
Industrial logging: a major cause of destruction

Logging involves the removal operation of trees from the forest. When it is carried out for industrial purposes, it implies large-scale operations and becomes one of the primary causes of global deforestation. It is also a major threat to the world's remaining old growth forests, where the most rare and valuable species are selected.

A number of actors are involved in the process. Some of them are the promoters and facilitators: transnational and national companies, multilateral banks (World Bank/WB, Inter American Development Bank/IDB, Asian Development Bank, African Development Bank), international financial institutions (International Monetary Fund), the World Trade Organisation, development and cooperation agencies, northern consultancy firms, national and local governments. Other actors are the victims: indigenous and local peoples, poor countries, the world at large.

The underlying forces

The modern world is unbalanced, full of asymmetries and with a widening gap between the rich and the poor, both between and within nations. The Northern industrialised countries that hold the wheel have built an international architecture to rule the world. Southern impoverished countries, though rich in natural resources, have arrived later to industrial development and have paid historically for that.

The Bretton Woods institutions (WB, IMF) have the international monies greatly needed by Southern countries, and they exert pressure on local governments imposing conditionalities to grant credits which usually go to pay the countries' international debts. The governments get more indebted, thus creating a vicious circle involving the further destruction of the environment and the increasing impoverishment of the local population.

Typical "development" plans promoted by the multilateral institutions imply export-oriented exploitation of local natural resources. In the case of tropical countries, the commercial interests which run a "marketed" globalised world see the forest only in terms of wood, disregarding all the other dimensions (shelter, medicinal plants, food, fishing, hunting, spiritual values, biodiversity). So wood becomes a profitable business to be exploited.

Local elite's vested interests --in close cooperation with transnational corporations-- plus pressure on the government by the financial institutions force national governments to promote logging operations which imply the granting of concessions in forests for long inhabited by indigenous or other local peoples.

At the end of the logging chain are the end-consumers of products based on tropical wood, typically high income citizens from the monetary rich countries of the industrialised North.

The destruction process

All usually starts with the construction of a road, typically financed by the World Bank or a regional bank within the framework of a "development" programme, to reach the most precious trees and take out the logs from the forests and eventually from the country.

Along with the road come the loggers, the machinery, the trucks. Those outsiders encroach upon ancient dwellers' habitats, who have been there for generations and the forest has been their "supermarket", their temple, their "pharmacy", their home. They are and have always been a nation, in the modern concept, with their own law, common roots, heritage, based on a territory: the forest. And one day a foreigner --representing the logging company-- comes and tells them that they have no rights to that land because they have not got an X paper, the only one the foreigner recognises as valid to grant ownership of the forest resource. Of course, the foreigner has it from the government --a government representing a state that did not even exist when the indigenous populations already inhabited the forest.

When the traditional guardians of the forest react in self-defense to protect their rights and livelihoods, they face violence and violation of their human rights from that same government who granted the logging company the concession to log in their territories.

Those new roads that initiate the above process also enable the arrival of other outsiders who carry out other unsustainable activities such as bushmeat hunting --thus depriving local communities of yet another basic resource-- or gold mining, resulting in the pollution of water courses and the decimation of the fish population also used by local people as a basic food resource.

During the process triggered by logging, forest-dwelling peoples are severely affected by introduced diseases and many indigenous peoples have been entirely wiped out or their numbers have severely diminished from the introduction of those diseases. Additionally, the whole process generates poverty among forest peoples who are laid bare, deprived of their place, their resources, their culture, marginalised and eventually driven out of the remaining degraded forest. Even many other groups who depend on the forest or live in close association with it are affected by commercial logging. Their traditional tenure of and access rights to the land are usually overrun by logging concessions.

In terms of the environment, the vegetation of a primary forest, where most logging takes place, is typically multi-layered. The tallest trees emerge from the general level of the canopy and may appear alone or in groups. Beneath the main canopy there are generally other layers of tree, shrub and herb species at different heights. Added to this vertical layering there are gaps of varying sizes caused by disturbance events. The majority of rainforest species are scarce at a per hectare level and generally few of them are acceptable to the timber trade, so although clearfelling --that is, the removal of all trees on a specified cutting area-- does sometimes occur, commercial logging in tropical rainforests is almost invariably "selective". Although the term "selective" might appear to be less harmful than "clearcutting", in fact it implies that a much larger area of the forest is affected by logging. "Standard" logging concessions in the tropics imply several hundred thousand hectares of forest per concession, and all of them adding up to millions of hectares in any one single country. Selective logging is thus synonymous to widespread damage.

The total area of forest disturbed by a logging operation --felling gaps, skid trails, landing areas, tracks and roads-- can vary, but is always extensive. In selective felling operations, the FAO estimates a level of damage of between 30 per cent and 40 per cent of the forest area and this figure can be as high as 70 per cent with intensive logging and careless felling methods.

The whole selective logging process implies a great deal of damage and loss of marketable trees, but

this is, however, only a comparatively minor effect. The felled trees are moved from the forest to “log landings” --large cleared areas in the forest which imply total deforestation-- along “skid trails” and transported out of the forest on a network of tracks and roads --resulting in further deforestation-- using heavy tracked or rubber tyred machinery which destroys the vegetation and compacts the soil.

