WRM BULLETIN

World Rainforest Movement

Issue 112 - November 2006

THE FOCUS OF THIS ISSUE: BIOFUELS

The serious problem of global warming, the rise in oil prices, the dependency of industrialized countries on oil reserves beyond their frontiers, the interests of agro-business always eager to expand its profits, "western" lifestyles consuming huge amounts of oil – particularly with regards to transport – are at the root of the appearance of fuels derived from plant crops. The model presenting them – large scale, functional to globalization, consolidating the ransacking of the peoples' natural assets– offers a "solution" to the energy crisis implying a 360º degree rotation – that is to say, so that everything can continue exactly as it was...

OUR VIEWPOINT

BIOFUELS: A 360º ROTATION

BIOFUELS ON THE GROUND

OUR VIEWPOINT

- Biofuels: A serious threat masked in green

Replacing fossil fuels by biofuels (produced from plant biomass) may seem a step along the right path to avoid worsening climate change. However plans for their production and use not only leave this problem unsolved but make many others worse.

The biofuels to be adopted are biodiesel (obtained from oilseeds) and ethanol (obtained from fermentation of plant cellulose). Among the many possible crops for this purpose are soybeans, corn, colza, groundnuts, sunflower seeds, oil palms, sugarcane, poplar and eucalyptus trees.

Because the major consumers in the North do not seriously consider reducing their disproportionate consumption of fuels and because in most cases they do not have sufficient arable land to supply themselves with raw material to produce their own biofuels, their governments and companies are planning to promote, basically in the countries of the South, crops to produce biodiesel and ethanol.

It is important to note that in the forest areas of the South, this policy will not imply any change related to oil or gas exploitation, which will only be stepped up as fossil fuels will continue to be the main component of the energy matrix in the countries of the North. However, the biofuel business will add new impacts to those already existing in the forests.

As proof of the above it is enough to mention soybean and oil palm which appear as the main candidates for large scale biodiesel production. The former has become the main cause of deforestation in the Brazilian Amazon and in Paraguay, even before it started to be produced for energy purposes. The latter is also the main cause of deforestation in Indonesia and is having an impact on the forests of many other countries in Africa, Asia and Latin America.

Furthermore, technologies are already being developed to convert timber into ethanol (with the use of genetically modified organisms) and thus the biofuel industry will promote an even greater expansion of fast growing monoculture tree plantations both in forest areas – increasing deforestation – and in grasslands.

Both deforestation and the change in grassland use imply releasing the carbon they store. To this are added the emissions from growing, processing and transporting the biofuel itself, mostly done on the basis of oil and other elements releasing greenhouse effect gases: the manufacture of machinery used, the fuel used for its operation, the production and use of chemical fertilizers and agrochemicals, the trucks and ships transporting it to its destination, etc. That is to say, the net carbon balance in areas given up to the production of biofuels may even be negative, thus increasing the concentration of greenhouse effect gases in the atmosphere which is precisely what this change intended to avoid.

Summing up, the use of biofuels in addition to not solving the problem of climate change also implies an adverse effect on equally serious problems.

In fact, dozens or hundreds of millions of hectares of fertile land will be concentrated in the hands of large trans-national corporations and will produce fuel instead of food – in a world where hunger and malnutrition are already serious problems in themselves.

During this same process they will evict millions of farmers and peasant smallholders who will mostly migrate to shanty towns around the large cities. The forests will no longer ensure sustenance to millions of people who depended on them and will be replaced by soybean, oil palm or other energy crops. Water will be polluted (from the use of agrochemicals) or disappear (due to the plantation of fast-growing trees), local fauna will be seriously affected by the enormous green deserts that will no longer provide them with food, the native flora will be eliminated and replaced by vast monoculture plantations and many local species will be contaminated by the genetically modified crops used in such monoculture plantations, while the soil will be degraded by these plantations and the use of agrochemicals.

It would seem evident that this is not a good solution, either for the people or for the environment. However, it is an excellent business opportunity for large companies operating on a national level and in particular for large tansnational corporations. Among them are those associated with the production and marketing of agricultural products for export, biotechnology and chemical industries (that are able to increase their sales of transgenic material and agricultural inputs) the automobile industry (that can continue growing under a “green” mantle), the new companies arising from the biofuel wave and the oil companies that are becoming involved in this new and lucrative business.

For this reason, so many governments, aid bodies, bilateral agencies, multilateral agencies and international experts are involved in the promotion of this absurd solution: in order to serve the interests of these powerful economic groups who dictate global policies in their own favour.

Finally, it should be noted that biofuels in themselves are not a problem. More, within a social and environmentally sound approach they may serve to satisfy part of the energy needs of our countries and, in particular, of local communities. The central problem is the model that they intend to implement, characterized by large scale, monoculture plantations, massive use of external inputs and transgenic crops, mechanization and export to feed the North's disproportionate energy consumption.

It is therefore essential to face this new threat hanging over the peoples and the ecosystems of the South and incorporate the issue of biofuels into the struggle for the defence of forests and biodiversity, against the advance of monoculture and transgenic crops, for food sovereignty and for the peoples' right to decide their own fate.

index

BIOFUELS: A 360º ROTATION

- The energy crisis and a bad solution

In 1972, a study conducted by the Massachussetts Institute of Technology (MIT), on growing consumer trends alerted politicians and scientists all over the world. The research titled "The limits of growth" was prepared by an international group of scientists, researchers and industrialists – later to be know as the Club of Rome – and became a classic for the analysis of the relationship between production and environment.

Throughout the seventies and most of the eighties, various theories and studies endeavoured to analyze the problem of the limitations imposed by nature on the development model. In 1990, forceful neo-liberal waves wiped out a considerable part of those efforts and the idea of unlimited growth based on technological progress overwhelmingly prevailed in political and academic circles all over the world.

However now in the twenty-first century it would seem that the energy issue is emerging as yet another reminder of those old announcements which affirmed that in life everything has a limit.

Energy sources and uses

Energy sources are divided into renewable and non-renewable sources. Solar energy, wind energy, geothermic energy (harnessing the heat inside the Earth), plant biomass and hydraulic energy (from water) are virtually inextinguishable sources of energy, some because of the enormous amount of energy they contain and others because they can be regenerated by natural means. Non-renewable energies, once totally consumed cannot be replaced in the short or medium term, for instance as in the case of fossil fuels (formed during millions of years by action of heat inside the earth and the pressure of rocks and soil on the remains of dead plants and animals) and nuclear fuels.

With industrialization coal appeared on the scene and later on (at the end of the nineteenth century), oil and gas. Most of the world energy consumption is based on one of these non-renewable sources: oil, natural gas and coal, adding carbon dioxide to the atmosphere. Today, 80 per cent of the oil consumed in the world comes from wells discovered during the seventies and are now reaching their ceiling for daily extraction. The consumption of oil rose from 2,753 million barrels in 1973 to 3,767 million barrels in 2004. The daily extraction of oil amounts to some 75 million barrels and a 2 per cent annual growth is expected over the next few years. By 2020 some 100 million barrels a day will be

needed. This in turn gives rise to the urgent need for new prospecting and discovering of reserves as the present ones can no longer increase their extractive capacity.

There are major differences in the use of energy between rich and poor countries. Although consumption of fossil energy in third world countries has risen at a faster rate, their participation in world consumption has dropped. According to the International Energy Agency, by 2025, 82 per cent of the population of the planet will be consuming 45 per cent of the energy, while in the industrialized countries, 14 per cent of the population will be consuming 43 per cent (the remaining amount corresponds to the so-called transition economies).

