



Issue 146 - September 2009

[Printable version](#) | [For free subscription](#) | [Previous issues](#)

also available in [French](#), [Portuguese](#) and [Spanish](#)

THE FOCUS OF THIS ISSUE

This WRM bulletin is a contribution to the activities to be carried out on September 21st, International Day Against Tree Monocultures. It is important to stress that the choice of this date is rooted in peoples' struggles against plantations. The date was first chosen by local networks in Brazil, who in 2004 decided to establish this date as a day of struggle against tree monocultures. Following their lead, the date was immediately adopted by a large number of communities and organizations struggling against plantations in their own countries and internationally. Since then, more and more people have joined in by carrying different activities on this date, thereby helping to raise awareness about the social and environmental impacts of plantations.

We hope that this bulletin –as well as a number of other tools available in our web page- will help in strengthening local peoples' struggles to stop the expansion of monoculture tree plantations.

OUR VIEWPOINT

The “benefits” of tree plantations: shattering the myths

THE MYTH BUSTERS

Myth No. 1: Tree plantations are “planted forests”. Eduardo Galeano

Myth No. 2: Tree plantations generate jobs. Winnie Overbeek

Myth No. 3: Plantations are much more productive than native forests. Premrudee Daoroung

Myth No. 4: Tree plantations are good for the environment. Wally Menne

Myth No. 5: Plantations relieve pressure on native forests. Longgena Ginting

Myth No. 6: Plantations are necessary to supply the growing need for paper. Mandy Haggith

Myth No. 7: Plantations provide opportunities for women. Ivonne Ramos

Myth No. 8: Certification ensures that plantations are socially beneficial and environmentally sustainable. Elizabeth Díaz

Myth No. 9: Oil palm plantations help mitigate climate change through the production of agrodiesel. Elizabeth Bravo

Myth No. 10: Timber plantations help to address climate change through the production of ethanol. Scot Quaranda

Myth No. 11: Tree plantations help to address climate change by neutralizing carbon emitted from fossil fuels. Kevin Smith

Myth No. 12: Tree plantations as carbon sinks help to address climate change by offsetting carbon emitted from fossil fuels. Larry Lohmann

Myth No. 13: Genetic Modification is Useful and Necessary for Improving Trees. Anne Petermann

Myth No. 14: Including plantations in the climate-related mechanism REDD will help address climate change. Chris Lang

Myth No. 15: Planting trees to produce biochar can help to mitigate climate change. Almuth Ernsting

TOOLS FOR ACTION

Materials available for 21 September

OUR VIEWPOINT

The “benefits” of tree plantations: shattering the myths

International Day against Monoculture Tree Plantations is a good opportunity to expose the myths being spread around about the so-called “benefits” of these plantations. Such myths have not arisen on their own but are the result of a long process during which people and institutions related to the corporate-plantation sector have invented arguments to convince both the general public and governments and institutions of the advisability of mass tree plantation.

The fact that none of these arguments has the slightest scientific foundation has not prevented their dissemination as “scientific truths,” not only by those who directly benefit – corporations – but also by the technical-bureaucratic apparatus – national and international – placed at their service. In this process, local wisdom has been ruled out as “ignorance” and true ignorance has been placed on the pedestal of “science.”

Throughout the years, WRM has echoed the voice of those negatively impacted, who have repeatedly proved that the “scientific truths” regarding tree plantations are no more than falsehoods. In this respect, our publications and articles have disseminated the testimonials of people who have suffered from the degradation of all the resources they

depended on – soil, water, flora, fauna – as a direct effect of the establishment of monoculture tree plantations in their regions.

We have also disseminated the voice of those forestry professionals and students that oppose the expansion of monoculture tree plantations. Last year they declared that “not only are monoculture tree plantations not forests, but such plantations result or have resulted in the destruction of our native forests and of other equally valuable ecosystems that they substitute.” (See complete declaration at <http://www.wrm.org.uy/plantations/Declaration-Foresters.pdf>)

However and in spite of all the accumulated evidence, corporate interests have continued to prevail and plantations continue to benefit from the positive image invented by their promoters.

In this bulletin we have aimed at complementing local testimonials with those of people having wide experience and involvement on a global scale in the struggle against monoculture tree plantations. We have asked them to give a brief answer to the main myths disseminated by the plantation sector. Here below we find their answers that will no doubt serve to strengthen – with more arguments – those who are waging an unequal struggle against the advance of the plantations. To all those who made a contribution: our warmest thanks!

