



**Friends of
the Earth
Europe**

for the people | for the planet | for the future



Marriages made in hell – why agribusiness mega-mergers must be stopped

**How the proposed mergers of Bayer with
Monsanto, Dow with DuPont, and ChemChina
with Syngenta threaten European farmers,
workers, consumers, the environment, and food
security.**

March 2017

Marriages made in hell

Why agribusiness mega-mergers must be stopped

Introduction

The proposed merger between the German chemical giant, Bayer, and the US chemical and seed company, Monsanto, has set alarm bells ringing, **threatening major consequences for European farmers and farm workers, consumers, the environment, and food security.**

Yet the deal is just part of an on-going consolidation in the agribusiness sector, which is seeing a series of proposed mergers. If allowed to go ahead, these could result in three mega-companies **controlling 60% of the global market in commercial seeds and agricultural chemicals**¹ – with unprecedented influence over democratic governments. It raises serious questions not just about market power and the impact on competition, but also about the entire future of farming in Europe.

Friends of the Earth Europe believes that regulators must **not approve these mergers.** The European Commission, whose role is to prevent anti-competitive agreements, must step in to protect the interests of European farmers and consumers, and the future of our food.

The companies involved

1) Bayer-Monsanto

The German Bayer Group is the tenth-largest chemical producer worldwide, and its Crop Science division is the second biggest producer of pesticides and agro-chemical inputs.² Its \$66 billion offer for the US company Monsanto was accepted in September 2016, but must now be approved by regulators. Monsanto is the world's biggest seed manufacturer, and specialises in genetic traits, dominating the market in genetically modified (GM) seeds. It is the fifth largest manufacturer of pesticides, including the top selling herbicide glyphosate (sold as Round-up). The merger would make Bayer-Monsanto the world's biggest agro-chemical company, controlling over a quarter of the global seed and agro-chemicals markets,³ with combined sales in seeds and agro-chemicals of almost \$25 billion (on 2015 figures).⁴

2) Dow-DuPont

Before the Bayer and Monsanto merger was announced, the deal between Dow Chemicals and DuPont was set to create the world's largest integrated agro-chemical and seeds company. DuPont is the world's second-biggest seed manufacturer; Dow is fifth. Concerns about the combined companies' dominance has triggered an in-depth investigation by the European Commission.⁵ Both companies have invested in "gene editing" technologies (to create a new generation of GM crops), and combined they could dominate these technologies. Their combined agro-chemical and seed sales represent a further quarter of the global seed market, valued at over €18 billion in 2015.⁶

¹ https://www.boell.de/de/2017/01/10/monsanto-und-co-pestizide-und-saatgut-als-milliardengeschaeft?utm_campaign=ds_konzernatlas

² ETC Group, Possible impacts on food security and nutrition of recent developments in agribusiness market concentration, Rome, 2016

³ Bayer-Monsanto sows seeds of doubt among regulators, Financial Times, 30 May, 2016, accessed online 19 January 2017, <https://www.ft.com/content/e76f4d8a-23f2-11e6-9d4d-c11776a5124d>

