Industrial Agrofuels
Fuel Hunger and Poverty

The Via Campesina Notebooks

November 2009
Industrial Agrofuels
Fuel Hunger and Poverty

The Via Campesina Notebooks
Notebook No. 1 November 2009

La Via Campesina
International Operative Secretariat (IOS)
Jl. Mampang Prapatan XIV No. 5
Jakarta Selatan, DKI Jakarta -12790
Indonesia
Telephone: +62-21-7991890
Fax: +62-21-7993426

Copy Left! We encourage the free reproduction, circulation and exchange of the documents presented here just as we do for farmers’ seeds. We simply ask you to quote the source
Credits

We thank the Via Campesina team of volunteer translators and editors who make it possible for La Via Campesina to work across the world and across our wide diversity of cultures and languages.

Jakarta, November 2009

Esta publicação existe também em versão portuguesa! ¡Esta publicación existe también en versión española! Cette publication est également disponible en version française!
Introduction

Growing plants and trees to make fuel and replace the vanishing oil reserves is the brilliant idea that was presented as a solution to the fossil fuel crisis, and as a promise for farmers to make a better living. In the climate talks, agrofuels are also promoted as a “green” alternative. After a sharp rise in agrofuel production since the year 2000, the euphoria has begun to fade. First of all, the 2007 food crisis was in great part triggered by the speculation on corn and soya due to the agrofuel frenzy. Then several studies reveal that the energy balance of most agrofuels is meaningless or negative and that the cost on the environment is enormous. More over, farmers’ livelihoods haven’t improved whatsoever.

In 2007, the international farmer’s movement Via Campesina published a position paper titled: “Small farmers feed the world, industrial agrofuels fuel hunger and poverty” - that you will find at the end of this publication. Since then, the development of agrofuels has impacted more rural communities and more countries of the world.

This publication presents a compilation of articles written by grassroots member organizations of the Via Campesina or their close allies from Mozambique, Mali, Haiti, Brazil, Canada and Indonesia. They present an analysis of agrofuel production in their national and local contexts, how it impacts farmers and agricultural workers’ lives and work and how farmer organizations are getting involved in this debate. The articles were written in different contexts and for different purposes, but they all reflect the importance of this debate among the members of the movement. We also included an article by François Houtart on the “Scandal of agrofuels” to give a general context to the local stories.

What this series of articles reveals is a generalized situation of exploitation, devastation and absurdity. Plantation workers and small farmers – women and men - are exploited and sometimes live in slavery. Meanwhile we witness the devastation of the environment, public health, forests, water resources and human communities in the monoculture production areas. It demonstrates the absurdity of growing plants for fuel, and show that agrofuel production cannot solve the current energy crisis in a sustainable and just way.

This publication is aiming to give a better understanding of the realities and the political positioning of the Via Campesina member organizations on this issue. It is part of our relentless struggle against the transnational companies that are maximizing profits at the expense of people’ lives, land and territories. We hope that those testimonies will be a useful tool in our struggle for food and energy sovereignty.

Henry Saragih,
General Coordinator of La Via Campesina
Jakarta November 2009
# Table of Contents

**Credits** .....................................................................................2
**Introduction** ...............................................................................3
**Table of Contents** ......................................................................4

1. **Mali**: Jatropha culture gains ground to the 
detriment of food crops .................................................................5
2. **Mozambique**: Production of jatropha expands 
in the country ...............................................................................11
3. **Brazil**: Agrofuels in Brazil .........................................................15
4. **Haiti**: The project of agrocarburants 
productions, a project of the death for the 
haitian peasantry ........................................................................20
5. **Canada**: Ethanol - The zero-point-seven-
percent solution .............................................................................22
6. **Indonesia**: Working under the palm oil trees. 
Agricultural workers and small farmers in the 
palm oil plantations .........................................................................25
7. **La Via Campesina position paper**: Small 
farmers feed the world. Industrial agrofuels fuel 
hunger and poverty ........................................................................35
8. **The scandal of agrofuels in the countries of the** 
South, *by François Houtart* ..........................................................38
Mali

Jatropha culture gains ground to the detriment of food crops

Physic nut is one of the 170 species of jatropha, a variety of trees and shrubs the Euphorbiaceae family. The oil used to produce the fuel is extracted from the seeds of the physic nut located inside the fruits of the plant.

Since the 1990’s, Mali has tried out the jathropa curcas family culture for community use. But since 2007, the Center of International Cooperation in Agronomic Research for Development (CIRAD) started a research project in Mali on physic nut oil with the objective of getting energetic autonomy at an ecotourism station by using generators powered by the oil.

Today, in an initial phase, the country plans to pass onto exploiting the industrial type for the national market; and later on, for export. With this intention, a specialized institution called The National Agency for the Development of Biofuel (ANADEB) was installed by the government in order to promote the biofuel industry and to control marketing. Indeed, Mali extends over 1,241,238 km2, of which a cultivable surface is estimated at 30 million hectares.

Currently, the country exports mainly cotton, gold and cattle and imports oil products, construction materials, machines and products for food. The agricultural tendency of eastern Mali has turned towards oversea investments. Most of the land is occupied by small farmers, both women and men.

Cultivating plants for biofuel production is starting to gain ground in Mali, a country of West Africa. In 2007, Mali Biocarburant (MB), a company having benefited from carbon funds from the Netherlands’ government, set up its first biofuel factory in Mali, in the Koulikoro area located 75 km from the capital Bamako. MB is the first company in the country using the jatropha curcas for biodiesel production.

Since then, the Koulikoro area peasants have devoted themselves to this culture, known as pourghère in French (and in Barbados) or the physic nut in English, in order to sell the production to the aforementioned company. With this activity, the peasants and country women have been devoting less time and farmlands to cereals for food because of a crop culture whose production process is controlled by a company whose investors are mostly foreign.
Carbon Credits contribute to the installation of Mali Biocarburant

To establish the factory, the Mali Biocarburant (MB) company profited from the carbon credit from the Netherlands and Switzerland governments. The physic nut producers union also profited from 30 million CFAs (65,000 USD) of carbon credit for salaries, the purchasing of physic nut seeds, and other union office operations.

The carbon credit funds, which represent 130 billion dollars, are based on the idea that the best way to control climate changes is to transform CO2 emissions into a exchangeable good on the international market. A carbon credit is equivalent to the emission of a ton of carbon dioxide. Compared to the current rate fixed by the Kyoto protocol, it allows its holder to emit more gas responsible for the Greenhouse effect. Allotted to States or companies which take part in reducing the greenhouse gas emissions, such carbon appropriations are supposed to help the participating countries respect their engagements to the Kyoto protocol.

The attribution articulates around several mechanisms; particularly, a collaboration between industrialized and developing countries: these are Clean Mechanism for Development (MDP) acts, whose conditions include obtaining "carbon credit" to finance a carbon emission reduction project in the developing countries. This is how MB obtained funding: thanks to the idea that biofuels reduce CO2 emissions in the atmosphere.

The Mali Biocarburant company and the lure for the peasants

When it was established in Koulikoro, the strategy used by Mali Biocarburant (MB) was to offer seeds to peasants and country women for an initial production, to support the creation of a local physic nut producers’ union (offering it 20% of the shares), and to guarantee the purchase of all post-harvest production. The peasants of this area were convinced of the advantages of this activity: to begin cultivating without investment, plus to be able to sell the entire production.

Nana Coulibaly, a sexagenarian married to the chief of "MAFEYA", a village located at 7 km of Koulikoro, no longer produces the same quantity of millet produced until last year to nourish her large family. Since 2008, Coulibaly has divided her time and her land between the production of food for consumption and the physic nut.

Today, the jatropha culture is done on one hectare.

"This year I produced 7 kilograms of seeds and I plan to reach 50 kilograms next year", said Coulibaly, known as 'The Old Woman'. She will gain only 50 francs CFA ($0.10 USD) for each kilo of physic nut seeds sold.

To obtain the minimum Malian wage fixed at 29,000 Francs CFA (61 USD), Mrs. Coulibaly should produce approximately 600 kilograms of seeds of physic nut per month – which would seem a difficult goal at the present time.

In Koulikoro, the physic nut culture has extended over a surface of 2,112 hectares; when it comes to the producers’ and the fields, it is generally on plots between 0.5 and 2 hectares in size. The acreage of last year (2008) was of 1,300 hectares compared to a forecast of 1,500, explains Madou Koné, the Union’s chief technical officer.

"On our premises, the bambanas, the children, work for the parents. Thus, there are two hectares which one of us cultivates for our father. Given that I am the president of the physic nut producers’ Union in our village, I sought a hectare that I cultivated beside my father's field", said Ndji Diarra, a 40-year-old MAFEYAN. To accelerate the work, the peasants make everyone in the family work, whether it is to plant or to harvest.
Sales and purchasing

*Mali Biocarburant (MB)* provides seeds to the peasants for the initial seedlings. And the production is sold exclusively to this company. Currently, the physic nut producers’ union, which is the interface between the producers and the company, pays only 50 Francs CFA per kilogram of seeds.

In connection with the criteria which determines the purchase price of the seed, Koreissi TOUREA, director of MB said to Via Campesina that "we buy at this price because it is what one pays on the market. But if we pay more, it would bring us damage because the production costs are high". A survey of the international market shows that the fall in prices for this culture has not affected the producers, Malians who were still in an experimental phase of production. MB agreed with the local producers’ union on the price.

Charlotte SAMA, a trade unionist of the village of Kolongo in the circle of Macina, has had quite enough of the physic nut culture for having taken part early in 2009 in a workshop on renewable energies, as a representative of the Ségou area where this culture has been largely discussed.

“It was understood that one becomes a slave by growing this crop, specifically because we do not have factory for the processing and it is somebody else who will come to buy our production at the prices which are appropriate to him. As I went, I found that I am likely to spend more than my current future according to my first experiments with this culture: its fruit is not immediate”, testifies Mrs. SAMA.

Ibrahima Coulibaly, president of CNOP (the National coordination of the Rural organizations of Mali), the largest rural organization of the country, explains why his organization is opposed to the culture of plants for biofuel production.

“The peasants are disabled by the food crisis. Mostly illiterate, they do not realize that they are misled by the jatropha purchasers”, he explains.

According to the explanations of the person in charge of the MB lab, a peasant can, in the first years, gain between 45,000 and 70,000 F CFA (approximately 96 to 150 USD) per hectare with the sale and harvest of the physic nut. A sum which, in the majority of the cases, must be divided between several family members (between 4 and 6) working the same field.

“This sum is marginal”, recognizes an employee of the company that required anonymity; “but between that and not having money to buy rice even for a few days, the peasants see themselves obliged to produce. So we encourage the increase in production, to have significant receipts with the sale of seeds”, he adds. After the transformation of the physic nut and its carburization, the output is sold to large fuel distributors in Bamako, at the same price as fossil fuel. NGO Mali Folk Center and the company Bangani SA also have future production projects for biofuel starting from the physic nut. For the time being, priority is given to the production of physic nut - and not its transformation. But in a few years, Mali Biocarburant will have serious competitors around.

To increase production in response to demand

The current Koulikoro peasant production does not satisfy the *Mali Biocarburant (MB)* requirements for seeds. From 2010 on, it intends to extend its project to include even more of the area's peasants.
“We want to increase the production by 1,000 hectares because the quantity produced does not satisfy our needs”, reveals one of the company’s employee, who required anonymity.

MB is a company which gathers several partners: The Royal Institute of the Tropics, Retirement Fund (SPF), The Flower Machine Company, Interagro, and Koulikoro’s union, a local cooperative society of physic nut producers. Through the PSOM program, the Economic Affairs Ministry of the Netherlands subsidized the investments at a total value of 60%.

To increase cultivation of the physic nut is to compromise food crops

The leadership of Mali Biocarburant (MB) praises the existence of the Koulikoro factory because it affirms that biofuel is good for the environment, avoids erosion and does not emit carbon dioxide into the atmosphere.

MB turns a blind eye to the fact that the physic nut culture is destroying forests, and that it occupies lands intended for food crops. Scientific studies published recently in Science show that biofuel production is more polluting than the extraction and use of fossil fuels. They produce more greenhouse gases in their production process.

The increasing tendency to produce the physic nut in Koulikoro threatens the cultivation of food products. Today, the peasant still shares his time between the food crops and the physic nut; but jatropha curcas research for the production of biofuel will lead him to dedicate more time to cultivating of the nut - which will gradually eliminate the countryside’s food production in Mali. The farmers are becoming increasingly dependent on the worldwide market. If the prices for food products experience a dramatic rise, as happened in 2007, the peasant will no longer be able to buy enough food. And with the fall in oil prices, a farmer’s income will not suffice any more for his needs. The situation becomes more serious...
when one says to the peasants and to the country women that the jatropha culture is a positive activity; they thus find themselves with the obligation to produce more each time to be able to respond to factory requests.

