family had few options but to sell their small cattle herd following the end of the FAP. They liquidated most of their stock of cattle, which was their form of savings, according to the focus group discussion. Of course, this income source would not be available to them in the following year.

Nonfarm wage was rare in Careiro da Várzea, which is explained by the fact that the municipality is mostly rural, with few nonfarm job opportunities, as discussed in the previous chapter. With regards to livelihood aspirations, Eduardo's family members have pursued three different livelihood pathways, including greater aspiration for diversification, which was indeed found to be more common in Careiro da Várzea among men and younger peasants than in Angatuba. Women, as seen, have mainly aspired for a hanging in pathway. Older and retired peasants have also relied on pension, the Aposentadoria Rural. This was not the case of Eduardo's parents, who had not reached retirement age as yet, but the case for Amalia, 60, housekeeper and family farmer, and her husband, 62, family farmer (see Figure 54). They were both retired, with old-age rural pension contributing 57 percent of their 2017-2018 annual income.



Figure 54. Amalia's household in Careiro da Várzea.
Source: Personal Collection

Amalia said: 'With the end of the Food Acquisition Programme, we went back to square one: selling to intermediaries. We thought we would supply to the FAP for at least ten years, but it lasted two years in my case. There is a saying: 'all good things come to an end.' (Amalia, 60, moderately low-income, family 61-AM, edited for clarity). 'I see myself living here, on-farm, God willing', said Amalia, 'And doing the same things: farming – but also travelling, to São Paulo, Fortaleza, Belém' (Amalia, 60, limited income, Family 61-AM). Amalia and her husband aspired for a hanging in pathway, with reduced agricultural produce.

As the quotes make clear, some peasants have reverted to previous livelihood strategies, ones that were fundamentally disconnected from markets and focused on auto-consumption. Reverting to previous livelihoods was found not only in the Amazonas but in São Paulo as well. Moreover, after the termination of the Food Acquisition Programme, most families (80%, 18 in Careiro da Varzea and 16 in Angatuba) declared having reduced farming production.

Food waste and the role of social security

Community leaders mentioned food waste as an immediate consequence of the unexpected termination of the Food Acquisition Programme. A respondent said: 'I lost more than 1000 litres of pumpkins that I did not even harvest' (women, 37, extremely low-income, family 59-AM). Figure 55 shows field abandonment in Careiro da Várzea.



Figure 55. Abandoned field of pumpkins in Careiro da Várzea.
Picture: Personal Collection (2018).

Beyond immediate food loss, production potential is often not fully realised due to poor infrastructure for storage and commercialisation. Another farmer made this point:

[The end of the FAP] was a hardship. We lost what we had grown to supply to the programme. I wasted 15 tonnes of pumpkins. (...) My son and I shipped some of the pumpkins to the markets in Manaus, but nobody bought it. There were too many pumpkins there already. (Man, 48, limited income, family 54-AM).

This broader picture reveals how different social programmes have covered different generations cohorts in Brazil. Bolsa Família contributed to poorer and families with children (see Figure 56); Seguro-Defeso to the security of adult fishers during the fishing-prohibition season; and the old-age pension Aposentadoria Rural to the livelihoods of the older. The Food Acquisition Programme can be seen as a ‘social protection’ mechanism, particularly for the food insecure populations who receive the food. For the peasants, however, the FAP is better described as an economy facility. Regardless, the set of state interventions in the form of social protection and economic facilities have played a central role in rural development and the expansion of livelihood opportunities for the peasants. With the termination of the FAP as an economy facility, social protection was in place so they would not immediately fall into extreme poverty.



Figure 56. Children in a peasant family farm household in Careiro da Várzea.
Source: Personal collection (2018)

6.5 From prosperity to austerity

Peasants' ability to adopt coping strategies is widely acknowledged to be a critical factor in their long-term survival and in processes of re-peasantisation, as several scholars have observed (i.e. Sherbinin *et al.*, 2009; Van der Ploeg, 2010; Guedes *et al.*, 2012; Hebinck, 2018; van den Berg, Hebinck and Roep, 2018). This chapter has contributed to this debate by examining how peasants have coped with the end of the Food Acquisition Programme and gone through the early years of constitutional austerity in Brazil. As seen, occupation and income portfolio of peasant family farmers are diverse and vary by location and income groups. Differentiated portfolios stem from differentiated contexts and vulnerability situations, and from the kinds of responses that come from the peasants themselves in negotiation with their environments, and with the state. For instance, off-farm wage was more available and common in Angatuba, which is relatively better resourced and more urban than Careiro da Várzea. Also, negotiation with the state can also be seen in the distribution of social protection benefits, with the cash transfer Bolsa Família and the unemployment benefit for fishers Seguro-Defeso being more prevalent in Careiro da Várzea, particularly for the extremely income poor households, while the old-age pension Aposentadoria Rural being more prevalent in Angatuba, particularly for households on moderately low-income. This is evidence that the context of differentiated access to assets and the vulnerability condition, as discussed in the previous chapters,

are linked to the relationship between rural peoples and the state, the forms of public policies devised for different publics, and to the kinds of livelihoods people (can) aspire for.

The Food Acquisition Programme and the market opportunities it created affected livelihood dynamics in both its implementation and the manner and speed of its termination. With its inception, improving wellbeing through an expansion of farming enterprises, some of them close to the market, became viable and was indeed aspired to by younger peasants, including young adults who had never thought farming would ever be viable. The FAP proved them wrong. It encouraged some to learn farming techniques and invest in infrastructure for farming, even in contexts of high social vulnerability, extreme income poverty and limited availability of technical assistance. The FAP brought a sense of prosperity to the countryside in locations where income from agriculture had been in long term decline. One could say, therefore, that the FAP in some respects addressed the predicament of the peasantry. Its termination was equally impactful. Although a surprise for many, peasants and their families responded rapidly to the new regime of austerity imposed in the mid-2010s. They reverted to previous livelihood sources and coping strategies, increased their reliance on community, family support and social security, as well as through farming for self-consumption and engagement with off-farm alternatives when available. What might have been predicted to be a shift towards dropping out for many peasants did not materialise, however, largely due to diversified activities and the preservation of key assets such as land, community and family support, savings (as in small cattle herds), social protection, alternative job opportunities (even if in low-skilled jobs), and some infrastructure (even if at a sub-standard level, particularly in the Amazonas). Living under austerity was not new to communities used to survive under extreme marginalisation since colonial times, as discussed in Chapter 3.

Having minimal economic facilities and social opportunities, it became challenging for peasants to maintain or advance welfare, to keep away or escape income poverty and other forms of poverty, such as inadequate living standards, poor quality of work, poor sanitation, health or education facilities. Despite these difficulties, the majority of peasants did not express a desire or necessity to migrate away from the family farms and wanted to find pathways for prosperity through farming or a mix of on-farm and off-farm activities. However, the termination of the Food Acquisition Programme as a nested market reminded peasants that surviving and competing under the current food and agricultural regime – one dominated by food empires and by industrial and financialised modes of agriculture – was always going to be challenging. Nevertheless, the majority of peasants aspired to improve wellbeing, even under the new austerity regime, and several of them have acknowledged that changes in policies and politics are crucial in enabling livelihood opportunities. The opportunities available to rural people were not evenly distributed. Livelihood aspirations under this new regime of austerity were found to vary by location, gender, and age, but not by income groups. Levels of self-assurance were also found to vary by location, but not by gender, age, or income groups. Inequality of opportunities in Angatuba was confirmed to be more pronounced here than in Careiro da Várzea. In Careiro da Várzea, citizens had minimal off-farm opportunities. In Angatuba, citizens had more room for manoeuvre, with off-farm opportunities, which were not necessarily suitable for those with poor education or off-farm skills. Equally important, the level of income poverty of a family (i.e., the official Pronaf classification) was not found to be associated with livelihood aspirations after the termination of the FAP. That is not to say that those on extremely

low-incomes (Pronaf A and B) had the same conditions as those on a moderately low-income (Pronaf V). Rather, it shows that the peasant condition is shaped by several factors beyond income poverty.

If ideas of development with equity and social justice permeated the design of the Food Acquisition Programme, as discussed in Chapter 4, its short-lived implementation meant that this ambition was far from realised in practice – as was the more modest objective of enabling the best positioned family farmers to be further integrated into competitive markets (as discussed in the previous chapter). The FAP cannot be said to have been transformative but, on the evidence of this research, it has contributed to reducing income poverty in the short term. The FAP's premature interruption was sufficient condition to take aspirations down to several peasants both in highly 'prosperous' regions such as São Paulo as well as in highly vulnerable geographies such as in the Amazonas. The food, farming and social system in Brazil remains highly unbalanced, largely dismissive of the peasant condition, with perverse implications for the future of rural peoples. One could argue, therefore, that the retrenchment of the FAP is another victory for the corporate food regime.

This examination of livelihood dynamics calls for a reflection on the understanding of the peasant condition amidst the environmental and climate breakdown intertwined with global health crisis such as the Covid-19 pandemic. Public policies for sustainable development should therefore address priority issues for rural peoples that contribute not only to material wellbeing but to multiple dimensions of wellbeing.

Chapter 7 Peasants' wellbeing

While the evidence suggests that the Food Acquisition Programme contributed to the expansion of livelihood opportunities for several (though not all) peasants in Brazil, its recent retrenchment has had significant implications, not only for livelihoods in a material sense, but also for people's sense of wellbeing and security. Wellbeing is not explicitly recognised in the FAP legislation, but it is worth looking at it since all the peasants interviewed for this research made clear their desire to maintain or improve wellbeing levels. In this research, the peasants themselves, individually, were considered the best judges of their personal wellbeing, following well-established methodologies for the appreciation of self-reported or subjective wellbeing.¹ Indeed, critical studies of human wellbeing have accepted that non-financial factors 'matter more to human welfare than standard economic models assume' (Graham, Laffan and Pinto, 2018, p. 287) and, as just noted, peasants in this research reported first hand that political and policy decisions, as well as human capital are equally if not more critical to enable livelihood aspirations than financial capital. Therefore, the researcher used documental analysis to explore how the FAP addresses wellbeing, and individual interviews to explore how peasants understood and assessed their own sense of wellbeing overall and in relation to the retrenchment of the FAP. The interview protocol (see Appendix 4) started with an open-ended question that allowed respondents to articulate their appreciation of wellbeing, which was followed by survey questions covering issues across multiple domains of life satisfaction, viz.: community wellbeing, emotional wellbeing, health, intimacy, material wellbeing, productivity, and safety – as proposed by Cummins (1996). The sample was comprised of 78 individuals from 42 family units. The respondents were diverse with regards to location, gender, age and income levels. Besides qualitative data analysis (QDA), the association of these groups and wellbeing issues were tested using Pearson Chi-Square test of independence for categorical variables, and Mann-Whitney U tests for ordinal variables. The null hypotheses were that there were no significant differences by groups (for methodological details, please refer to Chapter 2).

This chapter starts with an analysis of the official objectives of the Food Acquisition Programme, according to primary and secondary legislation. Coding and categorization of the QDA were conducted by the author and one other experienced researcher, independently, and the results of the conciliation are presented in this short introduction to this chapter. The analysis revealed several domains of life satisfaction that were tackled by the FAP, at least in its legislation. The first section depicts wellbeing issues faced by peasants in Brazil today. The size of the sample allowed for the identification of wellbeing issues that were unevenly distributed by location, gender, age or income groups. The second section explores how the implementation and termination of the FAP impacted the wellbeing of peasants, again, according to the interviews. The final section concludes this chapter with considerations of the wellbeing situation vis-à-vis recent policy changes and the overall predicaments of the peasantry.

¹ See Chapter 1 on theoretical frameworks.