Indeed, most of the damage is “incidental damage” during the logging operation. As trees are felled they crash down through the remaining stands, crushing many trees. Debris decomposition may prevent seedling growth and the branches can form an ideal support for climbing vines which further suppress tree regeneration. The threat to biodiversity is enormous, given the radical changes to which large areas of the forest ecosystem are subjected to.

And follow-up impacts are great. The hydrological cycle is disturbed since less rainfall is intercepted by a diminished canopy; evapotranspiration is reduced, and rainfall run off is higher due to decreased soil infiltration efficiency. Logging operations also degrade the soil and water courses through compactation, erosion and sedimentation which in turn lead to nutrient loss, also caused by the removal of biomass. The temperature of the surface is increased due to changes in evapotranspiration, and a significant amount of carbon dioxide stored in ancient trees is released to the atmosphere.

Logging roads and secondary tracks open up previously inaccessible forests. This has many negative implications. One of them is related to fires: research studies confirm a long-suspected link between logging and the devastation of forest fires in tropical rainforests. Logging waste and dense undergrowth of fast-growing pioneer species provide large amounts of fuel that feeds the rampant spread of forest fires. On the contrary, tropical rainforests don't usually burn. In their natural state, fuel loads are low and not highly flammable, and the humidity is high even during drought years.

Additionally, the forest wildlife begins to disappear as a result of intense logging operations. The noise itself and the presence of numerous workers make the animals flee. The destruction of much of the wildlife's habitat force many species to move elsewhere and loggers themselves hunt animals to complement the meager diet they receive from the company.

All the above, coupled with extensive human rights violations also force people to leave their forests, where they are now unable to fulfil their basic needs. Logging thus generates poverty in areas where until then people were able to provide for their livelihoods.

And when the forest has already been opened up and forest dwellers have been displaced, other operations are carried out which eventually lead to ultimate deforestation. Large-scale agriculture, cattle raising and monoculture tree plantations complete the liquidation process of what once used to be a thriving biodiverse, multi-purpose habitat.

Unsustainable consumption and trade

And one may wonder, all this destruction, what for? As happens with many other commercial operations where globalisation has facilitated transnational corporations' access to natural resources (almost invariably located in the South), the driving force behind the international timber trade is a wasteful consumption pattern. In this case, massive demand for cheap and plentiful tropical timber in the consuming markets of the US, the European Union and Japan. Three quarters of the world's commercial timber output is swallowed up by one quarter of its population.

Unless radical changes are imposed on unsustainable consumption, the prevailing development

paradigm will only create further problems as more countries embrace it. China provides an example of this. Chinese timber imports have risen dramatically in the last few years as a direct result of the government's efforts to combat deforestation through a logging ban. Yet the emphasis on supply controls rather than demand has prompted a flood of timber --legal and illegal-- entering the country. Recent trade statistics show that China is now one of the main two recipients of Indonesian timber and Chinese loggers are increasingly becoming a major actor in the destruction of forests throughout the tropics.

For forestry corporations that have exhausted most of the resources in their host countries, the globalisation of their activities and the aggressive promotion of "free trade" in forest products is a matter of corporate survival. They influence on global economic rules and exert pressure on governments worldwide to adopt three basic elements of public policy: unregulated access to forests, increased access to consumers, minimising regulatory costs. All of them are at various stages of being introduced into the World Trade Organisation (WTO), with its legally binding instruments by which governments agree to restrain themselves from regulating international trade and investment.

The WTO system threatens the ecological sustainability of the world's forests by shifting power from local to global institutions through trade rules and proposed investment rules, increasing wasteful consumption, opening the door to invasive species and genetically modified organisms, enforcing monopoly controls over genetic resources, intensifying the conversion of forests to agriculture, weakening existing environmental protections, blocking new environmental protections, threatening eco-labeling initiatives and banning government procurement rules aimed at forest conservation. Member countries are required to bring their policies into line with the WTO's spirit of privatisation, deregulation, subsidisation, and liberalisation of trade and investment.

Benefit for whom?

The soaring demand of tropical wood has fuelled the expansion of transnational corporations involved in every stage of the production process, from raw material extraction, through manufacturing, to marketing and distribution. A series of mergers and acquisitions has led to intense concentration of forest exploitation capacity in the hands of relatively few companies which concentrate huge economic power --and consequently political leverage-- to exploit new logging frontiers and roam the globe in their quest for profits. They are the great winners in this.

As for the countries, we just have to look back to when they started to get involved in this process --some 20 years ago-- and ask: are they now better off? No one could seriously reply that they are. Indeed, they are poorer and more indebted. Only the local elites may have lined their pockets. And, all in all, corruption pervades the whole logging process. In most tropical countries, forests are government-owned --ignoring indigenous and other traditional peoples' territorial rights-- but harvesting is carried out by private parties who receive timber concessions often awarded as part of a political patronage process. The forestry sector is particularly susceptible to illegal actions and corruption because of the remoteness of operations, the lack of information about the quantity of timber in forests, the substantial discretionary power offered to government officials, the high monetary values involved and the lack of supervision from civil servants. And most of all, the enormous economic capacity of transnational companies to corrupt.

