RESEARCH REPORT

LABOR MARKET EXTENSION AND OUTREACH GROUP

PROJECT: VOLUNTARY MIGRATION OF WORKERS IN THE SUGAR AND ETHANOL SECTOR

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Translator’s notes

City – Brazil is a three-tier federation, organized into 26 states (plus the Federal District) and 5,564 municipalities. A municipality can range from totally urban to a vast rural area containing one or more urban clusters, the largest of which is normally the eponymous municipal seat. The terms “city” and “municipality” tend to be used interchangeably. Also, the term “city” (cidade) tends to be used for any urban settlement except the very smallest – there is no common equivalent to the English “town”, implying a mid-sized settlement. In this text, “city” has been used throughout, and should not necessarily be taken to imply, for example, that a person said to be moving from “city A” to “city B” is moving between two urban areas.

Mills, distilleries and plants – In English, sugar is produced from sugarcane in a mill or crushing plant, while ethanol is produced in a distillery. In Portuguese, the word “usina” is frequently used for both. This translation uses “mill” and “sugar mill” for all generic references to industrial plants producing sugar and/or ethanol. Also, the text frequently refers to migrants working “for a mill” when in fact not all sugarcane plantations are owned by mills.

Harvest mechanization - Controlled burning has traditionally been used in sugarcane plantations around the world to get rid of cane leaves and tips prior to manual cutting, but the practice causes significant atmospheric pollution as well as wasting potentially valuable biomass. Under the terms of a 2002 São Paulo State law, all sugarcane burning must end in the state by 2021 in plantations where the terrain allows for mechanized harvesting, and by 2031 in all other areas (for example steeper slopes). An agreement was signed 2007 between the São Paulo State government and representatives of producers of sugar and ethanol to voluntarily bring forward the deadlines to 2014 and 2017. Ten months after the agreement was signed, 141 of the 170 sugarcane mills and ethanol plants in São Paulo State had signed up voluntarily.

Rooms - includes all principal internal spaces: bedrooms, kitchens, living rooms, bathrooms.
Executive Summary

This study had the following objectives:

(i) To analyze the dynamics of voluntary migration to the State of São Paulo by sugarcane workers;
(ii) To identify the characteristics of these workers and the region they come from;
(iii) To assess the importance of the income of these workers for their cities of origin and destination; and views in these communities about the potential impacts of mechanization of the sugarcane harvest on these respective regions.

Case studies were conducted for the cities of Leme (SP) and Pedra Branca (CE), characterized as – respectively – a dormitory city and a city of origin for the migrant workers.

Results

(I) Socio-economic indicators for migrant workers living in Leme:

(i) Of the 411 migrants initially analyzed, 38% were originally from Ceará State, 20% from Pernambuco State, 18% from Paraiba State, 9% from Bahia State and the other 15% from other regions of Brazil;

(ii) 37% of migrant workers had already established residence in Leme, while the remaining 63% migrated each year during the sugarcane harvest and returned to their region of origin in between harvests.

(II) Key results of a questionnaire used with 88 of the migrant workers:

(iii) The average age of the workers was 30 years;

(iv) Low educational level was a feature of the cane cutters interviewed, with 17% of them illiterate and a further 33% possessing between one and three years of schooling. These two categories comprised 50% of all those interviewed, illustrating the problem of finding new work for these workers in a scenario of harvest mechanization;

(v) When in their cities of origin the great majority of the migrant workers lived with their families in small houses in rural areas – the houses in their cities of origin had an average of five rooms, with an average of five people residing in each house.

(vi) Approximately half of those interviewed said they had an indoor bathroom in their region of origin, with the rest having an outdoor bathroom or no
bathroom at all. With respect to sewage in their city of origin, 61% said they had a septic tank, 17% said they had mains sewage and 22% said they had no sewage disposal whatsoever;

(vii) Asked about the labor market in their city of origin, 51% said they had no work while of the 49% who said they had worked, only 7% had been formally employed;

(viii) The main motive given for migrating was the lack of work in their city of origin;

(ix) Of those who had established residence in Leme, 38% said they planned to continue living in São Paulo State even after mechanization of the sugarcane harvest;

(x) Of those who had not yet established residence in Leme, 38% said they would continue migrating even after mechanization of the harvest, given that there was no work in their region of origin;

(xi) The average wage of the cane cutters interviewed in the 2007/08 harvest was R$850 a month (roughly equivalent to US$480/month in December 2007).

How residents of Leme viewed the impact on the region of the migrant workers:

(i) There was no consensus. Some local residents believed that the migrant workers made a positive contribution to commerce in the region. For those who thought this, the harvest mechanization and consequent drop in migrants was likely to reduce local store turnover by some 35%;

(ii) The city health secretary was among those who thought that the presence of the migrants created more negative than positive points. The secretary blamed overcrowding of the local health system and the consequent fall-off in quality of service on the presence of the migrant workers;

(iii) Some residents stated that the presence of the migrants had caused a general increase in theft and crimes. This was not backed up by the local police chief (delegado), who believed the increase was a result of general urban growth rather than the presence of the cane cutters;
Importance of the cane cutters’ income for the city of Pedra Branca:

(i) There was just one company in the city, a textiles company, which employed a small proportion of the workforce; there was also subsistence agriculture;

(ii) There was nothing to create work for the great majority of young people, who opted for sugarcane cutting in Sao Paulo State as a way to seek better opportunities;

(iii) Sugarcane cutters gained a certain privileged status in their region of origin thanks to the various material possessions they could buy – even their own house – with the wages they earned in São Paulo;

(iv) They were known locally as CDC (the Portuguese acronym for sugarcane cutters) and enjoyed an economic situation better than that of other workers in the city;

(v) The ambition of local adolescents was to go and cut sugarcane in São Paulo, because they saw it as the only way to get money to fulfill their dreams;

(vi) Local shopkeepers said that much of the income generated in Pedra Branca came from spending by sugarcane cutters. They were of the opinion that harvest mechanization would have a negative impact on commerce in the city;

(vii) The lack of employment options and other opportunities in the region were the main reasons for the phenomenon of voluntary migration to the region of Leme;

(viii) Given the economic profile of the regions of origin of the migrant workers – including low per capita income (which made it difficult to create a consumer market); low levels of schooling; lack of infrastructure; difficulties of soil and climate; and other problems – there was obvious difficulty in attracting the investment required to set up any new company or any type of farming other than subsistence.

It became clear that voluntary migration is a very complex question, and one that is not likely to be solved without creating opportunities for young people in the poorest regions of the country. Without that, the workers will continue migrating in search of employment and a better life.
INTRODUCTION

Every year, thousands of migrant workers are hired during the harvest season to manually cut sugarcane. Many of these workers travel at their own cost from the regions where they live.

A culture has grown up amongst part of the population living in the country’s poorest regions to travel to São Paulo in a bid to improve their life by earning money working in the sugarcane plantations.

However, legislation has been passed calling for phasing out manual cutting. The consequent increase in harvest mechanization means that much of this migrant labor will in the near future no longer find work in the sugarcane fields.

Given this prospect, it becomes relevant to consider the future of this large mass of voluntary migrant workers who in their great majority have very little schooling and no qualifications to work in any other type of employment – a profile that will make it difficult for them to find new work in other activities related to mechanical cutting.

When we factor in the lack of opportunity, the poverty and the social inequality in the regions of origin, we cannot help but be concerned about the future of these workers in this new situation. Will they continue to migrate from their regions of origin to São Paulo State, even knowing that the sugarcane mills are no longer hiring workers for manual cutting? Bearing in mind that this really could happen, it is necessary to know what might be the possible economic and social impacts arising from the presence of these workers in the destination cities. And what will be the impacts in the regions of origin? Is there an awareness of the problem, and are there public policies in place that can help absorb this mass of labor in the cities of origin?

This study thus took as its central objective an analysis of the situation of voluntary migrant workers in the State of São Paulo – those who travel to the state at their own expense to work in the sugarcane harvest.

