A CASE STUDY OF DEBATE ABOUT GENETIC MODIFIED SEEDS: A COMPARATIVE ANALYSIS OF ROMANIA AND REPUBLIC OF MOLDOVA

1st part

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STUDIU DE CAZ CU PRIVIRE LA DEZBATERILE DESPRE SEMINȚELE MODIFICATE GENETIC: O ANALIZĂ COMPARATIVĂ A SITUAȚIEI DIN ROMÂNIA ȘI REPUBLICA MOLDOVA

Rezumat. Pornind de la consecințele unui proces istoric de durată, regiunea românească, numită Basarabia, a fost desprinsă de principatul Moldovei și anexată de Rusia, formând ulterior fosta RSS Moldovenească. Această analiză ține de legislație, instituții și politici cu privire la noile pachete tehnologice referitor la agricultura și autonomia alimentară – un domeniu de interes fundamental pentru o performanță eficientă a economiei și structurilor sociale din ambele părți politice ale Moldovei. O serie de zone de reglementare agroalimentară va fi analizată, luându-se în calcul protecția consumatorilor moldoveni, precum și dezvoltarea comerțului agroalimentar în țările terțe. În urma unei prezentări (care a examinat contextul regional și politic), această evaluare se va baza pe o abordare agroecologică etică și politică, fiind divizată în trei părți interdependente: (i) analiza situației curente din agricultura Republicii Moldova și cea a României; (ii) provocările UE și ale Moldovei în legătură cu noua lege a Uniunii Europene cu privire la organismele noi modificate genetic (GMO) și (iii) o evaluare generală îmbogățită de opiniile numeroșilor experți și de cele derivate din surse adiționale. În final, se va oferi o serie de recomandări pentru cercetări ulterioare, destinate fermierilor locali și factorilor de decizie privind dezvoltarea ulterioară a acestei chestiuni în ambele țări.

Cuvinte-cheie: România, Moldova, GMO, porumb, soia, lege, agroecologie.

1. Introduction

This analysis deals with the law, institutions and policies concerning new relevant technological packs of extensive use in our current conventional agriculture, being an area of fundamental interest for the effective performance of the economy and social structures in Moldova region.

Some remarkable areas of knowledge and technical agrarian regulation and food policy management will be shown, giving particular attention to the context of protection of Moldovan consumers, as well as to the development of agri-food trade to third countries, on behalf to genetic modified seeds and their associated technological packages, in these two countries. This article has the purpose of influencing their local inhabitants´ opinions and policy makers´ agendas. Therefore, it follows an ethical and agronomic approach based on the theoretical paradigm of Agroecology.

1.1. Agroecology as theoretical paradigm

Agroecology is an holistic agronomic and technical approach, capable to integrate an ethical, political and cultural dimension. While its technical dimension limits its scope to the studies of agronomic management styles related to the Organic Agriculture (Primavesi, 1997:107-156) [1] cited by Sevilla et al. (1998: 1 [2]) it is true that it contains a valid sociopolitical and cultural dimension as a tool for political struggle and social and environmental activism. But also it has serious uncapabilities for an expanded reproduction of these same experiences. From a political point of view according to (Garrido, 1993 [3]) political ecology could be defined as a new political paradigm that helps, without being a science, to create a new ontology and epistemology that will help to address the ecological crisis and the social development of our civilization.

It departs from the scientific-agronomic knowledge, turning their attention to the ecological mechanisms of the biological processes of production from an environmental approach, and, secondly, the proposals for a sustainable agriculture. This transdisciplinary approach defines sustainability as the maintenance of the biotic reproduction mechanisms of the agroecosystems and the social reproduction of the cultural matrix through the social and ecological co evolution (Norgaard, 1994) [4].

This transdisciplinarity lies in the fusion of past environmental and technical productive perspectives with an intense search for equity. It is intended therefore that the transition processes are carried out in the space of the local territories and mainly in the farm space. To do this, it is tried to avoid the

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deterioration of natural resources, transforming the same level of social operating mechanisms in a similar approach to the paradigm of sustainable development. This is made by rescuing and developing proposals for collective social action to combat the predatory logic of the hegemonic agro productive model, to replace it with another target towards an agriculture more socially fair, economically efficient and ecologically feasible (Altieri, 1997) [5] in (Op. cit. 1: 2).

