Agroenergy:

Myths and Impacts in Latin America
Organization
Pastoral Land Commission
Network for Social Justice and Human Rights

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Recent studies on the negative impacts of fossil fuels have contributed to agrofuels becoming one of the most important issues of the day. Currently, the global energy matrix is composed of petroleum (35%), coal (23%), and natural gas (21%). Just ten of the wealthiest countries consume close to 80% of the energy produced in the world. Among these, the United States is responsible for 25% of the atmospheric pollution produced by this energy.

Brazil is the fourth largest producer of carbon dioxide in the world. Its contributions to global warming are largely a consequence of deforestation of the Amazon rainforest, which accounts for 80% of the country’s carbon emissions. The expansion of monoculture agricultural production tends to exacerbate this problem, as it expands the agricultural frontier and places ever larger pressures on the Amazon and the Cerrado (savannah). Brazil is practically self-sufficient in energy production. As a result, the central objective of the expansion of agroenergy production is to meet the needs of other countries. This will result in the acceleration of global warming instead of contributing to the preservation of the planet.

The acceleration of global warming is a fact that places all life on our planet at risk. As a result, it becomes necessary to demystify the propaganda promoted by corporations in regards to the supposed benefits of agrofuels, which are pointed to as the primary solution. The concept of
"renewable" energy should be discussed from a broader perspective that considers the negative effects of these energy sources.

Large agriculture corporations, biotechnology companies, oil companies and the automotive industry, taking advantage of the legitimate concern of international public opinion, are now pursuing agrofuels as an important source of profit.

Since no alternative source of energy would be capable of meeting the current energy demand, a shift in the current patterns of consumption, principally in the countries of the Northern hemisphere, is indispensable. However, the option of reducing consumption has been practically excluded from the official debate about the means by which atmospheric pollution may be diminished. The first step should be massive investment in public transport, well beyond policies of rationalization, waste containment, and energy efficiency. Implementing a diversity of alternative sources that are truly renewable is imperative.

During the 1920s, after the First World War, a phase of capitalism known as "Fordism" was constructed, based on a powerful automotive industry created by Henry Ford. The industry had strong ties to oil companies. "Humanity during the industrial era sacrificed time, space, natural resources, and, sometimes, their own lives to machines, to which public relations campaigns attributed magical qualities," describes journalist Antonio Luiz Costa, in the magazine *Carta Capital.*

In 1973, vehicles were responsible for 42% of carbon dioxide emissions. This rate increased to 58% in 2000, and the tendency continues. Analysts estimate that, within 25 years, the global demand for oil, natural gas, and coal will increase by 80%.

The World Health Organization has warned that 1.2 million people die, and 50 million people become disabled per year due to the consequences of car accidents. In the United States, automotive accidents are the principal cause of death for ages younger than 44 years old. In that country, vehicles occupy 43% of all urban space; 33% of which are streets, and 10% of which are parking lots. 770 cars exist for every 1000 people.

To think that the solution to saving the life of our planet is by continuing to supply the same quantity of vehicles with fossil fuels or agrofuels is, in the least, ingenuous. The extensive production of agrofuels causes serious environmental problems, as we will see in this text.

**Wars over energy sources**

The majority of wars fought in previous decades have had as their main objective the control of energy sources. In this scenario, the energy policy of the United States, followed by other countries in Europe, has the ability to determine armed conflict or invasion of foreign territories as policy options. Beyond representing the central theme of its foreign policy,
the government of the United States seeks to guarantee large corporations’ monopoly control over energy sources (traditional or alternative).

Many armed conflicts and processes of militarization also involve an interest in the control of natural water sources, which, among other functions, is also capable of producing energy.

According to United Nations (UN) estimates, 1.2 billion people do not have access to potable water. Each year, close to 2 million children die from illnesses caused by contaminated water. In the poorest countries, one of every five children dies before they reach five years old due to illnesses related to water contamination. The UN Special Rapporteur on the Right to Food, Jean Ziegler, characterizes this situation as a “silent genocide.”

Water is an irreplaceable natural resource. If the current rate of destruction of natural water sources continues, half of the world’s population will have no access to potable water within the next 25 years. The increase production of agroenergy tends to worsen violations of the fundamental right of access to water for human consumption.

As a result, a lifestyle based on high energy consumption is guaranteed for the privileged sectors of central and peripheral countries, while the majority of the world’s population is left without access to basic services. According to the World Energy Statistics Institute, per capita consumption of energy in the United States is 13,066 kilowatt hours (kwh), while the global average is 2,429 kwh. In Latin America, the average is 1,601 kwh.

With the privatization of these services, there is an even greater interest on behalf of the majority of transnational corporations to profit from these policies. The private monopoly of energy sources is guaranteed through clauses included in Free Trade Agreements (bilateral or multilateral), in policies implemented by the World Bank, and by the International Monetary Fund (IMF), which stimulate the mercantilization of natural resources.

In Latin America, the Inter-American Development Bank (IDB) stimulates the agrofuel production through the argument that we should utilize our “enormous potential in arable land, climactic conditions, and labor costs.” The Bank recently announced its intention to invest US$3 billion in private agroenergy projects.

The Initiative for the Integration of Regional Infrastructure of South America (IIRSA) also promotes a series of large energy projects. As a result, this model of integration follows the historical pattern of colonization, in which the role of our countries is to export cheap, raw materials and natural resources to central countries.

In this context, the role peripheral countries are meant to play is to generate cheap energy for rich countries, which represents a new phase of colonization. The current policies for the sector are sustained by the same elements that characterized colonization: the exploitation of territory, natural resources, and labor.
It is necessary to demystify propaganda about the supposed benefits of agrofuels. The concept of “clean” and “renewable” energy should be discussed from a broader vision that considers the negative effects of these sources.

**Production of ethanol based on sugarcane and corn**

In the case of sugarcane-based ethanol production, the cultivation and processing of sugarcane pollutes the soil and sources of potable water as it utilizes large amounts of chemical products. Each liter of ethanol produced in a factory, in a closed circuit, consumes close to 12 liters of water. This quantity does not include irrigation, which consumes even more. As a result, the production of agroenergy represents a greater risk for scarcity of natural sources of water and aquifers.

The process of ethanol distillation produces a toxic residue called stillage. For each liter of ethanol produced, between 10 and 13 liters of stillage are produced. One part of stillage may be utilized as fertilizer, if diluted in water. Because of this, researchers warn that this substance may contaminate rivers and sources of underground water. If the annual production of ethanol in Brazil is 17 billion liters, the result is at least 170 billion liters of stillage deposited in sugarcane fields.

Burning of sugarcane serves to ease the labor process during cane harvest. However, this practice destroys microorganisms in the soil, pollutes the air, and causes respiratory illnesses. The processing of sugarcane in factories also pollutes the air through burning of bagasse, which produces soot and smoke. The National Institute of Spatial Resources (INPE) has declared an alert in the sugarcane fields of São Paulo (the largest producer of sugarcane in Brazil), as sugarcane burnings have diminished relative air quality to extremely low levels, between 13% and 15%.
In addition to environmental degradation from the indiscriminate use of natural resources, sugarcane monoculture will dominate some of the best agricultural lands. The expansion of this monoculture will substitute lands meant for food production. In Brazil, the production of sugarcane has invaded lands meant for resettlement under Land Reform, and lands of Indigenous communities.

In the case of corn-based ethanol, the main problem is the risk that this production presents for food sovereignty. The difference of corn in relation to other crops is that it is one of the most common grains used for human food consumption. Therefore, its use as fuel should generate an increase in the prices of a variety of food products that utilize corn.