The cities chosen as focal points for the study were Leme, in the State of São Paulo, and Pedra Branca, in Ceará. Leme was chosen for its role as a dormitory town, because a significant proportion of the migrant workers live in Leme even when they work in neighboring cities, while Pedra Branca was chosen because it is the city of origin of many of the migrants who travel to Leme to work as cane cutters.
The views of the citizens of Leme with respect to the migrant workers were evaluated, seeking to determine if the presence of these workers in the dormitory town was generally seen in a positive or negative light, in particular with respect to socio-economic factors such as the impact on local commerce, the public health system, the crime rate and so on.

In the same way, the study assessed the views of citizens of Leme with respect to the importance of the income generated by cane cutting and the likely impacts of mechanizing the harvest in São Paulo State.

Additionally, the study compared socio-economic indicators for the regions of origin and destination of the migrant workers, seeking to better understand the motives behind the migration and the future tendencies of this phenomenon.

2. A REVIEW OF THE LITERATURE

It is well known that migratory movements of individuals and groups have been a part of human history and are ever more present in modern society. Castells (2000) sees such societies as comprising networks or states of flux, where migratory movements are one theme that forms part of contemporary dilemmas, such as diasporas (Hall, 2003) and the conflicts that surround cultural identities and mediation, these being themes correlated to the theme of migrations or migratory flows (Moraes et al., 2007).

According to Ramos and Araújo (1999), in a context where the challenge is to establish the variables that determine the relocation of labor in the transition from an “archaic” society (where the main activity is agriculture) to a “modern” economy characterized by urban-industrial activities, the migratory flow should be an “endogenous variable” within growth models, thus identifying the factors that induce it. The same authors state that the main defendants of the dualist models, for example Lewis; Ranis and Fei; and Jorgenson, hold that migratory flows are determined by wage differentials. Thus, the flows would move from more “archaic” sectors or areas to those regions or areas of activity that exhibit relatively greater development.

Looking specifically at the case of Brazil, Sahota (1968) conducted a pioneer study and concluded, even after including other variables such as distance, education, growth of income and employment, urbanization and so on, that in fact internal migration in Brazil is highly influenced by wage differentials between the regions of origin and destination. Ferreira (1996) also identified wage differentials as the variable that explained migratory flows in
Brazil, although he examined other variables such as the availability of land and the rates of change of income in different states.

However, the theoretical arguments that seek to explain migratory flows through differences in per capita income are characterized by a certain fragility in their internal consistency. According to Ramos e Araújo (1999), if the migrant makes his choice based on this differential, and supposing that the agents are uniform, with perfect mobility, then all the population of the lower income regions should move to those with relatively greater development.

In this sense, the model proposed by Harris and Todaro (1970) was an important advance. The authors held that the migratory flow was a process that would tend towards equilibrium, because from the exclusively economic point of view the decision to migrate should take into account not just the earnings differential, but also their expected value. In this case, each individual would maximize an intertemporal utility function within a context of risk, where the relevant factor would be the present value of the income flow, and having as a horizon a certain life expectancy. The earnings differential should be weighted for risk – in other words, it should indicate the expectation of present value. The risk would be determined by the probability of finding work in the more developed and/or dynamic region, and this could on the other hand be given by the unemployment rate: to the extent that this was higher (or lower), then the probability of finding a job would be lower (or greater).

However, Ramos and Araújo (1999) state that, despite the popularity of the Harris and Todaro model, up to that point the rate of unemployment had still not been used in studies of migratory flows in Brazil. For this reason, in their study they sought to identify the determinant factors of migratory flows (or the spatial relocation of labor) between Brazilian states (including the Federal District). To this end, they used the Harris and Todaro model. The results suggested that the introduction of the unemployment rate together with income seems to be relevant in explaining population movements in Brazil. The results obtained may also help understand why it should be that in a geographic space where there is free movement of labor, there can be significant differences in the unemployment rates and per capita income levels.

From the middle of the 20th century, the main migratory flows in Brazil have comprised people from the Northeast moving to the Southeast, Center-West and North of the country. This has been caused by the severe social inequality of the Northeast region, which is a consequence of the dry climate and the none-too-productive soil of the drylands (sertões),
coupled with the bad distribution of land and income. The South and Southeast regions of Brazil, on the other hand, are industrially well developed with a growing market, and have thus become increasingly attractive as migratory destinations. Additional factors are the expansion of new agricultural areas, major construction projects such as hydroelectric power stations and highways and, in recent decades, the expansion of the sugar and ethanol sector, which has hired numerous migrant laborers as cane-cutters during the harvest season.

According to Menezes et al. (2007) the Northeast region has historically been noted for intraregional and interregional migration. In the period between 1950 and 1970 there was expansion of inter-regional migration from the Northeast, with the principal destinations being the metropolitan regions of São Paulo, Rio de Janeiro and Brasília. After the phase characterized as Brazil’s “economic miracle” the country’s economy was notable for continued periods of economic crises, affecting the labor market and interfering with migrational tendencies. Unlike the previous decades, studies show that as of the 1970s migrations were characterized by multiple movements in which the groups of migrants had less chance of establishing roots in their cities of destination or of accumulating savings to invest in their place of origin. The author states that this contributed to intensifying the temporary migrations and the so-called “return migration”. Internal migration in Brazil thus shows various tendencies, amongst them the occurrence of “multiple migrations”, also called “repeat migrations”, which have predominated since the 1970s. “Return migration” is one manifestation of this.

Figure 1 shows migratory tendencies in Brazil from the 1950s through the 1980s. It can be seen that, despite the existence of migratory flows in different directions, for example the migrations from the Southern region to the Center-West region in the 1970s and 1980s, the migratory currents from the Northeast states to the Southeast region of the country have always been present.

It should be stressed that the restructuring of the sugar and ethanol sector in São Paulo State contributed to redefining the migratory flows from Northeast states. In addition to the classic migration to the metropolitan regions, the seasonal migrations to the sugarcane regions in upstate São Paulo started to grow in visibility and gain importance.
Figure 1. Migratory Flows in Brazil.
According to Alves (2007), at the start of the 1970s the institution of programs such as the Programs for the Rationalization of and Support for the Sugar Industry (Programas de Racionalização e Apoio da Agroindústria Açucareira – 1971/72), the Planalsucar and the National Ethanol Program – Proálcool (Programa Nacional do Álcool – 1975) fostered the process of expansion, modernization, concentration and centralization of the production of sugar and ethanol in Brazil. Within this scenario, the increased need for raw material for the mills was supplied by expansion of sugarcane plantations, which attracted workers from other regions to work in the São Paulo harvest.

At that time, the migrant workers came to São Paulo to work as wage-earners during the harvest and then returned to their cities of origin to work in subsistence family farming in the period between sugarcane harvests. Owing to the difficulty of earning a living from their subsistence plots, many workers ended up settling with their families in São Paulo. They became a point of reference for other migrants who came and went (Alves, 2007).

Migration to the region expanded thanks to the modernization of the sugarcane plantations in the Southeast region, plus the expansion of agribusiness due to the good prospects for sugar and ethanol in the international market.

The sugarcane agri-industrial complex (here called CAI, the Portuguese acronym) required rural workers who were drawn from increasingly distant regions of the country. According to Alves (2007), the current process of expansion of the sugarcane CAI shares similarities with the golden phase of Proálcool, in the 1970s and 1980s, both for the fact that the principal product driving the expansion is ethanol and for the need to use migrant labor coming from regions that are distant from São Paulo, such as Maranhão, Piauí and other Northeast states.

It should be noted that this is a trend that will tent to be reversed with the mechanization of the sugarcane harvest.

Even though unemployment is one of the main problems in cities in the region of Ribeirão Preto, the sugar mills continue hiring migrant workers from more distant regions. This happens because the quality of worker required by the sugarcane CAI is different from that of the local labor supply. According to Alves (2007) there are practically no small family farms in the Ribeirão Preto region, and therefore children grow up without being exposed to the rigors of agricultural work. Also, child labor is now virtually unknown. This means that the youth of the region cannot handle the work of cane-cutting. The new production and remuneration targets adopted by the mills merely accentuate the fact. In Maranhão, Piauí and
other Northeast states, by way of contrast, family agriculture still dominates as a subsistence activity, so that the young people of the region are accustomed to the kind of work involved in cane cutting. At the same time, the remuneration for a day’s work in the cities of origin is very low, meaning that they are willing to work for less pay than workers in São Paulo State.