“The physic nut is a miraculous tree which came to save Africa. Since the first tests, the union was visited by many foreigners, Japanese, Spaniards, the French, Americans and even Africans. The goal of these visits was to experiment with Koulikoro”, says Issiaka DEMBELE⁹, President of the union of the physic nut producers of Koulikoro. He informs us that its organization plans to promote the culture of this plant at the national level.

This leader explains that his organization condemns the use of all food cultures such as sugar cane or sesame for biofuel, but he does not see any danger in the use of the physic nut because it is not a food plant. This leader supports with conviction that he does not see any problem in dividing the land between food cultures and the culture of the pourghère. Therein, he ignores inadequate land use and the famine problems that Mali must face. In reaction to the engagement on the part of the Koulikoro peasants in the physic nut culture, Charlotte SAMA considers it regrettable that these peasants do not realize the possible risks of lacking food for nourishment.

“I concluded that this culture cannot go together with the rice culture because one cannot sleep under the light being hungry”, she concludes.

The case occurred in Burkina Faso where the peasants refused the food cultures and turned to the culture of the sesame (a plant of the Pedaliaceae family largely cultivated in certain tropical areas because of the oil that one extracts from its grains) intended for marketing. Some time afterwards, when they saw that this culture did not yield the expected result, they turned back.

“Even if there is little money, it will not provide food for the family. If attention is not paid, we will suffer consequences similar to those of the Burkinabe peasants” alerts Charlotte SAMA, a contractor of Sikasso, the third area of Mali.

Abou Woro Madou, in order to feed his factory, agreed with the local peasants to cultivate the sunflower, another plant being used to make biofuel. After having cultivated great quantities of sunflower and physic nut, the peasants will show a loss in their production, because Abu Madou did not succeed in paying them.

“I was to cultivate 3 hectares last year, but thanks to the propaganda of Abou which promised to buy all the area’s production of sunflower, I cultivated 2 hectares of food crops and a hectare of sunflower. We produced well but, until now, no one has been paid. I regret this bad faith extremely, I could have cultivated corn on this hectare and I would not have had a food deficit as it is the case now. I did not have the money for my production and I produced less food”, explains Alamine TRAORE, a peasant of Sikasso.

Mali Biocarburant entrusted the Physic Nut Producers Union with the task of convincing the peasants that they would gain more while cultivating the physic nut on their grounds. Contrary to this practice is that with the little money gained with the sale of their harvest, the peasants of Koulikoro are obliged to go to the capital, Bamako, to buy food products most of which could have been produced locally.

Although at first the physic nut plantation does not constitute an obstacle to the blooming of the other cultures - by leaving two meters of distance between each plant for the culture of other cereals (groundnuts, sorghum, corn), over time, the tree branches out, creating shade and preventing the growth of certain cereals such as the millet, which needs sun.

A SNV (Dutch Development Service) specialist in Mali explains that, with time, the selling price of the jatropha will go up and that will motivate the peasants even more to forsake other cultures.

“There will come a moment when multinationals will impose their prices on the peasants and the latter will not have a choice but will have to subject themselves to their conditions because it will be too late for them to return to other cultures”, he explains.
Land conflict in Mali

With a population of 13,176,000 inhabitants (data that goes back to 2008), more than 75% of Malians practice agriculture, a sector which contributes to approximately 44% of the GDP. Because of the policy of the Malian government, which is interested in oversea investments, the peasants are starting to have problems of access to the land.

Recently, a Libyan company called MALIBYA rented, together with the Malian government, 100,000 hectares of ground in the Western zone of Macina located in the fourth area of Ségou country and renewable for 50 years. This surface thus conceded will be intended for the culture of agricultural produce for export. According to a source from the Niger Office directorate, an agency which coordinates the culture of rice in Kolongo-Macina, 150 surrounding families are affected by the alteration of the 100,000 hectares. Only 58 of these families will be compensated. In addition, group TOMOTA of the contractor Malian Alou TOMOTA has 100,000 hectares in the same zone of Macina. Peasants of this locality were removed from their land to the profit of this group, which intends to devote itself to biofuel culture.

Nouhoum SANOGO, manager of the natural resources of the Program of Support to the Territorial collectivities, PACT, observed the dissatisfaction of the local peasants due to the occupation of lands for the culture of the physic nut. For SANOGO, the land must be used by the local peasants because it belongs to them. “We cannot allow the peasants, legitimate owners of the lands, to become agricultural employees of the companies installed on their own land. That worries me much”, said the indignant SANOGO.

In Mali, one witnesses a country in preparation for the exploitation of a million hectares – lands that are currently used for the culture of rice - for the culture of the physic nut to produce biofuel. According to April 2009 studies by the French daily newspaper Le Monde, the Malian government agricultural extension projects for the Niger area of the Delta foresee the exploitation of 360,000 hectares by foreigners among them Libyans, Chinese and Americans. There only remain nine thousand hectares in the hands of local peasants.

“Certain peasants do not measure the agrarian stakes - even in terms of control of the land around the biofuel; they think themselves as having enough land and being able to devote it to the jatropha without any problems. But there too they are mistaken because the things will evolve in a direction where they will not be able to move back easily”, explain the persons in charge of the CNOP.

Via Campesina_Africa

References
1 - This information was given to us by the president of the Koulikoro physic nut producers union, an organization which holds 20% of the company shares.
3 - Maintenance made at the village of Mafeya, Koulikoro on July 2nd, 2009.
4 - Person interviewed on company grounds on June 2nd, 2009
5 - Person interviewed in Kolongo, Macina area, on July 4th, 2009
6 - Person interviewed at CNOP grounds in Bamako
7 - Information available on the company Web page: http://www.malibiocarburant.com
8 - Information available on the page http://ciencia.barrapunto.com/article.pl?sid=08/02/11/206242
9 - Person interviewed in his office in Koulikoro, on July 2nd, 2009
10 - Laetitia Clavreul, “In Mali, the new settings in profit culture, especially with the Libyan investors”, Le Monde, 15.04.09.
Mozambique

Production of jatropha expands in the country

The worldwide fuel crisis has sharpened the race for the production of biofuels on all sides. The fever also reached Mozambique and for some time there the authorities have developed efforts in the production of this type of fuel, giving rise to projects for planting sugar cane and jatropha, among others.

The production of agrofuels is projected to reach 5.7% of the fuel needs in Europe by 2010 and 10% by 2020. To achieve such production volumes, Europe will need around 70% of its current farmlands—a scenario which would have a negative impact on food production on that continent. The alternative would be to rely on the South, where there is little data or knowledge about this type of cultivation.

According to information that has been made public, jatropha is a plant that can be grown in marginal lands, an argument cited by the authorities in Mozambique to say that there is no conflict with food production. The same authorities believe that the planting of jatropha can benefit the farmers because they can sell their production to the biofuels industry.

However, some sectors of civil society argue that jatropha production will cause the loss of arable land for food production and will keep the farmers so busy that they will not have time to grow food. It is believed that with the development of jatropha, many farmers will lose their lands to the big farming interests, a scenario that will contribute to the impoverishment of the farmers.
According to a study recently carried out by the National Union of Farmers (UNAC) and Environmental Justice, the mass production of jatropha still needs more study to understand its socio-economic impact on the farmers. The study concludes that this program will not ensure a sustainable market or an alternative to climate change, but instead will make farming very unstable and will not reduce poverty.

A fear that is manifested in the study refers to the destruction of the native forest implied by the mass production of jatropha. 70% of the land in Mozambique is covered by forest that is slowly being destroyed to make way for new farm lands, a phenomenon that will contribute to a rise in the greenhouse effect, a main cause of the climate changes that are affecting the world.

The study mentions that jatropha can cause illnesses and even with the use of pesticide to reduce this problem, the plant ends up saturated with chemicals, which affect the farmers if they are using them. In Mozambique, the discussion around agrofuels is increasing with the expectation that their cultivation can attract foreign investment as well as lessen the country’s reliance on importing fuels for domestic use.

Up to 2007, various multinational corporations had already acquired around 5 million hectares of land, around one-seventh of the lands considered arable. This is to be added to the approximately 40 million hectares considered marginal that are officially considered suitable for the cultivation of agrofuels.

The campaign for the promotion of the cultivation of jatropha carried out by the Mozambican authorities highlights above all the advantages that agrofuels can have for the country as well as the added value to the farmers’ income. However, each day that passes brings more questions about this cultivation, especially from civil society, including UNAC. More information and in-depth studies are needed about this crop and this issue before moving ahead blindly with a program that can become a disaster for the lives of the farmers, who can see their expectations of a better life threatened.

The fear is that land that is currently in the hands of the farmers can be expropriated. Little is known about the Land Law itself or the procedures that guide its application, a process that is not very transparent. The study cites the case of the ProCana project, which took 30 thousand hectares for the cultivation of sugar cane along the margins of the Limpopo River for the production of ethanol. The land in the Chokwe district is not only very fertile but also makes up part of the lands given to the community that was transferred to the Grand Limpopo Cross-Border Park. As soon as the population found out about this, the conflict over this land emerged.

Following is the executive summary of the study cited in this article.

Jatropha! A socio-economic pitfall for Mozambique

Executive summary

In Mozambique, the debate on agrofuels has steadily advanced over the last five years, fueled by industry speculation and demand, grand promises and foreign interests. Investors have applied for rights to close to 5 million hectares in Mozambique in 2007 alone, nearly one-seventh of the country’s officially defined “arable” land and is rushing to create favorable conditions for investors at the cost of the civil rights of Mozambicans. A good example of this was clear with the World Bank funded National Policy and Strategy for Biofuels that purposely blocked civil society participation, lacked transparency and was only made publicly available once complete and approved by parliament.

Because of Africa’s water scarce climate and the continent’s large extent of supposedly ‘marginal’ land, Jatropha has been given the most attention as a potential agrofuel crop. However, many question the claimed benefits of Jatropha and believe that the current rush to develop Jatropha production on a large scale is ill-conceived, under-studied and could contribute to an unsustainable trade that will not solve the problems of climate change, energy security or poverty. Therefore, this study evaluates Jatropha production in Mozambique and the most common claims made in favor of Jatropha in order to delineate the differences between the rhetoric and reality.

Myth No. 1 Jatropha grows well on marginal land and can produce high yields on poor soils

Unfortunately, no cases from the literature or from any of the communities, industry experts or individuals interviewed could even mention a
single example of this being true in Mozambique. On the contrary, almost all of Jatropha planted in Mozambique has been on arable land, with fertilizers and pesticides, but have still fallen short of the claimed growth rates and yields. Furthermore, one of the main factors for Mozambique’s projected potential for jatropha production is its “claims” of extensive stretches of “unused arable and marginal land”. Not only are these claims believed by many experts to be grossly overestimated, at an industrial level, one must take into consideration that around 70% of Mozambique is covered in forest and woodlands [34] and most large scale agriculture projects are going to replace natural vegetation. In the current climate change crisis the loss of the major carbon sinks like forests have to been taken seriously and agrofuels in Mozambique are a threat in the fight to decrease the countries carbon foot print. In addition, it doesn’t take into account neither the ecosystem services, such as sustaining local hydrology, replenishment/maintenance of soil nutrients and maintaining biodiversity; nor the resource contribution to livelihoods, such as animal protein, fruit, firewood and building material. Large extensions of these functioning ecosystem are vital in coping with the livelihood requirements of rural communities and the loss of these areas to large scale farming will intensify the community impacts.

Myth No. 2
Jatropha requires low water use and minimal maintenance
In Mozambique it was found that irrigation was required during the early development phase, even in areas were the rainfall ranged between 800mm and 1400mm. In the southern region of the country the lower range is around 600mm, constant irrigation was often required and even some areas that received around 800mm of rain still found it useful to irrigate their crops. In one of the districts visited there were already concerns of the impacts of the large amounts of irrigation water used by the large scale farming companies in the area.

Myth No. 3
Jatropha is resistant to disease and pests
This study found extensive evidence pointing to Jatropha’s vulnerability to diseases and problems with fungi, viruses, and insect pests. In cases were the plants were heavily infested the plant would stop producing leaves and stay in a state of stress, which left the farmer with no choice other than to remove the plant. The extensive use of fertilizers and pesticides has still not solved these problems. Of even greater concern in Mozambique is the growing evidence from both the subsistence farmers, and experts, of Jatropha pests spreading to surrounding food crops. More research is required to better understand the extent and impacts to subsistence farmers and food sovereignty in general, but the current food deficit, weak support and lack of “safety nets” characteristic of the subsistence farming sector makes even minor impacts serious.

Myth No. 4
Jatropha does not present any risk to food security but is a development opportunity for subsistence farmers
In Mozambique Jatropha is planted as a direct replacement for food crops raised by subsistence farmers, and given that around 87% of Mozambicans are subsistence farmers and produce 75% of what they consume, major concerns arise when one considers the plan to encourage subsistence farmers to plant large amounts of Jatropha. This concern is even further exacerbated because subsistence farmers have very weak links to markets and lack of storage capacity, communication and information makes it difficult to benefit from cash crops. As the lowest link in the agricultural value chain, when food agricultural markets crash or slump in Mozambique, the price risks are passed down to small farmers. While subsistence farmers are somewhat resistant to food price fluctuations because they produce such a high percentage of their food consumption, non consumable cash crops like Jatropha will change this.