[index](#)

THE MYTH BUSTERS

Myth No. 1: Tree plantations are “planted forests”

Plantations are forests in uniform. They look like soldiers all lined up in ranks, and that is what they are. Dressed in green, they march off to the world market. The hymns that sing their praises in the name of our Mother Earth are lies. Industrial forests are to natural forests what military music is to music, and what military justice is to justice.

Eduardo Galeano, writer, Uruguay

[index](#)



Myth No. 2: Tree plantations generate jobs

Large-scale tree plantations do not generate jobs because they always involve as much mechanization as possible. For example, the Veracel Celulose Company in Brazil generates 1 direct job per 130 hectares of eucalyptus. On the other hand coffee plantations, very common in Brazil, are able to create up to one job per hectare.

Seeking to profit, companies exploit the workers they employ, placing their health in jeopardy. Among the harvesting machine operators, who carry out five simultaneous functions, back and arm problems are common, as is renal insufficiency. Women

working in tree nurseries producing seedlings also suffer from problems related with the repetitive efforts that cause hand and arm lesions. Outsourcing policies further reduce workers' rights and wages.

Jobs generated are also extremely expensive if compared with the cost of generating other rural jobs. For example, a job generated by Veracel Celulose has a cost of 2 million dollars. With this amount it would be possible to settle over 150 families in agrarian reform settlements, which would provide a future for these families and produce food to supply the cities instead of exporting pulp to produce disposable paper in Europe.

Winnie Overbeek, Brazilian Network Alert against the Green Desert

[index](#)

Myth No. 3: Plantations are much more productive than native forests

Anyone that subscribes to this idea must be someone who has either never visited a forest area surrounded by communities, or is simply linked to the plantation business. Local people in the Mekong countries in Southeast Asia who live and rely on their native forests will totally disagree with such a statement. For them, conversion of their forests into plantations has started to be the worst nightmare they have ever suffered in real life.

In the eyes of forest dwellers of tropical rainforest areas in southern China, Burma, Laos, Cambodia, Thailand and Vietnam, plantations are not only unproductive: they have no value at all. The large eucalyptus, rubber and oil palm plantations that have taken away their native forest areas cannot provide daily food, shelter, medicines – all that serve to meet life's basic needs. Even more than that, Laos and Thai village people who worship the sacred forests inhabited by good spirits told us, "the ancestor spirits will not stay in a plantation", because the spirits simply cannot dwell in fake forests, and people do not want to stay in a community that has no guarding spirits.

Plantations disguised as "forests" can only provide one product –either timber or palm oil or rubber- that clearly cannot rival the biodiversity, food, cultural and spiritual products that forests provide to local people. So, if the above lie is not exposed as what it really is –an invention produced from a blind perspective- more and more people around the world will be deprived of the foundation of their lives, based on native forests.

Premrudee Daoroung, Towards Ecological Recovery and Regional Alliance (TERRA), Thailand

[index](#)

Myth No. 4: Tree plantations are good for the environment

Why is this statement simply not true?

Monoculture tree plantations cannot ever improve on the natural environment that is eliminated when plantations are established.

- Indigenous plant species, that supply the needs of both people and wildlife, are lost, and this means that natural ecosystems disappear.
- Replacing natural vegetation and even agricultural cropland with tree plantations leads to the depletion of ground and surface water.
- Monoculture tree plantations affect the health of the soil, increasing acidity, polluting with toxic chemicals, and causing soil compaction.
- The intrinsic beauty of landscapes is destroyed by tree plantations that block out attractive scenery with 'a green blanket of death'.
- Tree plantations usually are of alien tree species that spread out of plantations, invading wetlands, grasslands, heath and forests.
- Local communities, including Indigenous Peoples are displaced from their land, and forced to live in overcrowded unhealthy slums.

Apart from the direct impacts of tree plantations listed above, they also result in many indirect or 'downstream' environmental impacts when they are clear-cut, transported and processed for export as logs, chips or pulp.

- Rivers, lakes and oceans are polluted with mill effluent and chemicals.
- Fuel combustion and chemical processes cause severe air pollution.
- The pulp and paper industry is the third largest greenhouse gas emitter.