Another factor is that workers in São Paulo have a generally higher level of education, meaning they can work in other activities, including areas outside of agriculture.

The process of harvest mechanization dates from the 1980s, as one of the consequences of a series of strikes in the sector that started in 1984 in Guariba (SP). According to Alves (1989) this was called “perverse mechanization” because although it liberated the workers from backbreaking work it also condemned thousands of people to unemployment, given that they were not qualified to do any other type of work.

Changes over recent years in the technology used in the sugarcane plantations have contributed to modifying the dynamics of seasonal migration of workers seeking to take part in the harvest. In recent years workers have stayed for longer in their city of destination, rather than just staying during the harvest and then returning to their cities of origin. Given this new scenario, some workers have brought their families to live in São Paulo State; others bring them just for the season. Some migrant workers bring just their wife, leaving their children with a relative, while some bring the whole family. Yet others meet their wife in the city of destination and end up forming a family in São Paulo State.

When sugar mills incorporate a high degree of mechanization, the workers hired on permanent contracts meet all the needs for labor during the sugarcane harvest and in the period between harvests, thus greatly reducing the number of workers hired just for the harvest period. As a consequence of the process of mechanization, the total number of rural workers hired is lower.

Also according to Alves (2007), being a cane cutter in the São Paulo sugarcane mills is generally a way for small farmers who work their own or rented land in some of the poorest regions in Brazil, particularly in the Northeast, to complement a survival-level family income. While there is as yet insufficient information available to permit an adequate assessment of the impact of government social programs on the migratory flow of cane cutters to São Paulo, programs such as rural pensions, the Family Grant (a monthly income supplement) and the cooking gas allowance must be taken into account in any consideration of migratory movements in Brazil today.
Given the numerous difficulties and the precarious and uncertain existence that families face when they live in poor regions, particularly in the Northeast, many workers end up migrating to the Center and South regions of the country to work as cane cutters. According to Alves (2007), the money for the journey may come from various sources, for example savings, loans, sale of personal belongings, an advance from contractors and even gifts from local authorities (mayors, local councilors and labor leaders).

The author states that migrant workers prefer payment related to productivity (piece work), because the more they cut, the more they earn. Thus, migrant workers arrive in the sugarcane region determined to use all their strength, all their skill and all their stamina to produce as much as possible. The author notes that the majority of migrant workers leave their cities of origin well informed about the reality of working in the São Paulo mills.

Alves (2007) relates that significant numbers of migrant workers believe that, for their living standards to improve, there would have to be simultaneous changes in different regions of Brazil. There would have to be a greater number and variety of opportunities for productive occupation in the Northeast, so that the option to migrate could be less and less driven by absolute necessity.

Carneiro et al. (2007) analyzed the reasons causing rural workers in the Northeast, and particularly in the State of Maranhão, to leave home to work in the São Paulo sugarcane plantations. To this end they conducted quantitative research in some neighborhoods of the city of Timbiras (MA), interviewing people who had been through the experience of travelling to São Paulo. They conducted a socio-economic analysis of the city and concluded by suggesting government actions that they deemed important to deal with the problems associated with labor migration from the city of Timbiras.

The authors discovered that the majority of migrants from Maranhão were males aged 20 to 29, and they associated this fact with the high productivity of workers from Maranhão – a characteristic prized by labor contractors. According to the authors this high productivity is in line with what the sugar mills expect. The authors also discovered that the largest percentage group, 45.06% of those interviewed, traveled to São Paulo with the help of family and friends; 40% made the journey in unregistered buses; and most journeys were concentrated in the months of January, February, March and April.

Additionally, when interviewing people about their sources of income, the authors discovered that 53.5% of the heads of family questioned gave agriculture as their principal occupation and 20% identified the rural retirement pension as their main source of income.
Among those families with agriculture as their principal means of subsistence, 54% worked on rented land, 16% worked their own land and 15% occupied land without title deeds.

The authors were able to conclude that, even despite the hardship of life and labor in São Paulo, the workers from Maranhão were willing to travel there to cut sugarcane because they saw migration as a virtually inescapable option, given the difficulties they faced back home. Chief among these were the lack of access to productive resources available in the city, and the lack of collective public infrastructure in the areas of health and education.

Associated with this realization was the hope on the part of the migrant workers that they would be able to accumulate some resources to invest in the purchase of goods and in the realization of some form of investment when they returned to their city of origin.

Arango (2000) states that to understand the ongoing nature of this migratory flow it is necessary to highlight the role played by networks of friends and family. These supply information and provide economic help, lodging and support of various forms, thus facilitating the migratory process.

Menezes et al. (2007) analyzed season migrations from the drylands of Paraíba State to the São Paulo sugar mills. To do this, they used data collected in the city of Tavares, in Paraíba State, in the years 2005 and 2006. In the former year, according to the Brazilian Institute of Geography and Statistics (IBGE) population of Tavares was 13,584. Based on various interviews, the authors noted that the bad standard of living in the city of origin constituted the main factor prompting the decision to migrate. Most families survived through subsistence farming, an activity which, according to the authors, in addition to paying badly, is subject to weather problems such as cold, lack of rain and so on.

Migrant workers interviewed said that the main drawback to migrating to the city of São Paulo as opposed to the sugarcane plantations in the farming regions of the state was that in São Paulo city it was more difficult to find work, the cost of living was high, wages were low and one could never tell when it would be possible to return home. On the other hand the migrant traveled to the plantation with his job guaranteed, the costs of food and lodging were lower because they were divided with other workers and the wages, depending on a person’s productivity, could be far better than in other jobs. Additionally, the date of return was known in advance, allowing the workers to make plans.

Despite the large number of migrant workers employed in sugarcane cutting in São Paulo, Silva (2007) says that as of the middle of the 1980s when the mills started using machines for cutting the cane, there has been a gradual reduction in the hiring of rural
workers. This was particularly true for the seasonal harvest labor which comprises mainly temporary migrants from the poorest regions of Brazil, such as the Jequitinhonha Valley in Minas Gerais State and various states in the Northeast.

The author says that despite the reduction in demand, hundreds of workers arrive in the cities of the sugarcane region, even without any guarantee of getting work. Many are obliged to go back to their places of origin, others find work and yet others wander from place to place searching for work to survive.

Based on all the foregoing, there must be concern about the consequences of the process of mechanization on employment of cane cutters, given that they are essentially unqualified labor and unlikely to adapt easily to other types of activity.

For this reason, this study sought to assess the perception of the agents involved with respect to the socio-economic impacts of the temporary migrant workers in Leme, given the prospect of a diminishing number of harvesting jobs in the sugar mills. Additionally, the study sought to analyze the main motives that help to explain the dynamics of voluntary migration, and which lead so many people to migrate in search of work as manual sugarcane cutters in the plantations in the city of Leme.

### 3. METHODOLOGY

A questionnaire was used with 88 migrants who were working as sugarcane cutters in Leme. The goal was to identify some social indicators and also the conditions under which they lived in Leme and in their city of origin.

Representatives of civic society in Leme were interviewed to assess their perception of the impact of migrant workers on relevant social and economic aspects of the city.

Amongst those interviewed were: local shopkeepers; representatives of the Leme Commercial Association (ACIL); the city secretaries of agriculture and public health, the chief of police (the delegado); the president of the Rural Workers’ Union; and workers employed in cane cutting:

- Mr. João Carlos Pinheiro – president of the Leme Commercial Association (ACIL) and representative of the Association of Sugarcane Producers in the Mogi Vale (ASSOMOGI); and Mr. Sebastião – manager of ACIL;
- Mr. Marco Antônio (city secretary of agriculture) and Ms. Tereza (an agronomy engineer at the “House of Agriculture” – Casa da Agricultura);
- Mr. Anselmo Luis de Paulo (manager of the Casas Bahia chain store) and Mr. Marcio Disardi (manager of Cybelar);
- Mr. Sandoval Alves de Brito (president of the Rural Workers’ Union).
- Dr. Cataldo (city secretary of health) and Ms. Renata (sanitary inspector, responsible for collecting information about the participation of migrant workers in the public health system);
- Dr. João Batista (local police chief – delegado).