Recently, the government of the United States announced that it seeks to substitute 20% of its gasoline consumption with ethanol. Currently, corn provides the basis of ethanol production in the United States. The goal of the Bush administration is to achieve an annual production of 132 billion liters of ethanol by the year 2017. To reach this amount, the US (the largest corn producer in the world), would have to use its entire production (268 million tons of corn) and would still need to import close to 110 million tons—equivalent to total annual corn production in Brazil.

In 2006, the price of corn on the global market rose by 80%. In Mexico, the increase of corn export to supply the US ethanol market caused an increase of 100% in the price of tortillas, which represent the principal food source of the Mexican population. In China, foreseeing a food supply problem, the government prohibited corn-based ethanol production.
The March 2007 edition of the magazine Globo Rural published an article that stated, “In global terms, corn cultivation will advance into areas of soy, wheat, and cotton production, which will cause a generalized increase in the price of these products in a true domino effect.” Wheat and rice prices have already risen, as the population looks for alternatives to high-priced corn, thereby increasing the demand for these cereals.

High corn prices should also affect the costs of avian, cow, and pig production, since corn represents 75% of all the grains utilized for animal rations. This will cause an increase in the price of products derived from livestock, such as milk, eggs, cheese, butter, etc. According to Clóvis Puperi, the director of the Brazilian Union of Aviculture, “No cereal has the capacity to rapidly substitute corn without causing an earthquake in the market.”

Another threat is the elevated quantity of water utilized for the production of corn. According to Professor Pimentel of Cornell University in New York, for each kilo of corn produced, 500 to 1500 liters of water are used. And to produce one liter of corn-based ethanol, one needs 1200 to 3600 liters of water. In addition, ethanol factories in the United States are fueled by coal or gas energy, which results in more carbon emissions into the atmosphere.

**Vegetable diesel fuel based on soy and palm oil**

In the case of soy, the most optimistic estimates indicate that the balance of renewable energy produced per unit of fossil fuel energy spent during cultivation is 0.4 per unit. This is due to the high consumption of oil for use in fertilizers and in agricultural machines. In addition, soy expansion has caused enormous devastation of forests and savannah, destroying biodiversity in various countries, including Brazil.

Even so, soy has been presented by the Brazilian government as the main crop to produce agrodiesel. “The cultivation of soy sticks out like a jewel on the crown of Brazilian agribusiness. Soy could be considered the cradle for the opening of biofuel markets,” affirm researchers from the Brazilian Business for Agricultural Research (Embrapa).

The government estimates that more than 90 million hectares of Brazilian land could be used to produce agrofuels. In the Amazon alone, the proposal is to cultivate 70 million hectares of palm for palm oil. This product is known as the “diesel of deforestation,” as its production has already caused the devastation of large areas of forest in Colombia, Ecuador, and Indonesia. In Malaysia, the largest producer of palm oil in the world, 87% of forests have already been destroyed. In Indonesia, the government is attempting to expand palm oil production to 16.5 million hectares of land, which may result in the destruction of 98% of its forests. Diverse environmental organizations warn that monoculture expansion in forest areas represents a much larger factor for global warming than carbon emissions from fossil fuel combustion.

Beyond the destruction of agricultural lands and forests, there are other polluting effects of this process, such as the construction of transport and
storage infrastructure, which demand large quantities of energy. It would also be necessary to increase the use of agricultural machinery, agricultural inputs (fertilizers and pesticides), and irrigation in order to guarantee an increased supply of the product. In the case of palm oil, a study of the Delft Hydraulics institute underlines that each ton produced releases 33 tons of carbon dioxide emissions. Therefore, this vegetable fuel pollutes 10 times more than common diesel.

Production of biomass based on cellulosic material

New research has attempted to introduce the so-called “second generation” of agrofuels onto the world market, developed from a base of cellulosic material that would be available in approximately ten years. The idea is that agrofuels produced from food crop sources could be rapidly substituted by cellulosic material, avoiding the risk of impacts on food security and food sovereignty. However, if the current rate of expansion of corn, sugarcane, soy, and palm (the principal raw material sources for agrofuels) continues, the impacts within the next ten years will be enormous.

According to the International Food Policy Research Institute, food prices could rise from 20% to 33% by 2010 and from 26% to 135% by 2020, if the current trend of expansion of agrofuel production continues. According to the FAO (Food and Agriculture Organization), close to 824 million people do not have access to adequate food. This number may rise to 1.2 billion people as a result of rising food prices.

It’s also a mistake to think that cellulosic agrofuels would not utilize agricultural lands, because they will be produced from organic residues from corn, sugarcane, and other crops. However, what are called organic residues are actually natural fertilizers that serve to feed nutrients to and protect the soil. If this material is used for other ends, it would be necessary to apply chemical- and petroleum-based fertilizers, which would annul any positive effects in relation to global warming.

Biomass based on cellulosic material is being developed principally through the production of genetically-modified trees. Corporations that produce genetically modified crops are developing non-consumable types of crops that are meant only for agrofuel production. As there are no ways to avoid contamination of native species by GMOs, this practice places the production of food at risk, and could worsen the problem of hunger across the world.

In the United States, ethanol production is based on a type of genetically modified corn, different from corn for human consumption. Farmers admit
that there is no way to control contamination, since they use the same areas
to grow corn for both ethanol production and food consumption.

The expansion of agroenergy production is of great interest to companies
that produce genetically modified organisms such as Monsanto, Syngenta,
Dupont, Dow, Basf, and Bayer. These companies hope to obtain greater
public acceptance through promoting GMOs as “clean” sources of energy.

In Brazil, the group Votorantim has developed technology to produce
genetically modified sugarcane for ethanol production through two
companies, Alellyx and CanaVialis, which recently formed a partnership with
Monsanto. This agreement will allow Alellyx and CanaVialis to have access
to genetically modified soy and cotton genes developed by Monsanto, in
order to apply the technology in sugarcane production.
The sugarcane industry was the sector of agribusiness that most grew in 2005. In 2006, more than 425 million tons of sugarcane were produced throughout six million hectares of land. For 2007, the Ministry of Agriculture forecasts an increase of 10% in the cultivation of sugarcane. This trend towards growth should continue. Brazil is currently the largest global producer of ethanol, and reached a record 17.4 billion liters in 2006. It is estimated that by 2012 Brazil’s annual production of ethanol will be 35 billion liters.

The cycle of land invasion in Brazil tends to begin with deforestation by large agribusiness, including the use of slave labor, and continues to include cattle farming and soy production. Currently, with the expansion of ethanol production, this cycle is then complemented by sugarcane monoculture. Rather than for ethanol, public agricultural lands should be utilized for the production of food crops, for reforestation of areas degraded by large landowners, and for land reform, in order to meet the historic needs of close to five million families without land.

Many large foreign companies have acquired plantations in Brazil, including Bunge, Noble Group, ADM, and Dreyfus, in addition to foreign businessmen such as George Soros and Bill Gates.
The sugarcane industry generates unemployment

In many regions of the country, the increase in ethanol production has caused the expulsion of small farmers from their lands, and has generated a dependency on the so-called “sugarcane economy,” where only precarious jobs exist in the sugar fields. Large landowners’ monopoly on land blocks other economic sectors from developing, and generates unemployment, stimulates migration, and submits workers to degrading conditions.

Despite propaganda about “efficiency,” the agroenergy industry is based on the exploitation of cheap labor and even slave labor. The workers are remunerated according to the quantity of sugarcane cut and not by the hours worked. In the state of São Paulo, the largest producer in the country, the goal of each worker is to cut between 10 and 15 tons of sugarcane per day.

In the state of São Paulo, workers receive $1.20 dollars per ton of sugarcane cut and packed. To receive $220 dollars per month, workers must cut an average of 10 tons of sugarcane per day. To meet this goal, a worker must swing their scythe 30 times per minute, during eight hours of work per day.

