
Corporate smart agriculture

As the UN climate negotiations in December approach, there's only one major intergovernmental initiative on climate and agriculture, and it is controlled by the world's largest fertiliser companies. The Global Alliance for Climate Smart Agriculture, launched in 2014 at the UN Summit on Climate Change in New York, is the result of several years of efforts by the fertiliser lobby to block meaningful action on agriculture and climate change.

The fertiliser industry's policy coup has been partly possible because its role in climate change is severely underestimated. People associate Shell with fracking, not the Norwegian company Yara. But it is Yara that coordinates the corporate lobby for shale gas in Europe and it is Yara and other fertiliser companies that suck up most of the natural gas produced by the fracking boom in the US.

Fertilisers, especially nitrogen fertilisers, require an enormous amount of energy to produce and generate about 1-2% of global greenhouse gas (GHG) emissions. Chemical fertilisers destroy the natural nitrogen in soils, so farmers have to use more fertilisers every year to sustain yields. Over the past 40 years, the efficiency of nitrogen fertilisers has decreased by two thirds and their consumption per hectare has increased 7-fold. Furthermore, supplies of nitrogen fertiliser, which is produced almost entirely from natural gas, are expected to grow nearly 4% per year over the next decade. New studies show that the rate of nitrous oxide (N₂O) emissions, a gas that is 300 times more potent as a greenhouse gas than carbon dioxide (CO₂), increases exponentially as more fertiliser is applied. Fertiliser use is expanding fastest in the tropics, where soils generate even higher rates of N₂O emissions per kg of nitrogen applied, particularly when the soils have been deforested.

There is a growing body of evidence that shows that farmers can stop using chemical fertilisers without reducing yields by adopting agroecological practices. As a response, fertiliser companies have moved aggressively to control the international debate on agriculture and climate change, and to position themselves as a part of the solution.

Fronting for fertilisers

The fertiliser industry is dominated by a handful of corporations. Yara, which is over 40% owned by the Norwegian government and its state pension fund, dominates the global market for nitrogen fertiliser, while US-based Mosaic and a few companies in Canada, Israel and the former Soviet Union operate cartels that control the global potash supply. Mosaic is also the leading producer of phosphates.

These companies are represented by a number of lobby groups. The main ones at the global level are The Fertiliser Institute, the International Fertiliser Industry Association and the International Plant Nutrition Institute. Fertiliser companies are also represented by energy consumer lobby groups such as the International Federation of Industrial Energy Consumers. Yara chairs its Gas Working Party,

which, in collaboration with Fertilisers Europe, is lobbying heavily for shale gas development in the European Union.

In North America, Yara and other fertiliser companies and lobby groups co-founded the Alliance for Sustainable Agriculture ("Field To Market") alongside other major food and agribusiness companies like Walmart, Kellogg's, and Monsanto. Also active in this alliance are big US environmental NGOs, such as the Environmental Defense Fund (EDF) and The Nature Conservancy (TNC). These NGOs work directly with Yara, Mosaic and other fertiliser companies on "climate smart" fertiliser efficiency programmes. The same NGOs and fertiliser front groups are behind Solutions from the Land, a US alliance of agribusiness corporations and corporate farmers established to prevent environmental regulations that could affect the industry. In early 2015, Solutions from the Land changed its name to the North American Alliance for Climate Smart Agriculture and now acts as the regional coordination for the Global Alliance for Climate Smart Agriculture.

Moreover, Yara is particularly active within the World Economic Forum (WEF) where it chairs the WEF's Climate Smart Agriculture working group, through which it coordinates the implementation of "climate smart" fertiliser programmes with Nestlé, PepsiCo, Syngenta and other companies in Asia and Africa. Yara is also working with these companies in developing programmes in Africa (called Grow Africa) and in Mexico (called Grow Mexico).

Fertiliser companies also collaborate with the research centres of the Consultative Group for International Agricultural Research (CGIAR) on various climate smart initiatives in the Global South, such as the "Climate Smart Villages" programme that the Mexico-based International Maize and Wheat Improvement Center (CIMMYT) runs in collaboration with the International Plant Nutrition Institute. The relationship extends to the Alliance for a Green Revolution in Africa (AGRA) funded by the Bill Gates Foundation and which has several areas of cooperation with the CGIAR and the fertiliser industry, such as the African Green Revolution Forum that was established by Yara and AGRA in 2010.