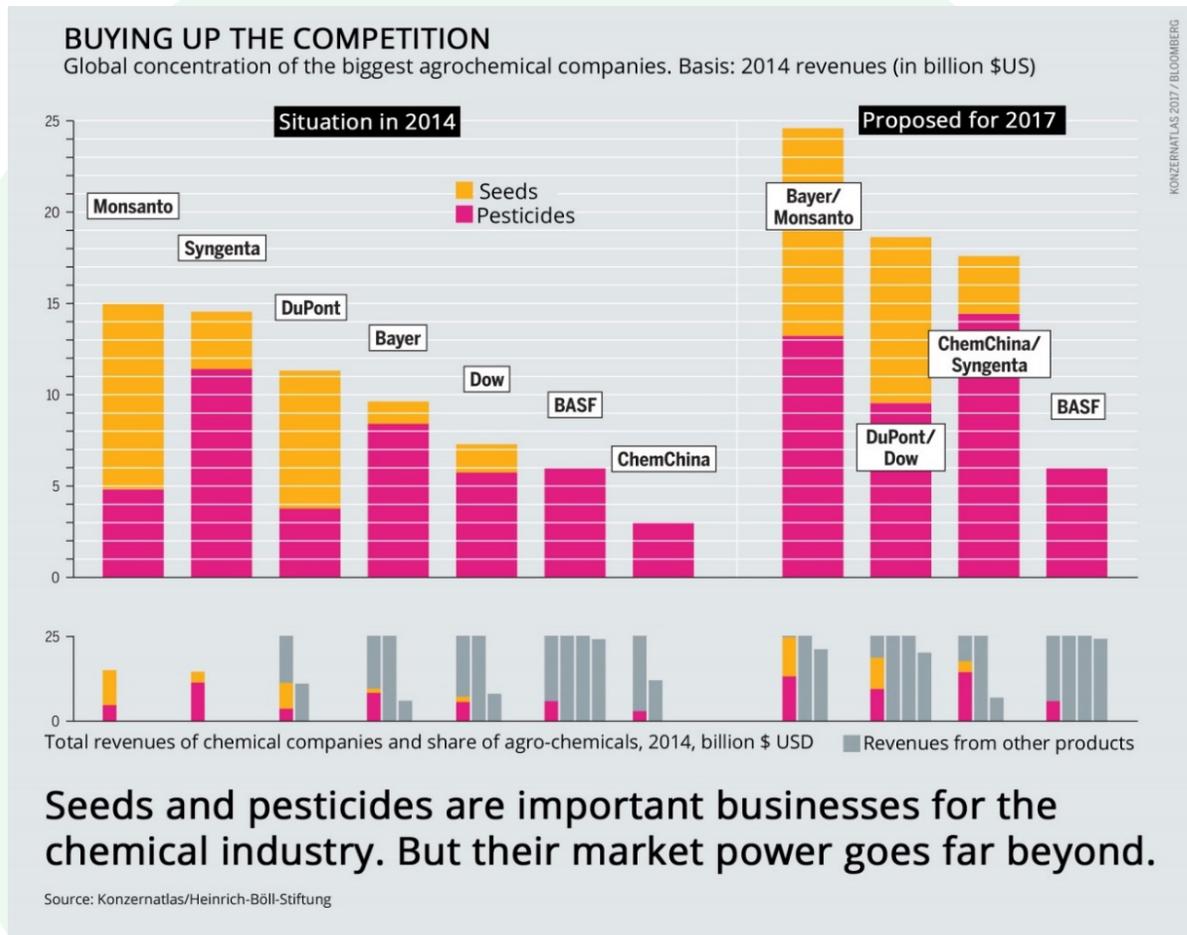
⁴ See: http://www.monsanto.com/investors/documents/annual%20report/2015/2015_annual_report_fullweb.pdf and http://www.annualreport2015.bayer.com/servicepages/downloads/files/entire_bayer_ar15.pdf (pg. 161)

⁵ http://europa.eu/rapid/press-release_IP-16-2784_en.htm

⁶ See http://s2.q4cdn.com/752917794/files/doc_downloads/2015/DuPont_2015_DataBook-FINAL.pdf and <http://www.dow.com/-/media/dow/business-units/dow-us/pdf/2014-dow-annual-report-with-10k.ashx?la=en-us>

3) ChemChina-Syngenta

The Chinese National Chemical Corporation (ChemChina) is China's largest chemicals company.⁷ It owns the world's seventh-largest agro-chemical company, ADAMA, a specialist in generic (non-brand) agro-chemicals. Its \$42 billion offer for the Swiss agribusiness company Syngenta, the world's biggest manufacturer of pesticides and third-biggest seed producer, was accepted in February 2016.⁸ Combined, the two companies' agro-chemical and seed sales in 2015 amassed to more than €15 billion.⁹ The deal's impact on the agro-chemical market is being investigated by the European Commission.¹⁰