The percentage of energy consumed in the United States is some 25% of world consumption for 4.6 per cent of the world population, while in India consumption is 3.1 per cent for 16.6 per cent of the world population. In other words, a US citizen consumes an average of fifty times more that an inhabitant of India.

Disproportionate use of fossil fuels has fed unsustainable economic growth. From the time "The limits of growth" was published and today, increase in energy consumption – and the need to increase supply – was sustained with the argument of economic growth to overcome the poverty of the vast masses of the population. Since then we have undergone an escalation of continuous growth – except for a few years – where increased energy consumption has not been accompanied by the same measure of improvement in people's living conditions.

Furthermore, the vision mechanically associating growth of trade and consumption of energy with "development" overlooks several key problems, among them the fact that energy imports increase a country's dependence; energy exports have a strong impact on the balance of payments but also make the producing country extremely vulnerable to changes in importing economies; the use, exploitation and transformation of energy always have environmental impacts left unaccounted in the balance of payments.

Climate change as a result of excessive fossil fuel use

The United Nations has warned that we are going through the largest process of extinction of life on the planet since the disappearance of dinosaurs 65 million years ago. Climate change causing the abrupt increase in the mean temperature of the earth's surface has been identified as one of the main causes of this process. Additionally, climate change is directly related to an accelerated increase in carbon dioxide emissions together with other greenhouse effect gases as a consequence of the current development models – production and consumption – encouraging an excessive use of fossil fuels and unsound land uses (see WRM bulletin No. 76).

The international community's response to the threat of climate change has been given through the United Nations Framework Convention on Climate Change, adopted in May 1992. Its declared objective is to stabilize atmospheric concentrations of greenhouse gases resulting from human activities at a level that will not involve risks for the climate system. In 1997 the Kyoto Protocol established obligations for reduction, basically affecting industrialized countries which, so far, do not appear to be willing to change their energy consumption model.

As a response to commitments to reduce carbon emissions, the European Union and the United States are seeking "solutions" that do not imply taking on the cost of radically changing their unsustainable production, trade and consumption patterns based on squandering energy. The way of life of a small sector of the planet is threatening the whole of humanity with a planetary crisis.

Within this context, biofuels enter into the scene

Biofuels are any fuel that derives from biomass — recently living organisms or their metabolic byproducts. Thus it could be oils from plants, manure from cows, wood from trees and so on. We will focus --in this bulletin-- on biofuels that are derived from crops and include biomass that is burnt directly; biodiesel obtained from oil seeds and ethanol

produced from the fermentation of sugars found in plants.

Vegetable oil can be used as fuel either pure or blended with gasoline. It can also be converted to biodiesel through a process using alcohol and a strong alkali to make a more volatile blend based on oil from a variety of plants.

The European Union and the United States have adopted policies promoting rapid biofuel expansion. This has led to the creation of an enormous market in the tropical countries of the South which are converting millions of hectares to bio-energy monocultures to feed European and US automobiles. All this is done without stopping to study the impacts of this expansion on the planet. Effects on the forests of Latin America and Asia and on their people are already being felt.

Facing the present energy crisis or the climate change crisis - the other side of the same coin-, the politicians and technocrats have shown no willingness to adopt strong measures to solve them. In this great vacuum and paralysis largely supported by major corporate interests, false and dangerous solutions are being promoted that urgently need to be submitted to public scrutiny and debate, such as the growing enthusiasm over biofuels which merely worsen existing socio-economic, technical and environmental problems.

Article based on: “Energía en Sudamérica: una interconexión que no integra”, Gerardo Honty, Ceuta, Nueva Sociedad 204, http://www.nuso.org/upload/articulos/3369_1.pdf; “Biocombustibles Renovables y sustentables”, Gerardo Honty, Peripecias Nº 18, www.peripecias.com; “¿Es posible el desarrollo sostenible?”, Guillermo Villegas Arenas, Mario Hernán López Becerra , Universidad de Caldas, http://lunazul.ucaldas.edu.co/index.php?option=com_content&task=view&id=180&Itemid=180); “Which energy?”, 2006, ISS, Energy Report, Mae-Wan Ho, Peter Bunyard, Peter Saunders, Elizabeth Bravo, Rhea Gala; “Biofuels: Renewable Energy or Environmental Disaster in the Making?”, Almuth Ernsting, Biofuelwatch, http://www.biofuelwatch.org.uk/background.php

index

- Large-scale biofuels: Good for the power, bad for the people and the climate

The modalities of biofuel consumption and production are already causing a negative impact on food security, rural livelihoods, forests and other ecosystems, and these negative impacts are expected to accumulate rapidly. Large-scale, export-oriented production of biofuel requires large-scale monocultures of trees, sugarcane, corn, oil palm, soy and other crops. These monocultures already form the number one cause of rural depopulation and deforestation worldwide.

Furthermore, the claim that biodiesel is 'carbon neutral' is disputed since it doesn't take into account how, for example, oil palm plantations are developed. Realistic estimates show that making biofuels from energy crops requires more fossil fuel energy than they yield, and they do not substantially reduce greenhouse gas emissions when all the inputs are accounted for. Also, rainforests, swamp and peat forests, which are important carbon sinks, are being cleared in order to establish oil palm plantations.

However, the European Union is promoting the use of biofuels as an energy source for transport. The EU has set itself a target of increasing the use of biofuels in energy consumption to 5.75% by 2010. The European Commission is now pressing member states to fulfil their commitments under the 2003 Biofuels Directive. The agriculture council of 20 Feb 2006 held a first policy debate on the biofuels strategy and the EU's biomass action plan. The advantage for these countries is that biofuels like bioethanol and biodiesel have lower prices than oil. Another plus for European farmers is that domestic production of biofuels could offer new income and employment opportunities after the reform of the Common Agriculture Policy.

In Europe, biodiesel is used in Germany, France and Austria in varying concentrations. In Germany, there are more than 1,000 filling stations providing biodiesel. The first German 'biorefinery' is to be built in Emden, with financing from a Dutch syndicate. The plant is intended to turn 430,000 tonnes of palm oil, probably from Indonesia, into more than 400 million litres of biodiesel.

Demand for crude palm oil to generate electricity has increased 400,000 tonnes this year in the Netherlands, of which 250,000 tonnes will be imported. The electricity company, BIOX bv, is reportedly planning to build four new generators using palm oil. The company intends to sell this palm oil-based electricity to several EU countries.
In the United States, biofuels are welcomed as a way to help reduce the country's dependence on oil produced abroad. Biofuels combine patriotism with economic self-interest: farmers love it because biodiesel and ethanol are brewed from agricultural commodities, helping drive up farm-gate prices; and Republican senators love it because federal tax subsidies keep their voting farmers happy.

On quite an opposite stand, in Southern countries, the production of biofuel crops is already having great environmental and social impacts which will become worse in case the North-driven push for new energy sources gain ground. An alliance of human rights and environmental NGOs are campaigning against European countries' use of fuel made from palm oil at the expense of forest ecosystems. In an April statement entitled 'No to Deforestation Diesel!', over thirty German, Austrian and Swiss groups warn that a palm oil-fuelled biodiesel boom would repeat the pattern of forest destruction caused by the rapid growth of Indonesia's pulp and paper industry.