The land law designed to protect local communities has been manipulated by government through unconstitutional decrees weakening community land rights. In addition, the law identifies the importance of local community leaders in dealing with community rights, as well as the prevention and resolution of conflicts at a local level, but this is abused by investors and government officials through bribes to leaders to gain community consent without community consultation. When they do take place, community consultations are often not transparent and loaded with promises that are never delivered. These abuses are facilitated by weak dissemination of community rights, information and lack of translation of documents into local languages. When abuses are uncovered, resolution is usually very difficult, especially for communities that lack the resources and information around the legal processes. These problems make large land grabs of community land a likely prospect in Mozambique’s drive for jatropha production.

Conclusions and Recommendations
The report concludes that the dominant arguments about Jatropha as a food-security-safe biofuel crop, a source of additional farm income for rural farmers, and a potential driver of rural development were misinformed at best and dangerous at worst. While further independent research will give more detail, this investigation
seriously challenges Jatropha as providing for sustainable fuel and development in Mozambique. Given the trend in evidence emerging internationally demonstrating the failures of Jatropha to meet expected outcomes, and in fact endangering food sovereignty and rural livelihoods, this report recommends that support for Jatropha development in Mozambique be halted until some of the major development issues surrounding subsistence farming are addressed and rural communities obtain food sovereignty. A similar conclusion was reached by Mozambique’s civil society, and subsistence farmers, in 2008, resulting in the emergence of a declaration with specific recommendations that should be respected, including prioritizing food production, greater support for subsistence farmers, increased support for cooperatives, ensuring farmers rights, respecting community land rights, and promoting food sovereignty.

*National Farmer’s Union - Mozambique (UNAC)*
*“Jatropha! A socio-economic pitfall for Mozambique”, Justiça Ambiental (JA) and União Nacional de Camponeses (UNAC)*
*July, 2009*
Brazil

Agrofuels in Brazil

During the past few years, the production of biofuel from agricultural products, or agrofuel, has been presented internationally as the possible solution to a future global energy crisis. It is promoted as the substitution of non-renewable fossil fuels, such as petroleum, and it is also seen as a "clean energy" source, an alternative that would prevent the degradation of the environment. However, the governments, researchers and large corporations that consider agrofuels to be the solution to the world environmental and energy crisis disregard from their analyses the negative impacts of the agricultural production model geared for export. The effects of the production of agrofuel must be evaluated based on the entire production system and not solely "from the exhaust pipe."

1-The World Energy Matrix
Currently, the world energy matrix is composed of petroleum (35%), coal (23%) and natural gas (21%).

Ten of the richest countries consume about 80% of all energy produced in the world and, consequently, those are the most responsible for the pollution of the atmosphere. The United States alone is responsible for 25% of the total pollution that affects the environment. Brazil is also one of the countries with high carbon emissions. This is primarily due to the destruction of the Amazon rainforest, which represents 80% of the carbon emissions of the country. Brazil is practically self-sufficient in energy production.

Thus, the main goal of expanding agrofuel production is to meet the demand of other countries. This measure will hasten global warming instead of contributing to the preservation of the planet. Taking advantage of the legitimate concern of public opinion regarding global warming, large agribusiness, biotechnology, petroleum and automotive corporations notice that agrofuels represent an important source of profit.
The Brazilian government considers the production of agrofuel as a pillar of its development program and has already granted billions in incentive of research and production of biodiesel – from soy and castor oil, for example, through the National Program of Production and Use of Biodiesel (Programa Nacional de Produção e Uso de Biodiesel – PNPB) – and also ethanol from sugarcane. During 2008 the president signed a series of bilateral agreements with various countries in order to amplify the exportation possibilities for the product. With billionaire investments, the country stands out as one of the major agrofuel producers of the world.

2-The Myth of Agrofuels
It is necessary to demystify the propaganda about the supposed benefits of agrofuels. The concepts of “clean” and “renewable” energy must be discussed in light also of a broader view that considers as well the negative effects of these energy sources. The Smithsonian Tropical Research Institute concluded in 2008 that the ethanol produced from sugarcane and the biodiesel made from soy cause more damages to the environment than fossil fuels.

2.1- Ethanol Production from Sugarcane

Dilma Roussef, the Brazilian Chief-of-Staff, announced at the end of this year’s first semester that the country maintained leadership in the global production of agrofuel and that an even greater expansion of ethanol exports are of fundamental interest to the government.

This year alone, the sector received more than R$3.2 billion from the National Bank of Economic and Social Development (Banco Nacional de Desenvolvimento Econômico e Social – BNDES). This value is 36% greater than the investment during the same period in 2008. The BNDES resources destined to agrofuel are extracted, in great part, from the Worker Support Funds (Fundo de Amparo ao Trabalhador – FAT).

In June this year, the Brazilian government signed an “ethanol certification agreement.” The President promoted the signature of this agreement as a way to relieve the international rejection of Brazilian ethanol, which was provoked by hundreds of indictments that prove an intrinsic relation between agrofuel production, slave labor and the devastation of the environment. However, the agreement adds nothing to the already existent labor legislation, which is violated, chronically and continually, by the corporations that employ Brazilian sugarcane workers. As we watch the expansion of the ethanol industry, we also witness the increase of the negative impacts that monoculture causes upon workers and the environment.

In the case of ethanol produced from sugarcane, the production and processing of sugarcane pollute the soil and sources of potable water, for they require large quantities of agrochemicals. Each litter of ethanol produced at the processing plant, in a closed circuit, consumes about 12 liters of water. This quantity does not include the amount employed in raising the crops that, in the case of irrigated monocultures, guzzles an even greater quantity of water. The distillation process produces a residue called vinasse. For each litter of ethanol produced 10 to 13 litters of vinasse are generated.

Burning the sugarcane crops serves to facilitate reaping and, moreover, labor costs are far cheaper for harvesting the burned crops. However, this practice destroys great part of the microorganisms in the soil, pollutes the air and causes respiratory diseases. The sugarcane processing plants also pollute the air through the burning of the bagasse, which produces smoke and soot.

The National Institute for Space Research (Instituto Nacional de Pesquisas Espaciais) decreed a state of warning in the sugarcane-growing regions of São Paulo (the state with most sugarcane production in the country) because the fires led the relative humidity of the air to extreme lows, between 13% and 15%. In addition to the environmental degradation and the indiscriminate use of natural resources, sugarcane monoculture dominates some of the best arable lands of Brazil.

2.2- Biodiesel Production from Soy and Palm Oil
In the case of soy biodiesel, the most optimistic estimates indicate that the balance of renewable energy for each unit of fossil energy spent in the production of the crops is 0.4 unit. This is due to the high consumption of petroleum in heavy agricultural machinery and petrochemical fertilizers. In addition, the expansion of soy crops have caused enormous devastations of forests and cerrado (or savannahs), obliterating biodiversity in several countries, including Brazil.

Yet, the Brazilian government has presented soy as the main crop for biodiesel, due to the fact that the country is one of the largest producers worldwide. “The production of soy stands out as the crown-jewel of Brazilian agribusiness. The production of
soy can be considered the wedge that will allow the opening of biofuel markets," assert researchers from the Brazilian Company of Husbandry and Agriculture Research (Empresa Brasileira de Pesquisa Agropecuária – EMBRAPA). In the Amazon alone, the proposal is to cultivate 70 million hectares with palm oil (dendé). This product is known as "deforestation diesel." In Malaysia, the largest producer of palm oil worldwide, 87% of forests have been cut.

In addition to the destruction of arable and forest lands, these processes involve other polluting procedures such as the construction of transport and storage infrastructure, which demands great quantities of energy. In the case of palm oil, a study by the Delft Hydraulics research institute concluded that each ton produced represents 33 tons of carbon dioxide.

2.3- Biodiesel Production from Castor and Jatropha Oil
The Brazilian Biodiesel Program (Programa Brasileiro de Biodiesel) includes castor bean (*Ricinus communis*) and Barbados nut (*Jatropha curcas*) as possible crops for agrofuel production, especially involving small farmers. However, there are serious doubts about the viability of these projects. According to analysts, the castor bean is more economically viable for other purposes, such as the production of lubricant oil for the aviation sector and for high-performance automobiles.

Regarding the Barbados nut, researchers from EMBRAPA warned that there is no trustworthy technical knowledge that guarantees the viability of the production of this crop in sufficient volume for the Biodiesel Program. Whether in Brazil or in other countries, there have been no reports of long term experiments with scientific validity that uphold the viability of this crop.

2.4- The Production of Biomass from Cellulose
New research intends to introduce in the global market the so called “second generation” of agrofuels, developed from cellulosic matter, which some estimate would be available in approximately ten years. This gives the idea that agrofuels produced from food sources would be substituted quickly, eliminating the risks associated with food security and food sovereignty. However, if the current rate of expansion of corn, sugarcane, soy and palm crops is maintained (which are currently the principal prime matter for agrofuels), within ten years those will already have a significant impact in their own right.

Another myth promoted in regards to cellulosic agrofuels is that those would not utilize agricultural lands and that they would take advantage of organic residues from the production of corn, sugarcane, etc. First of all, what are usually called “organic residues” are natural fertilizers that are required to nourish and protect the soil. The biomass of cellulosic matter for agrofuel is being developed primarily through genetically modified species of trees, which represent a great danger of contamination to other species, for it is practically impossible to control pollination, in addition to the risk of the extension of such plantations into forest areas.

2.5- Transgenic Agrofuels
Corporations that produce genetically modified organisms (GMOs), or transgenic organisms, began developing non-edible crops geared solely for the production of agrofuel. Since there is no way to avoid the contamination of transgenic varieties into native crops, this practice places food production at risk and could aggravate hunger worldwide.

The farmers themselves admit that there is no way to control contamination, since they cultivate corn for ethanol and human consumption simultaneously.

The expansion of agrofuel production is of great interest to the GMO corporations such as Monsanto, Syngenta, Dupont, Dow, Basf and Bayer, which expect to obtain greater public acceptance if they sponsor transgenic products as sources of “clean” energy.

In Brazil, the Votorantin group has developed technology of the production of transgenic sugarcane for the production of ethanol through two corporations, Alelyx and CanaVialis, which recently established partnerships with Monsanto.

2.6- Destructive Effects for Agrarian Reform and for Rural Workers in Brazil
The case of Brazil involves elements that can also be verified in other countries. Brazil is currently the largest producer of ethanol, reaching a record of 22.5 billion liters in the 2007/2008 harvest. It is estimated that Brazil’s annual production of ethanol will reach 35 billion liters by 2012.

Brazil has approximately 200 million hectares of unused public lands and 130 million hectares of unproductive private lands, according to studies from the II National Plan of Agrarian Reform (II Plano Nacional de Reform Agrária). The expansion of monocultures for agrofuel production will likely increase the illegal occupation of large tracts of public lands by soy producing corporations, in addition to “legalizing” the already existent occupations.

Both public and private unproductive lands should be devoted to agrarian reform, to the production of food, to reforestation of areas degraded by unsustainable farming practices, and to attend the
historical demands of about five million landless families. Some large transnational corporations have been acquiring processing plants in Brazil, including Bunge, Noble Group, ADM, and Dreyfus, in addition to wealthy businessmen like George Soros and Bill Gates.

In the wooded area of Pernambuco (Zona da Mata Pernambucana), the expansion of sugarcane processing plants has pushed hundreds of peasant workers from their lands. This is the case of dona Maria Francisca’s family, who have lived for over thirty years in the Camurim farm, in São Lourenço da Mata, Pernambuco.

In 1997, the Petribú Processing Plant acquired the lands around their farm and expelled all residents. Only Maria Francisca’s family remained. Surrounded by sugarcane, facing the fire of the burning of the crops and the threats from Plant owners during harvest season, dona Maria reports: “Everything gets clogged with soot in my house. At night, no one could stand it.” And she adds, “The Plant burned my orchard, the coconut tree, the mango tree, the jambo tree… This place was full of fruits and crops. Everything collapsed.”

2.7- Slavery and Death of Workers
The pattern of overexploitation of work in agrofuel production monocultures has caused serious health problems and even the death of workers. The cases of worker exploitation are persistent.

Between 2005 and 2006 alone, 17 deaths due to exhaustion while harvesting sugarcane have been reported. “The sugar and the ethanol in Brazil are bathed in blood, sweat and death,” asserts the researcher Maria Cristina Gonzaga, from Fundacentro, an organ of the Labor Ministry.

Data from the Pastoral Commission on the Land (Comissão Pastoral da Terra), published in the Brochure of Conflicts of 2008 (“Caderno de Conflitos 2008”) demonstrate that 2.5 million of the 5.2 million people freed from slave labor worked in the sugarcane plantations, that is, 48% of all individuals freed.