The actors involved in industrial logging in tropical countries vary from country to country, but the main ones are usually transnational corporations. In a recent Greenpeace study on some few selected countries (including Brazil, Cameroon, Gabon, Guyana, Papua New Guinea and Solomon Islands), the top ten loggers were:

1) Rimbunan Hijau from Malaysia, with an annual wood extraction from tropical forests of Brazil, Gabon, PNG and Solomon Islands of some 1,5 million cubic metres; 2) Gluntz from Germany: 500,000m³ from Gabon; 3) WTK from Malaysia: 370,000m³ from Brazil, Gabon and PNG; 4) Rougier from France: 360,000m³ from Cameroon and Gabon; 5) CFG with shareholders from France, The Netherlands and Gabon: 350,000m³ from Gabon; 6) Idris Hydraulic from Malaysia: 300,000m³ from Gabon; 7) Prime Group from Singapore: 240,000m³ from Guyana and PNG; 8) Eidai from Japan: 225,000-321,300m³ from Brazil; 9) Thanry from France: 210,999m³ from Cameroon; 10) Samling from Malaysia and South Korea : 193,000 m³ from Guyana.

The above is only a sample of the many transnational companies profiting from logging extensive areas of forest concessions in the tropics and there is no single example to show that any of those countries has become more "developed". On the contrary, all of them are much poorer now than they were before.

The so-called illegal logging

There are many well-intentioned efforts to stop in some way the destructive trend which threatens forest existence. One of these efforts is focused on addressing the issue of illegal logging operations with a view to reducing tropical wood production. But up to date, the scale of illegal logging is enormous and both governments and industry in consuming nations have failed to take steps to eliminate illegal timber from the supply chain. By turning a blind eye, consuming nations are colluding with the corrupt timber bosses that provide the chainsaws. The G8 group of industrialised nations has made a series of public statements concerning the need for sustainable forest management, yet continues to import vast amounts of timber, much of it illegal at source. The major suppliers to the G8 are the countries suffering the highest rates of illegal logging. The US imported over \$450 million worth of timber from Indonesia in 2000 and over \$330 million worth of timber stolen at source in Indonesia in a single year.

Illegal logging is often portrayed as small communities cutting a few trees that they were not legally entitled to cut. It is time this myth is dispelled once and for all. Illegal logging is not about subsistence felling by local people. It is about the highly organised and vastly profitable international trafficking of timber stolen from the world's dwindling tropical forests. In the long run it is the small communities that have the most to lose with their forests destroyed and their resources stolen.

More importantly: the issue of illegal logging tends to hide the issue of logging in general. In the tropics, the important question that needs to be posed is: is there any legal logging at all? From a government perspective the answer is yes, but for the customary owners of the forest, all logging is illegal, because it fails to recognise their rights as owners and custodians of the forest.

Logging and the future of the Earth

And, finally, the great loser in this business is the entire planet. Forests in general and tropical forests in particular play crucial roles in the functioning of the Earth as a whole. They regulate the climate and constitute some of the major carbon reservoirs in the Planet. The carbon stored in the world's forests is ten times larger than all the fossil fuels that have been burnt over the last hundred years. Destruction of the rainforests --especially by burning-- causes much of the stored carbon to be released into the atmosphere. The clearing of large areas of forests not only increases the social and environmental impacts of natural climatic phenomena (such as droughts, floods, hurricanes) but also accelerates climate change and its unpredictable impacts.

At the same time, forest destruction entails the disappearance of species --mostly due to habitat loss-- and tropical forests constitute the main habitat for the world's terrestrial biodiversity. The conservation of this biodiversity is thus directly related to the conservation of tropical forests. Additionally, deforestation in tropical regions increases the threat of desertification.

It is important to underscore that governments that met almost ten year ago in the so-called Earth Summit held in Rio de Janeiro, committed themselves through three legally binding instruments to address those three issues related to deforestation: climate change, biodiversity and desertification. Given that industrial logging is the main threat to forests and given that forests protect the world's climate and biodiversity, it is clear that governments, South and North, have violated all their legal obligations --and continue doing so-- both through the promotion of industrial logging and through the promotion of international trade in wood extracted from tropical forests.

Ten years after the Earth Summit, governments will meet again, this time in Johannesburg, South Africa. Will they put themselves on trial? Will they decide to compensate the millions of people affected by their non-compliance of the Rio agreements? Will they put an end to industrial logging? Or, more probably: will they make yet more promises? More importantly: will the world's peoples allow them to get away with that?

Article based on information from: "Buying Destruction", Greenpeace, August 1999; "Free Trade, Free Logging", Victor Menotti, International Forum on Globalization (IFG) , 1999; "Corporate Power, Corruption & the Destruction of the World's Forests. The case for a new global forest agreement", Environmental Investigation Agency, 1996; "Life After Logging. The impacts of commercial timber extraction in tropical rainforests", Haworth, J., edited by Simon Counsell, June 1999.