

Unveiling Greek farmers' perception of GMOs: between uncertainty and controversy

Main author: Chrysoula Kapartziani (Harokopio University of Athens)

Co-authors: Kostas Balias, Anna Dimitropoulou, Giorgios Balias, Dimitris Kouretas

INTRODUCTION

The development of biotechnology during the 20th century is seen as providing opportunities to address not only global environmental issues, but also social problems such as hunger and malnutrition. However, at the same time, its application is faced with a number of challenges and has found itself at the heart of intense disagreements, in particular between the USA and Europe. Those disagreements relate to the risk assessment of GMOs with regard to the environment and human health and to the wider regulatory approach regarding biotechnology. Additionally, the international discussion is equally focused on the legal, financial, social and political aspects of the issue. In this paper we will present the interim results of our ongoing research project 'Genetically Modified Organisms: Regulatory and Socioeconomic Aspects', funded by the Hellenic Foundation for Research & Innovation (H.F.R.I). The project aims to explore the complex issue of GMO cultivation and the challenges associated with a) the scientific uncertainty surrounding the safety of GMOs, (b) the implementation of the legal and regulatory framework regarding GMOs, and (c) important socioeconomic implications of releases of GMOs, with particular reference to the EU and Greece.

METHODOLOGY

Our study combines qualitative doctrinal and socio-legal research. It employs literature-based analysis, study of primary and secondary legal sources and original empirical data acquired through a series of interviews with individuals from the farming industry and the administration at national level in Greece. We used a set of pre-planned interview questions structured around themes that link back to our research questions. The interviews are loosely structured around key open-ended questions, which allow for flexibility without compromising comparability. Since October 2020 we have gathered data from 89 interviewees. We have analysed, evaluated and further discussed some of the interviews, the results of which we are presenting in this paper. The questions revolve around key topics such as: the farming community's understanding and perception of GMOs; the information available on the subject, or lack thereof; the sources of such information; the farming community's perception of their role in the formation and implementation of agricultural

policy; the issue of cross-contamination of conventional and organic cultivations and the related theme of civil liability in cases of such contamination, etc.

RESULTS

The findings reveal how farmers and small businesses understand GMOs. Among other things, many farmers seem to have safety concerns about the GM products and cultivations. Some participants expressed their concerns that the private sector may move products to the market very quickly and sell them to farmers before the risks and benefits related to the products have been sufficiently evaluated. Several farmers also expressed concerns on the co-existence of different types of agricultural production. They draw particular attention to the organic and GM-free premium segment markets and their food supply chains, which may be severely threatened by certain GM products. Some farmers were also concerned about a possible displacement of traditional varieties and loss of agricultural diversity.

The lack of information on regulation and application of GMOs and the achievements of biotechnology was a major concern among interviewees, many of whom painted a desolate picture of their being updated by governmental or local authorities. The lack of reliable detection methods was also highlighted, as it may affect agri-food business operators' ability to verify compliance with the EU legislative framework.

DISCUSSION

A key issue that emerges from the interviews carried out so far is the lack of robust information in relation to both the challenges and opportunities presented by the introduction of GMOs into Greek farming. This then raises the question of whether farmers' understanding enable them to make informed choices about the cultivation of GMOs. There are concerns that the state has failed to provide a robust framework for public participation in the decision-making process with respect to transgenic technologies as mandated by international agreements and EU regulations (Cartagena Protocol, Aarhus Convention). It is crucial to engage farmers and the wider public with the scientific discourse well before the regulatory stage. This is the only way to ensure all interested parties understand and feel ownership of their country's scientific decisions. Public fora can shed light on issues not anticipated by scientists and policymakers and can provide valuable input into decisions with socioeconomic impact. What this presupposes, however, is a period of public education and familiarisation with biotechnology; the fight against lack of information and misinformation on the topic is a great challenge in itself.