Source: Konzernatlas/Heinrich-Boll Stiftung¹¹

Increased market dominance

The three mega-mergers all require approval from the EU's competition authorities, with decisions on Dow-DuPont and Syngenta-ChemChina expected in 2017. The EU Merger Regulation requires mergers to be examined if the combined market share within the EU is above 15%, or above 25% in the case of vertically related markets (where the combined company sells a chain of linked products, for example pesticide components and pesticides).¹²

⁷ http://www.chemchina.com.cn/en/gywm/jtj/A601601web_1.htm

⁸ <https://www.syngenta-growth.com/en/home/>

⁹ <https://www.ft.com/content/e76f4d8a-23f2-11e6-9d4d-c11776a5124d>

¹⁰ http://europa.eu/rapid/press-release_IP-16-3579_en.htm

¹¹ https://www.boell.de/de/2017/01/10/monsanto-und-co-pestizide-und-saatgut-als-milliardengeschaeft?utm_campaign=ds_konzernatlas

¹² http://ec.europa.eu/competition/mergers/overview_en.html

All three deals raise concerns about the effect on competition within the markets for seeds, pesticides and other chemical inputs. Monsanto alone already controls an estimated 24% of the vegetable seed market in Europe.¹³ Bayer, Dow, DuPont, Monsanto, and Syngenta, together with French company Limagrain, account for 60% of European seed sales.¹⁴

The merged companies would also own a dominant share of seed and genetic trait patents, effectively controlling access to the development of new seeds. Together Bayer and Monsanto own 16% of all EU plant patents (2015).¹⁵

This market dominance not only affects the choice and price of seeds, pesticides and other inputs, but will result in less diverse information and advice for farmers, and would allow a handful of companies to further shape the way that food is grown in Europe.

The combined market power of these big companies, which all have a vested interest in promoting an input-based intensive monoculture model of farming, will be able to drown out alternative voices in political debate. To halt the rapid loss of biodiversity and make our food systems more resilient to climate change, we urgently need to make Europe's farms and landscapes more diverse – not the monoculture approach these companies promote.

“Whoever controls our seeds, controls life” – Vandana Shiva, scientist and activist

More lobby power

The mega-mergers will further increase the lobbying power and influence of these companies, which already use an army of lobbyists, trade associations, PR professionals and scientists to influence debates in the EU.¹⁶ Agri-business lobbyists fought against restrictions on glyphosate for example, undermining World Health Organisation science on the health risks of glyphosate; they lobbied to privatise seeds, winning exclusive rights over the use and breeding of seeds; and they attacked the rules on safety assessments for GM crops.¹⁷

Entries in the EU Transparency Register show that Monsanto and Bayer have a combined lobby spend of more than €2 million,¹⁸ and that Bayer employs 19 people to work on lobbying, securing 17 meetings with the European Commission in 2015.¹⁹ This is in addition to the many trade associations through which they work.

Dow's lobby spend is registered as over €3.75 million for 2015, and the company secured 26 meetings with the European Commission that year.²⁰ Syngenta declared spending €1.5 million on lobby activities in 2015²¹ – its EU relationships would provide ChemChina with valuable access to the EU.²²

¹³ Ivan Mammana, Concentration of market power in the EU seed market, The Greens/EFA Group, 2014

¹⁴ <https://uk.finance.yahoo.com/news/over-60-seeds-market-share-164300117.html>

¹⁵ https://www.boell.de/de/2017/01/10/monsanto-und-co-pestizide-und-saatgut-als-milliardengeschaeft?utm_campaign=ds_konzernatlas

¹⁶ https://corporateeurope.org/sites/default/files/attachments/monsanto_v09_web.pdf

¹⁷ https://corporateeurope.org/sites/default/files/attachments/monsanto_v09_web.pdf

¹⁸ See: <http://stage.lobbyfacts.nestor.coop/representative/4193629ab768429489b9f3d8e7a21e13/bayer-ag> +