It is therefore clear that tree plantations are BAD for the environment.

Wally Menne, Timberwatch Coalition, South Africa

[index](#)

Myth No. 5: Plantations relieve pressure on native forests

A typical propaganda disseminated by business interests and governments in many tropical countries is to say that plantations will relieve pressure on native forests. They claim that with enough plantations, native forests would eventually be left alone, as the plantations would provide sufficient wood to avoid the need of extracting timber from native forests.

This argument is a blunt lie. In the first place, because plantations and forests produce different qualities of wood, aimed at different markets. This means that demand for high quality wood will continue to rely on native forests while plantation timber will supply lower quality wood demand.

More importantly, in most cases monoculture plantations are established by replacing a native forest, which is felled and cleared to make way for the plantation. Through this operation, the plantation company -which is often also the company that logs the forest- will at the same time get access to cheap timber -from clearing the forest -and fertile

land until then occupied by the forest. In many cases, plantation companies don't even establish the plantation after the native forests are felled and cleared –though the timber is of course sold- and they abandon the area leaving behind a degraded forest. In Indonesia, millions of hectares of degraded forests have been the result of this process.

In sum, plantations not only don't "relieve pressure" on forests, but are a major cause of deforestation and forest degradation.

Ginting Longgena, WALHI, Indonesia

[index](#)

Myth No. 6: Plantations are necessary to supply the growing need for paper

The need for paper is not growing. We should not confuse consumption levels with need. In rich countries, we already use far more paper than we need, and the vast bulk of it is wasted. The real need is to reduce demand for paper, to use this precious resource more efficiently and to encourage recycling systems that ensure paper fibres are reused over and over again. Of course, there are countries and communities where paper consumption is currently well below what is required for education and democratic engagement, and they have a right to use more. Schools need books, voters need ballot papers. No one is suggesting that paper does not have benefits. No one is suggesting that its use is all bad and must be eliminated. However, unread magazines, junk mail, excessive packaging and pointless photocopying are all wasteful and should be limited. Without producing any more paper than at present, but sharing it more evenly, everyone on earth's needs for paper could easily be met. By replacing virgin tree fibres with alternatives like recycled paper or agricultural residues, fewer trees would be required for paper production, not more. We certainly do not require more tree plantations to supply fibre for paper.

Mandy Haggith, author of *Paper Trails: From Trees to Trash, the True Cost of Paper* (Random House/Virgin Books, 2008).

[index](#)

Myth No. 7: Plantations provide opportunities for women

The experience of Ecuador in areas where large-scale pine plantations have expanded shows that, far from providing women with opportunities, women have been adversely affected by them in various ways.

The arrival of tree plantations to the Ecuadorian Andes has involved the destruction of local economic systems, strongly based on a subsistence economy. Smallholder farming for self-supply was the work of women and it provided them with a certain degree of food sovereignty in addition to leaving them a surplus for trading. Plantations have dismantled this system and forced the communities to integrate to a new economic system where money is the central element, leaving little room for women in

a world dominated by men.

Furthermore, the expansion of monoculture tree plantations has caused water sources to dry up. This has had two kinds of repercussions on women as it is they, together with the children, who are responsible for taking the animals to pasture and now must cover longer distances in search of water for their animals. Furthermore, the scarcity of water makes their domestic and farm work harder.

Socioeconomic changes resulting from the arrival of the plantations, together with their negative environmental impacts have also led to generalize migration. In the Sierra, the trend is that the men leave to work in the cities and the women stay at home with the children. This has implied an additional load on women because now, in addition to their usual domestic chores they are responsible for doing jobs in the fields that were previously done by men – with the exception of sowing and harvesting which the men come back to do.

Summing up, the plantations have only worsened the situation of women, without giving them any benefits in exchange.

Ivonne Ramos, Acción Ecológica, Ecuador

[index](#)

Myth No. 8: Certification ensures that plantations are socially beneficial and environmentally sustainable

In the area of tree plantations, the FSC has become the main body responsible for granting a certificate to plantations assessed as “environmentally responsible, socially beneficial and economically viable.”

The insurmountable problem of this “green seal” granted by the FSC is that it certifies what intrinsically can never be either socially beneficial or environmentally sustainable: large scale monoculture tree plantations.