Wellbeing in the Food Acquisition Programme's legal framework

As just noted, while wellbeing (*bem estar*) is not listed as an official objective of the Food Acquisition Programme, a qualitative data analysis of its formal (legal) objectives allows for the identification of wellbeing issues and domains of life that are addressed in primary or secondary legislation (*Lei* and *Decreto*, respectively). The original purpose of the FAP, as established by Lei 10696 of 2003, was to encourage family farming through a new market that would improve food security, reduce hunger, and form family farming buffer stocks. It directly addressed at least two domains of life satisfaction: (i) productivity, particularly marketing channels and incentives; and (ii) health, in the form of food security and hunger reduction. One could say that the formation of stocks would contribute to self-assurance under challenging times and motivation to work even in volatile markets, which are connected with another domain of life satisfaction, i.e.: (iii) emotional wellbeing. The amendments to Lei 10696 of 2003, by Lei 12512 of 2011 and Decreto 7775 of 2012, added several purposes to the FAP, therefore tallying complexity to its essence.² The amended legislation included the realisation of the human right to food as part of the purposes of the FAP and tackled other domains of life satisfaction. The amendments addressed (iv) material wellbeing, (v) community, and (vi) safety, in addition to productivity, health and emotional wellbeing. The substantiation for such observations is found in Table 19.

Table 19. Wellbeing issues officially addressed by the Food Acquisition Programme.

Domain of life satisfaction:	
<i>Wellbeing issues</i>	Evidence
Productivity: <i>Incentives, Marketing channels.</i>	To encourage family farming, promoting their economic and social inclusion, promotion of production with sustainability, food processing and industrialization and income generation (Lei 12512 of 2011, Art. 33-I); To promote food supply, comprising government food purchases, including school feeding (Lei 12512 of 2011, Art. 33-IV); To strengthen local and regional circuits and marketing networks. (Lei 11512 of 2011, Art. 33-VII).
Health: <i>General health</i>	To promote access to food in quantity, quality, and regularity necessary to people in situation of food and nutritional insecurity, from the perspective of the human right to adequate and healthy food. (Lei 12512 of 2011, Art. 33-III). To promote and value biodiversity and organic and agroecological food production, and encourage healthy eating habits in local and regional level (Decreto 7775 of 2012, Art. 2-VII).
Emotional wellbeing: <i>Self-actualisation, Life opportunities, Self-assurance under challenging times, Motivation to work</i>	To encourage family farming, promoting their economic and social inclusion, promotion of production with sustainability, food processing and industrialization and income generation (Lei 12512 of 2011, Art. 33-I); To encourage consumption and the appreciation of food produced by family farmers. (Lei 11512 of 2011, Art. 33-II); To promote food supply, comprising government food purchases, including school feeding (Lei 12512 of 2011, Art. 33-II)
Material wellbeing: <i>Money or jobs</i>	To encourage family farming, promoting their economic and social inclusion, promotion of production with sustainability, food processing and industrialization and income generation (Lei 12512 of 2011, Art. 33-I)

² Please refer to Chapter 4.

Domain of life satisfaction:	Evidence
<i>Wellbeing issues</i>	
Community:	To encourage cooperativism and associativism. (Decreto 7775 of 2012, Art. 2-IX).
<i>Relations in the community</i>	
Safety:	To encourage family farming, promoting their economic and social inclusion, promotion of production with sustainability, food processing and industrialization and income generation (Lei 12512 of 2011, Art. 33-I); To promote and value biodiversity and organic and agroecological food production, and encourage healthy eating habits in local and regional level (Decreto 7775 of 2012, Art. 2-VII).
<i>Environmental and climate security</i>	
Intimacy:	No clear evidence found. Indirectly, however, one could argue that freedom to make decisions with family and family respect and communication could be included as higher-level impact of the FAP, but this was not found to be articulated in the primary or secondary legislation.
-	

7.1 Self-reported wellbeing

In response to an open question, all 78 but 15 of the respondents reported at least one severe wellbeing issue. The most commonly reported severe issues were difficulties with money (16) and health (15). Debts, drugs in the community, access to quality seeds, were raised by four respondents, each. Respondents also listed access to markets, climate security, food and nutrition, hygiene in the community, land access, agrochemicals and social conflict, and each of these elements were severely affecting their lives. Notable, even the less prevalent issues have severely challenged livelihoods, according to the interviews. The tree-map in Figure 57 shows all severe issues reported by the respondents, clustered (colour-coded) by domains of life satisfaction by the author. Material wellbeing and health issues were the most prevalent, alongside issues regarding productivity, community and safety.

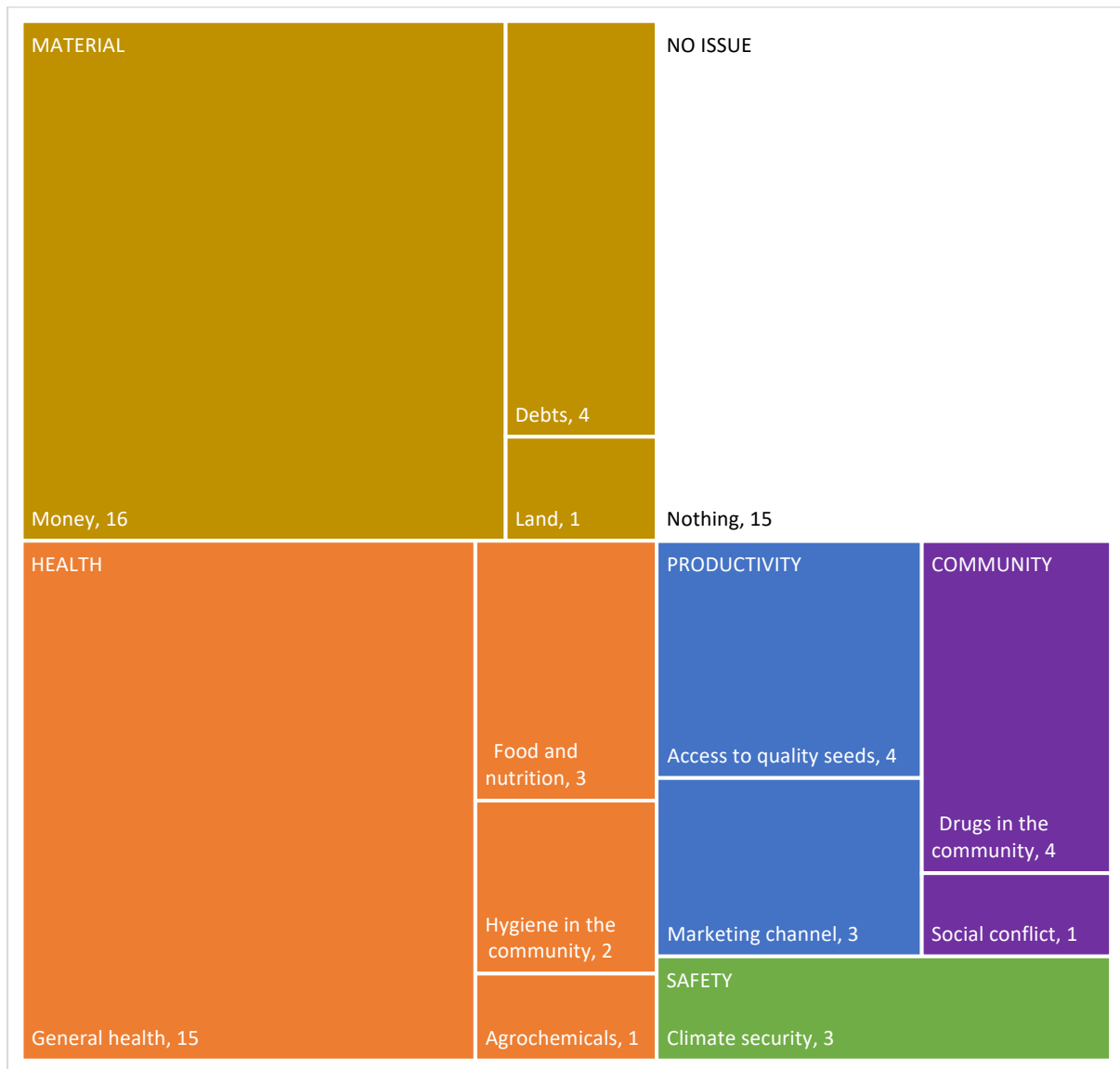


Figure 57. Severe wellbeing issues.

Boxes are scaled proportionately according to the number of times each issue was reported. Each colour corresponds to a domain of life. Source: QDA of open-ended (unprompted) questions (N=78)

We have earlier seen the importance of marketing channels and Food Acquisition Programme mediated markets in opening up new economic opportunities for many of the peasants interviewed for this research. However, difficulties with marketing channels were listed as severe issue by three respondents only, which should be viewed in context. Limited marketing channels could be seen as likely to be a second-order issue for the wellbeing of peasants, rather than one of the main challenges faced by peasants. Otherwise, lack of marketing channels could simply not be understood by the respondents as an issue that could be associated with wellbeing. Nevertheless, this finding challenge one of the principal assumptions behind the theory of change behind the ‘pedagogy of marketisation’, as articulated in Chapter 4. As seen, a premise of the FAP’s theory of change was that a marketing channel gap was one of the most important issues preventing rural people to thrive or develop (in a generic sense) in Brazil. The marketisation of the produce of rural people, one could argue, was a top-down approach to development that did not necessarily address the most severe issues they experience. Of course, rural

people and their representatives supported the FAP, but this support should also be viewed in context: the peasant condition may have not been considered in its full complexity in policy formation. There were indeed some but limited opportunities for peasants to directly discuss and delineate broader rural development alternatives based on rural peoples' sovereignty and needs, as observed in Chapter 4. This is not to say that the FAP was not useful to contribute to the wellbeing of peasants, but to highlight that there is a plethora of issues that shape this other than lack of marketing channels.

Therefore, the responses above portray what first came to the respondents' mind when inquired about wellbeing issues they deemed severe, but these should not be taken as a comprehensive picture of their wellbeing situation. If what was said in response to an open question is relevant, what was not said could be equally relevant. For instance, intimacy and emotional wellbeing issues did not emerge at all in response to the open question. The more structured framework for analysis, with issues spanning across multiple domains of life satisfaction, was then useful to give the analysis greater width and depth.

7.1.1 Issues across domains of life satisfaction

Once prompted with a list of issues across seven domains of life satisfaction, as per Cummins (1996), additional wellbeing issues were unveiled, and others increased salience. The most common issues were associated with productivity – technical assistance, marketing channels and incentives – and material wellbeing issues – money and jobs, and debts. This finding complements the results of the open-ended question, in which access to marketing channels was not salient as a severe wellbeing issue, and technical assistance and incentives were not apparent. Moreover, intimacy and emotional wellbeing issues emerged as relevant categories after the prompted questions. Also, productivity issues emerged as highly salient, while health and material wellbeing were confirmed as widespread issues. The tree-map in Figure 58 illustrates the occurrence of each issue after the prompted questions.

