MONOCULTURE TREE PLANTATIONS IN LATIN AMERICA – HOW, WHY, FOR WHOM

The territories that make up what is known today as Latin America have two main features in the eyes of big corporations and business conglomerates: they encompass vast areas of land, and they are a source of highly coveted commodities: wood, palm oil, commercial crops, meat, wool, raw materials for agrofuels, genetic resources, land, water. As such, they are a magnet for big capital.

These sprawling expanses of richly biodiverse ecosystems – jungles, forests, grasslands, mountains, highland plains, savannahs – have served as the physical foundation for the proliferation of the diverse cultural and productive practices of the region's communities. What big business views as commodities have been the basic elements of centuries-old agricultural traditions developed by many different peoples; the vestiges of these traditions attest to the advanced levels attained by this local knowledge.

Today, just like over 500 years ago, colonialism is alive and well, although it adopts different forms and takes different names. The ships that used to sail off from the ports of Latin America loaded down with silver, gold, cacao and rubber are now enormous freighters that carry off our water and our land in the form of logs, wood chips, pulp and palm oil. And through sophisticated new schemes, they can even appropriate our air and sell it on the carbon market. Essentially, they take away with them the future of the coming generations, to be sold at market prices.

The current model of globalized markets is based on a structure of subordination: the subordination of the countries of the South to those of the North; of those who sell their labour to those who control the capital; of ethnic minorities to hegemonic social groups; of the female gender to the male gender. This subordination has enabled the accumulation of surplus capital by the dominant groups, at the cost of intrinsic inequalities and hardships for the subordinate groups.

In the framework of the expansion of this accumulated capital, globalization is the ideal platform for the growing appropriation and commodification of nature by increasingly concentrated business groups. Forms of production take on increasingly larger scales and increasingly uniform characteristics, to supply increasingly larger and conveniently uniform markets. Consumption becomes the basis and the driving force of the economy, and social policies often serve to introduce the necessary improvements to allow for the maintenance of the system and add even more consumers to the markets.

As part of this expansion, large-scale monoculture plantations of alien tree species arrived on the continent in the 1950s, through a process of land and water grabbing and at the expense of local ecosystems and communities. These plantations were not an isolated undertaking, but rather form part of the "Green Revolution" model promoted by the FAO, which consolidated the industrialization of agriculture. Others then joined in, including the World Bank, IMF, IDB, United Nations forest-related initiatives (IPF, IFF, UNFF), bilateral "cooperation" agencies like GTZ and JICA, and consulting firms like Jaakko Poyry. Through mechanisms like loans, subsidies, outreach, training and propaganda, these agencies succeeded in finding support for their arguments in scientific and

academic circles and influencing the state policies of numerous countries, which applied largely similar models to promote export-oriented tree plantations throughout Latin America.

According to the FAO, between 2000 and 2005 the land area occupied by tree plantations grew by roughly 2.8 million hectares annually (1), and 2009 figures indicate that there are 12.5 million hectares of monoculture tree plantations – not including oil palm plantations – in Latin America and the Caribbean. By 2020 tree plantations are expected to expand to cover 17.3 million hectares in the region.

This is how the region has become positioned as a "world leader in high-yield tree plantations", with Argentina, Brazil, Chile and Uruguay standing out particularly, since 78% of plantations of this kind in Latin America are found in these four countries. In this case, "high-yield" refers particularly to the tree species chosen to achieve rapid rates of growth. The most popular are eucalyptus (used in 65% of the plantations in Brazil and 80% in Uruguay) and pine (49% of plantations in Argentina, 78% in Chile). While these four countries play a predominant role in the sector, there are large areas of tree plantations throughout almost all of the rest of the region as well.

Wood for pulp

Until now, most of the plantations of fast-growing varieties of eucalyptus and pine trees have been geared towards the production of pulp for paper-making, a highly polluting industrial activity that requires enormous amounts of water and energy (pulp production is the fifth highest energy-consuming industry worldwide). Of course, no one can deny the benefits to humanity of industrial paper production, which dramatically lowered the cost of paper and enabled the spread of reading and writing in the mid-1800s. Today, however, paper production vastly exceeds the need for paper for educational purposes, despite the way this is used as a powerful symbol to reinforce the supposed need to produce more and more paper. In fact, far more paper is used for packaging than for the purposes of education, information and communications, along with many other articles and products inherent to the age of disposable consumption.

