PLURIACTIVITY AND AGRICULTURE IN THE STATE OF SÃO PAULO

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ABSTRACT - This paper represents a further development of the RURBANO Project studies on pluriactivity in agriculture. It presents the empirical results of an analysis made of the State of São Paulo using data from PNAD (National Households Sample Research) from 1995. Comparisons were made between pluriactive and monoactive households in five regions created from the state's 572 counties to study the influence of local economies on the characteristics of pluriactivity.

Key words: Agriculture, pluriactivity, local economies.

INTRODUCTION

In this paper, a mesoanalytic study of relations is applied to the state of São Paulo's agriculture sector by interrelating a territorial division obtained from economic and social indicators with a classification of households according to the presence of pluriactivity. The aim is to analyze pluriactivity at regional and local levels to find if there is a relation between pluriactivity and regional socio-economic inequalities. For agriculture, pluriactivity is defined as the presence of agricultural and non-agricultural activities among the household members.

To avoid the rural-urban dichotomy, many authors have emphasized the *relations* between rural areas and the nearby city, village, or community and proposed the study of the surrounding areas in which the agricultural economy is inserted: a study of the agricultural economy's context. It is a kind of mesoanalytic study, because it is beyond the micro productive units, families, and individuals (micro), but below the country or regional macro level.[2]

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[2] In fact, it is an intermediate level of spatial **aggregation**, which takes into account social and economic characteristics, but cannot replace the micro and macroeconomic levels and their analytical units (firms, markets etc.).

In a previous paper based on a review of international literature, Kageyama (1998) showed that in order to analyze the phenomena involving relations between economic sectors and territory it is necessary to surpass the rural-urban approach and look for a territorial unit with a proper economic meaning. That is the case of pluriactivity. One way of associating both themes --- activity and territory --- is to examine how families, households, enterprises and individuals are integrated in local networks and in local and national markets: the "insertion in local economies." Pluriactivity is one of those forms of insertion.

Socio- economic indicators taken from the Demographic Census of 1991 were used to regionalize the State of São Paulo's 572 counties into five types of "regional or local economies." The characteristics of pluriactivity in these regions' agricultural households are studied using 1995 data from PNAD.

METHODOLOGY

Data sources and selected population

PNAD (National Households Sample Research) data from 1995 are used to calculate economic and social indicators of two kinds of household in five regions within the State of São Paulo.

The use of PNAD data in low levels of spatial aggregation entails the sample's reduction, and leads to inaccurate estimates. However, in the present case there are some attenuating circumstances that allow the indication of general trends. These circumstances are: a) for the state of São Paulo the sample is relatively large[3] ; even with a low sampling

[3] The national households research (PNAD) is based on a probabilistic sample of households obtained in a three-stage selection: primary units (cities); secondary units (sectors); and tertiary units (households). In the first stage the cities are classified into two categories: "self-representative" (whose probability of belonging to the sample is equal to 1) and "non self-representative". The latter are stratified and in every stratum a sample (with reposition) is withdrawn, with probability being proportional to the population given by the Census of 1991. In the second stage the sectors are selected, also based on a proportional probability using the number of households given by the Census as a measure of the size of the cities. In the last stage, the households are selected in the sectors with eqüiprobability. PNAD investigates the characteristics of families, individuals and housing conditions for this sample of households. (See *Introdução* of PNAD, 1992 to 1995).

fraction (1:750), the absolute number of counties (106), sectors (857) and households (13,757) are the highest in Brazil, thus providing fair values for the different strata and regions; b) the main interest will be in relative indicators, not in absolute values; c) no comparisons will be made between different time points, in this way avoiding additional problems of projections involved in the sample. Under these conditions, it can be assumed that the results will be useful to show the regional diversity of pluriactivity. In spite of the intrinsic limitations, due to the nature of sample data, the empirical results can offer some guidelines for further, less aggregated, case studies ("local economies"). This is, in fact, our main goal.