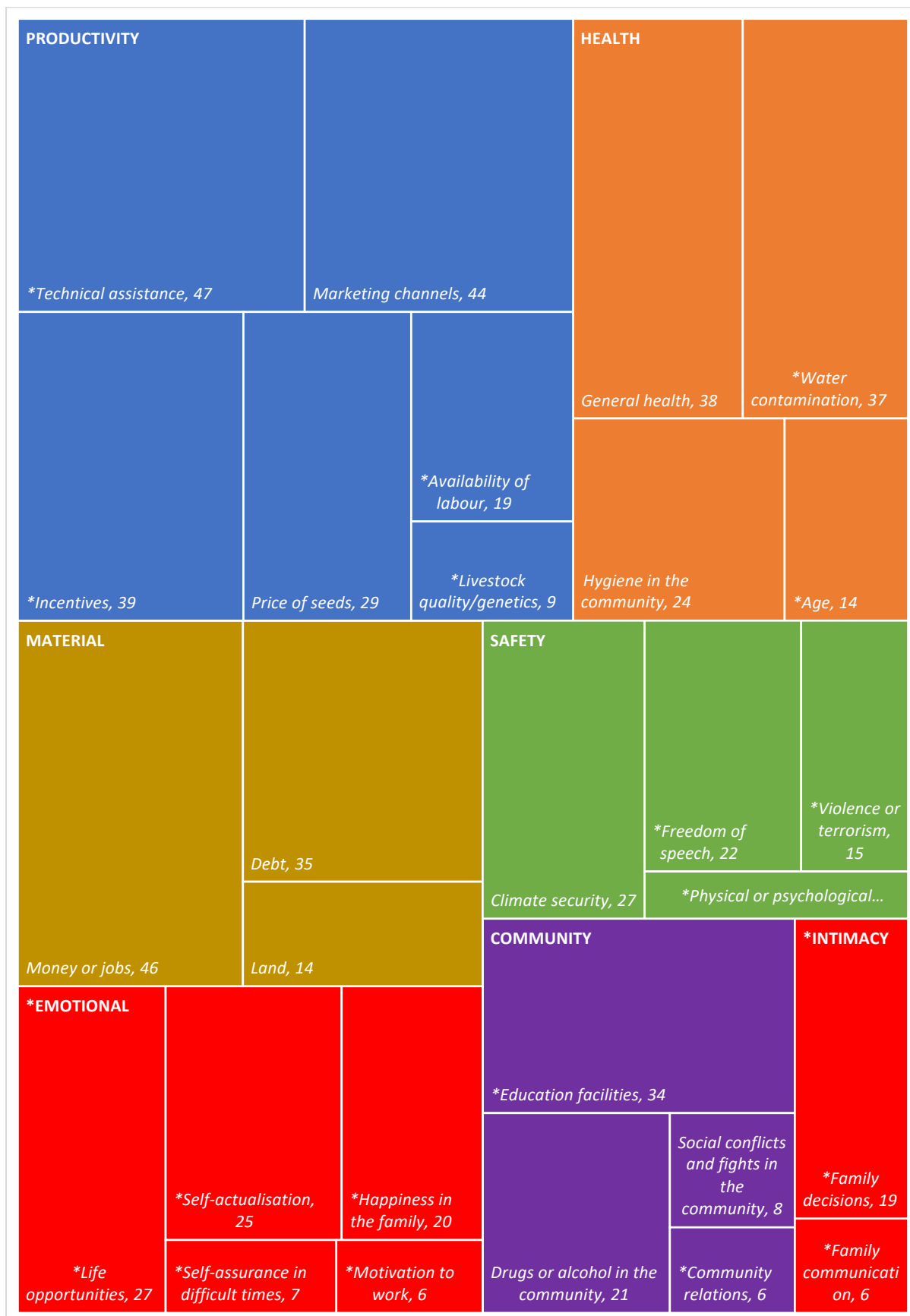


Figure 58. Wellbeing issues across seven domains of life satisfaction. Boxes are scaled proportionately according to the number of times each issue was reported.

* Issues not identified in the open-ended question.

Source: Survey data (N=78)

Technical assistance is the most prevalent of all issues affecting the wellbeing of the respondents. As discussed in Chapter 5, access to technical assistance is very limited, and its distribution is uneven; for instance, Cruz et al. (2021) identified that women, the non-extremely income poor and the better formally educated are more likely than men, the extremely income poor and less formally educated to receive and use technical assistance. Also, if access to marketing channels was hardly mentioned in the open-ended question, it emerged as an issue that is actually one of the most common of the challenges faced by peasants. More than half of the respondents (56%) agreed that marketing channels was challenging to wellbeing. This is clear evidence of how different methods and types of questions result in different data. In this research, the cascaded method – starting with an open question followed by structured questions – was useful to understand similarities and differences between the ontology of peasants and a theoretical construct in wellbeing analysis.

It is also worth noting the number of individuals who reported not having accomplished much in life (self-actualisation), who did not foresee good opportunities for the future (life opportunities), and who felt they lacked the freedom to make decisions within the family. Those who reported experiencing harassment could have been essentially trapped in misery and oppression. Those who did not foresee opportunities for the future may end up giving up on life. Observing less frequent issues, therefore, can also be relevant in policy-making processes addressing health (including mental health) and inequalities. Again, each of these issues were actual constraints to individual's wellbeing and should not be underestimated, even if they appeared at low numbers. A single challenge might be enough to lock-in a person into undesired situations, which could prevent them from leaving poverty traps or advancing wellbeing.

General wellbeing issues

Peasants have faced wellbeing constraints associated with their poverty levels and productivity capabilities, concerns about their health and their limited access to healthcare and due to deeper set and more personal issues to do with emotional wellbeing and intimacy. The wellbeing issues reported by the peasants are listed in Table 20, ordered by frequency. Productivity, material wellbeing and health issues were the domains of life most frequently reported, but issues about community, emotional wellbeing, intimacy and safety have also affected the wellbeing of peasants. This research tested the null hypotheses that there were no differences in wellbeing issues by location, gender, age or income groups (Chi-Square tests of independence and Cramer's V tests). The null hypothesis was retained for most issues, which are marked with a dagger (†) in Table 20. The general wellbeing issues (independent, or not found to be associated with either location, gender, age or income levels) belong to six of the seven domains of life satisfaction: 1) Material wellbeing: money or jobs, debt, access to land; 2) Emotional wellbeing: life opportunities; 3) Safety: climate and environmental security, freedom of speech, violence or terrorism, physical or psychological abuse/ harassment; 4) Emotional wellbeing: happiness in the family, self-assurance under challenging times, motivation to work; 5) Productivity: availability of labour, livestock quality/ genetics; 6) Community: community relations. None of the intimacy issues considered in this research were found to be universal, but associated with gender, location or income groups.

Table 20. Wellbeing issues by frequency and associations with location, income, age and gender

Wellbeing issues (Domain of life)	Frequency	Location	Gender	Age	Income level
Technical assistance (Productivity)	60%	*	***		
Money or jobs (Material wellbeing) †	59%				
Marketing channels (Productivity)	56%				*
Incentives (Productivity)	50%				
General health (Health)	49%			**	
Water contamination (Health)	47%	**			
Debt (Material wellbeing) †	45%				
Education facilities (Community) †	44%				
Access to quality seeds (Productivity)	37%	***			*
Life opportunities (Emotional wellbeing) †	35%				
Climate and environmental security (Safety) †	35%				
Self-actualisation (Emotional wellbeing)	32%	*			
Hygiene in the community (Health)	31%	***			
Freedom of speech (Safety) †	28%				
Drugs or alcohol in the community (Community)	27%	***			
Happiness in the family (Emotional wellbeing) †	26%				
Family decisions (Intimacy)	24%	**			*
Availability of labour (Productivity) †	24%				
Violence or terrorism (Safety) †	19%				
Age (Health)	18%			**	
Access to land (Material wellbeing) †	18%				
Livestock quality/genetics (Productivity) †	12%				
Social conflicts and fights in the community (Community) †	10%				
Self-assurance under challenging times (Emotional wellbeing) †	9%				
Physical or psychological abuse/ harassment (Safety) †	9%				
Respect in family communication (Intimacy)	8%		*		
Community relations (Community) †	8%				
Motivation to work (Emotional wellbeing) †	8%				

Key: † not significantly associated with location, gender, age or income poverty; * significant and moderate association ($0.001 < \chi^2 p \leq 0.05$; $0.20 \leq \text{Cramer's } V < 0.30$); ** significant and strong association ($0.001 < \chi^2 p \leq 0.05$; $\text{Cramer's } V \geq 0.300$); *** highly significant and strong association ($\chi^2 p \leq 0.001$; $\text{Cramer's } V \geq 0.300$).

Source: survey data (n=78)

The issues that were found to be associated with location, gender, age or income level are marked with asterisks (*) in Table 20. In a nutshell: all issues statistically found to vary by location were more prevalent in Careiro da Várzea than in Angatuba; for the older group than the younger group; for the extremely income-poor respondents than the non-extremely poor; but for gender, there was one issue found to be more prevalent among women and another one among men.

7.1.2 Location and the vulnerability situation matter

The analysis of the survey confirmed that location is associated with self-reported levels of wellbeing: peasants in Careiro da Várzea – the location of meagre prospects for social prosperity – faced a greater number of challenges than peasants in Angatuba – the location of very high prospects for social prosperity. On average, ten challenges were reported per person in Careiro da Várzea and six in Angatuba. This finding is in line with the assessment of livelihood resources available in these two contrasting locations – as discussed in Chapter 5. There were highly significant and strong association between location and (i) access to quality seeds, (ii) drugs or alcohol in the community, and (iii) hygiene in the community; significant and strong associations between location and (iv) water quality, (v) freedom to make decisions with the family; and significant and moderate association between location and (vi) technical assistance, and (vii) self-actualisation (see Table 21). All of these issues were more prevalent in Careiro da Várzea, which clearly demonstrates that living in a location of meagre prospects for prosperity (i.e., low human development indicators and high levels of social vulnerability) is indeed more challenging than living in a location of very high prospects for social prosperity.

Table 21. Wellbeing issues by location.

Wellbeing issues (domain of life)	Careiro da Várzea (n=41)	Angatuba (n=37)	Tests of independence and effect size
Quality seeds (productivity)	59%	14%	$\chi^2(1, N = 78) = 16.879, p < .001$ Cramer's V = 0.465 ***
Alcohol or drugs in the community (community)	46%	5%	$\chi^2(1, N = 78) = 16.565, p < .001$ Cramer's V = 0.461 ***
Hygiene in the community (community)	44%	11%	$\chi^2(1, N = 78) = 13.163, p < .001$ Cramer's V = 0.411 ***
Water quality (health)	63%	30%	$\chi^2(1, N = 78) = 13.163, p = .003$ Cramer's V = 0.337 **
Family decisions (intimacy)	37%	11%	$\chi^2(1, N = 78) = 7.012, p = .008$ Cramer's V = 0.300 **

Wellbeing issues (domain of life)	Careiro da Várzea (n=41)	Angatuba (n=37)	Tests of independence and effect size
Technical assistance (productivity)	73%	46%	$\chi^2(1, N = 78) = 6.019, p=.014$ Cramer's V = 0.278 *
Self-actualisation (emotional wellbeing)	49%	19%	$\chi^2(1, N = 78) = 5.574, p=.018$ Cramer's V = 0.267 *

Key: * significant and moderate association ($0.001 < \chi^2 p \leq 0.05$; $0.20 \leq \text{Cramer's } V < 0.30$); ** significant and strong association ($0.001 < \chi^2 p \leq 0.05$; $\text{Cramer's } V \geq 0.300$); *** highly significant and strong association ($\chi^2 p \leq 0.001$; $\text{Cramer's } V \geq 0.300$).

Source: survey data (N=78)

Quality seeds were in scarce supply in Careiro da Várzea. As observed in the fieldwork, most peasants in the Amazon floodplain used to buy seeds (and other farming inputs such as pesticides and fertilisers) in farm supply shops in Manaus, the state capital. There is limited provision of local seeds for use and exchange, according to a community leader (personal communication, May 2018), which does not contribute to the alleviation of the peasant condition. One of the reasons that explain this difficulty is systemic. The Brazilian regulatory environment has been conducive to the growth of the seed industry, which is largely dominated by the chemical industry (Peschard, 2017). By comparison, it has done little to promote 'seed sovereignty', which would disseminate and preserve locally adapted seeds by peasant communities (see Wittman, 2009). The Food Acquisition Programme had another modality of implementation dedicated to support processes of seed sovereignty, but this was not implemented either in Careiro da Várzea or in Angatuba.

Drugs in rural communities in Careiro da Várzea has been a more recent phenomenon, according to a community leader.³ According to them, drug dealers from Manaus – the state capital – recruit so-called 'smart' teenagers in rural communities to enact as local distributors of illicit drugs. Since educational and job opportunities are very limited in Careiro da Várzea, as discussed in Chapter 5, drug dealing presented an opportunity for diversification, income earning, and potentially a way out of poverty. This is an issue that has been under-studied and under-reported, even in the literature available in Portuguese. Health and community issues were also disproportionately reported in Careiro da Várzea. This is in line with the observation that most households in Careiro da Várzea did not count on adequate sanitation facilities (as discussed in Chapter 5) and lacked infrastructure for potable water supply other than Chlorine tablets for collection in town (which required a commute, normally by boat). Sourcing potable water and avoiding water-related diseases and contaminants are part of the everyday struggle in the Amazon floodplains, as seen. The list of issues that were associated with location also included technical assistance, freedom to make decisions with the family, and the sense of self-actualisation. Notably, the overall picture does not mean that living as a peasant in Angatuba is easy, but it is relatively less challenging than living like a peasant in Careiro da Várzea – at least in terms of wellbeing realisation.