According to Professor Pedro Ramos of University of Campinas, in the 1980s workers would cut close to 4 tons per day and earned the equivalent of $4.50 dollars per day. Currently, to earn $3.50 dollars per day, it’s necessary to cut 15 tons each day. New technology for genetically modified sugarcane, which is lighter and has a higher quantity of sucrose, has resulted in higher profits for landowners and more exploitation of workers. According to research from the Ministry of Labor and Employment (MTE), “previously, 100m² of sugarcane weighed 10 tons. Now, it’s necessary to cut 300m² of sugarcane to add up to 10 tons.”

Slavery and workers’ deaths

This pattern of exploitation has caused serious health problems and even death of workers. Between 2005 and 2006, 17 deaths were registered due to exhaustion from cutting sugarcane. “Ethanol in Brazil is bathed in blood, sweat, and death,” affirms researcher Maria Cristina Gonzaga of Fundacentro, an institute within the Ministry of Labor.

In 2005, 450 deaths were registered by the MTE in the plantations of São Paulo. The causes of these deaths include assassinations, accidents in the precarious transport to the plantations, illnesses such as cardiac arrest and cancer, and severe burns during the fires set to the crops. Maria Cristina Gonzaga estimates that 1,383 sugarcane workers died in such situations between 2002 and 2006.

Between April and May of 2007, three workers’ deaths were registered in the sugarcane fields in the state of São Paulo. José Pereira Martins, 52 years old, died from a heart attack after cutting sugarcane in the city of Guariba. Lourenço Paulino de Souza, 20 years old, was found dead at São José plantation, in Barretos.
On April 15th, a worker died and another was seriously wounded, when they were affected by flames of an attempted controlled burn in the Santa Luiza plantations, in the municipality of Motuca. Adriano de Amaral, 31 years old, died when the water ran out from the hose he was using to control the fire. He was the father of a 7-year-old boy and a 20-day-old baby. The other worker, Ivanildo Gomes, 44 years old, had burns across 44% of his body.

Every year, hundreds of workers are found in similar conditions in the sugarcane fields: with no worker’s registration, no protective equipment, inadequate water and food supply, no access to bathrooms, and living in precarious shelters. Many times it’s necessary for workers to pay for their instruments, such as boots and machetes. In case there are accidents, workers do not receive adequate treatment.

Slave labor is common in the sector. The workers are generally migrants from the Northeast or from the Valley of Jequitinhonha in Minas Gerais, transported by middlemen who select the cheap labor for the plantations. In 2006, the Public Defender of the Attorney General’s Office cited 74 plantations in the state of São Paulo, and all of them received charges. In March 2007, public attorneys of the MTE rescued 288 workers in slave conditions at six plantations in São Paulo. In another operation carried out in March, the Group of Public Attorneys of the Regional Labor Delegation of Mato Grosso do Sul rescued 409 workers in the sugarcane fields at the ethanol plantation Centro Oeste Iguatemi. Among them, 150 indigenous people were being used as slaves.

In June 2007, attorneys of the Ministry of Labor freed 1108 workers in slave conditions in the sugarcane plantation Pagrisa (Pará Pastoril e Agrícola S.A.), in the municipality of Ulianópolis (Pará state), in the Amazon region.

The International Labor Organization (ILO) states that “According to the legal labor auditor Humberto Célio Pereira, the workers received less than 10 reais (5 dollars) per month, while the illegal wage discounts that the company performed consumed almost the entire amount of wages these workers were to receive. The auditor reported that the food supplied to the workers was rotten, and various people suffered from nausea and diarrhea. Drinking water for workers was the same used for irrigation of the sugarcane fields, and was so dirty that it looked like bean stew. Shelter for the workers, according to Humberto, was crowded and the sewage draining were open inside the shelter. The majority of workers came from the states of Maranhão and Piauí, but there was no transport available to take them back.”
The sugarcane industry was one of the earliest activities during colonization in the Americas, and was continuously marked by the appropriation of territory and by the exploitation of cheap labor. This activity allowed sectors that controlled production and commercialization to obtain more capital, and to contribute to the construction of capitalism in Europe.

Ethanol production is increasing in Latin America, as signaled by a memorandum signed between the governments of Brazil and the United States in March 2007 to spread agrofuel production in the region. Currently, Brazil and the United States are responsible for 70% of global ethanol production.

The memorandum specifically cites Central America and the Caribbean as “key regions” for the production of agroenergy. The effect of this announcement was immediate. Guatemala recently began ethanol production on lands that traditionally produced sugar. Today, four ethanol distilleries exist in the country, which together produce 550 thousand liters of ethanol per day.

In El Salvador, President Elías Antonio Saca negotiated a pilot project to receive technical assistance from Brazil and the United States in order to begin a National Agroenergy Program.

In Costa Rica, the March 20th edition of *La Nación* revealed that “a large global demand in ethanol will result in a change in the national agricultural structure.” Technicians from the Ministry of Agriculture in that country...
attempt to stimulate the substitution of other crops by sugarcane or yucca, for the production of ethanol and vegetable diesel. “The country should adopt the decision of concentrating on these products, and avoiding investment and research in others,” asserted Alfredo Volio and Carlos Villalobos, Minister and Vice-Minister of Agriculture.

Farm worker organizations connected to the Latin American Coordination of Rural Organizations (CLOC) rejected this policy, since, they argued, it represents a risk for food production, and for the very survival of rural communities. Incentives for agroenergy projects eliminate resources and infrastructure for smallholder agriculture, which is responsible for the majority of food production consumed in the internal markets.

The strategic interest of the Bush government in converting Central America into a region of ethanol export is related to the pressure imposed on Central American countries to approve the Central America Free Trade Agreement (CAFTA), which would facilitate the entrance of ethanol into the North American market.
In Central America, the planting of sugarcane is one of the most profitable agroindustrial activities, but this business panorama contrasts with the lived reality of the workers in sugarcane plantations throughout the region. These plantations are owned, throughout the region, by members of the elite classes, who subordinate small- and medium-sized sugarcane producers as suppliers of raw material.

Guatemala is the third largest sugar exporter in Latin America, and the largest in Central America. In order of importance, Guatemala is followed by El Salvador, Costa Rica, Nicaragua, Honduras, and Panama.

**Costa Rica and Nicaragua**

Here we analyze the cases of Costa Rica and Nicaragua in order to have an idea of the day-to-day reality of thousands of agricultural workers in the region. In this sense, it is necessary to underline that the increase of migration (temporary or permanent) from Nicaragua to Costa Rica allowed for the creation of a kind of binational zone of sugarcane plantations, where the former country supplied cheap labor and the latter supplied machinery and capital, but also where workers’ rights are violated.

The harvest in Costa Rica is carried out between December and May, and in Nicaragua between November and May. An agreement between the two countries for “import” of Nicaraguan labor contemplates favorable conditions for workers (migrant protection, financial loans, supplying of tools). But the agreement is not carried out, which means that many workers have no other option than to become “illegal.”
The sugarcane industry in Costa Rica includes 7,000 independent producers and 16 large plantations. These plantations are located in four regions: Pacífico Central, Pacífico Seco, Huetar Norte and Huetar Atlántica.

In Nicaragua, the control of the production and commercialization of sugarcane, both for external and internal markets, is in the hands of large producers. In Nicaragua, four sugarcane plantations exist that control the entire process of production.