This demonstrates the falseness of the premise that higher paper consumption goes hand in hand with higher educational levels. To debunk this myth, one need only compare national rates of paper and paperboard consumption with rates of formal schooling. This would lead to the finding, for example, that Cuba, which has a much lower rate of paper consumption than the United States, Finland or Chile, nevertheless has rates of access to tertiary education that are higher than Chile and the United States. (2)

Paper and paperboard consumption per person per year (2005)

Europe: 132.39 kg (Finland 324.97 kg)

United States: 297.05 kg

South America, Central America and the Caribbean: 84.85 kg (Chile 64.57 kg; Cuba 8.63 kg)

Education: tertiary school gross enrolment ratio (2006)

Finland: 93%

United States: 82%

Chile: 48% Cuba: 88%

These inequalities in consumption coincide with the intrinsic inequalities of the current economic

model, dominated by business interests. In any event, they demonstrate that excessive consumption is not necessary to meet the needs of human development.

Meanwhile, at the starting point of the pulp and paper chain, monoculture tree plantations arrived and have continued to spread in Latin American countries under the premise that they "contribute to development." However, in the highly emblematic case of Chile, where tree plantations have been and continue to be strongly promoted by the state to the detriment of native forests, an article published by the National Committee for the Defence of Native Flora and Fauna (CODEFF) (3) reveals that population censuses prove that "the municipalities with larger areas of land covered by plantations are the ones where a larger percentage of peasant farmers have been displaced towards urban areas, generating significant levels of poverty."

The indiscriminate clearing of native tree species in order to plant alien species like eucalyptus has not only led to the disappearance of endemic animal and plant species, but has also caused alterations in the hydrologic system. According to the president of CODEFF, Bernardo Zentilli, this has led to a situation where flooding in the winter alternates with dried-out stream beds in the summer, which has limited the available amount of arable land.

For its part, the Chilean Association of Foresters for Native Forests (AIFBN) is quoted in the same article as stating that "between 1978 and 1987 some 50,000 hectares of native forest disappeared in two of the most highly forested regions in the country (VII and VIII), and almost a third of the forests on the coast of region VIII were replaced with pine plantations. The updated Registry of Native Plant Resources in the Region of Los Ríos indicates that over the last decade, more than 20,000 hectares of native forest have been replaced by plantations of alien tree species."

The fruit of discord – oil palm

The oil palm tree originally comes from Africa, and has long been used as a source of oil. In recent times, palm oil production has been largely geared to industrial uses, and even more recently, oil palm cultivation has undergone a major boom as a result of the climate crisis, because of its potential as a supposedly "ecological" alternative source of fuel that can continue feeding the current unsustainable model of production and consumption that is at the root of the crisis and yet remains unchallenged.

In Latin America, oil palm cultivation followed the model of large-scale monoculture plantations established through the forced displacement of autochthonous populations, combined with cases in which local peasant farmers provide their labour and in many cases their own land. New oil palm plantations tend to be established in tropical rainforest areas, which are clear-cut, drained, fertilized, planted with oil palm seedlings and subsequently sprayed continually with powerful herbicides which, combined with the chemical fertilizers, leach into the soil and contaminate water sources. These practices make it impossible to plant other crops, which has a critical impact on the food sovereignty of local communities. In addition, to maximize the amount of oil produced per fruit and per tree, the land is dried out with drainage channels that also dry up nearby lagoons, streams and wetlands, thus affecting local flora and fauna. (4)

Oil palm cultivation is rapidly expanding in suitable tropical rainforest areas throughout Latin America. In Mexico, plantations are being forcibly established in the Lacandon rainforest. in Peru, inhabitants of the Amazon region have risen up against the Romero palm oil group, declaring "The rainforest cannot be sold! The rainforest must be defended!" In Guatemala, the spread of oil palm plantations is enabled through the eviction of local populations and forced purchase of land from impoverished

communities who are obliged to migrate to other areas. In Honduras, peasant farmers and members of the Unified Peasant Farmers Movement of Aguán (MUCA) were the victims of a brutal crackdown by army troops and police acting in support of Miguel Facussé Barjum, a large landholder and palm oil producer known as "oil palm grower of death". In Nicaragua, oil palm plantations are the latest business venture of United Brands, formerly United Fruit, a name linked with a long record of political and social manipulation. In Costa Rica, oil palm cultivation has also gained a solid foothold.

