# Going against the grain

UK farmers are being prevented from accessing global feed markets, jeopardising our world-leading food industry and threatening to push up prices for UK consumers







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This paper has been prepared by the Agricultural Biotechnology Council (abc), with expert input and advice from individuals and organisations across the agricultural technology, food and farming sectors. The messages and calls to action are supported by leading plant science, farming and agricultural organisations:

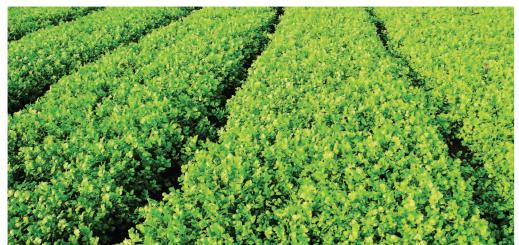








Comprising six member companies, abc works with the food chain and research community to invest in a broad range of crop technologies, including conventional and advanced breeding techniques, such as GM. These are designed to improve agricultural productivity by tackling challenges such as pests, diseases and changing climatic conditions, while reducing water usage, greenhouse gas emissions and other inputs. The companies are BASF, Bayer, Dow AgroSciences, Monsanto, Pioneer (DuPont) and Syngenta. Further information is available at www.abcinformation.org









### Introduction

Support for UK agricultural technology research has increased substantially, but worrying political manoeuvres at a European level are inhibiting the ability of UK farmers to benefit from the technology.

The Council of Ministers and the European Parliament recently passed legislation to enable Member States to introduce national bans on the cultivation of approved GM crops. A proposal on national bans for GM feed and food imports remains on the table despite being rejected by the Parliament.

This report demonstrates that Europe is in danger of becoming the museum of world agriculture if recent trends, which have seen it increasingly abandon evidence-based policy, continue.

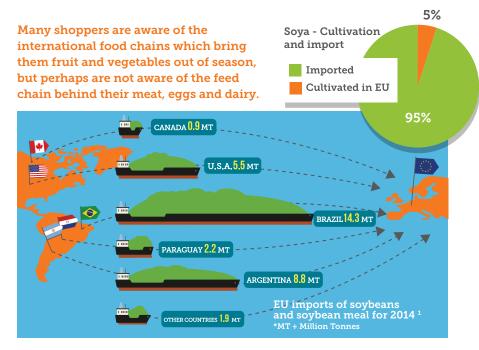
In 2012 a coalition led by the Agricultural Biotechnology Council (abc) published the Going for Growth report. It called for stronger political support to enable the research sector to compete with economic powerhouses around the world who had embraced agricultural technology and were pushing ahead. There have since been a number of very positive steps by the Government to help the UK regain its global competitive edge, culminating in the publication and implementation of the AgriTech Strategy in July 2013. This saw the Government commit to a £70m investment in an AgriTech catalyst fund, and £90m of Government investment in Centres for Agricultural Innovation.

However, after innovative crop research leaves the lab, European farmers are often unable to reap the benefits of the trade and use of GM crops and GM animal feed benefits that other farmers globally are increasingly able to enjoy. This is especially true of the UK's livestock farming which is underpinned by the free trade in animal feed - 95% of soya used in the EU is imported.

The continued backlog in approvals of GM products for import, and the effective break-up of the common market, would therefore have devastating impacts for the future of EU agriculture. Such political decisions at a European level increasingly threaten UK farmers' ability to compete, with knock on effects for jobs and growth in the UK's successful food and farming industries.

This report calls on the Government and all political parties to continue to support an evidence-based approach to agricultural biotechnology and continue to take an active European leadership position on the issue. It also calls for the strong rejection of any proposals for the nationalisation of decision-making on the import and use of GM feed and foods.

