



Bulletin Issue N° 206 – September 2014

OUR VIEWPOINT



10th Anniversary of the International Day of Struggle against Monoculture Plantations

Ten years ago in Brazil, September 21st was established as the National Day against Tree Monocultures. The aim was to increase the visibility of the many peoples and communities struggling against tree monocultures, as a way of breaking the circle of silence around the numerous violations faced by the communities whose territories were surrounded by these monocultures. Also, to disseminate as widely as possible the evidence emerging from the resistance struggles about the negative social and environmental impacts of these plantations. The impacts on the lives of women in the affected communities are particularly severe. Recognizing the importance of the decision, the WRM decided in 2006 to make this day an International Day of Action.

THE UGLY FACE OF A 'BIO' ECONOMY: PROMOTING FURTHER DEFORESTATION AND PEOPLES' DISPLACEMENT



Tree factories: An overview of the impacts and interests behind GE trees
The debate over genetically engineered (GE) organisms has mainly focused on agricultural crops. However, the fact that these trees will not be eaten does not mean that transgenic trees are any less dangerous. On the contrary, as trees live longer than agricultural crops, there could be unforeseen changes in their metabolism many years after they have been planted. GE trees are designed to be planted in large, monoculture, industrial tree plantations, which already have serious impacts on people and forests. GE trees will increase these impacts.

Beware the 'bioeconomy'



'Bioeconomy' is an industrial strategy now being aggressively promoted by the agribusiness, forestry and biotech industries. They envisage a new economic order where a set of technologies and economic arrangements are being put in place that can literally transform woodchips, sugar cane, algae and other biomass stocks into the liquid fuels, bulk chemicals and electricity that make up our production economies. Such 'bioeconomy' will inevitably collide and conflict with the protection of life and local livelihoods.



Research with Genetically Engineered trees advances in Asia

WRM just updated a 2008 country by country overview of research with Genetically Engineered (GE) Trees. This overview contains summarized information from 24 countries where such research is taking place. The main research objectives identified are on how GE trees could improve disease resistance, wood quality and use for bioenergy purposes. Most of the 750 field trials of mostly eucalyptus, poplar and pine tree species, - excluding fruit trees - registered worldwide until now, is taking place in the Americas, mainly in the USA and in Brazil. In both countries, commercial release of GE eucalyptus is dangerously close. Nevertheless, it is important to also have a close look on other continents. Risky research with GE trees, especially with poplar, eucalyptus, rubber and oil palm, is advancing in Asia, with China leading as the country with second highest number of field trials worldwide and first commercial release of GE poplar trees.



EU support for wood-based 'bioenergy' fuels forest destruction and land-grabbing

Back in 2009, the European Union agreed on a 20% renewable energy target by 2020. Most of the target is expected to be met from burning biomass, primarily wood. Across much of Europe, wood burning is being promoted for heating and for electricity. As a result, the EU's demand for wood – already unsustainably high – has started to grow substantially. Pressures on forests across Europe are increasing. On top of this, EU demand for wood pellets now far outstrips EU pellet production.



Plants designed for deconstruction? The use of wood cellulose for fuels

Globally, many people rely on wood as fuel for cooking and heating, but increasingly, commercial and industrial interests are also turning to wood for producing so-called 'bioenergy'. Massive coal plants in the EU and the USA are co-firing large amounts of wood alongside coal. Some coal power plants are even converting entirely to wood pellets, for which, in several countries, they can be rewarded with 'renewable energy' subsidies. Those energy facilities require vast amounts of wood, creating a new international trade in wood chips and pellets, and further threatening forests, ecosystems, human rights and climate.



Uganda: Carbon plantations generate benefits for foreign investors and certifiers while communities pay prize of displaced livelihoods
 The commercial tree plantation located in the Kiboga District, the ‘cattle corridor’ of mid-western Uganda, under the name of “Kikonda Forest Reserve”, covers 12,182 hectares of land owned by Uganda’s National Forestry Authority (NFA). The land is managed, however, by the German private shareholding company Global-Woods AG. The plantation project started in 2002 with a 49-year ‘tree-farming’ lease agreement granted by the NFA. Each year, around one million trees are planted over an area of 1,000 hectares, with the goal of capturing carbon dioxide from the atmosphere and ‘storing’ it as well as of producing saw logs and fuel wood.



Honduras: Criminalization of the Garifuna people defending their territory from the advance of the African palm
 During the colonial era, shipwrecked Africans reached the Caribbean coast, inhabited by the Kalinagu or Caribe people. The fusion produced the Garifuna language, religion and traditions. Under pressure from transnational banana companies interested in exploiting these lands, the communities began to lose part of their territories. Heedless of the protests of the Garifuna people, the state allowed history to repeat itself nearly 100 years later: the banana enclave changed into an oil palm enclave. The Garifuna people are currently in the struggle to retake their lands and assert their community titles.



GE Trees: Threatening North America's Native Forests
 A genetically engineered (GE) tree is a tree whose DNA has been modified using genetic engineering techniques. In most cases the aim is to introduce a novel attribute to the plant which does not occur naturally within the species, such as resistance to a certain pest or herbicide. The commercialization of GE trees, like eucalyptus and poplar, would have major irreversible environmental and social implications. The US Federal government support and millions of dollars in funding have been granted to tree biotechnology research. Test plots for GE trees in the US span 19 states and over 600 acres of field trials.

PEOPLES IN ACTION

Forum in Honduras denounces impacts of African palm expansion. “They are growing palms everywhere and leaving us without food.”



Organization and mobilization against the corporate takeover of the climate summit convened by Ban Ki-moon in New York City, US



STOP GE TREES campaign urged FSC to keep GE trees out!



Perú: Demand Justice for the Amazon Indigenous leaders murdered by loggers



Francia: Grassroots organizations in France alert the participants of the International Symposium on Agroecology for Food Safety and Nutrition organized by FAO

RECOMMENDED

International declaration in solidarity with the peoples of Honduras in the



face of the expansion of African palm plantations in their territories



Thailand: Forest populations need a voice



“Planet Palm Oil: peasants pay the price for cheap vegetable oil”, publication by GRAIN



China: World’s largest reforestation scheme fails to protect natural forests and threatens more

Brazil: organizations issued a letter opposing commercial use of transgenic eucalyptus by Suzano, but could only do so after the public hearing



“New trends in the expansion of industrial tree monocultures in Latin America”, a WRM publication



Indonesian logger: “cleared peat forest doesn't have high conservation value”

OUR VIEWPOINT

21 September 2014: 10th Anniversary of the International Day of Struggle against Monoculture Tree Plantations



Dismantle the power of transnational plantation corporations!
There is no “smart monoculture”: Support the People’s Climate March!

Ten years ago, at a meeting of 250 members of communities affected by large-scale eucalyptus plantations in Brazil, September 21st was established as the National Day against Tree Monocultures. The aim was to increase the visibility of the many peoples and communities struggling against tree monocultures, as a way of breaking the circle of silence around the numerous violations faced by the communities whose territories were surrounded by these monocultures. The day was also created in order to disseminate as widely as possible the evidence emerging from the resistance struggles about the negative social and environmental impacts of these plantations. The impacts on the lives of women in the affected communities are particularly severe. Recognizing the importance of the decision taken by the Brazilian communities, the World Rainforest Movement (WRM) decided in 2006 to make this day an International Day of Action.

This year, September 21st is also a day of mass mobilizations for Climate Justice. Thousands of people will join the People’s Climate March, while political leaders – and increasingly also corporate representatives – are meeting at the United Nations in New York City for the Climate Summit 2014, convened by UN Secretary General Ban Ki-moon. This summit represents yet another step towards the corporate takeover of the UN climate negotiations, and the privatization of land, water and air resources under the guise of a global climate pact.

The UN and other international agencies will launch the “Climate Smart Agriculture” initiated at the summit. This initiative is a new smokescreen being used to greenwash the worst practices of industrial agriculture: chemical fertilizers, industrial meat production, and genetically modified crops, such as tree plantations and other monocultures, which are being disguised as 'climate smart'. Proponents of this dangerous false solution include the World Bank; they are seeking to turn the carbon in farmers' fields into carbon credits, which would lead to land-grabbing and undermine real climate solutions.

Transnational corporations are primarily responsible for the problems caused by plantations: land-grabbing and the seizure of common 'resources'; destruction of biodiverse areas and their associated wildlife; the drying up and pesticide pollution of rivers, streams and springs; soil exhaustion and erosion; degrading working conditions; and the increasing financialization of nature, land and production. However, these corporations not only persist in denying and systematically concealing all these processes of social and environmental injustice; they even argue they are part of the ‘solution’ to the problems. Some of the market's false solutions, which are really solutions beneficial primarily for financial capitalism itself, increase the injustices associated with monoculture. Among these false solutions are initiatives that legitimize corporations’ operations without requiring them to be accountable for the crimes and violations they commit. Examples of this kind of ruse are ‘green’ certificates issued by the Forest Stewardship Council (FSC) and the Roundtable on Sustainable Palm Oil (RSPO) the ‘forest dialogue’, initiatives where civil society and corporations forge voluntary corporate commitments, and other so-called ‘sustainable’ initiatives, like phony commitments to ‘zero deforestation’. Although such action may lead to short-term benefits for local communities in some places, they have mainly led to frustration and community division, by promising ‘compensation’ that does not fulfill people's key demands for guaranteeing their way of life, the return and respect for their territories, and an end to the environmental injustice caused by monocultures.

These initiatives are ‘voluntary,’ that is, they are not legally binding, and therefore lack a democratic institutional framework whose main goal is to protect the rights of the people affected. In this way, these initiatives, without aiming to change the destructive logic of capital, ultimately legitimize the expansion of a production model that we call neocolonial, because it destroys ways of life, is based on environmental racism and does not question any of its fundamental premises, such as the concentration of land and production in large-scale monocultures

with poisonous pesticides and degrading working conditions. Moreover, “green” and “sustainable” initiatives and commitments do not hinder big companies from further expanding their plantations and encroaching on local people's territories.

