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Coexistence: a new perspective, a new field

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Abstract

With the entrance into force of Directive (EU) 2015/412 of the European Parliament and of the Council of 11 March 2015 amending Directive 2001/18/EC as regards the possibility for the Member States to restrict or prohibit the cultivation of genetically modified organisms (GMOs) in their territory the legislative framework and the perspective of agricultural land use related to the use of a given plant variety are drammatically changed.-

The new Directive not only opens the way for different solutions within the European Union but also seems to have filed the decades-long debate on coexistence. However on consider the two aspect of coexistence: as principle and set of measures.

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1. Introduction

The entry into force of the Directive (EU) 2015/412 of the European Parliament and of the Council of 11 March 2015 that amends the Directive 2001/18/EC drammaticcally changes the legislative frameworks and the perspectives of agricultural land use regarding farmers possibility to choose a given plan variety and also the self determination of a given territory/local communities with respect to agricultural model.

Member States are now allow to restrict or prohibit the cultivation of genetically modified organisms (GMOs) in their territory, this new legal framework opens the way for different solutions within the European Union, and seems to have terminated the decades-long debate on coexistence (Dobbs 2011) of genetically modified crops with conventional and organic farming.

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Until now the EU Commission and the European Court of Justice have repeatedly stated that member's States may not prohibit, restrict or impede the placing on the market of GMOs, as or in products applying the principle established in the directive 2001/18 /EC and in the regulation 1829/2003/EC. The abovementioned principle has be considered applicable to the use of GM plant variety as cultivation (see art.19 Consent; Annex II Principles for the environmental risk assessment and Annex IIIB Information required in notifications concerning releases of genetically modified higher plants (GMHPs))¹. The possibility (art. 26a directive 2001/18) for Member States to intervene ruling to manage the coexistence of different types of crops was aimed to avoid the social and economic consequences related to the possibility of commingling of cultivations considering the labelling rules on labeling of GMO in food and feed stated in the Reg.1829 / 2003 and the Reg.1830/2003.

The cornerstone of the juridical framework was that: "No form of agriculture, be it conventional, organic, or agriculture using GMOs, should be excluded in the European Union". Differently from the previous Rec. 2003/556/EC on guidelines for the development of national strategies and best practices to ensure the co-existence of genetically modified crops with conventional and organic farming, the new Recommendation of 13 July 2010 reveal from the beginning the different aim as being entitled that "on guideline for the development of National co-existence measures to avoid the unintended presence of GMOs in conventional and organic crops". The first whereas does not gives a declaration of a principle of coexistence but refers to art.26a of Directive 2001/18 ², and underlines above all the implementation of the specific coexistence measures at the agricultural level ³. Also the corpus of Recommendation does not make a precise reference to the coexistence principle, but only touches it stating that "in principle, farmers should be able to cultivate the types of agricultural crops they choose", pointing out that "this possibility should be combined with the wish of some farmers and operators to ensure that their crops have the lowest possible presence of GMOs".

The new Directive, originate from the *Proposal for a Regulation of the European Parliament and of the Council amending Directive 2001/18/EC as regards the possibility for the Member States to restrict or prohibit the cultivation of GMOs in their territory (COM/2010/0375 final)*, included in the 2010 GMO package (Poli 2013), goes beyond the power to dictate measures on coexistence, enabling a seemingly whole self-determination of Member States in the area of the commercial cultivation of GMOs ⁴.

This paper will examine this last issue taking into consideration the different meanings attributed to "coexistence", as a principle and/or practice, beginning from the first statement in the Recommendation 2003, going then trough the analysis of the Recommendation of 2010 and the new juridical framework for GMO. Furthermore, if GM crops coexistence seems to be a typically regional /local issue, there is no doubt about the fact that the coexistence between GM and non-GM supply chains at the european and the international levels affects the feasibility of GMO-FREEs projects.

2. Safeguard clauses and physical specificities of the territories: from the authorization procedure to the coexistence measures.

In the past, in order to restrict or prohibit the cultivation of GMOs, some Member States applied the safeguard clauses and emergency measures as stated in Article 23 of Directive (EC) 2001/18/EC, Article 34 of Regulation (EC) 1829/2003. As stated in the abovementioned articles considering the possibility of new or additional information "made available since the date of the consent and affecting the environmental risk assessment or reassessment of existing information on the bases of new or additional scientific knowledge". Another instrument the Member States have used was the notification procedure set out in Article 114(5)(6) TFEU which requires to put

¹ Despite the interpretation of the Italian Constitutional Court in its judgment n.150 of 2005 (Sirsi 2005).

