

Response to second stage of Economics strand of GM debate, from Munloch GM Vigil

Dear Strategy Unit,

In response to the publication of your series of working papers, we would like to make the following points:

1. The impact on human health is not covered in enough depth, or detail considering its importance and potential huge future costs. It should therefore have a complete section (ie. working paper) on its own to reflect this.

The weighting given to health should make it the most important section in the whole study. Negative health effects could well be long term, widespread and irreversible. Considering the problems we already face with food related health problems, it really is inexcusable that there is not a separate, in depth section (working paper) on the costs to human health of growing and eating GM food.

2. This health section could draw on the work already carried out by the Scottish Parliament's Health Committee and should refer to the BMA policy paper on GM crops and food and also the BMA's submission to the Scottish Parliament.

3. An Expert Advisory Group should be set up to fully research the area of health (as has been done for the other sections in the study). It should include representatives from the BMA, the Medical Research Council and independent scientists in the field of toxicology (as mentioned in the Scottish Parliament's Health Report e.g. Vyvyan Howard, Liverpool University). Other scientists who have expertise in the health effects of GM include Dr Stanley Ewen, Aberdeen, and Dr Harash Narang, Leeds University.

(NB. we have previously sent you a copy of this report)

4. The Minister for the Environment, Michael Meacher recently expressed concerns on the potential health effects over a timescale of 10 to 30 years.
(Ecologist Magazine, March edition).

5. It should also be noted that the U.S. Centre of Disease Control has reported that food is responsible for twice the number of illnesses in the U.S, than 7 years previously. 80% of food-related illnesses are caused by viruses or other pathogens scientists cannot even identify.
(New York Times 18 March 2001)

This coincides with the widespread use of GM crops and food in the U.S. Though due to the lack of baseline data, labelling, and long term health monitoring, it cannot be a proven cause.

However it is a suitable example of the scale and type of problems that we may be facing.

6. There is no mention on how growing GM affects future land values. The Syngenta Report on land values and usage of Roundup Ready GM technology proposes a prospective fall in land values of about 17% (current estimate) due to weeds becoming herbicide tolerant.

(NB. we have previously sent you a copy of this report)

7. Once farmers have grown GM products it will be more difficult/costly to convert back to conventional/organic farming.

8. There is insufficient attention given to the potential market power that GM seed suppliers would have. In future this could lead to increased seed prices and with herbicide resistant crops, an increase in herbicide prices.

9. There is a presumption that IF there is an initial yield increase this will be maintained. This is unlikely to be correct as increasing herbicide resistance in weeds will lead to yield drag over time. This phenomenon has been detailed in many reports, e.g. Seeds of Doubt (Soil Association), ISIS etc.

10. The list of countries identified as "developing" seems more to fit a "middle income" definition. Argentina, China, S. Africa, Mexico, Bulgaria, Uruguay, Romania, and Indonesia - are not what most people would identify as developing countries.

11. The best lesson that Developing Countries can learn from the UK. is caution, and that once steps are taken they may be irretrievable, whilst any damage may be irreversible.

12. We share your concerns on the huge difficulties that you face on producing any cost/benefit analysis on GM uptake for Developing Countries that has any meaning whatsoever.

13. You note the need for separation distances + "refuge zones" but do not go onto to state that this may in fact reduce agricultural acreage, (and hence output + profits?)

14. There is clearly inadequate time to do a report of this kind any justice in the time-scale provided given the amount of material included.

15. The weightings of the results will be extremely critical in terms of the overall outcome and at present haven't been specified. We suggest the biggest impacts will be felt in the areas of health, the environment and product chains.

It should be noted that the biggest influence on product chains will be consumer preference, and we refer you to various reports and surveys commissioned by the NCC, Consumers Association and Eurobarometer.

16. The point must be made about the inclusion of a specific section for the Biotech Industry. This is questionable in itself and the most likely connection between GM crops and the rest of the biotech industry is negative due to widespread public rejection of GM crops and food.

(N.B. the world GM crop market is only worth 4.25 billion dollars!)

17. All the supposed potential environmental benefits listed have major long-term environmental costs associated with them which isn't mentioned and are aspirational rather than proven (as are the supposed benefits to human health, which anyway should surely be addressed through an adequate existing diet and nutrition, not awaiting some "futuristic" silver bullet!)

18. Although pharmaceutical crops are mentioned, whether they are grown under glass or in the open environment will have enormous impact on the cost benefit analysis. Reference should be made to the Prodigene contamination in the US.

19. Michael Meacher and the AEBC are currently looking into UK liability legislation. This will have major implications on the cost-benefit analyses portrayed in the paper. A short extension of the study's time-scale until proposals vis a vis liability have been firmed up would therefore be beneficial.

It would be also useful to refer to the proposals being developed on liability in the EU.

20. The substantial and continued decline in farming sector employment is drawn to our attention in the study. However, it is not noted that further intensification associated with GM agriculture will exacerbate this, leading to increased rural poverty. (Directly and indirectly via the multiplier effect)

21. It is also noted in the document that during this period agricultural output increased. However, this has not been linked to the declining employment and incomes and the report does not question as to whether increasing output is the solution to the problems encountered in the farming sector.

22. The scenarios that you have produced are partly based around international regulatory frameworks, and it should be noted that generally where GM has become an issue, regulatory frameworks are being dramatically tightened. eg EU and Japan. Many

other countries facing potential GM scenarios are looking to these regimes and the Cartagena Protocol for their models. Even in the U.S and Canada there is huge consumer demand over labelling (in the US, 92% of consumers want GM labelling), and there is also ongoing concern over the present "relaxed" regulatory frameworks.

23. UK, EU and World demand for GM products is at present very limited, and generally consigned to countries where there is no consumer choice. This is a vital point for an Economics Study on GM crops. If you feel that this demand may increase in the future it is incumbent on you to show the mechanisms and processes on which this is based. (esp. as you refer to "niche non-GM export markets"!!)

24. You state that you will "bear in mind Governments commitment not to allow commercialisation of GM crops that may have adverse effects on human health or the environment" This presents great difficulties, as there is very little confidence anywhere else in these "Government commitments" based on continually discredited advice from ACRE, FSA, etc, based in turn on "assurances" from the GM Multinationals.

"no evidence of harm is not equal to evidence of no harm"

We refer you again to the Scottish Parliaments Health Committee Report on GM Crops, the Minister for the Environments interview with the Ecologist, and submissions to the Seed List Enquiry for T25 Maize, amongst many examples of doubts cast on "Government commitments" on GM crops.

We would like to finish with the section that you reproduce from the Curry report, on how to ensure a viable future for farming in the UK:

- . Reconnecting farmers with their market and the rest of the food chain.
- . Reconnecting the food chain with a healthy and attractive countryside.
- . Reconnecting consumers with what they eat and where it has come from.

The present situation surrounding GM crops and food, the overwhelming lack of independent, long term research on its effects on human health and the environment, and the continual commercial/industrial push for the uptake of GM, seems entirely to contradict this independent and valuable strategy.