Socioeconomic, Financial and Production Infrastructure Profile of Farmers in Rural Settlements in the Western Region of the State of São Paulo, Brazil

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Abstract

Family agriculture, mostly represented by rural settlements especially in the state of São Paulo, makes up rural establishments in Brazil. Current investigation collects, analyzes and compares data on farmers on two rural settlements in the western region of the state of São Paulo, specifically in the municipality of Rancharia, with regard to their socioeconomic, financial and productive infrastructure profile, coupled to information on eventual restrictions to rural credit, by an analysis based on descriptive statistics. Results show that there are different factors between farmers and production systems, which cause loan restrictions due to such differences as age, agricultural and cattle-breeding activity, technical assistance and management. The valorization of these differences should be taken into account for the construction of new events, without extremes, and work for situations featuring demand-based development and characteristics of the locality.

Keywords: family agriculture; rural credit; descriptive statistics; regional development.

1. Introduction

Family agriculture influences the Brazilian economic situation due to the impact on the country´s internal supply of products. In fact, family agriculture features 84.4% of rural entrepreneurships, with 24.3% of total planted area. Although it constitutes a small territorial percentage, it employs 12.3 million people and produces 38% of the gross product (MDA, 2009). It has been institutionally defined by Law 11.326 of 2006, which established guidelines for the National Policy for Family Agriculture and Rural Family Entrepreneurship. Family agriculture is a rural estate (up to four fiscal modules) that develops economic activities in the area, with family income deriving mostly from such an establishment.

Family agriculture has been represented by rural settlements´ which are agricultural production units established by public policies to fix the landless farmer on a piece of land or help the farmer with a small parcel of land to work in a team (BERGAMASCO&NORDER, 1996).In Brazil, the state of São Paulo has the greatest number of rural settlements among all the other states and provides land and work to some 10,000 families, mostly in the western region of the state, specifically in the Pontal do Paranapanema area. Total area of the western region amounts to 1,356,000 hectares, or 60% of the state.

The municipality of Rancharia SP Brazil is an important region with many rural settlements and contributes towards the development of local and regional economy. There are two settlements in Rancharia, namely, the Nova Conquista rural settlement (established in 1998) with 104 estates and São Pedro rural settlement (established in 2001) with 74 estates, making a total of 4,265.2 hectares, or rather, approximately 3% of total area in Rancharia ((ITESP, 2009).

Farmers of rural settlements in the municipality of Rancharia SP Brazil are the subjects of current investigation due to the above and to the relevant role; they have within family agriculture in the state of São Paulo, especially on the western flank.

Current assay is a descriptive and comparative analysis on the socioeconomic, financial and productive infrastructure profile of farmers in two settlements in Rancharia and the origin of their eventual restriction to rural credit.

2. Bibliographical Review

Silva (2001) characterizes the establishment of rural settlements as a way to control and lessen conflicts for land. Conflicts started when rural workers were rallied and organized by several segments of Brazilian society.

Rural settlements in the state of São Paulo are the result of land conflicts by squatters, renters, sharers and small farm owners evicted by dam constructions. They are also the result of sugar-cane cutters and landless farmers roaming the state territory for engagement in social movements and rural trade unions to definitely fixing themselves on rural estates (BERGAMASCO& NORDER, 2003).

Family agriculture in the state of São Paulo is mainly represented by rural settlements with almost 223,000 hectares, comprising 131 settlements on state government-owned land, provided by Institute for Land in the State of São Paulo (ITESP), and 41 settlements in federal-government owned lands, sequestered by National Institute for Settlement and Land Reform (INCRA) to benefit more than 10,000 families (ITESP, 2009).

The importance of the Pontal do Paranapanema region for family agriculture is evident since approximately 49.6% of the families live in the western region of the state. Milk, manioc, corn, fruits and vegetables are the main cash crops planted by the families concerned (ITESP, 2009).

Since the family agriculture is a strategic sector to Brazil, it has been highly underscored by government administrations especially through two programs: the National Program for Land Reform (PNRA) and the National Program for the Strengthening of Family Agriculture (PRONAF).

The PNRA is a fundamental factor towards the constitution of rural settlements where small rural farmers who collaborate towards family agriculture in Brazil are mostly included.