In order to guarantee her wage, the worker must reach certain levels of productivity that require brutal efforts. “If one drafts a whole lot, the man can get minimum wage here. If you don’t draft enough, you don’t even get that. To get minimum wage here is suffocating, you have to work really hard. Sugarcane work is really bad. It is minimum wage and that’s it, we don’t get more than that here,” comments dona Sebastiana, from the municipality of Água Preta, in wooded area of Pernambuco, who works with sugarcane since she was 11. According to the worker Rosana Gonçalo da Silva, also from Água Preta, “work accidents also happen frequently. The physical effort is so great that sometimes we even agonize. We faint, one succors another, ‘run, run or you’ll die’, all that agony. When one agonizes, dies… various people have already died. They already died right there at work, from the exertion. I myself have almost died several times. You feel that agony in the heart, begin to shiver, shiver, shiver. When you think it’s over, you faint while at work,” she avows.

Social movements, human rights and research organizations that dedicate themselves to measuring the negative impacts of agrofuel production argue that it does not constitute a viable alternative for environmental preservation and, beyond that, it provokes severe impacts in regions of high ecological value, in addition to consolidating an agricultural production model that obstructs agrarian reform, exploits workers, and generates high dependence of the country upon transnational corporations. In Messilene Gorete’s view, from the Landless Rural Workers’ Movement (Movimento dos Trabalhadores Rurais Sem Terra – MST) in Pernambuco, the development model strengthened today in our country – that favors agribusiness and transnational corporations - is an exclusionary model for peasants and it does not solve the main social problems of Brazil. The struggle for agrarian reform presents itself, according to Messilene, as the main alternative for Brazil to overcome the violence and the crisis in the countryside. There is no possibility of extinguishing slave labor or environmental devastation in the agrofuel production process by agribusiness. The violence against the worker and the destruction of the environment are inherent to the agrobusiness model and will only be eliminated with the construction of a new model of production, through a massive and popular agrarian reform that guarantees food sovereignty, diversified production through new work relations, and new relations between humans and the land.

Accounts of Sugarcane Workers in the Wooded Area of Pernambuco

“The worker here is really meant to work for free, to the death. The worker has no turn here.” Aldair Oliveira

“The work of cutting sugarcane is a work of slavery, it is hard work. One leaves home at 3 in the morning and only returns at 8 at night. It is only better for the landowner, because each day he is going up and the worker is getting smaller, because all that we produce stays with him.” Brother Marcos

“And it isn’t like what they said. They said it was good pay, adequate housing, but when you get here there isn’t water to bathe… The thing is different, very different.” Josenilson Andrade
“When we finish the harvest they don’t pay us our due correctly, there is no insurance, no Social Security, and in our day-to-day, when we get back home, we leave to work at 2 in the morning, and when I come back home I sweep, do the dishes, clean my father’s house, all that.” Vanusa Maria da Silva Ribeiro

“I feel a lot of pain in my body. I have problems with digestion and with my spine. It hurts a lot to bend down, get up, bend down, get up. There are days I go to bed sick and wake up worse, take medicine and its as good as nothing. I take medicine, go to the doctor and the pain does not go away. I go work anyway, one day well, another sick.” Dona Sebastiana

“I don’t want to have any children to work in the sugarcane, no. Because there is no future in this. Here we have nothing, we are nothing.” Dona Maria José

Text drafted by the Pastoral Commission on the Land (Comissão Pastoral da Terra – CPT Nordeste 2), based on the brochures “Agroenergia: mitos e impatios na América Latina” and “Os impactos da produção de cana no Cerrado e Amazônia,” organized by the CPT and the Social Network of Justice and Human Rights (Rede Social de Justiça e Direitos Humanos).
Haiti

The project of agrocarburants productions, a project of the death for the haitian peasantry

The Haitian context

Haiti is a very small country occupying a third of the Island of Haiti in the basin of the Caribbean. The two thirds remaining form the Dominican Republic. The total surface area of the country is of 2,750 square kilometers, meaning only 2,750,000 hectares, of which 1,500,000 are no longer useful for agriculture because they are devastated by erosion. Haiti is a mountainous country (75%). The grounds which one can see as arable lands and represent 916,750 hectares are 25% of the national territory. 52% of the grounds have a slope of more than 40%.

Haiti is in the process of fast turning into a desert with a vegetable cover of less than 2% whereas at the time of independence 80% of the territory was covered with forests. That enables the floods that carry all in their path: human beings, animals, houses, harvests, soil, etc.

Today, Haiti has a population of more than 9 million inhabitants, of which 2.5 million live in Port-au-Prince, the country's capital. Charcoal constitutes the independent source of energy used for cooking food in cities. More than 80% of the families in Haiti use charcoal. In the farming community, the only source is wood.

Until the mid-70's, Haiti was a sovereign country in terms of food. Today, it covers only approximately 40% of the alimentary needs of the country.
has become dependent on food imports. Currently, the country produces only 20% of its requirements of rice, the population’s main staple food. The agricultural imports absorb more than $360 million of the export sales of the country, which in turn do not exceed 500 million dollars. Our total imports are of 1.5 billion dollars. Therefore, the payment balance deficit is of 1 billion dollars.

The peasants represent more than 70% of the active population. They live in absolute misery with a per capita income not exceeding $135.00 in rural areas. Certain peasants do not have more than $55.00 of annual income.

In general, 80% of the population lives with less than $2.00 per day; 55% of the population living with less than $1.00 per day. The unemployment rate is of 72%.

In spite of this situation the country has an agricultural potentiality that could guarantee food sovereignty. The problem is of a political nature. The agricultural sector receives only 6% of the national budget whereas 70% of the active population is in this sector.

We have just mentioned that the country has the potential to produce enough food to nourish the entire population. The country has more than 300,000 hectares of irrigable grounds in the various plains. There exist techniques of irrigation today such as drip irrigation, for example, which can double the quantity of the irrigable grounds. Thus, the potential for lands which can be irrigated reach 600,000 hectares whereas only 30,000 hectares are actually irrigated.

The rural organizations require an integral land reform: the granting of 30% of the national budget to the agricultural sector. If that were done, the country would produce within the absolute capacity of the bio-ecology enough corn, enough rice, enough tubers and vegetables to nourish suitably and healthily the 9 million inhabitants, guaranteeing the self-sufficiency of future generations. The country is enormously able produce organic fruits (mangos, citrus, pineapple), cocoa and coffee in the inclined grounds, which can be exchanged on the equitable markets to bring many currencies into the country.

Unfortunately, the president and his government have embarked on the insane and criminal project set in motion by the US president George W. Bush to plant this very small country in *Jatropha* for agrofuel production. For two years, structures have been installed to monopolize the arable lands and to force farmers to plant *jatropha*. Seedbeds are already under installation in at least 5 geographical departments out of 10. One starts by planting in fertile grounds while one says publicly that, in fact, marginal grounds will be used.

As regards this project the rural organization members of *La Via Campesina* and allied organizations have declared through a petition against agrofuel production aimed at fueling vehicles, and in favor of food sovereignty.

In June of 2009, the rural organizations carried out a great mobilization in Port-au-Prince in front of the Hotel where there was a meeting of national and international actors for the culture of *jatropha* in Haiti. That had a very important impact. The meeting was to some extent disturbed by the leaders - and leaders of rural organizations were present inside the Hotel. They spoke and distributed a document with two coffins on the first page.

On October 16, more than 500 peasants and country-women coming from all over the country gave a press conference to launch the call for the mobilization of *La Via Campesina* against multinational corporations and to present to the press the 31,000 peasant signatures against the *jatropha* plantations in Haiti.

A walk was organized towards the Haitian Parliament where the leaders of the rural organizations delivered the petition to the Parliament. Then they were received by the head of the Senate and the National Assembly President who declared publicly: “On my mandate, no law in favor of biofuels will be voted at the Parliament”.

*Mouvement Paysan de Papaye*
Canada

Ethanol - The zero-point-seven-percent solution

To cut energy use and greenhouse gas emissions, Canada is betting heavily on agrofuels—ethanol from corn or wheat and biodiesel from soybeans or canola. Bill C-33 passed through the Canadian Parliament and received royal assent in June 2008. C-33 gives the federal government the regulatory powers it needs to mandate that Canadian gasoline contain a minimum of 5% ethanol by 2010 and, potentially, that heating and transport diesel fuel contain 2% biodiesel by 2012. On top of this legislation to mandate demand, Canada is helping boost supply; federal and provincial governments have spent or pledged billions of dollars of citizens’ money in the form of production incentives, tax reductions, and research funds. The 2007 federal budget dedicated $2 billion over the subsequent seven years for the production of ethanol and biodiesel.

Media coverage and a well-financed campaign by lobby groups such as the Canadian Renewable Fuels Association have left many Canadians with the impression that we are making significant progress in replacing dirty petroleum-derived gasoline and diesel fuel with clean, green “renewable” fuels. That perception is wrong. The volume of fossil fuels that will be displaced by Canada’s agrofuel policies and expenditures is very small—in the case of ethanol, for instance, the displacement will be a fraction of one percent of current gasoline consumption.

Key to understanding ethanol and biodiesel is understanding that their production requires the consumption of large amounts of fossil fuels. Farmers use diesel fuel and gasoline in tractors and harvesters and trucks to produce agrofuel feedscrops: corn, wheat, canola, and soybeans. Nitrogen fertilizer—a key input for many agrofuel crops—is synthesized directly from natural gas. Many ethanol production plants run on electricity produced by burning coal. A key question is: How large is the input of conventional fossil fuels relative to the output of agrofuels? This is the question of “energy balance” (experts sometimes use the more technical terminology "energy returned on energy invested" or EROEI). An agrofuel’s energy balance is the quantity of fossil fuel energy used up in the creation of that agrofuel relative to the energy that the agrofuel ultimately contains.

Though there are some data outliers, a large number of studies calculate the energy balance for wheat and corn ethanol is in the range of 1.1:1 to 1.4:1, with a median value around 1.25:1. (See, for instance, USDA/Shapouriet et al, Kim and Dale, Wang, Agriculture and Agri-Food Canada, GHGenius, GREET.) What does an energy balance of 1.25:1 mean? It means that for every unit of fossil fuel energy (BTU or Joule) you put into producing ethanol (into making fertilizer, powering tractors, or running ethanol plants) you get out 1.25 units—a net gain of 25%. Some analysts disagree strongly that such a gain exists (Dr. Tad Patzek and Dr. David Pimental, for example, calculate large energy deficits, not gains). But let’s ignore these pessimistic assessments and proceed with only the figures provided by agrofuels proponents. Let’s accept the best-case scenario put forward by ethanol advocates.

So we have an energy balance like this: one unit of fossil fuel energy in produces 1.25 units of ethanol energy out. What does that mean in practice? Well, Canada’s Bill C-33 will soon mandate that automotive gasoline must contain 5% ethanol by volume. On the face of it, we are going to replace 5% of our automotive fossil fuels (oil refined into gasoline) with “renewable fuels” (corn distilled into ethanol). But appearances in this case are deceiving. Because that ethanol—let’s call it 5 units—takes some fossil fuel to produce. How much fossil fuel does it take to produce those five units of ethanol? It takes 4 units. (This is where the energy balance comes in: 5 units of ethanol divided by the 1.25 energy-balance ratio.) And when you account for those 4 units of fossil fuel...
that went into making the 5 units of ethanol, you find that a 5% ethanol mandate does not really displace 5% of the fossil fuel in your gas tank: it displaces just 1% (5 units minus 4 units, or 5% minus 4%).

But even that assessment gives too much credit to ethanol. Because that 1% ethanol requirement is measured by volume—essentially, one gallon out of every 100 you put into your tank. And if the energy density of ethanol were the same as in gasoline (if there were the same number of BTUs or joules per gallon or per litre), then you actually would have a 1% gain. But the energy density is not the same. A gallon of ethanol contains only 70% as much energy as a gallon of gasoline. Therefore, a 5% ethanol mandate for Canada will not displace 5% of the fossil-fuel gasoline we currently burn in our cars. It will not even displace 1%. It will displace 0.7%—seven-tenths-of-one-percent.

Surely a technologically advanced nation such as Canada can find creative ways to cut automotive fossil fuel consumption by a paltry 0.7% without triggering events like the 2007/08 food price run-up that many have attributed to ethanol production. Surely we can find alternative ways to make that 0.7% gain that does not require billions in taxpayer spending—subsidies to Archer Daniels Midland, Husky Oil, and others. Surely we can find ways to increase our fuel efficiency by less than 1% that don’t lay us open to charges of “burning food” in a world where nearly 1 billion go hungry.