From this conceptualization the sustainability notion equates to a fair allocation in the participatory design methods for endogenous development (Guzmán Casado, Sevilla, & González de Molina, 2000) [6] in (Op. cit. 1: 2) for the establishment of dynamic transformations to sustainable societies (Sevilla Guzmán and Woodgate, 1997: 83-101) [7] in (Op. cit. 1: 3). To carry out this task, the Agroecology relies on forms of collective social action in each locality with social potential endogenous (Op. cit. 1: 3).

The practical basis, or more properly, the sociological basis of this transacademic and social movement are composed by the organic agriculture (both from modern styles from the North, as the historical styles, and / or indigenous-peasant farming from the South). The Agroecology offers a rural development model based on the agrarian peasant farming (Sevilla et al. 2000: 56) [8]. Currently, we observe features that show a part of peasant resistance and by the other hand a certain "recampesinización" (Van der Ploeg, 2001: 45) [9] and neo-ruralization of the labor and artesanal productions, sold in local markets and through alternative channels, which are leading to new "farming styles" and new social agroecological movements (Calle, Soler, Varas. 2009) [10].

1.2 Agricultural land consolidation issues in the Republic of Moldova and Romania: Current situation

Moldova is the second smallest former Soviet republic (after Armenia). It covers 13,070 square miles (33,851 square kilometers) in southeastern Europe between two largest rivers, the Nistru and the Prut. Both drain into the Black Sea; however, Moldova is landlocked and has no direct access to the sea. Moldova's rolling plains and rich black soil (called in Russian as chernozem) allow for abundant agriculture. Its climate is characterized by cold winters and warm summers that create the biotic conditions for the permanent renewal of these fertile fields. It is heavily focused on agriculture with 54.52% of the land as arable (Economy Watch, 2011 [11] in Hall, S., 2012) [12]. The agricultural sector contributes to 16% of the GDP of the country and employs 40.6% of the labor force (CIA, 2011 in Hall, S., 2012).

After the collapse of Communism, with an excess of agriculture labor surplus many former farmers have emigrated to urban areas or abroad, following the Lewis model of growth based on the migration from primary to other productive sectors (Lewis, 1954) [13]. Moldova has been trying very diligently to become part of the E.U., but is experiencing economic, ethnical and political setbacks that avoid it.

Romania, on the other hand, broke free from Communism in 1989, and it is by far a bigger country in terms of land mass, and has a much higher total population than Moldova. In 2010 Romania had an estimated 21,442,012 people as compared to Moldova's population of 3,562,062 in the same year (ibidem). Both countries have a very high poverty rate with an estimated 25% of the population living below the poverty line in 2010 (ibidem).

Indeed, both countries face the same challenges in regards to the retardation of economic growth due to bureaucracy and corruption, lack of investments due to its peripherical distance to Central European countries, know-how gap and informal activities vicious circle, even though Romania joined the E.U. on 1 January 2007, being this the main factor of its competitive advantage for its current steady growth.

1.3. The structure of agriculture and farming system in the Republic of Moldova and in Romania

Moldova region's proximity to the Black Sea gives it a mild and sunny climate. The fertile black soil supports wheat, corn, barley, tobacco, sugar beet, and soybeans, among other commodities. Beef, dairy cattle and beekeeping are raised widespread. Moldova's best-known product comes from its extensive and well-developed vineyards from the South and trans-Dniester region, producing quality liqueurs and sparkling wine. Agriculture provides employment for almost half of the population and contributes nearly a third of GDP as agricultural products are the large majority of all exports. The large majority of Moldova's agricultural land was transferred from state to private ownership. Moldova faces environmental problems, related to the lack of wide forests and the heavy use of agrochemicals in Soviet times, which have caused soil and groundwater contamination (Moody, R., Kireeva, I., & Butucel, I., 2010) [14].

The significance of agriculture to the economy and population of Republic of Moldova is reflected in the extent of its legislation. There are more than 100 key legal acts currently in force in the sector. The importance of reviewing and amending them has been demonstrated by the priority given to the legal approximations and the resources dedicated to this task. There are two departments under the auspices of the Ministry of Agriculture tasked with approximating its legislation to that of the EU — The Centre for Harmonisation of Agri food legislation and the Sanitary Veterinary Legislation Harmonisation department (Barbarosie, A., & Barbarosie, C., 2005) [15].