Increasingly serious is the rise of “flex tree” monocultures, producing multiple-use trees and forest commodities that are perceived to be interchangeable (energy, wood, food, carbon sequestration, etc.). Their “flexible” nature is of major interest to financial capital, which is increasingly promoting, together with the monoculture tree plantations corporations, the speculation over the control of production and land uses. These companies continue to insist on commercial uses of transgenic trees, as well as other uses of wood for energy purposes, and on selling ‘environmental services’ such as carbon. These are all false solutions to the environmental and climate crisis confronting human societies today, and they ultimately exacerbate injustice, hunger and poverty. Monocultures and transgenic crops are not smart; they are one more tool of ‘green’ capitalism to grab peoples’ lands, undermining those who are building real solutions to the social, environmental and climate crisis.

To confront the impact of the big corporations and the expansion of plantations, we must continue to push for the transformation of this model of production and to fight the neoliberal policies that favour big capital. An important step is for us to join forces in the framework of the “[Campaign to Dismantle Corporate Power](#)”, in order to build and strengthen instruments to put a stop to the architecture of impunity and legitimation that corporations enjoy today. The starting point of the Campaign is the struggle of communities resisting the invasion of their territories by transnational corporations, or their fight to expel transnational corporations from their territories. It affirms the right of peoples to freely determine their own way of life. Agrarian reform and the demarcation of indigenous peoples’ territories and those of other traditional and small farmer populations all over the world are urgently needed actions to make headway in the struggle for food sovereignty, social and environmental justice, and people’s power.

We cannot end this declaration without paying tribute to the women and men all over the world who carry out a daily struggle, in different ways, against monoculture tree plantations. They have already achieved important victories in the defense and recovery of their territories and the biodiversity they need for their physical and cultural survival. These women and men, in their arduous and long-suffering struggles for the cause of life and the future, stand in sharp contrast to the greed of the big corporations and investors that seek to appropriate ever more same lands to generate profits for their shareholders.

"Plantations are not forests!"

“There are no smart monocultures!”

September 21st, 2014

Campaign to Dismantle Corporate Power and Stop Impunity

La Via Campesina

World March of Women

Friends of the Earth International

World Rainforest Movement (WRM)

THE UGLY FACE OF A 'BIO' ECONOMY: PROMOTING FURTHER DEFORESTATION
AND PEOPLES' DISPLACEMENT

Tree factories: An overview of the impacts and interests behind GE trees



Genetic engineering allows scientists to modify trees by inserting genetic material from another tree of the same species, from another tree species or from another species altogether. The attempts by research and plantation companies in the US, Brazil and other countries to commercialize engineered trees are posing an enormous risk to the world's forests.

Until now, the debate over genetically engineered (GE) organisms – also known as transgenic organisms – has mainly focused on agricultural crops, and only to a much lesser extent on GE trees. Our focus in this bulletin is not on genetic engineering of fruit trees like papaya or apple, but on eucalyptus, pine, acacia and poplar trees used in large-scale industrial monoculture, especially in the Global South. However, the fact that these trees will not be eaten – although honey produced from GE eucalyptus trees could become contaminated - does not mean that transgenic trees are any less dangerous. On the contrary, as trees live longer than agricultural crops, there could be unforeseen changes in their metabolism many years after they have been planted. For example, work is already underway on GE trees to stop them from flowering, for the supposed purpose of preventing the possible contamination of natural trees with transgenic pollen. The problem is that no one can guarantee that 20 or 30 years after they have been planted, not one of the thousands or millions of transgenic trees will flower and contaminate normal trees of the same species. The impact this could have on the species in question, on the forest as a whole and on the communities that are dependent on these forests could be devastating.

Scientists tinkering with genes in order to 'improve' trees are, in fact, changing certain genetic attributes of the trees to better serve the interests of those who are financing this research -particularly large tree plantation companies – by increasing the profitability of the businesses involved. A GE herbicide-resistant tree, for example, is not 'improving' anything - rather quite the opposite. This modified tree permits extensive fumigation with herbicides, and as a result, this will damage the soil, destroy local flora, poison fauna, pollute water and severely impact local populations' health and livelihoods.

Who is promoting GE Trees and why?

Much of the research that scientists are conducting into GE trees is primarily of interest to the pulp and paper industry. GE trees would in theory allow pulp mills to grow more fibre more quickly. Researchers are working on GE disease resistant trees, as large-scale monoculture plantations are particularly susceptible to diseases. Trees engineered to be sterile would grow faster since the trees would focus their energy on growing rather than producing flowers. The pulp and paper industry is also interested in GE trees with more uniform fibre, fewer branches and straighter trunks. The industry's goal is to replace its current tree plantations with transgenic trees that grow faster, contain more cellulose, are resistant to herbicides, insects and fungi, are

resistant to droughts and low temperatures and do not flower.

Fossil fuel and energy-related companies are also becoming increasingly interested in engineering trees. Faster growing GE trees with reduced lignin would make trees less fibrous, allowing an easier process for turning the wood cellulose into a liquid fuel (ethanol). This could result in the establishment of enormous plantations of GE trees for producing pulp, which would in turn be converted into ethanol. Moreover, burning of wood pellets is being promoted across much of the EU as 'renewable energy'. This promotion increases the demand for wood and promotes more tree plantation projects being set up in the global South. Meanwhile, researchers are looking into ways of engineering trees that absorb and store more carbon, as a supposed solution to climate change.

How did this happen?

The forestry industry has historically tried to 'manage' forests to meet their commercial needs. As a result, plantations were established - of a single species of tree planted in straight, evenly spaced rows, so as to obtain the greatest possible amount of wood per hectare. This led to the progressive destruction of forests and grasslands and their replacement with industrial tree monocultures that produce nothing but wood.

This was not enough, however, and companies have adopted different measures to 'improve' these monocultures. The United Nations Food and Agricultural Organisation (FAO) played a key role in this regard, beginning with defining monoculture plantations as 'forests' and backing the establishment of these 'forests' in the South. It also promoted research on the tree species considered best suited for planting – particularly eucalyptus and pine – and was also one of the main vehicles used to convince governments of the supposed benefits of promoting these kinds of plantations in their countries.

The next step involved the gradual adoption of the full Green Revolution package, also backed by FAO: growing mechanisation of forestry work, and the use of chemical fertilisers, agrototoxic substances for pest and disease control, and herbicides to prevent other plants from competing with the trees planted. In the meantime, genetic selection attempted to 'improve' the performance of plantations in terms of wood yields, which was quickly followed by hybridisation and the cloning of the 'best' trees. From this reductionist perspective, the next obvious step was to genetically modify the trees.

What are the main impacts and risks?

Research of GE trees is not limited to laboratories and 'controlled' testing, but has also extended to the field and with a wide range of species. GE trees are designed to be planted in large, monoculture, industrial tree plantations, which already have serious impacts on people and forests. GE trees will increase these impacts. Here is a short list of some of the many serious impacts:

- Genetic contamination of habitats: GE trees' pollen and seeds can be carried enormous distances by the wind, water or insect pollinators. This means that these can easily contaminate trees located a long distance away. For example, a GE insect-resistant pine tree planted in Chile could eventually contaminate trees of this species in their native habitat in the US, potentially killing off insects and causing serious impacts on the food chains to which they are linked. Propagation can also go via roots, shoots and grafts. This is one of the biggest risks associated with field trials and commercial plantations of GM trees. Regulation on a national level would then not be sufficient due to the large-scale dispersion.

- Increased pressure on native forests: although the argument "growing more wood on less land", used by GE trees proponents, appears to be convincing, the increasing demand for wood, largely coming from the North, increases as well the pressure on lands. In the past two decades, the plantation industry has already improved productivity of trees without using GE technology. Nevertheless, the area of industrial tree plantations was not reduced; it increased fourfold in the global South. As trees can be engineered to grow faster, resist chemicals

and insects, and be freeze-tolerant, it is expected that they increase corporate profits as well as expand the number of plantations. The potential effects of commercial release of GE trees include destruction of biodiversity and wildlife, loss of fresh water, desertification of soils and severe human health impacts, all of which directly or indirectly provoke the degradation and collapse of native forests and grasslands.

- More water, more chemicals, more destruction: Trees genetically modified for faster growth are likely to consume even more water than the trees currently used in industrial tree plantations. This will lead to more dried up rivers and streams, more lowering of water tables and more dried up springs and wells. Nutrients will be removed from the soil more quickly, requiring more chemical fertilizers. GE trees will grow faster than native trees and could be highly invasive to surrounding forests, crowding out vegetation and destroying habitat for the animals and fungi that have evolved to live in native forests.

- Increase in violations of local communities' rights: Rural, traditional and indigenous communities in and around countries advancing GE tree plantations will bear the greatest burden of the negative impacts. GE trees increase the already high corporate interests over lands and 'resources'. By occupying immense quantities of lands and polluting the surrounding soils and water streams, GE trees exacerbate directly or indirectly the displacement of more communities from their territories, destroying local livelihoods, food sovereignty and control over their own territories.

- Human health risks: potential impacts include exposure to hazardous chemicals that are applied to plantations of GE trees and harmful effects of inhaling pollen from trees that produce a Bt toxin (a toxin that produces proteins that are deadly to insects). Pines for example, are known for heavy pollination, spreading pollen over hundreds of kilometres. Establishment of plantations of pines that produce Bt pollen could potentially lead to widespread outbreaks of sickness. The impacts on wildlife and humans from consuming Bt plants have not been thoroughly researched. However, animal studies found that Bt remains active in mammals that have eaten it and may in fact bind to the intestines, leading to "significant structural disturbances and intestinal growths."