The groups argue that a fundamentally different approach to energy consumption is required, rather than merely replacing oil with biofuels. This entails promoting of public transport over private car and air traffic, more energy conservation measures and more energy from renewable sources such as solar and wind power. The groups are calling for strict criteria to be applied to the use of biofuel raw materials including: no conversion of primary forests for plantations; no burning to clear forests for plantations; no human rights violations or police or military operations; no certification of palm oil plantations, as a monoculture based on palm oil cannot be cultivated in an ecologically sustainable way and generally leads to problems rather than any enduring benefits for local people; yes to the promotion of organic farming without the use of artificial fertilizers or agricultural toxins; yes to a promotion of agricultural smallholdings in the cultivating countries. The statement also calls for customary rights and land rights to be respected and full compliance with ratified international agreements relating to indigenous peoples, biodiversity, workers' rights, etc in countries cultivating biofuel crops.

Furthermore, more NGOs, Indigenous Peoples Organizations and farmer's movements called upon the Parties to the UN Framework Convention on Climate Change COP 12 held in Nairobi on 6 - 17 November 2006 to immediately suspend all subsidies and other forms of inequitable support for the import and export of biofuels.

They claimed: "There is nothing green or sustainable to imported biofuel. Instead of destroying the lands and livelihoods of local communities and Indigenous Peoples in the South through yet another form of colonialism, we call upon Northern countries to recognize their responsibility for destroying the planet's climate system, to reduce their energy consumption to sustainable levels, to pay the climate debt they have created by failing to do so until now and to dramatically increase investment in solar energy and sustainable wind energy".

Article based on: "Biodiesel and the expansion of plantations", Down to Earth, Newsletter No. 69, May 2006, E-mail: dte@gn.apc.org; http://dte.gn.apc.org; Resistance Number 60, Oilwatch Network Bulletin, April 2006, E-mail: info@oilwatch.org, http://www.oilwatch.org/doc/boletin/bole60en.pdf; "Biofuels: A Disaster in the Making", alert to the Conference of the Parties of the Framework Convention on Climate Change, http://www.wrm.org.uy/actors/CCC/Nairobi/Disaster_Making.html

index

- Who does the biofuel business benefit?

There are some 800 million automobiles in the world, consuming over 50 percent of the energy produced in the world, making individual vehicles the prime cause of the greenhouse effect. Although there is consensus that climate change is a fact, there is no serious intention of changing the life-style causing it and instead, technological solutions are being sought to enable the companies benefiting from this model to maintain their profits.

In this context, over the past years biofuels have started to be promoted as an alternative to global warming.

European countries - in their eagerness to comply with their obligations within the Kyoto Protocol - are determined to switch their energy systems based on fossil fuels to biofuels, but their production is insufficient to cover their needs. Although the United States has enough farmland, the consumption of energy is so high that they will also have to depend on imports to cover their demand.

Where will these biofuels come from? Well, from regions such as Latin America, Asia and Africa. In many countries, farmlands or natural ecosystems will be used for the production of crops used to produce biofuels.

Biofuels will compound problems caused by soya bean, oil palm and sugar cane monocultures because of world voracity for energy and still not resolve fundamental ecological and social problems.

The Brazilian Minister Dilma Rousseff (Civil House) stated that biofuels express “a marriage between agro-business and the oil industry.” In this marriage the biotechnology industry must also be included.

Perhaps the most paradigmatic example is the new association set up by the BP oil company and the DuPont biotechnology company. Together they are going to develop, produce and put on the market a new generation of biofuels to increase global fuel demand for renewable transport. The two companies have been working since 2003 and will be introducing on the British market a new product: biobutanol as a bio-component of gasoline.

The companies are benefiting from DuPont’s biotechnology capacity and BP’s experience and know-how in fuel production. They hope to become world leaders in the development of advanced biofuels which, according to their estimates, could involve as much as 20 percent as blends in transport in some key markets.

The biotechnology industry has found an opportunity to increase its business through biofuels, mainly because they will enable it to remain on the market for a long time, in spite of opposition by consumers all over the world who have rejected transgenic crops as sources of food.

The incorporation of transgenic crops in the preparation of biofuels will help the biotechnology industry to improve its image which had resoundingly deteriorated over the past years. After many promises made by this industry that it could never have fulfilled, today it is offering to develop new transgenic varieties better adapted to the production of energy.

The RR soya bean will be the main raw material used in the production of biodiesel in the Southern Cone and possibly in other countries of the region. The RR soya bean already covers vast areas in Argentina, Paraguay, Uruguay and Brazil.

The use of transgenic soya beans in the production of biodiesel was presented by President Lula as a way out of the polemics on the use of transgenic soya beans in Brazil. He said that instead of people eating transgenic soya beans they will be used to make biodiesel because cars will not reject it.

Monsanto is the company that will most benefit from this business as it collects royalties from the sale of its patented

transgenic seeds and the product of its harvests (in this case, biodiesel) already the case of soya oil made from RR soya beans, and other companies such as Cargill, Bunge, ADM, which will market biodiesel.

Furthermore, no doubt a large part of the maize used in the distillation of ethanol in the United States comes from transgenic crops. Each litre of ethanol that is sold increases the income of biotechnology companies holding the patents for transgenic maize seeds. These companies include Monsanto, Syngenta, Bayer and Dupont.

Another oil-seed used in making biofuels is colza. The European Union's Confederation of Food and Beverage Industries has requested the European Commission to authorize imports of new varieties of genetically modified colza for the biodiesel industry.

Additionally, they are starting to test new transgenic varieties specifically designed for the production of biofuels. Syngenta has developed transgenic 3272 maize that expresses the alpha amylase enzyme mixed with conventional maize in the process of elaborating ethanol from maize. The alpha amilasa enzyme has been identified as triggering important food allergies. If the genes synthesizing it manage to infiltrate the food chain we will be facing a protein with unthought-of effects on human physiology.

US food companies are opposed to the introduction into the environment of transgenic crops that are not intended for food because they fear possible genetic contamination of their products with these genes.

Another sector benefiting from biofuels is the oil industry. Oil companies, and above all, European oil companies, have decided to enter the business of "environmentally friendly" products to satisfy their consumer needs and to adapt to the new goals of the European Commission regarding renewable energies. Some of the companies having best diversified their business are Total, BP and Shell.

The French company Total obeys the policies of that country strongly promoting renewable energies. France is the second largest producer of biodiesel and ethanol in Europe (it has 4,500 service stations in that country) and has a considerable market in Spain and Italy, where it has 1,740 and 1,400 service stations respectively. It is currently planning to open up new plants in Africa and South America.

The case of BP and Shell is different as neither Holland nor England is engaged in promoting biofuels but they have service stations in countries where consumers demand them. For example, BP has 2,700 service stations in Germany (the largest producer of biodiesel in Europe). Shell has 2,200 service stations in Germany and 1,000 in France.

Royal Dutch Shell intends to develop a second generation of biofuels and has been experimenting with the refining of bio-ethanol from lignin and pulp in cooperation with the Canadian company, Iongen. Another of Shell's strategic partners is the Choren Industries (Germany), with whom it has been working on the production of diesel from forestry biomass.

Among the US companies, Chevron has set up a business unit in advanced technologies to take advantage of the opportunity to produce and distribute ethanol and biodiesel in the United States. This unit is located in Galveston (Texas) with a production capacity of 100 million gallons per year of biodiesel. Chevron processes 300 million gallons of ethanol per year in the United States.