Agriculture is also the most important industry for Romania's economy, employing 43% of the population. In contrast to many other countries in Europe, the number of people employed in agriculture has increased because of the voluntary return of urban workers of rural origin to agriculture. Over 60 percent of Romania's land area is devoted to agriculture, of which one third is permanent pasture and some 63 percent is arable, more than half of which is planted with cereals, mainly maize and wheat. The main crops are soft wheat, spring barley, oats, maize, oilseed rape, sunflower, soybean, field peas, field beans, potato and sugar beet. Around a tenth of the arable area is devoted to oilseeds, with soybeans being grown on about 120,000 ha. or 1.3 percent of the arable land. The private sector farms 86 percent of the arable land in Romania and contributes 80 percent of agricultural production. The overwhelming majority (86 percent) of the 2.8 million private Romanian farmers own less than five hectares of land with the average size of a privately owned farm being 2.2 ha. (Paun, G., 2006) [16].

The main natural resources for Moldova are soils. The total area of Moldova is 3384,6 thousand hectares, including 2521,6 thousand hectares of agricultural land (74,5%). The area under arable land consists of 1840,2 thousand hectares (72,9%), under meadows – 373,5 th/ha (14,8%) orchards and vineyards – 297,7 th/ha (11,8%) (Krupenikov, I. et al., 2011) [17].

The share of farms smaller than 3 ha that used neither plant protection products (PPP) nor fertilizers is considerable, as it reaches 85%. The decline in the number of peasant farms is following an accelerated elderly process and it will last for a long time, including their steady farm liquidation.

The use of purchased inputs like mineral fertilisers, pesticides and improved seeds is very limited in private family farming. Some surveys conducted in the past years show that only one quarter of all respondents used fertilisers or chemicals at all (Boincean, B., 1999) [18].

The relatively frequent use of selected seeds by farmers is due to the widespread cultivation of maize for which hybrid seeds are normally used even by small farmers. In addition, they appreciate more the impact of PPP on their yield than that of fertilisers, which explains the less frequent use of them compared with other chemicals, and especially in vineyards.

1.4. The Sectoral Law Approximation Guideline on Moldavian agriculture and food Law and Policy: Chemical safety of food and bio-technology laws in Moldavia

The development of law and policy concerning agriculture and food have been progressively aligned with E.U. commitments as being an area of fundamental interest and importance for the trade, development and the protection of consumers in both countries. It is also important as part of this long term process into the EU Integration (Moody, R., Kireeva, I., & Butucel, I., 2010) [19]. As possible all this pletora of laws about biosafety will be summed up in a nutshell, as follows:

- Government Decision No. 390 of 29 April 1997, approved rules on the selling of seeds, seedlings and horticultural seeding material to the population, establishing the selling conditions, sanitary requirements and control for seeds, seedlings and horticultural seeds´ material.
- The 1999 Law on Plant Protection establishing the competent authorities in the plant protection field, their functions and the methods of plant protection.
- The 1999 Law on Seeds [20] establishes the norms regarding the production, quality control, marketing and use of seeds of plants.
- The 2001 Law on Biological Security establishes the norms regarding obtaining, testing, producing, use and marketing of genetically modified organisms through modern biotechnology techniques.
- Government Decision No. 360 of 27 March 2002, regarding the approval of the Regulation on the import and export of seeds, and the norms regarding packaging and control of import and exports of seeds and material.
- Government Decision No. 1153 of 25 September 2003, regarding the approval of a Regulation on the authorization for obtaining, testing, use and marketing of genetically modified organisms, establishes the procedures of authorization for

these activities in regard to genetically modified organisms.

o MAFI Order No.78 of 10 May 2007, regarding the approval of a Technical Regulation on "Seeds, seedling, and vegetal material other than seeds", establishes essential quality and safety requirements for seeds, seedlings, and vegetal seeding material other than seeds, derived from either internal production or import.

o Government Decision No. 1402 of 9 December 2008, regarding the creation of the General Inspectorate for Phytosanitary Supervision and Seeds Control, approved the Regulation of the Inspectorate, its mission, main functions and the structure of the Inspectorate.

Moldovan legislation on GMOs is limited to the two stated legal acts cited earlier – the 2001 Law on Biological Security and Government Decision No. 1153 of 25 September 2003, regarding the approval of a Regulation on the authorization for obtaining, testing, use and marketing of genetically modified organisms. No other more specific provisions e.g. on the issue of threshold for the unavoidable presence of GMOs are at present in force in Moldova Republic.