**Profile of workers and working conditions**

In the case of Costa Rica, the profile of workers varies according to the region. Over the past few years, the phenomenon of migration has increased, and it is reflected in the fact that more than 90% of workers in the sugarcane industry in the Pacifico Seco region come from Nicaragua. This creates a profile of workers that, in irregular migratory conditions according to existing laws, frequently accept working conditions much lower than the standards established by the Labor Code of Costa Rica and by the Agreements of the International Labor Organization, including Agreement 87 and 98, which have been adopted into law by the Costa Rican legal system. In contrast with previous percentages, in other regions of the country (for example, Huertar Norte and Pacífico Central), 85% of the manual labor is from Costa Rica, and 15% is foreign, especially from Nicaragua.

Normally, the workers also work in other seasonal agricultural activities (coffee harvest, cutting of pineapple groves, etc), in both Nicaragua and Costa Rica; therefore, their rotation in different productive activities is very high. The reduced participation of women is common as well; more than 90% of workers are men.

In Nicaragua, workers are principally of national origin and an immense majority is temporary workers. More than 90% of workers are men who dedicate themselves to other seasonal agricultural activities during the year, both in Nicaragua and Costa Rica.

In both countries, working conditions are difficult, labor violations are widespread, and the contracts are precarious and flexible; in other words, labor legislation is absolutely disrespected.

**Working conditions in the sugarcane industry**

**Costa Rica**

**Contract**

- Creation of contracts is performed many times in an indirect manner through a contractor. The contractor performs an intermediary role between the plantations, the independent producers, and the workers. Even when the worker is contracted without the mediation of the contractor, their labor rights are violated.
- Women participate in an unequal way in the production process, and are more vulnerable to violations of their rights due to the fact that they are contracted indirectly and verbally only. Women receive no direct payment. Instead, the payment is handed over to the men who claim to be their partners.

**Wages**

- A recurring wage flexibility exists in the sector, as within the different regions of the country payment is calculated differently: in some cases workers are paid per ton and in others they are paid per linear meter of cut sugarcane. Legislation in regards to minimum wages is not respected, since the average wage of $8 per day is only granted after working more hours than is allowed by law.

- The contractor defines the quantity of wages to be paid to the workers, depending on the profit they aim to make. The plantation contractor receives the entire workers’ wages and pays the workers, a scheme which dilutes the employer’s responsibility.

- The illegal situation of many workers leads many of them to work at the plantations in exchange for food, which violates legislation that establishes minimum salaries and wage protection.

- In sugarcane production, overtime goes unpaid.

**Working hours**

- The work schedule passes 8 hours daily (and can reach 10 to 12 hours daily)

- There are only two free days per month. Workers work 28 or 29 days per month, and are forced to be absolutely available to the landowner.

**Union building**

- In Costa Rica, the freedom to build unions does not exist, and therefore unions do not exist in sugarcane plantations. Only “Solidarity Associations” are legal, which are controlled by the plantation owners in order to eliminate autonomous unions.

- Subcontracting, migratory irregularity, and reduced temporality of the harvest make union building practically impossible among workers.

**Social Security and Job Risks**

- In many cases, workers do not have any social security or insurance to cover job risk, and they do not receive any kind of recognition in extra wages, such as bonuses or loans during periods of inactivity. Only permanent workers are insured, and they represent a small portion of the total amount of workers linked to sugar production.

- Exposure to adverse climactic factors, the use of machinery and tools, and the handling of toxic substances produce work accidents, and directly impact workers’ health and lives.
Nicaragua

Contract

- Subcontracting between “contractual” businesses is a generally common practice. 90% of workers in the industry are subcontracted.

- The subcontracted worker has no access to socioeconomic benefits that plantations offer to permanent workers, which aggravates their situation of poverty and social exclusion. The contract is always carried out through verbal agreement.

- Transport workers and independent workers are also subcontracted during harvest. The independent workers do not even appear in the logs of the plantations, as they do not have a formal relationship and, obviously, no type of benefits or insurance. This kind of contracting is called “service contracting.” We find these kinds of contractual conditions for truck drivers, helpers, lifters, and peons.

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- In sugarcane production, overtime goes unpaid.

- In relation to wages, the average wage does not rise about $70 USD per month, which does not allow for a family to meet its basic necessities.

Working hours

- The work schedule passes 8 hours daily (and can reach 10 to 12 hours daily)

- There are only two free days per month. Workers work 28 or 29 days per month, and are forced to be absolutely available to the landowner.

- Working hours are close to 12 hours daily or more during the harvest (between 4 and 7 months on average)

- This means that workers, during harvest, work a minimum 84 hours per week, with no time for sufficient rest during the season, and are exposed to extreme climactic conditions.

Many migrants work at the plantations in exchange for food. Working hours are close to 12 hours daily.
In Costa Rica, the freedom to build unions does not exist, and therefore unions do not exist in sugarcane plantations. Only “Solidarity Associations” are legal, which are controlled by the plantation owners in order to eliminate autonomous unions.

Subcontracting, migratory irregularity, and reduced temporality of the harvest make union building practically impossible among workers.

Practices of massive subcontracting diminish the negotiating power of union representation. Few unions exist and they have small memberships, since only 30% of plantations are unionized, and only permanent workers may join.

100% of temporary sugarcane workers are not organized in any union, and cannot exercise collective worker rights.

Plantations use threats of demission, lower wages, or worker relocation if a worker expresses their intention to join or create a union. This data can be proven by observing that 82.6% of those interviewed considered that in their workplace there is a prohibition of the right to free association.

Meanwhile, there are unions formed by the plantations with administrative staff that are used as a screen to deflect accusations regarding violations of the right to freely associate in the sector.

**Social Security and Job Risks**

In many cases, workers do not have any social security or insurance to cover job risk, and they do not receive any kind of recognition in extra wages, such as bonuses or loans during periods of inactivity. Only permanent workers are insured, and they represent a small portion of the total amount of workers linked to sugar production.

Exposure to adverse climactic factors, the use of machinery and tools, and the handling of toxic substances produce work accidents, and directly impact workers’ health and lives.

*Sources: Acuña (2004, 2005); Legall (2005)*

**Work-related risks and illnesses in sugar production in Costa Rica**

Risks include exposure to pollution and heat from machines, contact with agrochemicals, toxic dust, vapors, and gases from pesticides and fertilizers. Similarly, the environment presents risks such as overheating (high temperatures), ultraviolet radiation (solar), and severe climatic conditions (rain, wind, sun, etc).

Sugarcane workers also suffer from illnesses such as cystitis (a painful inflammation of the urinary tract as a result of bearing high temperatures produced during the burning of sugarcane) and diarrhea, as a consequence of eating food with dirty hands in the same area in which they work.

*Source: Acuña, 2004.*
Work-related risks and illnesses in sugar production in Nicaragua

In relation to work accidents, 85.5% of workers report having suffered cuts; 7.5% indicate having suffered burns, and 3% suffered fractures.

In relation to the main work-related illnesses, we find that skin cancer and lung cancer, kidney problems, sterility, and partial loss of vision are most common.

Exposure to chemical products, inhaling soot during burnings, prolonged exposure to adverse environmental factors and exposure to toxic residues all figure as the main risk factors for workers.

In each case, the rate of health coverage and attention to these accidents is extremely low, both within the public health system as well as business-led initiatives.

Source: Legall, 2005.

Honduras

Principal problems at sugarcane plantations

Temporary workers (harvest)

- Frequent suffering from bronchial illnesses, product of their permanent exposure to soot generated by burnings and dust kicked up by the trucks that transport the sugarcane.

- Strong headaches from prolonged exposure to high temperatures, since the harvest period includes the majority of summer, and the geographic location of the sugarcane fields is in the hottest areas of the country.

- Fatigue and muscular pain from excessive work hours, performing tasks that by their nature require strong force and physical expenditure.

- Constant pain in the waist and kidneys from the permanent repetition of doubling over and lifting up during cutting, little consumption of water that does not replace the excessive sweating.