# The UK's successful livestock industry relies on imports of feed, including GM...

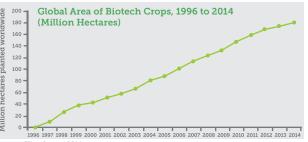


Soybean is the largest source of protein feed in the world. The EU is reliant on imports of soya to meet its demand for feed, partly due to farmers being denied access to grow higher-yielding GM varieties, with 95% of soya used in the EU imported. Currently, each year 60 kilos of soya are imported for every man, woman and child in the EU. Non-GM soya is increasingly becoming a niche product, as the vast majority of soya is imported from outside the EU, where GM soya is commonplace. The problem is not unique to soya, and is mirrored with other sources of feed

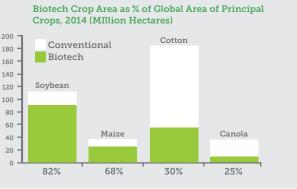
The imported GM soybeans weigh as much as we do – totalling more than 60 kg for each of the EU's 500 million citizens per year, an incredible number of almost 34 million tonnes.<sup>2</sup>

# ...meanwhile, the global uptake of GM crops continues to increase

The number of GM crops grown worldwide has steadily increased over the last 19 years. GM varieties now account for more than 80% of the soybeans and 30% of the maize grown by farmers, much of this in the developing world.<sup>3</sup> GM food crops now in commercial production include soya, maize, canola, sugar beet and papaya.



urce: Clive James, 2014



Source: Clive James, 2014

However, as was the case at the time of publication of the original Going for Growth report, just one—the insect-resistant GM maize MON810 – is currently being grown in some parts of the European Union including Spain, Portugal and Romania. Despite this, all Member States use imported GM feed ingredients.

Globally, farmers growing GM crops outnumber all European farmers, and they grow these crops on a surface bigger than the EU's entire arable land area.<sup>4</sup>

Almost all imports of soya – the prime sources of proteins for European livestock – are provided by South and North American countries where GM technology adoption is over 90%.<sup>5</sup>

#### Case Study - Spain

Spain is the largest grower of GM crops in the EU, and as of 2014 was growing 131,538 hectares of biotech maize.<sup>6</sup> Moreover, there has been a proven record of benefits to farmers and society as a whole; since 1998, thanks to GM maize cultivation, maize imports into Spain have reduced by more than 853,000 tonnes.<sup>7</sup>

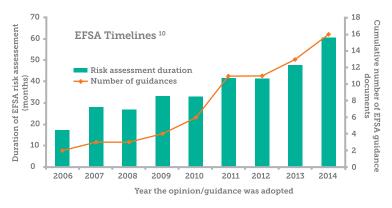
# There is an approvals process for import of GM, but it isn't being allowed to work...

The EU has one of the most onerous approval procedures for the use of GM products in food and farming. First the European Food Safety Authority (EFSA) has to give a positive scientific risk assessment, and there is then a politicised secondary decision-making phase overseen by the European Commission. The EU's authorisation system is already much slower than those in place in exporting countries, and the backlog of GM import applications in the EU approval system is significant.

42
import dossiers
awaiting EU
authorisation

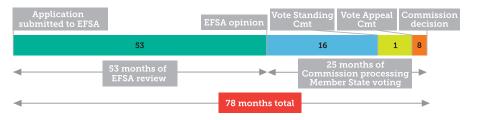
6.5 YEARS Average time the 17 recently approved products had been pending from time of submission to final authorisation<sup>8</sup>

Prior to 17 approvals earlier in 2015, there were zero GM products approved in 2014, and each year since 2010, fewer and fewer GM crops were authorised. The approval delays are not a matter of safety – the crops waiting for authorisation in Europe had undergone a rigorous safety assessment at EU-level and most of them have been approved in a number of third countries which follow similar safety assessments. There also appears to be a correlation between the rapidly increasing risk assessment timelines and the publication of numerous additional EFSA guidance documents, frequently changing what data is required from applicants.

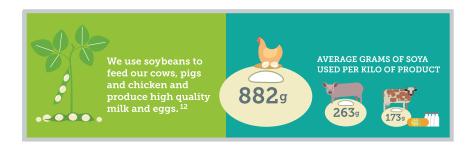


# ...so the backlog of approvals continues to grow and is already affecting trade

The diagram below illustrates the stages of the regulatory process, and demonstrates the average delays inherent in the EU regulatory system.