³ Personal communication, May 2018.

7.1.3 Gendered, age- or income-related issues

Regardless of gender, peasants registered eight wellbeing challenges on average. If there was no difference in the number of issues mentioned, there was a highly significant and strong association found between gender and (i) technical assistance, and a moderate association between gender and (ii) family communication (Table 22). Poor technical assistance (or lack thereof) is the most common issue listed by the respondents, and it was also found to be more prevalent among men. Meanwhile, family communication is an issue more prevalent among women. This reflects a gendered division of roles, and a culture in which women are found to be disrespected in family communication more frequently than men, as discussed in Chapter 6, and men more likely to inherit land and be expected to farm the land.

Table 22. Wellbeing issues by gender.

Wellbeing issues (domain of life)	Women (n=35)	Men (n=43)	Tests of independence and effect size
Technical assistance (productivity)	40%	77%	$\chi^2(1, N = 78) = 10.878, p < .001$ Cramer's V = 0.373 ***
Respect in family communication (intimacy)	14%	2%	$\chi^2(1, N = 78) = 3.887, p < .049$ Cramer's V = 0.223 *

Key: * significant and moderate association ($0.001 < \chi^2 p \leq 0.05$; $0.20 \leq \text{Cramer's } V < 0.30$); ** significant and strong association ($0.001 < \chi^2 p \leq 0.05$; Cramer's V ≥ 0.300); *** highly significant and strong association ($\chi^2 p \leq 0.001$; Cramer's V ≥ 0.300).
Source: survey data (N=78)

Unsurprisingly, general health was strongly associated with age (Table 23). The older group reported these issues at higher rates than the younger group. This information should be viewed in the contexts of vulnerability faced by peasants. For instance, health issues are part of the common struggles faced by peasants, no matter their age group. In this research sample, one in three of the younger peasants have identified health as an issue affecting their wellbeing, alongside the majority (68%) of older peasants (see Table 20).

Table 23. Wellbeing issues by age group.

Wellbeing issues (domain of life)	43 years old and younger (n=38)	44 years old and older (n=40)	Tests of independence and effect size
General health (health)	32%	68%	$\chi^2(2, N = 78) = 8.712, p = .003$ Cramer's V = 0.334 **
Age (health)	14%	86%	$\chi^2(2, N = 78) = 8.097, p = .004$ Cramer's V = 0.322 **

Key: * significant and moderate association ($0.001 < \chi^2 p \leq 0.05$; $0.20 \leq \text{Cramer's } V < 0.30$); ** significant and strong association ($0.001 < \chi^2 p \leq 0.05$; Cramer's V ≥ 0.300); *** highly significant and strong association ($\chi^2 p \leq 0.001$; Cramer's V ≥ 0.300).
Source: survey data (N=78)

Respondents in extremely low-income households (under R\$20,000/year, mainly Pronaf B) faced more challenges than peasants in limited income households (from R\$20,000 to 200,000 a year, Pronaf V). On average, respondents on extremely low-income reported nine issues, while the others reported seven. Income poverty was found to be significantly and moderately associated with (i) access to quality seeds, (ii) access to marketing channels, and (iii) freedom to make decisions with the family. The prevalence of all of these issues was higher among respondents in extremely low-income households, as shown in Table 24. Access to quality seeds was strongly associated with location, and moderately so with income levels.

Table 24. Wellbeing issues by income group.

Wellbeing issues (domain of life)	Extremely low-income (n=38)	Limited income (n=40)	Tests of independence and effect size
Access to quality seeds (productivity)	50%	25%	$\chi^2(2, N = 78) = 5.215, p=.022$ Cramer's V = 0.259 *
Marketing channels (productivity)	68%	45%	$\chi^2(2, N = 78) = 4.347, p=.037$ Cramer's V = 0.236 *
Freedom to make decisions with family (intimacy)	34%	15%	$\chi^2(2, N = 78) = 3.903, p=.048$ Cramer's V = 0.224 *

Key: * significant and moderate association ($0.001 < \chi^2 p \leq 0.05$; $0.20 \leq \text{Cramer's } V < 0.30$); ** significant and strong association ($0.001 < \chi^2 p \leq 0.05$; $\text{Cramer's } V \geq 0.300$); *** highly significant and strong association ($\chi^2 p \leq 0.001$; $\text{Cramer's } V \geq 0.300$).
Source: survey data (N=78)

Marketing channels and the extremely income poor

Our analysis further underlines the role of marketing channels in opening-up economic opportunities and thereby promoting an improved sense of wellbeing for many respondents. Marketing channels was found to be an issue that was not on top of the respondents' minds as a severe issue but found to be one of the most commonly constraints experienced by peasant family farmers, particularly those living in extremely poor households. As seen, marketing channels was the third most common issue listed by the respondents, at 56 percent. There was no significant difference in the distribution of this issue by location, nor between gender or age groups. However, the distribution was found to be significantly associated with income poverty, with 68 percent of the extremely income poor experiencing issues with marketing channels (see Table 24). This observation offers a counterargument to recommendations found in a study by Salgado et al. (2017), which classified several municipalities, such as Angatuba, as having no need for the Food Acquisition Programme, which could potentially influence policymakers to exclude certain municipalities in policy targeting. Instead of excluding locations, one could consider prioritising the extremely income poor families, which are already identified by the state under the Pronaf. Sometimes, very simple categories can be effectively used to target public policies, as opposed to complex uses of models and multiple indicators. For example, if there was a decision to limit the reach of the FAP as a

nested market, the results of this research would allow for the recommendation of a focus on extremely-income poor households rather than a focus on specific municipalities or regions.

7.1.4 Overlaps between actual wellbeing issues and the FAP strategy

Technical assistance – which was the most common issue identified by the respondents of this research – is not officially addressed by the Food Acquisition Programme, but several other highly prevalent issues are: money or jobs; marketing channels; incentives; and general health. Complementary policies have tried to address technical assistance, but this was reportedly very limited, as discussed in Chapter 5 and by several authors (see, for instance, Rocha Junior et al., 2020). Figure 59 highlights the issues mapped in the QDA among the set of issues reported by peasants in this research. The issues in dark boxes are the ones identified by the respondents and addressed in the FAP’s primary and secondary legislation, as discussed in the introduction to this chapter.

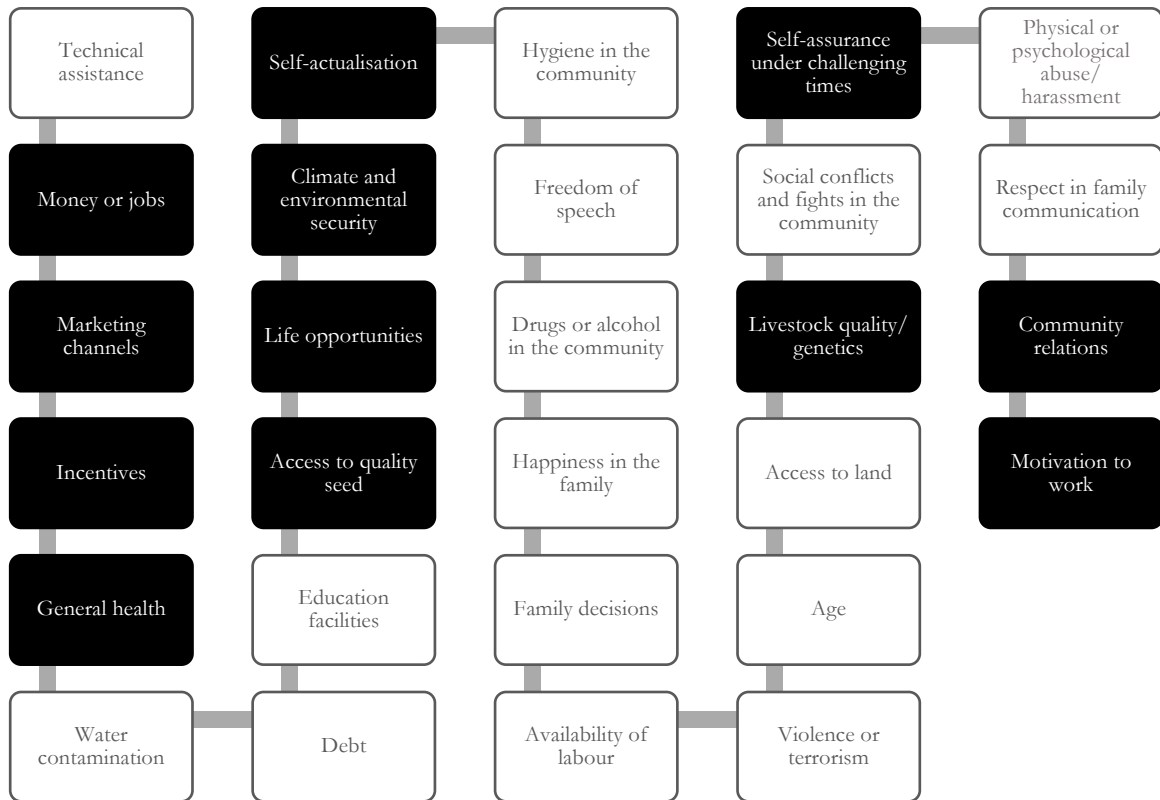


Figure 59. Wellbeing issues reported by peasant family farmers and addressed in the FAP’s legislation. The issues appear in order of frequency, decrescent, as reported by the respondents, starting at the top-left corner and following the grey line. The issues in black boxes were identified in primary and secondary legislation.

In order to understand the extent to which the wellbeing of the peasant family farmers was influenced by the Food Acquisition Programme in its implementation and retrenchment, this research asked respondents if and how their wellbeing was impacted by the FAP. The results of the analysis are presented as follows.

7.2 The impacts of the end of the Food Acquisition Programme on subjective wellbeing

About four in five individuals (64 out of 78 in the sample) reported drawbacks directly connected with the termination of the Food Acquisition Programme – see Figure 60. Before turning into the analysis of what happened with the majority who reported at least one kind of drawback, it is worth exploring the thinking which appeared to inform the comments of those who reported no drawback.

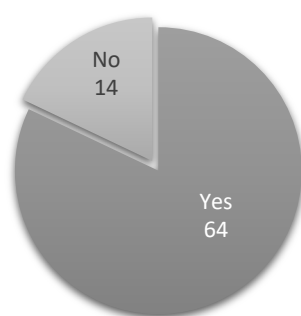


Figure 60. Occurrence of wellbeing impact after the end of the Food Acquisition Programme.
Source: Survey (N=78)

There were multiple reasons for resilient livelihoods for the 14 individuals who did not report wellbeing drawback after the termination of the Food Acquisition Programme. In their own words (edited for clarity):

We are fine; nothing has changed... We have to manage anyway... We have to increase our cattle here and produce more milk... (woman, 57, on a moderately low-income, family 10-SP).

The end of the FAP did not affect our wellbeing. With our farming work and our [off-farm] income, we have managed. We keep finding ways to live well. (man, 70, extremely low-income, F50-AM).

The end of the FAP did not affect us because we had other businesses. (woman, 34, on a moderately low-income, Family 18-SP)

No. The end of the FAP did not impact our wellbeing. My wife is retired [and receives an old-age pension] and we get paid rent for two houses besides the little things we do here [onfarm]. You can live in peace if you are healthy and do not need to spend on medicine... Also, we produce meat, so we do not need to buy much of it. Meat is very expensive.⁴ (man, 50, on a moderately low-income, Family 20-SP)

Availability and access to alternative marketing channels, pluriactivity, reliance on old-age pension, and resilience (to marginalisation) were some of the factors that enabled some individuals to keep wellbeing levels even after the termination of the Food Acquisition Programme. However, livelihood alternatives were not available to all

⁴ 'Não. Mulher já aposentou, e mais as casinhas, duas, de aluguel, mais as coisinhas que a gente faz aqui. Dá para viver sossegado, estando com saúde e não tendo que comprar remédio. E carne a gente produz, a gente compra pouca. Carne está pesando no bolso hoje.'

individuals, as discussed in Chapter 6, which meant that the numerical majority of peasants experienced wellbeing impairment following the retrenchment of the FAP. The uneven distribution of opportunities and resources was acknowledged by some of the respondents, who realised that other people – i.e., more impoverished peasants and recipients of food aid – struggled with the termination of the FAP.⁵ One of the peasants said: ‘Nothing much has changed for us after the end of the FAP. However, its termination has largely affected other families, mainly those who depended on the FAP to survive.’ (Women, 80, on a moderately low-income, family 2-SP).