- Skin irritations as a result of working with pesticides.

Permanent workers (plantations)

- Bronchial pains from exposure to chemical products.

- Headaches from high temperatures.

- Hearing problems from noise produced by machinery during the production process.

- Cases of visual irritation in some plantations that do not supply appropriate work goggles for those who handle and clean the boilers.

Source: Iriás, 2005.
Guatemala

History of land possession

The system of landownership in Guatemala has its roots in the Spanish conquest, when land was expropriated from indigenous populations and given as compensation to the new colonizers. After independence in 1821, land ownership remained highly unequal. Producers of crops for export such as sugarcane forced indigenous people off their lands toward higher altitudes, where cold climates were inadequate for the traditional cultivation of milpa (a mix between corn and beans).

Still today the rural population of Guatemala suffers from one of the most unjust systems of land concentration in the world. According to data from the Ministry of Agriculture, Cattle, and Food, 0.15\% of all producers control 70\% of all arable land, producing only for export; meanwhile, 96\% of all producers occupy barely 20\% of all lands. In the countryside, 90\% of the inhabitants live in poverty and more than 500,000 families live below the subsistence level. At the same time, the country historically has one of the largest rural populations in Latin America, comprising 69\% of the total population. More than 50\% of all workers are involved in agriculture.

Diverse analyses suggest that crop lands in Guatemala have become more concentrated as time goes on. Between 1964 and 1979, the number of agricultural lands with less than 3.5 hectares duplicated and the average size of those lands smaller than 7 hectares dropped from 2.4 hectares to 1.8 hectares per land area between 1950 and 1979. Analyzing the data of the Agricultural Census of 1979, we can verify that there was an extremely unequal distribution of land: 88\% of all properties possessed an area smaller than 7 hectares for family subsistence, accounting for 16\% of all arable lands, while barely more than 2\% of all farms maintained ownership of 65\% of all arable lands.

More than thirty years of intervention in the countryside by different governments have not affected the concentrated and exclusive agrarian structure: the pattern of land ownership has continued, as well as the dualism between the agro-export model and internal consumption.

The majority of land is concentrated in few hands and the large landowners dominate areas where the land is most fertile, located in the southern part of the country, on the Pacific coast. This region is known for its concentration of sugarcane production controlled by large businesses and plantations.

The National Coordination of Indigenous and Farm Workers Communities (CONIC) has denounced that, in the mountain districts, the problem of large landowners has become endemic, and a large percentage of the indigenous population has migrated, due to the small availability of arable lands. It is estimated that more than 60\% of the rural population that is economically active in the mountain districts migrates in search of employment during some period of the year.
The concentration of land ownership, a result of the historic expropriation of indigenous lands, has serious consequences for sustainable land use, the self-sufficiency of small farmers, and for food sovereignty. What’s more, the deformed agrarian regime results in a disproportionate channeling of public resources towards the agro-export sector, to the detriment of food production for the internal market.

**Agrarian Reform**

Juan José Arévalo became president in 1945, promoting a new constitution that established “social property” and the eradication of large farms. At the time, the 22 largest landowners possessed more lands than close to 250 peasant families. The *Supplemental Land Title Law* was approved, determining the concessions of land titles to those landholders who had cultivated the land for more than ten years.

Arévalo’s legislation and the growing prominence of worker and peasant organizations during the period between 1944-1954 constituted the base of the reform programs of Jacobo Arbenz, elected president in 1951. Faced with a land distribution in which 88% of agricultural production areas occupied 14% of all lands and large landowners cultivated, on average, only 19% of their properties, on June 17, 1952 the Guatemalan Congress approved the *Law for Agrarian Reform*. Its main objectives were to eliminate the feudal conditions and all forms of slavery in labor, to provide land to landless workers.
or those with little land, and to distribute credit and technical assistance to smallholder landowners. It is estimated that 180 thousand families benefited from the law, representing close to 10% of the total population of Guatemala at the time.

Opposition to agrarian reform was swift and decisive. On June 27, 1954, Arbenz was deposed by Coronel Castillo Armas. Agrarian reform in Guatemala became virtually a “taboo” and Arbenz’ program was stopped in 1954.

Pressure from the United States government to “repeal the communist threat” and to protect interests of North American companies, principally United Fruit Company, helped facilitate the coup d’etat supported by the CIA, and reverted Arbenz’ attempt at agrarian transformation. In the first six months after the coup d’etat, the majority of land expropriations were annulled and the lands were returned to their previous owners.

No land expropriation occurred in Guatemala after 1954, strengthening the unjust system of land distribution that persists to this date. The three decade-long dictatorship that followed caused the deaths of more than 300,000 people. The Guatemalan army massacred peasants, unionists, leaders of social organizations, and also invaded lands of various communities. Many union members were massacred, producing a general sense of fear in workers that still remains. Such is the case with sugarcane workers, who suffer from the fear of repression if they organize.

The support of the United States gave incentives for agricultural export to the external market, helping large sugarcane producers and consolidating repression of workers as a “warning” against future redistributions of land.

In the 1990s, two points dominated political debate within Guatemala: the pressure from international institutions to implement neoliberal policies of structural adjustment, and the implementation of the peace process, which sought to negotiate an end to the civil war.

The Peace Accords

On May 6th, 1996, the Guatemalan government, the General Command of the National Revolutionary Guatemalan Front, and a representative of the United Nations signed the “Accord on Socioeconomic Aspects and the Agrarian Situation,” as part of the overarching “Peace Accords” that officially ended 36 years of civil war. The negotiations symbolized a frame in the attempt to redirect conflicts over the historical problem of land in the country.

Two other components of the peace treaty, the “Accord on Rights and Identity of Indigenous Peoples,” and the “Accord on Resettlement of Forcibly Relocated Populations,” also referred to the agrarian problem and rural development. The first accord emphasized the duty of the state to provide land to indigenous peoples, to eliminate gender discrimination, and to legalize communal land holdings. The second referred to the commitment of the government to resolve land disputes generated during the civil war and to...
identify areas for resettlement. However, to this day, the majority of the clauses in the Peace Accords of 1996 have gone unfulfilled; the problems of rural poverty and access to land still persist.

The terms of agreement of the Accords resulted in prolonged negotiations between various groups. The National Coordination of Peasant Organizations (CNOC) demanded a guarantee for poor families’ land holdings, financial and technical support, respect for Mayan worldviews, and the reform of the constitution and state institutions. The CNOC also reintroduced the idea of “social property” as a way to defend the recuperation and protection of communal lands belonging to peasants and indigenous peoples.

Currently, the evaluation of rural social movements in the country is that the hunger and poverty facing Guatemalans has worsened since the end of the civil war, as during the civil war, popular pressure to maintain workers’ rights was stronger.

**The situation of sugarcane workers in Guatemala**

According to the evaluation of CNOC, after the Peace Accords there was an increase in temporary workers and a degradation of rural workers’ rights. The working season is only three months long. Workers are not directly contracted by the companies. In this way, companies avoid the responsibility of respecting labor rights. The agreement is negotiated through intermediaries, who receive a percentage of the workers’ salaries.

There are no public policies to guarantee the rights of sugarcane workers. During the Jacobo Arbenz government, the Guatemalan Institute for Social
Security was created to guarantee basic rights and rural retirement. Currently, this institution is threatened by the process of privatization of public resources occurring in the country.

A large part of the manual labor in the sugarcane industry is migratory, formed by peasants from the mountainous regions of the country. The working conditions are extremely precarious. Sugarcane workers live in sheds with no sanitary installations. To bear their forced labor, they receive chemical stimulants. In the case that they suffer from an accident, which occurs frequently, they receive no medical treatment. There are no public health services offered on behalf of the companies for the workers.