- GE trees cannot help reverse climate change: the idea that planting trees can help reverse climate change is based on the false assumption that the carbon released by burning coal or oil can be considered equivalent to the carbon 'absorbed' in a tree. Fossilized carbon stored under the ground is stable and unless dug out and burned, it will not enter the atmosphere. Moreover, GE trees will only increase the number of plantations and clearing forests for plantations is one of the main drivers of deforestation. Plantations are not forests!

- GE Tree research follows the logic of constant 'growth': Whether for the purpose of producing pulp for producing paper, liquid ethanol for fuel, biomass for energy or higher carbon absorption, GE trees aggravate the current violence of the economic system.

It is crucial to oppose the expansion of tree monocultures and to join the fight against GE trees. For more information on the impacts of monoculture tree plantations, see the [WRM website](#); and on GE trees in particular, see "[Unravelling the lies: Why GM trees don't make sense](#)", written by Chris Lang and produced by WRM and FoEI; and visit the [STOP GE trees campaign](#) website.

Beware the bioeconomy



Just a few years ago forestry giant Weyerhaeuser, a US-based logging company, began running a series of intriguing adverts in airports and magazines. The ads depicted a northern temperate forest along with the question “What could a tree be?”. Thought bubbles hovered above the forest canopy and a paragraph of text asked “Medicine that fights cancer? Alternative fuels for our cars? Do you think a tree could be biodegradable plastic or food? or clothing?”, Forestry, it seemed to say, is no longer just about pulp and timber – a new trend seems to have started where the markets for trees just got a whole lot bigger.

It was an advert about the ‘bioeconomy’ - an industrial strategy now being aggressively promoted by the agribusiness, forestry and biotech industries. The ‘bioeconomy’ plans and roadmaps are now being drawn up by every major northern country and several southern countries as well. They envisage a new economic order where biology and biomass become the major tools and feedstock of industrial production. Examples of such documents include the US “National Bioeconomy Blueprint” or the European Union’s “Knowledge-Based BioEconomy”. (1)

Driven by this new ‘bioeconomy’ vision, a set of technologies and economic arrangements are being put in place that can literally transform woodchips, sugar cane, algae and other biomass stocks into the liquid fuels, bulk chemicals and electricity that make up our production economies. Clustered under this banner are many hundreds of biomass energy facilities that burn woodchips to generate electricity in former coal plants, next generation agrofuel producers like Mascoma, who ferments woodchips into ethanol, as well as ‘biomaterials’ companies, such as Natureworks and Metabolix, who turn corn starch into plastic bottles. Meanwhile, researchers in nanotechnology (2) are developing new ways to transform wood cellulose into conductive materials for electronics. Firms in the rapidly exploding field of synthetic biology (extreme genetic engineering) are turning cane sugar into fuels, vanilla flavoring, food sweeteners or soaps. Seen together, these ‘bioeconomy’ players could potentially change the material base of our ‘advanced’ economies. Could a tree be the casing for your smart phone, the wiring inside it and the electricity flowing through it too? Well, conceivably yes, say the ‘bioeconomy’ boosters.

To believers in this ‘bioeconomy’ one great attraction is that biomass sources, such as forests and agriculture, amount to new ‘pools of carbon’ in an age when the traditional carbon used by the chemical industry (fossil fuels) are becoming harder and more expensive to access. Worldwide, there are estimated to be around 500 gigatonnes of carbon (GTC) stored in land-based vegetation – far outweighing recoverable stocks of oil (120 GTC) and gas (75 GTC). This has led some ‘bioeconomy’ enthusiasts to refer to forests as “above ground oilfields”. Moving production from the dead fossil carbons of oil, coal and gas to the living ‘green carbon’ of

biomass sounds like a green dream come true. - an industrial partnership with nature that appears to bypass the oil industry. Indeed, the 'bioeconomy' is sometimes included as a subset of the so-called 'green economy' - the set of tools and financial mechanisms valorized by the United Nations as a cleaner greener path of neoliberal economies. The World Economic Forum guesses that the new 'bioeconomy' of bio-based energy, chemicals, plastics, fuels and associated markets could be worth about US\$300 billion by 2020.

Yet, underlying such fantasies is the massive inconvenient truth of feedstocks. Whether transforming biomass woodchips, sugar or algae, the scale of current consumption patterns means that the growth of such a 'bioeconomy' will inevitably collide and conflict with the protection of life and livelihoods. The industrial term 'biomass' itself hides the fact that what is being transformed is living biodiversity, the trees that make up the forest, the crops that provide our food and return nutrients and carbon to the soil, the algae that make our oxygen. How we harvest or grow that 'biomass' is further entangled in lives and cultures - from the forest communities whose home is destroyed to the migrant sugar workers who cut sugarcane under near slave labour conditions. In effect, this new 'bioeconomy' often preys upon older existing 'bio-economies' that already use biodiversity to make material goods or energy but in a low impact, small scale manner - peasants, forest communities and fisherfolk. The new 'bioeconomy' vision however would put under attack in particular the lands and livelihoods of peoples of the South, as land is increasingly grabbed for sugarcane, cellulose and other biomass feedstocks. Since 86% of biomass is located around the equator, any roll out of the 'bioeconomy' is inevitably a transformation of the tropics and beyond.

Moreover, while the 'bioeconomy' proponents may point to the abundant greenery of our planet as proof that biomass-based economy is there for the taking, the truth is that almost all of the planet's terrestrial biomass is already spoken for since living plants are needed to provide valuable ecological interrelated functions, such as water and carbon cycling, as well as to coexist with forest dependent populations for mutual providing and protecting. Studies on how far our current economies are already damaging natural systems reveal that industrial societies are already using one quarter of all biomass - extracting far more than the biosphere can handle and pushing past critical 'planetary boundaries'. Some 'bioeconomy' promoters dream of boosting overall 'productivity' of the earth via genetically engineering trees or algae, stepping into realm of geoengineering the planet.

Nor are the underlying technologies of the 'bioeconomy' benign. The burning of biomass for electricity has been documented to cause extensive human health problems for communities located near the burning. The adoption of agrofuels has demonstrably driven up food prices and driven land grabs around the world. Meanwhile, the new techniques of synthetic biology involve risky extreme genetic engineering techniques that no scientist nor regulator yet knows how to evaluate for safety. Synthetic biology in particular has raised strong concerns. It involves printing out DNA molecules from a computer operated machine (synthetic DNA) and then altering the genetic makeup of yeast, bacteria and algae in highly novel ways. Those microbes are 'programmed' to process biomass and other feedstocks into new valuable commodities - turning sugar into plastic and cellulose into jetfuel. Contained in large fermentation factories, synthetic biology is often regarded as the ultimate 'bioeconomy' tool - a collection of 'magical bugs' that will transform the sugar and cellulose of the south into valuable commodities for the north.

Jim Thomas, ETC Group

(1) "National Bioeconomy Blueprint", US:

http://www.whitehouse.gov/sites/default/files/microsites/ostp/national_bioeconomy_blueprint_april_2012.pdf;

and "Knowledge-Based BioEconomy", EU: <http://www.kbbe2010.be/>

(2) Nanotechnology refers to the manipulation of matter on the scale of single atoms and molecules. At present, commercial nanotechnology involves materials science (i.e. researchers have been able to make materials that are stronger and more durable by taking advantage of property changes that occur when substances are

reduced to nanoscale dimensions). This involves profound risks with new nanomaterials potentially threatening lands in the south and posing new health risks to workers and the public at large. See more information:

<http://www.etcgroup.org/issues/nanotechnology>

Research with Genetically Engineered trees advances in Asia



WRM just updated a 2008 country by country overview of research with Genetically Engineered (GE) Trees. This overview contains summarized information from 24 countries where such research is taking place. The main research objectives identified are on how GE trees could improve disease resistance, wood quality and use for bioenergy purposes. Most of the 750 field trials of mostly eucalyptus, poplar and pine tree species, - excluding fruit trees - registered worldwide until now, is taking place in the Americas, mainly in the USA and in Brazil. In both countries, commercial release of GE eucalyptus is dangerously close. Nevertheless, it is important to also have a close look on other continents. Risky research with GE trees, especially with poplar, eucalyptus, rubber and oil palm, is advancing in Asia, with China leading as the country with second highest number of field trials worldwide and first commercial release of GE poplar trees .

Introduction

Industrial tree plantation companies want us to believe that using GE trees results in many benefits. One of the main benefits they mention is that using GE trees can result in an increase in wood production per hectare, and

therefore in less land use. But in the past two decades, the plantation industry already improved productivity of trees a lot without using GE technology. In spite of this past increase in productivity per hectare, the area of industrial tree plantations - including eucalyptus, pine, rubber and acacia, as well as oil palm plantations – was not reduced, it increased fourfold (!) in the global South.

Introducing GE Trees is dangerous. There are many potential environmental impacts as summarized in the introductory article of this bulletin, including the fact that there is basically no empirical data about the behavior of transgenic trees over time. In general, access to adequate information is lacking. But this is a first necessary step for people affected by GE research and field trials as well as for others concerned about the issue in order to take action and support local struggles. The updated briefing “GE tree research - A country by country overview”, is therefore one of the tools WRM is providing to reduce the existing information gap.

GE Tree research in Asia

China is the only country in the world to have commercially released non-fruit GE trees and the country with the second highest registered number of field experiments (78) worldwide. Well over one million insect resistant GM poplars have been planted in China since 2002. No records are known to be kept of where the trees are planted or how many have been planted. According to officials from the Chinese Academy of Forestry, “both commercialized species are female poplars with altered fertility”. However, in 2004, Xue Dayuan of the Nanjing Institute of Environmental Science told the China Daily that genes from the GM poplars had already appeared in natural varieties growing nearby. Also, new insect pests have emerged that were previously unknown in poplar trees not genetically engineered. Besides poplar, research is also being undertaken to develop GE eucalyptus and rubber trees.

