

**Manifestations, Blockades, and *Convivência*:**  
Socioeconomic and political impacts of weather and the *pequeno agricultor*  
in Canindé, Northeast Brazil

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Unlike the other five members of the research team, who had embarked on hours and miles of travel by plane, bus, and boat, the process to get to Canindé was much, much simpler. I merely picked up my bags, took a taxi to the Fortaleza *rodoviária*, and hopped on a bus for a three-hour ride into the interior of Ceará.

## **1 – CANINDÉ: the Place / the People**

### **Rádio São Francisco**

I met Márcio on my second day in Canindé, completely by chance. Wandering through the streets in attempt to grasp a mental impression of the city's layout – without a map, something I never could find during the entire length of my stay – I passed by a building with doors wide open and a sign overhead reading 'Rádio São Francisco', and decided to go in to ask the secretary a few questions. By total coincidence, Márcio – who, as it turned out, was the main radio personality at the station – was standing in the lobby. After briefly explaining what I was doing in Canindé, he told me to come back first thing Monday morning to talk more about the project.

Canindé has five registered radio transmitters – three FM stations and two AM stations, which have greater capacity and geographical reach. One of the AM stations, Rádio São Francisco (RSF) was founded in 1989, eventually adopting a religious affiliation and a 'very Franciscan programming' in addition to its emphasis on social issues and local culture. As multiple radio employees pointed out, its programs and content are geared towards *o trabalhador* and the inhabitants of the rural countryside. The other chief radio station is Rádio Jornal (also AM); RJ was the first station set up in the region, having been in existence for 27 years. Although both Rádio Jornal and Rádio São Francisco have some parallels in programming (such as daily time-slots dedicated to Canindé news), RSF is affiliated with the Catholic Church while RJ is acknowledged as linked to the local government – described as a radio of the *prefeitura*, rather than the general society (although it is important to note here that the two people who made these

analyses both have strong connections with RSF and/or regional social movements). RSF is acknowledged as receiving a wider listening audience, especially in the surrounding rural agricultural communities.

In addition to the radio stations, for at least a century various newspapers have been associated with Canindé. Contemporarily, the major access to printed news is through state-wide newspapers run out of Fortaleza, principally *O Povo* and *O Diário do Nordeste*. There is also a locally run paper, *De mão em mão*, which reports on social news of Canindé.

During the course of my stay in Canindé I came to perceive just how important and effective these modes of communication – primarily radio – are, particularly in rural areas. As electricity has not reached all rural communities and a significant portion of the rural population is illiterate, radio – as opposed to television, newspapers, or books – is the primary mechanism of communication throughout the greater Canindé region. Radio is used to communicate information about education and health; radio also functions, as I witnessed one of the times sitting in on Márcio’s show at the RSF station, as a way to communicate messages to the community (such as reports of missing family members, births or deaths, etc.), as well as to transmit updates regarding political proceedings or meeting points for social manifestations in times of protest – key during periods of drought. As José Nilde – a head figure in the local branch of the MST (*Movimento dos Trabalhadores Rurais Sem Terra*<sup>1</sup>) who also ran the weekly MST radio show every Sunday morning from 9:00 to 9:45 on Rádio São Francisco – clearly explained: radio has political, economic, and social power, playing “a fundamental role in the spreading [of information throughout the region].”<sup>2</sup>

And Márcio’s show *Canindé Notícias*, airing daily Monday through Saturday from 12 to 3 pm, is *the* radio show in the region. Everyone seems to listen to ‘*o show do Márcio*’. The radio turned out to be a key place for making connections – not only within the Canindé community itself, but in my establishing relations with the general population and making contact with key social actors and organizations. Coming back that Monday to chat with Márcio, I experienced first hand the effectiveness and reach of

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<sup>1</sup> Landless Peoples’ Movement

<sup>2</sup> My translation (All translations from Portuguese to English in this text are my translations.) José Nilde. Personal interview with the author, 19 July 2006

information transmitted through radio. Without much warning, I was shuffled into the recording studio to be interviewed, live on the Canindé airwaves, about the research I was conducting in the city. At the time I did not realize just how significant that interview was, but throughout the following weeks people in stores, the bakery, the market, or even on the streets would ask about the research project, knowing who I was and what I was doing in Canindé after “*ouv[indo] você falando no programa de Márcio.*”<sup>3</sup> Even when chatting with a farmer that I randomly encountered while wandering down a dirt road near the rural *assentamento* of Jarucutu, the man confessed that he had known exactly who I was because he had heard my interview on ‘*o show do Márcio*’ three weeks earlier!

Márcio also introduced me to one of the most significant people I met in Canindé: Sérgio. During my discussion with Márcio and the RSF director on that Monday, Márcio turned to me and said “*deve conhecer o Sérgio*”<sup>4</sup>, and subsequently arranged for us to meet later that afternoon during Márcio’s radio program when Sérgio was going to give a live interview. Officially appointed as ‘Territorial Organizer’ in 2004, not only was Sérgio involved in recently initiated efforts of territorial collaboration (establishing more intimate and cohesive relations/projects between municipal regions), he also was integrally involved in the majority of development initiatives undertaken in the surrounding rural regions, independent of whether headed by banks, governments, or social movements. Meeting Sérgio was a pivotal moment in my research, as Sérgio took it upon himself to introduce me to the right people. It was through him that I made contact with key groups, including the *Sindicato de Trabalhadores Rurais*, the MST, and EMATERCE<sup>5</sup> (all three organizations with which he worked closely), and through his efforts, I was invited to attend a range of community meetings and local workshops. Without exaggeration, practically everyone in Canindé knew ‘*o Sérgio*’.

At 2 pm, I returned to the RSF radio station to watch Márcio ‘in action’ and to meet Sérgio and two head Canindé MST organizers, Júnior and João Paulo. Before the group of us left the station to talk just-us-four, Márcio interviewed Sérgio and Júnior on-air, to give updates about the community development projects with which they were working. Replaying the interview I had given earlier that morning, Márcio took

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<sup>3</sup> ‘Hearing you speak on Márcio’s [radio] show’

<sup>4</sup> ‘You should meet Sérgio’

<sup>5</sup> Company of Technical Assistance and Rural Expansion

advantage of the moment to ask Sérgio for his opinions and reflections about my research project and if “*devemos ajudar essa americana?*”<sup>6</sup> Sérgio answered in the affirmative, continuing by stating that it is important that people from abroad are studying and valorizing the struggles of social movements, farmers, and rural communities of the Brazilian Northeast. With Sérgio’s clear statement of approval, I had just received the ‘okay’ to work in the community.

## **Canindé**

At this point, I should step back and describe Canindé itself. Canindé is located in the interior of the state of Ceará in Northeastern Brazil, approximately 108 kilometers from the capital city, Fortaleza, to which it has access by way of the BR-020. Several stories recount the origins of the word Canindé. Some historians believe that the Tapuias Indians who historically inhabited the region referred to themselves as ‘Canindé’; epistemologically, the word is associated with the translations ‘*teu seio*’, ‘*tua cama*’ or ‘*teu mato*’.<sup>7</sup> Locals also recount that ‘Canindé’ is the indigenous term for the Blue and Yellow Macaw (called ‘*Arara Canindé*’), birds which used to abound in the region.

The city’s foundations are attributed to the 1775 settlement of Francisco Xavier de Medeiros along the banks of the Rio Canindé, a small river which traverses the middle of the contemporary city. Completed in 1796, a tiny chapel dedicated to São Francisco was constructed by Medeiros, and following a number of renovations and transformations, eventually became recognized as a *Basílica Menor* in 1925. A series of miracles associated with this chapel of Canindé led to its increasing mystique and fame within the Northeast, and it became a centre for pilgrimages by those who prayed for the ‘miraculous cures’ of São Francisco. As the town continued to grow in size and significance, on the 2<sup>nd</sup> of August, 1914, Canindé was elevated from the status of ‘Vila’ to ‘Cidade’. Presently, there exist multiple ‘Canindé’s – the name inclusively refers to the municipality, the city itself, and the surrounding regions of rural populations. The

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<sup>6</sup> ‘Should we [the people of Canindé] help this American?’ (Note: ‘American’ in Portuguese is often used to refer specifically to people of the United States, and not the Americas in general)

<sup>7</sup> ‘Your bosom’, ‘your bed’, ‘your woods/brush’; IPECE. *Perfil Básico Municipal – Canindé*. 2005.

Canindé municipality was established on the 29<sup>th</sup> of July in 1846.<sup>8</sup> The city of Canindé is the capitol, and therefore is the seat of the municipal government. With an area of 3,218 km<sup>2</sup> it is the tenth largest of 184 municipalities in the state of Ceará.<sup>9</sup>

There are two distinguishing factors which define Canindé as a particularly unique place, yet simultaneously as almost hyper-representative of the Brazilian Northeast as a whole: 1) Canindé is one of the most important religious hubs of the Northeast; 2) the Canindé region happens to possess the highest concentration of land reform settlements in Brazil. These two characteristics – religious pilgrimage and land reform – also loosely correspond with distinctions between life in the urban and rural zones of the Canindé region. The urban sectors are heavily affected by and economically dependent upon pilgrimages and religious tourism, while the majority of rural areas are involved with the land reform. Recent trends of the ‘emptying out’ of the countryside have resulted in higher percentages of the population living in urban zones. The municipality is reported to have a population of 74,471 inhabitants<sup>10</sup>, 39,573 of which live in the city of Canindé itself.<sup>11</sup>

However, in a city like Canindé, which is rather small and integrally connected to rural life, distinctions between ‘urban’ inhabitants and ‘rural’ inhabitants often blur, as many rural residents have relatives or family members in urban areas, and a significant number of urban dwellers in Canindé maintain agricultural land and continue to farm in one way or another. Poverty is also characteristic of both urban and rural areas, and there is a high rate of unemployment in the region as a whole. Nonetheless, the rural and the urban sometimes are placed at odds, particularly with respect to public policy, resource distribution, and government development initiatives. The municipal government is much more present and active in (improving) the urban sector – partially due to greater accessibility.<sup>12</sup> Urban areas in general have more access to resources, from health care to transportation to education. Often, for example, rural communities will have to send their children to the city centre to go to high school (getting there each day, an arduous task in itself), as currently there are extremely limited resources for higher levels of education

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<sup>8</sup> Information about the history of Canindé is from Hélio Pinto Viera’s *Cronologia Canindé*, pages 23 to 67

<sup>9</sup> Fábila de Sales Nogueira. Personal interview with the author, 31 July 2006

<sup>10</sup> Population estimate made on 01.07.2005 for 2005 (IBGE, Census 2000)

<sup>11</sup> “Canindé pode sofrer escassez de abastecimento.” *Diário do Nordeste* [Fortaleza]. 07 June 2005.

<sup>12</sup> Fábila de Sales Nogueira. Personal interview with the author, 31 July 2006

actually physically located in the countryside. Additionally, while development in urban areas focuses considerably on religious tourism, development initiatives in rural zones concentrate on constructing alternative income sources, encouraging more diversified agricultural production, and finding markets to sell rurally-produced products.

### **Religion and Romaria**

Canindé receives pilgrimages from throughout the entire Northeast region, who come to ‘*pagar promessas*’ to São Francisco. Fulfilling these vows or promises often involves bringing an object related to the subject of the request made to São Francisco. Located next the *Basílica de São Francisco das Chagas*, the *Casa de Milagres* acts as a centre to deliver these promised items – ranging from carved wooden images of body parts, locks of hair, home-made Franciscan-style clothing, large wooden crosses, pictures of the person (sometimes, animals or land) who was the focus of the request. Many of the photos and some of the more famous items (a number of which have become subjects of regional folklore, such as those related to the *Menina Perdida*) are on permanent display in the House of Miracles.