In Latin America, in spite of its considerable oil reserves Venezuela is preparing to join Brazil and Argentina in the development of fuels originating from plants as an energy alternative. The search for technologies to produce alternative fuels, among them biodiesel, is also included in an agreement recently signed by Venezuela and 13 other Caribbean countries to set up Petrocaribe. Most of the fuels containing pure alcohol or mixtures in Brazil are produced by Petrobras refineries, the State company.

The Spanish company, Repsol that already produces biodiesel in Spain, will invest 30 million dollars in a first biodiesel plant in Argentina, that it will start building in 2007. During a first stage, production capacity will be 120,000 cubic metres per year mixed with gas oil in a proportion of 5 percent.

Finally we have the automobile industry. This industry is responsible for the greatest consumption of fossil fuels and for the greenhouse effect on a world level, but it is also adapting to the new wave of biofuels.

Already in Brazil all the major international automobile companies have adapted themselves to making vehicles that run on alcohol. Half the vehicles sold in Brazil in 2004 were designed to use pure alcohol or alcohol in mixtures.

In other parts of the world, these companies have entered into partnerships, joint ventures and joint projects with various companies to improve their image, achieve technological transformation and continue doing business for a long time yet. For example, there is the announcement made by the Germany company, Volkswagen AG to extend the guarantee to automobiles using biodiesel (B5) added to the fuel. This announcement is part of a joint initiative lasting 2 years with the trans-national food company, Archer Daniels Midland Company (ADM), after the two companies had assessed this biofuel for a year.

For its part, the Japanese company, Toyota announced a strategic cooperation with BP for the production of ethanol from pulp waste in Canada.

This is the route that other companies have also followed. They are not concerned about the future of the planet, but must adapt themselves to the new demands made by their consumers and by international obligations that some countries have acquired with the Kyoto Protocol.

The use of biofuels is being promoted all around the world and various countries have launched national biofuel programme, making laws favouring this sector, and consultative councils have been set up on the subject, etc. The justifications given, among others, are that the proliferation of energy crops such as sugar cane, oil palm, soya beans and other crops may become an important factor in rural development and that the substitution of fossil fuels by biofuels will contribute to lessen global warming.

However, the biofuel business will help to position the biotechnology industry, to recycle the oil and automobile industry and to expand the profits of industries marketing biofuels.

This does not imply that all that has been said is applied to the use of vegetable oils, cane bagasse or other agricultural or forest waste to supply the energy needs of small local communities. The problem we are now facing is one of scale. We refer to the problems that arise when we have to satisfy the demands of consumers who want to continue enjoying their standard of living based on squandering, but who also want to have a clear conscience when they put into the tank of their vehicle 5.75% of biofuel that may come from the Amazon forest of Brazil or from Paraguayan lands from which the peasant population has been violently displaced or from their own farmlands.

Unless we can change the development model and initiate a transition towards a post-oil society, where the energy consumption patterns are changed, biofuels cannot be a solution to curb climate change.

With this in mind, we must continue to work towards a society that promotes and respects everybody's food and energy sovereignty.

By Elizabeth Bravo, Acción Ecológica, e-mail: ebravo@rallt.org, http://www.accionecologica.org/webae/index.php

index

- The pulp industry and the biofuels boom

In July 2006, Pulp and Paper International reported on a conference called World Bioenergy 2006. The conference took place in Sweden, where biofuels provide 25 per cent of Sweden's energy and the majority of its heating. "Pulp mills with combined heat and power plants sending excess energy to district heating systems are an established part of the country's infrastructure and a useful source of extra income for its pulp mills," notes Pulp and Paper International.

Several pulp companies are working on converting pulp mills in the North into biorefineries. In Quebec, Tembec sells 17 million litres of ethanol a year from its Temiscaming dissolving pulp mill. Domsjö Fabriker recently spent about US$35 million to convert its dissolving pulp mill at Örnskoldvik in Sweden into a biorefinery. Two years ago, Etek opened a 10,000 tonnes a year pilot plant in Örnskoldvik to produce ethanol from wood residues. Next year, the company plans to start work on three more plants which will produce a total of four million litres of ethanol a year.

In 2008, a pilot plant at the Växjö Värnamo Gasification Centre in Sweden will start producing syngas (a mixture of carbon monoxide and hydrogen) from fermented wood chips. A commercially viable fuel is likely within five to ten years. Meanwhile, Royal Dutch Shell, the world's top marketer of biofuels as well as one of the biggest oil companies in the world, is working on a process to produce ethanol from wood chips.

In Norway, Norske Skog and energy company Hydro have set up a joint venture to look at the feasibility of producing biodiesel from wood. They hope to build a biodiesel plant in southeast Norway by 2012. In France, a consortium including Genencor International, Tembec and the University of Bordeaux's Pine Institute is working on a three-year study to develop ethanol from paper pulp.

The demand for biofuels in Europe is likely to continue increasing. The European Biofuels Directive rules that 5.75 per cent of transport fuel in Europe should come from biofuel by 2010. The figure could increase to 20 per cent by 2020. A biomass action plan at EU level aims to increase the share of bioenergies to 8 per cent by 2010.

While the pulp industry is happy to produce biofuels such as ethanol from wood it is less happy when the wood is used directly, as wood pellets for heating, for example. In a May 2006 position paper on biofuels, the Confederation of European Paper Industries (CEPI) complains that "the European Renewable Energy Policy puts too much focus on the use of wood as biomass."

CEPI is complaining because the growth in the use of wood pellets as biofuel has led to an increase in wood prices. The increased demand for wood will lead to increased logging. Sweden already imports wood pellets from Canada. Biofuel proponents are pushing for an increase in the annual allowable cut in Sweden. They are also suggesting removing parts of the tree which are usually left behind to rot - stumpwood and branches. Urban Bergsten, professor of silviculture at the Swedish University of Agricultural Sciences, argues that forest policy in Sweden should be reformed to favour increased biofuel production and to increase growth rates through the use of faster growing species. More water sucking monocultures, in other words.

Erik Ling of Sveaskog, the state-run Swedish forest company, suggested at the Bioenergy conference in Jönköping that production over 80 per cent of Sweden's forestland should be increased. The remaining 20 per cent could be converted to "environmental reserves". Ling told the Bioenergy conference that increased growth can be achieved by improved planting and seeding, maintenance of forest ditches, and increased use of nitrogenous fertiliser. Ling presumably didn't point out that increased use of nitrogenous fertiliser will lead to more nitrous oxide in the atmosphere. Nitrous oxide has 310 times the global warming power of carbon dioxide.

The pulp and paper industry in Europe is "the largest industrial sector using biomass as fuel", according to the

Confederation of European Paper Industries. Much of this is because pulp mills burn waste products from the pulping process. But the pulp and paper industry remains a large consumer of electricity. CEPI is part of an alliance with other high energy consumers such as the steel industry and the cement industry which lobbies for cheaper energy prices. One of the reasons that the industry is moving to the South is because electricity prices are cheaper there. Converting pulp mills to biorefineries will also be energy intensive.