Demands of the peasant organizations

For the National Coordination of Peasant Organizations (CLOC), the main principle of rural development is access to land, supported by investment in infrastructure and services to facilitate the means of a sustainable livelihood. The social movements propose an end to the agro-export model, the democratization of land, and the diversification of the economy. Their demands include:

a) The recuperation of public, unproductive, and communal lands. The democratization of land ownership is based on the following criteria: “land
ownership for those who cultivate it; property must have a social function; and recognition of historic land demands.”

b) Rights and social security: Women and historically marginalized communities should be prioritized.

c) To apply a tariff on unused lands that obliges their owners to create jobs or hand over the lands to landless workers.

d) Carry out land expropriation of unused or little-used lands, and recuperate lands that were taken over during the civil war.

e) Limit the extension of lands.

f) Access to subsidies, infrastructure, technical assistance, credit, and appropriate technology for agricultural peasants, in the sense that they guarantee food sovereignty and diversification of crops.
The first sugarcane plantations were introduced in the Dominican Republic by the Spanish colonizers in the beginning of the 16th century. Currently, agriculture is one of the most important sectors of the national economy, as sugarcane is the principal agricultural product of the country. The industry is concentrated in three businesses that control 75% of the sugarcane plantations: the State Sugar Board (CEA), which controls 50% of production, Casa Vicini, a national company, and Central Romana, a foreign company. The majority of production is found in the Southeast of the country.

**Migration**

Over the course of many years, there were disputes between Haiti and Dominican Republic over borders that were defined through a treaty signed in January 1929. As a result, thousands of Haitians remained in Dominican territory, the majority of whom served as a labor force in the sugarcane fields.

To this day, the sector depends fundamentally on Haitian migrants, who represent 90% of the labor force in sugarcane cutting. The estimates of the number of Haitian migrants in Dominican Republic vary from 500 thousand to 1 million. The Dominican government has stimulated Haitian migration many times as a way to take advantage of cheap labor costs in the sugarcane fields. However, immigrants have no access to basic rights and are frequently deported after their labor potential is exploited.

One of the main problems for these migrants is that they have no legal recognition within the state. They are known as “citizens without a country,” since they have no kind of legal citizenship. Many Haitians arrive to the Dominican Republic without legal documents and stay in the country this
Accidents in the sugarcane fields are frequent and leave many workers mutilated.

... way. The children of these immigrants, born in the Dominican Republic, are not recognized as citizens and do not receive birth certificates.

Haitian migrant communities are called *Bateyes*. The living conditions of these communities are extremely poor, and immigrants generally live in impoverished barracks that have no electricity, no basic sewage services, and no potable water. There are no health services, recreational spaces, or schools.

The word *Batey* originates from the indigenous Taínos, the original inhabitants of the region who were converted into slaves during Spanish colonization. Currently, working conditions for sugarcane workers could be characterized as analogous to slavery.

The workers face very difficult labor conditions. They work on average 12 hours per day, and face the threat of deportation when they attempt to organize to obtain basic rights. Many do not speak Spanish, which makes their organizing process even more difficult.

Accidents in the sugarcane fields are frequent and leave many workers mutilated. When they stop working, sugarcane workers have no right to retirement or benefits. Wages are extremely low and based on the quantity of cane that is cut, not on hours worked. Workers have no control over the weight of their production, and many times have no idea how much they will receive in compensation per ton of sugarcane they cut.
During the first decades of the 20th century, industrialization began in Colombia. The fast expansion of the sugarcane market allowed for the implementation of industrial plantations. At that point plantations arose such as Riopalia of the Caicedo family, Providencia of the Cabal family, and Mayagüez of the Hurtado Holguín family, and these continue to be the primary producers of sugarcane in the country.

Afterwards, the plantations of Valle del Cauca province greatly expanded in the period known as “La Violencia” between 1946 and 1958, leading to the consolidation of their control over the sugarcane market in Colombia. During this period, two million people were forcibly removed from their lands and together lost 350 thousand properties. Valle del Cauca was the department with the largest number of forcibly removed families. Close to one million people lost 98,400 properties in the province.

Currently, the conglomerate Ardila Lülle is one of the largest producers of sugarcane in Colombia. Its origins are in the soda industry, which it monopolized to such an extent that currently only Coca-Cola is able to compete with the company, since Lülle bought out the Colombian Pepsi Co. subsidiary. Ardila Lülle also owns textile companies and the radio and television company RCN, one of the two media companies that control Colombian communications. The company fully owns the Cauca sugarcane plantation, 52% of the Providencia plantation, and 35% of the Risaralda plantation, which was founded in 1979 with investment from the Coffee Growers’ Foundation, the Colombian state, and the Western Financial Corporation, which is dominated by Citibank.
Ardila Lülle is the principal promoter of ethanol production in Colombia. Their Cauca, Providencia, and Risaralda plantations produce 65% of all Colombian sugar-based ethanol, while Manuelita plantation and Mayagüez plantation produce the remaining 20% and 15% respectively.

Ethanol production in the country is the result of the large capacity for bureaucratic capitalism to maneuver in the country. Law 693, passed in September 19, 2001, determines that, beginning in September of 2006, gasoline in Colombian cities larger than 500 thousand inhabitants must be mixed with ethanol. The cost of ethanol production is higher than that of gasoline, and despite ecological and social motivations, the law was a decisive imposition that allowed Ardila Lülle to profit from the price of ethanol at US$2.40 per gallon, much more profitable than gasoline produced by state oil company Ecopetrol, sold at US$1.26 per gallon (Serrani, 2007).

Law 788 in 2002 exonerated ethanol producers from state taxes and taxes on fuels, incentives that cost the state US$100 million per year. The government’s program of “oxygenated gasoline,” which promoted gasoline that contains a 10% mix of ethanol, began in November 2005 in the Southwest of the country and in the coffee-growers’ zone, and in February 2006 in Bogotá.

How can Ardila Lülle and other large sugarcane corporations impose these kinds of mega-profits?

The company has strong ties with the state. Ardila Lülle supported the elections of Pastrana and Uribe, as well as Congress members.

Ardila Lülle has a strong influence over media through RCN. The media company has, over the past couple years, been publicly apologetic for paramilitary groups that have assassinated close to 4000 union workers, while controlling extensive areas of land.

The United States seeks to increase ethanol production and other agrofuels as a solution to their energy crisis, while receiving low cost petroleum from Colombia. It is convenient to the United States that Colombia consumes agroenergy, since its cost is higher than gasoline, allowing for a larger quantity of Colombian petroleum to be exported to the United States at a cheaper price.

1 We should understand by “bureaucratic capitalism—“ according to Hector Mondragon— the type of capitalism consolidated in Colombia since the middle of the 20th century. It is characterized by a direct control of the state over production, which through its institutions favors large corporations, and especially those sectors connected to the production of sugarcane.
The situation of workers

Thirteen sugarcane plantations are composed of 30 thousand workers without contracts. The previously strong unions have been reduced to minimal strength. Contracts are forged through so-called “cooperatives” that were created to conceal labor relations within the plantations.

Nonetheless, the sugarcane “cooperatives” began to strike since 2003, when 1600 operators shut down the La Cabana plantation. More recently, beginning in May of 2005, more than 2700 sugarcane cutters from the Cauca plantation stopped work. Following that, an additional 7000 workers went on strike at Mayagüez, Manuelita, and other plantations. The lack of regulations of worker relations impeded the authorities from declaring that the strikes were illegal, and the structure of “cooperatives” was used against their inventors.

However, working conditions for sugarcane cutters continue in shambles. Edision Arturo Sánchez, organizer of the strike in Castilla, was assassinated. At the La Cabaña plantation, the accords reached on working conditions were completely disrespected and the strikers were demoted.