Photos in the *Casa de Milagres*



Basílica de São Francisco das Chagas



Photos: Chandra Morrison, July 2006

Each October the city is dramatically transformed, when literally thousands upon thousands of religious tourists and pilgrims (the *romaria*) flood the city during the annual *Festa de São Francisco*, which culminates in the celebrations for *Dia de São Francisco*

on October 4<sup>th</sup>. In recent years, an estimated 265,000 tourists, pilgrims, and visitors arrive in Canindé during this period.<sup>13</sup> Coming to realize the extent of this intense population saturation, I finally understood why nearly every hotel room held at least three, sometimes four or five, beds! Accordingly, religious tourism is a primary source of employment and income in the urban centre, with high season recognized as running from September to February<sup>14</sup>, although increased numbers of *romaria* seem to begin towards late July. Efforts to increase Canindé's tourism potential, and boost urban growth and economic income for urban residents, have been the focus of initiatives by the Secretary of Economic Development and Infrastructure since 2000 at least, and projects have included the recently completed construction (in 2005) of one of the largest statues of *São Francisco* in the world, located at the edge of the city.

Partially due to its religious status and partially due to heavy church presence in general, Canindé contains some rather unusual features for a city its size, including a public library, a (now rather depleted) zoo, and a museum of the city's history (or rather, of the church, consisting of eclectic collections of relics and donated objects). Most astonishing, though, is the *Praça dos Romeiros*, an enormous amphitheatre with capacity for 110 thousand people, constructed between 1987 and 1989 to accommodate seating for the thousands of pilgrims which annually flood Canindé during the *Festa de São Francisco*. Interestingly, this project was initiated by the then Secretary of Urban Development and Environment to act as a *fonte de trabalho* for *flagelados*<sup>15</sup> affected by the prolonged droughts of 1987.<sup>16</sup>

## **Social Actors**

As multiple people explained to me, and as I certainly perceived, there are quite a few 'social actors' (*parceiros*) who make up the fabric of Canindé society, and who also have integral roles in the outcome of socio-economic impacts when drought (or other difficulty) occurs. These social actors can be grouped as follows: 1) government organizations; 2) religious institutions, especially the Catholic Church; 3)

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<sup>13</sup> *Capa-Relatório*, page 104

<sup>14</sup> *Capa-Relatório*, page 122

<sup>15</sup> Work fronts for those afflicted by drought

<sup>16</sup> Hélio Pinto Viera, *Cronologia Canindé*

financial/development agencies (chiefly Banco do Nordeste and Banco do Brasil); 4) ‘social’ organizations; and 5) urban and rural residents. In the following sections, I will expand on aspects of three of these categories: government agencies, social organizations, and, further on in the paper, rural residents.

Both official government agencies as well as government affiliated institutions have substantial impact on the socioeconomic and political workings of Canindé. Official government can be divided into three levels: the federal, state, and municipal, each with its own expected obligations to citizens living in the municipality. In particular, all three divisions of the government have distinct duties and roles to perform during socioeconomic crises triggered by situations of drought. As Canindé is the capital city of the region, the *prefeitura* is housed there, as are the municipal legislature and *secretarias*. Government-affiliated organizations such as EMATERCE and IBGE (Brazilian Institution of Geography and Statistics), both of which have offices in Canindé, play important roles in ‘officially’ indicating environmental and population classifications. Most interesting is INCRA (National Institute of Colonization and Agrarian Reform), the federal government department which handles land reform in Brazil, and thus, although being a government agency, closely works with both the MST and the Rural Workers’ Unions in Ceará.

Of the many social movements, unions, and NGOs which work within Ceará, the *Movimento Sem Terra* (Landless Peoples’ Movement, referred to as the MST) and the *Sindicato de Trabalhadores Rurais* (Rural Workers’ Union) have the greatest presence, influence, and impact in Canindé, especially in relation to the lives and struggles of agricultural workers.

The MST’s origins stem from a series of land occupations during the late 1970s in the southern Brazilian state of Rio Grande do Sul.<sup>17</sup> Arriving in Ceará in 1989, September 1<sup>st</sup> of that same year marked the first MST land occupation in Canindé, at Fazenda Tiracanga. According to José Nilde, the “birth of the MST in Ceará is directly linked to the question of drought and to the distribution of land,” also pointing out the link between the downfall of the region’s cotton production in 1989 and the augmented

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<sup>17</sup> Wright, xxviii-xxix

presence of land occupations, such as those of the MST, during that same period.<sup>18</sup> While the MST is an autonomous movement, in Canindé it is also self-described as extremely politicized.<sup>19</sup>

Mural outside the MST house in Canindé



Photo: Chandra Morrison, July 2006

The Canindé *Sindicato de Trabalhadores Rurais* (Rural Workers' Union) was founded on the 20<sup>th</sup> of October, 1968. Explaining the history of the Union, current syndicate leaders described how during the 1960s large land owners did not want their workers to unionize, resulting in the workers having to convene at clandestine meetings, '*reuniões de porta-fechada*', in order to commence unionization efforts in Canindé.<sup>20</sup> The struggle to unionize is seen as a passionate and vital issue in Canindé, and the Rural Workers' Union defines themselves as the most active union in the region. Their objectives are to organize and *conscientizar*<sup>21</sup> agricultural workers, "to redeem citizenship," so that the farmer understands his entitled rights. And as they observe: "*direitos dão outros direitos.*"<sup>22</sup> They especially aim to encourage farmers to continue to reside in the countryside, emphasizing that the city does not have sufficient jobs to offer.

Different from other communities in Ceará, the MST and Rural Workers' Union have always worked together in Canindé, often collaborating efforts on rural projects and in particular, joining forces during times of drought to pressure the government into

<sup>18</sup> José Nilde. Conversation with the author, 16 July 2006

<sup>19</sup> MST representatives. Personal interview with the author, 11 July 2006

<sup>20</sup> *Sindicato* leadership. Personal interview with the author, 17 July 2006

<sup>21</sup> '*Conscientizar*' means 'to make conscious of' or 'to become aware of'

<sup>22</sup> 'Rights lead to [achieving] other rights'

taking action and responding to their demands. The Agrarian Reform is central to both groups' efforts in Canindé; as Union members described, "Agrarian Reform is not just [about] land, but also [access] to credit."<sup>23</sup> More than just striving for land redistribution, Agrarian Reform also is linked to objectives of obtaining more equitable access to resources, particularly in reference to health and education in the countryside, and of achieving social transformation in general. Both groups state that their primary goal is to help rural workers, independent of whether individuals are actually members of the MST/Union or not. Neither the MST nor the *Sindicato* supports the current *prefeitura* government. Although both organizations acknowledge that they have had a closer relationship in the past than currently exists, "in the moments of struggle [they] come together."<sup>24</sup>

### **Rural Transportation**

Despite being based in urban regions of Canindé and conducting most of my interviews in the city itself, the areas I was actually learning about and which are most affected by droughts were the surrounding rural communities of the region. Most people I talked with made sure to check that I had been visiting the countryside, emphasizing the importance of actually being in the *campo* and talking to farmers, in order to 'know the reality of life in the *área rural*'.

Physically travelling to the countryside, however, was rather logistically and technically difficult. This was partly due to the fact that, as a young woman conducting fieldwork by myself, I only travelled into rural areas when accompanied by someone I knew, most often who was from or working in the community; and partly due to limitations (or lack) of transportation options to get to more distant communities. The level of comfort and flexibility when travelling in the countryside is completely dependant upon one's social class. Those who can afford to, own cars – by far the most comfortable, efficient, and mobile manner of travel, but the least common among the majority of rural inhabitants. Many farmers, if they own a vehicle, rely on motorcycles – an independently mobile yet more affordable mode of transportation. For the rest,

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<sup>23</sup> *Sindicato* leadership. Personal interview with the author, 17 July 2006

<sup>24</sup> *Ibid.*

‘public transportation’ in and out of rural zones is travelling by fairly ancient buses or, most commonly, by *pau de arara* – or by catching a ride with whoever drives past and is willing to *dar uma carona*. Characteristic of the rural Northeast, *pau de arara* are flatbed trucks with slats of wood laid across the truck-bed for passengers to sit on, and prices are set relative to the distance travelled. Usually buses and *pau de arara* pass through rural communities only at a specific time per day or on a limited number of days per week, so that the only way to catch a ride into town might be to take the bus at 9am on Tuesday, with the soonest return trip back to the rural community leaving the city at 5pm the following day. During my time in Canindé, I experienced most of these transportation modes, from the comfort and luxury of a spacious air-conditioned car, to squeezing into a miniscule space between a truck cabin, a person, and a huge bag of city-purchased bread on a *pau de arara*, to hitchhiking a ride on a truck carrying sand to sell in the urban sector of Canindé.

*Pau de Arara* loading passengers at the central market



Photo: Chandra Morrison, July 2006

### *Assentamentos*

Presently, there are approximately 80 *assentamentos* in the region of Canindé, the highest concentration in Brazil. As the current Vice Mayor Hígino Luis Barros de Mesquita (also the Secretary of Agriculture and Water Resources) joked: “The municipality is practically a single *assentamento!*”<sup>25</sup> An *assentamento* (literally, a

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<sup>25</sup> Hígino Luis Barros de Mesquita. Personal interview with the author, 03 Aug 2006

settlement) is a community set up out of the Agrarian Reform process. As opposed to ‘naturally’ occurring rural communities, they are settlements which are founded on land deemed to be unproductively used, which then is repossessed and redistributed by either the federal or the state government. Accordingly, there are both *assentamentos federais* and *assentamentos estaduais*, in addition to non-Agrarian Reform *comunidades rurais*.<sup>26</sup> There are also two *acampamentos* in Canindé at Fazenda Xinuaqué and Fazenda Renovação – squatter camps set up at territories waiting to be legally repossessed and redistributed by INCRA as part of the Agrarian Reform.

An *assentamento federal* is run through the federal government’s department for land reform, INCRA. Residents of INCRA-supported *assentamentos* were described as receiving free land, physical infrastructure (houses), financial infrastructure (loans), electric infrastructure (electricity, through the federal initiative *Luz para todos*), and *infra-estrutura hídrica* (providing water supplies for the community through constructing *cisternas de placa* and/or *açudes*).<sup>27</sup> Alternatively, *assentamentos estaduais* are run through IDACE, the Institute of Agrarian Development of Ceará. According to the INCRA superintendent, there are 37 *assentamentos estaduais* recognized in Ceará, of which the largest number are in Canindé.<sup>28</sup> However, the benefits and resources accessible to state *assentamentos* differ greatly from those available to their federal counterparts. *Assentados* must pay for the land they receive from IDACE and the *assentamentos* do not receive the infrastructural assistance provided to federal land reform settlements. Although INCRA acknowledges that to a certain extent they can help residents of state *assentamentos* with credit and technical assistance, INCRA is not able to provide anything more substantial.<sup>29</sup> As the Canindé Secretary of Agriculture observed, residents in state *assentamentos* and in federal *assentamentos* “are both *pequenos produtores*, they are just not equal in the benefits [that they receive]... The

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<sup>26</sup> In Canindé, the term ‘*comunidade rural*’ was used specifically to refer to a rural community which was not part of the Agrarian Reform, and therefore was not an *assentamento*. To maintain this culturally contextual distinction, when referring to this type of community I will keep the term in Portuguese. I am using the equivalent English term, ‘rural community’, as a more general category, which includes both *comunidades rurais* and *assentamentos*.

<sup>27</sup> Higinio Luis Barros de Mesquita. Personal interview with the author, 03 Aug 2006

<sup>28</sup> Dr. Raimundo (Djalma) Cruz Pinto (INCRA). Personal interview with the author, 25 July 2006

<sup>29</sup> Dr. Raimundo (Djalma) Cruz Pinto (INCRA). *Audiência* between Canindé *assentamento* representatives and INCRA superintendents at INCRA offices in Fortaleza, 20 July 2006

miserable, disinherited [recipients] of the Agrarian Reform are those in the state *assentamentos*.”<sup>30</sup>

Canindé’s relationship with *assentamentos* is rooted in the Northeast’s history of extreme socioeconomic inequalities, and the parallel stories of struggles against such injustices. Long before the arrival of the MST, the first *assentamento* in Brazil was established in January 1971 at Fazenda Japuara, just two kilometers from Canindé.<sup>31</sup> It is this longstanding connection to progressive and active social initiatives undertaken by rural farmers that motivates the people of Canindé to be known as a ‘*povo lutador*’.<sup>32</sup>

### ***O Pequeno Agricultor and Agriculture in Canindé***

A distinction which I wish to make clear is the difference between types of farmers in the region, principally corresponding to the size of the farm and economic status of the farmer. The rural experience, daily preoccupations, and quality of life are quite different for owners of large- or medium-sized farms than for those of small properties or *sem terra*. These economic differences determine the kinds of resources one has available, particularly in terms of access to credit and ability to pay back loans, and therefore, how vulnerable one is to the impacts of climatic instability. This study focuses predominately on the lives and struggles of *o pequeno agricultor* (small-scale farmers) and *o agricultor familiar* (family farmers).<sup>33</sup> The two terms have slightly variant definitions, but both fall into very similar socio-economic categories, and generally refer to farmers who work relatively small plots of land and who produce on a smaller scale (thus also being referred to as *pequenos produtores*).

*Pequenos agricultores* and *agricultores familiares* frequently rely solely on subsistence farming to feed and support their families; many do not have consistent external sources of income, and consequently depend upon government handouts and scholarship programs for extra money to pay for family expenditures. As one woman told me, her family had no outside salary, but she received the *Bolsa Escolar*, a monthly

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<sup>30</sup> Higinio Luis Barros de Mesquita. Personal interview with the author, 03 Aug 2006

<sup>31</sup> Ibid.; *Sindicato* leadership. Personal interview with the author, 17 July 2006

<sup>32</sup> ‘A people which fights and persists’; MST representative. Personal interview with the author, 11 July 2006

<sup>33</sup> Unless otherwise specifically specified, in this paper the terms ‘farmer’ and ‘rural farmer’ will be referring to *pequeno agricultor* or *agricultor familiar*.

payment of R\$15, intended to enable her daughter to attend school, although the money normally was used to pay for general family expenses. When there is a good harvest, she sells the extra corn and beans not needed for family consumption in the Canindé markets, but as she notes, “*mercado bom tem não.*”<sup>34</sup> Although subsistence farming can provide much of the food needed for families, the reality is that cash is required for many things in rural Canindé life: to buy medicine and clothing, to pay for transportation, to purchase canned goods and bread.

Historically, agricultural production of Canindé was split into two sectors: *algodão* (cotton) and subsistence farming. In Canindé, people spoke about the time of cotton with nostalgia, like a golden age. Known as ‘*ouro branco*’ – white gold – cotton generated a substantial portion of the region’s income, acting as the *acensão financeira* of Ceará.<sup>35</sup> Reminiscing about life with cotton in the 1960s, Flávio Ferreira Lima proclaimed that “the cotton of Canindé and Caridade was considered to be the best in the world,” producing the most resistant fiber with a “*cor branca perfeita brilhante.*”<sup>36</sup> In the late 1980s, however, due to a culmination of multiple factors, the cotton producing industry in Canindé came to a halt. Attempts were made by the government to revitalize cotton farming between 1998 and 2001; however, “the [selling] price did not compensate the [production] expenses,” and the program failed to take off.<sup>37</sup>

The decline of cotton left a major absence in regional sources of income. Although there have been recent attempts to replace the once-thriving cotton economy with *mamona* production (a plant used to make the government-invested alternative fuel, Biodiesel), so far this swap has not stimulated similar economic growth. As Flávio Ferreira Lima pointed out, in addition to being toxic to animals and humans, *mamona* needs humidity, and despite thriving in other communities in the *sertão*, *mamona* does not actually grow well in the climate of the majority of Canindé.<sup>38</sup> Consequently, more than ninety percent of the region’s contemporary agricultural production is subsistence farming. In 2004, 93.94% of productive agricultural land in the municipality of Canindé

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<sup>34</sup> ‘There are no good markets [to sell rural produce]’; Resident of Jarucutu. Personal interview with the author, 02 Aug 2006

<sup>35</sup> Flávio Ferreira Lima works in the Human Resources department of the Canindé *Prefeitura*. Conversation with the author, 27 July 2006

<sup>36</sup> ‘A perfect brilliant white color’; Ibid.

<sup>37</sup> Dr. Erivaldo (IBGE). Personal interview with the author, 26 July 2006

<sup>38</sup> Flávio Ferreira Lima. Conversation with the author, 27 July 2006

was planted with subsistence crops.<sup>39</sup> In 2005, this percentage dropped only slightly, to 91.13%.<sup>40</sup>



Corn fields, Jarucutu



Beans drying inside a house, Jarucutu  
Photos: Chandra Morrison, August 2006

IPECE includes the following crops under the category of ‘*culturas de subsistência*’<sup>41</sup>: corn, beans, rice, *mandioca*, and *algodão de sequeiro*.<sup>42</sup> Typically in Canindé subsistence-based agriculture is comprised primarily of corn and beans. Other produce, such as pumpkin or tomatoes, are sometimes grown on the more fertile and moist banks of *açudes*. Both *milho* and *feijão* have their own ‘personalities’. Following Dr. Erivaldo’s description, corn is considered to be more resistant to variations in rainfall, while “beans are more stubborn, needing moderate rainfall, not too much [or they will rot], and not too little.”<sup>43</sup> IPECE also emphasizes these not-so-favorable produce characteristics: “the income [of *pequenos produtores*] is derived from the production of *culturas de sequeiro*, such as corn, beans, and *mandioca*, [which are] highly susceptible to water shortage[s].”<sup>44</sup> The problem is that in the semi-arid region of Canindé, rainfall

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<sup>39</sup> IPECE:IMA 2004, page 51

<sup>40</sup> IPECE:IMA 2005, page 49

<sup>41</sup> Subsistence cultures

<sup>42</sup> IPECE:IMA 2005, page 17

<sup>43</sup> Dr. Erivaldo (IBGE). Personal interview with the author, 26 July 2006

<sup>44</sup> IPECE:IMA 2005, page 38

can be quite erratic, a climatic situation with which neither *milho* nor *feijão* is suitably able to tolerate.

So, the agricultural profile of Canindé ends up looking like this: the vast majority of the rural population produces and survives on subsistence agriculture, in an environment prone to periodic drought, relying on two fundamental crops neither of which is suitable to the irregular climate of the *semi-árido*; and a significant portion of this population does not have access to a substantial or reliant source of external alternative income in the case that these crops fail. The resulting socioeconomic structure is a delicately sustained, and potentially explosive, formula.

## **2 – DROUGHT: Weather, Agriculture, and Agro-Socio Impacts**

### **Climate**

Although I had lived in Brazil before and travelled extensively throughout the country, this was my first time in the Northeast. I have to admit, I was a bit surprised by the amount of greenery and the quantity of ponds that I watched zipping past my bus window on my first ride into the interior of Ceará. This scenery was not at all like the ‘dry’, ‘golden’ and ‘parched’ images so often associated with the Northeast, especially the *sertão*, and visualizing this landscape transformed into its counterpart state of dryness seemed difficult to conceive. This initial surprise, though, expanded my vision of the complexity of the *sertão*, and of the dramatic, and rapid, transformation nature can undergo from one season to the next. As I later found out, I had arrived at the tail-end of the rainy season, and over the month I spent in Canindé, as *verão* started creeping in, the natural surroundings became noticeably stripped of their hues of green. This color-shift reminded me of summers growing up in the Sacramento Valley of California, when wild grasses and shrubs become a parched and brittle golden, and the only lush green in sight is irrigated farmland and manicured lawns. I soon discovered, as well, that the *sertão* is not as ‘natural’ as it might appear. Those ‘lakes’, so seemingly abundant in the region, were actually all man-made, *açudes* and *poços artesanais*<sup>45</sup> constructed to collect rainwater for later use.

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<sup>45</sup> Hand-made or ‘artisan’ produced water wells

The topography of the *sertão* is, in fact, quite varied; interspersed throughout the expanses of the Canindé region, flat extensions of the *caatinga* are broken up by clusters of *serras*, hills and mountains which due to their elevation have much more humid and wet climatic patterns. The majority of agricultural lands and regional communities, however, exist in the *caatinga* of the *semi-árido*. Located in the semi-arid climate of the *Sertão Central*, Canindé (like the Northeast in general) only experiences two seasons: *inverno* and *verão* (winter and summer). Beginning in January and continuing through June, *inverno* is the rainy season and time of planting crops; *verão*, the dry season, extends from July through December.

Although obviously distinct, these two seasons exist in an integral relationship, particularly when considering their climatic impacts on the functioning of semi-arid societies; so that, what happens in the rainy season implicitly influences how communities are affected by and can cope with the dry season. As it stands, for the majority of *pequenos agricultores*, quality of life and even basic survival during *verão* is directly correspondent to how the rainy season of *inverno* played out.

### ***Chuva: the ‘Quality’ of Rain***

The central issue concerning rain is not so much related to quantity, but rather, to the *quality* of the rainfall. The quality of a winter/rainy season is based on the regularity or irregularity of the rainfall. Accordingly, the expressions *inverno bom*, *inverno regular*, and *chuva regular* (‘good winter’, ‘regular winter’, ‘regular rainfall’) are parallel descriptive terms, just as their opposing categories *inverno ruim*, *inverno irregular*, and *chuva irregular* (‘bad winter’, ‘irregular winter’, ‘irregular rainfall’) are similarly correspondent to one another. Interestingly, not once did I hear equivalent sets of oppositional categories (*regular/irregular*) applied to describe *verão*. *Verão* is always dry; what changes is the severity of the lack of water and lack of food (resources which are dependently determined by how rainfall temporally and quantitatively unfolds during the rainy season).

The ‘quality of rain’, as I am calling it, is dependent upon three variables: volumetric, temporal, and spatial variations.<sup>46</sup> How evenly and consistently rainfall is distributed over the months of the *época da chuva* is the basis to if and how crops will grow. According to Canindé EMATERCE director, Dr. Paes, an *inverno bom* would consist of approximately 600-700 mL total rainfall for the season from February to May, with rain being interspersed every 10 days.<sup>47</sup> Similarly, the *Agenda do Produtor Rural 2006*, an annual almanac / agricultural calendar / reference book for farmers published and distributed by the Banco do Nordeste, describes the type of rainfall characteristic of the semi-arid zone as:

“Low and irregular rainfall, around 750 mm/year, concentrated in a single season of 3 to 5 months, with occurrences of periods of intense drought, when pluviometric precipitation falls to around 450-500 mm/year.”<sup>48</sup>

Irregular rainfall, however, does not implicitly signify a *lack* of rain. More commonly it refers to an uneven distribution of water during the period designated for crops to be planted, grow, and mature. A year consisting of heavy rainfall in January and little to no rain during February and March, but which otherwise has a *quantitatively* average level of rain, is just as ‘*irregular*’ and ‘*ruim*’ as a winter which has a decidedly below-average *pluviosidade*. A correspondent effect, then, is that an abundance of rain actually can result in similar agricultural and socioeconomic difficulties as those induced by a lack of rain – even causing additional problems specific to disproportionate quantities of water, such as the flooding (and, at times, destruction) of roads. In sum, remarkably similar societal impacts associated with ‘drought’ can happen in a variety of cases, from unevenly distributed rainfall to lack of rainfall to overly-excessive rainfall.

## **Predicting Weather**

With such seemingly erratic and happenstance weather patterns, a logical question would be: are there ways for agricultural workers to predict a seasonal forecast? And if so, how? Like many rural areas in the world, in Canindé there coexists a dual modality

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<sup>46</sup> IPECE:IMA 2005, page 18

<sup>47</sup> Dr. Francisco Paes Pinheiro (EMATERCE). Personal interview with the author, 17 July 2006

<sup>48</sup> BNB *Agenda*, page 17

of rainfall predictions and understanding: one founded in technological and scientific methods, the other in locally-based knowledge and cultural tradition.

Located in Fortaleza, FUNCEME (the Ceará Foundation of Meteorology and Water Resources) monitors and analyzes weather and climate in the Brazilian Northeast. Every year they provide forecasts predicting the distribution of rain for the period of February to May (the primary months of the planting season), as well as publish a report in July summarizing the rain patterns of the past six months. In the case of 2005, FUNCEME issued two preliminary predictions for the state of Ceará, the first on January 21<sup>st</sup> and a second on the 24<sup>th</sup> of February.<sup>49</sup> The first diagnosis predicted that the total rainfall in the state of Ceará would be normal to low in relation to the historic median, adding that “it is worth remembering that in December of 2004 the phenomenon El Niño occurred, and the Intertropical Atlantic presented unfavourable conditions for abundant rainfall.”<sup>50</sup>

In the final report, climatic classification for the quantity of rainfall is split into five categories; for the macro-region Sertão Central and Inhamuns, to which Canindé belongs, these are: 1. *Muito Seco* (0 to 361.9mm); 2. *Seco* (362.0 to 449.7mm); 3. *Normal* (449.8 to 605.8mm); 4. *Chuvoso* (605.9 to 763.2mm); 5. *Muito Chuvoso* (higher than 763.3mm).<sup>51</sup> FUNCEME’s evaluation of the rain distribution for 2005 shows that the macro-region Sertão Central and Inhamuns received an observed average of 410.6mm of rain, placing the region as a whole in the category of *Seco*.<sup>52</sup>

The measurements for Canindé, however, place portions of the municipality as significantly more affected than the norm for the macro-region. For the period between 01/01/2005 and 31/05/2005, the FUNCEME post at the city of Canindé reported an observed rainfall of 342.0mm. During the same period at the post for Açude São Mateus (located near Canindé city), the observed total precipitation was only 307.7mm. The ‘normal’ quantity or historical median for both these locations is 674.4mm, resulting in a -49.3% rainfall for Canindé and -54.4% for Açude São Mateus.<sup>53</sup> These measurements of

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<sup>49</sup> FUNCEME, page 2

<sup>50</sup> FUNCEME, page 2

<sup>51</sup> ‘Very Dry / Dry / Normal / Rainy / Very Rainy’; FUNCEME, page 4

<sup>52</sup> FUNCEME, page 20

<sup>53</sup> FUNCEME, Annex 4

observed precipitation for 2005 place at least the region surrounding the city of Canindé squarely into the category of *Muito Seco*.

Historical average of rainfall (mm) of the municipalities of the state of Ceará  
 Period: 01/01/2005 to 31/05/2005

MUNICIPALITY	DISTRICT	NORMAL	OBSERVED	(%)
Canindé	Açude São Mateus	674.4	307.7	-54.4
Canindé	Canindé	674.4	342.0	-49.3

Source: *Relatório de Análise das Chuvas Ocorridas no Período de Janeiro a Maio de 2005 no Estado do Ceará*, Annex 4; FUNCEME, July 2005

FUNCEME also creates an Index of Rain Distribution which divides into four categories (Very Good, 301 to 1000; Good, 201 to 300; Regular, 101 to 201; Critical, 000 to 100).<sup>54</sup> In explaining the outcome of the Index of Rain Distribution for January to May 2005, they write:

“It is found that the irregularity of distribution was very high during this period, with reduced rainfall in relation to the historical average, observation of *veranicos* (periods of dry weather) and bad spatial distribution. The *sertão* of Inhamuns, the Sertão Central, the Jaguaribana region and isolated areas showed scores of less than 100, without conditions for development of agricultural cultivation (shown in red [on the following Index of Rain Distribution graph]).”<sup>55</sup>

Falling into the Critical category, almost the entirety of the Canindé municipality is shown in red, indicating conditions of acute lack of precipitation and an exceedingly high probability of crop failure in the region.

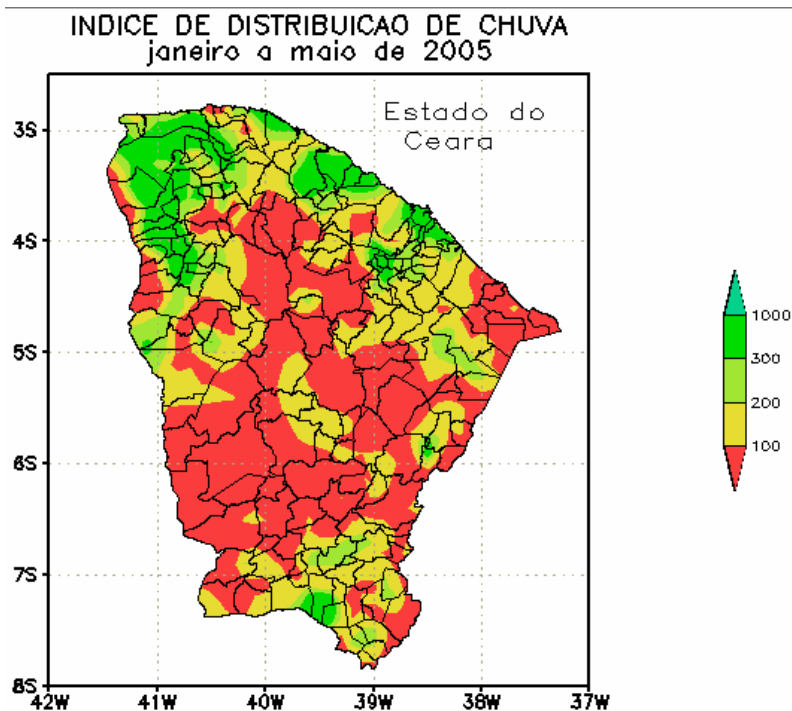


Location of the Canindé municipality within the state of Ceará<sup>56</sup>

<sup>54</sup> FUNCEME, page 22

<sup>55</sup> FUNCEME, page 23

<sup>56</sup> [http://commons.wikimedia.org/wiki/Image:Ceara\\_Municip\\_Caninde.svg](http://commons.wikimedia.org/wiki/Image:Ceara_Municip_Caninde.svg)



Source: *Relatório de Análise das Chuvas Ocorridas no Período de Janeiro a Maio de 2005 no Estado do Ceará*, page 23; FUNCEME, July 2005

However, whether this information is considered relevant or useful by farmers in the rural countryside itself is not so clear. Although I was not able to conduct an extensive survey, anecdotally a number of interviewees stated their doubts about the legitimacy of ‘official’ forecasts, holding preference for time-honoured knowledge and traditions of the region. The rural agricultural calendar in Canindé combines understandings of when to plant and harvest different crops, with an outline of pivotal moments when one needs to start worrying about the possibility of drought. The *Agenda do Produtor Rural* outlines the general timeline for beans and corn, the two primary subsistence crops. Planting for both cultures is during the months of January to March, with periods of tending the crops extending between February and May. Harvest for beans is from April to July, while corn is harvested slightly later between July and September.<sup>57</sup>

<sup>57</sup> BNB *Agenda*, page 40

Agricultural Calendar – Ceará

Cultures	/ soil preparation	/ planting	/ tending plants	/ harvest	/ commercialization
Beans	/ Nov-Feb	/ Jan-Mar	/ Feb-May	/ Apr-Jul	/ Jul-Sept
Corn	/ Nov-Feb	/ Jan-Mar	/ Feb-May	/ Jul-Sept	/ Aug-Dec
Cotton	/ Nov-Feb	/ Jan-Mar	/ Feb-May	/ Jul-Oct	/ Aug-Nov

Source: BNB *Agenda do Produtor Rural 2006*, page 40

The most distinct and significant mark on the rural agricultural/climatic calendar is March 19<sup>th</sup>: *Dia de São José*. The patron saint of Ceará, São José is the saint of *bom inverno* and *boa chuva*. Although not one of the three churches for which Canindé is famous (the *Basílica*, *Igreja das Dores*, *Igreja da Monte*), there is a small church dedicated to São José, noted for having a vaguely differing architectural style from that of other churches in the city. In 1987, Frei Edgar, a Franciscan priest, founded the church in the peripheral neighborhood Bela Vista, choosing São José to be its patron saint. Described as a tradition of the region, a festival in honor of the saint is held every year from the 10<sup>th</sup> to 19<sup>th</sup> of March. Distinct from the *romaria* characteristic to the *Basílica de São Francisco das Chagas*, the festival participants are mostly rural inhabitants from the nearby region. As one of the church's three resident nuns observed, the festival has been gaining popularity over the last few years, and the traditional *leilão* (auction) is always a success. Even on years of an *inverno regular*, participants come to the church to express thanks to São José.<sup>58</sup>

Igreja de São José



Photo: Chandra Morrison, August 2006

<sup>58</sup> Nun at Igreja de São José. Personal interview with the author, 05 Aug 2006

I heard two slightly variant versions of the significance of Dia de São José in its socio-climatic function. In essence, the belief is that if it rains on Dia de São José, there will be winter; if it does not rain, there will not be winter.<sup>59</sup> The alternate version is basically the same: if it rains on Dia de São José, there will be winter; if it does not rain before March 19<sup>th</sup>, there will not be winter.<sup>60</sup> In cases when it does not rain on or by March 19<sup>th</sup>, this day acts as a signifier for farmers that they will not be able to plant their crops this season. It simultaneously functions as a temporal marker for farmers to start to become overtly worried about how they and their families will survive the rest of the year, also marking the point at which agricultural workers, the *Sindicato*, and the MST will start discussing possibilities of seeking government assistance.

An important aspect to note, however, is that neither of these forecasts or predictions about what the weather will be like actually propose any solutions or suggestions for what to *do* when rainfall is irregular, nor for how to prepare so that irregular rainfall (which is acknowledged as a natural part of the Northeast semi-arid climate) results in less drastic, totalizing socioeconomic impacts.

### ***Seca in the Plural, Perda de Safra and Classifying Drought***

The word ‘*seca*’ in Portuguese can have multiple significations and applications. Utilized as ‘*uma seca*’, it refers to a drought; however, *seca* as a word in itself also means ‘dry’. This double significance gives insight to understanding the reality that there actually exist multiple types of *secas*, multiple categories of droughts. Most important is the distinction between *seca verde* and ‘*uma seca mesmo*’ (or as some Canindenses phrased it: *uma seca que secou tudo*).<sup>61</sup> Particularly in light of the fact that the two principal subsistence crops of the region – *milho* and *feijão* – are rather temperamental with regards to the quality of rainfall they require, and are not adequately suited for the semi-arid climate, irregular winters often produce crop failure – even while the rest of the *sertão* is healthy, green, and thriving. This combination, of enough rain for the *caatinga* to bloom but not of being regular enough to produce food crops, is called *seca verde*,

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<sup>59</sup> José Nilde. Personal interview with the author, 19 July 2006

<sup>60</sup> Nun at Igreja de São José. Personal interview with the author, 05 Aug 2006

<sup>61</sup> ‘A drought that dried out everything’

literally a ‘green drought’. Alternatively, the superintendent of INCRA, Dr. Djalma, explains how *seca verde* can occur even with a crop production when accompanied by a failure to replenish water reserves, describing the situation as having “sufficient [precipitation] for production, but water does not accumulate... [and the community] needs [water from a] *carro-pipa*.”<sup>62</sup> Most years, including both 2004 and 2005, at least part of the Canindé region will be affected by a *seca verde*.

Deciding on whether there has been a drought or not is actually a more complicated issue than it would first appear to be. At an official level, different classifications of drought stipulate expectations of varying levels of government action in response to the drought’s social impacts. EMATERCE is the organization responsible for assessing the winter’s impact on crop production and/or harvest (*safra*) and quantities of water; an evaluation of 50% crop failure or higher is the marking point for officially acknowledging that an area is affected by drought. Yet, as EMATERCE employees acknowledge, this can be a faulty process as it often delays to get out into the rural areas to assess the crop loss (*perda de safra*), and the process does not account for the struggles faced by rural families and workers even when an ‘officially’ recognized drought does not occur.

An important factor to consider at this point, and an issue that was raised in multiple conversations discussing the impacts of droughts and weather on communities, is the reality that even in physically proximate locations, the quantity and quality of rainfall can differ immensely. This is a real implication of such irregular rainfall patterns found in the *semi-árido*. As a consequence, while one community of a municipality may have experienced moderate crop loss, the neighbouring community could have no water at all. As I see it, this factor of hugely diverse experiences of a single rainy season within one region makes the process of classifying a ‘state of emergency’ for entire municipalities all the more complicated.

In the case of Canindé, the winter of 2004 saw a 45.13% loss of harvest.<sup>63</sup> In 2005, however, this number increased dramatically to a total loss of 74.07%,<sup>64</sup> with the

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<sup>62</sup> Dr. Raimundo (Djalma) Cruz Pinto (INCRA). Personal interview with the author, 25 July 2006

<sup>63</sup> IPECE:IMA 2004, page 51

<sup>64</sup> IPECE:IMA 2005, page 49

*Sindicato* reporting losses of more than 80% of corn and 60% of beans.<sup>65</sup> According to IPECE's *Índice Municipal de Alerta* (IMA), in 2005 three municipalities in the Sertão Central region were classified at the level of highest vulnerability: Caridade (11<sup>th</sup>), Santa Quitéria (14<sup>th</sup>), and Canindé (17<sup>th</sup>). Of these, only Canindé had changed its ranking, shifting from an evaluation of medium-high vulnerability in 2004 to being included in the highly-vulnerable category in 2005.<sup>66</sup> In analysing the significance of this data and in attempting to explain the increased number of highly vulnerable municipalities in the region, IPECE wrote the following:

“Despite the drought, Caridade and Santa Quitéria improved their positions on the vulnerability ranking... In this category [of ‘high vulnerability’] the presence of Canindé stands out, [a city] which in 2004 was in the 39<sup>th</sup> position on the ranking and from the class [of ‘medium-high vulnerability’]. Its class displacement ... [is due to] greater absence of rain in relation to other municipalities and, consequently, greater loss of crops.”<sup>67</sup>

### **Agro-socio Impacts of a Drought**

For subsistence-based farmers and their families, hindered or constrained crop growth means a substantial reduction in food supplies for the upcoming dry season:

“As consequence of these irregularities, the break in the rain cycle provokes drastic reduction in the food supply of these [small] producers, normally available in years with a regular winter. This situation occurred in the state of Ceará in both the years 2004 and 2005, when there was a high crop loss in various Ceará municipalities. In this way, drought aggravates the lived situation of the farmers.”<sup>68</sup>

Drought, manifesting particularly as crop loss and water shortage, interposes a sense of immediacy and urgency into everyday life, as pressing issues related to physical survival – access to drinkable water and food – shift to top priority. This implicit reprioritization has profound impacts of both the short-term and long-term functioning of a society, as concerns with long-term development are forced to become null when a ‘survival mode’ sets in based on the necessity of immediate attention and response.

For *pequenos produtores*, the loss of crops also implies an absence of prospective excess products/produce which could be sold to generate cash for emergency expenses,

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<sup>65</sup> “Agricultores retomam acampamento.” *Diário do Nordeste* [Fortaleza]. 05 July 2005.

<sup>66</sup> IPECE:IMA 2005, pages 21-23

<sup>67</sup> IPECE:IMA 2005, page 27

<sup>68</sup> IPECE:IMA 2005, page 38

medication, transport, or goods not produced on the farm. In addition to the risk of losing food supplies and potential sources of income, an additional monetary element works itself into equation. If rains become irregular at critical points in the growth period of plants, the harvest is lost, as is any monetary investment spent towards buying the seeds of the failed crop. If rainfall starts up again later on in the planting season, some farmers might try their luck and attempt to plant fields a second time; but as one agricultural worker summed up: “it rains again, you plant again, you lose again.”<sup>69</sup> Another person explained that farmers “pay their debts only after winter. If the year is bad, you pass another year without paying.” Losing crops not only can create debt, but also means that outstanding credit cannot be paid off either.<sup>70</sup> Such cycles of debt, reinforcing positions of systematically impoverished states of living, are woven into the intersections of climatic performance and agricultural production.

If a farmer is in a completely desperate situation, there are a few, although not necessarily desirable, options to generate small sources of income. While discussing climate and agricultural production, a farmer at a nearby rural community mentioned his experiences during 2003, when he had endured a very bad winter and, with lack of another option, resorted to making charcoal. Burning wood and shrubs into a charcoal form to sell in the city at a minimal price, he described the process as “the worst [type of] work that I’ve ever had to do,” further emphasizing that he did not want to resort to making charcoal – both recognizing that it is detrimental to the environment as well as stating that the fumes gave him headaches – but that he was obliged to do it as there were no alternative sources of funds or food.<sup>71</sup> Another strategy, also founded in the utilization of items from the natural environment, described to me at an MST camp, is selling sand (found in many places in the *sertão*, especially near streams) to be used as a construction material in urban areas.<sup>72</sup>

Interestingly, however, comprehension of and, in particular, acknowledgement of the impacts of the *semi-árido*’s irregular weather on crop production and the lived difficulties experienced during crop failure can be quite disparate among different sectors

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<sup>69</sup> MST representative. Personal interview with the author, 11 July 2006

<sup>70</sup> Resident of Jarucutu (1). Conversation with the author, 02 Aug 2006

<sup>71</sup> Resident of Jarucutu (2). Conversation with the author, 02 Aug 2006

<sup>72</sup> Renovação MST camp. Conversation with the author, 14 July 2006

of Canindé society. One's vision of whether a winter is good or bad depends on where that person is from – a distinction which is predominantly visible between rural and urban residents. Small rural farmers, those who live in *assentamentos* in particular, are frequently negatively stereotyped by urban-based Canindenses, especially concerning traits of work ethic and laziness. As one city resident bluntly proclaimed: "If you didn't produce, it's because you didn't work."<sup>73</sup> *Perda de safra*, lack of food, and lack of work were presented as a straightforward, cause-and-effect consequence of the farmer not having worked enough, or of being lazy. Further on in this conversation, though, other comments surfaced which hinted at underlying tensions between rural and urban realities, and at how these relations played into the constructions of stigmatized images of rural workers. The nature of such binary identities established between the rural and the urban, which incorporates conceptions of power, poverty and the struggles of daily life, is suggested at by a simple statement about living situations: "the greatest difficulties are [those faced by people living] in the city."<sup>74</sup> Hardships faced by inhabitants of rural zones become hierarchically inferior to those experienced in urban areas. Similarly, another city shopkeeper commented that nowadays "rural farm workers just complain... [and] demand resources... They don't work. Today, everyone receives [the government handout] *Seguro Safra*, who's going to want to work?"<sup>75</sup>

## Water

Commenting on the hydraulic reality of Ceará, an EMATERCE representative stated it best: "*água é vida*."<sup>76</sup> Water is life – a simple statement, with profound implications for a region which is prone to periodic drought. The irregular rainfall of the *sertão central* does not only affect agricultural production, but also, as one would intuitively imagine, directly impacts the amount of water reserves available for human consumption and daily use. There are actually two levels of water scarcity: that concerning water for animals, plants, and chores; and that relating to water of a quality

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<sup>73</sup> Resident of Canindé (1). Conversation with the author, 13 July 2006

<sup>74</sup> Ibid.

<sup>75</sup> Resident of Canindé (2). Conversation with the author, 26 July 2006

<sup>76</sup> EMATERCE representative. Conversation with the author, 29 July 2006

suiting for human consumption. Access to sufficient water – for agriculture, animals and humans – has historically been the quintessential dilemma of the Northeast.

In a time of drought, the most pivotal issue is finding potable water for human consumption, which is of good quality and at a source close enough to be easily accessed.<sup>77</sup> This primarily transforms into an issue of water distribution. In rather disturbing manners, socioeconomic status profoundly impacts a person's access to water – both during times of drought and in otherwise 'normal' life. The case of MST camp Xinuaqué is an explicative case: the camp's closest water supply is becoming increasingly polluted and runs the risk of drying up during summer months. On the private property behind the camp, just on the other side of the fence along which their *acampamento* is set up, there is an *açude*, which potentially could provide an alternative source of clean water for the *acampados*. Yet because it is on privately owned property, they are not allowed access to the *açude*; instead, despite the proximity of an alternate water source, INCRA representatives must arrange for water to be brought to the camp by truck, in *carros-pipa*.

When it does not rain sufficiently, as explained Hígino Luis Barros de Mesquita, the Secretary of Agriculture and Water Resources, the quantity of water retained in *açudes* lowers, as does its quality. This results in the transformation of such water supplies into water of high salinity, being of 'awful quality' for drinking. Although the Canindé municipality has approximately forty machines to desalinize the water, retransforming it into potable mineral water, the costs of maintenance and production are very high, therefore making this into a not abundantly feasible option for the majority of the population.<sup>78</sup> When water in *açudes* substantially lowers, nearby residents are forced to find alternative sources of water. In the case of Jacurutu, the community's *açude* completely dried up in 2003, remaining so for the following two years until 2006 (when Canindé received one of the best winters of the past ten years). With the main water supply defunct, residents had to search for water in sometimes-not-too-nearby *cacimbões* and *poços*.<sup>79</sup>

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<sup>77</sup> Dr. Raimundo Cruz Pinto (Djalma). Personal interview with the author, 25 July 2006

<sup>78</sup> Hígino Luis Barros de Mesquita. Personal interview with the author, 03 Aug 2006

<sup>79</sup> Types of wells

As urban zones of Canindé too rely on *açudes* as their primary source of water, the urban sector is also susceptible to risks of water scarcity provoked by drought. Two *açudes* provide water for the entire city of Canindé: *Açude São Mateus* and *Açude Souza*, which is three times the capacity of *São Mateus*. One rural resident observed that *Açude Souza* can withstand two years without substantial rainfall before drying up, while *Açude São Mateus* can only last one.<sup>80</sup> According to Hígino, the main *açude* of city (*São Mateus*) nearly dried out in 2005, significantly threatening the city's ability to supply water to its residents.<sup>81</sup> Additionally, lack of drinking water in the city becomes a particular problem during the Festa de São Francisco, when often there simply is not enough water to supply the crowds of pilgrims.<sup>82</sup>

*A carro-pipa*



Photo: Chandra Morrison, July 2006

In these situations of drought, how do communities obtain immediate access to potable water, necessary for basic survival? The answer is through the *carro-pipa* (also called *caminhão-pipa*). These trucks, which carry huge pipe-like containers filled with water (thus explaining the composite name *carro* and *pipa*), literally transport water from regional water reserves to afflicted communities. *Carro-pipa* water is used only for family consumption, particularly because waters found in Canindé tend naturally to be a

<sup>80</sup> Resident of Jacurutu (3). Personal interview with the author, 02 Aug 2006

<sup>81</sup> Hígino Luis Barros de Mesquita. Personal interview with the author, 03 Aug 2006

<sup>82</sup> Fábila de Sales Nogueira. Personal interview with the author, 31 July 2006

bit salty (however, these waters still can be used for activities such washing clothes and taking baths). *Carros-pipa* can be used to provide isolated provisions of water in cases of emergency; or, in areas heavily impacted by drought, water from *carros-pipa* can be the only source of water for entire communities for months on end. During seasonal drought, the *Exército* (National Army) monitors this water distribution, issuing tickets to community members to receive rations of water. They additionally oversee the application of chlorine to *carro-pipa* water in order to make it potable. In 2005, between 15 to 20 *carros-pipa* were employed to deliver water to the surrounding communities of Canindé. However, this act of providing water, the institution of *carro-pipa*, is inundated with politics – particularly reminiscent of the famous Northeastern *indústria da seca* (industry of drought), a situation in which select society members actually profit from droughts and the consequent misery suffered by the masses, under guises of helping and veneers of benevolence. While a period of drought implies food shortages and water scarcity for the majority of the population, these socioeconomic impacts of drought actually provide jobs and profit for private owners of *carros-pipa*. In Canindé, for example, there are approximately ten owners of *carros-pipa*; as such, *a seca* is a time of good business and of earning substantial income for the owners of these trucks.<sup>83</sup>

There additionally exist two fundamental problems which aggravate water scarcity and complicate water supplies in the Northeast: 1) pollution of sources of water, which renders it non-potable; 2) evaporation. During the dry season, the intense heat of the Ceará sun causes evaporation of huge portions of open-air water. Evaporation is another ‘natural phenomenon’ which must be taken into account in the Northeast, as it contributes to and exacerbates water scarcity during the dry season and droughts.

Rainwater was consistently conceptualized as a natural resource which should be taken advantage of and strategically utilized. However, the region of Canindé was perceived as lacking ways of effectively and efficiently collecting this resource. In accordance, despite the incredibly good winter of 2006 which replenished *açudes* and provided excellent harvests in Canindé, Hígino still commented on the failure to utilize rainwater to its full potential, stating that although it rained, the water merely ran-off the

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<sup>83</sup> Information throughout this paragraph is drawn from an interview with Lucas Cleyser, who works in the Secretary of Agriculture and Water Resources. Personal interview with the author, 10 July 2006

land.<sup>84</sup> Contrasting the typical assumption that the principal problem of Canindé, Ceará, and the general Northeast is a lack of water in itself, this variant discourse instead critiques the insufficient utilization of the water which the region *does* have.

This conception of water as precious-like and the concerns expressed about mismanagement of water as a natural resource, of just letting it run-off or evaporate, is illustrated in a beautifully observant local proverb about the Rio Juagaribe:

*“O Rio Juagaribe é a matéria aberta por onde corre e se perde todo o sangue do Ceará e só não tinge o mar de vermelho porque o sangue de Ceará é azul.”*<sup>85</sup>

### **Migrations: *O Êxodo Rural***<sup>86</sup>

In discussing societal impacts stimulated by drought in Northeast Brazil, I must mention migrations. Although I will not analyze these migratory trends at length, due to the nature and scope of this study, I want to provide at least a brief overview of some of the varieties of migrations in and out of Canindé. Neither the saddeningly classic visions of inevitable migrations towards cities from Graciliano Ramos’s *Vidas Secas*, nor the stereotyped images of drought-inflicted mass exodus of rural *flagelados*, are totally applicable descriptions of migratory tendencies in contemporary Canindé. Rural to urban migrations still persist; however, the climate-related timeframes, demographic nature, and reasons for migration have shifted slightly. What was the ‘*êxodo rural*’ of the droughts is now a more generalized ‘*esvaziamento do campo*’.<sup>87</sup>

On one trip accompanying representatives of Canindé *assentamentos* to meet with INCRA representatives in Fortaleza, I was astonished by the continual line of people waiting for the payphone, all calling relatives or friends who lived in Fortaleza. It was obvious that migration to bigger cities continues to be a reality of rural Ceará. Migration destinations from the Northeastern countryside continue to include Southern Brazil, especially São Paulo, as well as the North (Amazônia); however, urban destinations also frequently include larger Northeastern cities, Fortaleza in particular. This migratory transfer also includes smaller shifts, like that between rural areas to cities the size of

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<sup>84</sup> Higinio Luis Barros de Mesquita. Personal interview with the author, 03 Aug 2006

<sup>85</sup> ‘Rio Juagaribe is the open source through which the blood of Ceará both flows and is lost, and it does not tinge the sea red only because the blood of Ceará is blue.’

<sup>86</sup> ‘Rural exodus’

<sup>87</sup> ‘Emptying of the countryside’

Canindé. These contemporary migrations often are tinged with periodic and temporary qualities. Fábía de Sales Nogueira, who works in the Secretary of Development and Infrastructure, described the implications of bad harvests on family structure. As she explained, during a drought or non-successful harvest, the father will usually go in search of other work, most commonly in larger regional cities such as Sobral or Fortaleza, in order to send money back to his family.<sup>88</sup> I also met a number of people who had lived and worked in São Paulo for a period of years, eventually returning back to Canindé to work in agriculture. The vast majority of people I spoke with in Canindé either knew a friend living in São Paulo, had a direct family member currently residing in São Paulo, or had they themselves lived in São Paulo. However, as José Nilde pointed out, when rural farmers and their families move to a city, they often end up in more impoverished conditions than if they had stayed in the countryside. Summarizing this rural/urban dilemma, he states: “in the countryside, it’s not good, but it’s not as bad as [living in] the periphery of the city.”<sup>89</sup>

Upon examination, it appears that people in Canindé migrate not specifically because of drought or climate, but rather as a response to living in impoverished conditions, which show little or no way of improvement. Some families will move from the *campo* to the city in efforts to provide their children with a better future, particularly to pursue more extensive educational options in urban areas. In particular, many young people stressed their desires to leave rural life, citing as reasons to migrate: to pursue monetary and job opportunities in the larger cities of the Northeast or South, to receive more advanced education, and especially, to evade repeating the same life of hardship that they have grown up watching their parents struggle through.

Another pattern of rural to urban migrations – one which might not be at first considered or perceived – is that of elderly farmers. The peripheral neighborhoods of Canindé house interspersed communities of *idosos* who have moved to the city, mostly for health-related reasons. Their migration is principally due to the lack of adequate medical resources and attention provided in rural areas. This is further escalated by insufficient and unreliable transportation options between the countryside and the city,

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<sup>88</sup> Fábía de Sales Nogueira. Personal interview with the author, 31 July 2006

<sup>89</sup> José Nilde. Personal interview with the author, 19 July 2006

which makes getting medication, visiting doctors, or going to the hospital an arduous task. Notably, many of these migrants maintain strong ties to rural life, often tending small plots of land just beyond the city's edge and continuing to produce their own food – in spite of their age and their new urban status.

The flow of migrations is not unilateral, however. There also coexists a simultaneous trend, although not in as great a number, of urban-dwellers who move to the countryside – some of whom never have lived in rural areas before – to participate in the Agrarian Reform.

Although the direct connection between drought, *flagelados*, and migration does not seem to persist in contemporary Canindé, periods of drought *do* cause rural workers to come to the city. The difference, however, is that this 'arrival' in the city is not based in the dislocation and relocation of migration, but rather the temporary mass-condensing upon key locations in order to incite government response and action. In Canindé, manifestations at specific sites of 'official' power are essentially and integrally related to societal reactions to the socioeconomic impacts of drought.

### **3 – TAKING ACTION: Asking for Help / Demanding Response**

#### **Manifestation, 2005**

On Monday May 16th, 2005, rural agricultural workers and their families took to the city. In the late morning, “around 400 farmers from *assentamentos* and *comunidades rurais* of the municipality of Canindé camped out in front of the *prefeitura* building.”<sup>90</sup> By the following day, numbers had increased to at least 1000. Organized through the *Sindicato* and the MST, men, women, and children came from the rural zones, representing primarily *assentamentos federais* and *assentamentos estaduais*, but also *acampamentos* and *comunidades rurais*. Although Canindé Mayor, Antônio Glauber Gonçalves Monteiro, had declared that the municipality was in a 'state of emergency' due to impacts of drought-related crop failure, state and federal governments had delayed in

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<sup>90</sup> “Trabalhadores rurais acampam em frente à Prefeitura de Canindé.” *Diário do Nordeste* [Fortaleza]. 17 May 2005.

responding and providing assistance for the municipality's rural workers and their families.

On behalf of the *camponeses*, the *Sindicato* and MST manifestation leaders presented the following demands to the Municipal government:

Demands:

- 1) Emergency opening of work fronts
- 2) Release of *Seguro Safra* funds by the federal government
- 3) Food [and water] for those camping out in front of the *Prefeitura*
- 4) Doctors from the Family Health Program for the *assentamentos* and *comunidades rurais*
- 5) Implementation of guidelines for rural education
- 6) Water and cleaning of the *cacimbões*, *açudes* and supply [water] for *comunidades rurais*
- 7) Optometrists for the *assentamentos*, mainly for children and youths

(Source: Movimento Regional do MST)<sup>91</sup>

Taking advantage of the *audiência*<sup>92</sup> with government representatives, the list of demands included not only requests specific to the pressing necessities of food, water, and work, but also incorporated issues of importance towards the betterment of rural resources and quality of life, especially those related to education and healthcare. Always towards the top of the list, though, was receiving the *cesta básica*, a government handout of basic provisions and which offers the most immediate source of food and relief – even if limited – to rural residents affected by crop failure. On the 26<sup>th</sup> of May, at the offices of the state Secretary of Agriculture and *Pecuária*<sup>93</sup> (Seagri), a timeline for food distribution to residents of the Canindé municipality was established.<sup>94</sup> After twelve days of camping at the *prefeitura*, on May 27<sup>th</sup> the farmers finished the ‘occupation’, and returned home.

### ***Estado de Emergência***

In 2004, Canindé was one of only three municipalities in Ceará recognized by the federal government as being in a state of emergency due to crop failure, despite a total 28

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<sup>91</sup> Ibid.

<sup>92</sup> A meeting or assembly

<sup>93</sup> Cattle raising

<sup>94</sup> “Agricultores retomam acampamento.” *Diário do Nordeste* [Fortaleza]. 05 July 2005.

municipalities declaring emergency.<sup>95</sup> Canindé was again acknowledged as being in a state of emergency in 2005, this time as one of 70 Ceará municipalities recognized.<sup>96</sup>

Processes of declaring states of emergency begin as soon as there is an irregularity in rainfall which adversely impacts planting. EMATERCE's appraisal of the percentage of *perda de safra* is integral to determining whether a municipality's declaration of 'state of emergency' or, for the most severe cases, 'state of public calamity' (*estado de emergência / estado de calamidade pública*) will be recognized by the state and federal governments – and thus, if and what type of aid residents of the municipality will receive from these government branches. If a municipality is recognized as being in a state of emergency, the federal government is obligated to intervene and provided assistance. However, many more municipalities declare states of emergency than either the state or federal governments can actually attend to, and the federal government conducts thorough, and sometimes lengthy, analyses to check the veracity of municipal claims of emergency.

A significant snag in these proceedings, though, is the delay between different government bodies' assessing, processing, and recognizing the status of emergency for each locale which has applied for state and federal assistance. This lag-time creates gaps in the aid for affected rural workers and families, leaving them stranded, as government sectors pull back from taking direct action or responsibility when they are not actually obliged to do so, often due to funding limitations. Commenting on the wait before the federal government officially recognized Canindé's state of emergency, and thus would liberate funds, Mayor Monteiro stated in May 2005 that “this is aid that should come without doubt. The problem is that this requires a certain bureaucracy.”<sup>97</sup>

### **Re-Manifestation**

On July 4<sup>th</sup>, 2005, “with banners, signs, and cars with loudspeakers,” approximately 800 rural workers re-occupied the Municipal *Prefeitura* of Canindé<sup>98</sup> –

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<sup>95</sup> “Municípios aguardam socorro federal.” *Diário do Nordeste* [Fortaleza]. 11 Jan 2005.

<sup>96</sup> Faheina, Rita Célia. “Seca verde atinge 70 municípios.” *O Povo* [Fortaleza]. 06 June 2005.

<sup>97</sup> Peixoto, Marcus. “Prefeitura de Canindé: Sobe para 1.000 o número de trabalhadores acampados.” *Diário do Nordeste* [Fortaleza]. 18 May 2005.

<sup>98</sup> “Agricultores retomam acampamento.” *Diário do Nordeste* [Fortaleza]. 05 July 2005.

this time, with numbers soon reaching 2000 participants.<sup>99</sup> For a second time in 2005, strategies of mass mobilization were employed in attempt to pressure the *Defesa Civil*, state and municipal governments into acting more rapidly, and to hold them accountable to the agreement of *cesta básica* distribution, which had been established in May.

Farmers at the first manifestation of the *prefeitura*



Photo: Fábio Lima  
(in Peixoto, 18 May 2005)

The second manifestation of 2005



Photo: Antônio Carlos Alves  
(in “Reunião...”, 08 July 2005)

Expressing the frustration and dissatisfaction with the stagnated non-results of the first mobilization, José Tomé da Cruz Almeida, president of the Canindé *Sindicato dos Trabalhadores Rurais*, stated: “[We spent] 12 days of manifestations in front of the Canindé town hall and nothing got resolved.”<sup>100</sup> Back in May, Tomé had expressed directly and pointedly the urgent, yet basic level of the situation: “There are people, who live off of just subsistence agriculture, going hungry in both the *assentamentos* and *comunidades rurais*. They need work and food.”<sup>101</sup> Nearly a month later, Tomé proclaimed: “It’s ridiculous. Only 10% of the crop was harvested and it has already been eaten by the farmers [and their families]. The unrest in the rural zone is universal. Hunger does not wait nor does it leave a message in advance [announcing its arrival]. The last deadline for the federal and state government to deliver the *cestas* was on the 3<sup>rd</sup> of June. [It is already the 5<sup>th</sup>, and] so far, nothing.”<sup>102</sup> On July 6<sup>th</sup> the *Diário do Nordeste* reported:

<sup>99</sup> Sá, Rosa. “Agricultores voltam a acampar em Canindé.” *O Povo* [Fortaleza]. 05 July 2005.

<sup>100</sup> “Agricultores retomam acampamento.” *Diário do Nordeste* [Fortaleza]. 05 July 2005.

<sup>101</sup> Faheina, Rita Célia. “Seca verde atinge 70 municípios.” *O Povo* [Fortaleza]. 06 June 2005.

<sup>102</sup> “Agricultores retomam acampamento.” *Diário do Nordeste* [Fortaleza]. 05 July 2005.

“Farmers from Canindé aggrieved by the effects of the *seca verde* which affected the state [of Ceará] are going to begin receiving *cestas básicas* next Friday. The guarantee was given by the state Secretary of Social Action, Raimundo Gomes de Matos. According to him, one thousand *cestas* will be distributed. The crowd continues camping out in front of the *Prefeitura* and meets today, at 10 a.m., with nine regional mayors, representatives of Seagri, the Ministry of Agrarian Development, *Movimento dos Pequenos Agricultores*, MST and *Sindicato dos Trabalhadores Rurais* of the municipality. In relation to *Seguro Safra*, Matos affirmed that all efforts, together with the federal government, have been made... It was arranged that the 120 thousand farmers in Ceará registered with *Seguro Safra* will begin to receive the first installment of R\$110.00... starting in August.”<sup>103</sup>

### ***Seguro Safra and Bolsa Estiagem***

In the occurrence of drought, three immediate government-provided social services currently are available in Ceará: 1) supplying communities with water, principally using the *carro-pipa*; 2) distributing basic provisions with the *cesta básica*; and 3) dispersing economic assistance through *Seguro Safra* and *Bolsa Estiagem*. These last two programs – *Seguro Safra* and *Bolsa Estiagem* – are new initiatives (or at least, new versions of older programs) developed in attempt to alleviate financial impacts of drought on *pequenos agricultores*.

Beginning in 2003, *Seguro Safra* (or *Garantia-Safra*) functions as a type of insurance that farmers can buy, which provides a source of income to be received during the summer months if 50% or more of their crops are lost due to drought. The farmer receives five instalments of R\$110 each over a period of five months, amounting to a total of R\$550 for the year. In order to register, the agricultural worker must pay 1% of the total *Seguro Safra*, or R\$5.50. Sources for the rest of the money are divided between the municipal (3%), state (6%), and federal governments. The program is designed for the *agricultor familiar* who lives in non-irrigated rural areas and who receives a monthly family income of x1.5 or less the amount of minimum wage.<sup>104</sup> Farmers can partake in *Seguro Safra* only if the municipality has agreed to participate in the program. Additionally, in order to receive the monetary instalments, the municipality’s state of

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<sup>103</sup> “Governo regulariza distribuição de cestas básicas.” *Diário do Nordeste* [Fortaleza]. 06 July 2005.

<sup>104</sup> Cronemberger, Daniella. “Perda da safra já chega a 80% na região da Ibiapaba.” *O Povo* [Fortaleza]. 12 March 2005.

emergency must be officially approved by the state government, in addition to being recognized by the federal government.<sup>105</sup> For the harvest of 2004, 36,106 farmers throughout Ceará enrolled in *Seguro Safra*. This number more than tripled in 2005. The quantity of participating municipalities jumped as well, from 74 to 150 of the total 184.<sup>106</sup> As for Canindé, of the approximately 16 thousand farmers in the municipality, close to 3,250 registered to receive benefits from the 2005 *Seguro Safra*.<sup>107</sup> Although the money provided by *Seguro Safra* undoubtedly helps, the *Sindicato* pointed out that “it’s not enough for even one person to survive,” let alone five or six.<sup>108</sup>

The other federally-run initiative is *Bolsa Estiagem*. Designed to provide emergency assistance, the *Bolsa* is a single payment of R\$300. The Ministry of Agricultural Developments (MDA) stipulates the following conditions for eligibility: an average monthly income of R\$600 (two minimum wages) or less per family; declared crop loss of at least 50% in a municipality of recognized state of emergency; not be a participant in the *Seguro Safra* program.<sup>109</sup> Despite the long-standing natural recurrence of drought and drought-inflicted socioeconomic dilemmas in the Northeast, *Bolsa Estiagem* actually was originated in 2004 to assist the drought-induced crop loss and social crises faced by farmers in Southern Brazil.<sup>110</sup> The federal government brought the program to the Northeast the following year. Some in the Northeast comprehend these actions – the disproportionate attention geared towards Southern farmers for parallel socio-climatic hardships endured repetitively and frequently by farmers of the Northeast – as another example of how the Brazilian Northeast and the *nordestino* are discriminated against on a national level, especially by the federal government.

## Blockade

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<sup>105</sup> Ibid.

<sup>106</sup> “Procura pelo seguro triplica.” *O Povo* [Fortaleza]. 12 March 2005.

<sup>107</sup> “Trabalhadores rurais acampam em frente à Prefeitura de Canindé.” *Diário do Nordeste* [Fortaleza]. 17 May 2005; Faheina, Rita Célia. “Agricultores de 19 cidades recebem o Garantia-Safra.” *O Povo* [Fortaleza]. 07 Sept 2005.

<sup>108</sup> *Sindicato* leadership. Personal interview with the author, 17 July 2006

<sup>109</sup> “Bolsa Estiagem: Agricultores têm até 31 de outubro para se cadastrar.” *Diário do Nordeste* [Fortaleza]. 10 Oct 2005.

<sup>110</sup> Defesa Civil. “Bolsa Estiagem.”

Responding to the lack of resolutions achieved at meetings between manifestation and government representatives, after four days of the second ‘occupation’, on July 8<sup>th</sup> protestors flooded onto the BR-020. Halting traffic along the region’s principal highway linking Fortaleza and Brasília, “only ambulances were allowed to go through... Bus companies did what is called ‘*baldeação*’ – vehicles made a transfer of passengers from one side to the other of the prohibited section [of the road].”<sup>111</sup>

Although potentially viewed as merely an overflow of unruly (and emotional) dissatisfaction, these road blockades are actually quite strategically clever. MST representatives explained that shutting down the BR immediately grabs the attention of state and federal governments.<sup>112</sup> These actions are deliberately executed to interrupt and disrupt the flow of ‘the everyday’ functionings of the State – blocking access of officials, business, and transport needing to reach Fortaleza – through tactical spatial occupation. Similarly, utilizing the divulgation power of the media, the BR blockade is a way to publicize the situation to the rest of society, to be “noticed in the state and national conscience... It’s a form of pressuring the government, and of denouncing the government.”<sup>113</sup> When needing increased federal response, blockading the BR opens negotiations – it is the “moment of change.”<sup>114</sup> Thus, according to the MST, in 2005 after shutting the BR for slightly more than one day, they were able to achieve immediate distribution of the *cesta*, as well as liberation of *Seguro Safra* and *Bolsa Estiagem*.<sup>115</sup>

Later justifying these actions, the *Sindicato* explained that, after three *audiências*, two manifestations, and still no concrete response, “what else [could] we have done?” Commenting on these protests and eventual road blockade performed by rural farmers, Tomé stated: “[We] don’t do it for pleasure; we do it out of necessity.” In agreement, fellow *Sindicato* leadership explicated the situation: “[Everything] is really difficult [to make happen]... It’s very difficult to represent ‘the worker’ in the current bourgeoisie-condition [of society].”<sup>116</sup>

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<sup>111</sup> “Acampados em Canindé: Agricultores interditam tráfego na BR-020.” *Diário do Nordeste* [Fortaleza]. 09 July 2005.

<sup>112</sup> MST representatives. Personal interview with the author, 05 Aug 2006

<sup>113</sup> José Nilde. Personal interview with the author, 19 July 2006

<sup>114</sup> Ibid.

<sup>115</sup> MST representatives. Personal interview with the author, 05 Aug 2006

<sup>116</sup> All quotes from: *Sindicato* leadership. Personal interview with the author, 17 July 2006

## 4 – UNDERSTANDING DROUGHT

### Drought and Poverty

In a 1979 academic study examining drought in Northeast Brazil and investigating possible governmental efforts to reduce its impacts (in this case, irrigation initiatives by DNOCS<sup>117</sup>), Anthony L. Hall writes:

“The ‘drought problem’ [of the Northeast] is not simply one of climate, however. What has to be explained is why the rural population in the *sertão* is so vulnerable to variations in the rainfall cycle. The other side of the ‘drought problem’, then, is not directly concerned with climate at all but is social and economic in nature.... The majority of low-income producers... are especially liable to suffer as the result of climatic vicissitudes.”<sup>118</sup>

Similarly, in the 1983 book *Os Degredados Filhos da Seca*<sup>119</sup>, Itamar de Souza (a university professor) and João Medeiros Filho (a journalist) construct a similar observational argument:

“The *camponeses*, both small rural property owners and those without land, are those who suffer most harshly from the effects of droughts. The large- and medium-size property owners, although also affected, find in long term bank credits reasonable ways to recuperate, at least partially, the damage provoked by lack of rain... Even if the Northeast came to have sufficient water to satisfy its needs, rural poverty would continue, if there are not structural reforms.”<sup>120</sup>

And again, in IPECE’s *Índice Municipal de Alerta: Um Instrumento para orientações preventativas sobre as adversidades climáticas*<sup>121</sup> written in 2005:

“In the Northeast region, economic and social effects caused by climatic variations [and]... the occurrence of droughts,... constitute a ‘production crisis of restricted intensity’, since the droughts most intensely affect the population dedicated to the production of food used for auto-consumption, composed of, in the vast majority of cases, tiny productive units of family farmers, both land owners and those without land.”<sup>122</sup>

These three documents, representing academic, journalistic, and scientific fields, present notably parallel arguments. Although at least recognizing that socioeconomic

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<sup>117</sup> Departamento Nacional de Obras Contra as Secas – National Department of Works Against Droughts

<sup>118</sup> Hall, page 15

<sup>119</sup> ‘The Banished Sons of the Drought’

<sup>120</sup> Souza:1983, page 107

<sup>121</sup> ‘Municipal Alert Index: An instrument for preventative guidance about climatic adversities’

<sup>122</sup> IPECE:IMA 2005, 38

factors play a substantial role in both causing and exacerbating the impacts of drought, the fact that documents from 1979, 1983, and 2005 can all share and reiterate the same structural observations and same critical discourse significantly reveals that the situation of socioeconomic inequality and injustice in the Northeast has not substantially changed. The structural and infrastructural factors which contribute to formulating the unequal burden of climate irregularities and of drought upon small farmers persist.

More than just a socioeconomic dilemma, however, in Canindé these problems also are understood explicitly as being political in nature. The vast majority of people I spoke with in Canindé – from government officials to social movement organizers to farmers – specifically recognized that the persistence of poverty and lack of infrastructure in the region were not due to rain, nor due to *a seca*, but rather, were resultant of the ineffectiveness and absence of public policy (*política pública*) – especially public policy geared towards Canindé’s rural sectors and the *pequeno agricultor*. Societal impacts caused by drought in Canindé can be understood, then, as being constructed out of a convergence of climatic irregularities, socioeconomic structural and infrastructural inequalities, and inadequate political policy. The essence of Souza and Medeiros Filho’s observation, in a sense, holds true:

“Drought is merely the ‘drop of water’ which aggravates [an] already existent misery and visibly displays it for the rest of Brazilian society. As such, to a certain extent, drought in the Northeast is a false problem...”<sup>123</sup>

### *Convivência com o Semi-Árido*

In all the conversations I had about droughts, ‘*a seca*’ in Northeast Brazil was uniformly understood to be a natural phenomenon – a weather pattern which repetitively occurs. Irregular precipitation and recurring degrees of drought are understood to be innate characteristics of the semi-arid climate of the *sertão central* of Canindé. Acknowledging this reality, in contrast to the sensationalism so often encompassing the drought/Northeast relationship, an article in *O Povo* presented an astute, slightly ironic, observation: “The lack of rain in the semi-arid region of the Northeast should long ago have stopped being portrayed as an extraordinary phenomenon. Exceptional, actually, is

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<sup>123</sup> Souza:1983, page 107

the occurrence of regular winters.”<sup>124</sup> The understood normality of drought in the Northeast is especially evident in statements noting the heavy impact of drought on Southern Brazil over the past two years. As one Canindé storekeeper commented:

“And that drought in Rio Grande do Sul... [They go] six months without rain, and it’s a huge problem. Six months without rain here is just our normal summer!”<sup>125</sup>

As a part of nature, drought in itself cannot be ‘overcome’; however, its impacts on society *are* able to be influenced by human beings. Very shortly into this research, I discovered that talking just about ‘drought’ in the Northeast was a limited and insufficient perspective. I first became aware of this three days into my stay in Canindé, when Sérgio brought me to meet organizers of the *Sindicato*. Having phrased the explanation of this research project as ‘examining the impacts of drought on society’, the *Sindicato* president Tomé quickly modified my wording: “é ‘convivência com o semi-árido’ – não é a seca” – ‘it is [how] ‘to co-exist with the semi-arid climate’, not ‘[the impacts of] drought’.<sup>126</sup> In another conversation a few weeks later, members of the *Sindicato* reiterated this opinion: “we don’t like to say ‘drought’ or ‘to combat the drought’. It can’t be fought. We live in the *semi-árido*... so we are always in pursuit of coexisting with the semi-arid climate.”<sup>127</sup> From their perspective, the principal difficulty facing the Northeast, then, was not so much the *seca*, but rather, not having learned to coexist with drought; in other words, that contemporary human beings have not yet fully adapted to the semi-arid climate. Reinforcing this stance that *convivência* is possible, people frequently made reference to other global semi-arid regions, especially Israel, which were perceived as having achieved a productivity and economic stability despite their climate. In Canindé, the way that drought currently impacts society is not seen as an inevitable outcome. Droughts cannot be prevented, but the adverse effects of them *can* be prevented and changed through social actions and correctly implemented public policy.

Compared to previous tactics which tried to manipulate the weather itself to reduce effects of drought (most notably proposals of the 1970s to create artificial rain to

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<sup>124</sup> “A angústia da espera.” *O Povo* [Fortaleza]. 14 March 2005.

<sup>125</sup> Resident of Canindé (2). Conversation with author, 08 July 2006

<sup>126</sup> José Tomé da Cruz Almeida. Conversation with the author, 11 July 2006

<sup>127</sup> *Sindicato* leadership. Personal interview with the author, 31 July 2006

‘regulate’ rainfall<sup>128</sup>), or which focused near-exclusively on large- and medium-sized farmers (such as DNOC’s irrigation projects<sup>129</sup>), contemporary strategies are taking a dramatically different stance based in a *convivência* perspective. Since 2000, Canindé has experienced an influx of locally constructed, government aided programs aiming to find *alternativas agrícolas* and to establish more stable alternative sources of income for *pequenos agricultores*. Two of the most important agricultural projects in the region are raising goats and sheep (*ovinocaprinocultura*), taking advantage of these animals’ natural suitability to the semi-arid climate; and cultivating bees (*apicultura*) to produce honey, which utilises the flowers of the natural vegetation of the *sertão* which bloom during times of *seca verde* when more traditional crops do not grow. To complement these projects, efforts are being made to establish stable regional markets for local products, so that both producers and the general community benefit. An additional *convivência* effort is the government-lead program to install *cisternas de placa* at homes of small farmers. *Cisternas* are partially underground water-tanks in which rain water is collected and filtered, rendering it potable. They normally can store enough good quality drinking water for one family for an entire year – which potentially will drastically reduce water shortages in rural areas during droughts. These projects, policies, and collective efforts are attempts to adapt *pequenos agricultores*’ agricultural practices and means of subsistence to co-exist harmoniously with the semi-arid climate of Canindé, its natural irregularity of rainfall and recurrence of drought.

*Apicultura* meeting, Iguaçu community



House with *cisterna de placa*, Jacurutu



Photos: Chandra Morrison, July and August 2006

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<sup>128</sup> Hall, pages 21-22

<sup>129</sup> See Hall

## ***Lutar***

To conclude, I want to give special note to a recurring theme that I heard on so many occasions in Canindé – the idea of *luta*. *Lutar* means to fight, to struggle, to strive. Not intended to imply ‘fighting’ in a physical or violent sense, here, the application of *luta* signifies an effort to persevere, to persist, to not give up on moving towards objectives of betterment. The occupations of the *prefeitura*, the blockade of the BR-020, the continual evolution of new strategies for *convivência com o semi-árido* – these are all incarnations of the concept of *lutar* put into action. This notion of *luta* flows as an undercurrent in daily life in Canindé, acting as a creative mechanism to construct an optimistic determination towards continually moving forward. *Lutando* is understood as essential to improving the socioeconomic conditions of the rural zones:

“If you do not fight, nothing happens. If you do not fight, nobody achieves anything. The only ones who succeed are those who fight.”<sup>130</sup>

For *pequenos agricultores* and their families in Canindé, the seemingly minor act of expressing oneself as *lutando* automatically implies taking an active position in endeavours to generate a better quality of life and to live with dignity.

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<sup>130</sup> *Se não lutar, nada acontece. Se não lutar, ninguém consegue. Só vence quem luta; Sindicato leadership. Personal interview with the author, 17 July 2006*

## WORKS CITED:

- “A angústia da espera.” *O Povo* [Fortaleza]. 14 March 2005.
- “Acampados em Canindé: Agricultores interditam tráfego na BR-020.” *Diário do Nordeste* [Fortaleza]. 09 July 2005.
- “Agricultores retomam acampamento.” *Diário do Nordeste* [Fortaleza]. 05 July 2005.
- Banco do Nordeste (BNB). *Agenda do Produtor Rural 2006*. Banco do Nordeste, 2006.
- “Bolsa Estiagem: Agricultores têm até 31 de outubro para se cadastrar.” *Diário do Nordeste* [Fortaleza]. 10 Oct 2005.
- “Canindé pode sofrer escassez de abastecimento.” *Diário do Nordeste* [Fortaleza]. 07 June 2005.
- “Capa-Relatório Caracterização – Plano Estratégico.” Fortaleza: Secretaria de Desenvolvimento Econômico e Infra-Estrutura and Traço e Cor Engenharia, (2001?).
- Cronemberger, Daniella. “Perda da safra já chega a 80% na região da Ibiapaba.” *O Povo* [Fortaleza]. 12 March 2005.
- Defesa Civil. “Bolsa Estiagem.” Accessed at: [http://www.defesacivil.gov.br/bolsaestiagem/index\\_geral.asp](http://www.defesacivil.gov.br/bolsaestiagem/index_geral.asp)
- Faheina, Rita Célia. “Agricultores de 19 cidades recebem o Garantia-Safra.” *O Povo* [Fortaleza]. 07 Sept 2005.
- “Seca verde atinge 70 municípios.” *O Povo* [Fortaleza]. 06 June 2005.
- FUNCEME (Fundação Cearense de Meteorologia e Recursos Hídricos). “Relatório de Análise das Chuvas Ocorridas no Período de Janeiro a Maio de 2005 no Estado do Ceará.” FUNCEME and Secretaria de Ciência e Tecnologia, July 2005.
- “Governo regulariza distribuição de cestas básicas.” *Diário do Nordeste* [Fortaleza]. 06 July 2005.
- Hall, Anthony L. *Drought and Irrigation in North-East Brazil*. Cambridge: Cambridge University Press, 1978.
- IBGE. *2000 Census*. Accessed at: <http://www.ibge.gov.br/cidadesat/>
- IPECE et al. *Índice de Desenvolvimento Municipal (IDM) – Ceará 2004*. Fortaleza: IPECE, 2006. Accessed at: [http://www.ipece.ce.gov.br/estudos\\_sociais/idm/Idm\\_2004.pdf](http://www.ipece.ce.gov.br/estudos_sociais/idm/Idm_2004.pdf)
- IPECE et al. *Índice Municipal de Alerta – IMA: Um Instrumento para orientações preventativas sobre as adversidades climáticas, Estado do Ceará – 2004*. Fortaleza: IPECE, April 2005. Accessed at: [http://www.ipece.ce.gov.br/publicacoes/diversos/indicadores%20socioeconomicos/Indice%20Municipal%20de%20Alerta%20\\_IMA\\_%20-%202004.pdf](http://www.ipece.ce.gov.br/publicacoes/diversos/indicadores%20socioeconomicos/Indice%20Municipal%20de%20Alerta%20_IMA_%20-%202004.pdf)
- IPECE et al. *Índice Municipal de Alerta – IMA: Um Instrumento para orientações preventativas sobre as adversidades climáticas, Estado do Ceará – 2005*. Fortaleza: IPECE, 2006. Accessed at: <http://www.ipece.ce.gov.br/IMA2005.pdf>
- IPECE et al. *Perfil Básico Municipal – Canindé*. Fortaleza: IPECE, 2005. Accessed at: [http://www.ipece.ce.gov.br/publicacoes/perfil\\_basico/PBM\\_2004\\_PDF/Canind%E9.pdf](http://www.ipece.ce.gov.br/publicacoes/perfil_basico/PBM_2004_PDF/Canind%E9.pdf)

- “Municípios aguardam socorro federal.” *Diário do Nordeste* [Fortaleza]. 11 Jan 2005.
- Peixoto, Marcus. “Prefeitura de Canindé: Sobe para 1.000 o número de trabalhadores acampados.” *Diário do Nordeste* [Fortaleza]. 18 May 2005.
- “Procura pelo seguro triplica.” *O Povo* [Fortaleza]. 12 March 2005.
- Sá, Rosa. “Agricultores voltam a acampar em Canindé.” *O Povo* [Fortaleza]. 05 July 2005.
- “Reunião define movimento em Canindé.” *Diário do Nordeste* [Fortaleza]. 08 July 2005.
- Souza, Itamar de, and João Medeiros Filho. *Os Degredados Filhos da Seca*. 3ª Edição. Petrópolis, RJ: Editora Vozes Ltda, 1983.
- “Trabalhadores rurais acampam em frente à Prefeitura de Canindé.” *Diário do Nordeste* [Fortaleza]. 17 May 2005.
- Viera, Hélio Pinto. *Cronologia Canindé*. Fortaleza: Imprensa Universitária, 1997.
- Wright, Angus, and Wendy Wolford. *To Inherit the Earth: the Landless Movement and the struggle for a new Brazil*. Oakland: Food First Books, 2003.

#### LIST of CITED INTERVIEWS:

- Dr. Erivaldo (IBGE). Personal interview with the author, 26 July 2006
- Dr. Francisco Paes Pinheiro (EMATERCE). Personal interview with the author, 17 July 2006
- Dr. Raimundo (Djalma) Cruz Pinto (INCRA). Personal interview with the author, 25 July 2006
- *Audiência* between Canindé *assentamento* representatives and INCRA superintendents at INCRA offices in Fortaleza, 20 July 2006
- EMATERCE representative. Conversation with the author, 29 July 2006
- Fábia de Sales Nogueira. Personal interview with the author, 31 July 2006
- Flávio Ferreira Lima. Conversation with the author, 27 July 2006
- Higino Luis Barros de Mesquita. Personal interview with the author, 03 Aug 2006
- José Nilde. Conversation with the author, 16 July 2006
- Personal interview with the author, 19 July 2006
- Lucas Cleyser. Personal interview with the author, 10 July 2006
- MST representative. Personal interview with the author, 11 July 2006
- MST representatives. Personal interview with the author, 05 Aug 2006
- José Tomé da Cruz Almeida. Conversation with the author, 11 July 2006
- Nun at Igreja de São José. Personal interview with the author, 05 Aug 2006
- Renovação MST camp. Conversation with the author, 14 July 2006
- Resident of Canindé (1). Conversation with the author, 13 July 2006
- Resident of Canindé (2). Conversation with the author, 26 July 2006
- Resident of Jarucutu (1). Conversation with the author, 02 Aug 2006
- Resident of Jarucutu (2). Conversation with the author, 02 Aug 2006
- Resident of Jacurutu (3). Personal interview with the author, 02 Aug 2006
- Sindicato* leadership. Personal interview with the author, 17 July 2006
- Personal interview with the author, 31 July 2006