In Japan, genetic engineering has been performed on several trees like eucalyptus, Japanese cedar and poplar, with different objectives including increased CO₂ fixation by trees and increased quality and quantity of biomass. A number of universities and research institutions have been jointly working with major pulp and paper corporations, like Oji Paper. Until 2013, 9 field trials had been carried out, 7 with eucalyptus and 2 with poplar. The most recent field trial that is on-going (2013-2017) is carried out by the University of Tsukuba with cold-tolerant eucalyptus. According to the RIKEN research institute, new field tests will be carried out with the Nanjing Forest Institute of China and the Forest Science Institute of Vietnam, the latter in collaboration with Oji Paper.

In India, research is carried out on GE rubber trees by the Rubber Research Institute of India. In 2012, field trials were approved by the federal government with GE rubber trees in the states of Kerala and Maharashtra. It was reported soon after this federal authorization that the state of Kerala wanted to maintain its status as state free of GMOs (Genetically Modified Organisms) while the Maharashtra state government formed a commission to study the issue in all its aspects.

In Indonesia, more than 10 years ago, it was reported that the Indonesian Institute of Sciences (LIPI) was working in partnership with the Japan Society for the Promotion of Sciences (JSPS) in genetic engineering of Acacia and Sengon for increased CO₂ fixation by trees. This Japanese-led joint project resulted in the production of 750 GE Acacia and 400 GE Sengon trees in Indonesia. No recent information has been found about these trials or about a follow-up trial.

In Malaysia, since the 1990s research is carried out on GE oil palm and rubber trees. The aim of having GE oil palm is to obtain more oil, improve oil quality, herbicide tolerance and insect and fungal resistance. With GE rubber trees, the focus is on production of specific, commercially valuable proteins. Research is mainly carried out by the Malaysian Palm Oil Board and by the Malaysian Rubber Board, respectively. In spite of the efforts by Malaysia since the 1990s to be one of the global leaders in biotechnology, commercial oil palm plantations

are only expected from 2040 onwards. No information has been found on field trials. The slow process might be due to the existing opposition to GE crops in general in Europe, one of the major markets for Malaysian palm oil.

In Taiwan, the only information publicly available is that the Taiwan Forestry Research Institute is collaborating with the North Carolina State University in the USA in genetically engineered eucalyptus to achieve more cellulose production and more CO₂ uptake by these trees. In 2011, field testing of GE eucalyptus for pulp production was on-going.

In Thailand, France's research centre, CIRAD, is jointly working with some Thai research institutions on GE rubber trees, especially for higher latex production. A collaborative initiative between French and Thai research institutions was created in 2008, called the "Hevea Research Platform in Partnership". It is unknown if there are any field trials of GE rubber trees in Thailand.

Research in New Zealand has focused on radiata pine and Norway spruce, aimed at herbicide tolerance, flowerless trees and wood that is easier to pulp. Opposition is growing and is mainly headed by two organizations: GE-Free New Zealand in food & environment (Rage Inc.), and the Soil and Health Association. The latter carried out a campaign for the GE tree trial of the research institute Scion to be stopped and the trees to be removed. Following a different approach, in January 2008, activists got into Scion's GE tree experiment site and damaged 19 trees. A new Scion's field trial attempt with 375 pine trees, set up in 2013, was destroyed in a break-in action in 2014.

In Australia, research is or has been carried out on GE eucalyptus, and the focus has been on faster growth, 'improved' wood quality and sterility. Little is known about the work being carried out at two universities – Melbourne and Adelaide – and even less about research by Ensis, a collaboration agreement between Australia's Commonwealth Scientific and Industrial Research Organisation (CSIRO) and New Zealand's research institute, Scion. Australia is probably the most dangerous country for carrying out research on GE eucalyptus, given that eucalyptus trees are native to Australia. Any accidental release of pollen from GE eucalyptus – for instance, those manipulated for sterility – could easily contaminate and threaten the future of the country's natural forest ecosystems.

People in those countries where GE tree research is taking place were never asked to give their free, prior and informed consent to such dangerous research and such information has never been made available. Where authorities responsible for regulating such research eventually organize public hearings, these usually have a technical character. This in turn discourages participation by local communities affected by the plantations and others interested to discuss the issue. This summary of Asian countries provides an overview of the results of the collaborative investigation effort since 2008. It aims to provide sufficient information for concerned organizations and individuals in the relevant countries to involve themselves in the issue.

Find the full briefing at: GE tree research - A country by country overview- WRM Briefing, November 2008 (updated in August 2014) – <http://wrm.org.uy/books-and-briefings/ge-tree-research-a-country-by-country-overview/> - Please contact wrm@wrm.org.uy if you have any relevant information that you think should be included – or if you spot errors or omissions in the country sections of this briefing or in the information sheets where the briefing is based on.

EU support for wood-based 'bioenergy' fuels forest destruction and land-grabbing



Back in 2009, the European Union agreed on a 20% renewable energy target by 2020. Most of the target is expected to be met from burning biomass, primarily wood (1). Across much of Europe, wood burning is being promoted for heating and for electricity. As a result, the EU's demand for wood – already unsustainably high – has started to grow substantially. Pressures on forests across Europe are increasing. In Germany for example, more than 15 million households have installed wood stoves. This has led to higher logging rates and more destructive logging methods. Even large beech trees are being cut down for woodstoves and biodiverse forests not previously logged are being cleared. Most of Germany's wood production is now burned (2).

Other European countries primarily promote wood-burning in power stations. Those include the UK, which is expected to burn 5 million tonnes of wood pellets made from 10 million tonnes of wood in 2014 – far more than any other European country and roughly equivalent to the UK's entire annual wood production.

Forests in Europe are far from the only ones affected by EU and member states' support for wood-based bioenergy. EU demand for wood pellets now far outstrips EU pellet production. As a result, the EU imported more than 6 million tonnes of pellets last year, the vast majority of them from the southern US and Canada. For each tonne of wood pellets, two tonnes of wood are needed.

Southern US pellet production has tripled in just two years and ever more pellet plants are being announced and built (3). The impacts are devastating. Pellet plants are concentrated near the Atlantic coast, which is home to remnants of some of the most biodiverse temperate forest and freshwater ecosystems on the planet (4), ecosystems which harbour thousands of species, many of them endemic to the region and which are vital for regulating freshwater systems in a region increasingly affected by droughts. 90% of the region's original forest cover has already been degraded or destroyed, much of it converted to monoculture pine plantations for paper production.

When the EU's biomass boom first started around 2010, it was widely expected that future imports would increasingly come from South America and Africa. Yet this hasn't happened, as a report by Biofuelwatch reveals (5). Back in 2010, it seemed logical that European energy companies would be looking for cheap wood from fast-growing eucalyptus plantations. Indeed, there was a spate of investment announcements and, as article about the Brazilian company Suzano's eucalyptus plantations in Maranhão, Brazil, shows, tree plantations were expanded with the declared aim of producing pellets and/or woodchips for power stations in the EU (6). Yet, what would be required to establish new trade routes for wood-based bioenergy are investments into pellet plants, into transport links to ports, and port and shipping facilities - and virtually none of those have so far happened in the global South (7). South Africa is the only African country where pellet

plants – at least three of them – were built and started exporting to the EU. All of those have closed down because they were not economically viable. No Southern country, it appears, can compete with North America's pellet industry on any significant scale.

Does this mean that forests and communities in the global South are largely safe from EU biomass policies? Unfortunately, not. First of all, much of the wood extracted from forests in Europe that is being burned, and likely some of the wood imported from North America that is turned into pellets, would otherwise have been used by different industries. Those industries will have to look elsewhere for more wood. As global demand for wood increases, so do the pressures on forests and other lands which are converted to monoculture tree plantations. Secondly, companies are citing the EU's biomass demand to justify and attract investments into land-grabs. Suzano may well have believed, back in 2010, that they could viably produce pellets in Brazil and sell them to the UK, but other land-grabbers' claims appear less genuine.

Africa's largest tree plantation owner is Green Resources. The company recently merged with the Global Solidarity Forest Fund and now holds over 40,000 hectares of plantations in Mozambique, Tanzania and Uganda, with well-documented serious impacts on local communities and environments (8). Green Resources website features claims about the potential for wood pellet production for the EU – yet, no plans to invest in pellet plants have been published and references to such a 'promising' new market may well just be aimed at attracting more finance.

Another company, Miro Forestry, appears to have obtained funds via a German investment fund, claiming that they had signed a cooperation agreement to develop a pan-African woodchip biomass business which would supply the EU as well as domestic markets (9). However, nothing can be found on their or their supposed partners' websites to back this up and there are no indications of anybody building the infrastructure to produce and export such woodchips. Miro state that they have obtained long-term leases over more than 12,000 hectares of land in Ghana and Sierra Leone. They have so far planted more than 1,000 hectares, mostly with eucalyptus (10).

A very stark example of a European company justifying land-grabs with non-credible claims about biomass electricity is that of African Plantations for Sustainable Developments (APSD) – although their claims do not refer to potential exports. APSD proposes plantations in order to generate 600 MW of electricity from burning the wood in new power plants in Ghana. This would surpass the UK's biomass capacity and require many billions of dollars in investment (11). While their marketing claims look like a hoax, APSD's land grabbing activities, according to an independent land monitoring initiative, Land Matrix, are the biggest in the country. In April 2014, a Ghanaian news service reported that some 2,000 local people were being displaced by APSD in Brong Ahafo region, with the local MP warning that the region's food production and food security were under threat.

