

Genetically modified organisms in food



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Objectives

- Describe what GMOs are and the benefits and risks that can lead their presence in food.
- Research of legislation and control about GMOs
- Observe the current situation in the crops of GMOs
- Find out what consumers think, why and how it has been influenced this opinion.
- Extract an opinion on GMOs based on data from reliable sources.

Introduction

What are GMOs and how they are obtained?

- an organism, with the exception of human beings, in which the genetic material has been altered in a way that does not occur naturally
- genetic modification occurs through the use of this techniques:
 - ✓ recombinant nucleic acid techniques
 - ✓ techniques involving the direct introduction into an organism of heritable material
 - ✓ cell fusion (including protoplast fusion) or hybridization techniques

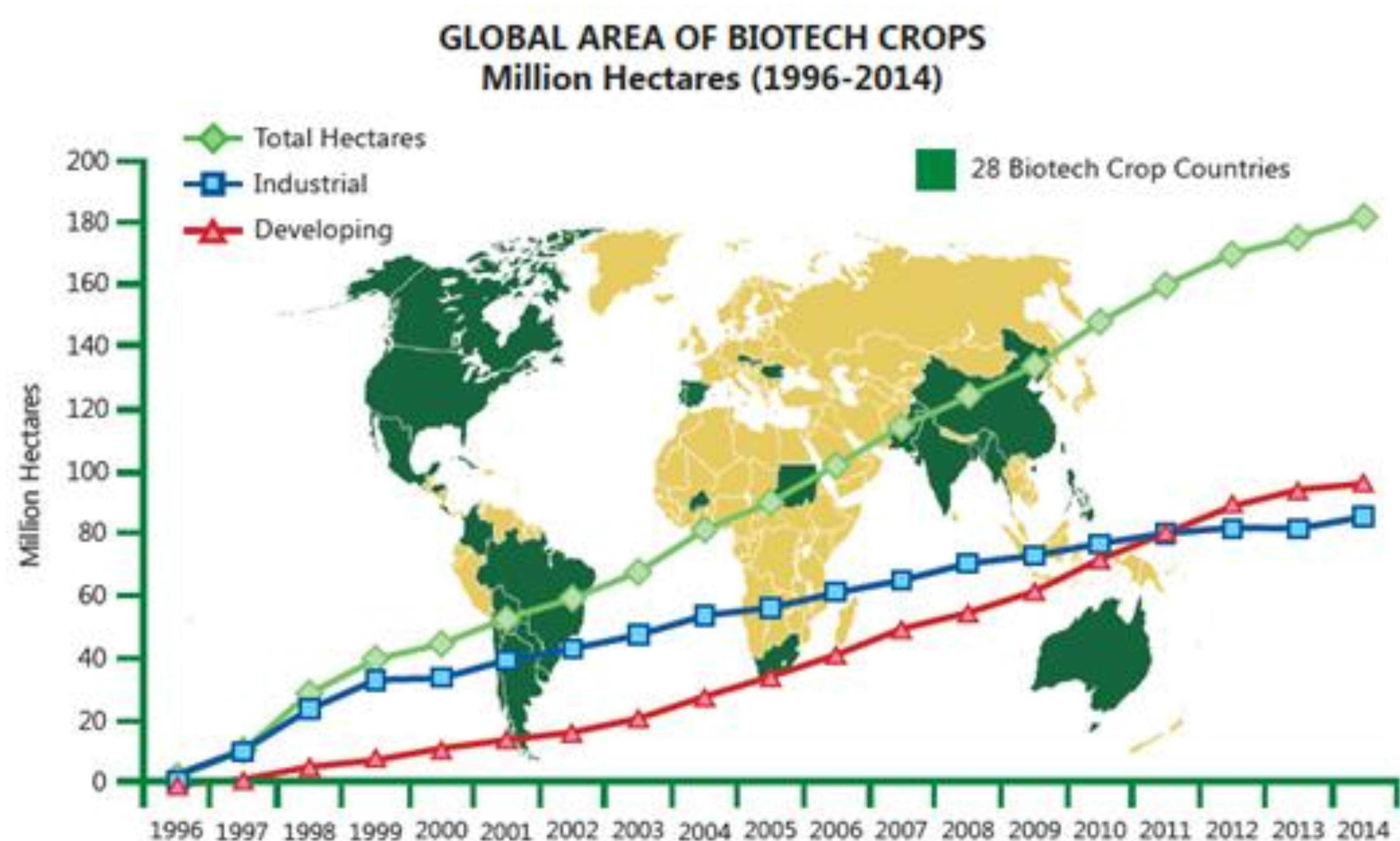


Figure 3. Evolution of the global area of biotech crops grown.