<http://stage.lobbyfacts.nestor.coop/representative/5a83278603e449fa9475505716ed7794/monsanto>

¹⁹ <http://stage.lobbyfacts.nestor.coop/representative/4193629ab768429489b9f3d8e7a21e13/bayer-ag>

²⁰ <http://stage.lobbyfacts.nestor.coop/representative/fad762cef5ba4685937ab10626026631/dow-europe-gmbh>

²¹ <http://ec.europa.eu/transparencyregister/public/consultation/displaylobbyist.do?id=16822412339-79>

²² <http://stage.lobbyfacts.nestor.coop/representative/7dd7b8d433c84c54bac4f56f45512d49/syngenta-international-ag>

Lobbying for TTIP

During negotiations for the Transatlantic Trade and Investment Partnership (TTIP) between the European Union and the United States, the agribusiness sector lobbied the European Commission more than any other sector, with at least 171 encounters with DG Trade over a two-year period. This privileged access shows how much influence agribusiness already has in EU decision-making processes. The proposed mergers, if they happen, would only increase this.²³



Source: Corporate Europe Observatory

Impacts on farmers and the environment

This level of market dominance spells bad news for farmers – with less diversity in seeds and less choice. Price increases are likely due to reduced competition, and the range of pesticide options could be restricted.²⁴ Farmers could find themselves reliant on one of three big companies for their seeds, inputs and technical advice, as prices rise and options narrow.²⁵ Small seed companies, already under pressure, could be squeezed out.

Small farmers and organic producers would be increasingly vulnerable in a market that favours large-scale intensive monoculture production using chemical inputs – with farmer-managed seed systems and seed saving marginalised. Smaller mixed farms will be at risk.

These companies are also looking to extend their power and control over the food chain by investing in “data farming”. Bayer, Monsanto, Dow, DuPont and Syngenta are all developing data platforms with technology companies, which could give them even greater control over farming practices. Data farming allows the companies to collect and analyse data on soil, weather and plant health and to use this to advise and supply farmers.²⁶ This gives the companies enormous power over farmers, who are likely to find themselves tied into whole chains of products, limiting their freedom to choose the inputs and methods they use.

Monsanto has described the data gathered as the “glue”²⁷ that connects its breeding, biotechnology, chemistry and microbe businesses.²⁸

The mergers would allow the companies to combine their systems and data, increasing their power and control over farmers.

“Bayer would be able to decide virtually single-handedly what is grown in our fields and ends up on our plates” – Molly Scott Cato MEP²⁹

²³ <https://corporateeurope.org/international-trade/2015/07/ttip-corporate-lobbying-paradise>

²⁴ <http://www.marketwatch.com/story/bayer-monsanto-tie-up-not-good-news-for-anyone-who-eats-or-grows-food-2016-05-24>

²⁵ <https://thewire.in/73281/bayer-monsanto-deal-impact-concentration-seeds-agri-chemicals-industries-farmers/>

²⁶ <http://www.dowagro.com/en-us/usag/news-and-resources/newsroom/2016/march/03/dow-agrosciences-puts-growers-at-the-center-of-a-new-precision-agronomy-program>; <https://blogs.adobe.com/aemmobile/2016/08/duPont-is-putting-the-latest-agricultural-product-information-at-the-fingertips-of-farmers-everywhere.html>; <http://www.pnewswire.com/news-releases/syngenta-acquires-ag-connections-to-enhance-whole-farm-management-for-growers-300161138.html>; <http://www.digitalfarming.bayer.com/bdf-farming-tool.html>; <http://uk.reuters.com/article/us-farming-digital-idUKKCN0XV0KP>

²⁷ <http://www.reuters.com/article/us-monsanto-farming-data-idUSKCN10S1Q4>

²⁸ http://www.monsanto.com/investors/documents/2015/2015-11-17_bie/digital-ag-stern_2015.11.17.pdf

²⁹ <https://www.ft.com/content/c815119c-6f4f-11e6-9ac1-1055824ca907>

Wildlife under threat

The proposed mega-mergers are particularly alarming given that Europe's wildlife is already under serious threat from industrial farming practices – supported by the current Common Agricultural Policy (CAP). The risks to wildlife will be exacerbated if these mergers go ahead.

