ARGENTINEAN SOY BIOFUELS FOR THE UK FISHING FLEET?

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and
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Background:

The Sea Fish Industry Authority (Seafish) have launched a project with Regenatec and Camborne School of Mines to develop biofuels for the UK fishing fleet. This project is partly funded by the European Union through the Financial Instrument for Fisheries Guidance (FIFG). Seafish manages the project on behalf of Defra.

Feedstock sources are locally sourced used vegetable oil as well as soya from Argentina. Used vegetable oil can only meet a very small proportion of the demand, so most of the biofuels would come from Argentinean soya.

The feedstock demand created by converting all or part of the UK fishing fleet to biofuels will be in addition to the massive biofuel expansion for transport fuels, with the EU planning to increase biofuel use from around 1% to 10% of all road transport fuel by 2020.

Is Europe's biofuel expansion sustainable and climate friendly?

Even the relatively low current share of biofuels has resulted in the EU becoming a net importer of both soya and palm oil, and in the expansion of both palm oil and soya plantations, particularly in Latin America and South-east Asia. Biofuel expansion means a massive increase in intensive monoculture production. This is accelerating the destruction of rainforests, peatlands and other natural ecosystems. NASA have shown that the rate of Amazon deforestation directly correlates with the world market price of soya [**http://tinyurl.com/2pfga4**] That price is expected to rise sharply as demand for soya biodiesel grows. Even though Seafish do not intend to source soya from the Amazon region, increased soya imports are likely to drive up world market prices and thus, indirectly, cause more destruction in the Amazon. Soya expansion is leading to deforestation not just in the Amazon but elsewhere in Brazil, in Paraguay, Bolivia and Argentina, too. Biofuel expansion is a major threat to the global climate because it is linked to the destruction of old growth forests and other ecosystems which store vast amounts of carbon and are essential for regulating the global climate.

Argentina expands soya monocultures to meet Europe's biofuel demand:

The Argentinean Energy Secretariat expects that the country will be ready to cover 10% of the European demand for biofuels by 2010 [**http://tinyurl.com/ynl2sp**]. By 2008, the Argentinean government expects the country to be able to export 1.2 million tonnes of biofuels. The agricultural attaché to the European Union, has stated that the export of biofuels will soon be the second most important business opportunity for Argentinean producers, and adds: "There will be no way for Europe of to fulfil with its own biodiesel obligations with its own production". Argentina is aggressively promoting biofuel exports through reduced export taxes and rebates, and by supporting massive expansion of soya monocultures.

In the last 15 years the production of soy tripled. In 2005/06 16.1 million hectares were cultivated and above 41 million tons produced. This year production is forecast to increase to 44.5 millions tons. Argentina is the leading global exporter of soy oil. 99% of Argentinean soya is genetically

modified RoundupReady (RR) soya. The EU is one of the principal markets for soya from Argentina.

Soya expansion destroys Argentina's forests:

Soya expansion is the main driver of deforestation in Argentina's semi-arid Chaco forest, and the more humid Yungas forest. Those are extremely biodiverse old-growth forests, which play a vital role in regulating the regions' water cycle and both the regional and the global climate. In Argentina, deforestation is directly linked to more severe droughts, regional warming, and more flash floods. Most of Argentina's remaining forests are at risk of being destroyed for soya plantations, and the rate of deforestation is accelerating. [**http://tinyurl.com/26wt4r**] . Between 1998 and 2002 alone, 500,000 hectares of ancient forests were converted to soya plantations. [**http://tinyurl.com/28upep]** . Some members of Argentina's biofuel and soya industry openly promote deforestation. Hector Huergo, member of the executive board of the Argentinean Biofuels and Hydrogen Association said in September 2006: "if Argentina wants to compete effectively in the global agricultural commodity market, needs to deforest where it is possible and cultivate soybean...We will take as much advantage as possible of the land, to transform energy from the sun into energy for biofuels." [http://tinyurl.com/yovs6a] .

