



Building Capacity for Effective Public Participation in Biosafety activity in Moldova

Dr. Angela Lozan
Biosafety Office, Ministry of Environment

**EXPERIENCE SHARING IN PUBLIC EDUCATION AND
AWARENESS OF BIOSAFETY ISSUES**

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Country regulatory framework on public information and participation

- **National Law on Biosafety, 2001**
- **Ratification of the Cartagena Protocol on Biosafety, 2002**
- **Ratification of Aarhus Convention on public access to information and decision making, 1999**
- **National Law on access to the information, 2000**
- **Ratification of Amendment to the Aarhus Convention (Almaty, 2005) on public access to decision making in the field of Biosafety, 2008**
- **Law on transparency in decision making, 2008**
- **National Register on information related to GMOs and submitting it to the BCH system of the Cartagena Protocol on Biosafety, 2009**

Institutional Framework

- Ministry of Environment – National Competent Authority for CPB
 - CBP and BCH Focal points appointed within the ME
 - Division of Natural Resources and Biodiversity, Section of Protected Areas, Biodiversity and Biosafety – unit
 - Biosafety office at the ME
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Moldova's case study. Public information and participation at national level

- **Art.39 of the Law on Biosafety** require application of principle of transparency during the procedures of notification and authorization of deliberative release of LMOs to the environment and placing to the market. The transparency in case of contained use of GMOs is a responsibility of National Biosafety Committee
 - **National Biosafety Committee** is represented by governmental bodies, academia, education and NGOs
 - **Guidelines** brings details and means for public information and feedback
 - **BCH system** involving stakeholders network and website available for public and strengthen capacities of Biosafety Committee
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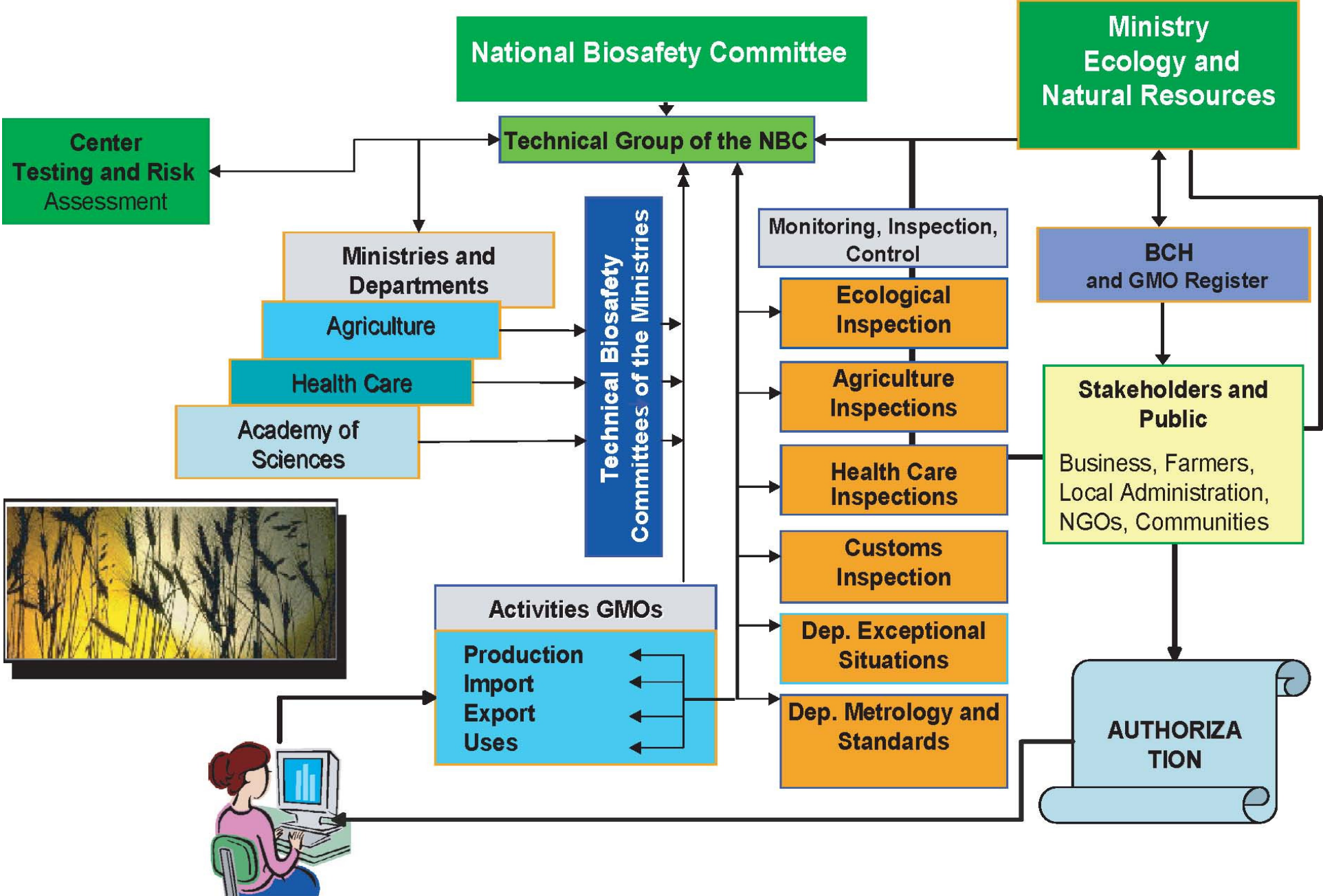
National Register on information regarding the genetic modification of organisms of GMOs and submitting of information to the BCH of the Cartagena Protocol/Electronic Register