1.5. The Sectoral Law Approximation Guideline on European Union agriculture and food Law and Policy: Chemical safety of food and bio-technology laws

E.U. legislation on Genetically Modified Organisms regulates (ibidem):

- The contained use of genetically modified micro-organisms (Directive (EC) No. 90/219 on the contained use of genetically modified micro-organisms).
- The introduction of GMOs into the environment for experimental purposes (Directive (EC) No. 2001/18 on the deliberate release into the environment of genetically modified organisms.
- The placing on the market of GMOs (or products containing or consisting of GMOs).
- The placing on the market of GMOs intended for food or feed and of food or feed products containing, consisting of or produced from GMOs (Regulation (EC) 1829/2003 on genetically modified food and feed).
- Unintentional movements of GMOs between Member States and exports of GMOs to third countries (Regulation (EC) No. 1946/2003 on trans-boundary movements of genetically modified organisms).
- GMOs and food products derived from GMOs placed on the market must also comply with labelling and traceability requirements. These requirements are found in Regulation (EC) 1830/2003 concerning the traceability and labelling of genetically modified organisms and the traceability of food and feed products.

The labelling requirement does not apply to foods containing GMOs in a proportion no higher than 0.9 per cent of the food ingredients considered individually, provided that this presence is adventitious or technically unavoidable. Also it excludes using GM processing aid (Grossman, M. R., 2006) [21].

The Regulation provides for a single authorization procedure, so-called „one door – one key", for all food and feed containing GMOs. The industrial operator can submit his application in accordance with the EC Regulation or else he can split this application and have it dealt with under EC Regulation 1829/2003 and under Directive (EC) No. 2001/18 on the deliberate release of GMOs into the environment. The latter only permits the cultivation of GMOs. At any rate, in order to obtain a food authorization, the industrial operator must apply for authorization under this Regulation [22] (Plan, D., & Van den Eede, G., 2010) [23].

All products approved in accordance with Regulation (EC) No. 1830/2003 are subject to compulsory labelling; consumers will therefore be better informed about GM products, whether for human or animal consumption. Food or feed produced from or containing GMOs must also meet the specific labelling requirements of Regulation (EC) No. 1829/2003 [24].

Through this system of unique identifiers of GMOs, it is possible to know the features and characteristics of these products for the purposes of surveillance of traceability [25].

2. The GMO debate and the current situation in Romania and in Moldova Republic

Romania has been the only country in Europe where GMO soybeans were grown on a commercial scale. Monsanto's GMO soybeans were growing commercially in Romania since 1999, before any regulations were in place (Gabriela, A., & Veronica, P., 2008) [26]. They quickly came to occupy a large percentage of the soybeans being grown, rising from around 20% (about 15,000 ha) of the soybean crop in 1999 to 50% by 2000, with some estimates being even higher. By the end of 2004, a total of 14 different varieties of GMO Roundup Ready soybeans were approved for commercial growing in the national seed catalogue. The area being officially cultivated with these seeds cannot be seriously estima-

ted but the total area of GMO Soya grown in 2005 was likely to form 90% of the total area growing Soya. According to farmers, the whole Romanian soybean harvest is delivered to 2 oil mills (Op. cit.: 2) The mills press the soybeans to extract soy oil, most of which is used domestically. The soy soil is used to make soy protein isolate, used for sausage filling and processed foods, like margarine. After oil extraction, the remaining soyameal is used as animal feed. Farmers cannot feed raw soybeans directly to cattle, because they contain a toxic component which requires heat treatment before it can be used.

GMO crops were cultivated on a larger scale than any other European country and according to Ministry of Agriculture figures, soybeans were planted and exported to Turkey, Greece, Italy, Spain and Hungary. Growers are and were well aware that they can benefit by continuing to produce GM soybeans, as there is a great protein deficit in the EU for raising of cattle raising. Exports were likely to continue to grow, as prices made soybeans competitive in the European markets, because of the lower transportation costs compared to those from North or South America (James, C., 2010) [27].

This GMO crop is made up of Monsanto's GMO Roundup Ready soybeans that have been genetically engineered so as they are tolerant to the herbicide Roundup (glyphosate), which is also made by Monsanto. Farmers can spray their fields of GMO soybeans with Roundup, killing the weeds but not the soybeans. In 2005, Monsanto's and Pioneer's GMO herbicide tolerant soybeans were approved for commercial growing in Romania. A GMO Bt potato was also approved but was a failure in commercial terms (Op. cit.: 2).