What would it take to reduce Canadian gasoline use by 0.7%? An average driving speed of 1 mph (1.6 km/h) slower would do it. Cutting back by one driving trip in every 142 would do it. Keeping our tires properly inflated would more than do it; according the the government of Canada, proper tire inflation can cut fuel use by more than 4%—saving us several times more gasoline than our ethanol experiment will save. Given the billions of taxpayer dollars seemingly available for agrofuel production, it would seem a superior strategy to spend just a fraction of those amounts by hiring 5,000 to 10,000 young people, paying them each $40,000+ per year, giving them each a tire pressure gauge and a hand pump, and have them walk around our cities and pump up the tires of parked cars? It sounds like a joke, but a competent and objective cost-benefit study would probably find this to be a far superior plan. Perhaps industrial ethanol is the joke.

The preceding analysis focuses on the fossil-fuel displacement potential of ethanol and finds that potential to be very, very small. Ethanol’s potential to reduce greenhouse gas emissions is a separate, but linked question. Ethanol’s very small capacity to displace fossil fuel would tend to make one pessimistic about its potentials to create large reductions in greenhouse gas emissions. That pessimism is reinforced when one considers the many inadequately answered questions regarding ethanol-related deforestation, land use conversion from grassland to cropland, the necessity to move ethanol by trucks and trains rather than by pipelines, and nitrous oxide off-gassing from natural gas derived nitrogen fertilizers. Some analysts (Fargione et al 2008 and Crutzen et al 2007) have shown these poorly-understood effects to be potentially very large relative to greenhouse gas reductions claimed by agrofuel advocates.

In conclusion, agrofuels appear to have been oversold. Their capacity to reduce fossil fuel use is negligible. Their capacity to reduce greenhouse gas emissions is uncertain, possibly non-existent or, worse, negative. And, thus, their capacity to solve the resource and environmental problems generated by a growing global auto fleet and the proliferation of the North American car culture is completely inadequate. It is very difficult to take seriously the idea that they may be a “solution.” They appear increasingly to be a distraction.

We are eating oil

Large-scale (and even medium-scale) renewable fuel production is unsustainable. This is partly because it is built atop, and draws from, our unsustainable food production system. Our food supply—now scaled up to feed 6.5 billion people and their livestock—is increasingly a product of fossil fuels. Nitrogen fertilizer, the main feedstock for our foodstuffs, is created directly from fast-depleting natural gas. Gas provides the feedstock chemicals as well as the energy to drive the reactions that make nitrogen fertilizer. Similarly, our farm chemicals are made primarily from fossil fuels. Likewise, our processing and distribution systems run on fossil fuels. The fossil fuel inputs into our meals are huge. We are, as many have observed, eating oil. Thus, as goes oil, so goes our food supply. And so goes our supply of grain and oilseeds from which to make ethanol and biodiesel.

The problems with the sustainability of our food supply do not end with fossil fuels: As we move from our current population of 6.5 billion people toward a probable 9.5 billion, we are encountering limits to our irrigation water supply. We are drawing down fossil aquifers. Our water use is unsustainable, and it will become even more so as we move to increase food production for humans by 50%.

We are losing soil to erosion and cropland to urban sprawl, salination, and desertification. Our use of the Earth’s soils is probably unsustainable.

Thus, if the energy and fertility sources of our food supply are unsustainable, if our use of soil and
water is unsustainable, we can be pretty sure that the food system overall is currently unsustainable. It naturally follows that any corn or soybean or canola biofuel source taken out of that food supply will be similarly unsustainable—renewable, but unsustainable.

In the face of such chilling facts about our food and grain supplies, biofuel proponents often stage a tactical retreat and begin talking about cellulosic ethanol—ethanol made from the fibrous cellulose found in wood and straw. The idea here is to take wood chips and crop waste and to turn them into fuel with the help of exotic processes or yet-to-be-discovered bacteria. It’s not a bad idea to turn wood waste into usable fuel. And we can even imagine that it could be sustainable to capture the sawdust and chips currently rotting in heaps around a sawmill and use them to create a bit of ethanol. Where such a scheme becomes unsustainable is when we pretend that we could replace a significant part of our global motor fuel supply with ethanol derived from wood or straw.

Such a scheme would require removing mega-tonnes of plant materials from the land. This plant material would then be vaporized, along with the nutrients it contains. Removing those nutrients, however, will only make our unsustainable food system even less sustainable. If you remove the straw, you remove the raw material for tomorrow’s soil. You also accelerate wind and water erosion. Running the global car fleet, even partly, on energy extracted from the land will deplete that land. We will replace the problem of Peak Oil with one of Peak Soil. By depleting our soils as well as our fuel sources, we will reduce, not only the capacity of future civilizations to fuel themselves, but also even to feed themselves. Biofuels made from unsustainably produced grains, oilseeds, or cellulosic feedstocks mean using tomorrow’s food to make today’s fuel.

When thinking about so-called renewable fuels, the bottom line is this: Sources of renewable energy are plentiful—wood, cow dung, a horse fuelled by a bale of hay and a handful of oats. Sources of sustainable energy are much rarer. Moreover, it is almost certain that there are no sustainable ways to fuel this civilization. That is true simply because the energy draw of this civilization is too large relative to the capacity of the Earth to create usable energy. Further, our energy use is too large relative to the Earth’s capacity to re-integrate the emissions from that energy conversion back into the biosphere—instead, the energy conversion by-products accumulate.

The lie implicit in the promises made by biofuel proponents is that their energy fixes are not only renewable but also sustainable. They are not. Using such fuels will empty the Earth of resources and fill the atmosphere with bi-products. Using such products will degrade the very possibility of our grandchildren and their grandchildren living lives as comfortable as ours. Biofuels, like all unsustainable energy sources, benefit the present at the expense of the future.

National Farmers Union (Canada)
The Indonesian palm oil industry is emerging as a new giant. Since 2006 Indonesia has become the first producer of palm oil in the world, replacing Malaysia at the top level. Together, both countries control more than 80% of the total world production. Ironically, shortly after becoming the top producer in the world, Indonesia was hit by the food crisis that shook the whole world.

It would be rational to think that Indonesian people, particularly those who work in the palm oil sector, would benefit from the boom of the price of oil on the international market. Unfortunately, the contrary happened. While Indonesian palm oil penetrating the world market, millions of ordinary peoples in the country are suffering. Even the workers in palm oil plantations had a very bitter experience when the oil prices rose dramatically before falling unexpectedly. During the food crisis, early in 2008, they could not even afford to buy cooking oil made from palm oil.

Due to the boom of the palm oil sector and the rising prices, the expansion of the plantations is happening at a quick rate. Hectare by hectare, the natural forest and the food farmlands are converted into palm oil. Farmers and small farmers went to the bank to borrow money to invest in palm oil plantation, but suddenly the international price decreased very sharply. At the same time the fertilizer price were increasing due to the fossil oil prices. Many palm oil farmers went into bankruptcy.

This is the dark side of the palm oil success story. This paper tells the real story and the struggle of the small farmer and workers who live deep in the palm oil forest.

Palm Oil Plantation

In 1987 palm oil occupied about 425,000 hectares in Indonesia, but in 2007 it had reached 7.2 million hectares or almost 17 times greater than thirty years ago. In only one year, between 2006 to 2007, the land planted with palm increased by 2,656,033 hectares, the sharpest increase ever. In 2009, the total area reached 9 million hectares.

Since the Dutch colonial era, large parts of the land in Sumatra has been used for cash crop plantations such as tea, coffee, tobacco and rubber. Palm oil came later, about 30 years ago, first of all, due to the influence of Malaysia that lies just across the narrow strait. After seeing the Malaysia success in getting more foreign revenue from the export of palm oil, the Indonesian government supported state owned companies and private companies to develop palm oil plantations.

The government facilitated the procedure to get a concession of land, to access bank credit and to set up contract farming mechanisms with small farmers. Sumatra has now become the largest palm oil producing island in Indonesia.

The model of contract farming in the palm oil plantation in Indonesia is known as "nucleus and smallholders plantation" (perkebunan inti-rakyat/plasma – PIR in Bahasa Indonesia). Small farmers give their land for the conversion into palm oil plantation. So there are two kinds of palm oil areas; the areas owned by the companies and the areas owned by groups of farmers.

After the contract was signed, the companies take the land from the farmers, convert it into palm oil plantation, and looks after it by applying fertilizers and weeding until the harvest time. Farmers do not work in their land anymore, the company does. But the land title of the farmer is being put as collateral.

The farmer receives an income after harvest, by dividing the production between farmer and the companies.
Contract farming contributed to the massive expansion of palm oil because it also included the land of the farmers from the resettlement program. The resettlement program is a government program to relocate the people from the crowded Java and Bali islands to the less populated outer islands such as Sumatra, Kalimantan, Sulawesi and Papua. Every family involved in the program would receive 2 hectares of land that many of them “invested” in the contract farming system.

But nowadays, about 30 years later, the opening of new palm oil plantations does not necessary take the model of contract farming. Individual investors and companies can request a permit to open palm oil plantations.

**Corporate control**

The increasing areas of palm oil are mainly controlled by private companies. The ten biggest companies controlled 67 percent of total areas of palm oil in Indonesian in 2007.

The expansion of the sector is also very striking when we look at the increase of crude palm oil production (CPO). In 1996, Indonesia produced 4.8 million tons of CPO, while in 2007 it reached 17.2 million tones. This means that within ten years the production increased more than three times. Details of the national increasing production are in the table below. Estimations for 2009 reach 19 million tons. From the existing plantation areal 58 percent of it belongs to the private and state owned companies.

### Table. Control of the Big Corporation in Palm Oil Plantation in Indonesia (2007)

<table>
<thead>
<tr>
<th>Holding</th>
<th>Areal planted (hectares)</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Local Agribusiness</strong></td>
<td></td>
</tr>
<tr>
<td>Salim Group</td>
<td>1.155,745</td>
</tr>
<tr>
<td>Sinar Mas</td>
<td>320,463</td>
</tr>
<tr>
<td>Raja Garuda Mas</td>
<td>259,075</td>
</tr>
<tr>
<td>Astra Group</td>
<td>192,375</td>
</tr>
<tr>
<td>Surya Duma Group</td>
<td>154,133</td>
</tr>
<tr>
<td>London Sumatera</td>
<td>245,629</td>
</tr>
<tr>
<td>Sampoerna Agro</td>
<td>170,000</td>
</tr>
<tr>
<td><strong>Foreign Companies</strong></td>
<td></td>
</tr>
<tr>
<td>Wilmar Holding</td>
<td>210,000</td>
</tr>
<tr>
<td>PBB Oil Palm Bhd</td>
<td>274,805</td>
</tr>
<tr>
<td>CNOOC</td>
<td>1,000,000</td>
</tr>
</tbody>
</table>

Source: Bisnis Indonesia, 2007

### Table. Production of CPO in Indonesia 1996-2008

<table>
<thead>
<tr>
<th>Year</th>
<th>Production (Million ton)</th>
<th>Areal (hectares)</th>
</tr>
</thead>
<tbody>
<tr>
<td>1996</td>
<td>4,8</td>
<td>2,249,514</td>
</tr>
<tr>
<td>1997</td>
<td>5,4</td>
<td>2,922,296</td>
</tr>
<tr>
<td>1998</td>
<td>5,9</td>
<td>3,560,196</td>
</tr>
<tr>
<td>1999</td>
<td>6,5</td>
<td>3,901,802</td>
</tr>
<tr>
<td>2000</td>
<td>7,0</td>
<td>4,158,077</td>
</tr>
<tr>
<td>2001</td>
<td>8,4</td>
<td>4,713,435</td>
</tr>
<tr>
<td>2002</td>
<td>9,6</td>
<td>5,067,058</td>
</tr>
<tr>
<td>2003</td>
<td>10,4</td>
<td>5,283,557</td>
</tr>
<tr>
<td>2004</td>
<td>12,2</td>
<td>5,284,723</td>
</tr>
<tr>
<td>2005</td>
<td>13,1</td>
<td>5,453,817</td>
</tr>
<tr>
<td>2006</td>
<td>15,8</td>
<td>6,594,914</td>
</tr>
<tr>
<td>2007</td>
<td>17,2</td>
<td>6,766,836</td>
</tr>
<tr>
<td>2008</td>
<td>18,37</td>
<td>7,007,876</td>
</tr>
</tbody>
</table>

Source: Oil World, 2007 and SawitWatch, 2009
The increasing production of palm oil at the national level is occurring parallel to the shifting of the consumption of oil in the world. While in 2000 consumption of palm oil was below that of soybean oil, in the year 2005 the consumption of palm oil and soybean oil was equal. This shows that production of palm oil is very competitive compared to the other oils on the world market.

**Agrofuel fever**

A new factor that is pushing the expansion of palm oil production in Indonesia is the world wide agrofuel fever. Agro-fuel is fuel that is taken from an agricultural product that could used as the fuel to generate power for combustion engines, both petrol and diesel engines. And palm oil can be used as a raw material for diesel-based combustion engines.