The initial unit of analysis is the *agricultural household*, in which there is at least one person 10 years old or over whose main occupation was connected to agricultural activities in 1995. In a review of literature accomplished in another paper, Kageyama (1998) demonstrated that both the family and the household may constitute units for pluriactivity analysis. The choice in the present case is the household because it constitutes the basic sample unit of PNAD and can be considered its "natural" division. This avoids additional problems related to the sample data. Furthermore, the difference between the number of families and number of households in São Paulo is negligible: out of the 848,248 households, only 13,902 have more than one family (1.6%); out of the 3,641,576 residents in agricultural households, only 87,380 live in multifamily households (2.4%). The results tend to be the same whether one uses households or families.

First, all the individuals (10 years old or over) with their main occupation in the agricultural sector were identified (1,431,259 persons). Then, the corresponding households were selected (848,248 households), as well as the total of their residents. As a result, 3,641,576 individuals living in households with at least one person working in agriculture were selected for the analysis.

Identification of the pluriactive households

Households made up of at least one person working in any non-agricultural activity and one or more persons working in agriculture were defined as pluriactive; in monoactive households people work only in

agriculture[4].

In pluriactivity studies, it is common to limit the concept to family agriculture. If that limit is applied in the case of São Paulo, this study's importance would be greatly reduced. Assuming that family agriculture could be roughly represented by households made up of self-employed, subsistence farmers and employers, there would be only 128,186 households, with 432,581 residents (39% in the state's two poorest regions)[5]. There are also some authors who think that an individual with more than one occupation can be considered as a pluriactive unit, as long as one of those activities is in agriculture[6]. In this case only 7,267 pluriactive people would be found in the São Paulo agriculture (representing 0.5% of the total number of people working in agriculture).

Regionalization

The concept of "local economy," used in several papers about agricultural pluriactivity in Europe, is an interesting way of replacing the rural-urban approach when conducting research; but replacement raises the problem of how to create territorial aggregates with meaningful importance[7]. In order to avoid part of the problem, research surveys can be designed to address limited areas and use specific variables which define territory without creating measurable administrative or statistical restrictions. On the other hand, in broader analyses based on censuses or sampling statistics, it is possible to build typologies or clusters using pre-existing variables and aggregation levels (for example, counties, districts, etc.). Many automatic algorythms for data reduction and classification are available for this purpose. This methodological possibility was adopted by Kageyama and Leone (1999) to cluster the State of São Paulo's counties based on the data of the Demographic Census of 1991.

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[4] This definition limits the idea of pluriactivity to the fact of simultaneous occurrence of activities in different economic sectors in a family or household. A broader definition will also consider the occurrence of secondary agricultural activities as pluriactivity, such as a small farmer who would work eventually in another farm receiving a wage.

[5] Rigorously, the big employer households should have been excluded. But considering the difficulty of this procedure based on the available data, and since their absolute number is small, they were kept in the calculations.

[6] See Barthez (1987).

[7] Extensive literature related to the topic is found in Kageyama (1998). Saraceno (1994), Murdoch and Marsden (1994) and the Arkleton Trust Research are examples of new proposals to the rural-urban approach.

represent this region are located in the northwest of the state (Lavínia, Pontes Gestal, Guaraçaí, Mirassolândia, Guarani d'Oeste), but it includes many counties spread between the boundaries of Paraná and the São Paulo's north, near Minas Gerais.

Intermediate: This region is in the intermediate position, representing a kind of "average city" in São Paulo (relative to the indicators used in this research). The indicators which define this region are, most importantly, the high percentage of formal employees working in agriculture and a well established labor market. This region has the lowest number of self-employed people among the five regions. This region's less important defining indicators are a low proportion of poor residents and fair levels of welfare and literacy. This region covers a large contiguous area corresponding to the state's "first quadrant," spreading from the center (Botucatu, Jaú) to the north (Catanduva) and to Minas Gerais' eastern boundary (S. João da Boa Vista, São José do Rio Pardo). It also encompasses many counties around Ribeirão Preto but not the city itself. Many counties belonging to the intermediate region are located around large, urbanized centers. These centers, as will be seen later, pertain to the fifth region, characterized by high demographic density and intense urbanization.