Farmland covers more than two-thirds of the EU's land surface,³⁰ and agriculture practices have been identified as one of the main threats to wildlife habitats.³¹ Almost a third of Europe's bird species are under threat or in decline, with industrial agriculture and water pollution to blame.³²

Pollinating insects are also at risk, with agro-chemicals contributing to the decline. A sixth of Europe's bee population was wiped out between 1985-2005,³³ and the threat of extinction hangs over a quarter of bumblebee species.³⁴ Studies show that neonicotinoid pesticides promoted by Bayer and Syngenta pose a "high acute risk" to Europe's bees. In 2013 the European Commission restricted the use of Bayer's imidacloprid, which the company had previously claimed was safe.³⁵

There is an urgent need to reform agricultural policy to support a transformation to more local sustainable farming, using ecologically sensitive practices to boost wildlife rather than destroy it.³⁶ But the mega-mergers being proposed will increase the reliance on these agri-giants, the political power of the intensive farming lobby, and put biodiversity and the future of small farmers and organic growers at risk.

“A wholesale transition to diversified agroecological food and farming systems does not hold obvious economic interest for the actors to whom power and influence have previously accrued” – International Panel of Experts on Sustainable Food Systems (IPES-Food)³⁷

Impacts on our food

Rising prices and reduced choice for seeds and inputs for farmers will have a knock-on effect on the food we eat, reducing choice and potentially pushing up prices, not just in Europe but also in the Global South.³⁸ Consumers could see fewer varieties on shelves and farmers will be able to buy fewer crop and seed varieties and so will struggle to meet consumer demand for diverse, healthy, affordable, quality food produced in an ecologically sound manner. Organic food supplies could be threatened.

Consumers already face worryingly high levels of potentially hazardous agro-chemicals in their diets. Glyphosate, which has been found in food and human urine,³⁹ is considered a possible carcinogen,⁴⁰ and has also been linked to liver and kidney disease.⁴¹ Pesticide exposure has also been linked to Alzheimer's disease, asthma, birth defects and learning and development disorders.⁴²

³⁰ http://www.eea.europa.eu/publications/state-of-nature-in-the-eu/at_download/file (p151)

³¹ http://europa.eu/rapid/press-release_IP-15-4965_en.htm?locale=en

³² http://ec.europa.eu/environment/nature/pdf/state_of_nature_en.pdf

³³ http://www.step-project.net/img/uplf/STEP_factsheet_ENG.pdf

³⁴ European Red List of Bees, IUCN, http://cmsdata.iucn.org/downloads/erl_of_bees_low_res_for_web.pdf

³⁵ <https://www.theguardian.com/environment/2016/jan/07/eu-scientists-begin-review-ban-pesticides-linked-bee-declines>

³⁶ From Uniformity to Diversity, International Panel of Experts on Sustainable Food Systems, June 2016, (p3)

³⁷ From Uniformity to Diversity, International Panel of Experts on Sustainable Food Systems, June 2016, (p58)

³⁸ <https://www.theguardian.com/global-development/2016/sep/26/farming-mega-mergers-threaten-food-security-say-campaigners>

³⁹ <http://www.globalresearch.ca/results-of-glyphosate-urine-test-its-not-good-news-glyphosate-in-water-and-food/5525529>

⁴⁰ <https://www.scientificamerican.com/article/widely-used-herbicide-linked-to-cancer/>

⁴¹ <http://ehjournal.biomedcentral.com/articles/10.1186/s12940-015-0056-1>

⁴² From Uniformity to Diversity, International Panel of Experts on Sustainable Food Systems, June 2016, (p29)