Another part of the study involved using a questionnaire with migrant workers, the goal being to better understand the overall problem and to compare the living conditions of the interviewees in their cities of origin and in the dormitory city. The questionnaire also sought to shed light on the principal reasons that cause migration, and the future expectations of the workers with respect to their return (or not) to their cities of origin when mechanization and the ban on sugarcane burning effectively ends the market for migrant labor.

Finally, the research team visited Pedra Branca, a city located in the rural region of the State of Ceará which is know as one of the main centers from which migrant labor travels to cut sugarcane in the Leme region. The purpose of the visit was to get to know the region of origin that many of the migrant workers come from, and to interview people including sugarcane cutters to better understand the motives that lead such people to migrate every year. Additionally, the researchers sought to identify the future prospects of these workers, once cane burning ends in São Paulo State.

The people interviewed in Pedra Branca were:
- Selma Barbosa, responsible for the unemployment insurance program at the city’s Secretariat for Labor and Social Welfare;
- An assistant to the city health secretary;
- An assistant to the city education secretary;
- An assistant to the city agriculture secretary;
- An assistant to the city economic development secretary;

Also in Pedra Branca, the research team interviewed sugarcane cutters who normally migrate to the State of São Paulo during the sugarcane harvest season and various shop keepers, for example the manager of the Honda motorcycle dealership and the managers of various furniture and household appliance stores.
4. SOCIO-ECONOMIC INDICATORS OF THE CITIES

Socio-economic indicators for Leme were compared with those of the principal cities of origin of migrant workers, specifically: Pedra Branca (CE), Princesa Isabel (PB) and Triunfo (PE). The population of Leme in 2004 was 87,192 and the GDP per capita was R$7,500 (roughly US$2,564). The populations of the cities of origin included in the study, Princesa Isabel, Pedra Branca and Triunfo, were respectively 18,868; 41,738 and 14,898.

The values for GDP per capita were R$2,839 in Pedra Branca; R$1,998 in Princesa Isabel and R$2,739 in Triunfo (respectively: US$971; US$683; US$936). It should be noted that the GDP per capita in Leme is significantly higher than that observed in the regions of origin of the workers – it is more than three times greater than that of the city of Princesa Isabel.

The population of Pedra Branca is equal to roughly 50% of the population of Leme, and is more than twice that of either Princesa Isabel or Triunfo.

Table 1 shows the participation of the three main sectors, agriculture, industry and services in each city’s Gross Domestic Product (GDP), plus the values of total GDP for each city. It can be seen that in the cities of origin, the services sector contributed a greater part of city GDP than do the productive sectors. One hypothesis for the services sector being more important than the other sectors would be related to public-sector jobs, which in some regions of the country are sometimes important sources of employment.

Table 1. Percentage participation of each sector in the 2004 GDP of the four cities evaluated in the study.

<table>
<thead>
<tr>
<th>Components</th>
<th>Leme (SP)</th>
<th>Princesa Isabel (PB)</th>
<th>Pedra Branca (CE)</th>
<th>Triunfo (PE)</th>
</tr>
</thead>
<tbody>
<tr>
<td>Agriculture (%)</td>
<td>20.3</td>
<td>23.6</td>
<td>13.04</td>
<td>24.7</td>
</tr>
<tr>
<td>Industry (%)</td>
<td>29.3</td>
<td>11.9</td>
<td>16.59</td>
<td>12.4</td>
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<tr>
<td>Services (%)</td>
<td>49.0</td>
<td>63.1</td>
<td>70.30</td>
<td>64.0</td>
</tr>
<tr>
<td>GDP (R$1,000)</td>
<td>653,685</td>
<td>53,566</td>
<td>83,421</td>
<td>40,819</td>
</tr>
</tbody>
</table>

Source: IBGE (2007)

Leme was also the city with the greatest number of students enrolled at school, as can be seen in Table 2.

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1 Exchange rate - commercial purchase, 2004 average, US$1.00 = R$2.925 - Brazilian Central Bank.
Table 2. Number of students enrolled at school in each city in 2006.

<table>
<thead>
<tr>
<th></th>
<th>Leme</th>
<th>Pedra Branca</th>
<th>Princesa Isabel</th>
<th>Triunfo</th>
</tr>
</thead>
<tbody>
<tr>
<td>Basic education – state schools</td>
<td>11,572</td>
<td>9,213</td>
<td>3,766</td>
<td>3,252</td>
</tr>
<tr>
<td>Basic education – private schools</td>
<td>1,314</td>
<td>549</td>
<td>146</td>
<td>278</td>
</tr>
<tr>
<td>Upper secondary – state schools</td>
<td>3,385</td>
<td>1,631</td>
<td>1,056</td>
<td>813</td>
</tr>
<tr>
<td>Upper secondary – private schools</td>
<td>493</td>
<td>125</td>
<td>0</td>
<td>70</td>
</tr>
<tr>
<td>Pre-school – state schools</td>
<td>3,451</td>
<td>1,327</td>
<td>297</td>
<td>254</td>
</tr>
<tr>
<td>Pre-school – private schools</td>
<td>68</td>
<td>190</td>
<td>47</td>
<td>140</td>
</tr>
<tr>
<td>Total</td>
<td>20,283</td>
<td>13,035</td>
<td>5,312</td>
<td>4,807</td>
</tr>
</tbody>
</table>

Source: IBGE (2007)

Another useful economic indicator is the participation of each kind of motor vehicle in the total fleet registered in the city. We can see in Table 3 that in Leme, the principal type of vehicle was the private car, while in the other three cities, which are poorer in comparison to Leme, the main vehicle type was the motorcycle.

Table 3. Share of each type of vehicle in the total fleet in each city in 2006.

<table>
<thead>
<tr>
<th></th>
<th>Leme</th>
<th>Pedra Branca</th>
<th>Princesa Isabel</th>
<th>Triunfo</th>
</tr>
</thead>
<tbody>
<tr>
<td>Automobile (%)</td>
<td>60</td>
<td>14</td>
<td>35</td>
<td>22</td>
</tr>
<tr>
<td>Truck (%)</td>
<td>6</td>
<td>4</td>
<td>7</td>
<td>6</td>
</tr>
<tr>
<td>Truck tractor (%)</td>
<td>1</td>
<td>0</td>
<td>0</td>
<td>0</td>
</tr>
<tr>
<td>Pickup (%)</td>
<td>4</td>
<td>4</td>
<td>11</td>
<td>7</td>
</tr>
<tr>
<td>Minibus (%)</td>
<td>0</td>
<td>0</td>
<td>3</td>
<td>0</td>
</tr>
<tr>
<td>Motorcycle (%)</td>
<td>22</td>
<td>71</td>
<td>42</td>
<td>64</td>
</tr>
<tr>
<td>Moped (%)</td>
<td>5</td>
<td>5</td>
<td>3</td>
<td>2</td>
</tr>
<tr>
<td>Bus (%)</td>
<td>1</td>
<td>0</td>
<td>0</td>
<td>0</td>
</tr>
<tr>
<td>Total (quantity)</td>
<td>31,253</td>
<td>3,502</td>
<td>1,119</td>
<td>2,562</td>
</tr>
</tbody>
</table>

Source: IBGE (2007)

Another important socio-economic indicator is the number of health establishments in each city. It can be seen in Table 4 that the quantity of health establishments in Leme was significantly greater than in the other three cities.

Table 4. Number of health establishments in each city in 2005.

<table>
<thead>
<tr>
<th>Health establishments</th>
<th>Leme</th>
<th>Pedra Branca</th>
<th>Princesa Isabel</th>
<th>Triunfo</th>
</tr>
</thead>
<tbody>
<tr>
<td>Health establishments – public</td>
<td>17</td>
<td>13</td>
<td>11</td>
<td>7</td>
</tr>
<tr>
<td>Health establishments – private</td>
<td>11</td>
<td>1</td>
<td>3</td>
<td>3</td>
</tr>
<tr>
<td>Health establishments (total)</td>
<td>28</td>
<td>14</td>
<td>14</td>
<td>10</td>
</tr>
</tbody>
</table>

Source: IBGE (2007)
Looking at agricultural production, we can see that sugarcane was the main crop in Leme, representing 51% of the total value of agricultural production and occupying 50% of cultivated area in the city. Oranges came in second place, with 18% of production value and 9% of cultivated area. This is shown in Table 5.