² "Member States may take appropriate measures to avoid the unintended presence of GMOs in other products".

³ "This applies in particular to avoiding the presence of GMOs in other crops, such as conventional or organic"

⁴ See COMMUNICATION FROM THE COMMISSION TO THE EUROPEAN PARLIAMENT, THE COUNCIL, THE ECONOMIC AND SOCIAL COMMITTEE AND THE COMMITTEE OF THE REGIONS on the freedom for Member States to decide on the cultivation of genetically modified crops (COM/2010/0380 final).

forward "new scientific evidence relating to the protection of the environment or the working environment on grounds of a problem specific to that Member State arising after the adoption of the armonization measure".

All these attempts made reference, among other things, to territorial specificities (Joined Cases C-439/05 P and C-454/05 P, Land Oberösterreich v Commission) sometimes as an expression of environmental and cultural issues (C-165/08 Commission v Republic of Poland).

The risk assessment authorisation procedure of GMOs as established by the Directive 2001/18/EC⁵ take account the characteristics of receiving environments and the geographical areas in which genetically modified crops may be cultivated. Territorial specificities are considered in the Directives 2002/53/EC and 2002/55/EC on the marketing of seeds and plants propagating material. Those provisions allow the Member States to prohibit, under certain well defined conditions, the use of a variety in all or in part of their territory or to lay down appropriate conditions for the cultivation of a variety: these rules are also applied to genetically modified variety.

Member States however couldn't justify the limitation of GMOs cultivation on the basis of socio-economic issues⁶, with reference to negative consequences in terms of loss of income and impoverishment of the country or region caused by the cultivation of GM crops.

When the co-existence debate started, after an expected increase of genetically modified crops in EU agriculture⁷, it seems to be a microeconomic question, concerning the relationship between neighboring farms⁸ with reference to the admixture of GM and non-GM crops⁹. Coexistence indeed referred to the implementation of a set of measures given to monitoring systems and minimize the admixture of GM and non-GM crops as isolation distances, buffer zones, pollen traps or barriers, crop production cycle planning, etc.

From a juridical point of view, the Commission exhorted Member States to examine the adequacy of liability rules regarding eventual economic damages resulting from admixture.

The Commission Staff Working Document that accompains the Report from the Commission to the Council and the European Parliament regarding the Implementation of National measures on the coexistence of GM crops with conventional and organic farming ¹⁰ (the last before the new coexistence recommendation) reports that fifteen Member States have adopted the legislation on coexistence and three Member States notified to the Commission a draft of the legislation. However these legislations had foreseen different have came to different ends do to the public opposition to GMO causing for exemple the restriction of GM crops cultivation in some areas of certain States and/or created the burden of mandatory procedures and of administrative ones. Common features of the legislation about coexistence into force are identification and registration of parcel ,unique identifier of GM crops, mandatory information/consent of neighbours and technical segregation measures. Some Member States also provide mandatory training, specific thresholds for seeds, national liability and compensation scheme for damages resulting from GMO admixture.

The balance could not be satisfactory, taking especially into account the controversies that arose in Member States at nation level and also at european level (Poli 2013).

3. From coexistence principle to no-existence. The two meanings of coexistence

Coexistence became the keyword of agricultural side of GMOs in EU.

However the term "coexistence" showed since the beginning two different meanings: the coexistence that follows

⁵ Which is fully applicable to GMOs to be used for cultivation purpose as seeds and other plant-propagating material.

⁶ See Commission decision 2 September 2003 relating to national provisions on banning the use of genetically modified organisms in the region of Upper Austria notified by the Republic of Austria pursuant to Article 95(5) of the EC Treaty, (67) (68).

⁷ See IPTS – JRC, , Scenarios for co-existence of genetically modified, conventional and organic crops in European agriculture (Report EUR 20394EN), May 2002.