- Stipulates requirements regarding public information and participation to decision making.
 - Transparency principle during decision making is ensured by National Biosafety Committee
 - National Committee maintains the Register of interested public
 - National Committee in term of 10 day informs the public via Internet, e-mails or via hard copies
 - National information regarding GMOs regulation and approvals is available via BCH web-site and Electronic Register
 - Regularly, accurate and timely submitting of National information to the Central portal of BCH of CPB
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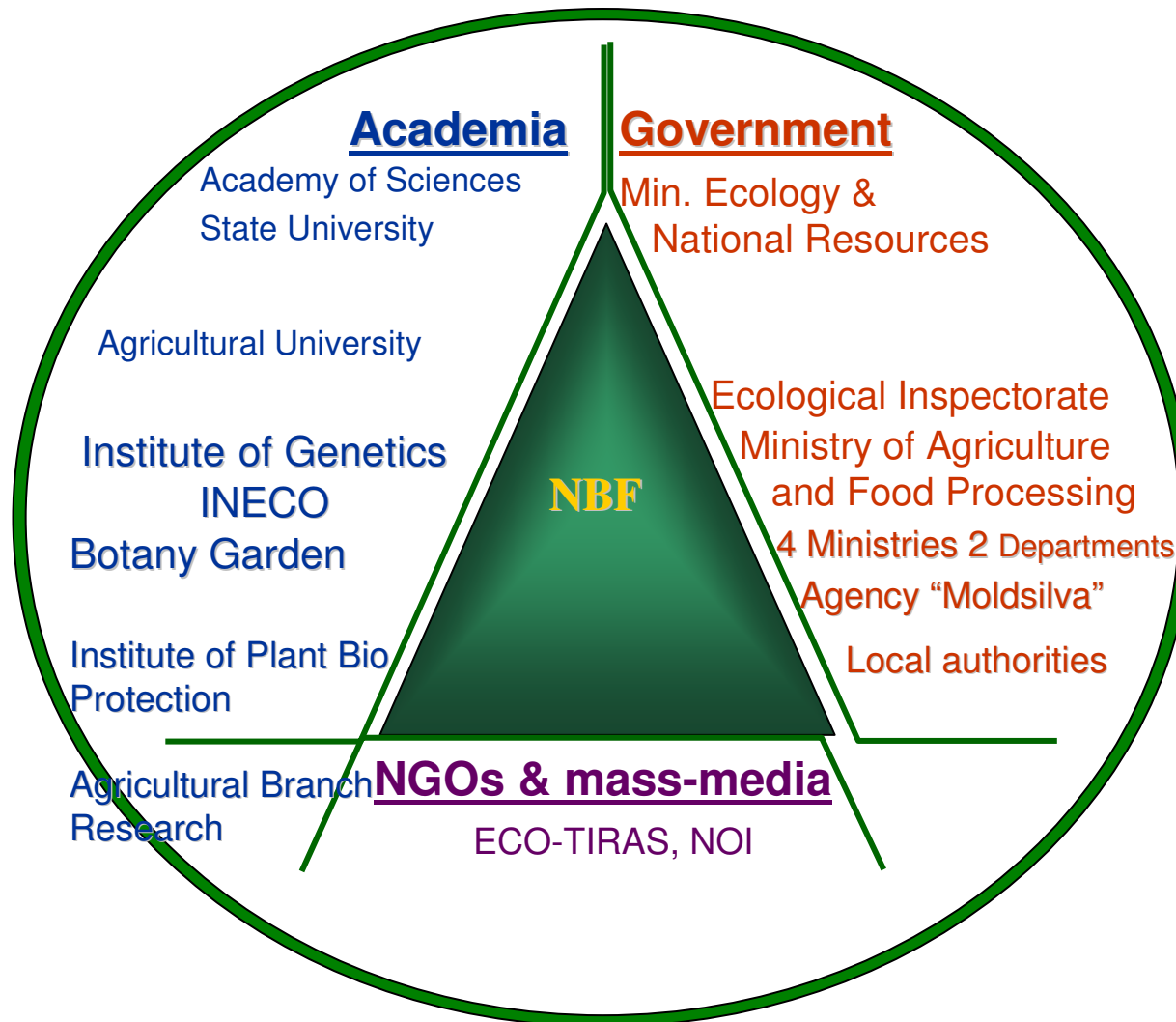
Moldova's initiatives to contribute to Public information and Participation (Aarhus Convention)