### Table 5. Percentage share of various crops in agricultural production in Leme (SP), by value and area occupied, in 2005.

<table>
<thead>
<tr>
<th>Value of production (R$1,000)</th>
<th>Area cultivated (% and hectares)</th>
</tr>
</thead>
<tbody>
<tr>
<td>Oranges (%)</td>
<td>17.69</td>
</tr>
<tr>
<td>Sugarcane (%)</td>
<td>50.69</td>
</tr>
<tr>
<td>Maize (%)</td>
<td>13.35</td>
</tr>
<tr>
<td>Others (%)</td>
<td>18.27</td>
</tr>
<tr>
<td>Total (R$ value and hectares)</td>
<td>94,136</td>
</tr>
</tbody>
</table>

Source: Municipal Agricultural Production (IBGE)

In Pedra Branca maize accounted for 50% of agricultural production by value, taking up 65% of total cultivated area. Sugarcane added just 3% of production by value, using 0.73% of the cultivated area. See Table 6.

### Table 6. Percentage share of various crops in agricultural production in Pedra Branca (CE), by value and area occupied, in 2005.

<table>
<thead>
<tr>
<th>Value of production (R$1,000)</th>
<th>Area cultivated (% and hectares)</th>
</tr>
</thead>
<tbody>
<tr>
<td>Sugarcane (%)</td>
<td>3.27</td>
</tr>
<tr>
<td>Beans (%)</td>
<td>36.41</td>
</tr>
<tr>
<td>Castor seed (%)</td>
<td>5.57</td>
</tr>
<tr>
<td>Maize (%)</td>
<td>49.87</td>
</tr>
<tr>
<td>Others (%)</td>
<td>4.88</td>
</tr>
<tr>
<td>Total (R$ value and hectares)</td>
<td>9,164</td>
</tr>
</tbody>
</table>

Source: Municipal Agricultural Production (IBGE)

Table 7 shows the same information for the city of Princesa Isabel.

### Table 7. Percentage share of various crops in agricultural production in Princesa Isabel (PB), by value and area occupied, in 2005.

<table>
<thead>
<tr>
<th>Value of production (R$1,000)</th>
<th>Area cultivated (% and hectares)</th>
</tr>
</thead>
<tbody>
<tr>
<td>Sugarcane (%)</td>
<td>0.33</td>
</tr>
<tr>
<td>Beans (%)</td>
<td>54.04</td>
</tr>
<tr>
<td>Cassava</td>
<td>16.66</td>
</tr>
<tr>
<td>Maize (%)</td>
<td>15.08</td>
</tr>
<tr>
<td>Banana (%)</td>
<td>1.16</td>
</tr>
<tr>
<td>Others (%)</td>
<td>12.73</td>
</tr>
<tr>
<td>Total (R$ value and hectares)</td>
<td>5,107</td>
</tr>
</tbody>
</table>

Source: Municipal Agricultural Production (IBGE)
It can be seen that the principal crop in the city of Princesa Isabel is beans, accounting for 54% of agricultural production by value and using 62% of cultivated area. Cassava generates 17% of agricultural production by value on 4.4% of agricultural land, while maize adds 15% of value using 26% of the farmland, as shown on Table 7.

As for the city of Triunfo, the principal crop produced is guava representing 44% of total production value and using 7% of cultivated land. Sugarcane contributes 14% of production value, consuming 14% of land – see Table 8.

Table 8. Percentage share of various crops in agricultural production in Triunfo (PE), by value and area occupied, in 2005.

<table>
<thead>
<tr>
<th>Crop</th>
<th>Value of production (R$1,000)</th>
<th>Area cultivated (hectares)</th>
</tr>
</thead>
<tbody>
<tr>
<td>Banana (%)</td>
<td>13.33</td>
<td>2.39</td>
</tr>
<tr>
<td>Guava (%)</td>
<td>43.55</td>
<td>6.82</td>
</tr>
<tr>
<td>Sugarcane (%)</td>
<td>14.02</td>
<td>14.49</td>
</tr>
<tr>
<td>Maize (kernels) (%)</td>
<td>7.13</td>
<td>34.08</td>
</tr>
<tr>
<td>Others (%)</td>
<td>21.97</td>
<td>42.23</td>
</tr>
<tr>
<td>Total (R$ value and hectares)</td>
<td>3,031</td>
<td>2,934</td>
</tr>
</tbody>
</table>

Source: Municipal Agricultural Production (IBGE)

5. RESULTS AND DISCUSSION

Various items of information were analyzed about 411 migrant workers living in Leme, and 88 sugarcane cutters were asked to cooperate with a questionnaire. From the information received it was possible to identify the principal regions of origin of the migrant workers employed in the sugarcane harvest. It was also possible to ascertain the proportion of workers who have already settled in Leme and those who travel to São Paulo for the harvest and return to their city of origin in the period between harvests.

It could be seen that of the 411 migrant workers employed as sugarcane cutters, 37% had already become resident in Leme and 63% continued migrating each year between their city of origin and the dormitory city. The fact that some of these workers had already settled in Leme increases the chances that these people will stay in the city even when the option of working as a sugarcane cutter no longer exists. This could represent a social problem if no work is available in other activities.

Of the 411 migrant workers, 38% came from the State of Ceará (CE), 20% from Pernambuco (PE), 18% from Paraíba (PB), 9% from Bahia (BA) and the remaining 15% from
other regions of Brazil. Considering all the states, the three principal cities of origin of the migrant workers were Princesa Isabel (PB), Pedra Branca (CE) and Triunfo (PE) which contributed 16%, 15% and 12% of the migrant workers, respectively. For this reason these three cities were selected to compare their socio-economic indicators with those of Leme (SP), using as a source the statistics of the Brazilian Institute of Geography and Statistics (IBGE).

5.1 Findings of the questionnaires

The questionnaire was used with 88 migrant workers representing 21% of the sugarcane cutters. Of these, 19% said they came to the State of São Paulo together with relations or friends and 81% came by themselves.

When asked how many times they had come to work as a sugarcane cutter, 14% replied that they were working on their first harvest, 11% were on their second harvest, 16% on their third and the other 59% had worked on more than three previous harvests. All of those questioned said they had been hired to work for the harvest. In other words, they had a contract with duration of seven to eight months. Of those who had already worked in more than one harvest, 46% said they had set up residence in Leme and 54% said they continued travelling back and forth to their cities of origin each year.

The average age of the migrant workers interviewed was 30 years old, with 22% of them in the 19-24 age group, 26% in the 24-29 age group, 19% in the 29-34 age group, 17% in the 34-39 age group, 10% in the 39-44 age group, and the remaining 5% older than 44.

Figure 2 shows the educational level of the migrant workers. It can be seen that 17% of them never went to school, 6% attended for just one year, 14% stayed two years, 13% went for three years, 15% for four years, 10% for five years, 9% for six years, 6% for seven years and 11% for eight years or more. It is important to note the predominance of low levels of schooling, and in particular the number who never went to school at all.
With respect to living conditions in the cities of origin, 77% of workers lived in rural areas, and 39% of the 88 cane cutters interviewed did not have their own house. The average number of rooms per house (in their cities of origin) was five, with 2% of migrant workers living in two-room houses, 11% in houses with three rooms, 30% with four rooms, 20% with five rooms, 28% with six rooms and 9% in houses with more than six rooms, as shown on Figure 3.

The average number of residents per house in the city of origin was five, in addition to the migrant himself, with 7% of the migrant workers living with one other person, 16%
with two others (often parents), 17% with three others, 5% with four others, 10% with five others and 45% with six or more other people in the house, as shown on Figure 4.

![Figure 4. Number of residents in the houses of migrant workers in cities of origin (in addition to the migrant himself)](image)

Almost half of the migrant workers – 47% – said they had no dependents in their city of origin, while 16% said they had just one dependent, 22% said they had two (frequently parents), and 16% reported having three or more dependents.

With respect to the condition of the houses in the city of origin, 47% of migrant workers said they had an indoor bathroom, 47% said they had an outside bathroom and 6% said they had no bathroom at all, as shown on Figure 5.