Expanding Urban: As the name suggests, this region displays a high degree of urbanization, having undergone rapid population growth between 1980 and 1991. This feature has probably created new opportunities for development of the labor market and resulting pluriactivity. From 1980 to 1991, total population increased 56% while the economically active population (EAP) increased 67%, much higher than the state averages. Nevertheless, the potential for population growth cannot be taken as an indicator of welfare, at least in the short run. This region's housing, literacy level, water supply, and basis sanitation infrastructure are below state averages; and income is only slightly higher than the average. The typical counties of this region, Cubatão, Votorantim and Cabreúva, are highly industrialized. There are also large contiguous areas near industrial counties: the entire north coast of the state (near São José dos Campos and Cubatão), areas around Sorocaba, and some counties near Campinas and São Paulo.

Dense Urban: An alternative designation for this region could be "rich urban," since the average income is almost twice the state average; and the proportion of poor is the lowest among the five regions. It is made up of the highly populated, urbanized counties, with almost no agriculture. In spite of its already high density, the population of this region increased 42% (and EAP 49%) during the 1980's. The typical counties are Sorocaba, Campinas, Assis, Americana, and other "poles", such as São Paulo, Santos, Ribeirão Preto, Araçatuba, São José do Rio Preto, Franca, and Jundiaí.

RESULTS

Number of agricultural households in the regions

Tables 2 and 3 display the distribution of people in households per region. These tables show that the intermediate region contains over one-third of the state's agricultural population and agricultural households. The least important region in terms of agricultural population is the very poor rural, which includes the scarcely populated areas in the state's south and in the Pontal do Paranapanema area. However, agricultural households in the very poor rural region represent 34.1% of the region's total households, contrasting with the state average of 9.3% (Table 4). The expanding urban region has the highest resident density per household. The two most urbanized regions contain about one-third of the state's households and one-third of the people working in agriculture, demonstrating that agricultural activities compliment rural-urban integration, as occurs in the developed countries.

Table 2 - General population figures per region of São Paulo 1995 (nm. of individuals)

regions	agricultural households	residents in agricultural households	people employed in agriculture	residents/household
very poor rural	77,012	331,988	125,295	4.3
poor rural	196,859	798,870	364,726	4.1
intermediate	292,726	1,260,135	490,010	4.3
expanding urban	168,108	790,112	273,319	4.7
dense urban	113,543	460,471	177,909	4.1
total	848,248	3,641,576	1,431,259	4.3

Source of basic data: PNAD 1995

Table 3 - Relative regional participation by number of people and households. São Paulo, 1995 (%)

Regions	agricultural households	residents in agricultural households	people employed in agriculture
very poor rural	9.1	9.1	8.8
poor rural	23.2	21.9	25.5
intermediate	34.5	34.6	34.2
expanding urban	19.8	21.7	19.1
dense urban	13.4	12.6	12.4
total	100.0	100.0	100.0

Source of basic data: PNAD 1995

In Table 4, the variables are calculated according to the totals for each region: agricultural households per total regional households; residents in agricultural households per total regional residents; people employed in agriculture per total regional EAP. The sharpest contrast occurs between the dense urban region, which contains approximately 2% of the agricultural households and residents linked with agriculture, and the rural poor region, in which about 50% of the households and people are linked with agriculture. Note the high data dispersion with regard to the state averages, emphasizing the need for regional approaches in the study of pluriactivity or even the study of general, agricultural population characteristics.

Table 4 - Participation of the agricultural households and people employed in agriculture in the regions of São Paulo, 1995 (%)

regions	agricultural households/ total	residents in agric. households/ total of residents	employed in agriculture/ total EAP
very poor rural	34.1	40.4	30.8
poor rural	49.9	56.6	46.8
intermediate	22.8	26.3	19.7
expanding urban	11.0	13.2	9.0
dense urban	2.0	2.2	1.7
total	9.3	10.8	8.2

Source of basic data: PNAD 1995

Table 5 introduces the division between pluriactive and non-pluriactive households. The table shows that the richer and more urban the region, the higher the proportion of residents in pluriactive households. In the very poor rural region, pluriactive household residents constitute the population minority. From the third region on, more than 50% of the people live in pluriactive households; that number reaches 70% in the dense urban group. For those employed in agriculture, there is a steady growth in the percentage of people living in pluriactive households as the regions move toward the more urbanized. In the poor region, 75% of the people employed in agriculture live in agriculture only households; but in the most urbanized regions this fraction drops to less than 50%.