There is a precedent from EU biofuels policies: According to the NGO ActionAid, European investors had grabbed 6 million hectares of land in Africa by 2013, with the declared aim of producing biofuels for export. Yet, the EU imports virtually no biofuels from Africa. Instead, mere hype and expectations over such 'possibilities' have fuelled one of the biggest land-grabs worldwide. Something similar may now start happening as a result of the EU's misguided biomass policies.

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(1) http://www.ieep.eu/assets/753/bioenergy_in_NREAPs.pdf

(2) http://www.forumue.de/fileadmin/_temp_/FORUM_Rundbrief0413_web_01.pdf

(3) <http://biomassmagazine.com/articles/10311/north-american-wood-pellet-exports-to-europe-double-in-2-years>

- (4) <http://www.dogwoodalliance.org/southern-forests/coastal-forests/>
 - (5) <http://www.biofuelwatch.org.uk/2014/biomass-landgrabbing-report/>
 - (6) <http://wrm.org.uy/books-and-briefings/eucalyptus-plantations-for-energy-a-case-study-of-suzanos-plantations-for-wood-pellet-exports-in-the-baixo-parnaiba-region-maranhao-brazil/>
 - (7) Note that Biofuelwatch has only looked at potential imports to the EU. South Korean investments into tree plantations in South-east Asia with the stated purpose of wood pellet production, possibly for export to South Korea have been reported but studies of intra-Asian biomass trading do not yet exist.
 - (8) [http://timberwatch.org/uploads/TW%20Tanzania%20CDM%20plantations%20report%20low%20res%20\(1\).pdf](http://timberwatch.org/uploads/TW%20Tanzania%20CDM%20plantations%20report%20low%20res%20(1).pdf), <http://wrm.org.uy/articles-from-the-wrm-bulletin/section2/mozambique-more-denunciations-against-chikweti-a-company-financed-by-a-nordic-solidarity-fund/>
 - (9) http://users5.nofeehost.com/pharos/12_01_2012.pdf
 - (10) http://www.finnfund.fi/ajankohtaista/uutiset14/fi/FI/MIRO_forestry_company_finnfund/
 - (11) <http://www.hbs.edu/environment/mission-and-impact/Pages/profile-details.aspx?profile=elorentzen>
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Plants designed for deconstruction? The use of wood cellulose for fuels



Globally, many people rely on wood as fuel for cooking and heating, but increasingly, commercial and industrial interests are also turning to wood for producing so-called 'bioenergy'. Massive coal plants in the EU and the USA are co-firing large amounts of wood alongside coal. Some coal power plants are even converting entirely to wood pellets, for which, in several countries, they can be rewarded with 'renewable energy' subsidies. Those energy facilities require vast amounts of wood, creating a new international trade in wood chips and pellets, and further threatening forests, ecosystems, human rights and climate (1).

Meanwhile, it is more challenging to convert wood into liquid fuel for transportation. Most liquid fuels currently used for transport –and, to a lesser extent, for electricity generation – are made from corn, sugarcane and oilseed crops, but industry and proponents of a 'bio-based economy' heavily rely on wood-based and other so-called second-generation liquid fuels in their scenarios for future use of liquid fuels. Large amounts of money

have been deployed on research and development over many years, and yet, there remains no significant commercial production of wood based liquid fuels.

Indeed, to convert wood into liquid fuel requires energy. Depending on the process, the energy inputs may outweigh the energy derived from using the fuel. Making liquid fuels from wood also expensive. Several projects, including Choren in Germany and Range Fuels in the US state of Georgia, which were to produce wood based liquid fuel, have ended in bankruptcy. Yet, great interest (and public grants) remains, not least on the part of the USA military and the aviation industry, both of which see liquid fuels from biomass as essential to their future since there are no other options for fueling military equipment and airplanes.

There are two approaches to turning solid biomass, like wood, into liquid fuel: One relies on heat and pressure – and, unfortunately for the industry, on far too much heat and pressure to make the process worthwhile economically as well as energetically.

The other relies on biotechnology – i.e. on engineering microbes and enzymes to break down cell walls. Thus, by engineering the wood from the trees, their cell walls can be broken down more easily. That means that the cellulose from the wood can be used more easily to obtain ethanol. The challenges are many, but one of the biggest stumbling blocks is lignin. Lignin is the material that lends strong structure to the cell walls in wood, allowing trees to grow upright and reach for the sky. But, in trying to turn wood into ethanol and other liquid fuels, lignin gets in the way, making it difficult to access the sugars in the cellulose, and creating large amounts of a low-quality by-products (i.e. residues).

Altering and engineering trees to have less, or modified, lignin is therefore one of the primary aims of tree biotechnology research. Another complementary approach is to use new synthetic biology techniques to engineer microbes that can produce enzymes that break down lignin (and then, perhaps also convert sugars to fuels and other chemicals).

To grasp what research is underway and the mindset behind it, it is worthwhile taking a glimpse into academic publications. In one recent paper entitled “Lignin Bioengineering”, the authors state: “Lignin is the primary material responsible for biomass recalcitrance [resistance to breakdown], has almost no industrial utility, and cannot be simply removed from growing plants without causing serious developmental defects. Fortunately, recent studies report that lignin composition and distribution can be manipulated to a certain extent by using tissue-specific promoters to reduce its recalcitrance [resistance to breakdown], change its biophysical properties and increase its commercial value. Moreover, the emergence of novel synthetic biology tools to achieve biological control [...] opens new doors for engineering.” (2)

Synthetic biology techniques are sometimes referred to as “extreme genetic engineering”. They make use of new computer assisted capabilities that allow researchers to analyze and synthesize genetic codes on a computer, working not just with one or two genes, but with sequences of hundreds of genes. These approaches essentially permit the construction of novel life forms (microbes, including yeast, e-coli bacteria and microalgae) programmed as ‘living chemical factories’ to produce chemicals and compounds considered ‘useful’ to people. The risks are high and many, especially because containment and control of microbes is virtually impossible. Yet, synthetic biology is proceeding rapidly. Many of the industry’s ‘top’ rated ‘biofuel’ companies, like the giant agribusiness Syngenta and the German chemical company BASF, use synthetic biology (3). Meanwhile, a number of (non-biofuel) products, that is, products derived from synthetic biology that are not fuels including fragrances, pharmaceuticals and more, are already on commercial markets, without oversight or regulation (4).

Another recent academic paper states: “Redesigning lignin, [...] is a promising way to produce plants that are designed for deconstruction.” (5)

Engineering deforestation

An international campaign to halt the commercial release of genetically engineered trees, requests for which are currently pending in Brazil and the USA, is growing in momentum and we can hope that this movement will be as 'recalcitrant' as lignin itself (6).

The campaign points out the potential risks of contaminating wild tree species with traits for 'deconstruction' as well as the virtually inevitable escape of lignin munching microbes from laboratories and refineries. Campaigners are calling for a ban on commercial release of GE trees. There is also growing momentum calling for a moratorium on commercial release of synthetic biology derived products.

The destructive impacts of industrial tree plantations on communities where they exist are well known. Genetically engineered trees are intended to be grown in plantations and will only contribute further to those problems. The impacts of synthetic biology remain unclear but there is growing awareness that some products under development are poised to undermine livelihoods (for example, vanilla growers may lose their market to synthetic producers). Further, the impacts of any release of synthetic microbes that digest plant cellulose into the environment have the potential to be disastrous. Finally, the very large scale of wood that is required to make liquid fuels on commercial scale has the potential to dramatically escalate deforestation and conversion (to plantations) of native forests and ecosystems.

The entire concept of manipulating and engineering trees, microbes and other life forms to meet an insatiable demand for fuels, chemicals and materials, is ethically and morally bankrupt. The arrogant and reductionist mentality that approaches nature as something to engineer for commercial purposes entirely ignores any understanding of the profound, intricate and beautiful interconnectedness of all life forms, achieved as a product of our shared evolutionary heritage.

Rachel Smolker, BiofuelWatch US

- (1) For more info see: <http://www.biofuelwatch.org.uk/2013/chain-of-destruction/> and <http://www.pfpi.net/trees-trash-and-toxics-how-biomass-energy-has-become-the-new-coal>
 - (2) Aymerick, Eudes, Liang, Y., Mitra, P. and Loque, D. 2014. Lignin Bioengineering. Current Opinion in Biotechnology 26: 189-198
 - (3) See: <http://www.biofuelsdigest.com/bdigest/2014/05/04/the-complete-2014-5-minute-guides/>
 - (4) For more info: <http://www.etcgroup.org/issues/synthetic-biology>
 - (5) Wilkerson et al, 2014. Monolignol Ferulate Transferase Introduces Chemically Labile Linkages Into the Lignin Backbone. Science 344 (90)
 - (6) More information here: <http://stopgetrees.org>
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Uganda: Carbon plantations generate benefits for foreign investors and certifiers while communities pay prize of displaced livelihoods



The commercial tree plantation located in the Kiboga District, the ‘cattle corridor’ of mid-western Uganda, under the name of “Kikonda Forest Reserve”, covers 12,182 hectares of land owned by Uganda’s National Forestry Authority (NFA). The land is managed, however, by the German private shareholding company Global-Woods AG. The plantation project started in 2002 with a 49-year ‘tree-farming’ lease agreement granted by the NFA. Each year, around one million trees are planted over an area of 1,000 hectares, with the goal of capturing carbon dioxide from the atmosphere and ‘storing’ it as well as of producing saw logs and fuel wood (1).