Worse in Careiro da Várzea and for those on extremely low-income

The ending of the Food Acquisition Programme impacted in ways which varied by location and income groups but not by gender or age groups. One of the potential explanation for the non-gendered impacts is that the Agricultural Supply Agency (Conab) granted preference to projects that had higher women to men ratios (see BRASIL Conab, 2019a; BRAZIL, 2020). This affirmative action was likely to have been effective in securing gender equality in the FAP, as the government itself has claimed (Ibid.). However, there was a significant and moderate association between wellbeing impact and (i) location and (ii) income levels. Impact on wellbeing was reported by 93% of the peasants in Careiro da Várzea and 70% of the peasants in Angatuba. There is a statistical difference between these proportions, as indicated by a Chi-square test ($\chi^2(1, N = 78) = 6.634, p=.010$), and the association between location and reported wellbeing impact after the termination of the FAP was found to be moderate (Cramer's $V = .292$). Moreover, impact on wellbeing was reported by 92% of peasants in extremely low-income households and by 73% of those on a moderately low-income. The chi-square tests showed that there was a significant association between impact on wellbeing and income levels ($\chi^2(1, N = 78) = 5.086, p=.024$), at a moderate strength (Cramers's $V = .255$).

Therefore, peasants with extremely low-income and those living in a location of meagre prospects for prosperity were impacted more severely than others. Equally important is to acknowledge that most of the peasants in the location deemed to be of very high prospects for prosperity, Angatuba in this case (at 70 percent), and almost three-quarters of the peasants who were extremely poor, have also reported wellbeing drawbacks. The results so far point for a widespread negative impact of austerity for the peasants, and it clearly shows that the income-poorest and those living in a location of very low social prospects were disproportionately more vulnerable.

Domains of life satisfaction and the Food Acquisition Programme

The end of the Food Acquisition Programme impacted on several domains of life satisfaction, i.e.: material wellbeing, productivity, health, emotional wellbeing, community wellbeing, and intimacy – according to the results of the interviews. For example, income loss, opportunities for income-generation, nourishment and health, and various aspects related to self-worth and life opportunities were mentioned by the respondents. Figure 61 shows the occurrence of wellbeing impacts by domains of life satisfaction.

⁵ As observed in the fieldwork, reported by peasants in the walking interviews and by community leaders.

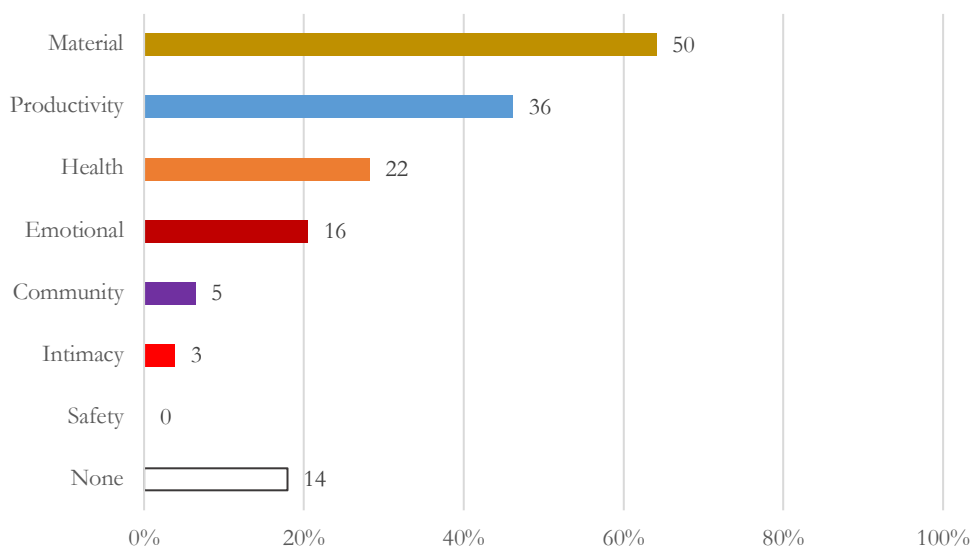


Figure 61. Early impacts of the end of the Food Acquisition Programme on peasants' wellbeing
Source: survey data (n=78)

The Food Acquisition Programme affected most of the wellbeing issues mapped in the programme's legislation (see Table 19), with two exceptions. First, self-reported happiness was not evident in the FAP legislation, but reduced happiness was clearly articulated by respondents as one of the consequences of its retrenchment. This is substantiated in the sections below. Second, none of the 78 respondents reported impacts of the end of the FAP on climate and environmental security. That is not to say that the FAP does not affect climate and environmental security. Instead, climate and environmental security would be medium- to long-term consequences that are not easily linked to the inception or termination of any policy. Environmental and biodiversity considerations were introduced in secondary legislation only in 2012, shortly before the retrenchment phase. Moreover, the FAP pricing mechanism for organic or agroecological production did not seem to have encouraged any of the rural people in this sample and in most cases across the country, as per the national statistics (see BRASIL Conab, n.d., 2019), with exceptions where the presence of NGOs and social movements such as the MST were actively supporting agroecological transitions, as discussed in Chapter 4.

7.2.1 Economic facilities and income

Material wellbeing and productivity were often found to be intertwined. According to interview data, productivity constraints were associated with difficulties with marketing channels, which made redundant farming for profits. Income loss and reduced purchasing power were also reported in association with impacts on material wellbeing. In the words of the respondents (edited for clarity):

Wellbeing has been affected by the end of the FAP to a great extent. One cannot rely on that money anymore... There is no money if there is no commercialisation channel. (Man, 56, extremely low-income, family 12-SP)

Things turned bad... Last year, my husband farmed, harvested and sold 7 tonnes of produce. Today [after the termination of the FAP], we have to reduce farming because there is no way to sell our produce. (Woman, 67, extremely low-income, family 50-AM).

I did not buy a tractor this year, which was part of my plans. (...) Had the FAP been continued, I would have been able to buy a tractor. (Man, 46, on a limited income, Family 21-SP).

Our only source of income is the Bolsa Familia (the cash transfer programme) after the end of the FAP. I wish I could buy new shoes, new dresses and clothes for the family. However, the current circumstances do not allow for it. We would also like to build our house in Iranduba (a neighbouring municipality across the river), but it is difficult... (Woman, 33, extremely income poor, Family 66-AM). See Figure 62.

We miss the money. Things became slower without the programme. We used to sell our produce to the FAP every month. Now, [without the programme], our financial situation is harder. Now we only have a small shop – and we do not make much money from it. Agriculture should be a good complement... Now you have to plan. We will not buy anything without planning... People used to spend more in our small shop when the FAP was active. (Woman, 43, extremely low-income, family 62-AM). See Figure 63.



Figure 62. Unfinished floating house in Careiro da Várzea, Amazonas.
Source: Personal Collection (2018).



Figure 63. Local shop in Careiro da Várzea, Amazonas.
Source: Personal Collection (2018)

This research tested to see if wellbeing impacts were evenly distributed by location, gender, age or income groups. There were no significant associations with productivity, but there were associations between material wellbeing with (i) income poverty and (ii) location. Impact on material wellbeing was found to be more commonly found amongst those in extremely low-income households (at 79%) than by those in limited income households (at 50%). There is a statistical difference between these proportions, as indicated by a Chi-square test ($\chi^2(1, N = 78) = 7.096, p=.008$), and the association between income-poverty and material wellbeing was found to be strong (Cramers's $V = .302$). Also, impact on material wellbeing was reported by 76% of the respondents in Careiro da Várzea and by 51% of the respondents in Angatuba. There is a statistical difference between these proportions, as indicated by a Chi-square test ($\chi^2(1, N = 78) = 4.974, p=.026$), and the association between material wellbeing and location was found to be moderate (Cramer's $V = .253$). As seen, the prevalence of adverse effects was found to be higher for the peasants living in extremely low-income households, and those in Careiro da Várzea – the site of meagre prospects for prosperity.

Income loss and recovery

The end of the Food Acquisition Programme was associated with reductions in annual family income which ranged from eight to 90 percent (Mdn=30%, IQR 20%-50%).⁶ This was estimated using proportional

⁶ The data is reported as range, median and IQR since the data was not normally distributed, which was confirmed by a visual analysis and Shapiro-Wilk tests on SPSS.

pling in focus group discussions with 42 families. Income poverty was not found to explain variance in income loss, but location was. The medians for the participation of the FAP on annual income were 40% in Careiro da Várzea and 20% in Angatuba (Figure 64). There was a significant and small effect of location (the mean ranks for Careiro da Várzea and Angatuba were 25.67 and 17.33, respectively; Mann-Whitney U = 133.000, $n_1 = n_2 = 21$, $p = .027$ two-tailed, $Z = -2.210$, $r^2 = .12$)⁷, with 12% of variance in income loss explained by location.

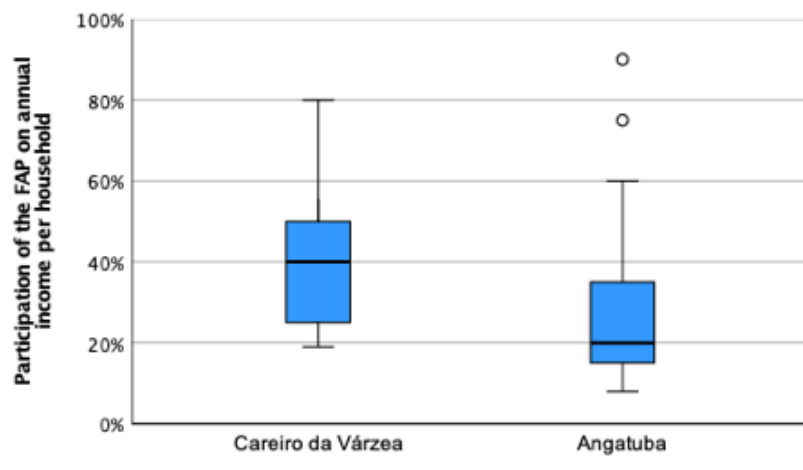


Figure 64. Box plot of reported income loss following the end of the Food Acquisition Programme. The boxes represent the interquartile (IQ) range which contains the middle 50% of the records. The whiskers are lines that extend from the upper and lower edge of the box to the highest and lowest values which are no greater than 1.5 times the IQ range. A line across the box indicates the median. Outliers are depicted as unfilled dots, which represent the cases with values between 1.5 and 3 times the IQ range. Source: proportional pilling, $N=42$ ($n_{SP}=n_{AM}=21$).

A key reason for this is because termination of the Food Acquisition Programme greatly reduced access to marketing channels – fundamentally restricted to intermediaries in Careiro da Várzea, and mostly through contract farming in Angatuba, as discussed in the previous chapter. Consequently, farm produce, if not wasted, was usually sold for low prices – which is the standard in dominant food regimes (see, for instance, Benton et al., 2021). The respondents said:

The cucumber I produced was sold for nothing after the termination of the FAP... While the FAP would have paid R\$1.10 per kilo, intermediaries paid R\$3 for a bag of 25 kg of cucumber [R\$ 0.12/kg]. (Man, 31, extremely low-income, family 57-AM).

The FAP was supportive because we could get a fair price for our produce, make a profit, and not waste [food]. Selling to intermediaries is not economical: the profits would be too little. However, as a father of a family, I cannot stop farming. Income from farming barely allows my family to buy coffee, bread, and afford transport costs. (Women, 36, moderately low-income, family 63-AM).