Table 5 - Resident and employed people in agriculture in monoactive and pluriactive households in the regions of São Paulo, 1995 (number of people and % of total for each region)

regions	residents		employed in agriculture	
	pluriactive household	monoactive household	pluriactive household	monoactive household
very poor rural	129,284 (38.9)	202,704 (61.1)	31,124 (24.8)	94,171 (75.2)
poor rural	359,124 (45.0)	439,746 (55.0)	120,510 (33.0)	244,216 (67.0)
intermediate	639,242 (50.7)	620,893 (49.3)	185,947 (38.0)	303,265 (62.0)
expanding urban	494,001 (62.5)	296,111 (37.5)	122,890 (45.0)	150,429 (55.0)
dense urban	322,480 (70.0)	137,991 (30.0)	91,986 (52.2)	84,271 (47.8)
total	1,944,131 (53.4)	1,697,445 (46.6)	552,457 (38.7)	876,352 (61.3)

Source of basic data: PNAD 1995

Pluriactivity characteristics per region

Income

The average pluriactive agricultural household income is consistently superior to that for the monoactive in all regions; although, the differentials vary among regions. Among the pluriactive households, the average income for the dense urban group (13.5 MS) is at least twice that of the two poorest regions (6.8 and 4.9 MS). However, monoactive household income in richest region is four times that of the monoactive household income in poorest region and three times that of the second region (11.4, 2.9 MS, and 3.8 MS, respectively)[9]. Pluriactivity seems to be a successful, income increasing strategy in the poorest regions, thereby reducing regional income inequalities. Note that the highest differential ratio between the pluriactive and monoactive incomes occurs in the very poor rural region (2.3 for household income and 1.6 for all job incomes). As can be seen in Table 6, the income differential in favor of the pluriactive is especially high in the very poor rural and intermediate regions, regardless of income type.

It seems that average household income variations are affected by two distinct factors:1) a regional effect, resulting from the adopted regionalization criteria, which acts in two ways: a) it ensures that higher incomes are always found in the most urbanized regions; and b) it determines the *differences* between the pluri and monoactive, favoring the pluriactive in the most rural region (where any non-agricultural source of income is important) and in the most dynamic and modern agricultural region, the intermediate (where sugarcane, orange, and soybean production are concentrated). There is a bias in the regionalization criteria favoring pluriactivity in the intermediate region. This bias comes from the intermediate region's proximity to the most important urban centers — the employment and supplementary income generators.

[9] For comparison, the average income in the State of São Paulo for all the households in 1995 according to PNAD was 11.25 MS; average urban household ncome was 11.65 MS, average rural household income was 5.57 MS.

2) an effect of the existing multi-activities that causes the pluriactive households to have higher average incomes in all the regions.

Table 6 - Comparison of the average household and individual incomes between the monoactive and the pluriactive in São Paulo's regions, 1995 (minimum salaries)

regions	household income			all jobs income per person		
	pluriactive (A)	monoactive (B)	A/B	pluriactive household (C)	monoactive household (D)	C/D
very poor rural	6.8	2.9	2.3	1.4	0.8	1.6
poor rural	4.9	3.8	1.3	1.0	1.0	1.0
intermediate	9.4	4.5	2.1	1.9	1.2	1.6
expanding urban	10.8	9.8	1.1	2.0	2.2	0.9
dense urban	13.5	11.4	1.2	2.5	2.5	1.0

Source of basic data: PNAD 1995

When the income from all jobs per employed person are considered, the previously mentioned regional effect tends to prevail, even in regions (expanding urban) where pluriactive household residents have slightly lower average incomes than monoactive household residents[10]. This conclusion can be extended to "all source incomes" and "main job income." The data were not shown since they follow the same pattern for the "all job incomes".