Conclusions

- Genetic selection has long sought to achieve the variety more resistant and productive, and GMOs are exactly that.
- There are not scientifically reliable tests about the benefits and the risks.
- The authorization process of GMOs in Europe is very demanding, where the products are exhaustively assessed.
- GMOs cultivation has increased over time, but in the recent years has stabilized.
- The introduction of GM foods in the food markets should be accompanied by appropriate policies to ensure consumer safety and better communicative tools in order to allow a reduction in the risk perceived by consumers.
- Must find ways to communicate the benefits and risks of GMOs to consumers without obstructions in order to let them formulate their own opinions based on reliable data.

Methodology

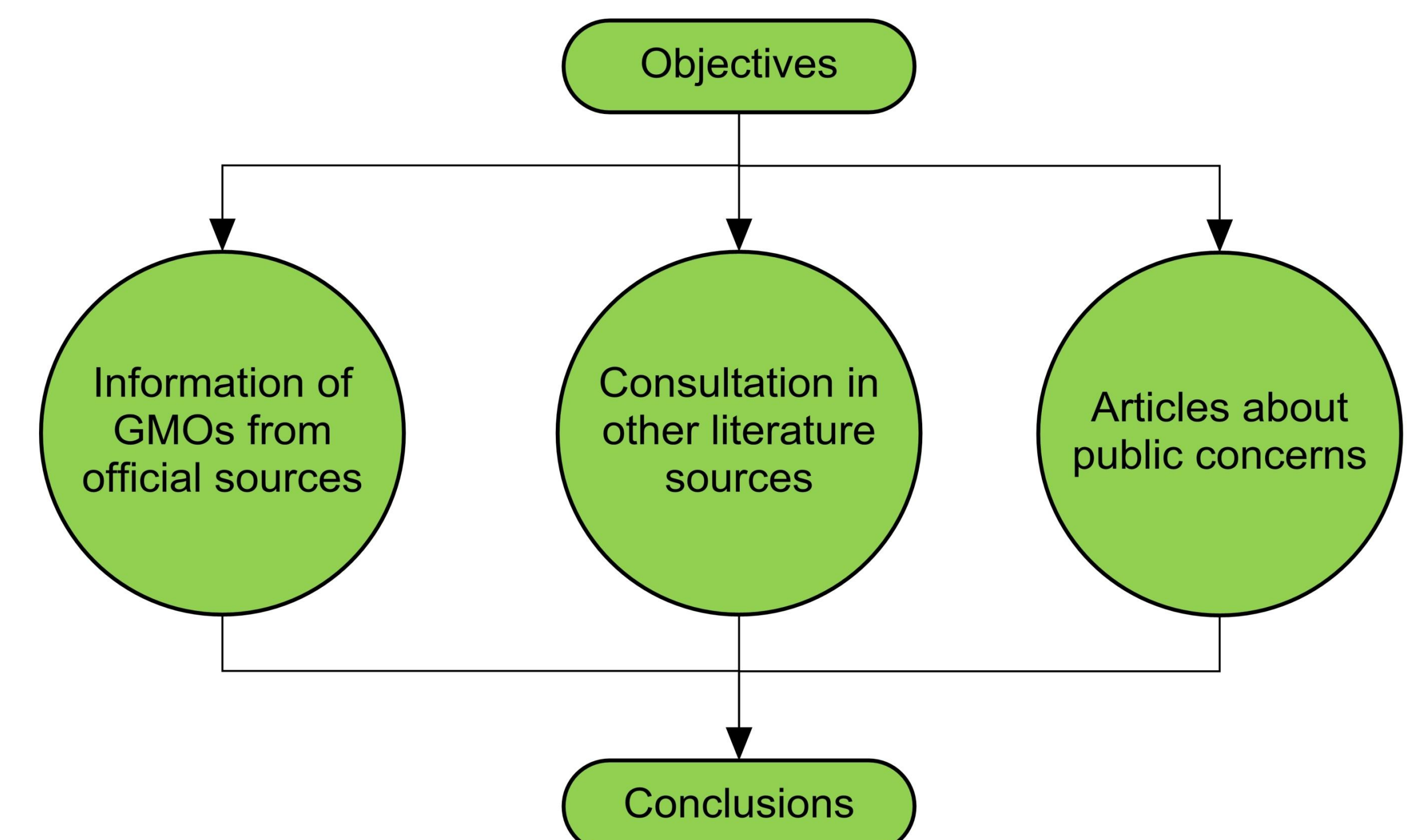


Figure 1. Outline of the methodology used.