Whether pulp mills are used to produce pulp or biofuels, the globalised structure of the industry will remain, as will the fact that it is cheaper to grow the raw material for pulp in massive industrial tree plantations in Brazil than it is in Sweden. According to Stora Enso's figures, trees can grow more than ten times as fast in Brazil as in Sweden. The price at the mill gate in Brazil of a cubic metre of wood is less than half the price it is in Sweden. Pulp production per tonne in Brazil is one-third as cheap as in Sweden. The same globalised commodity rules will apply for biofuel production. Converting pulp mills in the North to biorefineries will drive the expansion of industrial tree plantations in the South.

By Chris Lang, e-mail: chrislang@t-online.de, www.chrislang.blogspot.com

index

- Adding problems: GE poplar, cellulose and biofuel

The US Department of Energy's Office of Biological and Environmental Research (DOE) is funding a $1.4 million, three-year study by Purdue faculty members to determine ways to alter lignin and test whether the genetic changes affect the quality of plants used to produce biofuels. A hybrid poplar tree is the basis for the research that is part of the DOE's goal to replace 30 percent of the fossil fuel used annually in the United States for transportation with biofuels by 2030.

The researchers want to genetically modify the hybrid poplar so that lignin will not impede the release of cellulose for degradation into fermentable sugars, which then can be converted to ethanol. Currently about 25 percent of the material in plants is the complex molecule lignin, which in its present form could be burned to supply energy for ethanol production, but cannot be transformed into the alternative fuel.

Altering lignin's composition or minimizing the amount present in a cell wall could improve access of enzymes. With easier access, the researchers expect enzymes would be able to more efficiently convert cellulose to sugars. To advance production of non-fossil fuels, the Purdue researchers are using genetic tools to modify the poplar and then study how the alterations changed the plants' cell walls. Eventually, the expectation is to create trees suitable for high-yield ethanol production.

The usual reductionist approach of GE researches sees the tree but not the wood –rather, the plantation. The "solution" proposed can be foretold: huge extensions of identical GE trees, which will have the already predictable impacts on the soil, water, biodiversity, plus the unpredictable effects of a tech-fix challenged as non-scientifically sound. Not only the underlying global crisis of the climate rooted in the unsustainable energy consumption remains unsolved, but also these kind of "solutions" will place another threat to humanity.

Article based on information from: "GM tree could be used for cellulosic ethanol", August 24, 2006, Mongabay.com, http://news.mongabay.com/2006/0824-purdue2.html

index

BIOFUELS ON THE GROUND

The cases described further on illustrate the way in which, once again, the large-scale monoculture model, this time for the production of biofuels, usurps the indigenous peoples and local communities' territorial rights, violates their human rights, compromises food sovereignty, and causes deforestation and destruction.

- Brazil: Energy sovereignty vs. food sovereignty

In Brazil, production through agriculture of a new energy model is present every day in the mass media and increasingly the development of this field is gaining social endorsement and economic justification. Rapidly, the use of land to produce food is sharing its space with the fuel production. This change in social perception is very evident in the repeated news features showing farmers and landowners as the new "oil field" owners.

Within the world panorama substituting oil by a "renewable" energy, Brazil appears as a world leader in agro-energy because of its tropical climate, its vast arable lands, availability of water resources and regional facilities. Furthermore, the advantageous position of Brazil in this world leadership is further strengthened by the creation in 2005 of a national agro-energy programme and an ambitious private investment fund for the sector, planned and presided by the Minister of Agriculture of President Lula's first government, Roberto Rodrigues. This fund will endeavour to attract some 200 million dollars within the country, added to international investment (for example a Dutch bank that appears to have the leadership in funds for this type of project) aimed at shareholding in agro-business agro-energy projects and also in purchasing land, private research funding, project feasibility orientation and submission of proposals to the government, thus acting as a lobby agent. These two factors, a public programme and a private fund are concrete examples of how the country is preparing for this great and historic opportunity announcing the biofuel era.

Regarding the convictions of those guiding the plans in this new era, Décio Gazzoni, an agronomy engineer with over 30 years work as a researcher for EMBRAPA (the public agriculture research and development company) and in charge of the preparation of the national agro-energy programme, recently declared that "we must be pragmatic and allow reforestation of the Amazon with African palm trees" ("Dinheiro Rural", year III, no. 25, November 2006), which will enable production of biodiesel. Because, according to him "if we do not find an economic option, we will continue to log forests." The only problem in this vision would be the environmental groups and legislation, which only permits reforestation to be done using native species.

This "pragmatism" in the new frontier for the expansion of agro-business defended by the technician who prepared the national agro-energy programme is the same as that supported by various projects for the plantation of eucalyptus, planned and financed in synergy with mining and steelworks for the production of coal, particularly as the energy input for the pig iron industry, one of the most important items on the Brazilian export balance.

An example of the way the world views Brazil as the great agro-energy frontier is the international conference on bio-fuels to be held from 11 to 13 December in the city of Londrina, Parana State, where specialists from various countries will get to know and discuss the advantages of bio-diesel, ethanol and thus be able to better assess which alternative is more profitable.

In the case of Brazil, the amount of public and private investment and the contracts involved in the construction of bio-fuel processing and refining plants is being consolidated on a medium and long term basis. In addition to the productive facilities, an important energy geo-policy and appropriation of natural resources exists leading to greater pressure on the agricultural frontier areas, increasing the value of land and thus having a direct impact on the agrarian reform. The promotion of biofuels is strengthening land occupation with the expansion of monoculture sugar cane plantations for the production of alcohol, in addition to economically diversifying soybean use which, in relation to other oilseeds used in making biodiesel, is the most advantageous because it already has consolidated productive chains (credits, inputs, warehouses, transportation, etc.) and because its by-product oilcake, is used for as food for

livestock breeding.

The devastating effects of soybean cultivation in Brazil, Argentina and Paraguay are well known, in addition to the chain of violation of human rights, deforestation and environmental destruction arising from soybean cultivation. For its part, since it was started during the first Colonial economic cycle, monoculture sugar cane plantation unequivocally repeats a model exploiting nature and labour.

Bearing this in mind, it is important to make a critical assessment of the endorsement of agro-energy as the new 'renewable' source of energy also serving to 'renew' the ideological rhetoric of agro-business and its land occupation strategies and to strengthen the rural development model based on industrial monoculture agro-exports, controlled by major capital holders and trans-national companies, whose ecological and social impacts are presently the hub of environmental struggles and peasant movements in Latin America.

It is important to remember that land concentration in Brazil is still one of the greatest in the world, that "hunger" is essentially a political question and that the implementation of a comprehensive agrarian reform is still a structural challenge to democracy in the country. But most important, the story of the struggle for land in Brazil generated a peasant movement acknowledged all over the world, the MST ("Movimento dos sem terra" – the Movement of the Landless), which in turn is part of the Via Campesina, the international peasant coordination. Via Campesina and the MST in Brazil and other rural movements in various other countries are all linked by their common defence of food sovereignty:

"Food sovereignty is the right of all peoples to define their own agricultural policies and regarding food, to protect and regulate national agricultural production and the domestic market in order to attain sustainable development goals, to decide how far they want to be self-sufficient, to prevent their markets from being flooded with surplus products from other countries that dump them on the international market, and to give preference to local fisherfolk regarding control of the use of and rights over aquatic resources. Food sovereignty does not reject international trade but rather defends the option of formulating those trade policies and practices that best serve the right of the population to avail itself of safe, nutritious and ecologically sustainable methods and foodstuffs. Food sovereignty is the right of all peoples, their nations or unions of States to define their agricultural and food policies, without dumping involving third-party countries." (VIA CAMPESINA, introduction to the DECLARATION ON FOOD SOVEREIGNTY, 1996).