There are also consumer concerns that the merger between Bayer and Monsanto will increase pressure to grow GM crops in Europe.⁴³ Monsanto is currently the global leader in selling GM seeds, but its GM technology has faced widespread opposition from consumers in Europe. Bayer's bid suggests it sees a market for a new generation of GM crops.⁴⁴

This reduced variety in seeds and crops, and increased reliance on agro-chemical farming could have a long-term effect on food sovereignty and the resilience of our food supply as genetic varieties are lost, soil fertility is affected, crops become less diverse, and biodiversity declines – leaving farmers and citizens vulnerable to the impacts of a changing climate, pests and disease.⁴⁵

Recommendations:

Friends of the Earth Europe is calling on the European Commission to *reject the mergers and corporate dominance of the food chain*, by:

- **Examining the three mergers together and recognising the clear threat of market dominance;**
- **Limiting the market power of companies that own seeds and farm inputs, breaking the current oligopoly;**
- **Supporting the shift away from industrial to agro-ecological farming through urgent and complete reform of the Common Agricultural Policy;**
- **Increasing environmental and social safeguards, to ensure agri-business reduces its impact on people, farmers, workers, and the environment;**
- **Preventing corporate capture of decision-making and limiting the disproportionate influence agribusiness has over EU decision-making processes;**
- **Stopping trade agreements that further lock us into industrial models of agriculture.**

⁴³ <http://www.dw.com/en/what-the-bayer-monsanto-merger-means-for-food-farmers-and-the-environment/a-19296103>

⁴⁴ Bayer-Monsanto deal is a bet on GM crop expansion, Financial Times, 27 November 2016

⁴⁵ FAO (2010) The State of the World's Plant Genetic Resources for Food and Agriculture. FAO, Rome.



**Friends of
the Earth
Europe**

for the people | for the planet | for the future

Friends of the Earth Europe

Member Groups

Austria	Global 2000
Belgium (Wallonia & Brussels)	Les Amis de la Terre
Belgium (Flanders & Brussels)	Friends of the Earth
Bosnia & Herzegovina	Centar za životnu sredinu
Bulgaria	Za Zemiata
Croatia	Zelena Akcija
Cyprus	Friends of the Earth
Czech Republic	Hnutí Duha
Denmark	NOAH
England, Wales & Northern Ireland	Friends of the Earth
Estonia	Eesti Roheline Liikumine
Finland	Maan Ystävät Ry
France	Les Amis de la Terre
Georgia	Sakhartvelos Mtsvaneta Modzraoba
Germany	Bund für Umwelt und Naturschutz Deutschland (BUND)
Hungary	Magyar Természetvédők Szövetsége
Ireland	Friends of the Earth
Latvia	Latvijas Zemes Draugi
Lithuania	Lietuvos Zaliuju Judėjimas
Luxembourg	Mouvement Ecologique
Macedonia	Dvizhenje na Ekologistite na Makedonija
Malta	Friends of the Earth Malta
The Netherlands	Milieudefensie
Norway	Norges Naturvernforbund
Poland	Polski Klub Ekologiczny
Russia	Russian Social Ecological Union
Scotland	Friends of the Earth Scotland
Slovakia	Priatel'ia Zeme
Slovenia	Focus
Spain	Amigos de la Tierra
Sweden	Jordens Vänner
Switzerland	Pro Natura
Ukraine	Zelenyi Svit

Friends of the Earth Europe campaigns for sustainable and just societies and for the protection of the environment, unites more than 30 national organisations with thousands of local groups and is part of the world's largest grassroots environmental network, Friends of the Earth International.

**Prepared by Helen Burley, Robbie Blake, Adrian Bebb,
Myriam Douo & Paul de Clerck.**

Friends of the Earth Europe gratefully acknowledges financial assistance from the European Commission for this publication. The contents of this document are the sole responsibility of Friends of the Earth Europe and cannot be regarded as reflecting the position of the funder(s) mentioned above. The funder(s) cannot be held responsible for any use which may be made of the information this document contains.