In Uruguay, one after another, the companies that have requested certification have achieved it, but the negative impacts continue and worsen as plantations – certified or not – cover increasingly vaster expanses of land in different parts of the country. There is no shortage of statements bearing witness to the consequences of tree plantations on local communities: territorial occupation, concentration and “foreignization” of land, displacement of communities and of other forms of production, lack of water, soil erosion, loss of food sovereignty, just to mention some of these negative impacts. However, the FSC continues to certify those plantations.

Certification therefore does no less than legitimate the expansion of plantations, greenwashing them, while weakening the struggles of those who resist on a local, national, regional and international level.

The only socially beneficial and environmentally sustainable measure regarding monoculture tree plantations is to stop their expansion.

Myth No. 9: Oil palm plantations help mitigate climate change through the production of agrodiesel

The expansion of oil palm plantations usually takes place at the expense of transforming natural ecosystems, particularly tropical rainforests. This has disastrous consequences, firstly because these forests are the home of very traditional peoples who have learnt over thousands of years to understand the forest and to use it, respecting its natural dynamics. Secondly, the destruction of the forest implies the release of carbon dioxide (CO₂) – one of the greenhouse effect gases, whose accumulation in the atmosphere is responsible for global warming and subsequently climate change. Moreover, if a comparative assessment of CO₂ is made between the two systems (forests and plantations), it will be seen that tropical forests, because of their complexity, store and absorb much more carbon than plantations.

Oil palm plantations, like any large scale monoculture plantation, demand many inputs based on carbon-releasing fossil fuels. They also require agrotoxics because of the many pests and diseases that affect them, as well as chemical herbicides to control any species of plants other than oil palm that may compete for water and nutrients. All this produces another carbon imbalance, added to the fact that the agrodiesel fuel produced from palm oil is usually intended for export and the process of transportation required generates further CO₂ emissions.

It is possible that European consumers using palm oil or agrodiesel fuel produced in a tropical country may have the feeling that they are using an “ecological” or “green” fuel. But they ignore the fact that this fuel has travelled from the other side of the world, burning fossil fuels during its voyage and, what is even more serious, destroying the way of life of hundreds of local communities and natural ecosystems.

For all these reasons, oil palm plantations for agrodiesel fuel not only worsen climate change but also have a negative impact on the ecosystems and communities where they are established.

Elizabeth Bravo, Instituto de Estudios Ecologistas del Tercer Mundo, Ecuador

Myth No. 10: Timber plantations help to address climate change through the production of ethanol.

For those readers of the WRM bulletin who do not know this by now, the Southern US is the largest paper producing region in the world. Over the last 50 years we have been the testing ground for every imaginable destructive forestry practice that once perfected here, is exported around the globe. For example, starting in the 1950's and continuing

to today, we have converted nearly 17 million hectares of forests and arable land to monoculture timber plantations making us number one in the world in that regard.

The latest experiment is the plan to combat climate change by growing more tree plantations for the production of ethanol. This will mean greater pressure on natural forests, a rush to convert more forest land to plantations, greater reliance on toxic chemicals in forest management, shorter growing cycles which increase the pressure on soil and water resources, and a major push to develop and implement the use of genetically engineered trees. In a recent letter to the US Department of Agriculture pushing for the deregulation of genetically engineered eucalyptus in the US, International Paper claims that a growth in the tree-based bio-energy market would double the pressure on the forests of the Southern US.

Timber and pulp plantations increase rather than address climate change. Natural forests have been proven to sequester greater amounts of carbon and it has been shown that agrofuels are not a great substitute in terms of emissions for fossil fuel. Deforestation and business as usual forestry are the second largest contributors of Green House Gases behind the burning of fossil fuels, so doesn't it make more sense to protect and restore our forests than to further convert our forests to plantations and continuously mow them down in short rotations in a rush to use less fossil fuel?

Scot Quaranda, Dogwood Alliance, USA

[index](#)

Myth No. 11: Tree plantations help to address climate change by neutralizing carbon emitted from fossil fuels

At a very fundamental level, dealing with climate change involves making a dramatic and immediate reduction in the amount of fossil fuels that we extract and burn. The idea of using tree plantations to neutralise these emissions is counterproductive as it effectively provides a false excuse to keep on combusting more coal, oil and gas. As long as there is room for more plantations (regardless of their impact on communities and ecosystems) then business interest want us to believe that we can keep on building more oil refineries and coal mines.