The defence of food sovereignty as a political policy would therefore be the peoples' right to produce their own foodstuffs in accordance with the conditions of their territories and their food culture. In the twenty-first century, questions such as agrarian reform and peasants' rights continue to be central in responding to serious environmental and social issues (such as rural exodus and migrations) arising from the expansion of urban and industrial society affecting humanity as a whole and not only the rural population.

Before hastily taking up the task of producing the fuel that the world needs, at a pace imposed on by this model of industrial production and consumption and capital accumulation, it is crucial we think of what we want and what we are planting for the future. Are we in fact breaking away from our Colonial mould of dependency or are we merely updating the terms of exploitation and repeating ancient equations of submission? How far are the biofuel production plans going to serve the needs of the Brazilian people? Or what will be produced to subsidize with energy the rationale of the export monoculture? In this framework and before it is too late, a critical examination should be made of the discourse promoting energy sovereignty to find out how far this sovereignty will be achieved at the expense of mortgaging the premise of food sovereignty.

By Camila Moreno, research worker CPDA (postgraduate in Development, Agriculture and Society) / Rural Federal University of Rio de Janeiro, member of Terra de Direitos, Brazil.

index

- Cameroon: Oil palm plantations fostered by new biofuel market harm local livelihoods

In Cameroon, like in other African countries such as Ivory Coast or Ghana, the production of oil palm is distributed in 3 sectors: an agro-industrial sector, a village sector controlled by agro-industries, and a small-scale traditional sector.

Table 1. Area and production of oil palm plantations in Cameroon in 2002.

	Surface (ha)	Raw production of oil palm (tons)
Agro-industrial plantations	60,000	105,000
"Supervised" village plantations	14,000	
Small-scale traditional plantations	24,000	35,000

Source: Monfort (2005).

Even though Indonesia and Malaysia hold a strong leadership position in the oil palm global market, the agro-industrial sector in Cameroon can rely on several advantages.

In the first place, the industrial plantation of oil palms has largely benefited from governmental programmes and from international capital. The intensive culture of oil palm – a plant traditionally used by local populations – begins under the German colonization and is further developed by the French and the British with the creation of the Cameroon Development Corporation (CDC) and of Pamol Plantations.

In 1963, the government starts a first large programme aimed at developing the plantation of oil palms, notably with the creation of SOCAPALM in the Kribi region. In 2001, the Ministry of Agriculture launched an 'oil palm project' within the framework of new "voluntarist" policies aimed at "modernizing the agriculture", with the help of France and the international financial institutions (IMF, World Bank). This programme is seen as a "national priority" and promotes an increase of production and productivity in order to cover national needs (in deficit) and to improve international competitiveness. The objective is to produce at least 250,000 tons by 2010. This aim relies on the privatisation of large state-owned exploitations (CDC, Palmol and SOCAPALM) and on the increase of the plantation area of at least 5,000 ha per year.

Secondly, the oil palm agro-industry will benefit from the predicted boom of biofuel, a new market in which the French group Bolloré, for a long time present in Cameroon, is expected to play a key role.

In Cameroon, the culture of oil palm and its industrial transformation is carried out by 5 large societies, 3 of which are being owned by Bolloré: SOCAPALM, SAFACAM and the Ferme suisse. The investment strategy of this group is based on the possibility to expand the plantations and on the productivity gains made possible at the level of production and transformation.

Created in 1822, the company of the Bolloré family has today a yearly turn over of more than 5 billions of euros. The Bolloré Empire has specially grown in Africa, where it controls more than 70 firms in 35 countries, particularly in the transport, energy, and other highly profitable sectors such as wood exploitation and cash crops (like oil palm and hevea). It is well-known that the group, in order to expand its influence, did not hesitate to work hands in hands with dubious dictators such as Sassou Nguesso. What is more, Bolloré has largely benefited from the large privatisation campaigns imposed by structural adjustment programmes.

In Cameroon, Bolloré's nickname is "the last emperor". The group is present in the petroleum industry (Chad–Cameroon pipeline), in sea transport for exportation and in the wood business. The group also controls about 40,000 ha of oil palm plantations, particularly through the Belgian company Socfinal. The latter, which flourished thanks to the Belgian colonization in Africa, exploits 31,000 ha of oil palms in Cameroon (SOCAPALM and the Ferme suisse), as

well as other oil palm plantations in Indonesia and elsewhere in Africa, totalising an area of more than 140,000 ha.

SOCAPALM is the largest oil palm plantation in Cameroon and its expansion is on the way, at the cost of neighbouring forests traditionally used by local populations. SOCAPALM is at the root of important land conflicts involving Bagyeli, Bulu and Fang populations whose land has been confiscated without compensation. Their traditional ways of life have become impossible and at the same time they cannot benefit from an insertion into the market economy.

In effect, SOCAPALM hires workers from other regions of Cameroon and accommodate them in camps located in the plantation. The neighbouring villagers, on the other hand, only rarely get jobs. Jobs are often temporary, without labour contracts, without health and accident insurances, and the wages are extremely low: an unskilled worker earns a little more than one euro a day (the workday starts at 6am and lasts sometimes until 6pm). What is more, the arrival of non-native workers poses several problems, for instance with respect to the increasing pressure on local bush meat.

The agrochemicals used by SOCAPALM and the rejections of its treatment factory massively pollute the neighbouring streams. Cases of sicknesses within the village population have been reported.

An important number of guards prevent the villagers from using the resources of the plantation. This situation led, on January 7, 2003, to a severe clash between guards and villagers (during which arms and legs were cut by machete). As a reprisal, the police forces came to help the plantation guards and swept off many villagers and kept them in jail without trials during 14 days.

Given that oil palm plantations benefit from a large national and international support, this type of agro-industry will keep on spreading, in parallel with a worsening of the mentioned social and ecological impacts. Moreover, the new market of biofuel will certainly represent a powerful motor for the cultivation of oil palm. It is expected that the Bolloré group will not stay inactive in the great race for the “substitution of petroleum”. The group has already several advantages in his hands. Bolloré is already present in the energy and plantation sectors and can benefit from solid foundations in Africa based on the collusion of political and economic interests. Also, eager to green its image, the group has already invested in projects of “alternative” energy, for instance with its “BlueCar” electrical prototype.

By Julien-François Gerber, e-mail: JulienFrancois.Gerber@campus.uab.es. This article is based on the author’s field observation and on the following publications: M.A., Monfort 2005, "Filières oléagineuses africaines", Notes et études économiques, n°23, p. 55-85; Agir ICI & Survie, 2000, "Le silence de la forêt: réseaux, mafias et filière bois au Cameroun", Dossiers Noirs n°14, and "Bolloré: monopoles, services compris. Tentacules africaines", Dossiers Noirs n°15, Paris, L’Harmattan.

index

- Colombia: Biodiesel from oil palm

The Western world, and in particular the countries of the North, gave in to addiction to fossil fuels. This path has led to something that today nobody can doubt: climate change. Many solutions have been put forth to face it, but most of them let humanity’s race towards suicide continue as vigorously as before.

Biofuel mega-projects are some of the proposals to solve the problem. However, have those who submitted them as an alternative measured the consequences their creation could have on important ecosystems, peoples and culture? In the first place, this article delimits the steps taken to open up the field to these projects, focussing in particular on the implications of planting African palms, from which one of the biofuels to be produced is derived.

