

Genetically modified plants and food – New challenges for the European regulatory system

Results from a joint EPTA project

GM crops and foods have been a major topic for the EPTA (European Parliamentary Technology Assessment, cp. www.eptanetwork.org) members and associates. Building on their wealth of experience in the field of Technology Assessment (TA) on GM issues, eight members of EPTA¹ have come together to identify developments and challenges ahead. The final report of this joint activity, “Genetically modified plants and foods – Challenges and future issues in Europe”², has now been published.

After two decades, agricultural GM technology and its regulation is still contested in Europe. For example, the co-existence of GM crops with conventional and organic crops, as well as the labelling and tracing of the GM food products are topics of the ongoing discussion. Repeatedly, regulatory impasses over the approval of particular crop varieties occurred. On a world level, recent years saw trade conflicts over GM products. In contrast to the development and use of GM plants and foods in the United States and other countries the cultivation of GM crops in Europe is very limited. Today, the future of GM crops in Europe is as unclear as ever.

However, in spite of the seeming persistence of this situation some move and various changes have been identified in the project which will lead to new challenges for public debate and European policies. Apart from past and present regulatory conflicts, important technological developments and far-reaching shifts in framework conditions have recently taken place which will considerably influence future debates:

- > Novel varieties with new traits are about to enter the regulatory approval procedures. A new generation of GM crops, capable of producing medicine, industrial chemicals etc., is emerging.
- > The demand for agricultural products has changed to include more energy crops. Market conditions for agricultural products have turned out to be highly volatile and are increasingly linked to the energy markets.
- > Environmental challenges and requirements of Sustainable Development have altered the conditions for agriculture in many places.

The report works out that the future of GM plants and food in Europe can not be handled solely through negotiations over regulatory details. It is also a question which kind of sustainable agriculture will be developed in Europe in the light of different, and sometimes conflicting, sustainability goals. A broad societal dialogue on future sustainable European agriculture in a global context is therefore needed in order to determine the future role of GM plants and food.

The global increase in acreage covered by GM crops, pending international trade conflicts, the development of international regulations and the different approaches to risk assessment in various countries have challenged the EU policy on GM plants. Despite the outcome of the recent WTO conflict, most of the experts are convinced that the general principles of the EU regulatory system can be maintained. Additionally, the recent WTO conflict highlights the need to reconcile different international agreements in order not to thwart the aims of these

agreements (e.g. Convention on Biological Diversity). Therefore, not only areas specific for GMOs might be considered at stake but the possible integration of environmental and social standards into WTO regulations. Many of the problems encountered at the WTO level are said to have derived from different interpretations by member states of the EU regulatory framework. Possible solutions would be to give more leeway to national sovereignty (subsidiarity) or to increase harmonisation among member states. A considerable number of experts seem to consider further harmonisation and a reform of competent authorities/institutions an option in order to further improve the robustness of the EU regulatory system.

Overall, five key areas of challenge for the European system of GMO regulation in the years to come were identified:

- > New driving forces for GM plant introduction;
- > Novel GM plants, technologies and applications;
- > Public opinion – still a decisive factor;
- > Coexistence and labelling under a growing use of GM plants in Europe and the world;
- > International trade rules and domestic decision-making.

The report includes a picture of the current state of affairs in the GM field, identifications of challenges ahead as well as some hints at possible ways to go in the future. These results are focussed on conclusions rather than on policy recommendations.

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¹ Participants in the Joint EPTA Project „Genetically modified plants and food“ were:

- > Centre for Technology Assessment (TA-SWISS – Switzerland)
- > Danish Board of Technology (DBT – Denmark)
- > Institute Society and Technology (I.S.T. – Flanders) (the former Flemish Institute for Science and Technology Assessment – viWTA)
- > Institute for Technology Assessment (ITA – Austria)
- > Norwegian Board of Technology (NBT – Norway), together with the Norwegian Biotechnology Advisory Board
- > Office of Technology Assessment at the German Parliament (TAB – Germany) (project coordinator)
- > Parliamentary Office of Science and Technology (POST – United Kingdom)
- > Scientific Technology Options Assessment (STOA – European Parliament)

² The report “Genetically modified plants and foods – Challenges and future issues in Europe” of the Joint EPTA Project is available under http://www.itas.fzk.de/eng/projects/2006/meye0627_e.htm.