⁸ "While considering all the options available, priority should be given to farm-specific management measures and to measures aimed at coordination between neighbouring farms" (Commission Recommendation 2003/556/EC)

⁹ "The adventitious presence of GMOs above the tolerance threshold set out in Community legislation triggers the need for a crop that was intended to be a non-GMO crop, to be labelled as containing GMOs. This could cause a loss of income, due to a lower market price of the crop or difficulties in selling it. Moreover, additional costs might incur to farmers if they have to adopt monitoring systems and measures to minimise the admixture of GM and non-GM crops." (Commission Recommendation 2003/556/EC)

¹⁰ (SEC) 2009/408

mutual recognition of agriculture's methods (organic, conventional, GM) and brings coexistence measures, and the coexistence that is a no-existence of GM crops. This second meaning has distinguished some (not all) European Member States legislative orientation, bringing back to life the old debate regarding all the arguments against GMO: bad for human health, worse for the agri-environment and for the agricultural economic and social sustainability.

The no-existence measures adopted by some Member States (2), judged unfounded by the EFSA from a scientific perspective, remained into force because of the procedure and the schizophrenich conduct of the EU Council. It is already known as the EU Council has never been able to reach a majority on the requests for the marketing authorization of GMOs leaving the choice about it to the Commission but at the same time used to reject the proposals made by the Commission to cancel the safeguards measures against GMOs adopted by Member States. With the Commission Decision 495/2008/EC11, the distinction between products commercialization and cultivation authorisation have become to different situations. On one side there is the placing in the market of GMOs products and the other one the use of them as crops cultivation. In the same year the Council conclusion on GMOs of 4 December 2008, emphasised the need to "improve harmonisation of the Member States' assessment practices while ensuring that each GMP should be analysed on a case-by-case basis taking account of the characteristics of the ecosystems/environments and of the specific geographical areas in which GMPs may be cultivated in accordance with existing legislation". It invites also Member States to collect and exchange relevant information on socioeconomic implications about the placing on the market of GMO's including socio-economic benefits and risk and agronomic sustainability. Il emphasis the key role of the Member States in the assessment process notably of GMOs for cultivation, and a better consideration of specific National or regional characteristics. Finally, even talking about sensitive and/or protected areas, the Council pointed out that "in accordance with Community law, which includes the precautionary principle, regions with specific agronomical and environmental characteristic (...) may require particular case-specific management or restrictions measures, including prohibition measures for GMO cultivation".

4. On (socio)economic grounds and beyond. Coexistence and power of Member States (no territories?)

The gradual shift to a Member State decision power in GMOs sphere fulfills with the so-called Cultivation Package. On the thirteen of July 2010, the European Commission adopted a new approach with a legislative package that consists in a Communication (COM (2010)380) on the freedom for Member States to decide on the cultivation of genetically modified crops, a new Recommendation for the development of national co-existence measures to avoid the unintended presence of GMOs in conventional and organic crops, and a Proposal for a Regulation amending Directive 2001/18/EC as regards the possibility for the Member States to restrict or prohibit the cultivation of GMOs in their territory. This new approach aimed to achieve a balance between maintaining an EU science based authorisation system and the freedom for Member States to decide on GMOs cultivation in their territory.

New Coexistence Recommendation (1) supports a flexible approach to more stringent coexistence measures by the States, while attempting to maintain control over the legitimate objectives justifying the measures (Whereas 5) and to keep EU authorisation system based on science.

The new coexistence's guidelines, unlike the previous ones, limit their content to the main general principle for the development of coexistence measures, it recognisis that Member States need a sufficient flexibility to take into account their regional and National specificities and the particular local needs of conventional, organic and other types of crops and products (Whereas 7). The general principles seem to be: transparency, cross-border cooperation and stakeholder involvement; proportionality with specific reference to economic implication of certain levels of admisture; possibilità, when it is proportionate, to exclude GMOs cultivation from large areas ("GM-free areas"), and liability.

It is not classified as a principle but it is an essential point that coexistence concerns only economics aspects of

¹¹ "concerning the provisional prohibition of the use and sale in Austria of genetically modified maize (Zea mays L. line MON810) pursuant to Directive 2001/18/EC of the European Parliament and of the Council". See Whereas 18-20.

the GMOs cultivation, neither social nor environmental and on health aspects. That is why we can say that the co-existence as defined by the European Union is a limited implementation of the principle of subsidiarity: a term that, after all, is not explicitly present in this new text¹². A fortiori this Recommendation cannot translate – for my prospective - the model of the *epistemic subsidiarity* (Jasanoff 2013), as a subsidiarity of "how" instead of "who" manage the risk, also with reference to the style of reasoning.