Biofuel has its own story. Briefly, during the 1973 energy crisis, Brazil reconverted part of its sugar industry to produce ethanol and became the leading exporter. Today, Colombia wants to follow this example and become a producing power, particularly of bio-ethanol and biodiesel.

In 2001, Law 693 was issued, linked to Law 939 of 2004, opening up the way for biofuel production. Law 693 stipulates that Colombian gasoline must contain 10 percent ethanol by 2009 and in a period of between 15 and 20 years, it should gradually reach a proportion of 25 percent. Whereas law 939 of 2004, fosters the production and marketing of biodiesel for diesel motors, at a percentage of 5%.

Since the end of 2005, the production from the sugar cane industry in Cauca, Providencia, Manuelita and Mayagüez (all located in the Department of the Cauca Valley, in the West of the country), in addition to the industry in Risaralda, has been close on one million litres daily of bio-ethanol, aimed at satisfying the demand of the west of the country and the Bogotá Savannah. The talk is now of assembling 27 other plants scattered over 17 departments of the country, to extend the blend of 10% with gasoline throughout the whole Colombian territory. According to the forecasts of the National Fuel Federation, by 2010 internal consumption could double simply by rising the percentage of blend to 15%. By then, Colombia will have the capacity to export a figure close on 2,300,000 litres per day of ethanol.

A similar legislation to that referred to above is being prepared for biodiesel, derived from African palm trees. This plant already has a derivate used for food, which is the one most commonly known today: palm oil, with a production of 600 thousand tons. But in fact, it is biodiesel that is of interest to us in this article.

Before going into figures, it is important to say that the major beneficiaries from bio-ethanol legislation – and now from legislation being prepared for biodiesel – are precisely the sugar cane agro-industrialists from the Cauca Valley whose industries were mentioned on discussing ethanol, and in the case of biodiesel, it is the palm agro-industrialists who will benefit.

The consumption of diesel oil in the country for automotive transport is growing at a faster rate than that of gasoline, exceeding the national oil company Ecopetrol's refining capacity, so the country imports 5% of the domestic consumption of diesel oil. Thus an opportunity has arisen for African palm agro-industrialists who have year by year, increased the area under cultivation.

In Colombia the expansion of these plantations has shown a sustained growth. In the mid-sixties 18 thousand hectares were under production. By 2003, there were over 188 thousand hectares and presently, approximately 300 thousand have been planted. Furthermore, seven plants are being assembled in different palm regions of the country, at an approximate cost of 100 million dollars. According to the Colombian palm trade union, Fedepalma, since 2001 Colombia is the main producer of palm oil in America and fourth largest producer on a world level, after Indonesia, Malaysia and Nigeria. Out of the total oil production, 35% is exported.

However, several economic studies consider international palm oil markets to be insecure, insofar as world production increases day by day and prices continue to be low. Nevertheless, agro-industrial palm projects have been a priority for the present Government and are promoted, particularly in regions such as the Colombian Pacific, the plains in the east and the Caribbean region, as the characteristics of these regions make them ideal for the development of these plantations. The target is to reach one million hectares in a few years time.

Experts on this type of agro-industrial development have denounced that these crops are used to launder money from drug trafficking and as a mechanism used by para-military groups to force displacement of the population as their aim is to take over important and rich regions. Their strategy has been to displace the people and once the land is abandoned palm-growing companies occupy them. Jiguamiandó and Curvaradó, two municipalities in the Pacific region are outstanding examples of this strategy. The Urapalma Company illegally occupied these Afro-Colombian territories.

These Chocó communities received the deeds for their lands in November 2000 after years of reiterated violations of their human rights, nine years after the National Constitution had recognized the territorial rights of Afro-descendent and Indigenous communities. The deeds were received at a time when the communities were displaced. On their return they found their territories occupied with oil palm plantations. A long drawn out legal process started with claims by the communities to recover their territories. This process was tainted with major irregularities to favour the oil palm companies.

Something similar is taking place in the Tumaco region (located in the South of Colombia, on the border with neighbouring Ecuador). The communities have also gone through forced displacement and have been threatened and it is thus that the companies or even the State itself propose that the members of community councils, as an alternative to enable them to stay in their territory, become "rural sector entrepreneurs." In other words, they are being forced to involve themselves in partnerships or productive chains with palm oil companies. In this way, territories that used to be rainforests have now become monoculture palm plantations, depriving the Afro-descendent communities of their culture and their territory and destroying regions that are among the most diverse on the Planet.

Last June, President Uribe declared at the Fedepalma Congress in Villavicencio the following:

"[…] I would beg […] [the Minister of Agriculture] to fit into quarantine Tumaco entrepreneurs and the Afro-descendent compatriots and not let them leave the office, locking them in until they reach an agreement. It has to be this way…Lock them in and propose as a case [sic], that the State contributes, that they reach agreements on the use of these lands and the government contributes risk capital resources. And propose a date and tell them: gentlemen, we are in conclave and we will not leave this place until we reach an agreement […] Because here we must recognize what is good and what is bad, in this Meta and in Casanare and in what is starting to yield in the Guaviare, some extraordinary growth of the palm, not in Tumaco, no. And Tumaco, which has the road, go a little further north, that area of Guapi, El Charco with excellent conditions and without a single palm tree, full of coca that we must eradicate […]".

These declarations filled the Afro-descendent communities with wrath and they responded vigorously to the President of the Republic.

"If this oil palm, Mr. President is your mega pilot project, it is not one on our ethnic territories. Worse still, if it were it would lead to most serious environmental, social and cultural damage. We affirm this on the basis of what we have seen of this monoculture plantation since the end of the sixties to the present, that is to say, over thirty-five years now, suffering from the impacts of over twenty thousand hectares of forced sowing of this 'Plantation within camera' which still continues to expand in a violent way in our collective territories." (Letter to the President of the Republic from the ethnic territorial authorities and legal representatives of the Community Councils of Afro-descendent communities from the Kurrulao ethnic territory (Colombian South Pacific).

With these proposals for biodiesel production, the palm companies and the promoters of these companies now have new reasons to continue growing. But plantation stories are painful. They are stained with the blood and tears of the Afro-descendent and peasant communities of the Pacific, of Magdalena Medio, and the Colombian Caribbean. It is the silent story of forests disappearing to become plantations. It is the story of ancestral cultures becoming oil palm proletariats. These voices are clamouring to stop the destruction proposed by those defending biodiesel.

By: Tatiana Roa Avendaño, Censat Agua Viva, e-mail: hipochicho@hotmail.com; www.censat.org. Sources: People's defence office. Defence Resolution N° 39 of 2005; El Espectador. "Ley de tierras podría prestarse al lavado de activos", October 21 2006; Gestión del Instituto Colombiano de Desarrollo Rural – Incoder", August 2006; Salinas, Yamile, los vericuetos de la palma aceitera, Abdala, 10 November 2006; Procuraduría General de la Nación. "Análisis de la ejecución de la Reforma Agraria y la la Gestión del Instituto Colombiano de Desarrollo Rural – Incoder", August

2006. Web sites visited: Revista Semillas, www.semillas.org.co; Fedepalma. www.fedepalma.org

index

- Indonesia: Oil palm expansion for biofuel bringing more exploitation than development

Indonesia is one of the world's most populous and rural countries, with a total population of 220 million people.