![Figure 5. Location of bathroom in house in city of origin](image)
As for sanitation infrastructure to handle sewage outflow, as shown on Figure 6, 61% said they had a septic tank or cesspit, 17% said they were connected to a local sewer system and 22% said their house had no provision for sewage disposal.

![Figure 6. Sanitary infrastructure in house in city of origin](image)

Asked about the water supply in their house in their city of origin, 18% of migrant workers said they received water from a manmade pond, 41% had piped water, 1% had rain barrels and the remaining 40% drew water from wells. See Figure 7.

![Figure 7. Type of water supply to the migrant’s house in his city of origin](image)

When asked about the situation of the labor market in their city of origin, 51% of those interviewed said they had not been employed. Of the 49% who had been working, just 7% had been hired under a formal labor contract. This illustrated the high degree of informal employment in the city of Pedra Branca among those interviewed.
Almost two out of every five – 38% – said that the lack of employment in their city of origin was the main reason leading them to travel to São Paulo; 26% described migration as a chance to improve their standard of living; 23% named both of these reasons; 3% said they made the journey at the suggestion of another worker and the rest indicated other reasons or named all three together (suggestion by a fellow workers, lack of local employment and the chance to improve their standard of living).

Asked what normally happened at the end of the sugarcane harvest, 30% of the migrant workers interviewed said they continued working in the sugarcane plantations, for example planting new cane; 54% said they returned to their city of origin; 7% worked in other agricultural activities; 9% worked in other activities outside agriculture, for example taking odd jobs; and the remainder had no answer, given that they were working in São Paulo for the first time.

![Figure 8. Occupation after the end of the sugarcane harvest](image)

Figure 8. Occupation after the end of the sugarcane harvest

Asked about their families, 47% of those interviewed said they were living with their wife in Leme. Of these 61% said they brought their wife from their city of origin, while 39% said they met their wife in Leme.

With respect to children, 66% of workers questioned said they had children. Of these, 38% had one child in Leme, 21% had two children in Leme, 5% had three children in Leme and the rest had no children in Leme. It should be noted that the majority of workers reported having less than three children, even counting those remaining in their city of origin.

The research team asked those workers who had set up residence in Leme what they planned doing once the harvest is mechanized, and 54% said they planned remaining in the
State of São Paulo while 43% said they would return to their city of origin and 3% did not know. When the same question was put to those workers who had not yet established residence in Leme, 38% said they would continue coming (even after mechanization), 53% said they would not come any more and 9% said they did not know.

The average monthly wage of the sugarcane cutters was R$850 (roughly equivalent to US$480/month in December 2007), with 31% of them earning R$700 – R$800 (US$395 – US$452); 17% earning R$800 – R$900 (US$452 – US$508); 18% earning R$900 – R$1,000 (US$508– US$565). A minority earned under R$600 (US$339) or over R$1,000 (US$565). See Figure 9.

![Relative frequency of wages received by sugarcane cutters](image)

**Figure 9. Relative frequency of wages received by sugarcane cutters**

Source: Tabulation of the questionnaires

When asked how much of their wages they spent in Leme, 37% of the migrant workers said they spent all of it (100%), while 13% said they spent between 20% – 30%; 12% spent 30% – 40%; 17% spent 40% – 50%, and a minority spent 50% – 80%, as can be seen in Figure 10. It should be noted that, in general, either the migrant worker spent all of his wages in Leme, or he spent just a small proportion, taking home or sending home the rest to his city of origin, as shown on Figure 10.

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5.2 Summary of main information obtained during visits to Leme

A total of four visits were made to Leme, a target city of the study. Following is a report of the main information obtained during interviews. Appendix 2 (not included in this English translation) provides a report on each interview.

There were between 5,000 and 6,000 migrants living in Leme during the 2007/08 harvest season, because of the demand for cane cutters at sugar mills in the region. Of these, some continued travelling each year from their city of origin, while others had already established residence in Leme.

There was no consensus about the impact of the migrant workers on the city. Some of those interviewed said they saw the impact of these workers as being more negative than positive. Some of them had no fixed opinion about the impact of the migrants, while others said they saw the impact of the migrant workers as more positive than negative for the city.

Among those who saw more negative impact were the city secretary of health and the city health inspector, who stated that the presence of the migrants was exceptionally detrimental to the operation of the public health system. According to those interviewed, the city health system was obliged to provide treatment not only for workers at sugar mills located in Leme, but also for workers in neighboring cities who sought treatment in Leme.

According to the city secretary of health, the sugar mills pay ICMS (a state tax) in the cities where they are located, but the workers use the public health system in Leme. The
secretary said the migrant workers had a severe negative impact, both for the city’s public health system and basic sanitation system (water and waste water).

Those interviewed said that in addition to the workers themselves, the migrants also brought their families to receive treatment under the SUS (a public health program with partial federal funding) because the public health system in the migrants’ cities of origin was normally very precarious, if indeed it existed at all. When adding in the families, estimated at three family members per worker, the total migrant population in Leme would be around 18,000, representing some 18% of the total city population (resident and migrant), the interviewees said.

According to the representative of the city health secretary, some sugar mills made a monthly payment of R$36 (roughly equivalent to US$20/month in December 2007) per worker to a local publicly-funded hospital (the “Santa Casa Saúde”) for a basic health plan to cover treatment for their workers. However, this covered just the doctors’ consultations, because medicines and hospital internment should normally be covered by the SUS. The opinion of those interviewed was that this additional revenue made little real difference to the overall financial situation of the “Santa Casa Saúde”. The research team requested additional details, but these were not supplied.

In conclusion, these interviewees said that the population of Leme was not in general opposed to the cane cutters; on the contrary the local population was described as friendly and welcoming. However, these interviewees said it was undeniable that there were problems in the public health system, in particular in terms of medicines and more complex procedures.

The representatives of the Commercial Association also considered the presence of the migrant workers to have a negative impact on the city, in terms of socio-economic indicators. These interviewees said that in the neighborhoods where these workers lived, the houses had dropped significantly in value because of violence. The owners of such property were unable to rent them (to non-migrants) and ended up renting them to cane cutters.

These interviewees said they believed that mechanization of the sugarcane harvest would be very positive for the sugar mills and for the city, because they believed that the migrant workers were not very important for the city in terms of consumption, and there were problems of unpaid debts in the shops which they frequented.

The same interviewees complained of fights, vandalism and killings, principally amongst the migrant workers. They said they believed that if the migrant workers continued to come to Leme and remain unemployed, there would be a significant increase in problems
related to violence, drugs, drink and theft in the city. Given the fact that the migrant workers had no qualifications, it would be extremely difficult for them to get any job other than as a cane cutter.

They said they thought the migrant workers generated little commercial turnover in terms of clothes or foodstuffs, but bought a significant volume of household electrical goods.

On the other hand, commercial store managers interviewed said that migrant workers represented 30% – 35% of sales in the city, meaning that the end of manual sugarcane cutting in São Paulo could have a negative impact on local commerce. The cane cutters normally paid cash, and even taking into account non-payment by some who were allowed credit, if these workers were to stop coming to the city it would be bad for commerce, these interviewees said.

One store manager said that the cane cutters received relatively high wages, and the workers always return to the same occupation. He cited the case of his own father, who raised five children working as a cane cutter. Even when he (the father) landed a job with the city authorities he chose to go back to cane cutting because it paid better (around R$400 per two weeks).

The local police chief (delegado) said he saw no negative impact arising from the presence of the migrants in the city. He said that in the past, there had been significant migration, but it had decreased substantially in recent years, probably due to the increase in mechanization.

There was a general tendency for crime to increase in the city, the police chief said, because the city was growing and lacked the infrastructure necessary to support the larger number of people. However, he did not attribute this increase in crime specifically to the presence of the migrants.

With respect to the number of crimes, the police chief said he believed that Leme had more killings than in other cities with the same size of population, but it was not possible to say that this was a direct consequence of migration. With respect to other crimes such as theft, robbery, involvement with drugs and so on, he said that Leme was on a par with other cities of the same size. He said that migrant workers got into trouble in much the same way as the citizens of Leme. In other words, the migrants should not be held responsible for all the crime.