- COP-4 of Aarhus Convention meeting held in Chisinau, 27 June-1 July 2011
 - A side event on Genetically Modified Organisms held
 - National Action Plan on Implementation of Aarhus Convention of the Republic of Moldova (2012-2017), approved 2011
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NATIONAL BIOSAFETY FRAMEWORK



Stakeholders' partnership



BIOSECURITATEA ÎN MOLDOVA



Ministerul Ecologiei și Resurselor Naturale



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▼ BIOSECURITATE GENERAL

- [Protocolul de la Cartagena](#)
- [Cadru Național de Biosecuritate](#)
- [Legea privind Biosecuritatea](#)

▼ BCH - MANAGEMENT CENTER

- [BCH - Portalul central](#)
- [BCH - Reteaua Națională](#)
- [BCH - Training site](#)
- ▶ [Registering data](#)

▼ LOCALIZARE INFORMAȚIE

- ▶ [Contacte naționale](#)
- ▶ [Legi și regulamente](#)
- ▶ [Decizii și autorizații](#)
- ▶ [Capacități instituționale](#)
- [Registru de experți](#)
- [Registrul Național pentru OMG](#)

▼ CENTRUL DE RESURSE

- ▶ [Testarea OMG](#)
- ▶ [Cercetări biotehnologice](#)
- ▶ [Publicații](#)
- ▶ [Resurse publice](#)



[Convention on Biological Diversity](#)



[Global Environment Facility](#)



[United Nations Environment Programme](#)



[Ministry of Ecology and Natural Resources](#)

La 29 ianuarie 2000 la o întâlnire extraordinară a **Conferinței Părților la Convenția privind diversitatea biologică** (Montreal, Canada), a fost adoptat Protocolul de la Cartagena privind Biosecuritatea. Acest document la nivel global reglementează activitățile legate de asigurarea unui nivel adecvat de protecție pentru siguranța transferului, manipulării și utilizării organismelor modificate genetic rezultate din biotehnologiile moderne și care pot avea efecte imprevizibile asupra conservării și utilizării durabile a diversității biologice, ținând de asemenea cont de riscurile pentru sănătatea umană și concentrându-se în special asupra mișcării lor transfrontaliere. Semnarea Protocolului a fost calificată drept un pas semnificativ prin faptul că el asigură cadrul internațional de reglementare pentru reconcilierea necesităților respective de comerț și protecție a mediului în privința industriei biotehnologice. Astfel, Protocolul creează un mediu favorabil pentru aplicarea ecologică a biotehnologiei moderne, ceea ce permite utilizarea echitabilă a beneficiilor din potențialul oferit de biotehnologie, minimizând în același timp riscurile pentru mediu și sănătatea umană.