The PRONAF aims at strengthening family agriculture and contributes towards employment and the generation of income in rural and urban areas to improve the life quality of agricultural farmers. Its principal activity is the concession of credit to finance costs and investments, whichare adjusted over time for proper and constant updating. Farmers are classified according to their income so that payments and differentiated subsidies may be established. Credit available by PRONAF are Costs; Investments; Pronaf Agroindustry; Pronaf Agroecology; Pronaf Eco; Pronaf Forest; Pronaf Semi-Arid; Pronaf Women; Pronaf Young People; Pronaf Costs and Commercialization of Family Agroindustries; Pronaf Shares; Rural Microcredit; Pronaf More Food.

Over the years, agriculture and cattle raising grew and developed in Brazil partially through loan policies, improvement in production and the modernization of equipment and fertilizers. Loan policies developed according to the economic conditions of each period, with specific features for money loaned and interest rates (BIANCO&CARDOSO, 1996).

There are indications that farmers are in dire straits due to the credit conceded according to the type of activity, or rather, seasonality and climate are contributing towards defaults in financial contracts.

There are actually a considerable number of farmers who could use rural credit but fail to do so because of public policies. They could increase production and contribute towards the development of the country. Estimates show that only 15% of rural farmer shave been benefitted with rural credit, or rather, a very small percentage within the great possibility of the country for developing more extensively its agricultural and stock-raising potential.

3. Methodological Procedures

Current descriptive research with qualitative and quantitative approaches comprised a survey of data on rural farmers of two rural settlements in Rancharia, namely, Nova Conquista rural settlement (NCo) with 104 estates, mean area of 18.0 hectares, and São Pedro rural settlement (SPe) with 74 estates, mean area of 18.5 hectares.
Data were harvested by a form[1] provided to a sample of settlers-farmers according to the number of estates in each settlement. Due to the finite population and the variable indicating whether the farmer had or had not any restrictive note (SERASA; SPC - Credit Protection Service; CADIN - Information Register for non-paid debts in the government sector; or other non-paid credits conceded by the PRONAF) as the most important factor in current study, sample size amounted to 65 estates, or rather, 38 from the NCo rural settlement and 27 estates from the SPerural settlement, with 10% margin of error and a 95.5% confidence level(CASELLA & BERGER, 2010). Estates were selected at random and the names or data that would identify the farmers were omitted.

Rural farmers in the municipality of Rancharia were characterized according to their socioeconomic, financial and productive infrastructure profile within the following variables:

- Social-economic and production variables: date of enrolment in the settlement, family composition, age, schooling level, sources of income, composition of the rural entrepreneurship, occupation and use of land, use of employees, list of machinery and equipment, form of acquisition, productive infrastructure;
- Access and credit restriction variables: whether there existed access to credit, credit modalities obtained, interest in any new access, existence and motives of restrictions (aspects of production; aspects related to commercialization and/or institutional aspects).

These variables were analyzed and compared using analysis techniques based on descriptive statistics, i.e., using tables, graphs and descriptive measures (MARTINS, 2006).

4. Results and Discussion

Most residents (25.0% on NCo and 28.2% on SPe) in the two settlements were 50 years old or over. Secondary schooling reached 81.4% in NCoagainst 72.1% in SPe. The second most important age bracket in NCo was 19-29 years (23.3%) and 40-49 years in SPe (19.42%), with secondary schooling approximately reaching 95.0% in both. Dependence on income with activities within the estate was 20% more in SPe than in NCo (Figure 1). On the other hand, the latter has twice as much people working outside the estate than in SPe, especially for people in the 30-39 age bracket.

The above data show the indexes of work force. A 95% work force from the estate is the main working force in the development of activities on the estate in the case of SPe against 90% with NCo and represents the dependence of family income from such activities. However, work force is employed during the sowing and harvest periods, featured by intense labor, and makes up 10% of NCo and 5% of SPe workers.

Dairy is the main income-producing activity on the two settlements since both have natural pastureland. NCo settlement has approximately 3% more planted pastureland and natural woods (Figure 2). Permanent and temporary crops are planted for the settlers´ use and for the dairy activities, especially for feeding cattle during the dry season.

[1] Form is a tool for the collection of data. The system comprises the collection of information directly from the interviewed person by means of questions by the interviewer and answers of the interviewee jotted down at the time of the interview.