The country now has some 6 million hectares of land under oil palm and has cleared three times as much, some 18 million hectares of forests, in the name of oil palm expansion. Existing regional plans have already allotted a further 20 million hectares for oil palm plantations, mainly in Sumatra, Kalimantan, Sulawesi and West Papua, and new plans are currently under discussion to establish the world's largest palm oil plantation of 1.8 million hectares in the heart of Borneo.

Since the 1990s, Western European demand for oil palm products has been more or less stable, while demand from India, Pakistan, China and the Middle East has exploded. These new markets, and markets in Eastern Europe, are set to expand further as the people in these countries increasingly adopt 'western' consumerist lifestyles. Crude palm oil is also being heavily promoted as a source of 'bio-diesel' suited for countries like Japan and Europe, which have adopted renewable energy policies as part of their commitments to implement the Kyoto Protocol. It is the growth in these markets which is currently the main driver of palm oil expansion in South East Asia, which has proven attractive to oil palm developers for a number of reasons, including the favourable climate, comparatively low labour costs, low land rents and concerted government plans to develop the sector, through provision of attractive (or unenforced) legal frameworks, cheap loans and fiscal incentives.

New markets for 'biofuels' also provide scope for increased palm oil sales. Global demand for palm oil is set to double by 2020 with an annual rate of increase predicted at near 4% per year (compared to 2% per year predicted for soybean oil), and Indonesia's national development plans are designed to secure it a large share of these markets.

Putting together all the figures available on provincial land use plans, published in newspapers and various other sources, Sawit Watch has found that almost 20 million hectares of the national territory have already been proposed for oil palm development by local governments. The Indonesian government is now promoting bio-diesel from palm oil for both exports and domestic use.

Potentially, these trends, plans and projections have major implications for Indonesia's forests and forest dependent peoples. Forest clearance for oil palms is one of the main motors of deforestation in Indonesia and cause of destructive forest fires - though another major driver of this land clearance is for speculators to have access to the timber.

Oil palm expansion imply a major reallocation of land and resources, dramatic changes to vegetation and local ecosystems, substantial investment and new infrastructures, movements of people and settlements, major transformations of local and international trade that impact on local communities, who face serious problems and most are in conflict with companies over land. There is a widespread feeling that communities have been cheated of their lands, inveigled into agreements through false promises and denied a voice in decision-making. Among the many irregularities in the way lands have been acquired and held by companies, the most notable include the following:

-customary rights not recognised; plantations established without a government license; information not provided to communities; consensus agreements not negotiated; customary leaders manipulated into making forced sales; compensation payments not paid; promised benefits not provided; smallholders lands not allocated or developed; smallholders encumbered with unjustifiable debts; environmental impact studies carried out too late; lands not developed within the stipulated period; community resistance crushed through coercion and use of force; serious

human rights abuses.

In some oil palm plantations, affected groups are taking collective actions to take back lands that have been forcibly taken from them over the past 32 years. They have been doing this by reoccupying land, destroying company assets like buildings and mills, razing plantations, chasing plantation workers away and so on. Such actions create scope for provocateurs to widen the conflicts and spread social confusion, exacerbating the widespread communal violence (known as 'horizontal conflict') that has become such a feature of reform era Indonesia. The lack of mechanisms to resolve long-standing tenurial disputes underlies many of these troubles.

Extracted and adapted from "Promised Land: Palm Oil and Land Acquisition in Indonesia – Implications for Local Communities and Indigenous Peoples", a new report by Marcus Colchester, Norman Jiwan, Andiko, Martua Sirait, Asep Yunan Firdaus, A. Surambo, Herbert Pane, from Forest Peoples Programme, Sawit Watch, HuMA and the World Agroforestry Centre, published on November 17, 2006, available in English and Bahasa Indonesia at: http://www.forestpeoples.org/documents/prv_sector/oil_palm/promised_land_eng.pdf

index

- Malaysia: The huge cost of a cheap fuel

Malaysia, together with Indonesia, is the world's leading producer of crude palm oil for export, at a high cost, though. According to a 2005 Friends of the Earth report, 87 per cent of recent deforestation in the country has occurred to make way for palm-oil plantations. Since Malaysian rainforests are some of the most diverse ecosystems on the planet, clearing these areas poses serious threat to countless species of plants and animals.

Not only does this practice wreak havoc on the countries' megafauna (such as orangutans, Sumatran rhinos and tigers, Asian elephants, gibbons, and tapirs), it also causes significant pollution. The United Nations' Food and Agriculture Organization estimates that 25 to 30 percent of the greenhouse gases released into the atmosphere each year (about 1.6 billion tons) comes from deforestation.

Wetlands International have shown that destruction of SE Asian peatlands for Palm Oil plantations, which cover 0.2% of the global land surface, is responsible for 8% of the global CO2 emissions. However, the Clean Development Mechanism (CDM) of the Kyoto Protocol currently allows for peatland areas that have been burned and cleared to create biofuel plantations to be eligible for CDM funding!

The Malaysian government is drafting a national biofuel policy to encourage production and domestic consumption of palm oil based biofuel. "For supporting our palm oil sector, we have identified `3 bios' namely, biogas, biomass and bio-diesel," said Dr Chan Kook Weng, Senior Research Fellow at the Malaysian Palm Oil Board (MPOB). The government approved 54 projects this year alone to create B100, a biodiesel based from 100 percent palm oil. On September, Malaysia announced a joint venture with private partners to build three plants that will make the new fuel for export to Europe.

That's not good news neither for the people nor for the environment. "Corporations first clear the land for its lucrative timber. Then they burn everything that's left on the land, such as shrubs, stumps, and peat soil, which can smolder for three to four months before it's finally extinguished", says Michelle Desilets, director of the Borneo Orangutan Survival Foundation, UK. Tree-felling combined with the burning creates a haze above the forest and releases tons of carbon dioxide into the atmosphere, contributing to the same global warming that biofuels are supposed to reduce.

"When you turn a product into a world commodity, you get corporations involved," says Tim Keating, executive director of Rainforest Relief. "Originally palm oil was collected by hand, but once you get corporations involved, you end up having forest clearing and mass plantations."

Right now palm oil is mostly used in food products, but if the demand for palm oil-based biodiesel increases, the oil palm business will certainly expand, creating more deforestation and species destruction.

Despite the huge environmental impact palm oil-based biodiesel has, businesses interested in making money see a market for it. Palm oil as a source for biofuel doesn't integrate the huge environmental and social costs of its large-scale plantations, and so it can be sold at bargain prices to rich countries. But for the local communities who are left deprived of their present and future, the biofuel has a huge cost.

Article based on: "Malaysia to increase bio-fuel use", BBC News, http://news.bbc.co.uk/2/hi/asia-pacific/4326284.stm; "Using palm oil to make biodiesel may cause more trouble than it prevents", Sarah Parsons, Plenty Magazine – November 14, 2006, disseminated by Indonesian Nature Conservation, E-mail: incl.contact@gmail.com

index

Monthly Bulletin of the World Rainforest Movement
This Bulletin is also available in French, Spanish and Portuguese
Editor: Ricardo Carrere

WRM International Secretariat
Maldonado 1858 - 11200 Montevideo - Uruguay
tel: 598 2 413 2989 / fax: 598 2 410 0985
wrm@wrm.org.uy
http://www.wrm.org.uy