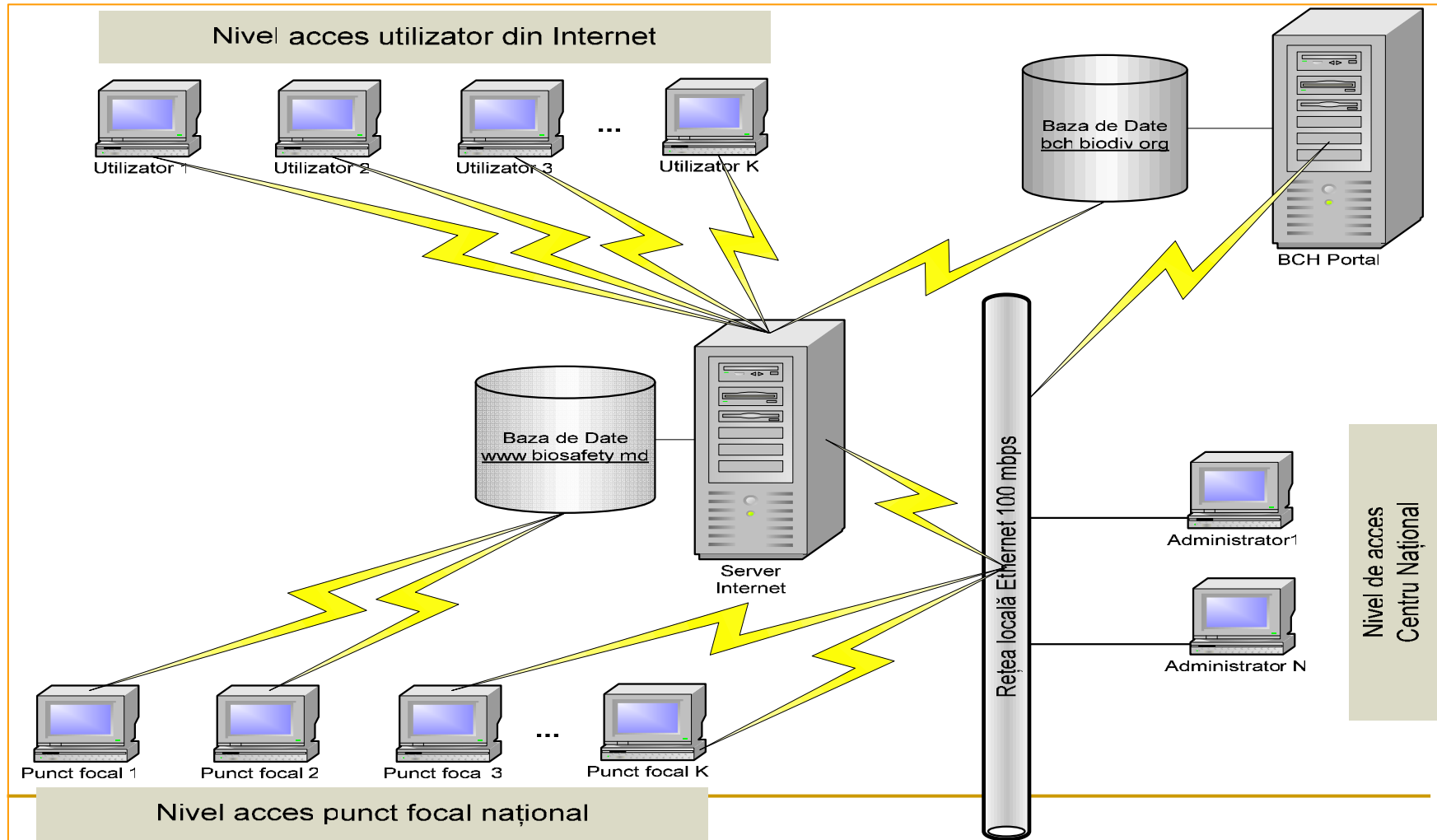
Biosafety Clearing House and Public Participation

www.biosafety.md

- National databases on Biosafety (institutions, laws, decisions, contacts etc);
 - Interactive system for public consultation to ensure public involvement in the decision making;
 - Information sharing at the national and international levels;
 - Emergency situations;
 - GMO Register;
 - National BCH network of responsible government institutions, academia, NGOs;
 - National Biosafety reporting through the BCH Central
 - Registering national information via BCH Central
 - National Register of NGOs
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Architecture of the BCH system in Moldova