Any disruption to the trade flows of protein feed restricts farmers' access to essential materials, harming the competitiveness of the European livestock production sector. The necessity for a functioning and reliable approvals system for GM imports has never been so clear. Soya is critical for UK livestock, particularly for use in poultry and pig diets, and GM soya accounts for an increasing proportion of the global soya production market - 94% of all soybeans planted in the US are now GM.<sup>11</sup>



Prices for non-GM soya for feed are already at a premium. Further costs associated with nationalisation proposals would mean further price rises for UK farmers and any price pressures in primary production will impact the onward food supply chain. Ultimately consumers will pay more.

## The projected cost of delays to EU could be severe....

Provided it has been submitted to EFSA for review and approved by a food safety authority in the exporting country, the EU currently allows for feed imports to contain 0.1% of GM material which is currently unauthorised in the EU.<sup>13</sup> However, any backlog of products waiting for political approval, or any delay in the approvals process, creates a problem of 'asynchronous approvals,' whereby EU countries cannot import products found to be safe in other nations. This can result in the rejection of whole shipments at the EU border and contributes to food price volatility. This has significant potential impacts:

600%

The estimated increase in feed expenditure in the event of a two year import interruption if non-EU approved GM soybeans were cultivated in the USA, Argentina and Brazil<sup>14</sup>

The total forecast cost to the economy as a result of unduly delayed GMO import authorisations and the resulting trade disruptions<sup>15</sup>

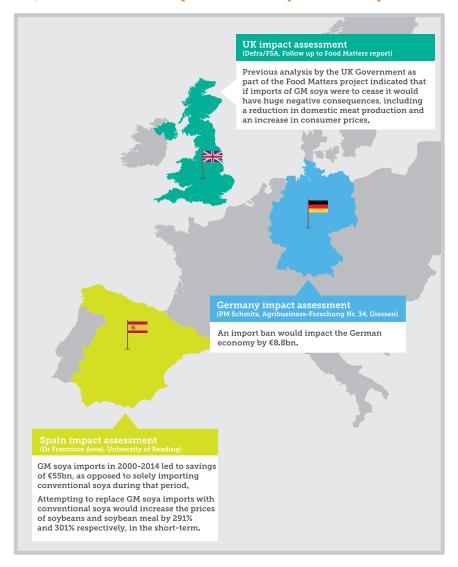


### Case Study - How traces of unapproved GM varieties cost farmers billions in 2009

In June 2009 several bulk shipments of soya from the US were found to contain barely detectable traces of GM maize not yet approved in the EU and were turned away from Germany. This problem was replicated in Spain and the Netherlands, and hundreds of thousands of tons of GM soya were refused entry into Europe. In Rotterdam and Hamburg prices after the incidents jumped about €30-35 per metric ton. After the GM products were authorised in the EU (October, November 2009) soybean prices returned to normal levels within two months. The extra economic cost of feed imports for the livestock sector was estimated by the feed industry to be between €3.5 billion and €5.5 billion.¹6

# ...and will be felt by farmers and shoppers across Europe

An EU-wide import ban for soybeans would impact the EU economy by €26,1bn.<sup>17</sup> Other national impact assessments paint a similar picture:



# Further proposals from the Commission to break up the single market would be disastrous...

The move to allow Member States to restrict or prohibit the cultivation of GM crops on their territory has already threatened the integrity of the single market – one of the fundamental principles of the EU. It has also raised concerns for any innovative industry subject to an EU approval process in Europe. This failure to support the EU's own best science is the single most damaging element for growth, innovation and investment across the EU.

Further proposals to apply the same principle to GM feed and foods would be disastrous for the functioning of intra-EU trade, resulting in huge upheaval and uncertainty for importers, sacrificing the fundamental principle of the internal market by proposing a patchwork of national bans on imports and use of safe products.

Different regulations in different member states would cause issues for segregation of imports, barriers to onwards trading, enforcement/testing costs and a lack of access to the global feed markets enjoyed by farmers outside the EU. Any further barriers to the global trade of animal feed relied on by UK farmers will damage jobs, growth, innovation and competitiveness.

