
MONOCULTURES ON THE MARCH IN SOUTHEAST ASIA

“The crucial characteristic of monocultures is that they do not merely displace alternatives, they destroy their own basis. They are neither tolerant of other systems, nor are they able to reproduce themselves sustainably.” So wrote Vandana Shiva in her classic 1993 essay “[Monocultures of the Mind](#).”

Monocultures exist to increase productivity of one product, whether that product is rubber, woodchips, timber, palm oil, cassava or sugar. But while productivity increases from the commercial perspective, productivity decreases from the perspective of local communities.

Woodchips, pulp and monocultures

Shiva wrote of the erosion of local forest knowledge by “scientific” forestry and the replacement of biodiversity by monocultures. Monocultures of eucalyptus trees are the ultimate expression of scientific forestry. Uniform rows of almost identical trees, with predictable growth rates and raw material for the pulp, biomass or timber industry as the only product.

However, as Shiva points out, “People everywhere have resisted the expansion of eucalyptus because of its destruction of water, soil and food systems.” She gives the example of a World Bank-funded social forestry programme in Karnataka state, in India. In August 1983, the Raitha Sangha, the farmers’ movement, marched to the forestry nursery and pulled out millions of eucalyptus seedlings. They planted tamarind and mango seeds in their place.

This resistance to the spread of monocultures turned scientific forestry on its head, which had reduced all species to one (eucalyptus). Villagers reasserted their needs, over the need to provide raw material for the pulp industry. They also reasserted their knowledge over that of the World Bank’s and the government’s forestry experts.

Similar protests against eucalyptus also started in the 1980s in [Thailand](#). In a series of demonstrations, villagers have dug up eucalyptus saplings, burned down nurseries, marched, written letters, taken part in demonstrations, ordained forest trees to prevent them being cut down to make way for plantations, cut down eucalyptus trees and re-established community forests.

Such resistance has often been met with brutality. The farmers in Karnataka were arrested. In Thailand, more than a dozen environmental activists have been [killed](#) in the last decade. Sometimes the violence starts even before villagers protest. In the late 1980s, a company called Arara Abadi, part of the Indonesian pulp giant Asia Pulp and Paper (APP), started to acquire land near the village of Mandiangin in Sumatra. The company simply seized land from the indigenous Sakai and Malay people without compensation. Armed police and military officials took part in meetings between the company and villagers. A 2003 [report](#) by Human Rights Watch documents the intimidation and violence against people living in the area of APP’s plantations. One villager told Human Rights Watch, “We often heard about people being arrested or just disappearing. So when they came here wearing their guns, we just kept our mouths shut.” The company imposed a monoculture of opinion as well as monocultures of fast-growing trees.

There have been several reports that APP is planning to expand its operations to Cambodia and Vietnam. In 2004, APP raised its none-too-attractive head in [Cambodia](#), in the form of a company called Green Elite. The company planned an 18,300 hectare acacia plantation inside the Botum Sokor National Park. Green Elite was kicked out of the country, but not before it had logged several hundred hectares of melaleuca forest and started to build a wood chip mill.

In 2007, Green Elite received permission to establish 70,000 hectares of fast-growing tree plantations in Nghe An province in [Vietnam](#). The planting is being carried out by a subsidiary of Green Elite called InnovGreen Nghe An. The plantations are going ahead, and InnovGreen plans to establish a total of 349,000 hectares of industrial tree plantations in six provinces in Vietnam.

The rubber juggernaut

A company called Golden One Company, which is reported to have links with APP, aims to establish industrial tree plantations in Laos. The company has mapped out an area of approximately 12,000 hectares in Samuoi district, Salavan province, although the exact status of the plantation concession is unknown.

In recent years, huge areas of land have been converted to rubber monocultures in China, Laos, Thailand, Vietnam, Cambodia, and Burma. According to a 2009 article in *Science* magazine, much of the expansion in China was encouraged as an alternative to swidden cultivation. Governments often see such agricultural practice as “a destructive system that leads to forest loss and degradation,” and have actively encouraged the replacement of swidden cultivation with plantations. Ironically, this is often carried out in the name of “reforestation”, although apart from the presence of trees the resulting monocultures have little in common with forests.

The authors of the article in *Science* magazine, Alan Ziegler of the National University of Singapore and his colleagues, estimate that 500,000 hectares of montane forest in the five countries have been converted to rubber plantations.

The authors [state](#) that the resulting rubber monocultures could have serious environmental impacts including loss of biodiversity, reduction of carbon stocks, pollution and degradation of local water supplies. Ziegler is currently carrying out further research with local scientists in Thailand and Cambodia on the [impact](#) of rubber plantations on water and carbon fluxes.

With rubber prices and demand for rubber booming, the area of rubber monocultures is expanding. In 2009, Cambodia’s rubber exports increased by [36 per cent](#). Vietnamese companies have plans to plant [200,000](#) hectares of rubber plantations in Burma.