The sad history, and future, of palm oil

Palm oil was originally produced in Colombia by large landowners that took advantage of the land they accumulated in regions such as Magdalena Médio after the displacement of peasants during the period of “La Violencia”, from 1946 to 1958.

Palm companies, the largest of which was Indupalma of the Gutt family, imposed super-exploitation of workers. Unions achieved some space for workers’ rights, but the response to worker’s organization was repression, the criminalization of strikes, and violence against union leaders. Losses within union organizing were expressed by the weakness of the organizations, and large numbers of workers left unions to form “cooperative associations,” established to conceal labor relations.

Palm oil companies prefer to cultivate lands belonging to others, externalizing degradation to those lands, which also allows the companies to avoid taxes and establish supposed “strategic alliances” or “productive associations” with peasants and indigenous peoples who hand over their lands. Beyond giving up their lands, these smallholders also “offer” their labor with no working contract, as so-called “business partners” to the companies.

These companies have forged an exceptional situation that allows them to evade the cost of land and taxes, to substantially reduce wages, and to eliminate the payment of social programs. Meanwhile, society assumes the environmental costs of palm exploitation, as the companies amass profits.

Transnational corporations in the vegetable oil industry, such as Unilever, are the principal benefactors of this business, stimulating the growth of palm oil plantations throughout the tropical world. Beginning in Malaysia
and Indonesia, they grew and expanded into Cameroon, Nigeria, and other countries in Africa, Central America, and South America. This tended to lower the price of palm oil on the international market, which benefited corporations that use it in their products.

More recently, as the price of palm oil has declined, the extraordinary increase in petroleum costs produced a new impulse for the expansion of palm oil plantations for the production of agrodiesel. The business is presented as one of the most extraordinary markets in history, and one which will guarantee magnificent ecological impacts for the world.

Nonetheless, for citizens in countries and regions of production, the effects could be devastating. Tropical forests and native vegetation will be destroyed, reducing biodiversity; soils will be degraded as palm plantations continue their productive cycles and utilize chemical inputs; and food sovereignty will be placed at risk as plantations expand, exchanging food production for fuels which, for the most part, will be exported.

Legislation over palm oil establishes that its production must be exempt of taxes. Plan Colombia and the World Bank have established special programs for the production of palm oil. State laws currently in progress foresee subsidies and state investments in the industry.
The information presented in this text have been obtained from research done in the state of Santa Cruz, Bolivia. The subjects of this study were children and adolescents between the ages of 9 and 18 years old.

Bolivia has lands totaling 1,098,581 km², and a population of close to 9 million people. There are nine departments in the country: one of them is Santa Cruz, which is composed of 370 thousand km² of land and more than 2 million inhabitants. The population younger than 18 years old is close to 3 million, of which one million live in the department of Santa Cruz.

**Cultivation, production, and consumption**

Industrial sugarcane activity began in Bolivia in 1941, when in the department of Santa Cruz close to 3,000 hectares of sugarcane fields were cultivated. In addition to local production, sugarcane was also imported. In the 1960s, Bolivia became self-sufficient in its supply of sugarcane and an export period began. In the following decades, import only occurred in exceptional cases due to weather conditions or low prices on the international market.

Currently, sugarcane production in Santa Cruz is located in nine municipalities: Andrés Ibáñez, La Guardia, El Tomo, Cotoca, Warnes, Portachuelo, Montero, Mineros, and General Saavedra. This zone is comprised of close to 100 thousand hectares of cultivation. Throughout this extensive land, properties are classified as small (up to 20 hectares); medium (from 20...
to 50 hectares); and large (more than 50 hectares). The small and medium properties represent 35% of total lands, and the large properties account for 65% of this area.

Santa Cruz contains four plantations for sugarcane production: San Auréliio, La Bélgica, Guabirá, and Unagro, which together produce more than one million tons of sugarcane per harvest.

Production of alcohol has always been for domestic use, pharmaceuticals, and for alcoholic beverages. In July 2005, the government approved a law which allowed fuel producers to add ethanol in a proportion of between 10% and 25% within five years. There is no official data regarding the quantity of ethanol currently produced in Santa Cruz.

Migration

The growth of the sugarcane industry has had repercussions in the use of harvest machinery. However, despite technological growth, the industry continues to require manual labor.

During the period between May and October, which corresponds to the harvest time in Santa Cruz, close to 30,000 people, generally organized in families, migrate to the region. In both direct and indirect ways, 7,000 children and adolescents younger than 18 years old participate in the work; 27% migrate on their own.

Half of the manual labor in Santa Cruz, and the remaining labor force in sugarcane production come principally from the states of Chuquisaca and Potosí. In this situation, radical changes in habitat represent the first challenge that migrants must face, since they migrate from zones of high altitude that are cold and dry. These families are unprepared for high temperatures, humidity, and extreme changes in climate that characterize tropical regions. Children are usually the most affected by these conditions.

While individuals and families become temporary migrants who seek to alleviate their extreme poverty, once the harvest period ends, many migrants do not return to their place of origin. They prefer to stay, offering their labor in other types of plantations, or looking for work in nearby urban communities, or in the city of Santa Cruz.

One effect of migration during and after the harvest—for those who stay—is culture shock, which is principally manifest in language and communication differences, as well as different lifestyle, such as dress and diet. Many migrants suffer discrimination, insults, and humiliation by the contractors, as well as other workers and local people.
Working and living conditions for children younger than 18 years old

While children younger than nine years old who migrate with their families are perhaps the most negatively affected during the harvest period, we will analyze only the group between nine and 18 years old who, in one way or another, participate in the harvest work. The statistics and analyses presented here are based on testimonies and field research.

The contract between workers and sugarcane producers is generally verbal, and is made with an adult (man or woman). Therefore, the labor of adolescents younger than 18 years old is hidden and unprotected, since they are not formally contracted. The bosses say that children work as “helpers.”

Younger children usually take responsibility for “housework” activities (cooking, washing, caring for infants, etc.), and their support in the harvest is principally in the storage of sugarcane. By and large, adolescents participate in the cutting of sugarcane. Their work schedule is up to 12 hours per day. Payment is received per ton of cut sugarcane. They spend money principally on food and clothing, leaving little to save. 25% of working children receive no payment at all.

The greatest risks children face—young boys as much as young girls—are cuts and snake bites. In particular, young girls are exposed to skin burns. Young boys expressed that the most negative aspect of harvest season is the hard work, and for young girls, cooking. Climactic conditions are also difficult, as well as the lack of sleep, filthy conditions, physical altercations, and leaving their homelands (they miss their families and the communities they belong to).

Medical attention is deficient, as only 9% declare having received care in the encampment in which they live during the harvest. Children and women especially suffer from a lack of healthcare. They do not receive any kind of social or company insurance. Children and adolescents live in precariously constructed encampments, together with other workers.
Common problems related to sugarcane plantations in Latin America and the Caribbean:

- Workers are stimulated through competition and “award-giving” to cut more sugarcane. This practice has caused serious health problems and even death of workers.

- Sugarcane workers, principally in Central America, are prohibited from organizing unions. When organizations exist, they are frequently controlled by the companies.

- Workers have no control over the weight of their production, which stimulates stronger exploitation.

- Labor contracts are normally not negotiated directly with the plantations owner and/or sugarcane supplier, but rather by an intermediary. As a result, the plantation owners avoid the responsibility of complying with labor legislation.

- Children and adolescents are not able to attend schools because of their work in the sugarcane fields.

- In some countries, women work at the sugarcane fields, but the payment is only given to the male workers.

- Living conditions on the plantations are extremely difficult, and workers lack adequate sanitary conditions, sufficient access to food and water.