While income loss was more severe for peasants in Careiro da Várzea, on the median, the variation and outliers found in Angatuba (see Figure 64) mirrors the higher inequality levels found in Angatuba, as discussed in the previous chapters. Also, most families (34 in 42) reported not having recovered in full the income lost after the end of the Food Acquisition Programme. Income recovery varied from zero to 100 percent ($Mdn=0$, IQR 0-

⁷ $r = \frac{z}{\sqrt{N}}$

40%), as estimated by the families using proportional pilling. The majority of families (24) reported no recovery at all; about a-quarter of the families (10) partly recovered income levels with alternative sources (from 4-50%), while a few families (8) reported income recovery in full. No family in the sample reported having had income gains after the end of the FAP. Also, there was no evidence that location or income groups would explain any variance in income recovery. Naturally, this was the context found in 2018, and only a longitudinal study could determine the consequences of austerity on the long run.

7.2.2 Nourishment and health

Interview findings suggest that the termination of the Food Acquisition Programme generated anxiety regarding health, nourishment and the ability to afford diversified diets and medical treatment. One-third of the respondents reported health-related issues associated with the end of the FAP. In their own words (edited for clarity):

Nourishment was affected by the end of the FAP. We used to have a greater variety of food, which we used to enjoy every day. Now [after the end of the FAP] we do not have the diversity that we used to have. (woman, 30, moderately low-income, family 19-SP)

You have to eat more basic stuff if you do not want to get in trouble. Nourishment (...) could be better had the FAP continued. Now [after the end of the programme], to save money, you buy one kilogram of ribs [which contains inedible bones] instead of one kilogram of steak. (man, 56, moderately low-income, family 22-SP).

It became more challenging than it was before. Sometimes you get sick, and you cannot afford medical treatment. You would die if you waited for public health assistance because it takes ages for you to get examined. (man, 52, extremely low-income, family 46-AM).

We had better conditions to get what we needed. The FAP used to help with our needs, such as nourishment, education, medicine... (woman, 55, extremely low-income, family 56-AM)



Figure 65. 'The Programme used to help with our needs, such as nourishment', said a respondent. Source: Personal Collection (2018)

Retrenchment in two phases for recipients of food aid

Some rural communities were not only suppliers but also recipients of food from the Food Acquisition Programme in Careiro da Várzea.⁸ As explained by a local community leader, his community was shipping produce to urban food insecure populations in Manaus through the FAP. At the same time, some members of his community were receiving the produce of another rural community in Careiro da Várzea, also through the FAP. What they received added to their food baskets and were well received by those living in extremely income poverty.⁹ Although legal and useful for nutrition and food security of extremely low-income families, this practice was discontinued due to criticism that ‘one should not be supplier and recipient’ of the same policy, according to a government representative.¹⁰ Consequently, in its final years, all of the government purchases from Careiro da Várzea was shipped to Manaus, the state capital – and nothing was distributed to local, neighbouring rural communities.¹¹

Therefore, the retrenchment of the Food Acquisition Programme in Careiro da Várzea was realised by peasant family farmers, particularly those on an extremely low-income, in two stages: first as food recipients, then as food producers. Initially, the government agency implementing the FAP in Amazonas, working together with rural community leaders in Careiro da Várzea, excluded local peasants from the list of recipients of food aid. Later, with the closure of the FAP in Careiro da Várzea, family farmers lost access to a marketing channel – which is considered by most of them as an issue affecting their wellbeing.

7.2.3 Community and emotional wellbeing

The respondents reported that the Food Acquisition Programme allowed for the creation and strengthening of bonds with relatives and community members and remarked the benefits of socialising in different venues, such as in the church, in football matches, and in meetings organised by community associations. The example of Luciana’s family in Angatuba is illustrative of this point. As discussed in Chapter 6, Luciana credited the FAP with improvements in her relationship with her parents, which was also remarked by her mother, who said: ‘the FAP helped my daughter and myself, because we are together’ (Luzia, extremely low-income, Family 3-SP). ‘Happiness’ (*felicidade*) was often used to describe what was felt when the programme was active. Peasants were thrilled with the chance to work the land, felt gratified, happy and courageous.

However, it was a feeling of ‘sadness’ (*tristeza*), anxiety, and discouragement that prevailed as consequence of the end of the Food Acquisition Programme. The coping strategy of Eduardo’s family in Careiro da Várzea, which was discussed in the previous Chapter, illustrates well this feeling. As his father put it: ‘Everybody is sad here.’ (Joaquim, 46, extremely low-income, family 58-AM, free translation). Impact on community wellbeing was reported by 12% of the respondents in Careiro da Várzea and by none in Angatuba. There is a statistical difference between these proportions, as indicated by a Chi-square test ($\chi^2(1, N = 78) = 4.821, p=.028$), and the

⁸ Personal communication with representative of Conab in Manaus, April 2018.

⁹ Personal communication with representative of a community leader in Careiro da Várzea, May 2018.

¹⁰ Personal communication with representative of Conab in Manaus, April 2018.

¹¹ Ibid.

association between community wellbeing and location was found to be moderate (Cramer's $V = .249$).

Respondents in Careiro da Varzea were missing the meetings with members of their community associations and the lessons they would acquire in such meetings. In the respondents' own words:

The end of the FAP affected our wellbeing. Working the land is therapeutic. I liked it a lot. I was thrilled to take care of it. It is good. It is gratifying. I liked it very much, but now it is over. (woman, 30, on a moderately low-income, Family 19-SP)

I was living well. I was happy. I would go party, play football, to the church. Thanks to the FAP, I bought a freezer, a cell phone, and my mom got a washing machine. Now I am worried. Because I know the money from the FAP will not come anymore. I am worried... When we found out that the FAP would be terminated, I thought: 'holy shit'. (...) I had plans to buy six oxen. But my plan went down the drain. (man, 23, moderately low-income, family 53-AM).

We used to be happier at work, hopeful. The FAP was an assured income. We used to make plans to buy things. (woman, 37, extremely low-income, family 59-AM).

We became sad. My husband stopped farming because he observed our neighbours and realised farming was not worth it. It was discouraging to many people. (...) Investment in farming does not pay... We can only rely upon Jesus. (woman, 36, moderately low-income, family 63-AM). See Figure 66.



Figure 66. 'Investment in farming does not pay... We can only rely upon Jesus', said a respondent. Source: Personal collection.

7.3 Wellbeing and marketing channels in perspective

This chapter has gathered evidence from a survey and interviews of how the retrenchment of the Food Acquisition Programme and the broader retrenchment of the state which occurred during 2010s have not only limited the agency of peasant family farmers but also amplified wellbeing challenges. The focus of this chapter on subjective wellbeing under a contemporary austerity regime has shed light on various aspects of this dimension of the peasant experience. First, by discussing the perception and awareness of wellbeing issues among peasants, this chapter has contributed to a better understanding of individual and collective rationales regarding wellbeing and life issues. This extension into our respondents' lived experiences offers a richer analysis of how individuals have sought to navigate and adapt to policy change and it should be central to any work going forward designed to identify ways of improving life chances through rural development. Of course, their voices were mediated and translated by the author of this thesis, which is a process that necessarily reduces accuracy, on one hand, but allows for interpretation through the creation and analysis of categories, on the other hand. Second, this chapter has brought an original examination of how the FAP tried to tackle wellbeing issues, which was framed within the seven domains of life satisfaction, alongside thick descriptions of the early impacts of the retrenchment of the FAP on the wellbeing of peasants. This study is one of the first of its kind – if not the first encompassing livelihood dynamics that go beyond deductions or analysis of income change. A further, longitudinal analysis would therefore contribute to a deeper understanding of longer-term effects of austerity on livelihood strategies and outcomes and other case studies could contribute to an analysis of diversity, generalisations. More importantly, however, it would allow particularisations by groups that could include and go beyond binary divisions of gender, location, age and income groups.

Finally, this chapter has allowed for the appreciation of the relative importance of marketing channels for the peasantry, which is one aspect out of many influencing wellbeing, and for the appreciation of the complexity of public policies such as the Food Acquisition Programme, whose legislation does not mention wellbeing verbatim but tackles multiple dimensions of life satisfaction. Marketing channels is a very common challenge for peasants, but so is technical assistance, health, climate and environmental security, education facilities, life opportunities, freedom to make decisions with their relatives, and a plethora of other issues that should be observed by researchers and policymakers interested in getting a better sense of the peasant condition and the relative role of marketisation strategies in rural development and food security strategies.

Conclusion

Brazil's Zero Hunger strategy and the Food Acquisition Programme as a mediated market for family farmers have been seen as global icons of success by policy commentators, including the United Nations Food and Agriculture Organisation and the 2030 Agenda for Sustainable Development. However, the consequences of its retrenchment in Brazil and the recently established regime of constitutional austerity are still under-explored. The literature on this subject has been speculative and inconclusive on several vital questions within public policy and development discourses. This study sought to answer two of these questions: 1) What are the politics which have given rise to the expansion and subsequent retrenchment of government family farming policies in Brazil? Moreover, 2) What have been the impacts of austerity on peasants' livelihoods and their sense of wellbeing? And how have these impacts varied across geographies and demographics?

Through a critical review of the literature, key informant interviews, survey work and face-to-face encounters with peasants in the field, we have explored the origins, politics and impacts of the development and retrenchment of the Food Acquisition Programme as a mediated market for rural development. The thesis has identified the peasantry's global predicament, the changing relationship between the Brazilian state and rural peoples, and the evolution of policy narratives. It has also contributed to a better understanding of the extent to which nested markets mediated by the central government has impacted livelihood dynamics and the wellbeing of rural people in contrasting universes and different demographic groups, vis-à-vis the establishment of constitutional austerity in Brazil. Drawing on political ecology and sustainable livelihood frameworks, and articulating methodological bricolage with critical and constructivist research paradigms, these questions were explored combining two points of entry: the condition of the peasantry within the state – in a macro-analysis of policy and politics – and the livelihood dynamics and subjective wellbeing of peasants – in a micro-analysis of livelihoods. The theoretical underpinnings and methodological challenges were discussed in chapters 1 and 2, respectively, which included critical adaptations to theoretical frameworks and combinations of methods that allowed for an integrated analysis of changes in politics, policies and context-specific livelihoods. The main findings are chapter-specific and were summarised within the respective chapters: The peasant struggle and the state (Chapter 3), The political economy of a nested market (Chapter 4), Contrasting rural worlds (Chapter 5), Livelihood pathways under austerity (Chapter 6), and Peasants' wellbeing (Chapter 7). This conclusion synthesises the findings in order to reflect on the study's research questions.

Public policies and the modernisation imperative

The relationship between rural people and the state in Brazil has changed considerably since the end of the military regime in 1985, moving from expansion to retrenchment. The state expanded its permeability and inaugurated a series of innovative policies in the 1990s and 2000s, with 2013 marking a turning point. Since then, a series of retrenchment measures reduced the budget allocated for family farming policies and programmes and the institutionalised ways family farmers could represent their interests. Blame avoidance strategies were initially pursued, which paved the way to austerity as the hegemonic vision for state action. Austerity gained substantial traction in government during Michel Temer's presidency in 2016. That year also consolidated a shift in the dominance of the social basis of the state, particularly in the Executive branch of the government: Dilma Rousseff's impeachment in favour of Temer marked a sharp change in the state's social basis, which led to a growing disconnect between the government and working classes and marginalised groups such as the peasantry. An 'alliance of elites', as Saad-Filho put it, was vital for the election of Jair Bolsonaro in 2018. With a strengthened commitment to austerity, budgets for family farming policies continue to be retrenched apace, and the state closed down institutionalised mechanisms for the representation of the peasantry.