Growing food in monocultures

Between 2006 and 2008 world food prices rocketed. There were several reasons. The rising price of oil was one. Another was the demand for food crops as biofuels. Another was that financial speculators at Goldman Sachs and other banks pulled out of dodgy sub-prime mortgages derivatives and [poured the money](#) into food derivatives thus driving up the price of food.

But there is another reason for food price increases to be found in Vietnam’s [rice fields](#). Vietnam is the world’s third largest exporter of rice. An epidemic of disease and pests struck the rice crop in Vietnam cutting world rice supplies.

Monocultures are the problem, once again. Less intensive farming is far less vulnerable to pests and

diseases than monoculture farming. Vandana Shiva warned about the problems of pests in monocultures in 1993: “Having destroyed nature’s mechanisms for controlling pests through the destruction of diversity, the ‘miracle’ seeds of the Green Revolution became mechanisms for breeding new pests and creating new diseases.”

“Sustainable” monocultures?

Much of the response to monocultures from the environmental movement has been to demand something called “sustainability”. For example, earlier this year, WWF [set up](#) a “New Generation Plantations Project”, through which it will work with pulp and paper companies to promote monocultures that are “well-managed and appropriately located” and which “can contribute positively to sustainable development.” WWF will help one of the companies involved, Stora Enso, to expand its controversial plantations in China by 160,000 hectares. Stora Enso’s existing plantations in China have resulted in a series of [land disputes](#) and violence against a lawyer representing local farmers.

This strange word, “sustainability”, has devoured a large part of the environmental movement, swallowing up activists and spitting out the stuffed suits that traipse from one business-friendly shindig to the next.

We have the [World Business Council for Sustainable Development](#), whose chairman works for Shell and which includes among its 200 member companies such paragons of environmental virtue as Sappi, Mondi, Stora Enso, Weyerhaeuser, MeadWestvaco, Veracel and Fibria (as Aracruz Celulose is called these days). The WBCSD has a “Sustainable Forest Products Industry” [project](#) the “driving force” of which “is to find ways to sustainably manage forests to meet the needs of six billion people now – nine billion by 2050 – for wood and paper products, renewable and greenhouse neutral energy, ecosystem services and healthy livelihoods.” Here we see what sustainable development means: more production from (and therefore destruction of) the world’s forests. And more industrial tree plantations.

The myth of “sustainable” oil palm

Then we have the Roundtable on Sustainable Palm Oil, which was set up by WWF and several palm oil companies. A promotional video on the RSPO [website](#) asks, “What sustainability practices is RSPO encouraging?” The answers are revealing. Planting high yielding varieties of the crop. Use of buffaloes to transport harvested fruit bunches, “reducing fossil fuel energy usage”. Management of waste at the milling stage. Integrated pest control. Leguminous crop cultivation to add nitrogen to the soil. Zero burn replanting. Energy efficient extraction process, including converting waste to biofuel and biogas. Advocating safety at work and providing adequate health care. Promoting the protection of biodiversity. Sustaining local communities and the education of children.

These are all things that the palm oil industry should do anyway. But the hypocrisy of the last two is breath-taking. The industry most responsible for destroying the forests of Malaysia and Indonesia and the livelihoods of thousands of local people and indigenous peoples now claims to be promoting the protection of biodiversity and sustaining local communities. It would be nice if it were true. It’s not.

Back to the video. As the camera pans through a palm oil monoculture, the presenter calmly tells us that

“While other agricultural industries seek superficial green solutions it is clear to many that sustainable

palm oil could be a path breaking and historic effort that is the beacon of hope and inspiration.”

Several NGOs (not the stuffed suit variety, I hasten to add) have worked hard to ensure that the RSPO set high standards. There is a Certification Protocol, a Code of Conduct and Principles and Criteria that include indigenous peoples rights and the right to free, prior and informed consent.

But abuses continue. In June 2010, hundreds of oil palm small holders [protested](#) in Riau, Sumatra, at the way PT Tri Bakti Sarimas, a member of the RSPO, had broken its promises to return the land to the farmers. During the protest, a Mobile Brigade Police officer shot dead a woman protester. Several other protesters were injured or arrested.

Perhaps the biggest failing of the RSPO is that it does not address the industry’s constant expansion. The NGO SawitWatch has estimated that the industry plans to expand its plantations by a total of [26.7 million hectares](#) in Indonesia.

There is an unavoidable [contradiction](#) in describing as “sustainable” any product that is grown in vast monocultures. But with oil palm in southeast Asia, there is no other way, as Marcus Colchester of the Forest Peoples Programme explains in a recent report titled, “[Palm oil and indigenous peoples in South East Asia](#)”:

“Maximum production from the least amount of land favours regularly spaced palms planted in monocultures. Because oil in the very heavy, mature, fresh-fruit bunches rapidly loses its quality, producers have to be able to get fruits to a mill, where the oil can be extracted and stabilised, within 48 hours, meaning that farmers need ready access to roads, which in their turn require maintenance.”