The main vehicle for the promotion of fertilisers in the Global South, however, is the International Fertiliser Development Center (IFDC) which was established in Alabama, US, in the 1970s and is funded by several fertiliser companies, including Yara. IFDC lobbies governments for policies that increase fertiliser use and promotes different fertiliser application techniques, such as integrated soil management that AGRA, the World Bank and other funding agencies have embraced as "climate smart".

All of these various corporations, agencies, front groups and alliances have converged to promote "climate smart agriculture" as the official response to climate change. The UN's Food and Agriculture Organisation (FAO) first coined the term in 2010 as a means to attract climate finance to its agricultural programmes in Africa. Yet, the term only became significant in international policy circles in 2012 after the second Global Conference on Agriculture, Food Security and Climate Change, organised by the World Bank and FAO and hosted by the Government of Vietnam.

The choice of Vietnam was no accident. Yara and other food and agribusiness multinationals of the WEF had recently launched a major public-private partnership with the Vietnamese government under which these corporations were given exclusive responsibility over the "value chains" of the country's main export commodities. The Vietnam programmes were adopted as WEF's first pilot project for climate smart agriculture, which Yara was tasked with overseeing.

By the time of the next Global Conference in South Africa a year later, the fertiliser lobby and its allies

had produced a plan for the creation of an Alliance for Climate Smart Agriculture to be formally presented at the UN Climate Summit in September 2014 as the international community's main platform for action on climate change and agriculture. The US State Department then took the lead in moving the plan forward.

Today the Global Alliance for Climate Smart Agriculture is stacked with fertiliser companies, front groups and NGOs and companies that work directly with them. Its Steering Committee includes Yara, Mosaic, EDF and TNC, as well as the governments of Norway and the US.

Pollution as the solution

There is no precise definition for "climate smart agriculture", and deliberately so. The Global Alliance for Climate Smart Agriculture instead leaves it to its members to determine what "climate smart agriculture" means to them.

The FAO, one of the leading organisers of the Alliance, produced a sourcebook and an accompanying list of ten climate smart agriculture "success stories". All of the examples are top-down extension programmes, including a nitrogen fertiliser application technique that focuses on small farmers in the Global South. The CGIAR has a similar set of climate smart "success stories" that focus on the Global South, promote the use of fertilisers and GMOs, and make no mention of agroecology. Most climate smart agriculture initiatives, however, come directly from the private sector, through alliances between the major agribusiness and food companies.

What this means on the ground can be seen in the model project that Yara is implementing with PepsiCo on the plantations that supply oranges for its Tropicana juices. Under the project, PepsiCo gets these plantations to purchase Yara's "low carbon footprint" branded nitrogen fertilisers, which are supposed to produce less fertiliser run-off. These "premium branded fertilisers" were developed by Yara "in order to avoid a situation where only organically produced food would gain the climate brand of approval".

Perversely, in Africa, where much of the attention of the Global Alliance is focussed, the fertiliser industry and its allies maintain that increasing the use of fertilisers is a "climate smart" way to reduce greenhouse gas emissions. Yara and Syngenta are running trials in Tanzania to show that increasing yields with chemical fertilisers and hybrid seeds "reduces the need for deforestation, thereby avoiding GHG-emissions". Africa however is not merely of interest to the fertiliser industry as a way to deflect attention from agricultural emissions in industrialised countries. It is the world's fastest growing market for chemical fertilisers and an important new source of natural gas reserves, especially on the east coast between Tanzania and Mozambique. Yara is a leading player in initiatives to promote large-scale industrial agriculture in Africa, such as the WEF's Southern Agricultural Growth Corridor project in Tanzania, where Yara is coincidentally in talks with the government for the construction of a new US\$2.5 billion nitrogen fertiliser plant.

Dramatic and rapid reductions in GHG emissions can be achieved in our food systems without major economic consequences for people. The elimination of chemical fertilisers is one of the easiest and most effective places to start. Doing so would improve livelihoods for farmers, provide more nutritious foods, protect the ozone layer and help provide safe water systems. There are plenty of studies showing that farmers using simple agroecological practices can produce as much food without chemical fertilisers on the same amount of land.

Kicking the fertiliser habit is not a technical problem; it is a matter of politics. No meaningful action

can occur until the fertiliser industry's grip on policy makers is loosened. Let's start making this happen by shutting down the Global Alliance for Climate Smart Agriculture and booting the fertiliser companies out of the COP21 in Paris.

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