Figure1: Percentage of workers on the NCo and SPesettlements, according tocategory

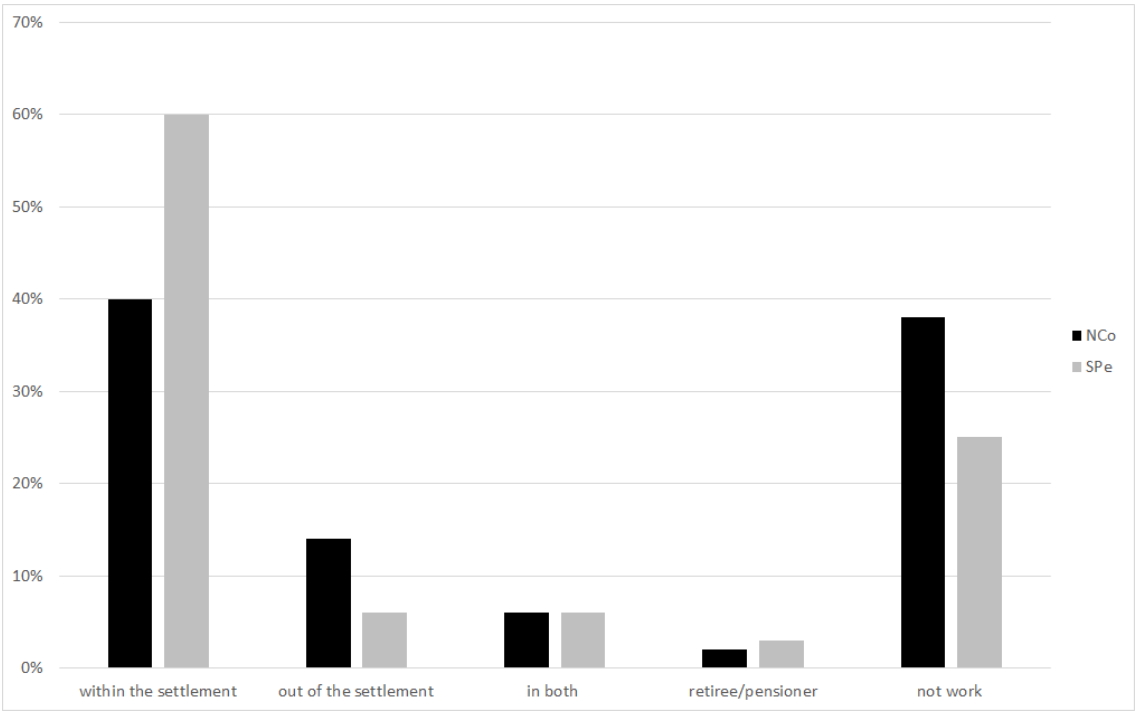
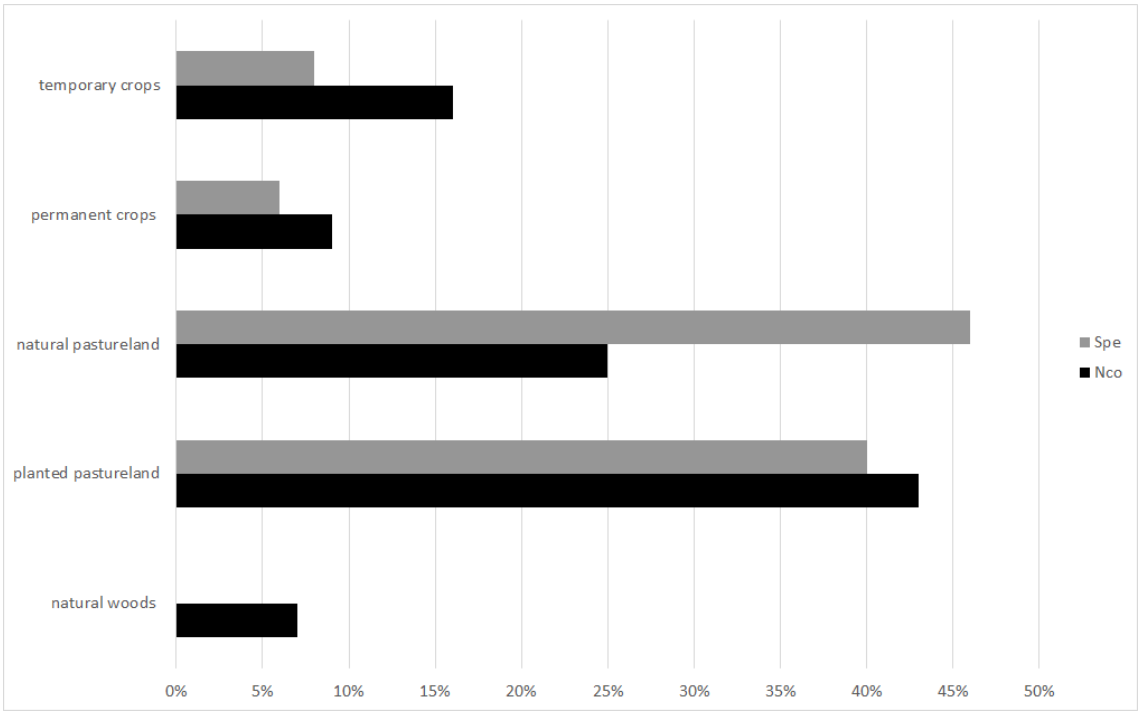
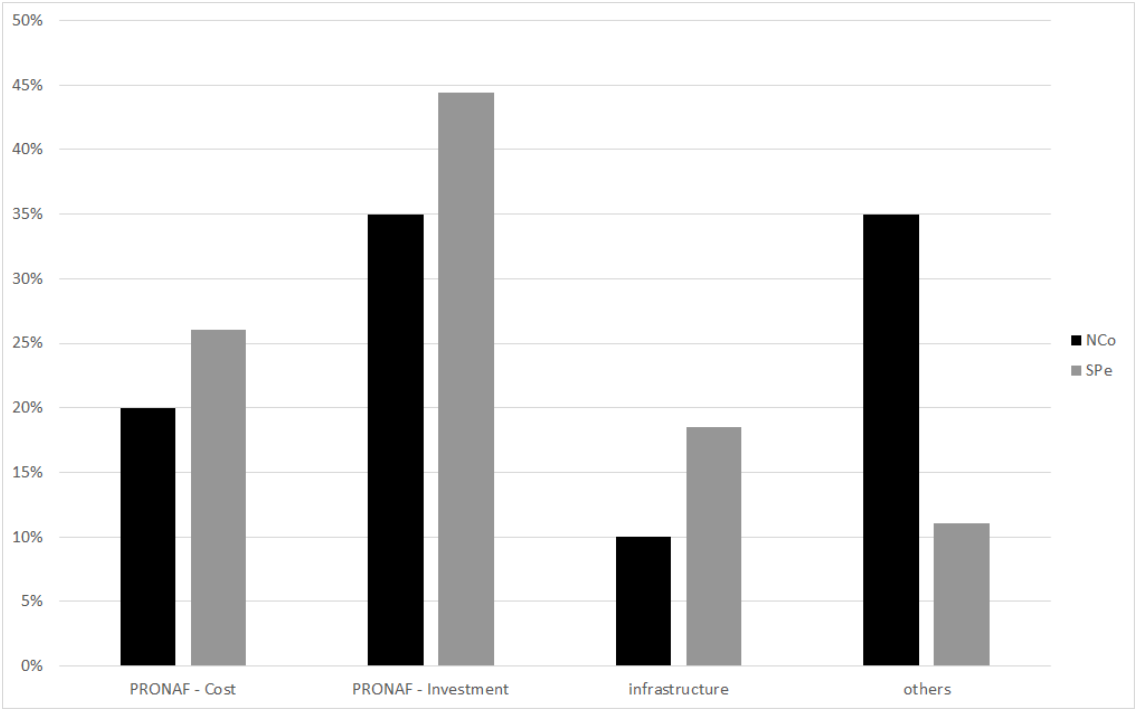