The demand for palm oil as a source of agro-diesel can be seen in the international and in domestic markets. For instance, Europe has already moved toward a target of 20 percent agro-fuel use in the transportation sector. \(^{(2)}\) While in the United States, based on the energy bill passed in the year 2007, it targeted using agro-fuels for up to 36 billion gallons annually by the year 2022.\(^{(3)}\)

While in the Indonesian market, the government has issued some policies to pave the way for investments on agro-fuel projects. \(^{(4)}\) To implement this new policy, the government has planned to open 6 million hectares of land for palm oil plantations in order to provide the raw material for agrofuels. In mid-2007 some major projects started. In North Kalimantan (Borneo) 1.8 million hectares of land were cleared for palm oil plantations in the border area. In Subang, West Java, peasants are struggling against the expansion of 30 hectares of palm oil plantation taking away their farm land. And in early 2008 there was another huge land opening for a total of 1.3 million hectares in Papua. All of these projects are government projects for the PTPN (State Plantation Companies) in collaboration with foreign companies like CNOOC from China.\(^{(5)}\)

By the enactment of those regulations, now in Jakarta there have been 190 fuel stations and in Surabaya (the second largest city) there have been 12 fuel stations that sell agro-diesel. All these stations use palm oil as the raw material and processes it into fatty acid methyl ester (FAME) that is blended with the normal diesel fuel. So far the agro-fuel sold in the market is known as B5, which means there is 5 percent of agro-fuel in the fuel. But the target is to increase up to 10 to 20 percent.

Until May 2007, there were four main big processing plants for agro-diesel in Indonesia with a total capacity of 620,000 tons per day.\(^{(6)}\)

Projections of agrofuel production in Indonesia for 2010 mention Sumatra island as the main producer, to Kalimantan island that follows as the second producer and Java island, as the main market for agro-fuels in national. In the figure below we can see the projection of each company.
The massive on-going expansion of the palm oil sector in Indonesia is presented as a national economic success. However, it has had devastating consequences on the people and the country. It has expelled thousands of farmers from their land, it has destroyed the environment, it had turned farmers from food producers to food-dependent, it has created slavery more than employment and has maintained a colonial system where local people do not have any control over the production chain.

**Land Conflict**

The massive expansion of palm oil plantations in Indonesia requires wide areas of land. Since the beginning, the opening of plantations in the country has given rise to many conflicts between local farmers and companies - both state owned and private companies, including multinational companies.

For example, in Bukit Kijang, Asahan Regency, North Sumatra a conflict occurred because the companies took the land belonging to the small farmers in the eighties. At that time some farmers were opening the forest to have land to grow food for their families. It was a time where Sumatra still had a lot of land and people could open forest to do farming. This is why the government moved small farmers from Java to Sumatra in the resettlement program.

They were told that those who opened the forest could get control over the land to do farming. However, just after they had cleared the forest and the farmland was ready to grow food, they were informed that the land belonged some companies. A lot of problems occurred because the companies were backed up by the military.

Farmers who were reclaiming their land were violently repressed. The families were told that if they did not give up their land they would be considered as members of the communist party which was repressed in a blood bath in the late sixties. Farmers families experienced all kinds of threats and violence.(7)

Small farmers in Bukit Kijang realized the importance of creating an organisation in order to defend their land not on an individual basis but as a group. Since then they have struggled to claim their land back. They have reclaimed some of it, that they manage collectively, but they still do not have an official land title for it. Since then they have struggled to claim their land back. They have reclaimed some of it, that they manage collectively, but they still do not have an official land title for it.

“We still live under the palm oil trees, but we face a lot of uncertainty here, because we do not hold any land title. The land office does not want to issue land titles. We continue to struggle for it for our children and grandchildren” said Suharto, a member of Indonesian Peasant Union in Bukit Kijang.

After the fall of the military government of Suharto, the repression by the army decreased. Seeing this opportunity, small farmers who had lost their land to the companies tried to get it back. Unfortunately repression is still occurring. For example, in Bandar Pasir Mandoge, landless women farmers have been occupying part of a palm oil plantation by building small bamboo huts where they live with their children. They are claiming their land back from a company who doesn’t even have the right permit to exploit the land, PT Bakrie Sumatra Plantation and PT Jaya Baru Pratama.

Even though it has already been converted into a plantation, small farmers do not want to lose their connection with land. It is not just a piece of land but it is connected to their soul, to the whole history of their families. Maulina br Sitorus, a woman farmer said “How can I leave this piece of land? This is the land of my ancestors. We were born here in this land; I grew up in this land. I still remember what grew in every corner of this plantation before companies uprooted everything and planted palm oil trees. When my parents passed away we buried them here because it belongs to us.”

Women mainly live in very difficult situations. One of them, Mak Rinset said that their struggle for land is very hard. They have to live under the palm oil trees, deep in the plantation. There is no
electricity at night. And they cannot grow anything. They have started to grow some food like cassava but it does not grow, because the palm trees have destroyed the soil. It is very difficult for the women to maintain the struggle and keep feeding their children.

Another conflict is currently taking place in Jambi Province in South Sumatra. There are already over 600,000 hectares of palm monocultures in this area but the local government has put a target to reach 1 million hectares of palm plantation. Therefore the local government keeps offering private companies new land concessions for plantations.

Mr. Nyoman, a member of the Indonesian Peasant Union (SPI) in Jambi, said that some private plantations are now forging some documents to pretend to have farmer cooperation as part of contract farming to smooth their way to receive land concessions. They also use unclear agreements to have access to the farmers' land. He explained a case that happened in Lubuk Napal village, Surolangun district, Jambi where a double concession was given for the same 15,000 hectares of land: one to the Department of Transmigration and one to PT Emal, a private palm plantation. As a result, the area which was allocated for the resettlement program (transmigration) was turned into a private palm plantation.

Nyoman said that the industrial expansion of palm monocultures has led to the oppression of small scale peasants. Moreover, the palm trees have destroyed their natural resources.

While farmers have conserved the areas with the agro-ecology model of agriculture, the industrial palm oil plantations have destroyed the nutrient in the soil. Nyoman told, “We can see it where the land becomes white and hard. It also absorbs a large amount of water, in some areas it even dried out the rivers. Therefore the peasants are trying to force the government to stop releasing new land concessions for palm plantations”.(9)

**Environmental Devastation**

There are two contributors to the destruction of the rain forest in Indonesia; the timber industry and land conversion into palm oil plantations. When the timber concessions are harvested, the forest is usually destroyed because the compulsory reforestation programs are not properly implemented. Afterwards, it is very common that this destroyed forest land is converted into palm oil plantations.

An indication of the rapid expansion of the plantations in the forest areas are the regular conflicts between wild animals and local villagers. Because of the destruction of their habitat, animals such as tigers and elephants have destroyed farmland and entered villages in 2009, killing some villagers in some cases.(9)

In the past the government did not allow the use of the peat land areas and the areas with high slope to be converted into plantations. But in some regions such as North Sumatra, the government is so keen to develop the palm oil business that it is now giving concessions for peat land and hills. The direct impact on the environment is the extinction of biodiversity (flora and fauna), the exhaustion of water resources and the loss of the peat land and forest capacity to absorb carbon.

Palm oil production not only destroys the environment, it also destroys the basis of the livelihood of farmer communities, which is food self-sufficiency. In Bukit Kijang, in the regency of Asahan, village members of the Indonesian Peasant Union explained that they don't produce any of the food that they are eating.

Food has to be transported from other areas. “As you just came from the Province's capital city, Medan, and you travelled far passing many village you finally arrived here deep in the palm oil forest. You see that we live in the rural area, but here we are not different from people who live in city. Our daily meals come from outside.

It is true that the revenue from selling palm oil gives us more money, but we have to spend it all for food that could not be grown here”, said Mrs Wagimin, the wife of a small palm oil plantation farm in Bukit Kijang.

Palm oil plantations bring environmental devastation to the surrounding areas, creating suffering for rural communities. In Ogan Komering Ilir (OKI) district of South Sumatra province where palm oil has been introduced in the swamp areas the villagers now have lost their livelihood.

Marda Elius one of the villager women and also leader of the SPI in the area says that before the palm oil came in their areas, they could get on average Rp 4.5 million (Indonesian currency~ 409 SUS) on every rice planting season or about 3 months. Due to the palm oil plantation, water is not available as it was before, and people's incomes have decreased sharply.

Some forests protected for conservation have been devastated by the expansion of palm oil in South Sumatra, which is the case of the Bentayan forest that was destroyed by the company PT Sentosa Mulya Bahagia (SMB).
**Losing control over food**

Being the first palm oil producer in the world does not mean that the country has been able to secure the domestic needs of palm-related products such as ordinary cooking oil. In the middle of the year 2007 the price of palm oil in the international market increased. Therefore, many of the companies preferred to sell their products for export, instead of selling it in the domestic market.

As a result, in the national market the price of cooking oil increased by 43 percent compared to the previous year's price. This increase occurred because of the lack of supply.

From mid June 2007 to the end of 2008 the government subsidized oil prices in many parts of the country as a response to the high market prices. The food riots could not be avoided while poor people, mainly women, queued in long lines under the sun waiting to buy subsidized cooking oil. It is a shame that in the land of the largest palm oil producer, people could not afford to buy cooking oil.

Moreover, agricultural workers in the palm oil sector were among those who suffered the most. When the prices where high farmers did benefit from a better income. However the price of the raw product paid by the companies to the small farmers remains very low compared to the processed oil. Moreover, the agricultural workers in the plantations did not see their wages increasing when the price of the CPO had tripled. The permanent workers earn about Rp. 1 million (about 100 US dollars) per month while the growing number of seasonal workers get only about Rp. 700,000 (about 70 dollars).

This wage has been relatively stable for several years. Out of a daily wage of about 3 US dollars, people had to spend almost half of it to buy oil. Workers were in the absurd situation of many small food producers in the world: they produced raw palm oil but could not afford buying oil in the grocery shop.\(^{(11)}\)

The artificial scarcity of cooking oil on the domestic market was partly due to the fact that around 77 % of palm oil production is exported out of Indonesia. This export consists of CPO, edible oil, and other derivative products. Out of the remaining 23%, 70% is sold as cooking oil on the domestic market.\(^{(12)}\) It shows that the rationale behind developing the palm oil sector is to support the industry, not to fulfil the people's right to food.

The Indonesian government requested several times that the palm oil sector should supply the domestic market; it even released a domestic market obligation (DMO). However, the large corporations – state owned or private – which control the plantations as well as the processing, did not obey.

These corporations such as Sinar Mas, Astra, Salim, Asian Agri, Duta Palma dan Wilmar Group control the price of the product. Small palm oil farmers have no choice: they can only sell their fresh produce to those companies who will decide what to do with it (whether it is sold for export, transformed into agrofuel, cooking oil or any other product).

**Provide Slavery, instead of Employment**

One of the main arguments used by the government to open palm oil plantations is that it will create employment, which in turn will eradicate poverty and hunger, particularly in the outer islands such as Sumatra and Kalimantan. Because it is very difficult to provide any infrastructure in those remote areas, they push for palm oil investment so the infrastructure such as roads and bridges can be developed along with the plantations.

Using the data released in 2007 the palm oil related economy provides employment for 3.3 million families. But this only includes the permanent plantation employees who are a minority in the sector. Most of the workers are temporary agricultural workers and small farmers. Up to now, in the Indonesian plantations, the Dutch colonial labour system is still implemented. There is a hierarchy among the employees: the higher rank is the permanent officer, then comes the supervisors and then the workers. The permanent officer enjoys facilities such as housing, transportation and health care and education for their families. The children of the high rank officer will be sent to school in the company's bus.

The supervisors supervise the dirty work both in the processing factories and in the field. They work under a very tight work schedule. Peter Sirtorus, a retired employee of a state owned company in Asahan testified that in the factory there was no...
lunch break; workers can only sneak out and ask a friend to substitute them. Working in the factory is very hard work, but most people don't have any other choice because they do not have any land to become a farmer.

To become a permanent worker is a long process. They have to start as a daily and then semi permanent workers for long time. One of the workers testified that he had to wait for 21 years before the company hired him as the permanent worker; (13)

The daily and weekly workers live in a very difficult situation. Based on Mrs Zubaedah, a spokeswoman on SPI in Asahan North Sumatra, “I originally worked as a labourer in the plantation. But I decided now to stop because I could not stand to see and experience the slavery conditions on the plantation. We have to apply fertilizer to the trees, which is a very heavy work. There is no water to drink in the middle of the forest in the afternoon. Our hands sometimes are injured because we do not use gloves; they are not provided by the company. We are not working based on time, but on target (piecework). We cannot stop working until we reach the daily target . This work is mainly done by women, and we get a lower wage than men. Women’s daily wage is about RP 25,000 rp while men’s daily wage is about RP 30,000. Therefore, if a woman works 6 days a week she would earn around 576,000 rp a month, which is slightly higher than the minimum wage in North Sumatra (525,000 rp a month).

However, daily workers have no certainty to be hired for a full month and their salary often falls below the minimum.