Paradoxically, Romania was one of the first countries in Eastern Europe that put in place its national biosafety framework , but as we can see without any commitments to implement it. In this context, at the end of the year 1999, the Government Ordinance 49/2000 (GO) on the obtaining, testing, use and commercialization of genetically modified organisms obtained through the modern biotechnology techniques, and of the products resulting thereof, was issued and was the pioneer of a big number of following laws [28] (Maxim, P., Belc, N., 2008) [29].

Under Order 462/2003, the Ministry of Agriculture should keep records of the area of GMO crops grown each year, collecting data from sales of seed. Farmers have to record what they have planted with the local County Agriculture Department before June 15th of every year. However, this figure neglects those farmers who use farm-saved seed without reporting it.

Romania is facing backbreaking decisions on aligning its agricultural legislation to the EU's and applying it since its entry into the EU abruptly changed the legal situation with regard to GMOs, and especially regarding Roundup Ready soy. Its cultivation was immediately prohibited when Romania entered the Union, in January 2007, without any transitional period whatsoever, but this does not mean that these plants have disappeared, as GM seeds remain in the soil, thus assuring a considerable amount of soy harvest contamination. Viewed this way, Romania represents a test case if and to what extent a GMO decontamination may be possible (ibidem, 2). The Romanian GMO legislation had to change of a rushed harmonization change from the national regulation with the European directives. And even thought it had 24 laws (the country with the most laws in this field) they leave much room for interpretation, and were never submitted to public debates. An even more critical aspect of the GMO legislation is its application. A real example is the way Romania banned GM soy. The efforts to remove these GM crops from the fields were superficial and irresponsible [30] (Masood, E., et al., 2005) [31].

Conversely, entry into the EU has permitted Romanian farmers to cultivate Monsanto's GMO maize (Mon810) and GMO Bt maize – containing a gene that produces a bacterial toxin to protect the plant from insects, such as the European corn borer - both of which have been licensed in the meantime. Thus the problem has simply shifted from one plant to another. Simultaneously it is becoming more virulent as corn growing areas in Romania are significantly more extensive than those used for soy production (Kanter, 2008) [32].

Since 2007, the Romanian authorities clearly expressed the will to re-introduce GM soy in Romania, offering that its cultivation proved to have obvious advantages for Romanian farmers, with positive outcome for Romania's national economy. As Romania is an EU member state since 2007, this favorable position for GM soy commercial growing would affect the entire E.U. and its neighboring countries, like Republic Moldova. Since 2007, Romania has shown a suspicious pro-GMO double attitude within the E. U. debates.

There were a large series of discussions in the GMO field within the EU structures regarding new GMO approvals, as levels of contamination of the organic and conventional crops with GMO could be admitted, to keep the right to use this seeds after

this interdiction etc. The votes of Romania in these discussions were reluctant about GMO debate. This shows the successful efforts of the GMO producing companies to influence the decisions of the Romanian authorities, and the lack of interest of them to apply the precautionary principle and to assess the risks of GMOs on the environment and concerning health risks.

The Romanian Government was facilitating Monsanto and other GMO producing companies to use the "Romanian experience" on GM soy for their personal lobby at the European Commission and about how GM soy Romanian experience could be applied on a larger scale, since it was the only country in the world to have reported higher GM soy production per hectare in comparison to conventional soy. The record production data was never been officially verified as true, as in communist times, reporting higher production per hectare was a common institutionalized procedure.

Moody, R., Kireeva, I., & Butucel, I. (2010): Agriculture and food law and policy approximation to EU standards in the Republic of Moldova. IBF International Consulting.

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22. Once the application has been made, the authority concerned acknowledges receipt in writing within 14 days and informs EFSA, which is responsible for risk assessment in the food sector. The latter has 6 months in which to conduct this assessment. The Commission is responsible for risk management. On the basis of the risk assessment carried out by EFSA, the Commission draws up a draft decision accepting or rejecting the application within 3 months. It then submits this draft to the Standing Committee on the Food Chain and Animal Health. If this Committee accepts the proposal, it is finally adopted by the Commission; if it does not, the proposal is passed on to the Council of Ministers. If the latter does not reach a position within three months or if it is unable to reach a qualified majority for or against, the Commission adopts its proposal. The marketing authorisation is renewable for ten-year periods. All products approved in accordance with the Regulation are subject to compulsory labelling and the words "genetically modified" or "produced from genetically modified [name of organism]" must be clearly displayed on it. If the foodstuff or one of its components contains GMOs, or if it is produced from such organisms, it should be labelled as a GMO.