Colombia is an emblematic case of the oil palm industry. There are more than 360,000 hectares of oil palm plantations, and former president Alvaro Uribe once announced that these plantations would eventually reach a total of six million hectares. Their creation, financed primarily by the World Bank, has been based on the plundering of land collectively owned by local communities. Murder, destruction of homes and property, large-scale displacement, economic blockades, continuous harassment, threats and ongoing abuse by the national army and paramilitary forces working on behalf of the plantation companies are the underlying foundation of this "progress", as denounced by the Inter-Ecclesiastic Commission for Justice and Peace. In the case of Bajo Atrato, the expansion of oil palm cultivation was achieved through the misappropriation of 15 villages on over 25,000 hectares of land in Curvaradó and another four villages and 20,000 hectares of land in Cacarica, for which collective property titles had been granted by previous governments. (5)

The oil palm plantation workers are subjected to slave labour working conditions. Constant surveillance by armed guards during the work day and payment in scrip that can be exchanged for food in the company store, instead of cash salaries that workers can freely spend as they choose, are the hidden face of the supposed "clean energy" offered by agrofuel produced from palm oil.

Indupalma is one of the leading companies in the Colombian palm oil industry. One of the strategies it used to expand its operations, copied from the Malaysian model, was the forging of partnerships with peasant farmers for the cultivation of oil palm on small farms, which nonetheless remained firmly linked with big capital. When Indupalma approached the Sintrainudpalma trade union in 1995 to propose an alliance, the union declined. Paramilitary forces murdered four of its leaders and "disappeared" another. (6)

Greenwashing the plantation industry

The expansion of palm oil plantations has sparked heavy criticism in light of their serious environmental and socioeconomic impacts and human rights violations. In response, the sector found a way to "greenwash" its image through the creation of the Roundtable on Sustainable Palm Oil (RSPO), a strategy aimed primarily at appearing European and North American consumers.

In a similar vein, Colombia has promoted a "peasant oil palm" programme aimed at the incorporation of oil palm cultivation within the system of agriculture for food production. The Colombian non-governmental organization Grupo Semillas has challenged the long-term sustainability of this programme, because "we should evaluate not only if this crop is viable and profitable for farmers, but also who is ultimately in control of the entire process." (7)

In the Chocó bioregion, Afro-Colombian and indigenous organizations participating in a meeting called by the conservationist organization WWF to promote "sustainable palm oil" firmly stated their opposition to becoming involved not only in the industrial production of palm oil but also in the "sustainable palm oil" initiative, given the serious consequences of this involvement, namely the violation of their rights, and in particular their ancestral rights to their land, the loss of their autonomy and their traditional farming practices, and the loss of their culture and diversity. (8)

For their part, eucalyptus plantations also have their own mechanisms for greenwashing their image. The FSC is the leading certification scheme in this area, and has granted its seal of approval to highly destructive monoculture tree plantations in the region. In the state of Bahia, Brazil, the pulp company Veracel (jointly owned by the Swedish-Finnish company Stora Enso and Aracruz Cellulose of Brazil) owns more than 100,000 hectares of eucalyptus plantations. Veracel has stripped almost all of the Pataxó and Tupinambá indigenous communities of their ancestral lands, uses large amounts of sulfluramid, a pesticide banned by the FSC, and has been fined for killing large numbers of indigenous trees with herbicides, clear-cutting native forests, and planting too close to national parks. And despite all of this, it has obtained the FSC label.

All of these strategies are aimed at giving the plantation business a better reputation. But their biggest mistake is trying to demonstrate the sustainability of something that is inherently unsustainable: production obtained through large-scale monoculture plantations of alien tree species that cause serious impacts on the water, soil, native flora and fauna, forests, livelihoods and human health, and provoke the displacement of local populations and violations of human rights.

The criminalization of social protest

In many Latin American countries, grassroots organizations and movements that fight back against the loss of their land, water, forests and livelihoods as a result of the spread of plantations—eucalyptus, pine, oil palm, rubber trees, etc.- must contend with what has become known as the "criminalization" of resistance. This is a strategy aimed at categorizing acts of resistance as crimes, thus moving an intrinsically social conflict into the sphere of legal proceedings and criminal charges. As a result, plantation companies are able to use the punitive power of the state as a means of neutralizing protest.

Respected and recognized community leaders, people who are legitimately defending their cultural identity, ways of life and means of production, end up being arrested, imprisoned, prosecuted and sometimes even killed. Outright repression is combined with the formal use of the legal system to punish activists opposed to policies and models of production which, in the pursuit of profit, ultimately conspire against the very survival of the planet.