Several commentators have criticised Temer and Bolsonaro for the retrenchment and austerity regime. However, this study has noted that policy retrenchment (or programme retrenchment) was initiated some time before their respective administrations. Policy retrenchment was initiated during Rousseff's presidency (Workers' Party). This kind of dynamics is not new, and repeats a tradition in which left-wing governments in developing countries find it easier to retrench social policies than authoritarian governments, as clearly argued in a review by Mares & Carnes (2009). Blame avoidance is indeed a typical strategy in retrenchment politics, as pointed by Pierson (2006). On a theoretical note, there is a parallelism between the two types of retrenchment identified by Pierson, Elmelund-Præstekær and Klitgaard – programmatic retrenchment and systemic retrenchment – with two of the components of the formal dimension of the state as identified by Jessop – forms of intervention and forms of representation, respectively.¹ In more detail, programmatic retrenchment (or policy retrenchment) affects state intervention forms, i.e.: direct cutbacks in concrete bills, specific policy proposals or even entire programmes reduce state intervention into market-state-civil society relations. Systemic retrenchment (or institutional retrenchment) reduces the representation of certain groups to the state, i.e.: political and organisational changes, concrete changes in the institutional structures of a particular programme, or more general changes in the broader political economy that promote retrenchment in the future reduce the representation of certain groups and social forces to state apparatus and power.²

The complexities of the peasant condition have long been acknowledged and addressed by the Brazilian society and its relational state for some time, but to a limited extent. On the one hand, a series of public policies have been implemented since the 1980s which have acknowledged the problems of (uneven) economic

¹ One could also observe traits of systemic retrenchment in the modes of articulation, but this other formal dimension of the state has not been explored in detail in this research.

² See Elmelund-Præstekær & Klitgaard, 2012; Pierson, 2006; and Jessop, 2008, and Chapter 3 of this thesis.

distribution, extreme income poverty, particularly in rural areas, the role of rural people in a food security strategy, and that global capitalism was not benefiting the majority of rural people. On the other hand, those same public policies have largely dismissed cultural and ecological processes and differences, as observed in this research. For instance, place-based struggles were not appreciated, as shown in the similar treatment *caipiras* in São Paulo and *ribeirinhos* in the Amazonas received through the Food Acquisition Programme. The physical geography and vulnerability levels in these locations are disparate. However, policy models such as the FAP are so focused on the issue of marketing access that they ended up overlooking contextual issues such as lack of infrastructure for training and commercialisation in the Amazon floodplains, and that some rural people in São Paulo had little to benefit from the FAP, particularly those who drew from old-age pension and did not live in extremely low-income households. To appropriate some of Escobar's political ecology of difference framework, the state can be said to have used measures such as the FAP to try to mitigate some of the problems caused by global capitalism, as it did in earlier generations of family farming public policies in Brazil – the financing mechanisms provided by Pronaf – the National Programme for the Strengthening of Family Farming – being the utmost example of it. Since the state has failed to fully appreciate ecological and cultural differences associated with rural peoples, public policies have continued to be modelled on the modernisation theory and reductionist science and technology paradigms. More recently, however, a marketisation strategy was deployed to strengthen 'family farming' or 'rural family entrepreneurship'. This attempted to address some of the immediate productive issues affecting the wellbeing of rural people.

As has become evident from the analysis of policy change presented here, the Food Acquisition Programme underwent a process of simplification. This process has diluted ideas of development for equity and social justice and turned the FAP into a tool for the modernisation of peasants into family farmers or rural family entrepreneurs, as summarised in the idea of a 'pedagogy of marketisation'. The research presented here shows how the FAP failed to encourage place-appropriate farming techniques informed by principles of ecological or regenerative agriculture, not to mention agroecology – since this would require the acknowledgement of place-based struggles for economic, ecological and cultural differences and encompass considerations of farming techniques alongside an artful science and social movement. Finally, we have demonstrated how peasants have perceived the premium price for conventional produce in the FAP as relatively superior to the premium price for organic or agroecological produce, and that none of the respondents of the survey realised any impact of the FAP on environmental or climate security. Viewed retrospectively, the FAP can be seen to have been anchored in a largely expedient view of state intervention where the aim was to accommodate the acceptance of the dominance of the corporate regime or food empires. In this view, rather than having a role as protagonists or active agents in redefining the role of agriculture in society or transforming food and agriculture regimes, the role of rural people, particularly the marginalised peasantry, would be largely to produce for niche markets mediated by the state. This framing has largely contributed to inhibiting rural people from fighting for food sovereignty, pursuing equity principles for sustainable development, or advocating for the human rights of peasants and other rural people.

The underlying assumption of most frameworks of rural development is that a lack of market integration equals a pre-modern stage and under-development. It is noted from this study that rural people have had to learn

to survive and cope with situations of very limited access to several types of assets – not only financial assets, but also other forms of assets such as physical capital (as in poor infrastructure, for example) and human capital (as in opportunities for learning and keeping healthy, for example). More importantly, this research has underlined the importance of changes in political processes and public policies relative to access to other resources such as financial and natural capital in enabling rural people to realise their livelihood aspirations and improve wellbeing levels. The Food Acquisition Programme was directly associated with improvements in material wellbeing and the productive capabilities of peasants, and the consequences of its retrenchment was largely negative, not only for these domains of life but also for peasants' subjective wellbeing with regards to health, intimacy and emotional wellbeing, as well as community wellbeing. The FAP created the opportunity for some to engage in farming, which was not available before. However, once terminated, it did not leave a sense of prosperity for most people in the countryside. Farming, once again, became hardly economical. In other words, after a few years in which family farming seemed to be promising and a real opportunity for wellbeing advancement, the termination of the FAP made on-farm livelihoods be once again seen as not promising.

There are, of course, multiple reasons that could help explain this situation. Constitutional austerity is certainly one of the reasons, as could structural inequality be part of the puzzle. The research also clarifies that financial capital – which is often the type of asset that is mobilised in aid and development initiatives – is as valuable as human capital, particularly education and health, and transformation of structures and public policies. These are vital aspects that would make peasants' livelihood aspirations more likely to succeed. In other words, it is not always money, but better education, health, and fairer systems that would expand the real freedoms that people enjoy, or that would ensure the material basis for freedom from want and for freedom of action and movement.³ There is fundamentally nothing dishonourable or despicable about peasant livelihoods and the struggle for autonomy and fight against marginalisation in the countryside. On the contrary, since these have been generally geared towards improvements of processes of co-production and inter-dependence with nature. What is largely unsustainable, as several authors have argued, is the priority societies and states have given to promoting compound growth in profit-maximising market systems (geared toward creating market security to traders and investors and the promotion of mass consumption and production) rather than to guaranteeing direct provision of adequate use values for all and great diversification in ways of living and being together in nature.⁴

Transformations in the state's formal and substantive dimensions have affected livelihoods, the kinds of aspirations people can afford, and their sense of wellbeing. Recent changes in the relationship between rural people and the state in Brazil, as portrayed by the cases of peasants in Angatuba and Careiro da Várzea, illustrated the complexity in the analysis of livelihoods, which in this research observed not only the macro-politics and dynamics of policymaking but also the micro-level dynamics of policy adoption and resistance at the level of individual households. Some academics have recommended using Dorward's conceptual framework of livelihood strategies to analyse livelihood trajectories of households (i.e. Wright *et al.*, 2016), but this research has demonstrated how contextualised analyses of individual livelihood trajectories allow for a more accurate

³ See Sen (1999) and Harvey (2014) for alternative views on development within and against capitalism, respectively.

⁴ See, for instance D'Alisa & Kallis (2016); Harvey (2014); Hickel (2020); Kallis (2019); Kothari *et al.* (2019).

understanding of livelihood dynamics and the limits to the agency of individuals in contexts of marginalisation and dispossession. Of course, a longitudinal study would present an even better account and would be welcome in future scholarship to understand the medium- to long-term effects of the austerity that is mandated by the Brazilian constitution until the year 2036.⁵

Theoretical and policy implications

At an essential junction in international debates about rural development, the role of new nested markets needs to be revisited. It should be reconsidered in the light of broader understandings of culturally- and place-based aspirations, livelihood dynamics and subjective wellbeing issues. There is also a need to reprioritise the principles of food sovereignty and agroecology, the United Nations declaration of the rights of peasants and other people working in rural areas, and to consider how public procurement can effectively address equity principles for sustainable development, such as intra-generational, inter-generational, geographical, procedural and inter-species equity (see Haughton, 1999, and Uehara, 2020). The Food Acquisition Programme, for instance, should better translate its environmental and biodiversity objectives into practical instruments if it is genuinely to facilitate agroecological transitions and transformations towards sustainability (Uehara, 2020). As seen, the FAP helped alleviate hunger and situations of extreme income-poverty, but it was far from transformative for most rural people. In this respect, the FAP did not meet its fundamental objective of serving as a new benchmark for development with equity and social justice, nor the compromised one that was channelling peasants to be transformed into modern family farmers or rural entrepreneurs. The theoretical arguments for this justification suggest the need for a policy review that will look at how best to enable cultural and ecological diversity to work for the peasantry without severing ties between rural people and the countryside and encouraging the commodification of nature.

In concluding this work, we wish again to underline the importance of exploring the deep set of normative frames that informs policymaking. For example, following international and national food security standards, income-poverty and headcounts, Salgado et. al. (2017) classified Angatuba and 1880 other municipalities in Brazil as locations of ‘null’ demand for the Food Acquisition Programme. The study by Salgado et al. (2017) drew from metrics compiled by the central governmental and multilateral organisations, which included seven indicators – four of which are income-related. It is, therefore, aligned with modern frameworks focused on financial indicators while overlooking ecological and cultural differences. The struggle of rural people lacks visibility not only because central tendency metrics blur deviations, but mainly because those who shape normative frames have been oblivious to differences between social groups and to equity principles for sustainable development. While some may attribute this gap to poor information concerning the peasantry and other marginalised social groups in Brazil, the hypothesis here is that the international community and several states

⁵ Emenda Constitucional no. 95, 2016.

have only monitored some important economic and geographical indicators while disregarding structural issues concerning intra-generational and inter-generational inequities, as well as environmental sustainability.

The idea of rural development through nested markets and newly emerging markets, as articulated by Van der Ploeg, Jingzhong and Schneider (2012), has the potential to redefine the role of agriculture in society. However, as this research has shown, one such nested market – the Food Acquisition Programme – created survival spaces embedded within (if not marginal to) the corporate food regime and food empires. While nested markets can help rural peoples cope with – or comply with – the dominance of the corporate food regime and other processes that contribute to the reproduction of systemic inequities, nested markets can also reinforce a dominant modernity framework which typically overlooks cultural and ecological differences and contribute to a divide between people and non-human environments. Mediated markets can absolutely reduce economic inequalities, but measures should be put in place if cultural diversity and heterogeneous environments were to be sustained.

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Appendix 1 Guide for key-informant interview

Introduction

- [a] Introduce the research and the researcher, explain that I am interested in understanding how the food acquisition programme has changed in the past 5 years or so
 - [b] Explain how I plan to use the interview
 - [c] Explain that my thesis is going to be open-sourced
 - [d] Ask for consent to voice-record the interview
 - [e] Start recording if allowed
1. How would you like to be identified in my research? By pseudo-name, name, position, other?
 - [f] Note that withdrawal or change of consent is always possible.
 2. Other than [ORG], do you work for, or collaborate with other organisations?

Development views

3. What is the current vision that the [ORG] has for the family farming sector?
4. In your view, what is the ideal outcome for the development of the family farming sector?
5. How would you compare and contrast this ideal view with the current view of the organisation?

Role of the PAA

6. In your view, what is the role of the PAA to the development of:
 - 6.1. a family farmer?
 - 6.2. the family farming sector?
 - 6.3. the neighbouring region where the PAA is implemented?
 - 6.4. the nation?
7. In your view, what would family farmers learn from their participation in the PAA?
8. In your opinion, how has the PAA influenced family farmers' lives?
 - 8.1. More specifically, how does the PAA influence farmers?:
 - 8.1.1. Management skills?
 - 8.1.2. Autonomy or dependency on marketing channels to guarantee their livelihoods?
 - 8.1.3. Resilience, or capacity to adjust to different shocks or circumstances?
 - 8.1.4. Wellbeing?
 - 8.1.5. Freedom they enjoy in life? Could you tell me more about this?
9. In your view, how does the PAA affect the abilities family farmers have to control their:
 - 9.1. food systems?
 - 9.2. markets, or marketing channels?
 - 9.3. production modes?
 - 9.4. food cultures?
 - 9.5. environments?
10. In your opinion, would the PAA be a temporary or permanent programme? Why?