Additionally, he said he thought that there was a positive impact from the presence of the migrants, because they spent money in the local shops and contributed to the economic development of the city.
The representative of the Rural Workers’ Union in Leme said that the migrants came of their own free will, looking for work and conditions for a better life. Around 20% of the migrants, some 1,300 workers, had already settled as residents in Leme and the rest – some 4,000 – came every year, going back to their cities of origin when the harvest ended, he said.

When they arrived in Leme, some took lodgings while others stayed in a relative’s house, while others rented a house. In general, such a rental did not pass through the hands of a real estate agency. Some workers who came every year had already acquired a place to stay.

The union representative said that the introduction of mechanization would imply major losses for local commerce, if the workers stopped coming. He said that supermarkets in the poorer areas of the city might see their sales fall off by 60%, as happened in the period between harvests.

The migrant workers received information about the new developments such as banning sugarcane burning and increasing mechanization, and as a consequence the likely unemployment amongst sugarcane cutters, he said, emphasizing that the Leme city authorities had a program aimed at developing basic literacy among the migrant workers.

According to this interviewee, the migrants who came to Leme and settled down ended up integrating with local citizens. This was his own case – he migrated to Leme from Bahia to cut sugarcane and, after the strike of 1986, which he led, ended up becoming president of the union.

The workers wanted to continue being paid according to their production, he said, because in this way they earned more. Moreover, he said, the debate about the possible end of this system was now over and the union had managed to conclude some negotiations in this sense.

The agriculture secretary and the agronomy engineer working at the Secretariat of Agriculture said they thought that with the advent of harvest mechanization, the voluntary migrant workers would stop coming to Leme. The main source of concern for these officials was with respect to those workers who had established residence in the city and did not plan on going back to their city of origin.

The officials said that virtually all the migrant workers were now hired formally, completely in accordance with labor regulations including those relating to medical exams. They said that the use of formal labor contracting had increased significantly in recent years.

They said they believed that there were no problems in the region with respect to workers not being paid, or with working in situations similar to indenture. Neither did they
see problems with respect to labor intermediaries. Some workers lived in shared accommodation while others lived with relatives, they said.

Additional details on these interviews are available in Appendix 2 (not included in this English translation).

5.3 Summary of the main information obtained in a visit to Pedra Branca

In March of 2008 the research team visited the city of Pedra Branca, located in the rural region of Ceará State. It is one of the principal cities of origin for migrant workers who travel to Leme.

The purpose of the visit was to get to know the region of origin of the rural workers, to evaluate the importance of the income of these workers for the city, and to try to determine what would be the impacts for the city of the end of manual sugarcane cutting in the State of São Paulo.

Figures 11, 12 and 13 show the city hall, a street in the city and the highway that leads to the city.

Figure 11. Pedra Branca – city hall.
Various people were interviewed: assistants to the city secretaries of health, education, social welfare, agriculture and economic development. Additionally, the research team spoke with various cane cutters who normally migrated to the State of São Paulo during the sugarcane harvest and with various shopkeepers, for example the manager of the Honda motorcycle dealership and the managers of some furniture and household appliance stores.

Following is a summary of the main information received during these interviews. Additional details are available in Appendix 3 (not included in this English translation).

It is interesting to note that the income of sugarcane cutters who migrated to São Paulo was comparatively higher than that of local workers, and this created a culture of migrating to work in the sugarcane harvest. On their return the cane cutters acquired greater status in relation to the other residents of the city, and were known as CDC (the Portuguese acronym for a cane cutter).
for cane cutters) or lemeiros (a Portuguese word meaning, roughly, people from Leme, or who work in Leme).

Many children grew up with the dream of being able to cut sugarcane in São Paulo, and this ended up having a perverse effect on their education. This dream of being a sugarcane cutter trumped the desire to study and acquire professional skills.

It could be seen that sugarcane cutting in São Paulo currently represented one of the only alternatives for earning an income for the residents of Pedra Branca, given that employment opportunities in the region were virtually non-existent. Only by cutting sugarcane in São Paulo could they save enough money to buy the things they wanted, for example a motorcycle, television, DVD player, parabolic antenna, and so on. Additionally, the wages they earned cutting sugarcane in São Paulo also made it possible to buy their own house – something that many inhabitants of Pedra Branca had done as a result of migrating to cut sugarcane in São Paulo.

There was no commercial association in Pedra Branca, but the research team visited three relatively large stores in the city; one was a Honda motorcycle dealership and two were stores selling furniture and household electrical goods.

The manager of the Honda dealership said that the impact of the migrant workers on the sale of motorcycles was in fact significant. Sales of motorcycles averaged 10 to 15 units per month during the year, but in the period December through February when the migrants returned to Pedra Branca between São Paulo harvests, sales rose to an average of 100 to 120 units per month.

Some workers brought their motorcycles from São Paulo, while others chose to buy them in Pedra Branca. The new motorcycle became a kind of trophy for the sugarcane cutters. Those who were successful during the migration felt that they “had to” buy a new motorcycle because if they didn’t, the residents of the city would assume that they had not been successful. The Honda manager also confirmed that the city became a much busier place at the end of the year, and this led to an increase in fights, brawls, accidents, and so on.

As for the commerce in furniture and household electrical goods, this was also significantly impacted by the migrant workers. Storekeepers stated that some migrant workers preferred to buy products in Pedra Branca while others preferred to bring them from São Paulo, but even so the local sales were significant. In conclusion, the local retail sector received significant stimulus from the income of these workers, meaning that the sector would suffer a negative impact with the end of manual sugarcane cutting in São Paulo.
According to the employee of the Secretariat for Labor and Social Welfare who was responsible for the unemployment insurance program in the city, the majority of workers who migrated to the State of São Paulo had a formal labor contract (in São Paulo). The only options in Pedra Branca would be to work for the city authority, but there were insufficient jobs for everybody, or subsistence agriculture, which ended up being the option for the great majority. This meant that only a few workers were formally employed in their city of origin. This was important because only those workers who had been formally employed enjoyed the right to receive unemployment insurance. Thus, the people who came to the secretariat to claim unemployment insurance were predominantly those migrant workers who cut sugarcane in São Paulo, mainly aged 19-25.

The interviewee was of the opinion that if employment in the sugarcane harvest were really to come to an end, the impact on Pedra Branca would be very negative because the workers would have no alternative employment in the city. She (the interviewee) and other people stated that the only solution for this problem would be if some factories moved to the city, so providing local employment options. An alternative would be if some of the workers showed interest in specializing in subsistence agriculture and even agriculture at a commercial level.

She pointed out that the city’s Agriculture Secretariat was very active and offered various incentives for farming in the city. The population showed little interest, however, and people preferred to go to São Paulo to cut sugarcane in the belief that this would earn them more money.

The representative of the city secretariat for economic development, who was also the person responsible for all civic works in the city, said in an interview that the end of manual sugarcane cutting would be extremely detrimental for the city of Pedra Branca because the money earned by cutting sugarcane in São Paulo was the main factor driving economic development in the region.

When the migrant workers returned to Pedra Branca, they frequently bought plots of land and built houses. The dream of home ownership had come true for many families thanks to the money earned in sugarcane cutting. The assistant also said that these workers bought a lot of motorcycles, satellite antennas, furniture and household electrical goods, noting that such acquisitions would not have been possible without the money earned by cutting sugarcane.
At the end of the year, in the period between São Paulo sugarcane harvests, local commerce experienced a large increase in turnover. This was due to an influx of money into Pedra Branca, both from the wages received in São Paulo and from the unemployment insurance money that the cane cutters received in Pedra Branca in the period between harvests, the interviewee said.

![Image of Houses with Satellite Antennas](image)

**Figure 14. Houses with satellite antennas**

Various migrant sugarcane cutters were interviewed in Pedra Branca. According to these workers the work was very hard. Nevertheless all said they were very satisfied because they saw it as the only way to earn money to acquire material possessions such as motorcycles, household electrical goods, satellite antennas, furniture and so on. All said that the sugar mills took proper care of worker safety, providing equipment and teaching workers how to use it, with lectures and so on. According to the cane cutters, accidents were generally a result of workers themselves being careless.