Soya monocultures poison water, soil and communities:
RoundupReady soya is grown on large plantations with minimum labour, using no-till agricultural methods. A machine drills the seed into the soil, without ploughing the land. All other vegetation is destroyed by aerial spraying with highly toxic pesticides. Pesticide poisoning of people living close to the plantations is common [http://tinyurl.com/yu8ufg]. Frequently, fields next to plantations are poisoned and local people become unable to grow food. Jorge Rulli, from Grupo de Reflexion Rural Argentina said in a radio programme in March 2007:
"Where the soybean reigns, the people doeing aerial spraying of pesticides to not stop when they fly over populations with their toxic loads. The effects of sprayed agrochemicals become visible in the malformations, the patients of cancer, the asthma or the generalized respiratory diseases".

Very little crop residue is left in the soil after harvesting, leading to soil erosion and, eventually to desertification, which is already a serious problem in large parts of the country.

Biofuels from soya threatens to accelerate global warming:

According to the Stern Review, deforestation and agriculture together account for around one third of all human emissions of greenhouse gases. Old growth forests store vast amount of carbon which enter the atmosphere if land is converted to soya plantations. The Chaco may be the largest carbon store outside the tropics in the Southern Hemisphere, according to scientists. Cutting large parts of that forest down for soya plantations will therefore accelerate global warming.

Soya monocultures are also linked to large emissions of nitrous oxide. This is a greenhouse gas which is about 300 times as potent as carbon dioxide – it is the third most important greenhouse gas in the atmosphere. Most of the soya in Argentina is grown under no-till systems, and one study [**http://tinyurl.com/2okhhs]** has shown that nitrous oxide emissions are greater with no-till than with other cultivation systems. Moreover, different studies suggest that legume monocultures, such as soybeans, are linked to considerably larger N2O emissions than either pasture or grain crops.

Far from being climate friendly, biofuels from Argentinean soya are linked to large-scale greenhouse gas emissions from deforestation and nitrous oxide, as well as from the loss of soil carbon and of natural vegetation other than forests.

Soya, human rights and food sovereignty:

As soya plantations are expanded, rural communities are forced off their lands and into cities, either by violent means, or due to the loss of their traditional food production. In the past ten years, land which was used for daily industry, cereals and vegetables has been converted to soybean plantations. The advent of GM soy and no-till farming methods, around 1998, has made the situation worse because very little labour is required, and small farmers cannot afford the expensive machinery needed for direct drilling. Many people have sold or rented out their land at very low prices, and those left unemployed have been forced into the slums of the cities. Others have been driven out with threats and violence. Land has been acquired by "sowing pools", investor groups that have replaced contractors and bring in their own employees to grow soy.

Between 1998 and 2002, 60,000 productive farming units disappeared in the Pampas region alone [**http://tinyurl.com/28upep**].

Food sovereignty in Argentina is seriously threatened by the export model exemplified by soya. The Argentine diet used to include plenty of cheap meat, dairy produce, lentils, beans and other vegetables. Mixed farming, with animals and crops, using rotation, provided good yields, but received no support from the government. In recent years, the production of food staples has been replaced by soy, and they are now being imported, which has led to far higher prices for the population. 15% of Argentina's population – 5.5 million people – lacks minimum food requirements. To overcome the hidden hunger among a country's population, food aid programmes have been organised, often consisting of soybean derivatives, which are of little nutritious value.

Conclusion:

Biofuels from Argentinean soya are not sustainable, clean energy. Under the Kyoto Protocol, the UK can 'reduce' its own greenhouse gas emissions by importing goods linked to high emissions in poor countries – even if the real impact is one of accelerating global warming. This is clearly not an acceptable climate change strategy!

If the UK fishing fleet was converted to run on soya oil from Argentina, this would lead to more soya expansion. It would cause more greenhouse gas emissions greenhouse gas emissions from deforestation and fertiliser use, more rural communities losing their livelihoods, more pesticide poisoning, pollution and soil erosion.