The prisons in Chile hold dozens of indigenous Mapuche political prisoners who have attempted to defend their territory from the advance of monoculture eucalyptus and pine plantations. The majority are tried under anti-terrorist laws left over from the Pinochet dictatorship. In spite of this, they continue their resistance from within the prison walls, through hunger strikes and fasts, while outside, the repression extends to their families. In the Chocó bioregion of Colombia, Afro-Colombian communities and human rights organizations like the Commission for Justice and Peace face threats and violence from military and paramilitary forces for their opposition to the establishment of industrial oil palm plantations and the expansion of cattle ranches. In Honduras, the struggle of the peasants of Bajo Aguán to defend their right to the land stolen from them for large-scale oil palm cultivation left a tragic toll of injuries and deaths, added to the general escalation in repression in Honduras since the June 2009 coup.

The gender dimension

The expansion of monoculture tree plantations, like all anti-social megaprojects, has a gender dimension in terms of specific impacts on women. As illustrated by a women's declaration on the impacts of monoculture exotic tree plantations on grassland ecosystems, issued in 2009 during the World Forestry Congress held in Argentina, "the expansion of monoculture eucalyptus plantations

has sowed fear, violence and sexual harassment. Many women report that they are afraid to walk alone near the plantations, because of the large numbers of workers from outside their community. This means that women's right to free movement is curtailed, bringing about changes in their habits and routines. In addition, many have been the victims of sexual harassment by these workers. This has undoubtedly meant a step back for women's independence and autonomy, which contributes to greater disempowerment of women."

The declaration also refers to other potential impacts, such as the breakdown of social and family structures, a rise in prostitution, the proliferation of sexually transmitted diseases, illicit drug use, and changes in eating habits, "which typically occur in different places following the arrival of large-scale projects like these. Unfortunately, these impacts are neither studied nor quantified by public agencies."

The women conclude by saying "we will keep up our resistance and our struggle for as long as necessary, not only against the expansion of monoculture exotic tree plantations and pulp and paper industry megaprojects, but against all processes that entail the commodification of living beings and the disempowerment of women. We, the women, have the power to bring about something new, and we are doing it." (9)

In Brazil, every March 8, International Women's Day, women from peasant farmer, indigenous and Afro-Brazilian organizations, the Landless Workers Movement and Via Campesina join in protest against the expansion of eucalyptus plantations owned by pulp companies like Stora Enso, Votorantin/Fibria, Suzano and Veracel. The women denounce the hunger brought by these cloned armies of eucalyptus trees, which take over the lands of indigenous peoples, local communities and peasant family farmers, stripping them of their identity, their knowledge, their ability to grow and eat healthy food in sufficient quantities and in accordance with their cultures. Their struggle is aimed against agribusiness and in defence of food sovereignty.

At the same time, however, they stress that the oppression suffered by all is aggravated by gender differences that place women in a situation of inequality by making them almost exclusively responsible for raising children; that result in their earning less pay for doing the same work as men; that frequently make them the targets of sexual harassment; and that sadly, on occasion, make them victims of physical violence, sometimes at the hands of men in their own families.

The business of climate change

Nothing is spared from the zealous pursuit of profits. The climate crisis has become a business opportunity in which the false solutions promoted by international agencies like the World Bank and the Kyoto Protocol itself serve as a platform for the further expansion of monoculture tree plantations. Through carbon sinks established under the Clean Development Mechanism, or the REDD+ (Reducing Emissions from Deforestation and Forest Degradation) programme, in which large-scale tree plantations could be viewed as a means of "enhancement of forest carbon stocks" and thus be eligible for financing, plantation companies are finding new "markets", and plantations disguised as forests slip through the cracks and onto the carbon market.

In Colombia, the 1995 Framework Convention on Cooperation for Cleaner Development authorized oil palm plantation companies to participate in the international carbon sink business created in the framework of the Kyoto Protocol. The incentives and tax exemptions granted by the government for the development of technologies to capture methane gas from the environment allowed company owners to obtain additional profits from a new market niche: the carbon market. (10)

Ecuador is also promoting the establishment of one million hectares of monoculture tree plantations for the sale of carbon reduction certificates on the world carbon market, through the Proforestal programme's national afforestation and reforestation plan.

The plantation-as-carbon-sink business is even attracting companies from outside the sector: Nestlé Waters France plans to offset the equivalent of the annual carbon emissions from its Vittel mineral water production in France and Belgium through "forestation" projects. As a result, it will fund the planting of 350,000 trees in an existing plantation in the Bolivian Amazon and a new project in the rainforest of Peru, with plans to renew the same number of trees every year. (11)

In Brazil, Plantar S.A. Reflorestamentos, a pig iron and plantation company, has large-scale eucalyptus plantations in the state of Minas Gerais. Despite the fact that these trees are used as fuel for its production of iron ingots, that the company's operations are highly polluting, and have had serious impacts on water, soil, and the rich natural biodiversity of the Cerrado biome, the company has repeatedly applied for funding under the Clean Development Mechanism to finance its eucalyptus plantations. It argues that using eucalyptus charcoal to power its plant is less polluting than using coal. Nevertheless, this is clearly a ploy to grab money from any source possible, since the company has never used coal in its operations.