23. Plan, D., & Van den Eede, G. (2010): The EU legislation on GMOs. JRC Scientific and Technical Reports, EUR, 24279.

24. In addition, genetically modified foods and feedstuffs are subject to a regulation that requires operators give the following information in writing: an indication that the products consist of or contain GMOs; the unique alphanumerical identifiers assigned to the GMOs contained in the products.

25. In the case of products that are or contain mixtures of GMOs, the industrial operator may submit a declaration of use of these products, together with a list of the unique identifiers assigned to all the GMOs used to constitute the mixture (Cheftel, J. C., 2005). Moreover, the Regulation stipulates that operators who place on the market a pre-packaged product consisting of/or containing GMOs must, at all stages of the production and distribution chain, ensure that the words „This product contains genetically modified organisms" or „Product produced from GM (name of organism)" appear on a label affixed to the product. In the case of products, including those supplied in large quantities, which are not packaged and if the use of a label is impossible, the operator must ensure that this information is transmitted with the product. It may take the form of accompanying documents, for example. When placing a product on the market, the industrial operator must transmit the following information in writing to the operator receiving the product: an indication of each food ingredient produced from GMOs; an indication of each raw material or additive for feeding stuffs produced from GMOs; if there is no list of ingredients, the product must nevertheless bear an indication that it is produced from GMOs.

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29. Two years later, Law no. 214/2002 for the approval of the GO no. 49/2000, with modifications and completions, was promulgated, which at the same time also largely transposed the following Directives: 90/219/EEC, 98/81/EEC and 2001/18/EC. Romania signed on 11 October, 2000, as a Party to the Convention on Biological Diversity, the Cartagena Protocol on Biosafety, which was ratified on 30 June, 2003 by the Law no. 59/2003. The Protocol entered into force on 28 September, 2003, thus Romania had to implement all its provisions and it was expected that before Romania's accession to EU, all EU biosafety regulatory provisions were going to be transposed in the national legislation. At present, new regulations are to be enforced in order to strengthen the National Biosafety Framework (NBF) in accordance with EU Biosafety Policy and the main international instruments in the field to which Romania is a signatory Party.

Regulations governing GE crops were established for the approval of the GO no. 49/2000, composed of academics and officials to evaluate and license experimental and commercial releases of GE organisms. However, to bring Romania into line with EU rules, Ordinance 49/2000 was replaced with Law 214 in April 2002, effective from May 2002. This new law provided the main framework for GE product approval in Romania. It was intended to be consistent with the EU's Deliberate Release Directive (2001/18) and administered by the Ministry of Environment and Water Management. Two other pieces of legislation that were relevant to labelling and traceability are Decision 106/February 2002 on labelling food derived from GMOs or containing genetically modified additives or derived from GMOs; and the Minister of Agriculture, Forests, Waters and Environment Order 462/2003, effective from July 2003, with provisions aimed at tracing GE products and which requires farmers to register when they grow GE crops. Romanian law enforced the complete EU 1830/2003 Regulation on labelling and traceability by the end of 2006.

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31. More than that, The National Registry of the GMO from 2006 and various responses to requests for information from 2007, 2008, 2009 and 2010 showed that the authorities didn't have any control on the cultivation of GM soy even when it was authorized in Romania, nor the MON810 maize. There are many cases of missing data (crop locations, crop dimensions, varieties grown, the origin of the seeds, destination of the production etc.), data processed wrongly (basic arithmetic errors – the sum of the areas), contradictory data coming from different authorities (Ministry for Agriculture / Ministry for the Environment). In 2007, the Laboratory Unit of Molecular Biology and GMOs of the National Sanitary Veterinary and Food Safety Authority was accepted on the list of the European Reference Laboratories in the GMO field, but there aren't any public results of laboratory analysis of any products made by the authorities. Romania has not conducted or published studies on examining the impact of GM crops and there aren't any plans to achieve them in the future.

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