The lease allows Global-Woods to plant and harvest trees -even though the area is officially a ‘Forest Reserve’-, in return for a one-off fee of US\$410 and an annual rent of about US\$4.10 for each hectare planted with trees. No rent was to be paid for areas that the companies had not planted with trees. When the Ugandan government realized how investors were taking advantage of the system and tried to negotiate better terms for the Kikonda Reserve with the Institut für Entwicklung und Umwelt (IEU), a German company headed by a former Green politician from the European Parliament, the company refused, saying: “Our plane to Germany leaves tonight; if you don't sign now, there will be no deal.” (2)

Since Global-Woods started the project, there have been continuous conflicts with local communities since they are forbidden to cut trees, practice agriculture or graze animals in the area of the project. Collecting charcoal and grazing cattle in a ‘reserve’ are illegal under Ugandan law, but this was not being enforced prior to the project. The restriction of agricultural and grazing access also caused so-called contradictions in management; whereby at times grazing was allowed for a fee, whilst at others times fines of around US\$400 were levied. Cattle keepers lost access to the 'valley dams' that were specially constructed for cattle keepers in conjunction with Irish Aid in the reserve in 1992. After 2009 an internal review indicated the need to change strategy, and the company built two dams outside the reserve for cattle access (3).

The tree plantation project is certified by the CarbonFix methodology, a certification for carbon offset projects. CarbonFix was recently acquired by the company Gold Standard, which also provides certification for projects to sell carbon credits (4). The certifiers confirmed in their certification report that the project is

expected to store 888,033 tones of CO₂e over the 50 years the carbon calculations are made (even though the lease Global-Woods holds is only for 49 years, and planting did not start immediately after the lease was acquired) – the ‘sequestered’ amount translates into carbon credits that the project owner can sell on the carbon market. The project has also been certified under the Climate, Community and Biodiversity (CCB) Standard, another scheme that developed guidelines against which projects selling carbon offsets are assessed, in particular in relation to social and environmental impacts. A third set of consultants has certified the management of the tree plantations according to the standard of the Forest Stewardship Council (FSC). The question that arises, then is - how can so many standards ‘back’ a project characterized by conflicts and contradictions?

The CCB standard requires that the certified project must deliver net benefits to communities, and the Project Design Document (PDD) must present “a credible estimate” of the net benefit of changes in community wellbeing as a result of project activities. The PDD for Kikonda argues that communities surrounding the plantation will benefit from employment opportunities on the plantation, and from support for planting trees on private land through an organisation that has been formed around the project. However, only private landowners can benefit from the tree planting activities, and a Global-Woods report reveals that only four per cent of the households in the area around the project have titles to the land that they cultivate. It was also expected that community members could benefit directly from forest carbon payments for trees planted in a buffer zone around the project, but this initiative has already failed. It has been discontinued.

The PDD also argues that as the project is simply enforcing the law it cannot be held responsible for the consequences. Since cattle grazing, charcoal burning or firewood collection in the Kikonda Reserve are not allowed according to NFA regulations, community members “will have to stop their illegal activities within the reserve and find other work outside”. The company argues that sufficient time has been allowed for affected persons to “come to terms with accepting the job offers of the project or to develop other income alternatives”. Others “still have the possibility to continue their way of living and working in other parts of the country”. Furthermore, the PDD of 2008 states that security guards employed by the project management “patrol the area of the forest reserve constantly to stop illegal activities. These patrols also constantly remind the people of the area, that the Forest Reserve may only be used for tree growing. As the government does not have the capacities to arrest culprits in the field, these security guards also fulfil this responsibility and bring the culprits to local police station if necessary.” (5)

Communities around the project area complain about a high level of conflict with the project: fines, arbitrary arrests of people and impoundments of cattle entering the reserve, denied access to water tanks that were constructed for use by the communities, widespread corruption among forest rangers, etc. Only in 2011 – 9 years after the start of the project – did Global-Woods carried out what they call a “socio-economic baseline survey”. The report confirms many of the problems that the communities had been complaining about, and also reveals some very significant gaps in the project proponents’ knowledge about the communities in the project area. The most recent survey report states: “Originally, it was assumed that there were 20 communities and the aim was to include all of these. During the survey, we became aware of more communities within the area and in total 44 communities were recorded.” This means that Global-Woods did not have even the most basic understanding of the surrounding areas – and that auditors from several certification schemes certified the project despite such fundamental errors in project documentation.

It is clear from the CCB project validation report that the auditors have observed many of the shortcomings of the project with regard to negative impacts on communities, baselines and monitoring. However, rather than requiring these problems to be addressed, “Forward Action Requests” were issued for the project to address – at a later stage. The auditors even issued a ‘Silver level’ certificate, in part based on the assessment that the project met the criteria for “Best Practice in Community Involvement”.

Likewise, CCB certified projects must generate “net positive impacts on biodiversity within the project boundaries and within the project lifetime”, measured against the baseline conditions. Projects should also have no negative effects on species included in the IUCN Red List of threatened species or species on a nationally recognized list. Kikonda involves large-scale monoculture tree plantations replacing existing degraded forest, shrub and grasslands. This undoubtedly has many serious environmental impacts and will cause a direct loss of biodiversity in the area.

The project proposes to balance the negative impact by conserving and enhancing biodiversity on a smaller ‘conservation area’ within the project boundaries. The carbon offset project thus claims to also be a ‘biodiversity offset’ project within the project. However, a look at the map reveals that the ‘conservation area’ has not primarily been defined on the basis of biodiversity considerations. The area is a gully with a watercourse and wetlands. The set-aside area is thus primarily made up of land that is not suitable for being converted to pine plantations. Furthermore, planting in at least parts of these areas is also restricted due to NFA rules.

As a result, community members see their livelihoods destroyed for vague promises of (poorly paid) employment on plantations that are set up on land they have used under customary law. While local populations are criminalized or chased away altogether, foreign companies, certifiers and investors, who take advantage of leases and legislation favouring private capital, are able to sell timber and carbon credits for their own gain.

This article used information from the 2013 report from the Swedish Society for Nature Conservation (SSNC), “REDD Plus or REDD ‘Light’? Biodiversity, communities and forest carbon certification”, <http://www.redd-monitor.org/wp-content/uploads/2013/02/REDD-plus-or-REDD-light130121.pdf> and Tree Trouble, a report compiled by Friends of the Earth, the WRM and FERN, <http://www.sinkswatch.org/sites/fern.org/files/pubs/reports/treetr.pdf>

- (1) <http://www.uganda.global-woods.com/3.html>
- (2) http://www.blackherbals.com/climate_justice_now.htm
- (3) Nel, A, Forthcoming thesis, Sequestering market environmentalism: A geography of carbon forestry and unevenness in Uganda, University of Otago, New Zealand
- (4) <http://www.carbonfix.info/>
- (5) https://s3.amazonaws.com/CCBA/Projects/Kikonda_Forest_Reserve_Reforestation_Project/CCBS_KFR.pdf

Honduras: Criminalization of the Garifuna people defending their territory from the advance of the African palm



In the early 17th century, during the colonial era, shipwrecked Africans reached the Caribbean coast, inhabited by the Kalinagu or Caribe people. Over the years, cultural syncretism gave rise to the ethnic identity of the Garifuna people. The fusion produced the Garifuna language, religion and traditions. The Garifuna people settled river estuaries and marshes on the coasts of several Central American countries, where they engaged in fishing and subsistence agriculture.

In Honduras, the Garifuna people live on the northern coast of the country, where they have had a constant struggle for the defence of their territory. In the late 19th century, the state recognised their territorial rights and handed over the first community land titles. In spite of this, in the 20th century, under pressure from transnational banana companies interested in exploiting these lands, the communities began to lose part of their territories. With the endorsement of the state, large areas of Garifuna territory passed into the effective control of foreign companies.

Heedless of the protests of the Garifuna people, the state has allowed history to repeat itself nearly 100 years later: the banana enclave changed into an oil palm enclave. (1)

The case of the Garifuna community of Armenia

The banana boom and the arrival of the Standard Fruit Company, with enticing promises of work, led to the displacement of the Armenia community to another site on the coast, also part of Garifuna territory. It was re-established with the name of Nueva (New) Armenia. As years went by, the promised work did not materialize, and territorial pressure and cultural differences with the newcomers were felt. New customs were adopted for land management and ownership. The Garifuna community lost access to nearby forests and coastal areas which had provided part of their food and building materials for houses. Lands under community tenure entered in conflict with the land-grabbing by the transnational banana company, which had the authorization of the state itself.

In the 1990s, African palm plantations also began to expand within Garifuna territory in the vicinity of Nueva Armenia. The National Agrarian Institute and the municipal government acted against each other. While the one

said it recognized Garifuna territory, the other handed over those same lands to small cooperatives of oil palm producers.

When the Standard Fruit Company's concession expired, and the company had in any case determined that banana production was no longer profitable, it withdrew from the Garifuna territory around Antigua (Old) Armenia. The company returned the lands to the municipal government, which did not respect the historical rights of the Garifuna people and instead began to distribute land for African palm cultivation.

The new land owners, both at Nueva (New) Armenia and at Antigua (Old) Armenia, have followed the strategy of forming palm producers' cooperatives, as this is a requirement for receiving property titles. Once they have the property titles, they sell the land and palm plantations to a single company. The community says this company belongs to a local economic group, but in fact, its owners are unknown, and they are acquiring a large proportion of Garifuna territory with complete impunity.

Recently, the expansion of African palm plantations has caused the destruction of the remaining forests, pollution of rivers with agrochemicals and the loss of food sovereignty of the Garifuna people. Nearly 80% of the Garifuna territory is occupied by African palm plantations.

The land titles issued by the state in the early 1900s have not been respected by the authorities, and the new company has been occupying and destroying what was left of their ancestral territory. As a result, the Garifuna people have decided to retake their lands and assert their community titles.

In January 2014, heavy machinery could be seen clearing what was left of Garifuna territory. The community lodged a complaint with the municipal government and set up the "Permanent Cultural Resistance Camp" (Campamento Resistencia Cultural Permanente) on recovered land near Nueva (New) Armenia. At the camp, some 80 members of the community are resisting the advance of oil palm plantations. In spite of the legal complaint, the company has continued its activities. Day by day, this new agribusiness offensive is taking over a few more meters of land, completely encircling the camp, which now only has an exit to the sea.