Changes

11. In your view, what have been the main changes in the PAA since 2013 or so?
 - 11.1. In your opinion, has the dominant political vision for rural development changed in the last 5 years or so? Could you tell me more about that?
 - 11.2. In your opinion, has the dominant political vision for food security and sovereignty changed in the last 5 years or so? Could you tell me more about that?
 - 11.3. In your view, what are the interests underlying these changes?
 - 11.4. In your view, who are the actors, organisations, and institutions that influenced these changes?
 - 11.4.1. How have they done so?
 - 11.5. In your opinion, what are the main implications (results and impacts) of these changes?
 - 11.6. In your opinion, how successful has been the PAA in the last 5 years?
12. In your opinion, what is the future for public procurement of food from family farmers?

Livelihoods and land management

13. Could you please share your view on how family farms cope with PAA's interruptions?
14. In your view, how do PAA's interruptions influence family farmers?
 - 14.1. Activities?
 - 14.2. Wellbeing?
 - 14.3. Migration, or movement of people to the farms or out of the farm?
 - 14.4. Freedom they enjoy in life? Could you tell me more about this?
15. In your view, how do PAA's interruptions affect the abilities family farmers have to control their:
 - 15.1. food systems?
 - 15.2. markets, or marketing channels?
 - 15.3. production modes?
 - 15.4. food cultures?
 - 15.5. environments?
16. In your view, how do PAA's interruptions affects land use and land management?
 - 16.1. More specifically, how the PAA's interruption affect:
 - 16.1.1. The area dedicated for agriculture? (+ - =)
 - 16.1.2. The area set aside for water, soil, and biodiversity conservation? (+ - =)
 - 16.1.3. The level of productivity of the farm? (+ - =)
 - 16.1.4. The use of agrochemicals, pesticides and fertilisers per unit of produce? (+ - =)
 - 16.1.5. The adoption of agro-ecological or organic practices? (+ - =)

Conclusion

17. Is there anything that you would like to add to this interview?
18. Could you confirm your consent to use this interview in my research?
 - [g] Acknowledge the contribution.

Appendix 2 Focus group guide

Day:

Initial time:

City:

Address:

Community:

GPS location:

Intro

- Hi, good morning/afternoon, my name is T. Mx. XXXX suggested that you may be able to help me in a study that I am conducting for my doctoral degree at Imperial College London, which is a University in the UK. As part of my research, I am trying to understand family farming in Brazil, particularly the consequences of recent changes on the PAA and the PNAE, and I would appreciate if you could help me in my study. If so, you could help me in two ways. One way would be responding to an interview¹⁶⁷, and, if you feel comfortable, I would very much appreciate if you could either show me around your property, or if I could accompany you during your work routine. Would this be OK?
- <Confidentiality/Anonymity>: <Explain how I plan to use the interview, and that anonymity will be secured>; <Ask for consent to voice-record the interview>; <Start recording if allowed, and note that withdrawal or change of consent is always possible>

Identification

1. Could you help me identify who has lived and worked in this smallholding in the last 20 years or so? Is there anyone planning to join in the next 5 years or so? When and why each one arrived/left?

Identification	Gender	Relationship	Age	Occupation	Education	Presence	Since	Left in (y)	Contact
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¹⁶⁷ If asked, anticipate that I want to understand three main issues. 1) About their smallholding and family; 2) about the marketing/distribution channels available to them; and 3) about how distribution channels have affected their agricultural practices, and how they have coped with eventual changes.

2. Do you have any relationship with any association, cooperative, NGO, or political party?
 - 2.1. If so, how is your involvement with them?
 - 2.2. To what extent do you feel they represent your interests?

Economics

3. I would like to understand the dynamics of the size and tenure of your holding. How did you first get access to this land? Also:

	Size	Tenure (privately owned, leased, borrowed, collectively owned, under an agrarian reform scheme)
Original/arrival		
Current		
Future, in 5y or so		

4. In the past 12 months, what have been your main sources of income?
 - 4.1. Who has been the main responsible for each of these activities?
 - 4.2. I would like to understand the relative weight of each activity in your annual family income. <Explain proportional pilling, provide an example, use 20 beans and labelled sticky notes >. Let's suppose that these beans represent the total income that your family earned last year. <provide an example using the beans, and test understanding>. How would you divide these beans among the different sources of income – which are labelled in these sticky notes?

Income source	Produce	Main responsible	Self-consumption (%)	Income composition (%)
Dairy cattle farming				
Beef cattle farming				
Poultry farming				
Pig farming				
Fish farming				
Fruit farming				
Annual crop farming				
Vegetable farming				
Rural pension				
Govt social programme				
Off-farm paid activity				

5. Could you tell me what is your current annual family income?
 - 5.1. Has your annual income been stable in the past 20 years or so?
 - 5.1.1. If not, how has it varied?
 - 5.1.2. Why is that?

6. In the last 20 years, who have you sold your produce to? <Wait for open answer, fill the table below, then follow-up>. Besides these, have you sold your produce to any of the following? When?

-

Market	When? (year/s)
PAA	
PNAE	
Social assistance (welfare) organisation	
Charity	
Public school	
Cooperative	
Association	
Street markets	
Door to door	
Food box	
Mini-market or grocery store	
Supermarket	
Restaurant/ cafe/ bar	
Neighbour	
Middleman	
Others:	

-
7. I would like to have an idea of how your property looks, and of how you manage your terrain.
 - <Ask if it could be appropriate to proceed to a walking interview; if not, organise a better time for them to visit their terrain>. Before we go out, could you please help me identifying the perimeter of your holding on a (google) map and the main plots, buildings, wells, rivers?

Adapting to a new marketing channel (Part C.1)

8. How did you first engage with the PAA?
9. What was your initial expectation?
10. To what extent have these been fulfilled?
11. Have you participated individually, with an association, or cooperative?

12. Do you remember who was sponsoring and paying for these purchases?
13. Who have benefited from your produce?
14. What have you supplied?
 - 14.1. Who decided what you would supply?
 - 14.2. Have you participated in any meeting/ consultation about their demand? How was it?
 - 14.3. In your opinion, have they considered your capabilities?
 - 14.4. Were you cultivating these products immediately before this project?
15. Did you have to change your production? If so, how have you done this?
 - 15.1. Has the PAA led you to incorporate or abandon land for farming? Could you tell me more about it?
 - 15.2. Has this project led you to change the intensity of cultivation of the land previously cultivated? Could you tell me more about it?
16. Has this project affected how you deal with:
 - 16.1. Soil erosion and fertility? How?
 - 16.2. Water, such as for irrigation, cattle watering? How?
 - 16.3. Unwanted pests and weeds? How?
 - 16.4. Any area set aside for environmental conservation? How?
17. What part of your family annual income did it comprise?
18. Who in the holding has been mostly affected by this sale? How?
19. In your view, has this income allowed anyone to do things that otherwise they would not have been able to do? Could you tell me more about it?
20. What are the main benefits of taking part in this sale, if any?
21. What are the main drawbacks of taking part in this sale, if any?
22. What lessons did you learn with your involvement in the PAA, if any?
23. In your view, has the project affected your managerial skills? Could you tell me more about it?
24. Have you stopped selling your produce to the PAA? Why?

Coping with retrenchment

25. Could you describe your experience with the retraction of the PAA? <use the following questions to address eventual gaps>
 - 25.1. How did you first learn about its interruption?
 - 25.2. Was this an expected or unexpected interruption? Could you tell me more about it?
 - 25.3. What was your initial reaction?
 - 25.4. In your view, who decided to make this interruption?
 - 25.5. In your view, why this decision was made?
 - 25.6. Do you think this decision is justified?
 - 25.7. Do you think someone is supporting or benefiting from the PAA's interruption? Why?

26. How have you coped with this interruption? <wait for open answer; follow-up if needed>
- 26.1. What have you done with surpluses?
- 26.2. Which marketing channels have you used ever since?
- 26.3. How has this interruption affected your annual income?
- Reduced by more than 50%
 - Reduced by 10-50%
 - Fairly stable (less than 10% of variation)
 - Increased by 10-50%
 - Increased by more than 50%
 - ICR
- 26.4. How would you compare your life before, during, and after the PAA?
- 26.5. Who in the holding has been mostly affected by this interruption?
- 26.6. Have the learnt lessons you mentioned before <recruit answers from Q22> been useful? Could you tell about it?
27. Have interruptions affected:
- 27.1. What you produce?
- 27.2. The quantity you produce?
- 27.3. Your decision on abandoning or incorporating land for agriculture?
- 27.4. Your decision on intensifying or reducing what you produce in a plot?
28. How the interruptions affected how you deal with:
- 28.1. Soil erosion?
- 28.2. Water, such as for irrigation, cattle watering?
- 28.3. Fertility?
- 28.4. Pests and weeds?
- 28.5. Areas set aside for environmental conservation?
29. In your view, has the PAA interruption hindered any development (or the future)
- for your family? Could you tell me more about it?
30. What are the main benefits of this interruption, if any?
31. What are the main drawbacks/losses of this interruption, if any?
32. What lessons did you learn with this interruption, if any?
- <Ask them for a family picture> ; <Ask them for consent to use the picture in my research >
- <Acknowledge participation> <Deliver gift> <start individual interviews

Appendix 3 Guide for walking interview

- <Following the focus group discussion with the household>; <ask if they would be happy to take some pictures that I could use in my work >; <Ask for consent to use pictures for research purposes>.
- <Start walking – allow them to take the lead but hint/adjust the trajectory to have a look at as many plots as possible>
- <Enquire for area description, current activities, the natural environment>
- <Ask for description of previous and planned uses>
- <Take pictures, notes, videos><Observe, and induce informal conversation about current practices and futures>.

Appendix 4 Guide for wellbeing survey

- <Confidentiality/Anonymity>: <Explain how I plan to use the interview, and that anonymity will be secured>; <Ask for consent to voice-record the interview>; <Start recording if allowed, and note that withdrawal or change of consent is always possible>

	Never	Rarely	Sometimes	Very often	Always	Why? (Reasoning)
Do you feel free to express yourself?						
Do you feel free to make decisions with your family?						
Do you think that there is respectful communication among your family?						
Do you feel confident in your decisions and abilities to support your family during difficult times?						
Do you feel that you are advancing towards your life goals? What specific accomplishments have you obtained? (com relação aos seus objetivos, vc sente que está avançando na sua vida?)						
Do you feel that you have good opportunities for your future?						
Do you feel that your family has good communal relations and that it collaborates with others in your community?						
Do you feel that all members of your family are happy with their lives?						

1. In your view, who makes the important decisions for your family?
2. What are the most severe issues affecting your family wellbeing?
(open response)

3. Does any of the following issues affect your family wellbeing? (choose as many as apply):

- Little work / lack of capital/money
- Debts
- Lack of land ownership
- Health problems
- Opportunities to study/learn
- Lack of motivation to work
- Violence /terrorism
- Physical or psychological abuse/harassment
- Bad hygiene in the community
- Social conflicts
- Alcoholism / drugs
- Contamination of water with chemicals
- Poorly trained (or unskilled) workers
- Market access
- Lack of incentives
- Age
- Quality of seeds
- Animal/cattle genetics
- Climate
- Technical assistance
- Other problems. Which? ____

4. How hard would it be for your family to get over those issues? Why?

very likely | likely | neutral | unlikely | very unlikely | ICR

5. Where do you see yourself in five years?

Activity	Barriers / Facilitators	Feasibility
		very likely likely neutral unlikely very unlikely ICR

<e.g. sell/buy property, off farm, emigrate, grow other products, improve production, how? Buy new equipment, etc>

6. What would prevent you to succeed?
7. What would help you to succeed?
8. Could you manage to succeed on your own?
9. Who would you look for support or advice? (chosse as many as apply)
 - My family/friends
 - my community
 - my association/cooperative
 - NGO or social movements
 - Private companies and foundations
 - Local government (prefeitura)
 - State government
 - Federal government
10. How would you describe the impacts of the implementation of the PAA on your personal wellbeing?
11. How have the PAA affected your income? What have you done with it?
12. How would you describe the impacts of the end of the PAA on your personal wellbeing?
13. What would you be you recommendation for the federal government?
14. Would you like to say anything else about your personal wellbeing?

<Ask to take a picture > ; <Ask for consent to use it in my research >

<Interview other adult family members individually>

End time:

