

# The Life Organic

## A Minor Field Study on the socio-economical consequences of small-scale organic farming in Northeast Brazil

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Minor Field Study

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## **Abstract**

This Minor Field Study aims to examine how small-scale farmers in Northeast Brazil experience the transition towards organic farming mainly in regard to economy and quality of life but also considering gender equality and national migration. The author finds that organic farming seems to create new meanings and discussion areas for the people involved. Organic farming may also be of relevance considering livelihood as it makes an alternative niche available for the earning of a living in a rural area where urbanisation is high.

## **Keywords**

Organic farming, Northeast Brazil, small-scale farming, smallholding, Pernambuco, sugarcane, world system theory, socioeconomic consequences, human ecology and Minor Field Study.

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# Introduction

My first intention with this essay was to examine permaculture and the social and ecological consequences of this way of living. Arriving in Brazil, I soon found out that the site I was going to visit was rather a cooperative of organic farmers than a permaculture community, and didn't feel less flexible than that I changed my purpose to instead study organic farming from a human ecological perspective with the main focus on its socio-economic effects. While doing fieldwork at the first site, interviewing smallholders with mainly garden plots, I found out about a small organic cachaça<sup>1</sup> producer and decided to visit the distillery and talk to the sugarcane producers, also smallholders, but further inland. Sugarcane is of special interest because it was the main reason why so many slaves were imported to Pernambuco. The afro-Brazilian culture is still very strong in Northeast Brazil and many traditions have sprung from the certain environment that the fazendas (large-landed properties) presented. A large part of today's sugarcane production consists of enormous monocultures in the south of Brazil, but it has a 500 year long history in Pernambuco. It would be very interesting to see what role organic farming can play in a developing country like Brazil.

My study tour and collection of data was made possible by the Swedish development agency Sida. Each year Sida announces a number of scholarships for university students called Minor Field Study (MFS). This scholarship makes it possible for students to go on a field trip in a developing country for six weeks or more and use the data to write an essay for a bachelor's or master's degree.

## Purpose and questions of issue

The purpose with this essay is to find out which are the ecological and socio-economic consequences of organic farming in Northeast Brazil. I want to understand how people's lives changed after the transition to defined organic farming. The questions of issue that I want to treat are the following:

- Can organic farming improve the situation for poor farmers and if so, how?
- How can organic farming contribute to equality regarding gender?

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<sup>1</sup> Cachaça is a typical Brazilian spirit containing 38-48 %vol alcohol at 20°C and is obtained by the distillation of the syrup of the sugarcane. The characteristics of this drink differ from other spirits, and may contain up to 6 g/l of sugar. Basically, there exist two types of cachaça; *cachaça de alambique* and *industrial cachaça*. In the production of cachaça de alambique natural yeast is being used, no external ingredients such as water or sugar are added, and only the part of the distillation which results in cachaça of the highest quality, called *coração* (heart), which is between the *cabeça* (head) and *cauda* (tail), is being used.

- How does organic farming affect national migration?
- Which are the connections between smallholders in the south and the world system and what are the effects of exporting sugarcane products?

### **Presentation of the field study**

The field study turned out to become two studies. The first one is a study of ecological farmers planting mainly fruits and vegetables in small gardens (2-3 hectares). Most of them live in a small village, São Severino, with 50 families, located 13 kilometres from Gravatá, a relatively small town not far from the coast of Pernambuco and situated some hundred metres up in a hilly countryside (see map on pages 13 and 14). The second study consists of interviews with sugarcane farmers living in or around Triunfo, a very small town in the inland of Pernambuco about 1000 metres above sea level, also in a hilly landscape. The climate here is different from the surrounding Sertão, which is characterized by draught the main part of the year and a short rain period when everything becomes green and flourishing. In this mountainous area the climate is cooler and not extremely dry. I made my visits during the winter (April-May) when most of the year's rain falls. São Severino was cold, foggy and rainy as was Triunfo (though not to the same extent).

### **Author's background**

I didn't know very much about Brazil until I started practicing capoeira, an afro-Brazilian martial art which made me learn Portuguese and develop a wish to visit this enormous country. Brazil is an enticing country and is particularly interesting in regard to the social inequalities and the fact that different parts of the country are on completely different development levels. I found it very convenient to visit a country where I wasn't depending on an interpreter but could converse even in non-interview situations, which helped me to settle in and adjust myself to the quite different situation. Besides human ecology I have studied behavioural sciences, ecology, geology and environmental sciences which altogether reflect my interest for the interaction between man and the environment (if one can say that there is a dichotomy between the two).

### **Previously done research**

The bookshelves aren't exactly flooded by human ecological works on the themes treated in this essay. There is some literature on the subject, but mainly from an economical perspective, and, unfortunately, not very recent. Two of the most promising titles are "The Agricultural Economy of Northeast Brazil"<sup>2</sup> and "Classes Sociais e Agricultura no Nordeste"<sup>3</sup> which both unluckily are a bit out of date and not actually qualitative studies. On the other hand, Clara Araújo's and Celi Scalon's "Women in Brazil" is a very inspiring and new work, but still rather general about women's situation throughout the country and not specifically about the countryside.

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<sup>2</sup> Kutscher, Gary P. and Pasqual L. Scandizzo. *The Agricultural Economy of Northeast Brazil*. 1981. Baltimore and London: The Johns Hopkins University Press.

<sup>3</sup> De Andrade, Manuel Correia. 1985. *Classes Sociais e Agricultura no Nordeste*. Recife: Fundação Joaquim Nabuco.

# Theoretical background

This essay is trying to examine how the use of organic agricultural methods and/or the redefinition of an already more or less organic agriculture can change the life of a farming family in socio-economic and ecological ways. The essay is written from a human ecological view which means that the focus lies heavily on the three-part relation man-nature-society. Here follows a description of what human ecology is and a presentation of the theoretical platform that builds the fundament of this essay.

## What is human ecology?

Human ecology is the interdisciplinary study of the relationships between man, society and nature. In concordance with Dieter Steiner Alf Hornborg describes human ecology in terms of a triangle with the three equal corners “nature”, “society” and “person” (Hornborg 2001:194). By using three corners instead of traditional dichotomies such as nature-culture, society-nature or subject-object, just to mention a few, already the language helps extending the view from two poles to a wider relation (Hornborg 1999:9).

So why is this a human ecological study? The study involves “person” - that is, the farmers; “nature” – that is, the land from which the farmers live directly and indirectly (they are of course using other natural resources that they don’t take from nature directly, like televisions, electricity, tools, vehicles etc.) and “society”. Society refers here both to the local society, as well as to a “wider society”: the world system with all its aspects of globalization and modernity (including activities such as export and import but also daily routines like television-watching etc.).

## Theoretical platform

For this essay, it seems appropriate to back up the analyses and conclusions with world system theory along with the thoughts presented by Joan Martinez-Alier in “The Environmentalism of the Poor” (2002). Martinez-Alier focuses rather on ecological conflicts and the conflicts between the interests of poor people versus big companies, but there is still much to use. Some of the ideas he presents are further examined in Alf Hornborg’s “The Power of the Machine”, wherefore I found this a useful source as well. Brazil is a country with great inequalities, hence the core-periphery theory can be applied even within the



borders of this huge country and not only in the sense of a global world system. I will try to further draw the outlines of what world system theory and what the expressions core and periphery mean.

World system theory, strongly connected with Immanuel Wallerstein, is a school related to and developed from the dependency theory (mostly connected with Andre Gunder Frank) rooted in Marxist tradition. What world system theorists have in common with Marx is that capitalism is a key-word and is seen as an exploitative system that is the cause of most economic expansion, but also to the negative aspects of the modern world (Shannon 1996:11-12). The basic outlines of world system theory are that the world is seen as a whole system, with core-states and periphery-states. The core consists of countries with a “differentiated economy and industrialized production, strong, centralized state machineries and a certain degree of autonomy within the world system.” (Smekal 2001:96, my translation). The peripheral states are societies in the beginning of modernization, typically seen as Third World countries. Besides these rough classifications there are also semi-peripheries and even countries between semi-periphery and core and between semi-periphery and periphery (Shannon 1996:5, 109).

According to Shannon, Brazil is a semi-periphery. What characterizes a semi-periphery is that it functions both as a core and a periphery depending on different situations and views. There is still an important reliance on export goods to the core, like raw materials or coffee but also trade with the periphery (ibid:29).

Hornborg (2001) points out the importance not to limit the term core-periphery to “spatially demarcated areas” but argues in concordance with Andre Gunder Frank that they are to be seen as

polarized exchange relations at different levels of scale both within and between countries. These polarized flows can be traced even in local contexts such as the exchange between a hacienda owner and his workers. (ibid:28).

# Method

The choice of method is often of great importance for the results of a study. In this case, qualitative methods were to be preferred before quantitative methods, as the nature of this essay is human ecological and the aim is to chart what it means to be (or become) an organic farmer in regard to socio-economy and equality.

## Qualitative method

For this study I found it appropriate to use qualitative methods, which I did by interviewing farmers and other persons who could give me relevant information on the subject (see appendix for interviews). This means that I chose not to collect quantitative information but rather to have personal contact to my informants, and let everybody tell their own story. By staying in São Severino and sharing everyday life with the people – for example celebrating Mother’s Day, eating and working with them – I also learned about things that may have been too obvious to talk about, but still important for the study. This kind of participating observation was a very useful method in São Severino, but less possible to practice in Triunfo due to the limited time.

As this is a quite short essay I had to restrict myself to a limited number of questions. I chose to focus on the implications of the farming and how these people’s lives have changed since their work got the label “organic”. The selection of informants was partly planned, partly caused by circumstances. In São Severino I decided to interview adults rather than children and I interviewed mainly women, in part because of my interest in their situation, but also because I found them easier to approach in their daily work. I could easily participate in their daily activities to get a better understanding for their lives. I would have liked to interview women even in Triunfo, but as I was short on time and the man often is the one who receives guests, I only interviewed men. It also seems like men work with sugarcane and women with the garden plot, and as I was interested in sugarcane it was natural to interview the ones who actually work with this. This of course affects my results. There will be no chance to make comparisons on equal grounds, but I still consider it possible to make conclusions on the different situations of men and women because this was discussed in (some of) my interviews. Nevertheless it would have been very interesting to make a wider study with both men and women involved from both sites. At both sites I did not specifically seek landowners or land leasers but found representatives from both types. There is a wide

range of people – from a family who received their land through an occupation by MST (*Movimento dos trabalhadores sem terra*<sup>4</sup>), and people who never owned their land but work on the land of other people, to landowners who own many hectares of sugarcane and a distillery.

To summarize, the research methods were semi-structured interviews and participating observations. I made six interviews with farmers in São Severino and one with the vice-president of the environmental organization they were part of. I also accompanied some women in their daily work with the vegetables, helping out packing vegetables the day before the market and also went with one of the women to the market that started in the middle of the night and took part in the selling of her produce. In Triunfo I made eight interviews with sugarcane farmers, one interview with a cachaça worker, one with the president of an agro ecological organization that some of the farmers were members of and two interviews with the owners of the cachaça distillery. I also visited around ten plantations, the distillery and the farm where the barrels are made. Generally I recorded the interviews with two exceptions – one woman was unwilling to perform the interview if she was to be recorded and another time my mini-disc didn't work.

### **Obstacles and possibilities**

It is amazing how much ones language improves staying in a foreign country, surrounded by a foreign language and forced to speak it each and every day. When I first arrived in São Severino, my Portuguese was not yet what it later came to be, and there is a risk that I might have missed one detail or another due to linguistic weakness. However, I caught up on Portuguese, and when it was time for me to go to Triunfo, I had been in Brazil for a month and a half and was far more fluent than I was when I arrived. The people in São Severino were very helpful and taught me many things about Brazilian language, culture, agriculture and life itself. For that reason, I was better prepared when I came to my next field. There was some time between the stay in São Severino and the visit to Triunfo, which gave time to reflect over the work, interview practice and above all, over the questions and the way of asking them. So when arriving in Triunfo, the interview questions were better elaborated as well in terms of language and grammar, as in themes (see appendix).

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<sup>4</sup> Movement of landless workers (my translation).

At both sites, semi-structured interviews were used - a method that works very well in order to create a relaxed atmosphere between the interviewer and the informant. It also leaves some space for spontaneousness and digressions from the given theme. Between five and seven themes were elaborated and the conversation was held within these subjects. In case of silence questions were prepared that could be asked whenever the conversation was stagnating. The more I got to know my field, the easier it was to start up a conversation. There were some keywords on farming that easier opened up the dialogue. Some of the keywords were words that I initially didn't have in my vocabulary, but acquired gradually, such as the Portuguese words for cow-dung, chemical fertilizer, pesticide, herbicide, crop rotation and names of different plants. When I came to Triunfo, I didn't know how sugarcane was planted and grown (it is a perennial plant that often is intercropped with maize and beans the first one or two years), but when I obtained information about this it was much easier for me to connect with the following informants. It also seemed like this knowledge added some respect to my person, and it was easier to deepen the conversation on other fields when the question about intercropping could be dealt with rapidly. A simple fact is that it was easier to communicate the more I understood and harmonized with the culture and the more I learnt about the people and their way of living.

# Historical background

This chapter is a short historical and geographical background of the state of Pernambuco and the introduction of sugarcane plantations.

## Pernambuco – a short overview

The federal republic of Brazil (see map on page 14) is an enormous country, covering almost 50% of the area of Latin America and has an estimated population of 170 million people. It consists of 26 states where the richest are in the south-east, the poorest in the north-east, north and west (Höglund 2002). Pernambuco, situated in the north-east (see map on page 15), is one of the poorest states. Parts of the state are covered by the *Sertão* - a large, semiarid hinterland with a special kind of vegetation, *caatinga*, a thorny scrub forest. The Sertão is blocked from rain by low mountains and its altitude. Rains fall in the winter and the area that can look almost like a desert turns into a lush green – *if* rain falls. According to Ramon G. Jackson the dryness seems to have increased in recent years. A possible cause is the clearing of vegetation which exposes the land to sunshine in turn creating heat that stops condensation (Jackson 2005). The periodic droughts have caused large-scale migrations to the Amazon basin and to the urban centres of south-east Brazil. (The Columbia Encyclopedia 2005). Higher up in the mountains (1000 m above sea level) the climate is not so dry – instead of Sertão it is called “brejo” (marsh), even if it is not that wet. Nevertheless, the region is poor and many people, especially the young ones, migrate to and from the south in periods (Interview 20050607, Triunfo).

Pernambuco has a narrow coastal region (the littoral) with endangered Atlantic rainforest. Even here, the higher regions tend to be wetter and cooler. Here the land is mainly covered with sugarcane and maize fields as well as pasture (my observation 2005). Parts of the area are forest-covered, and there is a growing awareness of the importance of saving the Atlantic rainforest.

When the Europeans arrived in Brazil in the 16<sup>th</sup> century, Brazil wood became the first Brazilian export good, but was soon followed by sugarcane (1532), which was turned into sugar in one of the 120 factories (in the year 1600) in the Northeast. Sugarcane has been grown in Pernambuco ever since, and it was the reason why almost four million African slaves were brought to Brazil (Höglund 2002).





1. São Severino
2. Triunfo

*Map 2. Pernambuco*

Another aspect is that Brazil is a country under continuous change and though there are still many poor farmers in the north-east of Brazil, many tend to migrate to the urban centres, especially if they are educated. Unfortunately, the cities cannot provide everybody with a good life and many people end up in misery (Höglund 2002:38). Therefore I find it appealing to search for alternatives to urbanisation. Organic farming could be a step in the right direction, but only thorough research can show if this thesis is acceptable.

## **With bare feet in Brazilian earth**

In this chapter I will present the two localities in the field study and how they differ. Not only are people planting different crops, but their societies are also organized differently, wherefore everyday life doesn't look the same in São Severino and in Triunfo.

### **Two worlds in one country**

The two sites differ in various ways. I spent almost a month in São Severino, where people were mainly cultivating fruits, vegetables and flowers. Only few of the habitants had animals – even dogs were quite uncommon. Here I interacted with the citizens on a daily basis, which gave me admission to the “inner sphere”, that is, the women. Therefore I interviewed mainly women. The majority was living in the village and actively making part of a cooperative called *AMA Gravatá, Amigos do meio-ambiente de Gravatá* – “Friends of the environment in Gravatá” - which supplied the members with classes on organic farming and helped the farmers with the marketing of the products. I made six interviews and each of them took about half an hour including small talk. My visit to Triunfo was completely different. I had contact with and stayed at the property of the owner of a cachaça distillery of which my informants were sugarcane suppliers. I only had a few days to conduct my interviews, which resulted in up to three interviews per day. As I was staying in the town and the sites were spread out in and around town, I didn't have the same possibility to interact with my informants as I did in São Severino. I think that this is one of the contributing factors to why I mainly interviewed men, as it is common that the man in the household is the one who receives guests. Another factor must have been that sugarcane cultivating is a male occupation, whereas attending the vegetable plot is a female one. Some of the sugarcane farmers were members of different associations but were not organized in only one cooperative, like in the case of São Severino. I made ten interviews in Triunfo, each of them taking about half an hour, like in the former village.

### **AMA Gravatá and its members**

São Severino is a small village with 50 families. The village has a nick-name, *A Ruinha*, “the little road”. The houses are situated along the dirt road in two long rows, one house built close to the next one. In the middle of the village is a church, where mass is held each evening. Ten



of the families in the village are cooperating with AMA Gravatá. AMA is an NGO (non-governmental organization) that has existed for eight years and consists of 42 families who are small producers of organic greens. The purpose of AMA Gravatá is to protect the environment and also work for ethic, human and cultural matters. The aim is to go further towards auto-sufficiency and sustainability by using agroforestry and permaculture methods. There is also a branch of the organization called *Grupo das mulheres*, “the Women’s group”, which primarily is working on the opening of a bakery in São Severino and a vegetable plot for women only. Not all the families of AMA own their land, but work at other people’s farms where the landowners are not members of the organization. There is a huge variety among the members. There are landowners and landless farmers, men and women, young and old, enthusiastic environmentalists and unengaged workers, people who have always cared about nature and people who just recently found an ecological interest. Some of the members live in São Severino and the rest lives at other places in the same region. There are non-farming members as well, around 170 people who are paying 5 reais (around 17 SEK) per month for their membership. Some of these members are working in the organization whereas others only help financially. The activities of AMA include besides organic farming also cultural work, environmental education and administrative work. The ones who are not part of AMA usually work at different *fazendas* (big farms) or in greenhouses (interview 050505, Gravatá).



*Picture 1. One of the members of the Women’s group at her vegetable plot.*

## **Organic farming in São Severino**

The farmers usually have around 1-3 hectares of land (owned or borrowed/rent), which means that they are smallholders. Farming is not mechanized and usually the whole family is involved in cultivating the land. The children go to morning, afternoon or evening school depending on age and preference, which leaves much time to help out in the gardens. The harvest is carried in baskets on top of the head and natural materials, such as banana leaves and fibres are used for packaging of vegetables. Only few have animals for transport and carrying and only if their land is far away from the house.

All of my informants and most of the other farmers as well, stick basically to growing vegetables and fruits. Most of them plant several varieties of vegetables and use plant rotation and many of them have trees around the plantation or scattered on the garden plot. Two or three of the farmers I spoke to are also intercropping flowers with vegetables to attract insects. The flowers can also be used at the market to attract customers. Bananas are very important crops, and are also the first ones to go at the market. Other fruits that are cultivated are for example mango, papaya, jackfruit and acerola. Among vegetables the most common are manioc, carrots, xuxú (similar to courgette), ladyfingers and varieties of cabbage and beans along with lettuce, tomato, onion and cucumber.

People use various methods to cultivate their vegetables. The majority seem to stick to neat squares with one or two varieties in each, whereas others use all their imagination to invent new intercropping variations. The youngest informant, a boy aged seventeen, whose lifelong dream has been to become an organic farmer, never misses a chance to invent new combinations of vegetables. He says that he doesn't like the idea to separate vegetables and his present favourite is to combine broccoli, cucumber, maize and blackbeans. Recently he found out that carrot and coriander or cucumber and pepper did not get along so well in the ground. He has never been studying any theories on this kind of farming, but experiments freely because he knows that the plants need different nutrients and by intercropping and rotation the soil gets less depleted. He is also very well aware of the nourishing qualities of leguminous plants and therefore plants beans which he also uses for green manure (interview 050510, São Severino). Two hours away by foot from the village lives a man who is also part of AMA. He doesn't mix the vegetables in the plot but uses another method – he plants everything in small groups and has for example broccoli in three places so that he always has a reserve if one should get attacked by pests (interview 050518, outside São Severino).

By joining AMA, new crops have been introduced to the farmers. One of my informants says that she has learnt a lot about new vegetables, but she doesn't eat of

everything she plants because she doesn't like the taste of some of the vegetables (interview 050513, São Severino). For example, most people cultivate both parsley and coriander, but prefer to eat only of the coriander. At the market, on the other hand, the parsley is the more popular of the two. This can probably be explained by the fact that coriander has strong traditions in this part of the country and is an essential ingredient in most dishes. When I was invited to lunch with one of my informants she stated that "Food without coriander is incomplete" (conversation 050513, São Severino). Many customers at the market are from another social group (the prices at the market are slightly higher than on other markets because everything is guaranteed organic); some have their roots in other parts of the country and many seem very open-minded about new foods. This I noted when I once was put to sell vegetables at the market and people bought vegetables they had never seen and of which I didn't even know the name.

The produce is sold at four different markets – one in Gravatá, the closest town, and three in Recife, the capital of the state of Pernambuco. For the market in Gravatá, people go by collective transports – the bus. For the markets in Recife most participants rely on the shared bus to transport their goods, but some go by car. The bus leaves at ten pm the night before the market and arrives around two in the morning. At four the trade is already in full bloom.



*Picture 2. At the market in Recife.*

## **Life in São Severino**

I have spent most of the time with women and because of this learnt many genealogical words, mainly female ones. The family network is big and many of the people in the village are related. Most of the habitants are from the region and many of them are born in the very village. Mother's day was a gigantic holiday here. A big mass followed by a party where presents were handed out to every mother in the village. This was to me a sign that everybody knows how much work a mother does, but also that the party justified all this work. My impression is that a mother does everything and will always do. The majority of my informants say that women work more than men, probably because they work at the garden plot as well as taking care of the house, the children, cooking, cleaning and washing.

The elder children go to school in Gravatá, the closest town. The younger children in São Severino go to school in the morning, come home for lunch and are then out playing the whole day if they are not helping out in the garden. The women of the village help each other in looking after the children and often bring even young ones to the vegetable plot. If one is busy, she usually has a mother, sister or elder daughter to look after them.

Husband and wife leave the house early in the morning to go out and work in the vegetable plot (if he isn't going alone, leaving his wife to wash the family's clothes) and the wife returns earlier than her husband to prepare lunch. Lunch is the most important meal of the day. Everybody seems to eat the same things: rice, spaghetti, beans, salad and meat (or fish). The wife puts food on her husband's plate, whereby he immediately starts eating, she then serves the children and finally herself. Sometimes she doesn't even have time to sit down to eat, but takes her meals standing, always ready to accommodate the needs of her family. Breakfast consists usually of cuscus (made of maize and very dry) with milk, cheese, eggs or coked/fried banana and black coffee with a lot of sugar. Some people also have bread and/or crackers for breakfast. The evening meal equals breakfast more or less, sometimes with leftovers from lunch or a soup.

None of the houses has a telephone, but the village has one public phone at the end of the road. There is only tap water between 5 and 7 in the morning and the same time in the evening. As it is very cool and humid in the winter, clothes and shoes tend to mould and the washing hardly dries, which makes life even harder for the women who take care of the household. Village life starts at five in the morning and it gets quiet around nine or ten in the evening. There is a bus going to Gravatá twice a day, and though it isn't very far (14 km), the trip takes 1,5 hours.

I got many questions about whether I missed my family, how many sisters and brothers I had, if they were still living with my parents and so on. In São Severino the family is one of the most important foundations in life. Many people believed that I was 17-19 years old (I was one month from 24 when I visited the village), and they often asked if I had a boyfriend, though not if I had any children.

When I arrived I got my own little house, and the family with which I was having all my meals arranged that their daughter slept in my room as well – so that I shouldn't feel alone. People seem to be afraid of sleeping alone. When the parents stayed away one night the daughter wanted me to sleep in her house with her and her nephew, and when she was away her parents asked me if I would rather sleep in their house instead of sleeping alone in my little house. They understood perfectly well if I was feeling homesick – many of them hadn't even been to the closest city, Recife, and didn't long for it either. On the other hand there are many people who have left for the enormous city in the south, São Paulo, and have changed life completely. To me (maybe because of my background as a city-dweller) it seems to be very difficult to manage on the land up here in the Nordeste.

### **Socio-economy in São Severino**

None of my informants or the rest of the village is wealthy - every family has its own television and stereo and the houses are very similar. Usually there is a living room, kitchen and one to two bedrooms for families of 2-10 members, often not just parents and children but also grandchildren, siblings and/or nephews/nieces. Despite this standard of living, only one of my informants reports that his family actually starves from time to time. For survival they also get support in form of money from relatives (interview 050510, São Severino). Some of my informants say that they can sustain themselves solely on agriculture, whereas others declare that they have complementary jobs and/or get support from relatives. Only one of my informants is illiterate, but as I haven't done a quantitative study, this doesn't say much about the state of the whole village or the region. In the whole of Brazil, illiteracy is 15 % (Höglund 2002:5). There are evening schools where adults can learn mathematics and how to read and write. Sadly enough, many people are working so hard in the daytime that they are too tired to attend evening school. Illiteracy is much lower in the younger generation, though.

Most of my informants in this village have been working with conventional farming before, either on their own land or at other sites. Some of them tell about people they know or have heard of, who have become sick due to work with pesticides and chemical

fertilizers. The husband of one of the women I spoke to had been working with flowers in a greenhouse. He used to be ill but he is better now that they are planting organic vegetables and flowers (interview 050517, São Severino).

On the question why they are organic farmers most of my informants say that they are planting organically because it feels cleaner, that it is the best thing for the earth and humans, that it is healthy, good for the environment and even cheap. Two of them say that their conscience feels better now with the organic farming. Three of them say that they live off the vegetables, which gives them better health. Of the people I spoke to, all but one say that their economy is better now that they are organic farmers and being part of AMA Gravatá. The one that didn't, states on the other hand that the income is about the same, but that it is more secure now, which is a progress. Her family used to have two or three crops, which resulted in few, big incomes and not a very varied alimentation. Now they have fresh vegetables everyday and an equally spread out income instead. This is also a security against floods or draughts (interview 050506 São Severino). One of the others explains it like this: "Conventional farming is a gamble. When you go to the market you might sell some of your produce. When I sell organic vegetables, I sell 90 %, sometimes even more" (interview 050518, outside São Severino). I also talked about the environment with a few people in the village and two of my informants noted that there are more toads, insects and butterflies now that they are planting organically.

Generally, people seem to be quite happy where they are. Some would like better soil and are therefore willing to move, though not too far, and two of them state that they want an agroforestry combined with a vegetable plot, whereas others say that they don't want an agroforestry because the soil is too poor or because they say that the trees shade too much. This sounds a bit strange to me, as it is stated that agroforestry is a good farming solution for poor soil (Alavalapati et. al 2004:299)

### **Planting sugarcane in Triunfo**

I visited different sugarcane farmers around Triunfo, all of whom were (or were about to become) suppliers to the local organic distillery *Cachaça Triunfo*. The people here weren't living close to each other in one single village, but spread out over a larger area. The farmers I visited have areas around 2-3 hectares, some slightly bigger, around 10 hectares, of which 1-3 hectares is sugarcane. Sugarcane is the crop that rents most income. The other crops are mainly maize and beans, often even manioc and some garden vegetables and/or fruit trees.

Traditionally the sugarcane has been cultivated without chemical fertilizers, herbicides or pesticides, with local exceptions for cheap substances such as ant poison. Today the sugarcane that is to be processed at the cachaça distillery has to be organically grown.

The sugarcane is planted by being put into the ground. Each segment of the cane sprouts and gives rise to a new plant. During the first year the farmer plants maize and beans between the rows of sugarcane. The maize and beans can benefit by the nutrients that are not being used by the sugarcane. This only works the first year, though, as the roots of the sugarcane spread out leaving no space for other species. Sugarcane needs much sun to grow well wherefore the most common way is planting sugarcane on a field by itself. To be a supplier for Cachaça Triunpho, the farmer has to plant other things in addition to sugarcane. The most common plants are maize, beans and manioc, but it is also very common to plant fruit trees around the sugarcane field or have an orchard. The most common fruits are banana, avocado, orange, mango, cashew, graviola, jaca and pinha. Many farmers also cultivate coffee for house requirement. Some farmers have chickens but few have bigger animals such as cattle or donkeys.

Some of the suppliers of sugarcane are members of ADESSU – *Associação de desenvolvimento rural sustentável da serra da Baixa Verde*<sup>5</sup>, which is an organization with the objective that all its members will have an agroforestry system on the property. In contrast to other suppliers, the members of ADESSU generally already have a profound ecological knowledge and awareness.



Picture 3. Freshly harvested sugarcane.

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<sup>5</sup> Association of sustainable rural development of the Baixa Verde mountain range (my translation).

### **ADESSU – an agro-ecological organization**

As I found the association ADESSU interesting, I went to see the president of organization, who was very helpful and told me about the history and aims of ADESSU. ADESSU is a non-governmental organization without lucrative goals. The aim of the organization is to increase the quality of life of the members. They are striving to raise the number of organic farmers in the area of Baixa Verde (the area around Triunfo). They want to increase the environmental awareness of the farmers. The members of ADESSU are farmers. To become a member there are some criteria that should be fulfilled:

- not burn the fields
- not use chemical fertilizers
- not use pesticides
- within a year one has to initiate the creation of an agroforestry where fruit trees and endemic trees are mixed in.

Due to these criteria the number of members is growing very slowly. The definition of agroforestry in this organization is the following: A diversified production where one can harvest the year around. There should be some of everything. Leaves and other organic material should be left at the plot. The plantation should contain endemic trees and/or fruit trees. Fruit trees are always productive and have high priority in an agroforestry system. Endemic trees strengthen the soil.

Around 40% of the members plant sugarcane. The others are prioritizing vegetables. According to the president of ADESSU an area mainly covered with sugarcane and some scattered trees is not an agroforestry system because it looks too much like a monoculture. An agroforestry system should differ strikingly from conventional farming.

I later visited one of the members' garden which definitely differed from a conventional garden by containing all types of vegetation; grasses, shrubs, trees, flowers etc. in a planned but thoroughly mixed order.

Another definition, a bit more unspecific is the definition of agroforestry by Lundgren and Raintree, cited by Fergus Sinclair (1999:165) where

Agroforestry is a collective name for land-use systems and technologies where woody perennials (...) are deliberately used on the same land management unit as agricultural



crops and/or animals (...). In agroforestry systems there are both ecological and economic interactions between the different components.

Sinclair further visually presents varieties of agroforestry, where some seem very loosely connected to what ADESSU consider being agroforestry, for example “trees on crop-land”, “plantation forest/trees” and “trees on pasture/rangeland”. It is difficult to make a general classification of agroforestry practice and perhaps not even Sinclair would consider a sugarcane field with a few trees as an agroforestry system.

It is quite a long process to get into agroforestry and manage to live off it. Most of the members of ADESSU need to work with other things as well to sustain themselves. ADESSU holds courses about agroforestry and about keeping small animals. There is a project with 800 families involved where adults, youths and children attend courses.

The president doesn't think that the organization has helped its members to improve their economic situation but he says that that is not the purpose of ADESSU. Quality of life has increased, though, and some of the families who have come far with their projects have a better economic situation nowadays. The idea is to give people a better life with their families, not just improve their economic situation. This sounds very interesting to me as being part of the modern, western society, which normally makes a connection between an improved economic situation and better health and education. I find it sympathetic that ADESSU can see quality of life from another, non-monetary perspective.



*Picture 4. Sugarcane, banana and manioc in the agroforestry of one of the ADESSU associates.*

### **Fighting ants and strengthening soil in Triunfo**

Northeast Brazil and especially the Sertão has had some severe draughts throughout the centuries. Even Triunfo and its surroundings have suffered from this, which has led to that many farmers had to stop cultivating sugarcane. Additional factors to the decline in sugarcane production have been low prices and the closing of many sugar mills in the region (interview 050607 and 050609, Triunfo).

By introducing the opportunity to produce organic sugarcane for organic cachaça, the tradition of cultivating sugarcane is being re-established. In this region, where the land is very unsteady and the ground is full of stones, it is almost impossible to work with machines. Due to these difficulties and the costs of using machines, all work is done manually. Cutting sugarcane is very hard work as the straw is very sharp and often cuts the labourer. To simplify the work, it used to be common to burn the fields before harvesting the sugarcane. This implies that the straw of the sugarcane is being removed, leaving only the cane itself easy to harvest. This method damages the soil, though, and is not accepted in organic farming. The cachaça distillery provides its suppliers with courses and classes on organic farming, ensuring that the sugarcane is cultivated with ecological standards. Instead of burning the fields, the farmers cut the straw and either use them to cover the soil or to feed the animals.

After the introduction of courses on organic farming held by *Centro agroecológico Sabiá* (a national environmental organization) at the distillery, habits like the use of ant poison were terminated. Ants are a common problem for sugarcane cultivators, and as the ant poison is cheap compared to other pesticides, the farmers could easily afford it. Now that the farmers are being certified as organic they are not allowed to use this poison anymore. Other methods were however introduced in order to suit an organic approach, hence, instead of using chemicals; bread soaked in vinegar forces ants to diverge from the cane favouring the bread.

The fertilization of the soil is another problem for the smallholder. If the farmer does not have animals on his own property he will have to buy dung, which is expensive. This is leading to that some farmers are bound to using their earth without bringing back the nutrients to the soil – thereby exhausting the earth. The engenho São Pedro is planning to provide the suppliers with organic fertilizer, which is produced as follows: A by-product, *vinhoto*, is received when distilling cachaça. In its concentrated form the vinhoto is very strong and even toxic, but contains several important nutrients, among others calcium, manganese and magnesium. Usually the vinhoto is being discarded in the rivers, thereby

poisoning the water and killing fish. Mixed with water in the right proportions, though, the vinhoto is a useful fertilizer on the fields when used for irrigation. Another kind of fertilizer is being obtained when the pulp - which is excessive after the sugarcane is being squeezed - is being used as straw covering the ground beneath cattle and then mixed with the vinhoto. This fertilizer will maximize the production and ensure the retrieval of nutrients to the soil.

### **Perspectives on life in and around Triunfo**

The situation in Triunfo is somewhat different from São Severino. People are not organized in the same way, but what my informants all have in common is that they are all selling sugarcane (or soon to be selling) to a cachaça distillery called Cachaça Triumpho. Two of my informants are initiating agroforestry systems and are members of ADESSU where they receive help and advice. Very few are owners of their land and not many can survive on the land they are cultivating, but need to work on other people's land to sustain them. Fifty percent of my informants are illiterate and almost all of them long for education. There are alphabetizing schools in some of the areas around Triunfo, but in many places the roads are in a very bad condition and it is hard for the farmers to go anywhere, especially for those without a car. More than one states that farming is about surviving – nothing more than that. It is a quite sufficient life, but not a life in excess.

Most of my informants are born in the region and have parents who are also farmers. Half of them have had courses on ecology and organic farming before supplying Cachaça Triumpho with sugarcane. Fifty percent of my informants also have animals. Some have only chickens, whereas others have mules, cows and goats or sheep. Nearly all of my informants mix sugarcane with maize and beans the first year, but only half of them use crop rotation. It is common to have a spot that serves for sugarcane field and which never is included in the other crop rotation on the land except for the initial maize and beans.

Nearly none of them have ever used pesticides or chemical fertilizers and fifty percent have never burnt the fields before harvest. Some make their own, organic pesticides.

All of them have a vegetable plot along with a sugarcane plantation and eat of what they plant. A few never sell anything apart from sugarcane and plant vegetables and fruits only for household requirements. It seems common that the husband is working with sugarcane and the wife occupies herself with the vegetable plot. I didn't get specific information on this matter in all of the families.

This is what my informants answered on the question “Why do you work with organic farming?”. The number of people answering is put in brackets.

1. Chemical fertilizers are not as good as organic fertilizers (4)
2. It is good for the environment (3)
3. It is healthier (3)
4. It renders more money (3)
5. My father has never used chemicals (2)
6. Chemicals are bad for the health (2)
7. Fruit only tastes if it is natural (1)
8. Chemical fertilizers are not needed (1).

Life has changed somewhat now that people are producing sugarcane for the distillery. Fifty percent tell that they have more knowledge on ecology now even though most of them could have called themselves organic farmers already. I noted pride in almost everybody’s voices when they were talking about organic farming. Even though the situation seems to be that most of them are organic farmers because of tradition and lack of resources, they often sound very proud when they tell me that they have never used chemical fertilizers and slightly contemptuous when they tell about unsuccessful experiences with chemicals. Some of them also know people who became ill because of work with agro-chemicals. One of my informants seemed quite bitter over his situation and stressed that he plants organically only because he cannot afford anything else (interview 050607, Triunfo).



*Picture 5. A proud and enthusiastic sugarcane farmer who likes his profession too much to retire from planting even if he is limping on his right leg.*

What almost all of them have in common is that they believe that life will get better now that they are supplying the distillery with sugarcane and half of them have a positive view of the future. Two of them had grown sugarcane before but stopped because of the low payment, but started planting again thanks to seeds from the rural university of Pernambuco. One of the informants hopes for export of cachaça because he thinks that it would render more money not only for the distillery but also for its suppliers. There are of course different factors that conspire to a better life: two of my informants say that life would be so much better if only there were better roads so that they could transport their produce to the market and sell it there. One of them also longs very strongly for education, but there is no such thing in the area where he lives (interview 050606, outside Santa Cruz).

Even if the farming tradition has been more or less organic, the acknowledgement hasn't been high. Some of the interviewed say that the problem with the countryside is that people lack education and because of that are unwilling to pay more for organic fruits and vegetables. People tend to buy attractive fruits and vegetables irrespective

of origin. It is easier in the cities where people are more educated, more aware and have better economic resources and value organic goods. But not only farmers have a hard time. People say that it is difficult to stay in the region after higher studies. It is not easy to find a job. For many farmers an alternative lies in seasonal work. All of my informants but one knows at least someone who either left the region for good or takes seasonal jobs. Some of them have done so themselves as well. Only one had never heard about people leaving the region because of weak soil or other agricultural difficulties. Half of them believe that people will return: Some say that the reason for returning is that life is getting better in the region again, others because they think that people are fleeing the violence in the big cities.

### **Cachaça Triumpho – a local distillery**

Five years ago, the owners of Cachaça Triumpho bought and restored an old *alambique* (traditional cachaça distillery) in the outskirts of the small town Triunfo. As they were to be a small company, unable to compete with the big cachaça industries, they needed a unique product, well separated from the others on the market. They decided to focus on an organic, high quality, handicraft cachaça and organic *rapadura*<sup>6</sup> with different tastes. Cachaça Triumpho is the first organic cachaça in Pernambuco. By producing an organic cachaça the producer combines many values: a unique niche on the market, with a high-quality product, along with the conservation of nature and culture in the region of Baixa Verde.

Cachaça Triumpho produces pure cachaça, cachaça aged in oak barrels and liqueur. There is also the making of *raizada*, a traditional mixture of herbs and cachaça that is commercialized locally. The distillery also functions as an *engenho*<sup>7</sup>, where rapadura is produced, refined and mixed with coconut, milk, papaya, cinnamon, cloves, and peanuts. There is also the production of *mel de engenho*, a sugarcane syrup similar to honey. The production capacity of the distillery is currently 180 000 liters of cachaça a year. The owners of the company state that they are always searching for local, ecologically correct solutions. Therefore the ageing of the cachaça is performed in reused oak barrels. The smaller barrels, in which some of the cachaça is sold, are made out of organic wood planted in the region, by the son of the distillery's master of cachaça. The decoration on the bottles is made of the dried

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<sup>6</sup> Rapadura is boiled sugarcane syrup that is formed into bars.

<sup>7</sup> Engenho is a factory where rapadura is produced.

pulp of the sugarcane. Instead of using *caatinga*<sup>8</sup> for fuel the pulp of the sugarcane is being used. Their business philosophy includes the following:

- 1) Social commitment
- 2) Environmental commitment
- 3) Product quality – which is deeply linked to the two above.

The business ideas are fulfilling two purposes: to niche the company on a difficult market as well as offering fair working conditions. The social commitment, for example, even includes the people outside of the distillery. The owners say that it is important that the distillery is situated in a healthy environment with people who neither should suffer from poor conditions nor from bad health. The social commitment includes continuous education of the labourers and suppliers, always updating them on new topics about ecology, organic farming and respecting nature.

With the environmental commitment the company tries to make the production sustainable. If the distillery and the suppliers of sugarcane are respecting nature and the environment without exploiting the soil or polluting the air, ground and water, the production will have longer prospects.

The quality of the final product is also very important and deeply dependent on both the social and the environmental commitment. If the raw material is of good quality, there are good possibilities for the final product to reach a high level. This also counts for the social engagement – if there are healthy, observant labourers interested in their work, it will effectively improve productivity.

One of the owners of Cachaça Triumpho stated: “Many people think that organic farming is just cultivating without using toxic substances, but this is not enough. It is important to respect nature and also the closest neighbours. All this is the result of training, courses and information exchange. Gradually the mentality of the people is changing.” (interview 050607, Triunfo).

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<sup>8</sup> Caatinga is a native shrub that grows very slowly, yet often used for fuel in this area.

### **Working at the cachaça distillery**

To get a better understanding of the process at a distillery I went to the distillery in Triunfo to talk to some of the labourers (050602). The first one I met was a girl who worked with the packaging of rapadura. On the question if she noted any difference between organic and conventional sugarcane she answered no, which made me look for someone who maybe had more information on the matter. I found another labourer who was more interested in organic products. He is 36 years old, is married and father of three children. He has been working with sugarcane since he was 12 years old and always on the land of other people since he doesn't have his own land. His main occupation was rapadura for many years and now he is distilling cachaça. Besides this he is working on the fields of one of the owners of the cachaça distillery Cachaça Triumpho. In the beginning of his activity he used chemical fertilizers, always happy that the sugarcane grew beautiful, but the fertilizer burned his skin, he developed an allergy and got eczema and red eyes from using these substances.

He came in contact with organic farming by courses at the distillery and he came to appreciate and value the ecological ideas. He has developed his organic conscience over a long time. As an organic farmer he has learned to respect nature and to eat healthier. As he is deeply convinced of the ecological benefits of organic farming, he is always passing on what he knows about it to other people, spreading knowledge “like rings on the water” to use his own words. Today even his own father has a small organic sugarcane field thanks to the knowledge that his son provided him with.

My informant has been working on practically all of Triunfos sugar-mills – the majority using conventionally cultivated sugarcane. When he began to realise that organic farming is a correct and good alternative he became more conscious and interested and began paying more attention to the process of making rapadura. He observes the appearance, smell and taste. Subsequently the final product will be better with such an observant worker. During the years he has developed a sensibility to observe the differences between organic and conventional sugarcane.

During the production of rapadura it is important that the content of saccharose in the sugarcane is high. Conventionally grown sugarcane grows very fast and is low in sugar but high in water, which makes it difficult to produce a good rapadura. The syrup of this sugarcane is also thick and salty, due to the chemical fertilizers. Because of its thick consistency it takes long time to form the rapadura, which results in a burnt and dark product. Organic sugarcane is different. It is high in saccharine, which makes it easy to form rapadura. The taste is sweeter, the colour is lighter and the consistency is better.



Now he has learned how to make cachaça as well, and even here he can tell the difference between an organic and a conventional raw material. At the fermentation state the conventional sugarcane syrup has more bubbles, disperses more dirt and is thicker in the consistency in contrast to organic sugarcane syrup. If a supplier would try to sell his conventionally grown sugarcane under the name “organic”, this skilled labourer would be able to distinguish it. His knowledge therefore is another guarantee that the products of the engenho and distillery really are organic and pure.

He admits that organic sugarcane, fruits and vegetables grow much slower than the conventional one, but it is in nature’s own rhythm and he affirms that slow growth generates high quality. The organic products are usually not as beautiful as the conventional ones, which makes it difficult at the moment of selling the product. He says that people need to be enlightened and not just pick the most attractive product.

He believes that the ecological activities are going to improve the situation of the region of Triunfo. He says that people are being more and more conscious about the importance of an organic agriculture. He wants to be a person who spreads knowledge about ecology and organic farming to the people who are not yet convinced. His expectations of the future are that Triunfo will be a reference on organic production. He always buys organic products even if these are more expensive in order to raise his children in an organic environment.



*Picture 6. Cachaça liqueur filled in bottles at the distillery in Triunfo.*

## Discussion

In this final chapter the subjects that have been treated throughout the essay will be discussed and analysed. To facilitate the reading of this quite long part of the essay, it is divided into sections where some correspond with the questions of issue that were introduced in the beginning of the essay and others treat more general questions.

### **Environmentalism of the poor**

In Brazil, people seem to be organic farmers due to other reasons than farmers are organic in Sweden, for example. In northern countries, there is a choice. It is always the consumer who chooses if he or she wants organic products or not. If the demand for organic food is very high the way of farming has to be organic in a greater extent. I am afraid that Brazilian farmers do not always have the choice to either produce organic crops or not. Especially in the north-east there are many smallholders who have no choice but to work the land mechanically and without chemical substances just because it is cheaper this way. Generally, local consumers prefer good-looking products (often from a chemically treated monoculture) before locally grown, organic but less eye-catching products. Thus it is somewhat difficult for local organic farmers to motivate a higher price for their produce. Hence, the organic farmers depend on other, wealthier (and better educated) consumers than their local neighbours. Otherwise the will to limit the use of chemicals loses importance and there is always a risk that cheap chemical substances (like ant poison in Triunfo) will be used. These circumstances make it very interesting to study the possibilities of organic farming in developing countries.

Martinez-Alier (2002:235) states that “Quite often environmentalism is still seen, north and south, as a luxury of the rich rather than a necessity of the poor.” If one considers organic farming being a variety of environmentalism, the quotation points at something very important in this context, namely the question about *why* people are organic farmers. In the two cases treated in this essay, it seems like most farmers already were organic farmers who found out that they could actually benefit from this fact by getting the label “organic” on their produce and sell it to the right channels. Even the ones who had to change farming habits in order to become organic farmers could profit from the results. I would like to return to the above cited quotation and state that what is considered to be luxury by the rich often is a necessity of the poor: The farmers use environmentally friendly, simple but (for the body) trying methods and the richer citizens pamper themselves with fresh, expensive foods

that are free from toxics and help to soothe the consciences that are weighed down by thoughts about the environment.

### **The influence of organic farming**

Spontaneously, I want to answer “yes” quite simply on the question if organic farming can improve the situation for poor farmers, but this is a very open question and the answer is strongly depending on what can count for an “improvement”. As I presented earlier, 50 % of my informants in Triunfo state that they have more knowledge on ecology now than before. This can count for an improvement, but only if one values knowledge about ecology. The increased knowledge can be valuable for the individual and his or her interest but also valuable when it comes to decision-making on farming; what to grow, how to grow it and whereto to sell it. If there would be no forum or market for organic produce, then perhaps the increased knowledge on ecology would be a source of frustration. In this case, however, I’d like to state that the improved awareness is something positive, not least because the people themselves perceive it as such. Secondly, almost all of the interviewed farmers in Triunfo believe that life will get better now that they are supplying the distillery with sugarcane. “Better” must here be understood as improved economy – not only that the income will be higher (sugarcane for the making of cachaça is more expensive than sugarcane for rapadura – even if it is exactly the same plant) but also that there is an agreement between the seller (the farmer) and the buyer (the distillery) that is supposed to guarantee the farmer’s income. Life will, in short, become more secure for the farmers. In São Severino all of my informants except one say that their economy is better now. The one whose economy isn’t better says that her family used to have two or three crops, which resulted in few, big incomes and not a very varied alimentation. Now they have fresh vegetables everyday and an equally divided income instead. This is also a security against floods or draughts. About 50% of the informants in that village tell that they have learned about new vegetables, which can be seen as something positive. Equally many say that they live off the vegetables they plant, which gives them better health. And the health aspect is another side of the coin. Some of my informants know people who became ill because of work with agro-chemicals. By planting organically, they won’t expose themselves to these kinds of toxics, which means something less to worry about.

In some cases, the prerequisite for organic farming in Triunfo was that the rural university of Pernambuco provided some farmers with sugarcane seeds so that they could take

up the cultivation of sugarcane again. It is also important to attend courses or join groups who deal with organic issues if one is about to become an organic farmer or get certified. Another requirement is a conscious consumer. I doubt it that even if Triunfo's farmers would cultivate ever so organic vegetables and sugarcane, their economy wouldn't change if they continued selling on the ordinary markets, as a very important part of organic farming is the labelling of the produce and the enlightening of the customer. Therefore in the end, it seems like the most important factor is that the consumer is educated and knows to value the products offered for sale or he/she will not be willing to pay the higher price.

The benefits of organic farming seem to be economical and ecological as well as social (both on a personal and a collective level). Two of my informants in São Severino have noted that there are more toads, insects and butterflies now that they are planting organically. Two of my informants say that their conscience feels better now with the organic farming. One of my informants was very happy to be part of AMA because it gave her a chance to meet new people from foreign countries and that it made her happy to see that other people were interested in her village and in her work (interview 20050513, São Severino).

What they do have in common is that they say that organic food is healthy for humans and nature and that it is natural. The people here are catholic and very religious (compared to (my) everyday life in Sweden) and believe what God gives is natural, which might add another dimension to the ecological thinking.

Very few of the farmers that I met have ever worked with conventional farming – and of these most live in São Severino. It would therefore be wrong to say that there has been a transition from conventional to organic farming, respectively an entering of an organization that values organic farming. Rather, I would say, there has been an acknowledgement of the work these people are performing and an effort to deepen these people's knowledge on ecology. Many smallholders in Northeast Brazil have more or less been obliged to organic farming due to lack of resources. Some of the farmers have always had an environmental view, either thanks to insight or because of fear of the unknown, whereas others have used chemicals whenever these were affordable. What I can discern through my studies is that smallholders do benefit from the "organic" labelling of their work, rather than through the transition from conventional to organic farming. There hasn't been much of a change of the farming methods, but there have been other changes. In the case of São Severino the most striking difference between "now" and "then" (i.e. after joining the environmental organization AMA Gravatá) is that the farmers now sell their produce directly to the consumer without the detour through middlemen's hands and that their income has

been spread out evenly over the year thanks to diversified cropping. Thanks to this diversification they can also eat what they plant. In Triunfo the major difference are the crops and the more or less guaranteed buyer of these: thanks to the distribution of sugarcane seeds and the opening of a distillery there is a new market for the farmers. What both sites have in common is that the ecological awareness of the people is increasing through the environmental education provided by non-governmental organizations and that old knowledge is being revalued.

It is interesting that organic farming, in an indirect way, as well as in a direct way, can affect people's lives to such an extent that was observable in Brazil. In São Severino the direct benefits are visible: There is a high variety of crops, people are more aware of the environment and take better care of their waste, for the people formerly unknown crops have been introduced and, not completely irrelevant, most participants' economy is better due to direct sale. The indirect benefits are mainly thanks to the organization, through which the introduction of organic farming was made; by joining in an organization like AMA new discourses and meanings are being formed, there is inclining contact with the surrounding world<sup>9</sup> and people are helping each other. New forums, like the women's group, are created, which might not have happened without the energy of an organization (interview 050505, Gravatá).

One can still raise a broader question if nature really benefits in total by the organic farming of the smallholders in question. The most direct benefit for the farmer is a raised income. This income is often spent on material goods such as televisions, stereo kits, clothes and other things. Many of my informants respond that they don't buy organic food when they go grocery shopping. Neither do they prioritize wholegrain products before polished ones because wholegrain food is more expensive. This implies that nature might not benefit as much as one could wish because the augmented purchasing power is used for potential environmentally hazardous products. Thus new questions on modernity and consumption are raised. On the other hand, the remaining consequences, like education and quality of life and the potential education of coming generations, are positive to such an extent that it seems like a benefit in the end. And, by the way, who am I to judge what people do with their raised income?

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<sup>9</sup> Through the international organization Friends of the Earth contacts between the members of AMA Gravatá and people from Sweden and Canada (amongst others) are established.