In August, police swarmed into the camp, tore down its flag and arrested several of its members. They were charged with illegal occupation of their own land, and were held for over 6 hours. As a result, the other members of the community also mobilized in support, but when they got back to the camp, they found their houses burnt down along with all their possessions. These reprisals however have not intimidated them; on the contrary, with enviable fortitude, the community is in the process of rebuilding their homes. (2)

The communities are on constant alert for possible attacks by the oil palm company or the police. They know that the municipal government will not protect them. "The state does not govern for the poor; it is trampling on the ancestral land rights of the Garifuna people," said members of the Honduran Black Fraternity Organization (OFRANEH). (3)

Attempted kidnapping, police arrests and evictions are some of the trials suffered by members of Garifuna communities for taking a firm line in defence of their territory. They are therefore taking their grievances to the international fora. At the latest hearings of the Inter-American Court of Human Rights, in Paraguay in September 2014, the Garifuna people presented their case, and the state of Honduras now faces an international court case.

With the goal of increasing the visibility of this resistance movement, demonstrating that the Garifuna people are not alone in their struggle, and denouncing the impacts of the expansion of African palm monocultures, an international forum was held in September in La Ceiba, Honduras. Latin American organizations and networks met with indigenous, campesino and Garifuna communities to discuss the impacts of large-scale monocultures. During the forum, participants visited the community of Nueva (New) Armenia and Resistance Camp, where

they were able to verify the denunciations and claims of the Garifuna people.

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1. The state of Honduras denies indigenous status to the Garifuna people (in Spanish), <http://ofraneh.wordpress.com/2014/08/20/estado-de-honduras-deniega-condicion-de-indigena-al-pueblo-garifuna/>
 2. Nueva Armenia's struggle for life and sovereignty (in Spanish), <http://www.rel-uita.org/index.php/es/agricultura/soberania-alimentaria/item/5450-nueva-armenia-y-su-lucha-por-la-vida-y-la-soberania>
 3. Organización Fraternal Negra Hondureña (OFRANEH-Honduran Black Fraternity Organization), a Honduran federation of the Garifuna people for the defence of cultural and territorial rights, <http://www.ofraneh.org>
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GE Trees: Threatening North America's Native Forests



A genetically engineered (GE) tree is a tree whose DNA has been modified using genetic engineering techniques. In most cases the aim is to introduce a novel attribute to the plant which does not occur naturally within the species, such as resistance to a certain pest or herbicide. The commercialization of GE trees, like eucalyptus and poplar, would have major irreversible environmental and social implications. Especially for the forests and peoples of the southeastern and northwestern US. The US Federal government support and millions of dollars in funding have been granted to tree biotechnology research. Test plots for GE trees in the US span 19 states and over 600 acres of field trials (1).

Support for GE trees is part of a broad and multifaceted strategy to use living plant biomass as a substitute for coal and petroleum in energy, manufacturing and production. This strategy is sometimes referred to as the 'bioeconomy.' Wood, for example, is used as chips and pellets to burn in place of coal, even though CO₂ and

other pollutant emissions from wood burning can be higher than those from burning coal (2).

Wood is also targeted for refining into liquid transportation fuels, for aviation and military use as well as various other chemicals and compounds for industrial manufacturing (see article “Plants designed for deconstruction? The use of wood cellulose for fuels” in this Bulletin). Since 2013, the US Renewable Fuel Standard mandates that a portion of the ‘biofuels’ mixed into gasoline include ‘advanced cellulosic’ fuels, largely derived from agricultural ‘waste’ such as corn stover, and wood. This has proven challenging however, and as yet, virtually none of these fuels are being produced commercially. Nonetheless, tree biotechnologists are working to engineer trees that grow very fast and can be more easily ‘deconstructed’ into fuels, chemicals and more. Companies like ArborGen, a US developer of biotechnology tree seedling products, seek to fulfill this insatiable demand for wood, proclaiming to offer “more trees on less land.” They are seeking approval to commercialize, also known as deregulation because it will no longer be regulated by the USDA if approved, of a cold-tolerant GE eucalyptus, coded EH1, with the intent of growing vast plantations of these trees across the southern US.

Meanwhile, GE poplars are a focus of research in the Pacific Northwest, where there is a specific interest in aviation fuels. Tom Vilsack, secretary of the US Department of Agriculture (USDA), has been an avid supporter of ‘biofuels’ and GE trees. He sees in them a means for producing vast amounts of biomass required to supply a very tiny portion of overall energy demand.

Under his leadership, and in partnership with the Department of Energy, at least US\$136 million have been granted to support research on ‘biofuels’ in the Pacific Northwest. Researchers include private companies and universities such as the University of Washington, the Washington State University and Oregon State University, where research on GE poplar is underway. Currently, there are almost 100 thousand acres of fast-growing hybrid poplar plantations spanning the Pacific Northwest, from southern Oregon to British Columbia, Canada. Hybrids differ from GE trees as they are cross-breeds of two different poplar species. When a tree is hybridized, it is an act that is possible to happen in nature, unlike when it is genetically modified. Advocates envision an increase of these plantations in the area by 400% to meet ‘biofuel’ and paper industry demands, with a transition from hybrid to genetically engineered (GE) trees.

However, the cold tolerant GE eucalyptus tree (EH1) and GE poplars are riddled with complications. EH1 is made of two hybrids: *Eucalyptus grandis* and *Eucalyptus urophylla*. Both are documented as invasive species in Florida, US, where there are currently test plots. EH1 is known by the US Forest Service to take up 20% more water than native tree species. It is also highly flammable, with the nick-name ‘flammable kudzu (a highly invasive plant)’. EH1 is being engineered for cold-tolerance, with the intent to expand its hardiness, increasing the risks of eucalyptus competing with native forests. ArborGen is working to engineer sterility in their trees, but 100% sterility is simply impossible to guarantee.

Poplars are being genetically engineered for disease resistance, herbicide tolerance, fast growth, reduced lignin and more. Lignin is the part of the tree that is fibrous and help keeps it strong. It also happens to be the barrier that scientists have to break down in order to process the trees into liquid ‘biofuels’. There are 30 species of poplar native to the northern hemisphere, making the risks of contamination deeply troubling given that poplars can spread pollen over hundreds of miles. Containment is not feasible and once contamination occurs, there is little possibility to reverse it. As poplars can sprout from stumps as well, and testing in the US of GE poplars has been conducted for over 13 years, contamination of native poplars in the US may have already occurred.

Test plots for EH1 have been authorized in 7 southern US states and right now ArborGen's petition for deregulation is being reviewed by the USDA, the same institution which funds GE tree research and is notoriously lax in its regulation of biotechnology. The Environmental Impact Statement, an analysis of its cumulative impacts to water, human health, air quality, land etc., is expected to be publicly released soon, but

resistance to GE trees is growing, as people become increasingly aware of their dangers. Before the USDA closed the public comment period on the Environmental Impact Assessment regarding the GE eucalyptus tree test plots, over 40 thousand people submitted public comments opposing the tests. In May 2013, the largest protest against GE trees converged when hundreds of protestors demonstrated outside the bi-annual Tree Biotechnology Conference, hosted by the International Union of Forest Research Organizations. In November 2013, a strategy meeting of GE trees opposition took place in the US comprised of many of the groups working to expose the risks of GE trees. On May 14, 2014, protestors disrupted a corporate event sponsored by ArborGen. Now, the Campaign to STOP GE trees is an international coalition of groups from all over the world calling for a ban on GE trees and is growing in public support.

Resistance to GE trees has already faced state repression in the US. When presenters from the organizations Global Justice Ecology Project and Everglades Earth First! went on an outreach tour in the southeastern US in October 2013, one event was cancelled by the University of Florida, four days before it was scheduled to happen. The University is involved in GE tree research and has test plots of GE Loblolly pine. After cancelling, the University made no attempt to assist the presenters. When the presenters tried to talk to someone on campus about the cancellation, they were banned from the university for three years. At their next university stop in Florida, the Federal Bureau of Investigations contacted the provost of the campus and, although negotiations allowed them to give the presentation, an armed guard waited outside until the event ended.

Tree plantations are not forests and GE trees, which are meant to be grown in plantations, are not trees. Industry's plan for a GE tree future is one more example of the twisted disconnect from nature that industrial capitalism facilitates. Presented as a "solution to climate change," GE trees threaten only to worsen the impacts on forests and on people whose lives depend on healthy forests. Global players are moving quickly to release GE trees, so it is imperative for the resistance to grow in order for us to save the future of forests, which is also our future.

Ruddy Turnstone, ruddy@globaljusticeecology.org
Global Justice Ecology Project, member of the STOP GE trees campaign

- (1) APHIS Notification, Permit, and Petition Data. Biotechnology Regulatory Services, APHIS, USDA. Last updated September 2, 2014. Accessed September 3, 2014.
- (2) Partnership for Policy Integrity. Trees Trash and Toxics: How Biomass Energy Has Become the New Coal. April 2014.

Further reading

- Reuters. "[ArborGen Partners with University of Florida to Advance Pine-Based Biofuels as Part of a 6.3 Million Dollar DOE-ARPA-E grant.](#)" October 4, 2011.
- Center for Food Safety. [Genetically Engineered Trees: The New Frontier of Biotechnology.](#) November 2013.
http://www.earthisland.org/journal/index.php/elist/eListRead/anti_ge_tree_activists_kicked_off_florida_university_campus_spied_on_by_fbi/
- Mitra, Maureen Nandini. "[Anti GE Tree Activists Kicked Off Florida University Campus, Spied on by FBI.](#)" Earth Island Journal. December 2, 2013,



Forum in Honduras denounces impacts of African palm expansion. “They are growing palms everywhere and leaving us without food.”