- The diet of workers is precarious. Many companies distribute chemical substances to stimulate the workers’ energy during hard labor.
Experiences in the production of raw material for agroenergy by small farmers have demonstrated the risk of dependency on large agricultural companies that control prices, processing, and distribution. Rural workers are utilized to give legitimacy to agribusiness, through the creation of certificates of so-called “social fuel.”

This model has caused negative impacts in peasant and indigenous communities, who have their territories threatened by the constant expansion of large plantations. What’s more, the lack of policies in support of food production may lead peasants to substitute their crops for agrofuels, and, as a result, compromise their food sovereignty. In Brazil, for example, small- and medium-sized farmers are responsible for 70% of the food production for the internal market.

Researchers from the University of Minnesota warn that, in order to fill one tank of ethanol it is necessary to utilize the same quantity of grains that it would take to feed one person during a whole year.

Francisca Rodriguez, a representative of the rural workers’ organization Via Campesina, has denounced that “large landowners are going to control land in order to feed motors, not people.” She adds: “Facing these challenges, we must defend our commitment to preserving our land, unmasking these destructive projects, and stimulating a profound discussion about the current model of energy production. We want to avoid the destruction of our lands, since we know what extensive monoculture means for the future of our countries.”
Proposals in defense of agrarian reform and food sovereignty

Grassroots organizations throughout the continent are echoing the denunciations of the devastating effects of an agricultural model based on monoculture, concentration of land and profit, exploitation of labor, and environmental destruction. They propose a new agricultural model, based on massive agrarian reforms.

It is necessary to strengthen rural workers’ organizations to promote sustainable peasant agriculture, prioritizing diversified food production for local consumption. It is crucial to advocate for policies that guarantee subsidies for food production through peasant agriculture. The principal objective of this model should be to guarantee food sovereignty. We cannot keep our tanks full while stomachs go empty.

The Right to Food

The principal international norm on the Right to Food is contained within Article 11 of the International Convention on Economic, Social, and Cultural Rights. According to this norm, hunger should be eliminated and communities should have permanent access to adequate food, both quantitatively and qualitatively, such that the physical and mental health of individuals and communities is guaranteed.

According to the International Convention on Economic, Social, and Cultural Rights, states have the obligation of “respecting, protecting, and guaranteeing” the right to food. To respect this right means that the state cannot obstruct or impede its population’s access to adequate food, such as is the case of displacement of rural communities from their lands, especially those who depend on agriculture as their form of subsistence. The Convention also prohibits the state from using toxic substances in food production.

Beyond this, the Convention establishes the principles of non-regression and non-discrimination in relation to the approval of laws that guarantee access to food. This means that governments may not approve laws that impede the organization of people that seek to obtain this right. On the contrary, governments should facilitate the organization of society in favor of access to land, work, and protection of the environment. States should guarantee the universal right to food through actions and concrete measures that protect vulnerable social groups, and provide the necessary means for them to feed themselves.
We, representatives of organizations and social movements of Brasil, Bolivia, Costa Rica, Colombia, Guatemala, and the Dominican Republic, gathered at a forum on the expansion of the sugarcane industry in Latin America, declare that:

The current model of production of bioenergy is sustained by the same elements that have always caused the oppression of our peoples: appropriation of territory, of natural resources, and the labor force.

Historically the sugar industry served as an instrument to maintain colonialism in our countries and the creation of dominant classes that have controlled, through today, large extensions of land, the industrial process, and commercialization. This sector is based on latifundio ownership, on the overexploitation of labor (including slave labor) and the appropriation of public resources. This sector was created upon intensive and extensive monocropping, provoking concentration of land, profit, and wealth.

The sugarcane industry was one of the main agricultural activities developed in the colonies. It allowed sectors that controlled production and commercialization to continue accumulating capital and with this contribute to the development of capitalism in Europe. In Latin America, the creation and control of the State, beginning in the 19th century, continued to service the colonial interests. Currently, control of the State by this sector is characterized by so-called “bureaucratic capitalism”. The sugar industry defined the political structures of national States and of Latin American economies.

In Brasil, beginning in the 1970s, during the so-called world oil “crisis”, the sugarcane industry began to produce fuel, which justified its maintenance and expansion. The same was repeated in 2004, with the new Pro-Alcohol program, which principally serves to benefit agribusiness. The Brasilian government began to stimulate the production of biodiesel as well, principally to guarantee the survival and expansion of large extensions of soy monoculture. To legitimate this policy and camouflage its destructive effects, the government stimulated the diversified production of biodiesel by small producers, with the objective of creating a “social certificate”. The monocultures have expanded into indigenous areas and other territories of native peoples.

In February of 2007, the United States government announced its interest in establishing a partnership with Brasil in the production of biofuels, characterized as the principal “symbolic axis” in the relation between the two countries. This is clearly a phase of a geopolitical strategy of the United States to weaken the influence of countries such as Venezuela and Bolivia in the region. It also justifies the expansion of monocultures of sugarcane, soy, and african palm in all Latin American territories.
Taking advantage of the legitimate concern of international public opinion on global warming, large agricultural companies, biotechnology companies, oil companies, and auto companies now perceive that biofuels represent an important source for the accumulation of capital.

Biomass is falsely presented as the new energy matrix, the ideal of which is renewable energy. We know that biomass will not actually be able to substitute fossil fuels, nor is it renewable.

Some characteristics inherent to the sugar industry are the destruction of the environment and the overexploitation of labor. The principal workforce is migrant labor. As a result, processes of migration are stimulated, making workers more vulnerable and attempts at organization more difficult. The rigorous work of cutting sugarcane has caused the death of hundreds of workers.

Female workers who cut sugarcane are exploited even more, as they receive lower salaries or, in some countries such as Costa Rica, do not directly receive salaries. Payment is made to the husband or partner. Child labor is commonly practiced in the industry throughout Latin America, as well as the exploitation of youth as the main labor force in the suffocating process of cutting sugarcane.

Workers do not have any control over the total amount of their production and as a consequence over their salary, as they are paid according to the quantity cut and not for hours worked. This situation has serious implications for the health of workers and has caused the death of workers through fatigue and the excessive labor that requires cutting up to 20 tons per day. The majority of contracts are through third party intermediaries or “gatos”. This complicates the possibility of achieving workers’ rights, as formal work contracts do not exist. The figure of the employer is hidden in this process, which negates the very existence of labor relations.

The Brazilian State stimulates the use of resettled lands under agrarian reform and lands of small producers, currently responsible for 70% of the production of food, for biofuel crops, compromising food sovereignty.

As a result, we assume the commitment of:

- Expanding and strengthening the struggles of social movements in Latin America and the Caribbean, through a network among existing workers’ organizations and support groups.
- Denouncing and combating any agrarian model based on monocultures and concentration of land and profit, destructive of the environment, responsible for slave labor and the overexploitation of the working force. Changing the current agrarian model implies a full realization of a profound Agrarian Reform that eliminates latifundios.
- Strengthening rural workers’ organizations, salaried workers, and farmworkers to construct a new model that is closely cemented to farmworker agriculture and agroecology, with diversified production, prioritizing internal consumption. It is important to fight for a policy of subsidies for the production of food. Our principal objective is to guarantee food sovereignty, as the expansion of the production of biofuels aggravates hunger in the world. We cannot maintain our tanks full while stomachs go empty.

São Paulo, February 28, 2007

Asociación Brasileña de Reforma Agraria - ABRA
Comisión Pastoral de la Tierra - CPT
Grito de los/as Excluidos/as Continental
Red Social de Justicia y Derechos Humanos
Movimiento de los Trabajadores Sin Tierra - MST
Servicio Pastoral de los Migrantes - SPM
Via Campesina
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