Biofuels – A new threat to climate and climate justice

Fires to clear land for palm oil, Kalimantan, Photo by Nordin, Save our Borneo

Deforestation and repression by the soya industry, Paraguay, 2007

"The biodiversity and livelihoods of Africans should not be considered expendable for the cause of climate change solutions." *African Biodiversity Network*

"We have very serious concerns over nuclear energy, genetically modified trees, carbon capture and storage and biofuels for environmental and safety reasons. We consider that these are not ways out to combat global warming, but endangering environment and poor populations.", *Indonesian NGO Forum*

"The Earth will not give us the extra biomass needed to keep on existing as we do. For a while we might continue to rob this biomass from the poor tropics, but the results are already disastrous for all humanity." *Professor Tad Patzek, University of California Berkley*

Today, biofuels provide about 1% of global transport fuel. Already, they are causing serious harm to the climate, to communities, food sovereignty and food security and to biodiversity. Most biofuels are agrofuels – made from crops and trees grown specifically for that purpose, such as sugar cane, palm oil, soya, jatropha or maize. Agrofuel expansion means more intensive agriculture and thus more agro-chemicals (including synthetic fertilisers). It also means more destruction of natural ecosystems which play a vital role in regulating the climate, and the displacement of millions of small farmers, pastoralists and indigenous peoples. Figures for 'life-cycle greenhouse gas reductions' from biofuels tend to be based on non-systemic micro-studies, which look at individual fields or plantations but do not consider the wider impacts. On a small scale, locally produced and used, biofuels can play a role in meeting the needs of low-energy communities – using, for example, intercropping, or biogas from manure or sewage. If we try to replace a significant proportion of our fossil fuel use with agrofuels the impacts which are already severe, will become irreversible.

Five reasons why agrofuel expansion will make global warming worse:

Deforestation and peat destruction. The demand for biofuels is pushing up commodity prices worldwide. This is driving monoculture expansion, including palm oil, soya and sugar cane, crops already linked to the destruction of tropical forests and other vital ecosystems. Deforestation causes at least 18% of global greenhouse gas emissions. According to the Intergovernmental Panel on Climate Change, the destruction of peatlands causes even more emissions than deforestation.

Climate system impact. Ecosystem destruction worsens climate change not just because it releases vast quantities of carbon: A recent Australian study found that, in southern Queensland, land clearance accounts for half of the regional warming and loss of rainfall in the worst affected areas. A similar warming and drying effect could soon lead to a failure in the rainfall cycle on which the Amazon forest depends. If this was to happen, then up to 120billion tonnes of carbon could be

released over a few years or decades, and rainfall systems on which much of Latin America and the southern US depend for farming could collapse, too.

Biodiversity is essential for supporting the Earth's carbon cycle, nitrogen cycle, water cycle and soil fertility, on which we depend for our survival. Agrofuels mean a shift from biodiverse ecosystems and farming systems to more industrial monocultures. GM crops and trees used for agrofuels pose further unpredictable risks to biodiversity.

Industrial agriculture is responsible for some 14% of global greenhouse gas emissions, and for most nitrous oxide emissions – a greenhouse gas nearly 300 times as powerful as carbon dioxide. More agrofuels means more nitrate fertiliser and thus more nitrous oxide.

Second-generation agrofuels. If second-generation agrofuels become commercially available, this will greatly increase pressures on the world's forests. Eucalyptus, poplars and other trees will probably become prime feedstocks. Industrial tree plantations are displacing ecosystems and communities, depleting freshwater supplies, increasing the use of agrochemicals with serious health impacts on people, and wiping out biodiversity. Plantation growth could increase exponentially if it was to become a source of transport fuels – and much of this could be GE trees.

Five reasons why agrofuels undermine climate justice:

The South fuels the North. Most agrofuel expansion is planned in the global South, but most of the demand comes from the global North. Tens and perhaps hundreds of millions of hectares in Asia, Latin America and Africa are to be converted to monocultures, largely to grow fuel for car drivers in the North.

Harming food security and food sovereignty. The UN Special Rapporteur for the Right to Food has called biofuel production a 'crime against humanity' because it displaces food production, drives up food prices and threatens the food security of large numbers of poor people.

Land grab and refugees. The Chair of the UN Permanent Forum on Indigenous Issues has warned that up to 60 million indigenous peoples are at risk of becoming 'biofuel refugees'.

Policies imposed by Northern governments. The agrofuel market is being driven by government targets and obligations in the US, Europe and elsewhere, which have been imposed without taking account of the views of communities in the global South, including indigenous peoples, who are being directly affected by those decisions. Now, 'standards' and 'certification' are being discussed in a similar undemocratic and unrepresentative way.

Ecological devastation. Large-scale agrofuels mean faster global warming, more deforestation, freshwater depletion, biodiversity losses and soil degradation. They also mean more poisoning from agro-chemicals. Communities in the global South and indigenous peoples are the first to bear the brunt of climate change and environmental destruction.

> **We need real and just solutions to climate change – deep cuts in fossil fuel burning and in the consumption of energy, forest products and agricultural commodities in the global North. Economies based on economic growth are unsustainable. We also need large-scale transfer of funding from unsustainable energy sources like fossil fuels and agrofuels to truly sustainable ones such as solar and wind power.**

World Rainforest Movement, www.wrm.org.uy
Grupo de Reflexion Rural Argentina, www.grr.org.ar
Biofuelwatch, www.biofuelwatch.org.uk
Walhi Jambi (Friends of the Earth Jambi)
http://www.walhi.or.id/ttgkami/ed/wjambi_prof
Watch Indonesia, http://www.watchindonesia.org/