The differences between the average incomes from the main job and the from all jobs may express the importance of pluriactivity for the families and people employed in agriculture. When the differences between the income from all jobs and the main job are calculated, one can have a measure of the importance of the secondary jobs; this also applies to the ratio between other sources of income (except work) and main job income. However these indicators are limited because they are not able to reveal what the main job is (agricultural or not) or how important

[10] A likely explanation could be an error in the income data source, for instance due to the large number of self-employed in certain regions. As is well known, the estimate of variable incomes, which is generally the case of the self-employed, is much more subject to errors than that of regular salaries. Nevertheless, the proportion of self-employed (independent producers, subsistence farmers, employers etc.) varies little among the five regions, thus not providing a proper explanation for the different regional patterns. Following the order of the regions shown in the tables, their values are: 12.5%, 18.6%, 11.1%, 12.7% and 19.3%. Note that the expanding urban region has one of the lowest values for the proportion of self-employed, so this cannot be the cause for the discrepancy observed in table 6.

the secondary incomes are to small, family farm survival. The difference between the main job income and all-source income can be used to evaluate pluriactivity, because it can include activities which are not directly defined as "jobs" (for instance, rural tourism, rent of part of the property for events, and so on). However, one must bear in mind that pensions, rent payments, and investment returns can play the most important role among all-source incomes, so that the two indicators in Table 7 must be considered with constraint.

A strong regional effect can be observed in Table 7, especially between different regions' pluriactive households. Secondary jobs or other income sources ensure larger income increases in the two most urbanized regions than they do in the other regions, in both types of households[11]. But, secondary jobs have more affect on the pluriactive household income (increasing main job income by over 5% in the most urbanized regions), while other sources of income have a stronger affect on the monoactive household income (increasing main job income by over 60% in the dense urban region).

Table 7 - Relative increases of the secondary job and other sources of incomes on the average main job incomes between monoactive and pluriactive households in São Paulo's regions, 1995 (% of main job income)

regions	secondary jobs		other income sources	
	pluriact. household	monoact. household	pluriact. household	monoact. Household
very poor rural	1.6	0.3	24.0	20.4
poor rural	2.6	3.0	18.6	17.5
intermediate	3.5	2.4	21.1	38.7
expanding urban	5.3	1.2	25.4	30.6
dense urban	5.7	3.0	36.7	62.8

Source of basic data: PNAD 1995

[11] According to the adopted definitions, the secondary jobs in the monoactive households must be in agricultural activities only.

Schooling

In all regions, the residents in pluriactive households tend to have a higher level of schooling than those in the monoactive households, as shown in Tables 8 and 9.

On average, 13.6% of the agricultural, pluriactive household residents have 9 years or more of schooling; in the most urbanized region this average is more than 20%. In the monoactive households, the average is lower (7.1%). Even in the most urbanized region this average does not reach 15%. At the other economic end of our regional hierarchy, the very poor rural region, the proportion of illiterates is higher in the monoactive group, although this reverses in the most urbanized regions.

The regional variations within each group are important, showing that the regional effect influences this variable. In the pluriactive households, 65% of people have no more than four years of schooling in the poorest and most rural region, dropping to 58% in the dense urban region. For the monoactive, the corresponding fractions are much higher, 84% and 66%, respectively.

Table 8 - Distribution of the residents in pluriactive households according to the period of formal education in São Paulo's regions, 1995 (% of respondents)

regions	illiterate	up to 4 years	up to 8 years	9 years or above	total
very poor rural	23.7	41.2	25.2	9.9	100.0
poor rural	11.1	49.7	25.8	13.4	100.0
intermediate	14.2	46.0	25.6	14.2	100.0
expanding urban	18.7	46.4	26.8	8.1	100.0
dense urban	13.3	44.7	20.4	21.6	100.0
total	15.2	46.2	25.0	13.6	100.0

Source of basic data: PNAD 1995

Table 9 - Distribution of the residents in monoactive households according to the period of formal education in São Paulo's regions, 1995 (% of respondents)

regions	illiterate	up to 4 years	up to 8 years	9 years or above	total
very poor rural	26.3	57.7	12.9	3.1	100.0
poor rural	17.4	48.1	24.5	10.1	100.0
intermediate	26.0	50.9	18.9	4.2	100.0
expanding urban	16.9	56.6	19.1	7.4	100.0
dense urban	11.4	54.7	18.9	14.9	100.0
total	20.9	52.3	19.7	7.1	100.0

Source of basic data: PNAD 1995

Type of family

One of the most significant differences between monoactive and pluriactive households has to do with type of family. A comparison of Tables 10 and 11 shows that a higher occurrence of young families (childless or with children under 14) are found in the monoactive households[12]. In the state totals, on average, 42% of the families living in monoactive agricultural households have children 14 years old or older (older families), while the average is 60% in pluriactive households. Note the regional diversity for this indicator: for the pluriactive household, the highest proportion of older families is found in the poor rural region (66%); for the monoactive the highest proportion of older families is found in the dense urban region (51.8%). The highest proportion of young families is found in monoactive households in the intermediate region (57%), while the proportion of young families found in pluriactive, intermediate region households (33%) is very near the state average for this type of household.