5. The last episode (so far): Directive 2015/412

The Directive 2015/412 talks about the socioeconomic impact to which the Environment Council made reference in 2008 (and quoted in Directive 2001/18 in Whereas 62 and art. 31, 7, d).

Under Whereas 15: "Member States should also be able to base the decisions which they adopt pursuant to Directive 2001/18/EC on grounds concerning socioeconomic impacts which might arise from the cultivation of a GMO on the territory of the Member State concerned. While coexistence measures have been addressed by the Commission Recommendation of 13 July 2010, there should also be the possibility for Member States to adopt measures restricting or prohibiting cultivation of authorised GMOs in all or part of their territory under this Directive. Those grounds may be related to the high cost, impracticability or impossibility of implementing coexistence measures due to specific geographical conditions, such as small islands or mountain zones, or the need to avoid GMO presence in other products such as specific or particular products."

The assessment, under the framework of the Directive 2001/18, seems to be more inclusive of a coexistence framework and it is not clear why they still keep it separate and why to not include also socio-economic concerns in the phase of risk assessment.

The new paragraph of Article 26 of Directive 2001/18/EC states that "1a. As from 3 April 2017 Member States in which GMOs are cultivated shall take appropriate measures in border areas of their territory with the aim of avoiding possible cross-border contamination into neighbouring Member States in which the cultivation of those GMOs is prohibited, unless such measures are unnecessary in the light of particular geographical conditions. Those measures shall be communicated to the Commission."

6. Conclusions

These indications should suggest a marginal role of the last coexistence's rules.

However in my opinion it seems that the issue about coexistence could still be a significant theme in the agricolture juridical reflection on GMOs: with reference to coexistence principle and to coexistence measures.

The coexistence of genetically modified, conventional and organic crops confirms at a European (not at State) level the idea of "Unity in Diversity": in line with what was named as the "european model of agriculture" (Cardwell 2004 Jasanoff 2013).

With reference to the co-existence measures, the competence in the field of agriculture, for example in the Italian regions, does not exclude that the opt-out choice ex dir. 2015/412 could determine diversified choices nationwide and require, again, specific coexistence measures.

References

Bodiguel L, Cardwell M. (ed). 2010, The regulation of Genetically Modified Organism. Comparative Approaches, Oxford University Press Cardwell M., 2004. The European model of agriculture, Oxford University Press

Dobbs M., 2011. Excluding Coexistence of GMOs? The Impact of the EU Commission's 2010 Recommendation on Coexistence, Review of European Community & International Environmental Law, Volume 20, Issue 2, pages 180–193, July 2011

Chiarabolli A. 2011, Coexistence of Genetically Modified Crops with Conventional and Organic Agriculture in the European Union, Global Jurist. Volume 11, Issue 2, ISSN (Online) 1934-2640, DOI: 10.2202/1934-2640.1393, December 2011

Hristova V. 2013, Between politic and science. Accomodating National diversity in GMO Regulation, "Balancing Between Trade and Risk:

¹² Unlike previous Recommendation: see 1.4 of Annex.

Integrating Legal and Social Science Perspectives, (M.B.A Van Asselt, Versluis E., Ellen Vos) ed.Routledge.

Jasanoff S., 2013. Epistemic Subsidiarity-Coexistence, cosmopolitanism, Constitutionalism, EJRR2/2013

Poli S. 2013. The Member State's long and winding road to partial regulatory authonomy in cultivating genetically modified crops in the EU, EJRR2/2013

Sirsi E. 2005. Rilievi metodologici per lo studio del problema della «coesistenza » far colture transgeniche, convenzionali e biologiche, Regole dell'agricoltura, regole del cibo, Pisa.

Sirsi E. 2006. Ogm e coesistenza con le colture convenzionali, AIM.

Sirsi E. 2011. L'impiego in agricoltura di organismi geneticamente modificati e la coesistenza con le coltivazioni non geneticamente modificate, Trattato di diritto agrario diretto da L.Costato, A.Germanò, E.Rook Basile, Vol.II, Il diritto agro ambientale, Torino.