At the same time, it is impossible for us to quantify how much carbon a given plantation is capable of sequestering. This means that all the methodologies of assigning exact quantities of 'tonnes of carbon' absorbed from plantation to exhaust pipe are nonsense. The only thing that we can say with any scientific certainty is that tree monocultures are much less effective at storing carbon than primary forests.

Ironically, the communities that are typically evicted in order to create tree plantations are often ones that were leading low-carbon, sustainable lives. Using tree plantations to offset the emissions of Northern individuals, companies or countries is a form of 'carbon colonialism' – a new form of the land-grabbing that has characterised colonial history.

Kevin Smith, Carbon Trade Watch, United Kingdom

Myth No. 12: Tree plantations as carbon sinks help to address climate change by offsetting carbon emitted from fossil fuels

From a climate perspective, tree plantations not only are not a solution. They also add yet more problems. It is impossible to predict how much carbon any plantation could remove from the atmosphere, and for how long. Unlike subterranean oil or coal, carbon stored in trees is "fragile": it can quickly reenter the atmosphere at any time through wildfires, storms, insect infestation, disease and decay.

When tree plantations are harvested, it is very difficult to track the carbon stored in the wood. Some of the paper and wood products may be burned almost immediately; others may decay more slowly; still others may enjoy a somewhat longer life in housing or furniture; and some may be landfilled, which could lead either to long-term sequestration or to dangerous releases of methane, depending on circumstances.

This is only the beginning. In order to be able to claim credibly that a tree plantation "compensated for" a certain quantity of CO₂ emitted, carbon-plantation proponents would have to factor in a figure representing the degree to which their plantations destroyed existing carbon reservoirs, thus adding CO₂ to the air.

Moreover, any communities displaced from carbon plantations would have to have their activities monitored closely for (say) a century, no matter where they had migrated to, to determine precisely what impact they were having on forests or grasslands elsewhere, thus releasing the carbon stored in those ecosystems to the atmosphere.

For those and a long list of other reasons, large-scale "offset" plantations, instead of mitigating global warming, could even make it worse. In delaying the phaseout of fossil fuel mining, the transition to a more equitable distribution of emissions, and more sensible energy and transportation use, such plantations could result ultimately in an increased amount of avoidable carbon emissions both from industry and from the land.

Larry Lohmann, the Corner House, UK

Myth No. 13: Genetic Modification is Useful and Necessary for Improving Trees

There is a particular arrogance associated with this rationale. It implies that scientists and corporations know more about improving trees than has been achieved by 3 billion years of evolution, and ignores the fact that some tree species being engineered have genomes many times longer than the human genome. But really what they are saying is "genetic modification of trees is useful and necessary for making more money."

The first assumption one must make to agree with the assertion that "genetic modification is useful and necessary for improving trees," is that the consumption of

trees can and should continue to increase infinitely, because we can modify trees to grow "more wood on less land" (which is ArborGen's motto).

The second assumption one must make is that scientists can create trees that can ignore ecological limits—such as water availability, soil nutrients, etc—and grow faster and faster on smaller and smaller areas of land.

The third assumption one must make is that scientists can understand and address the full range of potential impacts from these trees by testing them in field trials for 5 or so years, even though the traits they are engineering into these trees have never before existed, and the trees can potentially survive in the environment for many decades. One must also believe that genetic engineering itself is inherently safe, and that the scrambling and mixing of tree genomes with genes from unrelated organisms will have no unintended, unpredictable or negative consequences.

The final assumption one must make is that scientists can manufacture trees that will never escape into native forests—either through pollen contamination of related wild species or through the escape of non-native invasives like eucalyptus. One must believe this, even though trees can spread their pollen and seeds for hundreds of kilometers, and GE tree scientists themselves report major concerns about unintended contamination of non-target species.

So if one is able to turn off the rational side of their brain, and only believe in a fantasy world then, and only then, will they be able to believe that "genetic modification is useful and necessary for improving trees." Fortunately, most of us still have a rational brain turned on and expose this as a lie.