[12] It is assumed that in the childless families young families tend to prevail, although they could also be elderly couples whose children have already left home. When assembling the indicator "with children under 14," only families with children in this age level were considered; for the "with children over 14" families with children in this age level only, as well as families who have children under or above this age level were included; "other type of family" refers to families who do not fit into the three previous types, for instance, a homeowner and boarders without any blood relation.

Table 10 - Distribution of the residents in pluriactive households according to the type of the family in São Paulo's regions, 1995 (%)

regions	childless couple	with children under 14	with children above 14	other type	total
very poor rural	9.9	37.7	50.6	1.9	100.0
poor rural	2.7	25.3	66.2	5.8	100.0
intermediate	5.1	28.3	61.0	5.5	100.0
expanding urban	4.7	27.7	61.7	5.9	100.0
dense urban	7.0	22.9	54.7	15.3	100.0
total	5.2	27.3	60.4	7.0	100.0

Source of basic data: PNAD 1995

Table 11 - Distribution of the residents in monoactive households according to the type of the family in São Paulo's regions, 1995 (%)

regions	childless couple	with children under 14	with children above 14	other type	total
very poor rural	7.9	45.3	41.3	5.5	100.0
poor rural	12.2	43.2	39.6	5.1	100.0
intermediate	11.8	44.9	39.3	4.0	100.0
expanding urban	7.3	37.9	48.5	6.3	100.0
dense urban	9.4	30.7	51.8	8.1	100.0
total	10.5	42.1	42.2	5.2	100.0

Source of basic data: PNAD 1995

Although it can be observed that pluriactive households seem to have older families on average, a concrete relation cannot be established between type of family and region, due to the diversity of existing situations.

Hourly work week

Tables 12 and 13 show the weekly hours people 10 years old or older spend working. On average, for the entire state, about 26% of the people living in pluriactive households and about 36% of the people living monoactive households work more than 48 hours per week. Comparing the regions, the proportions of this indicator for both pluriactive and monoactive households are similar only in the two poor rural regions (16% and 28% for the pluriactive, 14% and 27% for the monoactive);

but there is a significant difference in the number of hours spent working between the different regions' monoactive households. This is especially true in the expanding urban region, where 62% of the residents in monoactive households work more than 48 hours per week. It must be remembered that agriculture represents a very small fraction this region's economic activity, although there are specialized crops typically found on family farms, such as grapes. However, a regional effect alone would not account for the fact that that only 31% of pluriactive household members work more than 48 hours weekly.

Table 12 - Distribution of the residents in pluriactive households according to weekly work hours in São Paulo's regions, 1995 (%)

regions	up to 39 hours	from 40 to 48 hours	49 hours or above	total
very poor rural	25.0	59.2	15.8	100.0
poor rural	26.2	46.0	27.8	100.0
intermediate	21.4	56.5	22.1	100.0
expanding urban	26.2	42.6	31.1	100.0
dense urban	21.1	51.9	27.0	100.0
total	23.7	50.5	25.9	100.0

Source of basic data: PNAD 1995

Table 13 - Distribution of the residents in monoactive households according to weekly work hours in São Paulo's regions, 1995 (%)

regions	up to 39 hours	from 40 to 48 hours	49 hours or above	total
very poor rural	8.8	77.4	13.7	100.0
poor rural	36.7	36.7	26.6	100.0
intermediate	15.1	49.3	35.6	100.0
expanding urban	16.3	21.8	61.9	100.0
dense urban	29.0	28.8	42.2	100.0
total	22.1	41.7	36.2	100.0

Source of basic data: PNAD 1995

Economic activity sectors for the pluriactive

By definition, the pluriactive households have one or more residents working in non-agricultural sectors. As shown in Table 14, statewide about 45% of these household's residents work in agriculture, with little regional variation. Only in the poor rural region (formed mostly

by counties that specialize in coffee and cotton in the state's west) does this fraction reaches 50%, while it is close to 40% in the urbanized regions.