Weeding is also a hard task. Workers have to work on targets for cleaning the bush under palm oil trees. Sometimes they have to work using herbicides, and it is very clear that they are poisoned. Sometimes workers have to see the doctor, but there is no health support for them because they are not permanent workers. Accidents during work is another example on how bad working conditions are in palm oil plantations. Accidents quite frequently occur during harvesting, because of the falling of fresh bunches of palm oil. The big bunch can weight 60 kilograms and can fall on the workers. However, there is no health support or insurance.

**Workers do not Control the Production Chain**

When farmers are tied to contract farming agreements, the companies are the ones who do the harvesting from their palm oil plantations. The companies will send groups of workers to get the fresh palm oil bunches down from the trees. Tied to contract farming agreements, the farmer could not do anything in their farmland. If they want to work, they can be hired by the company as labourers. The farmer will need to wait until the contract farming agreement ends to start to work on their land. Therefore, in palm oil plantation, farmers are losing control over their farms.

After the contract farming ends, the farmer can manage his or her own farm, but he or she can only sell the harvest to the company because there is no other processing factory available. This structure places the farmer in a weaker bargaining position in the production of palm oil compared to the palm oil company.

In addition, small farmers are never involved in the negotiation to determine the price of palm oil fresh bunches. The discussion only takes place between the government and the representatives of the company. In reality small farmers very rarely come and bring their harvests by themselves to the factories; most of them directly sell their produce in the field. This happens because farmers do not have trucks to bring the bunches to the factories and hiring one would be very expensive. Farmers complain that the price of their produce is often lower than the product from the factory plantations because they argue that the fruit is not ripe enough, not as uniform as it should be, or that the quality is poor.

Facing this situation, it is very common for the individual farmer to prefer to sell the product to the middleman, a trader who will come to see the farmer when the time to harvest the palm oil trees comes. They propose a price to the farmer who will have to bargain. The farmer mainly prefers to sell to the middleman because they want to be paid in cash, and they do not want to do complicated work if they sell it by themselves. Palm oil producers usually get their only income from harvesting palms because other farming activities are impossible under the trees. Therefore some time when they need cash money they borrow it from middleman and pay it back when harvest time comes, which makes them very dependent on the middle man. Surely their harvest will be bought at a lower price. Small farmers will never get a fair benefit with the existing power relations. Therefore small farmers in Dukuh Tiga Bukit Kijang, members of the Indonesian Peasant Union (SPI) founded a palm oil farmers cooperative named “Koperasi Kijang Mas” in 1996. And after around 10 years, the cooperative has been able to plant 20 hectares of land in their communities. The cooperative buys the harvest and sells it to the middleman, getting a better deal as the quantity is higher. It also lends money to family members when they need cash and it also started raising cows and planting fruit trees in a search for an alternative to palm oil monoculture.
The community of Bukit Kijang lived very deep in the palm oil forest where no public transport enters. However, its member live relatively better than the other palm oil small producers thanks to their organization. The cooperative has been able to provide school for the children, transportation, and a workers group which helps each member in weeding and harvesting.

We have seen that small farmers do not control the processing chain. They do not control the inputs either (such as seeds and fertilizers). Regular fertilizing is the key factor to maintain the productivity of the palm trees, particularly when the trees have been producing fruits for more than 10 years. Without fertilizers, the production is not sufficient to make a living. This makes the farmer's economy very fragile and dependent on the price fluctuations. The situation becomes particularly critical when the price of fertilizers shoots up while the price of the fresh bunch falls. In 2008 small producers of palm oil went into despair after the price of Urea fertilizer increased very rapidly. They got indebted and could not payback the loan.

On July 2008 palm oil farmers in Tanjung Mulia, Jambi province still benefited from the high price of palm oil bunches (around Rp. 1,900 / kilo), the highest price throughout history. For one "Kapling" (2 hectares) of palm oil plantation they harvested 3 tons twice a month. At that time, they could make about Rp.15 million ($1,500 USD) per month. Two months later, the price of palm oil bunches fell to the lowest level ever, Rp. 300 / kilo.

"...I have been unable to pay my loan to the village cooperative (KUD) for 5 months" said Roni, a middle aged farmer. Even the KUD didn't give us any money to buy food in order to compensate our loss. Palm oil production is decreasing because we cannot afford to buy fertilizers; right now we have to fast frequently", (14)

Another very crucial issue in palm oil production is on how to get the seeds and seedlings. Palm oil seeds can only be provided by the companies, because the government does not provide that service. In Indonesia, the 8 main seed producers manage most of the 8 million hectares dedicated to palm oil seed production. (15) In the year 2009 the ministry of agriculture estimates that all the companies will produce not less than 215 million new palm oil trees.

The Fake Sustainable Claims

The monoculture system of is at the core of the critiques of palm oil production. There are no arguments that can assert that monoculture model of production is sustainable. And when it comes to the huge areas of monoculture, like big palm plantations, it is obvious that it has devastated the ecosystems. In reality some natural calamities such as land slides and floods are the result of monoculture palm plantations. Big palm oil producers are trying to hide from this reality, and are trying to say that they operate in a sustainable way. This is the case of the Roundtable on Sustainable Palm Oil (RSPO), an initiative created by large producers to clean up their image. The members of RSPO consist of the big corporations who set up their own criteria to deliver a certificate of sustainability. How can polluters be trusted in setting up environmental standards?

Since its establishment in 2004, only one company - PT London Sumatera Tbk. - got the certification in Indonesia. It was in April 2009. The company claimed that the certificate could give them additional benefits, around $10-15 USD/ ton higher than non-certified product.

However, RSPO does not accommodate small farmers. The association of small farmer producers of palm oil in Paseer Regency in East Kalimantan said that the RSPO is only accommodating the small farmer with status in contract farming with the corporation. Individual palm oil farmers and the association have not been able to become an RSPO member. (16) Becoming a member would be quite impossible for a small farmer because the certificate would require around $1.5-2/ton USD, said one of the officer of the PT London Sumatra. (17)

Towards a farmer and worker agenda

Workers and small farmers are at the core of the exploitation system created by palm oil monoculture plantations. Instead of the establishment of green labels controlled by the industry, they demand policies that do take into account the well being of the producers, the ordinary people and the environment. Seeing the reality faced by the farmers and agricultural workers it is important to take decisive actions.

First of all, it is urgent to stop corporate expansion. The concern of large agribusiness corporations is not to create livelihood from the palm oil economy. Instead, they maximise their profit by exploiting the workers, the environment, the infrastructure, and the credit facilities. We have to put an end to this system and support farmers to have a larger control over the production process and marketing. By doing so, we can increase the standard of living of the small farmers and workers and put an end to the expansion of palm oil plantations.

One important step to stop the corporate expansion is by giving access and control over land to the farmers. Palm oil production should not be done by expropriating the small farmer from their land. On the contrary, it is the duty of
the government to provide every family with enough fertile land to farm. Therefore the rights of the small farmer over land should be protected. All land conflicts between companies and farmers and indigenous people should be solved by giving back the land taken by the companies to the local communities.

Land conversions from food crops to palm oil should not be allowed and the government should implement measures to guarantee people food sovereignty. Guaranteeing the access and control over land to the farmers means supporting food crop production to fulfil food sovereignty, because even though palm oil plantations also produce cooking oil, small farmer and workers live in a high level of food insecurity

The government said that opening palm oil plantations would create employment, which in turn would eradicate poverty and hunger as was mentioned before. But the facts show the contrary, because farmers and agricultural workers are considered only as objects in the production chain. Small farmers and workers should participate in the decision making process regarding the whole production chain. This includes the price, the processing and the marketing process. Increasing the involvement of farmers in the decision making process is a very important aspect to increase their welfare. And cooperatives are a key element for this participation.

The palm oil plantations promise to create employment has not held true even after Indonesia became the main producer of palm oil in the world. What exists is just employment with small wage and very bad working condition. Creating employment should mean creating the means to a proper livelihood for the workers by improving their salary and working conditions.

Finally, the government should support and strengthen the development of the small-scale rural economy in the hands of the people who work on the land. Increasing the role of small farmers on the palm oil industry will help farmers to get a better income from the processing of palm oil and not from the expansion of the plantations.

Serikat Petani Indonesia
Indonesian Peasants’ Union
Even though in their meeting in Brussels in 2007 the target might be cut down to 10 percent. But still the 10 percent of transportation in Europe is big volume.

Some of policies are as follows; the Presidential Bylaw No. 5/2006 on the National Energy Policy, Presidential Instruction (Inpres) No.1/2006 on the use of renewable fuel (pemanfaatan Bahan Bakar Nabati), enactment of national standard SNI 04-7182-2006 on the agro-diesel standard and finally the permit No 3675/24/DJM/2006 (Dirjen Migas) to use maximum 10 percent of agro-diesel to blend in the diesel fuel.

These processing corporations are as follow PT Eterindo Wahanatama (120,000 tons per year - with various raw materials), PT Sumi Asih (100,000 tons/tahun – with RBD Stearin as raw materials), PT Indo BBN (50,000 tons/year – with various raw materials), Wilmar Bioenergy (350,000 tons/year with CPO as raw material), PT Bakrie Rekin Bioenergy (150,000 tons/year) and PT Musim Mas (100,000 tons/year). Out of those four big corporations there are several other small and medium processors with total capacity 30,000 tons per year, namely PT Ganesh's Energy, PT Energi Alternatif Indonesia, and some others owned by the state.

Based on direct interviews with small farmers members of Indonesia Peasant Union in Dusun Tiga, Bukit Kijang, Asahan North Sumatera, February 2009

2009 Reaping Lives, Stealing Hopes the False Promises of Palm Industrial Plantation. Internal Document of Indonesian Peasant Union (SPI)

http://www.hariansumutpos.com/2009/06/petani-tewas-diterkam-harimau.html in North Sumatra Tiger came out of the forest and attack farmers. Other similar cases occured in Jambi and also in Aceh province, where the expansion of palm oil plantation is massive.

Interviewed by Kartini Samon, SPI 2008


(1) Oil World, 2007
(2) http://news.bbc.co.uk/2/hi/europe/6365985.stm Even though in their meeting in Brussels in 2007 the target might be cut down to 10 percent. But still the 10 percent of transportation in Europe is big volume.
(3) http://www.nytimes.com/2008/07/07/business/worldbusiness/07iht-fuel.5.14308066.html?_r=1
(4) Some of policies are as follows; the Presidential Bylaw No. 5/ 2006 on the National Energy Policy, Presidential Instruction (Inpres) No.1/2006 on the use of renewable fuel (pemanfaatan Bahan Bakar Nabati), enactment of national standard SNI 04-7182-2006 on the agro-diesel standard and finally the permit No 3675/24/DJM/2006 (Dirjen Migas) to use maximum 10 percent of agro-diesel to blend in the diesel fuel.
(6) These processing corporations are as follow PT Eterindo Wahanatama (120,000 tons per year - with various raw materials), PT Sumi Asih (100,000 tons/tahun – with RBD Stearin as raw materials), PT Indo BBN (50,000 tons/year – with various raw materials), Wilmar Bioenergy (350,000 tons/year with CPO as raw material), PT Bakrie Rekin Bioenergy (150,000 tons/year) and PT Musim Mas (100,000 tons/year). Out of those four big corporations there are several other small and medium processors with total capacity 30,000 tons per year, namely PT Ganesh's Energy, PT Energi Alternatif Indonesia, and some others owned by the state.
(7) Based on direct interviews with small farmers members of Indonesia Peasant Union in Dusun Tiga, Bukit Kijang, Asahan North Sumatera, February 2009
(9) http://www.hariansumutpos.com/2009/06/potensi-pengembangan-biodiesel-di-indonesia/}
(10) Based on direct interviews with small farmers members of Indonesia Peasant Union in Dusun Tiga, Bukit Kijang, Asahan North Sumatera, February 2009
(11) http://www.hariansumutpos.com/2009/06/petani-tewas-diterkam-harimau.html in North Sumatra Tiger came out of the forest and attack farmers. Other similar cases occured in Jambi and also in Aceh province, where the expansion of palm oil plantation is massive.

Interviewed by Kartini Samon, SPI 2008
(12) Majalah Sawit Edisi Agustus 2009
(13) Majalah Info Sawit Juli 2009
(14) Majalah Sawit Juli 2009
La Via Campesina Position Paper

Small farmers feed the world. Industrial agrofuels fuel hunger and poverty

The current massive wave of investment in energy production based on cultivating and industrial processing of vegetal materials like corn, soy, palm oil, sugar cane, canola, etc, will neither solve the climate crisis nor the energy crisis. It will also bring disastrous social and environmental consequences. It creates a new and very serious threat to food production by small farmers and to the attainment of food sovereignty for the world population.

Over the last twenty years the neoliberal policies adopted globally have failed to answer people's basic needs. The FAO promises at the 1996 World Food Summit and the UN Millennium Development Goals to lift people out of poverty have not been kept. Many more people are suffering form hunger.

It is claimed that agrofuels will help fight climate change. In reality, the opposite is true. The new extensive monoculture plantations for the production of agrofuels are increasing greenhouse gases through deforestation, drainage of wetlands, and dismantling communal lands. If we take into account the whole cycle of production, transformation, distribution of agrofuels, they do not produce less greenhouse gases than fossil fuels, except in some cases. Moreover, agrofuels will never be able to replace fossil fuels.