Anne Petermann, Global Justice Ecology Project, USA

[index](#)

Myth No. 14: Including plantations in the climate-related mechanism REDD (Reduced emissions from deforestation and forest degradation) will help address climate change

This lie has its roots in the failure of the UN Framework Convention on Climate Change (UNFCCC) to differentiate between forests and plantations. "Forest" according to UNFCCC is an area larger than 500 square metres, at least 10 per cent of which covered in trees that can grow to more than two metres high. To UNFCCC, then, there is no difference between a monoculture eucalyptus plantation, a severely degraded forest and an intact old-growth native forest.

Forests become almost indestructible under the UN definition. A forest, or a plantation, can be clearcut and remain a forest. Clearcuts are "areas normally forming part of the forest area which are temporarily unstocked as a result of human intervention." With only three months to go until December's UN climate negotiations in Copenhagen UNFCCC has not yet agreed on a definition of forest degradation.

This is not just a theoretical issue. Asia Pulp and Paper, to choose a particularly egregious example, has destroyed vast areas of forest in Sumatra. Yet under the UN

definition of "forests" it has not caused any deforestation. APP could even benefit from REDD payments, rather than being held accountable for the damage it has already caused.

The answer to this lie is simple: Plantations are not forests and can in no way help address climate change

Chris Lang, www.redd-monitor.org

[index](#)

Myth No. 15: Planting trees to produce biochar can help to mitigate climate change

A coalition of start up companies, consultants and some soil scientists is promoting a new 'solution' for climate change: Large quantities of wood and other biomass are to be turned into fine-grained charcoal (euphemistically called biochar) and applied to agricultural soils. It's very worrying that advocates, who are organised in the International Biochar Initiative, claim that the carbon in the charcoal would remain in the soil for thousands of years and 'offset' fossil fuel burning, and that charcoal will make soils more fertile. They class all biomass as 'carbon-neutral', whether it comes from tree plantations or from stripping large areas of cropland and forests of residues. None of the claims are proven:

-- The climate impacts of charcoal are not fully understood and could be negative, even on a small scale.

-- Charcoal itself is not a fertiliser. Indigenous farmers have successfully combined it with organic residues to make some soils more fertile, yet what biochar advocates call for would require large areas of land to be stripped of crop and forest residues to make charcoal, a very different process. Large-scale removal of residues depletes soils and makes them more likely to erode and it makes forests more vulnerable and less biodiverse. It would also entrench dependence on fossil-fuel based fertilisers since residues will no longer be returned to the soil.

-- The potential for soil and air pollution has not been addressed and could be serious.

No amount of residues could produce the quantities of charcoal which are being advocated. Wood yields more charcoal than other types of biomass and large cheap quantities would be needed. Industrial tree plantations are the most likely source of large-scale biochar. Claims about a 'potential' for billions of tonnes of biochar rely on the false idea that there are vast areas of 'abandoned' cropland which could be appropriated, as if people, biodiversity and climate did not depend on land not yet under monocultures. The same arguments have been used to justify designating and taking over large areas of pasture, community land and forests, with disastrous consequences for people and also for the climate, since large amounts of carbon are released when trees and other vegetation are removed and the soil is ploughed, and as people's other agricultural activities are pushed further into remaining forests.

Furthermore, the proposals to include biochar into the Convention on Climate Change's

Clean Development Mechanism (CDM) are not limited to 'residues'. The first CDM methodology for dedicated tree plantations for charcoal has already been approved – for Plantar in Minas Gerais, Brazil. It applies to charcoal as a fuel, but if biochar advocates have their way, we can expect a lot more eucalyptus and other monocultures for charcoal, which means a further land grabbing catastrophe for indigenous peoples and peasants in southern countries.

Almuth Ernsting, BiofuelWatch, UK

[index](#)

TOOLS FOR ACTION

Materials available for 21 September

The numerous arguments voiced, collected from the experience of those who directly suffer from the effects of monoculture tree plantations, must be turned into action.

International Day against Monoculture Tree Plantations is a day of commitment to denounce this situation. For this reason and in order to enable everyone to choose different ways of involvement, we are supplying a series of tools for action – reports, animations, power-point presentations, videotapes, photos, banners, logos and posters that can be used, downloading them from the following web address:
http://www.wrm.org.uy/plantations/21_set/2009/index.html

Every action counts and every voice that joins this denunciation will contribute to generate awareness about the scourge of industrial tree plantations, whose falsehoods we must continue to lay bare.