In the decision making process are involved:



Figure 2. Authorities involved in the authorization process of GMOs

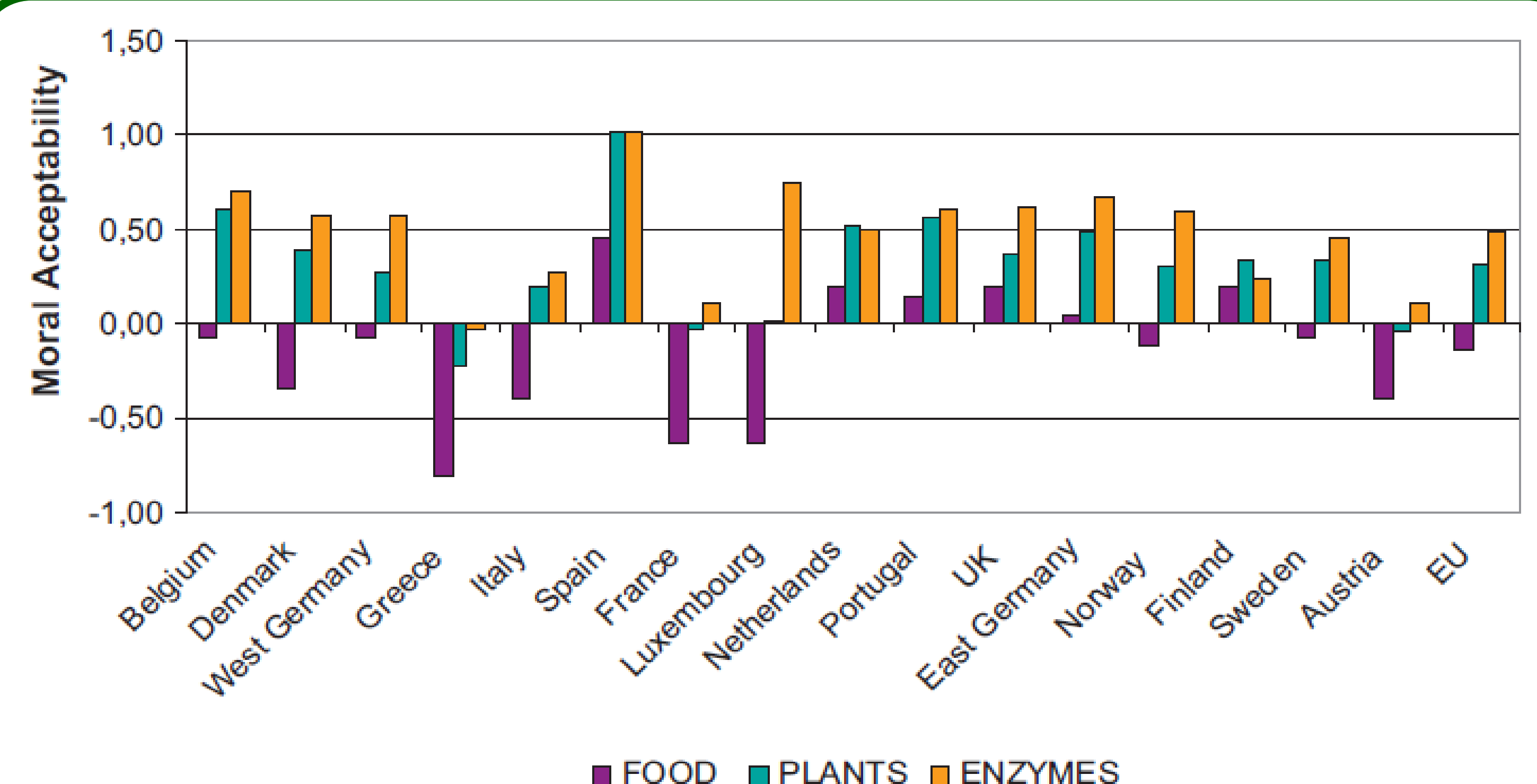


Figure 4. Moral acceptability of GMOs in the EU.