### **How could organic farming contribute to equality?**

In the case of São Severino there is a connection between organic farming and awakening interest for questions about equality between the sexes. This is both because women nowadays also leave the house to take care of the gardens instead of staying at home taking care of the house and the children, but also because of new forums, like the women's group of AMA Gravatá, where questions about women's health etc. are dealt with and where there will be a vegetable plot with only women working. One of my informants says that she helps her husband with his land in her daily work, and it is always he who decides what to plant (interview, São Severino 050509). At the women's vegetable plot, now she can also participate in the decisive part of the gardening. Unfortunately it is not only positive for the women now that they can work outside the house. The majority of my informants in São Severino say that women work more than men, probably because they work at the plot as well as taking care of the household and the children, as well as cooking, cleaning and washing. Some of them think it is bad, others say that that's the way it is and it doesn't matter and others say that that's how things are and they will never change even if they would like it to. I discussed the question of equality with some of the women in São Severino and they talked very positively about being employed outside the home as a good way to liberation. This lies in concordance with a study that Clara Araújo and Celi Scalon carried out – where 93 % of the women and 85 % of the men answered that work is the best way for a woman to make herself independent (Araújo & Scalon 2005:253-254).

Even though the women speak about this as a very good thing, I feel somewhat worried that they'll enter the trap of being a double-working wife, who apart from working outside the whole day also takes care of the whole household, including cooking and looking after the children – and this is in a village where there is only running water a few hours a day and all the washing has to be done manually – a very hard work that I've never seen a man do. In Triunfo I never spoke to any woman about these topics, hence I cannot express myself regarding the state of such matters in this region.

### **How does organic farming affect national migration?**

The interviews in São Severino did not consider the question about urbanisation to any large extent. Many people have brothers and sisters or children who have migrated and now live in one of the major capitals, like São Paulo, but there was never an explicit discussion on this theme. What turned out to be quite clear, though, was that there is a high migration rate

towards the cities, and that the people who still lived in the village did so generally because of a strong bond to the place. Seasonal work was never discussed in São Severino, but during the research work in Triunfo the topic soon came up and it turned out that some of the interviewed had actually been to other states to work for a shorter time. Nearly all of the informants know at least someone who either left the region for good or takes seasonal jobs every now and then. It is difficult to make a living in this region, especially if one wants to work with something that requires higher studies, but for the small-scale farmers, life is always a struggle due to small land areas and draughts.

Half of the informants believe that people will return sooner or later - partly because living and working conditions are getting better and partly because the citizens are fleeing the violence in the big cities. I believe that the Northeast has two options: either it should be modernized in order to affect people to stay in the region by creating employment even for people who are not farmers, or organic farming should be developed, subsequently evoking an interest for ecology. If the latter is done, a bigger market for ecological goods might open up and the farmers will find it easier to find customers who value the qualities of organic food and are willing to pay a higher price. If it turns out to be economically profitable to be an organic farmer, there will probably be a will to keep the land free from chemicals and maintain a high biodiversity. My hopes are that organic farming can be a way to prevent the need for national migration and seasonal work. Migration should be a choice but not a necessity for a decent life.

### **Connections between smallholders and the world system**

An interesting question – wide enough to provide a fundament for another study – is what the effects of the export of sugarcane products are and what connections there are between smallholders in the south and the world system. Brazil is already considered a semi-periphery, which means that the country is also taking part in certain typically peripheral activities, such as export. There is always a risk that an export country ends up as a dependent periphery - that is, exporting cheap raw-materials to the core where these are refined and sold for a higher price. This is not exactly the case in Triunfo. The final product (cachaça and rapadura) is refined in the very same region where the raw-material (sugarcane) is grown (a fact that adds a certain feeling of ecological exclusiveness to the product) and can consequently be sold for a higher price from the beginning.

The production control and the refining could be ways to emancipation from the destiny of being depending on the core. Even in regard to this, there will still be inequalities. The question is how the sugarcane farmers, and not just the owner of the distillery, can benefit from this. The producer of raw-materials will always be last in line and hence get the smallest share of the profit. Even though Brazil is considered “semi-periphery” and not simply “periphery” there still has to be somebody representing the periphery. These people have the least attractive jobs and live under simple conditions: for example small-scale farmers in the semi-arid Northeast. The exporter will function as a local core and the producers will be in the periphery – both locally and globally. The term “local” as a prefix before the words core, periphery or semi-periphery is used in order to distinguish the relations within a country or society from the relations between countries, continents or other larger units in accordance with Hornborg’s reasoning (see the above chapter “Theoretical platform”, page 8).

If the terminology core – periphery is being used, one problem has to appear sooner or later, and that is to be exact, the question about what to name the changes in the periphery. Or more specifically – if the status of the periphery is being raised, do the people here still belong to the periphery or is there a new periphery somewhere to which the former periphery now is a core? This must be illustrated with an example, and why not take the farmers in the village Sao Severino? Before they entered the organization AMA, most farmers depended on few crops that were sold through middlemen’s hands and received their income sporadically. Now the farmers have more diversified crops, choose what to plant and sell the produce directly to the customer, which gives the smallholders more control and a more secure income. There has been a progress, but the question is if they still belong to the periphery or if there is another group that has now taken the place of being the beginning of a long “production chain”.

To sum up, new questions are always born from old ones and I feel that it would be fruitful to follow up this study in a few years. There are also many other interesting questions of issue that may not be directly connected with the purpose of this essay, but still are worth to examine. Through this I want to state that the villages analysed in this essay provide a future researcher with a rich flora of material of study interest.



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## **Interviews**

All fieldwork is done in or around São Severino, Gravatá and Triunfo in Pernambuco, Brazil 2005.

050505, Gravatá  
050518, outside São Severino  
050506 São Severino  
050509, São Severino  
050510, São Severino  
050513, São Severino  
050517, São Severino  
050606, outside Santa Cruz  
050602, Triunfo  
050607, Triunfo  
050607 and 050609, Triunfo

## **Internet**

Jackson, Ramon G. 2005. <http://adams.patriot.net/~eastlnd2/rj/pl/ser/sertao.htm>.

051021:13.45.

The Columbia Encyclopedia, Sixth Edition. 2005. <http://www.bartleby.com/65/se/sertao.html>,

051021:13.44.

## **Graphics**

Map 1. Brazil: [http://geocities.yahoo.com.br/brasil\\_tur/mapa.gif](http://geocities.yahoo.com.br/brasil_tur/mapa.gif) 2005-12-14.

Map 2. Pernambuco: <http://www.v-brazil.com/graphics/pernambuco.gif> (modified by Beckmann) 2005-12-14

All photographs by Katharina Beckmann 2005.

# Appendix

## Interview questions in São Severino

1. Name, age, number of children, place of birth etc.
2. How does your farming work?
3. How does the cooperative work? Do you need other work besides your farming?
4. Why do you occupy yourself with organic farming?
5. What are the effects of your farming? How has your life changed?
6. What ideas do you have about the future?

## Interview questions in Triunfo

1. Name, age, number of children, number of years at school, literacy, contact with organic farming, part of any organization, alimentation?
2. How long have you been an organic farmer? What courses have you visited? How and where did you learn farming? Why are you an organic farmer? Do you have any animals? What and how do you plant? Are you using crop rotation?
3. Do you plant other things besides sugarcane? What? Do you mix your sugarcane with other plants in the field or do you plant everything separately? Do you sell other products besides sugarcane? What did you grow before sugarcane? Have you ever used chemical fertilizers and/or herbicides/pesticides? Can you see any environmental or health effects from your farming? What kind of fertilizer do you use?

4. Is it your own or somebody else's land? Do you also work for other people? Do you know anybody who had to move away from the region because life on the countryside was too hard?

5. How did your life change when you started selling your sugarcane to Engenho São Pedro? How has your financial situation changed since you began with organic farming? How is your quality of life? Do you eat different things now compared with before? Do you think about the effects of organic farming? Do you think much about the environment and about health? Do you see any changes in the nature? Do you know anybody who has stopped planting organically? What do the conventional farmers think about your work?

6. Do you like your work? What could be better? Do you talk to other people about your work as an organic farmer? Have you learnt anything new? What do you think about the future? Are your children interested in organic farming as well?