According to the latest estimates, they will only cover the future rise in consumption from now until 2020. There is simply not enough land in the world to generate all the fuel necessary for an industrial society whose needs for transport of people and goods are continually increasing. The promise of agrofuels creates the illusion that we can continue to consume energy at an ever growing rate. The only answer to the threat of climate change is to reduce energy use worldwide, and to redirect international trade towards local markets.

Meanwhile, the social and ecological impacts of agrofuel development will be devastating. Monoculture and industrial agriculture, whether for agrofuel or any other production, are destroying land, forests, water and biodiversity. They drive family farmers, men and women, off their land. It is estimated that five million farmers have been expelled from their land to create space for monocultures in Indonesia; five million in Brazil, four million in Colombia... Industrial agriculture generates much less employment than sustainable family farming; this is an agriculture without farmers.

The current expansion of agrofuel production contributes to the massive concentration of capital by landowners, large companies and TNCs, provoking a real counter land reform throughout the world. Moreover it contributes to increased speculation on food products and land prices.

Agrofuel production has already started to replace food production. Its ongoing extension will drive even more small scale farmers and indigenous peoples off their lands. Instead of dedicating land and water to food production, these resources are being diverted to produce energy in the form of diesel and ethanol. Today peasants and small farmers, indigenous people, women and men, produce the huge majority of the food consumed worldwide. If not prevented now, agrofuels will occupy our lands and food will become even more scarce and expensive.

Who would eat agrofuels?

A new alliance of some governments with automotive and chemical companies, oil and agro-industry is promoting agrofuels with the sole objective of making money. The fear of climate change and energy crisis is used to develop agrofuel production in a manner that maintains and strengthens an agro-industrial model.
Knowing that this model is, in itself, a major cause of climate change and an intensive energy consumer, is no obstacle.

Technology and market control of the TNCs strengthen and increase their hold over the agrarian sector. The family farmers whose food production has been based on traditional seeds, are displaced, their coexistence with biodiversity, their way of producing energy by human and animal force are disrupted. Their way of life uses much less energy per unit of food produced, and specially, fewer fossil fuels.

Agribusiness companies are aware that agrofuels produced on a large scale are not economically viable. The race towards agrofuels is made possible by the huge direct and indirect subsidies from supporting governments and by speculation on the financial markets, which is also causing food prices to rise.

The figures cited are alarming. Millions of hectares and billions of dollars are mentioned: the government of India is contemplating planting 14 million hectares with "jatrofa", the Inter-American Bank of Development says that Brazil has 120 million hectares ready for agrofuel production and a business lobby suggests that there are 397 million hectares available in 15 African countries. This means a level of expropriations without precedent.

While TNCs and investment funds increase their profits, a large part of the world population does not have enough money to buy food. Agrofuels are estimated to be responsible for 30% of the current food price crisis.

When the TNCs are unable to find farmland for agrofuel production, deforestation is forced on areas that are necessary for the preservation of life on earth. Thousands of farmers have no alternative but to accept to grow agrofuels as they need an income to support themselves till the next season.

National and international agricultural policies imposed by international financial institutions and TNCs have exacerbated the dependence of developing countries, leading to food crisis, extreme poverty, and hunger throughout the world. Therefore, those small farmers are not guilty of making the wrong choice they are the victims of the current system imposed on them.

Small farmers and agricultural workers, working in extremely harsh conditions with damaging effects on their health, with very poor income have no say in the way their production is used. Many are working under contract farming with large agribusiness companies that process, refine and sell the product. Therefore it is the companies who decide to channel the produce to the fuel rather than to the food market. The high food prices paid by the consumers are not reflected in the small farmers’ income.

In response to energy crisis: small scale production and local consumption

Small scale sustainable farming is essential to feed the world. Sustainable family farming and food sovereignty consume up to 80 times less energy than industrial agriculture.

Food sovereignty primarily involves the use of local resources for food production, minimizing imports of raw materials as well as transport. Likewise, the food produced is consumed locally so that the end product does not travel far. It is not logical to eat, in Europe, asparagus coming all the way from the Altiplano or fresh green beans coming from Kenya.

Throughout the history of farming, villagers have obtained energy from their farmland to meet their daily needs. Peasant families are using coconut or sunflower oil, biogas, firewood, wind and water to generate electricity for local use. Such methods are sustainable and integrated into the food production cycle on the farmland.

It is imperative to design and adopt responsible attitudes to food consumption and to adjust our way of eating, in the knowledge that the industrial model of production and consumption is destructive, while the peasant-based model of production uses responsible energy practices.

Therefore, Via Campesina continues its struggle against the power of large corporations and supporting political systems. The energy crisis should not be seen as an isolated problem but as part of the whole crisis of the current model of development where profit has priority over people.

Instead, we support a people centered, small-scale diversified agriculture with local markets and healthy livelihoods using less energy and less dependent on external sources. Sustainable family farmers fulfill the fundamental mission of agriculture: to feed people.

Via Campesina denounces:

- The neoliberal model, international financial institutions and
- transnational capital, directly responsible for the food and the climate crisis.
- The irresponsible presentation of agrofuels as an answer to the climate and energy crisis
• The scandal of producing agrofuels in a world ravaged by hunger.
• The passive attitude of many institutions faced with the serious risk posed by the advent of agrofuels which implies that rural and urban populations can neither produce nor consume food.
• That these same institutions are in fact placing the economic interests of TNCs above the food and nutritional needs of the very people they are entrusted to represent and defend.
• The insult of continuing to promote agrofuels in spite of the negative energy balance in their production, processing, and transport.

Via Campesina demands:
The end of corporate driven, monoculture- based production of agrofuels. As a first step, a five year international moratorium on the production, trade and consumption of industrial agrofuels has to be immediately declared.

An in-depth evaluation of social and environment cost of the agrofuel boom and of profits made by TNCs in the processing and trade of the raw materials.

The promotion and development of small scale production and local consumption models and the rejection of consumerism

Explicit support from governments and institutions to the sustainable peasant-based model of food production and distribution, with its minimal use of energy, its capacity to create jobs, to respect cultural and biological diversity and its positive effect on global warming (fertile soils are the best way to capture CO2).

The reorientation of agricultural policies towards sustainable rural communities and livelihoods based on food sovereignty and genuine agrarian reform.

The promotion and development of responsible consumption models.

Let’s put out the fire of agrofuels and carry the flame of food sovereignty!
The scandal of agrofuels in the countries of the South

The idea of extending the cultivation of agrofuels in the world and particularly in the countries of the South is disastrous. It is part of a global perspective on the solution to the energy crisis. In the next 50 years we will have to change the energy cycle, bypassing fossil fuels, which are ever more scarce, to other sources of energy. In the short term it is easier to use what is immediately available, that is to say agrofuels. This solution to the reduction in investment possibilities and the expectation of quick earnings, appears to be the best measure given the unfolding financial and economic crisis.

As always, the capitalist project ignores what the economists call externalities—that is to say things that do not enter into the calculation of the market, in this case ecological and social damage. In order to meet between 25 and 30% of energy demand as a solution to the energy crisis, hundreds or thousands of tillable acres for the production of agrofuels is necessary, for the most part in the South, since the North does not have sufficient tillable area. According to certain estimations, this would necessitate the expulsion of around 60 million peasants/family farmers from their land. The price of these «externalities» not paid by capital but by the community and by individuals, is terrifying.

Agrofuels are raw materials grown in monocultures, destroying biodiversity and contaminating the soil and water. Personally, I have walked for kilometers in the plantations of Choco, in Columbia, and I have not seen a bird, a butterfly, nor a fish in the river, because of the use of huge quantities of chemical products, like fertilizers and pesticides. Given the water crisis that is affecting the planet, the utilization of water to produce ethanol is irrational. In effect, to obtain a liter of ethanol, starting from corn, requires between 1200 and 3400 liters of water. Sugar cane also requires enormous amounts of water. The contamination of soil and water has risen to levels never before seen, creating the «dead sea» phenomenon in river estuaries (20 square kilometers in the estuary of the Mississippi River, in large part caused by the extension of monocultures of corn destined for ethanol). The extension of these cultures has resulted in the direct or indirect destruction (through the displacement of other agricultural and livestock activities) of the woods and forests that are deep pools of carbon with great absorption capacity.

The impact of agrofuels on the food crisis has been proven. Not only is the production of agrofuels in conflict with food production in a world where, according to the FAO, more than a billion people suffer from hunger, it has also been an important element in the speculation about the production of food in 2007 and 2008.

A report form the World Bank confirms that in these years, 85% of the increase in food prices that forced more than 100 million people below the poverty line (an indicator of hunger) was influenced by the development of agrofuels. For this reason, Jean Ziegler, during his term as UN Special Rapporteur on the Right to Food classified agrofuels as a «crime against humanity » and his successor, the Belgian Olivier De Schutter has asked for a 5 year moratorium on agrofuel production.

The extension of monocultures also means the expulsion of many campesinos from their lands. In the majority of cases, this is accomplished through trickery or violence. In countries like Columbia and Indonesia, they resort to the use of armed forces and paramilitary, who without a doubt massacre those who stay to defend their lands. Thousands of indigenous communities in Latin America, in Africa, and in Asia are dispossessed of their ancestral lands. Hundreds of millions of
campesinos have been displaced, largely in the south, as a function of the development of the productivist model of agriculture and the concentration of landed property. The result of all this is a savage urbanization and migratory pressure internally as well as internationally.

It is equally necessary to note that the salary of workers is very low, and the general inhumanity of working conditions is caused by these demands of productivity. The health of workers is also gravely affected. During the session of the Permanent Peoples’ Tribunal about European multinational companies in Latin America, conducted parallel to the Europe-Latin American Summit in May 2008 in Lima, many cases were presented of children with birth defects due to the utilization of chemical products in the monocultures of bananas, soy, sugar cane, and palm.

To decide that agrofuels are a solution for the climate is also in this mode. It is true that the combustion of agrofuels in cars emits less carbon dioxide into the atmosphere, yet when we consider the complete cycle of production including the transformation and the distribution of the product, the balance is mitigated. In certain cases, it becomes negative in relation to fossil fuel.

If agrofuels are not a solution for the climate, if they offer only a marginal mitigation of the energy crisis, if they carry important negative consequences — social as well as environmental— we have the right to question why they are given preference. The reason is that in the short and medium term, they elevate considerably and rapidly the returns to capital. This is why multinational oil, auto, chemical, and agribusiness corporations are interested in the sector. They have partners in the finance capital sector (George Soros, for example), local entrepreneurs and agribusiness, and the heirs to the rural oligarchy. Therefore, the real function of agroenergy is to help capital out of the crisis and to maintain or possibly augment its capacity for accumulation. In effect, the agroenergy process is characterized by the super-exploitation of labor, ignoring externalities, transfers of public resources to the private sector, and allowing for rapid earnings. This process also allows for the hegemony of multinational companies and a new form of dependency of the South on the North, all presented with the image of benefiting humanity—the production of « green energy ». Concerning the governments of the South, this brings a useful source of foreign exchange to maintain, among other things, the level of consumption of the privileged classes.

In the end, the solution is to reduce consumption, overall in the North, and to invest in new technologies (especially solar). Agroenergy is not bad in and of itself, and can support interesting solutions at the local level, under the condition of respecting biodiversity, the quality of soil and water, food sovereignty and campesina agriculture, that is to say, contrary to the logic of capital. In Ecuador, President Correa has had the courage to stop oil exploration in the Yasuni nature reserve. We hope that the progressive governments of Latin America, Africa, and Asia have the same resolve. To resist in the North as well as the South the pressure of economic powers is a political and ethical problem. Therefore, to denounce the scandal of agrofuels in the South is a duty.

Francois Houtart

Francois Houtart is former Professor of the Catholic University of Lovaina, founder of the Tricontinental Center and author of the book: “Agro-energy- Solution for the Climate or Escape from the Crisis of Capital?” Ruth Casa Editors and Ediciones Sociales La Habana, 2009
La Via Campesina is the international movement of peasants, small- and medium-sized producers, landless, rural women and youth, indigenous people and agricultural workers. Via Campesina’s main goal is to develop solidarity and unity among small farmers organisations and to promote sustainable agricultural production and local food markets based on small and medium-sized producers. It is an autonomous, pluralist and multicultural movement, independent of any political, economic or other type of affiliation. Born in 1993, La Via Campesina now gathers about 150 organisations in 70 countries around the world.

Contacts:

International Operational Secretariat (IOS) of La Via Campesina
General Coordinator: Henry Saragih
Address: Jl. Mampang Prapatan XIV No. 5 Jakarta Selatan 12790 Jakarta – Indonesia.
Phone: +62 21 7991890, Fax: 62 21 7993426
E-mail: viacampesina@viacampesina.org
Website: www.viacampesina.org