Towards another model

The large-scale monoculture tree plantation model is incompatible with the natural diversity of life. It is artificial, it is destructive, it is polluting.

The peoples of the countries of Latin America have forged social networks to denounce the impacts of monoculture tree plantations. One example is the Latin American Network Against Monoculture Tree Plantations (RECOMA), a decentralized network of Latin American organizations that coordinates actions, fosters support of local struggles, promotes alternative models that are socially and environmentally suited to different realities, and organizes horizontal exchanges between countries.

There are many other initiatives that point in the same direction. For instance, quilombola communities – descendants of escaped African slaves – in Espírito Santo, Brazil, living in the midst of vast eucalyptus plantations, have found new ways to survive and struggle to reconquer their natural resources and genetic heritage. These communities are reviving traditional agricultural practices, adapting management techniques, opening up new channels of access to local and regional markets, and promoting the ongoing exchange of seeds and agricultural practices between communities.

The search for an alternative path in production, marketing and consumption that will lead us away from the current process of extermination has become an imperative need, and the communities standing up in resistance are the agents of change who could lead us there, creating local sovereignty, building food sovereignty. We must all continue working to achieve the necessary change in direction.

(1) Evaluación de los Recursos Forestales Mundiales 2005, 15 Resultados Claves, http://www.fao.org/forestry/foris/data/fra2005/kf/common/GlobalForestA4-SPsmall.pdf (2) World Resources Institute, educational indicators: http://earthtrends.wri.org/searchable_db/index.php?theme=4; paper and paperboard consumption indicators: http://earthtrends.wri.org/searchable_db/index.php? http://earthtrends.wri.org/searchable_db/index.php? http://earthtrends.wri.org/searchable_db/index.php

- (3) "Plantaciones de eucalyptus ponen en peligro al bosque nativo", Comité Nacional Pro Defensa de la Flora y Fauna (CODEFF), www.codeff.cl, divulgado por Ecoportal, http://www.ecoportal.net/content/view/full/95039, y Servindi, http://www.servindi.org/actualidad/30725
- (4) "Palma africana: un proyecto mundial socialmente y ecológicamente destructor", François Houtart, 2006, http://colombia.indymedia.org/news/2006/06/45170.php
- (5) "Agronegocios de palma y banano en el Bajo Atrato. Impactos ambientales y socioeconómicos", por Comisión Intereclesial de Justicia y Paz,

www.pasc.ca/IMG/doc/Palma_y_bio.doc

- (6) "En Medio del Engaño: El Magdalena Medio y el Banco Mundial", Gearóid Ó Loingsigh, 2010, http://www.redcolombia.org/index.php?option=comcontent&task=view&id=1070&Itemid=36
- (7) "El agronegocio de la Palma Aceitera en Colombia. ¿Desarrollo para las poblaciones locales o una crónica para el desastre?", Grupo Semillas, 2008, Revista Semillas Nº 34/35,http://www.semillas.org.co/sitio.shtml?apc=w--1--&x=20155558
- (8) Documento de las organizaciones participantes de la mesa redonda de palma sostenible. Taller de discusión sobre principios y criterios; Cali, Colombia.Septiembre 18 y 19 de 2007; Revista Semillas Nº 34/35, http://www.semillas.org.co/sitio.shtml?apc=e-b-20155545-20155545&x=20155568
- (9) "Women's declaration on the impacts of the expansion of monoculture tree plantations on the grasslands," on the occasion of the World Forestry Congress, Buenos Aires, Argentina, October 2009, http://www.wrm.org.uy/WFC/declaration-women-wfc-2009.pdf
- (10) "El agronegocio de la Palma Aceitera en Colombia. ¿Desarrollo para las poblaciones locales o una crónica para el desastre?", Grupo Semillas, 2008, Revista Semillas № 34/35, http://www.semillas.org.co/sitio.shtml?apc=w--1--&x=20155558
- (11) "Peru hails Western carbon offsetting programmes", BBC, 28 de marzo de 2010, http://news.bbc.co.uk/2/hi/business/8586617.stm