## Price comparison for GM and non-GM soya feed in the UK as of October 2015<sup>18</sup>



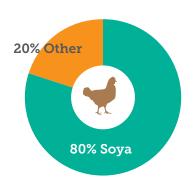
# ...there is a lot at stake, and Britain's agricultural industries stand to lose out

A reliable and functioning trading system brings huge benefits to UK agriculture. The UK is a trading nation and the economy and agri-food industry relies on global relationships. Conversely, if the free market for feed is restricted, it will have a damaging impact, and Britain's agricultural industries will increasingly suffer.

UK animal feed manufacturers succeed in meeting complex nutritional needs across a wide range of species and environments. Over more than 200 years, we have looked to and supported progressive research in both crop and animal production, in particular taking advantage of the availability of nutritional co-products such as soybean meal to deliver balanced diets to meet the performance requirements of the animal

The development and use of GM crops has been a further step in that research and development journey. Without the same level of access enjoyed by producers elsewhere in the world, the UK and EU livestock sector becomes increasingly less efficient and increasingly less likely to be the supplier of livestock products to the UK and EU consumer. This also risks research and development being held back.

#### Global animal feed<sup>19</sup>

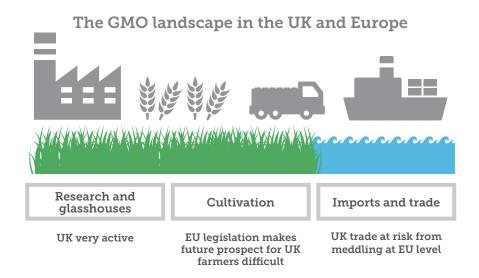


"I certainly do accept that the agriculture industry as we know it would not be viable without the use of imported GM animal feed."<sup>20</sup>

Mark Durkan MLA, Northern Ireland Environment Minister

# The EU approvals system is already deterring innovation and investment

In order to encourage and incentivise innovation, there needs to be as big a market for products as possible. Free trade is essential to underpin innovation, and this is certainly the case in agricultural biotechnologies.



Under the current system, UK innovations are not able to benefit the UK – since the majority cannot be commercialised in Europe, nor imported back into Europe. Not being able to fully realise the benefits of research has an inevitable impact on future investment and undermines the stability of our academic success in the sector.

The malfunctioning EU approval process means there is a lack of certainty or reliability in the regulatory system. This acts as a deterrent to private sector investment, and consequently there has been a slowdown in the number of new GM product applications for cultivation submitted for approval each year.

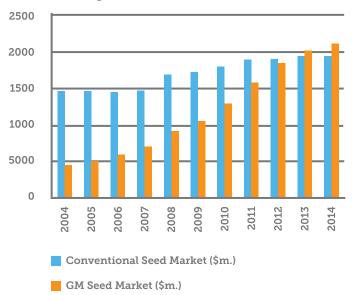
### ...while the global biotech seed market continues to be driven by our international competitors

The global biotech seed market continues to grow at a rapid rate. However, this growth continues to be driven by economic powerhouses such as India, China and the US whilst Europe has been left behind.

The EU obstructed approval process has deterred private sector investment. The recent cultivation directive risks exacerbating the problem; meaning Europe and the UK are shut out of one of the most exciting markets and condemning Europe to becoming the museum of world agriculture.

The EU situation has not improved since the Going for Growth report in 2012, and the worsening delays in approvals are slowing UK innovation down further. If the Commission imposes even greater restrictions, it could stop innovation in the UK in this sector for good, preventing the UK from benefitting from a potential growth industry.

#### Development of the commercial seed market<sup>21</sup>



#### Calls to action

As this report has demonstrated, Europe is in danger of becoming the museum of world agriculture, and GM is a critical issue for UK farming in the future. The backlog in approvals for animal feed for import could have a significant and damaging impact on UK food and farming.

It is clear therefore that:

- The Government should continue the trajectory of current policy, with regards to;
  - Supporting an evidence-based approach to agricultural biotechnology
  - Continuing to take an active European leadership position on the issue
  - Seeking and developing alliances with other Member States to support the UK's position
- All UK political parties should ensure that **representatives of the party**;
- at UK level continue the current evidence-based position
- at EU level follow their national party line and seek to take leadership on the issue
- at all levels strongly reject any proposals for the nationalisation of decision-making on the import of GM feed and foods.

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