Rapid expansion of African palm cultivation in Honduras has had profound social and environmental consequences for the black, indigenous and campesino population, whose legitimate rights to land, food and a decent life have been seriously compromised. Their resistance effort has also been criminalized. Analysis, thorough debate and the search for common strategies to confront a land-grabbing model of production that displaces communities were the main goals of the forum-workshop on “Large Scale Monocultures in Latin America, Land Grabbing and Threats to Biodiversity and Food Sovereignty,” held on September 9 in the city of La Ceiba, Honduras. More than 170 people and dozens of regional social, popular and trade union movements and organizations participated in the event.

Read the full article (in Spanish):

http://rel-uita.org/index.php/es/sectores/palma-africana/item/5432-nos-lenan-de-palma-y-nos-dejan-sin-comer?utm_source=newsletter_366&utm_medium=email&utm_campaign=rel-hoy-10-de-septiembre-de-2014



Organization and mobilization against the corporate takeover of the climate summit convened by Ban Ki-moon in New York City

More than 330 international organizations, social movements and networks are publicly denouncing the corporate takeover of the climate negotiations due to take place September 19-23 at the United Nations headquarters in New York. The declaration, launched September 16, highlights the need to change the economic model rather than proposing mechanisms based on market logic, such as REDD, Climate Smart Agriculture and Sustainable Energy for All. The declaration also issues a call for organizing and mobilizing in New York and around the world, to push for a transformation of the structural causes of the climate crisis.

See the declaration at:

<http://climatespace2013.wordpress.com/2014/09/16/mobilize-and-organize-to-stop-and-prevent-planet-fever/>



STOP GE TREES campaign urged FSC to keep GE trees out!

The WRM has for a long time denounced how the Forest Stewardship Council (FSC) wrongly certified millions of hectares of monoculture tree plantations, benefiting mainly the interests of the corporations promoting plantations. One of the few aspects that the FSC has not changed yet in favour of corporations is that it does not allow the use of genetically engineered (GE) trees in its certified areas. The FSC has been pushed by its member Suzano, a plantation company owner of biotechnology corporation FuturaGene, developers of GE eucalyptus trees. Members of the international campaign “STOP GE Trees” requested the FSC though

an open letter to keep opposing GE trees. During the last FSC General Assembly (7-14 September) GE trees were not approved.

Download the letter here:

<http://wrm.org.uy/other-relevant-information/open-letter-to-the-forest-stewardship-council-fsc-from-the-campaign-to-stop-genetically-engineered-trees/>

See STOP GE Trees campaign website: <http://stopgetrees.org/>

Read also related article by FSC Watch:

<http://fsc-watch.com/2014/06/06/suzano-plans-commercial-planting-of-ge-trees-will-fsc-dissociate-from-suzano/>



Demand Justice for the Amazon Indigenous leaders murdered by loggers

Four leaders of the Ashéninka people of the Peruvian Amazon were murdered by illegal loggers operating on their lands. Among them was Edwin Chota a prominent anti-logging campaigner who had fought for his peoples' right to gain titles to their land and expel illegal loggers who raided their forests on the Brazilian border.

Sign the petition:

<http://www.thepetitionsite.com/120/750/658/demandjustice-for-the-amazon-tribal-leaders-murdered-by-illegal-loggers/>

See also the note from AIDSESEP, the Indigenous organization with which the four leaders were affiliated (in Spanish): <http://www.aidesep.org.pe/comunicado-aidesep-cuantas-muertes-indigenas-se-esperan-para-titular-las-1124-comunidades-nativas-de-la-amazonia-que-aseguran-la-vida-en-el-planeta/>



Grassroots organizations in France alert the participants of the International Symposium on Agroecology for Food Safety and Nutrition organized by FAO Confédération Paysanne, the French chapter of La Via Campesina, Friends of the Earth France, and others, reaffirm that peasant agriculture is the only type of agriculture: it is not compatible with the 'ecosystem services' or the notion of 'natural capital', nor with the participation of agro-food and chemical industries present in the symposium carried out the 18-19 of September. This economic view of nature does not serve peasant agro-ecological practices but rather seeks to open new markets to multinationals who benefit from boosting their image. These alliances and agriculture thus formed do not match our social justice ambitions, but on the contrary undermine the foundations.

Read full declaration here:

http://wrm.org.uy/wp-content/uploads/2014/09/Peasant_agroecology_is_the_only_type_of_agroecology.pdf

RECOMMENDED

International declaration in solidarity with the peoples of Honduras in the



face of the expansion of African palm plantations in their territories, Representatives of organizations from different Latin American countries and of international networks met together in La Ceiba, Honduras, verified from local testimonies the serious situation faced by campesino, indigenous and Garifuna communities due to the voracious advance of monocultures of African palm. They denounce the serious violations of human rights, the dispossession and forced displacement of peoples, the criminalization of the struggle in defence of their territories, and the threats and persecution they have been subjected to for years in favour of business interests, to the clear detriment of collective rights. The Biodiversity Alliance (Alianza por la Biodiversidad), Friends of the Earth - Latin America & Caribbean, World Rainforest Movement, the Latin American Network against Tree Plantations and the Red-UITA (IUF Latin American Regional), call attention to the seriousness of this situation. We demand that the Honduran government recognize and restore the ancestral territorial rights of Garifuna, indigenous and campesino peoples. Read the full declaration at:

<http://wrm.org.uy/meetings-and-events/in-view-of-the-serious-situation-caused-by-expansion-of-monocultures-of-african-palm-in-honduras-international-declaration/>



Thailand: Forest populations need a voice

In Thailand, both the army and civilian governments define forests as “wilderness free of inhabitants”, neglecting that tropical forests have always been home to indigenous and peasant communities. Laws have marked local people as illegal encroachers, allowing forced evictions as the primary measure to “preserve the land” – often that meant installing monoculture plantations. Forest officials have intensified a crackdown on forest communities that are calling for change in forest management by pushing ahead with a grand reforestation plan that may lead to an even bigger scale of forced evictions than previous such government reforestation plans.

Read full article: <http://www.bangkokpost.com/opinion/opinion/430545/>



“Planet Palm Oil: peasants pay the price for cheap vegetable oil”, publication by GRAIN

Producing cheap palm oil comes at a high price: destruction of rainforests, labour exploitation, and brutal land grabbing. With lands in Indonesia and Malaysia becoming more difficult for palm oil companies to acquire, attention is shifting to Africa as a new frontier for low cost palm oil production for export.

See publication here: <http://www.grain.org/article/entries/5031-planet-palm-oil-peasants-pay-the-price-for-cheap-vegetable-oil>



China: Worlds largest reforestation scheme fails to protect natural forests and threatens more

A study from Agroforestry World has shown that while China has increased the amount of tree cover with a reforestation and ‘payment for ecosystem services’ program, it has failed to protect natural forests. Rubber and pulpwood plantations have replaced natural forests on sloping land. Equating plantations with forests in forest management policies and statistics allows governments to hide serious environmental impacts that the plantations cause. Rubber and pulpwood plantations are being planted in nature reserves, national protected areas, and important protected watersheds.

Read full article: <http://blog.worldagroforestry.org/index.php/2013/08/02/worlds-largest-reforestation-scheme-fails-to-protect-natural-forests-and-threatens-more/>



Brazil: organizations issued a letter opposing commercial use of transgenic eucalyptus by Suzano, but could only do so after the public hearing, On September 4 a public hearing in Brasilia considered the application of FuturaGene, owned by the Suzano pulp and paper company, to grow and commercialize the country’s first transgenic eucalyptus trees. Brazilian organizations, together with about 260 organizations from over 40 countries, signed a denunciation letter opposing the application ([See letter here](#)). They tried in vain to read out the letter during the hearing proceedings, but were refused permission by the President of the Biosecurity Commission (CTNBio). Furthermore, favouritism was shown to Suzano during the hearing in that more comments were allowed in favour of its project than against it. Only after the audience was over was André Dallagnol, legal adviser to Terra de Direitos, an NGO, able to deliver the letter of denunciation to the President of the Commission and to register its delivery with CTNBio.

See the detailed account of the audience (in Portuguese), <http://gondolasegura.com.br/porta1/blog/cientifico/100-audiencia-publica-debateu-pedido-de-liberacao-de-eucalipto-transgenico-na-ctnbio>



“New trends in the expansion of industrial tree monocultures in Latin America”, a WRM publication

The area planted in eucalyptus and pine in Latin America has doubled in the past three decades, due to the action of national and transnational companies. Wood production is intended mainly for pulp and paper manufacture. WRM found several recent trends in this process, such as the expansion of monocultures of African palm (oil palm), greater research efforts into transgenic trees, the phenomenon of the “green economy” and the increasing involvement of speculative financial capital. These are described in the publication “New Trends in the Expansion of Industrial Tree Monocultures in Latin America” which aims to call attention to and disseminate

information about these developments.

See the publication (in Spanish and Portuguese) at

<http://wrm.org.uy/books-and-briefings/nuevas-tendencias-en-la-expansion-de-los-monocultivos-industriales-de-arboles-en-america-latina/>



Indonesian logger: “cleared peat forest doesn't have high conservation value”

For Indonesian logging company Asia Pacific Resources International Holdings Limited (APRIL), clearing of peat forest on an island of Sumatra is "in line with its Sustainable Forest Management Policy" because, according to APRIL, the area wasn't of high conservation value. Differences over what is considered high conservation value allow APRIL to reap the PR benefits that come with its voluntary commitment to not log high conservation value forest in all its concessions. The NGO Greenpeace presented clear documentation of APRIL destroying forest on deep peat.

Read full article: <http://news.mongabay.com/2014/0617-april-letter.html>