An unexpected finding is that the percentage of non-agricultural sector jobs held by pluriactive household residents does not show very significant regional variations. For instance, 11.5% of the pluriactive household residents have industry jobs, not only in the most rural but also in the most urban region. The percentage of service jobs held varies between the regions by less than 8% (18.7% to 26.4%). However, it must be stressed that the types of jobs aggregated under the "industry" or "services" labels can be quite different, depending on if they are selected from industrial districts near the large urban centers, the poor regions of the Vale do Ribeira, or from the state's northern coast. The data suggest that only more disaggregated studies can shed light on the local importance of certain commercial and urban activities on the occupations and incomes found in pluriactive households'.

Table 14 - Distribution of the employed people living in pluriactive households according to economic sectors in the regions of São Paulo, 1995 (%)

regions	agriculture	industry	construction	commerce	services	others	total
very poor rural	44.8	11.5	6.9	5.7	26.4	4.6	100.0
poor rural	50.0	7.6	5.6	7.3	21.5	7.9	100.0
intermediate	46.2	16.3	3.4	4.6	18.7	10.9	100.0
expanding urban	40.5	11.4	8.8	7.1	22.2	10.1	100.0
dense urban	43.1	11.7	3.0	7.6	21.9	12.6	100.0
total	44.9	12.3	5.3	6.3	21.1	4.6	100.0

Source of basic data: PNAD 1995

CONCLUSION

This analysis of pluriactivity characteristics in the São Paulo's agriculture sector was carried out to show the importance of proper regional approaches to better understand this phenomenon. If the aim is to understand the relationship between pluriactivity and local economies, as recommended by the principal papers on pluriactivity, then the

aggregation level used in this paper may still be considered excessive[13].

Agricultural households in São Paulo shelter over 3.5 million people but are distributed in such different regions that they cannot be treated as a whole. In the poorest region, over 40% of the residents live in agricultural households; in the richest region, this proportion is only 2%. However, the richer and more urban the region, the higher the proportion of residents living in pluriactive households; showing phenomenon's importance in diverse regions.

For characteristics such as income and schooling, the regional effect seems more compelling than the effect of pluriactivity. The pluriactivity effect seems to prevail over regional effects in determining other household characteristics, such as type of family. The regional diversity of pluriactive families' non-agricultural jobs did not come out as expected, for a certain homogeneity is found in this characteristic's distribution among the sectors. This probably means that the data disaggregation level is insufficient to disclose the desired phenomenon. In short, it is not always possible to establish simple and unchangeable relations between the types of regions and the pluriactivity features. Nevertheless, this does not invalidate the argument which states that regional diversity is extremely important in this case.

The main conclusion of this paper is that it is correct to use regional approaches, such as the "local economy" as methodological guidelines to study pluriactivity. This is especially true for Brazil, a country with significant social and economic diversity that causes agricultural family characteristics to change greatly from one region to another. Even in São Paulo, with its dense urban network and roads linking nearly every local, one can identify extremely different, distinct, regional economies.

In addition, this paper emphasizes the need to try and overcome restrictions imposed by secondary data and sampling techniques, especially

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[13] An exemplary paper in Brazil is by Schneider (1998), who studied the pluriactivity of the settlers' families in the shoe-manufacturing region of Rio Grande do Sul (homogeneous micro regions, which are Vale dos Sinos, Encosta da Serra, Vale do Caí e Vale do Taquari). The author shows the articulated development established between the leather industry strategies (hire family members as wage workers or require specific tasks from them) and the settlers' families, who became responsible for the production of tannin (a raw material for shoe-manufacturing) from "acácia negra" trees. These families also participate directly by providing specific shoe parts made in their homes, and indirectly, supplying labor force to the factories. This is an example of perfect integration between the pluriactivity and the local economy. For a broader discussion on the importance of local economies in the pluriactivity, see also Saraceno (1994).

when working on small areas and disaggregated sectors. Surveys and secondary data sources collected by State or Municipal institutions should prove of utmost importance in further studies on the theme.

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