Whether the plantation is company-owned or managed as small-holder schemes, large areas of monocultures are needed to keep the palm oil mill operating – somewhere between four and five thousand hectares per mill, Colchester estimates.

The vast monocultures have destroyed habitat for elephants, tigers, orangutans and many other species. They have also led to serious human rights abuses that have been documented in a series of NGO reports in the past six years. “Acquisition of lands for estates and smallholder schemes violates the rights of indigenous peoples to their property,” Colchester writes. “Their lands are being taken off them without due payment and without remedy.” The Indonesian National Land Bureau states that there are about 3,500 land disputes in the country.

Carbon: The new monoculture?

In May 2010, the Indonesian and Norwegian governments signed a Letter of Intent for a US\$1 billion avoided deforestation deal. As part of this deal, the Indonesian government announced a two year moratorium on new concessions in forests or peat swamps. There are [mixed messages](#) from the Indonesian government about what the moratorium actually means. Some government officials say it will apply to at least some of the 26.7 million hectares on which the palm oil industry plans to expand its plantations. Agus Purnomo, head of Indonesia’s National Climate Change Council, told [Reuters](#) that at least some of Norway’s money would go on compensating oil palm companies whose concessions will be revoked. “When you revoke licences, when you cancel things, it involves money,” he said. Other officials state that the moratorium will not apply to existing concessions. If the latter is true, the moratorium will have little or no impact on deforestation in Indonesia, even for the miserly two years that it is in place.

The international negotiations on reduced emissions from deforestation and forest degradation (REDD) might even end up encouraging more clearing of forests, draining swamps and conversion to monocultures in Indonesia. In August 2010, Reuters [reported](#) Wandojo Siswanto, a special adviser to the forestry minister, as saying that “If there is agreement on REDD, we could put palm oil plantations to be eligible for that.” He added, “I think it would be good if we just say that palm oil plantations could also mitigate climate change through carbon sequestration through the nature of the trees.” He said that existing and proposed plantations developed on degraded land could be eligible for carbon credits.

The problem, as World Rainforest Movement and [others](#) have [pointed out over and over again](#), stems from the United Nations' failure to recognise that **plantations are not forests**. Currently, in the bizarre world of the UN climate change negotiations, the UN's definition of forests fails to differentiate between native forest and industrial monoculture plantations.

But even if REDD functions as it is supposed to, avoiding deforestation rather than encouraging the expansion of monocultures, there are still risks. With REDD schemes locking up the carbon in forests, a new form of “scientific” forestry is emerging where experts tell local communities how to manage the forests as carbon stores. Local communities' knowledge of the forest and their management of the forest has to be adapted to the new carbon economy. Forests could become carbon monocultures – existing to produce one product: carbon credits to bail out the north's failure to reduce its greenhouse gas emissions. Like other monocultures, productivity (of carbon credits) may increase, but productivity from the perspective of local communities could decrease.

Of course, indigenous peoples and local communities are not taking this lying down. Many are demanding that their rights be fully incorporated into any international agreement on REDD. Their [message](#) is clear: “No Rights, No REDD.”

In April 2009, more than 400 indigenous peoples met in Anchorage Alaska for the Indigenous Peoples' Global Summit on Climate Change. They produced the Anchorage Declaration, specifically rejecting carbon trading and forest offsets as false solutions to climate change. On REDD, the declaration states that

“All initiatives under Reducing Emissions from Deforestation and Degradation (REDD) must secure the recognition and implementation of the human rights of Indigenous Peoples, including security of land tenure, ownership, recognition of land title according to traditional ways, uses and customary laws and the multiple benefits of forests for climate, ecosystems, and Peoples before taking any action.”

Others are opposing REDD completely. Via Campesina, an international movement of peasants and small-scale farmers with about 300 million members, [states](#) that “The REDD+ initiative should be rejected.” Indigenous peoples meeting at the World People's Conference on Climate Change and the Rights of Mother Earth in Bolivia in April 2010 [stated](#), “We condemn the mechanisms of the neoliberal market, such as the REDD mechanism and its versions REDD+ and REDD++, which are violating the sovereignty of our Peoples and their rights to free, prior and informed consent and self determination.” In August 2010, the Social Forum of the Americas rejected REDD:

“We denounce Northern geopolitical countries governments rather than confront serious climate change impacts they are seeking to evade responsibility and to develop new carbon market mechanisms to make more profit, such as ‘Reducing Emissions from Deforestation and Degradation’ (REDD), which promotes forests commercialization and privatization and loss of

sovereignty over territories. We reject such arrangements.”