Figure 2: Soil use and Related Activities on the NCo and SPesettlements



The number of farmers on the SPe settlement with access to loans and rural credit is higher (approximately 96% against 92% on NCo) since the year of their admittance on the estate. All farmers received credit mainly through the PRONAF program. In fact, the index of farmers of the SPe settlement who received this type of credit (44%) was relatively higher than those from the NCo settlement (35%) since the farmers of the later settlement contracted a large varieties of loans, as Figure 3 shows.

Figure 3: Most Frequent Credit Modalities on the SPe and NCosettlements



Investment loans ranged between R$ 2,300 and R$ 21,500 on the SPe settlement, whereas loans varied between R$ 3,000 and R$ 20,000, with a three-year grace, on the NCo settlement. Credit resources to farmers on the settlements were mainly used for buying dairy cows. Approximately 40 % of rural constructions, such as hedges, greenhouses, milk tanks and others, and 15% of the acquisition of vehicles, machinery and tools, such as tractors, ploughs, milking machines and others, on the SPe settlement were obtained through financing. The indexes were approximately 25% for rural buildings and 15% for machinery and tools on the NCo settlement.

Financed resources could have been much higher but it was often not easy for the farmersto meet financial obligations. The above was due to delay in loans, climate problems and difficulties in management and production. There is evidence that cattle-raising activities should also have been developed to minimize loss risks that would mainly lead towards credit restriction, when compared to risks inherent to crop management.

Further, 52% of farmers on SPe and 57% of farmers on NCo who received loans had restrictive credit notes, with a 10% margin of error and 95.5% confidence level. In fact, 93% of farmers on SPe attributed credit restrictions to lack of payment (PRONAF, FEAP or any other program) and only 60% of farmers on NCo reported the same origin for credit restrictions. The main causes for non-payment of debts were low price in the commercialization of the products (71%), low productivity (43%) and climate conditions (29%) for farmers of the SPe settlement, whereas, in the case of farmers of the NCo settlement, the motives comprised low commercialization price of products (30%), climate conditions (30%) and credit conditions (15%), in this order. The farmers´ situation is more serious since they are subjected to prices already decreed by the productive system, with no bargain power to sell their products at a better price.

It should be underscored that farmers endeavor to renegotiate their debts (35% on NCo and 29% on SPe) since they acknowledge that this is highly relevant to continue the agricultural and cattle-raising activities. Moreover, 74% of settlers on NCo and 75% on SPe are highly interested in obtaining loans to improve the productive infrastructure, increase productivity, the quality of their products and, consequently, their income.
Further, 78% of farmers in the SPe settlement reported that they have technical assistance by ITESP and INCRA. However, 57% assessed assistance as fair or bad. Only 54% of farmers on the NCo settlement admitted having technical assistance and only 26% considered it fair or bad.

A mere 7% and 14% of farmers on SPe and NCo respectively insured their produce during some time on the estate. The above data reveal the fragility of the farmers since the insurance of produce (a guarantee in adverse situations) is not employed by most farmers.

The lack of insurance may be due to lack of information, which may be brought right through the intensification of technical assistance, rural extension, activities inherent to planting, management and harvest time. Financial resources are often delayed and any type of insurance is forfeited.

It should be underscored that a high age bracket affects financial resources since working power decreases with age. This would demand more work force, which, as a rule, does not impair the entrepreneurship since it produces more employment.

It should also be emphasized that dairy activities are conditioned to food safety, against seasonality of income and to inherent risks if one had chosen crop planting (risks originating from production systems or management). Options were evident due to aspects linked to the maintenance of income and food.

5. Final Considerations

The socioeconomic, financial and production infrastructure characterization of rural farmers in settlements in Rancharia SP Brazil provided important results, especially on notes that would lead to credit restrictions.

It is expected that, through the results above, some measures may be taken to minimize the credit-restricting risks that farmers of rural settlements. Farmers´ organization for a better negotiating power with other agents in the production chain, the demand of better technical assistance, specialized courses on production management, guidance on produce insurance, among other, are activities that provide the farmers with higher potentiality in their activities in technical and administration terms. The above will surely guarantee the multiplication of farmer families in settlements and their power.

A concentration of activities and uniformity may be observed. Understanding the diversity of family agriculture among rural family farmers in settlements is relevant to rural development, to the boosting of local and regional economies and to family reproduction. It is equally important to make meaningless the discourse among those who have more or less land. The polarization between a farmer and another and between a production system and another impairs the understanding of the requirements of place based on the characteristics of region, family, gender issues and environment. There are tools, including provision of credit, which may be thus interpreted. However, state policies, based on diversity, should be sufficient to face such a challenge.

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