The workers also said that if there was work in Pedra Branca, if some factories were brought to the region, then they would not return to cane cutting in São Paulo. They said that many workers were currently trying to migrate to Mato Grosso do Sul State, because sugarcane cutters who had worked in the harvest in that state said that the working conditions were better there.
Figure 15. Meeting with sugarcane cutters in the Secretariat for Social Welfare

However, some of the people interviewed, for example the representative of the Health Secretariat, said that while the end of manual sugarcane cutting in São Paulo might at first have a very negative impact for these people, with the passage of time it could end up being positive for the city of Pedra Branca. These interviewees argued that the young workers who migrated to São Paulo returned home with a different culture, they were more violent, they had been exposed to drugs and had become arrogant and ambitious, etc.

The fact of going to cut sugarcane in São Paulo gave these young men a certain status, particularly amongst the girls who called them CDC (the Portuguese acronym for cane cutters) or lemeiros (a Portuguese word meaning, roughly, people from Leme or who work in Leme). When they came back home at the end of the year the main city square was full of people, with new motorcycles parked all around. They drank, partied in the street and got into fights, the interviewees said. Because they spent the period between harvests living off their unemployment insurance money, and did not work when they were in Pedra Branca, they had time on their hands and got into brawls and fights.

Additionally, they lost all interest in local agriculture and in activities that could be developed in the region of Pedra Branca, both for simple survival and to earn additional income. According to the interviewees, there was a market for agricultural products, for example honey, and for craftwork and clothing, but nobody showed any interest in developing these activities.

These interviewees suggested that with time, if the local population broke the habit of migrating to São Paulo and developed a greater interest in its region of origin, the city of
Pedra Branca could develop more and the population would live better. However, for this to happen there would have to be an effort by the local government, small businessmen and also the migrant workers themselves.

7. FINAL CONSIDERATIONS

The principal goal of this study was to analyze the dynamics of voluntary migration of sugarcane cutters to the State of São Paulo – in other words, those sugarcane cutters who travelled voluntarily to work in the sugarcane harvest. The cities of Leme (SP) and Pedra Branca (CE) were chosen as focal points of the analysis because they were characterized as, respectively, a principal dormitory city and a principal city of origin for the migrant workers.

Some key socio-economic indicators were identified for the migrant workers who were staying in Leme. The study found that, of the 411 workers surveyed, 38% came originally from Ceará; 20% from Pernambuco; 18% from Paraíba; 9% from Bahia and the remaining 15% from other regions of the country.

A significant percentage (37%) of the migrant workers had already established residence in Leme, while the rest migrated each year during the sugarcane harvest season and returned to their region of origin in the period between harvests.

A questionnaire was used with 88 of the migrant cane cutters. A majority of the workers interviewed, 59% of the total, said they had already worked on more than three harvests in the Leme region.

The average age of the workers surveyed was 30. It is important to note the low level of schooling declared by the cane cutters interviewed, with 17% of them illiterate (people who said they had never been to school) and another 33% declaring up to three years of schooling, which could suggest that they were functionally illiterate. These two categories constituted 50% of all the workers interviewed, highlighting the difficulty of finding new employment for these workers in a scenario of harvest mechanization.

With respect to the living conditions of the workers in their city of origin, the great majority said they lived in rural areas, in small houses (migrant workers’ houses in the region of origin had an average of five rooms). The majority were living with family (the average number of people per house was five).

When asked about living conditions in their region of origin, roughly half of those interviewed said they had an indoor bathroom. The rest had a bathroom outside or none at all. As for basic sanitation, 61% said that their houses in their city of origin had a septic tank or
cesspit for sewage disposal, while 17% said their houses were connected to a sewer and 22% said their houses had no means of sewage disposal.

With respect to water supply, just 41% said their houses in their city of origin had piped water. The rest collected water from a small pond, rain barrel or well.

It is important to emphasize, when evaluating the labor market in the cities of origin, that 51% of those interviewed said they had no job in their city of origin. Among the 49% who did have a job, just 7% said they were formally employed. This pointed to the lack of work and the high degree of informal employment among those interviewed in the regions of origin.

The main reason given for migrating was the lack of work in the city of origin. Of those migrant workers who had already established residence in Leme, 54% said they planned to continue living in the State of São Paulo even after the sugarcane harvest is mechanized. In the case of those who had not yet established residence in Leme, 38% said they would continue to migrate following mechanization of the harvest, given that there was no work in their region of origin.

The average monthly wage of the cane cutters interviewed during the 2007/08 harvest was R$850 (roughly equivalent to US$480/month in December 2007). When asked about spending habits, 37% of the migrant workers said they spent their entire wage in Leme. In general, the study showed a pattern that either workers spent everything in Leme, or else they spent just a small amount locally, taking or sending the rest back to their city of origin.

The study examined the perception of community representatives in Leme with respect to the impact of migrant workers in the region. There was no consensus, with some people saying they believed the migrant workers made a positive contribution to regional commerce (benefitting large household electrical goods stores, provisions stores and other food outlets located in the neighborhoods where the migrant workers lived in the city of destination). For people holding this opinion, the mechanization of the harvest and the consequent reduction in the number of migrant workers would cause a drop of approximately 35% in turnover at local stores.

On the other hand, some people said they viewed the presence of the migrants as having more negative than positive points. This was the case of the city health secretary, who said he believed that the overcrowding of the public health system and the consequent fall in the quality of service was due to the presence of the migrant workers.
Others said that the increase in thefts and crime in general was due to the presence of the migrants. However, this was denied by the local police chief (delegado) who said he believed that the growth in crime was due to the general growth of the urban area and not specifically due to the presence of the sugarcane cutters.

On the other hand, the sugarcane cutters’ income was clearly important for the city of Pedra Branca, which is the city of origin of many of the Leme migrants. The research team’s visit to Pedra Branca, together with the various statements of people interviewed in the region, served to validate the complaint by the sugarcane cutters interviewed that there were no employment opportunities in the region. Just one company – a textiles company – existed in the region, absorbing just a small proportion of the workers. This, together with subsistence agriculture, did not generate employment and income for the young people in the population, who looked to sugarcane cutting as a path to better opportunities.

Sugarcane cutters gained a privileged status in their region of origin thanks to the acquisition of many material goods and even their own homes, which were purchased with the wages earned cutting sugarcane in São Paulo. These workers were known as CDC (the Portuguese acronym for cane cutters), and were financially better off than the other workers in the city.

Moreover, the ambition of the young people in the region was to follow the example of the “CDCs” and go to São Paulo to cut sugarcane, believing that this was the only way they would be able to acquire money to realize many of their dreams. The perverse effect was the low stimulus to stay at school, given the example of the relative success of the city’s migrants who had low levels of education.

Shopkeepers in Pedra Branca attributed a significant part of the income generated in the city to spending by the sugarcane cutters. They said they understood that mechanization of the sugarcane harvest and the consequent reduction in demand for workers from Pedra Branca would have a negative effect on commerce in the city.

On the other hand, the assistants to the city secretaries of health and education, who were against the migration, said they believed that the impact of mechanization would initially be very negative for the population of Pedra Branca, because cane cutting was the only way the workers had to earn money, but the impact (of mechanization) could be more positive in the future.

Without the option of travelling to São Paulo, they said, people would become more interested in developing agricultural activities in the region of Pedra Branca, not just
subsistence farming but also commercial agriculture. According to these interviewees, with the passage of time the migrants would lose the ‘culture’ of travelling to São Paulo and would become more interested in the life of the Pedra Branca region, “leaving behind them some of the ‘bad habits’ they acquired in São Paulo.”

However, it seems clear that the lack of employment options and of other opportunities in the Pedra Branca region were the principal motives behind the phenomenon of voluntary migration to the region of Leme, and that for the ‘culture’ of travelling to São Paulo to change there would have to be activities in the Pedra Branca region that could absorb this mass of labor.

Considering the economic profile of the region of origin of the migrants, with the low income per capita (which hampers the creation of a consumer market); the low levels of schooling; the lack of infrastructure; the difficulties of soil and climate; and other problems, there was obvious difficulty in attracting to the city the investment required to install any new company or any type of agriculture beyond subsistence farming.

It seems clear that voluntary migration is a very complex question – one that is not likely to be resolved without creating opportunities for young people in the poorest regions of the country.

8. BIBLIOGRAPHIC REFERENCES