General scheme



Biosafety Clearing-House



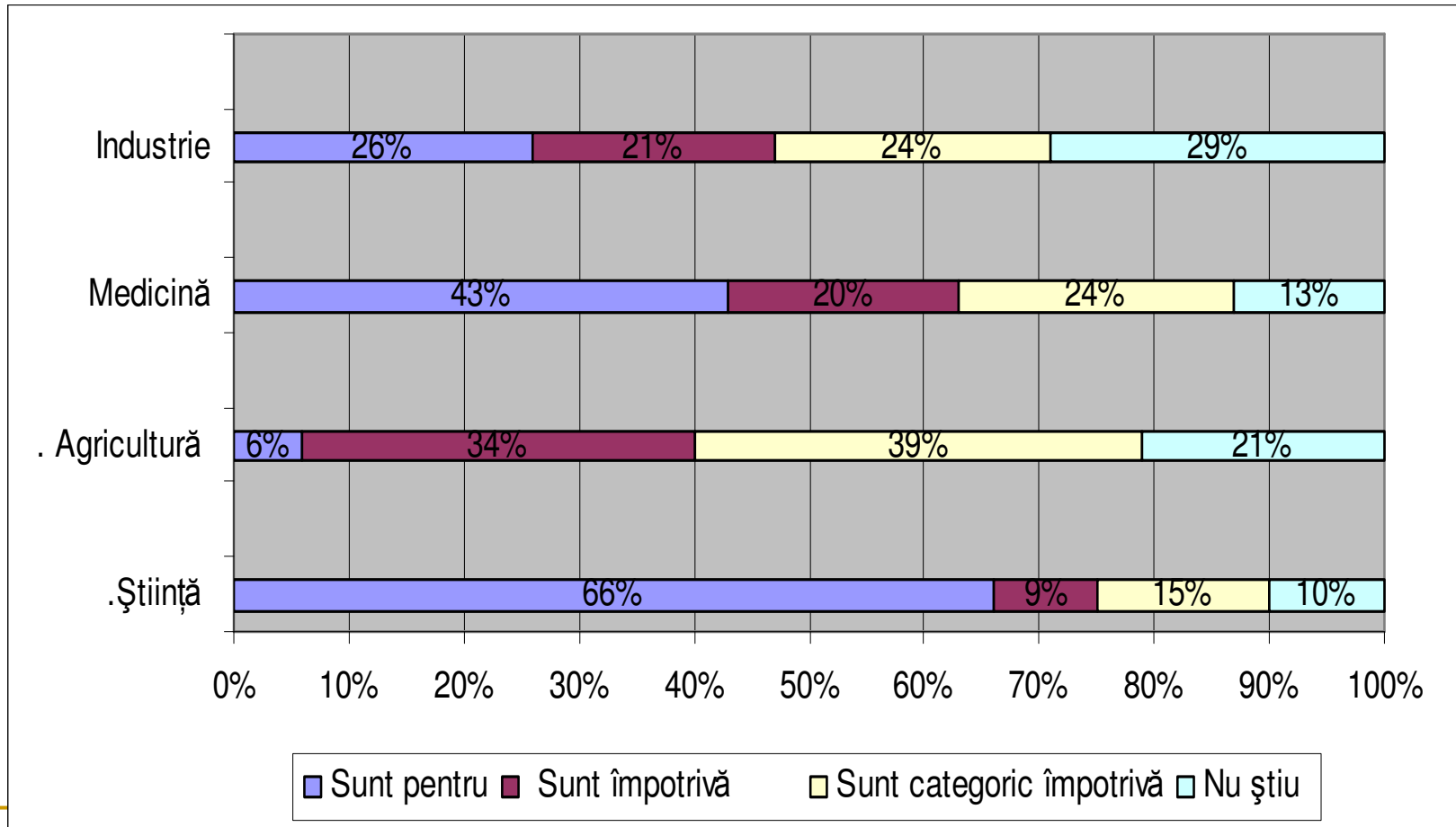
BCH Central Portal, Country Profile Republic of Moldova

of records

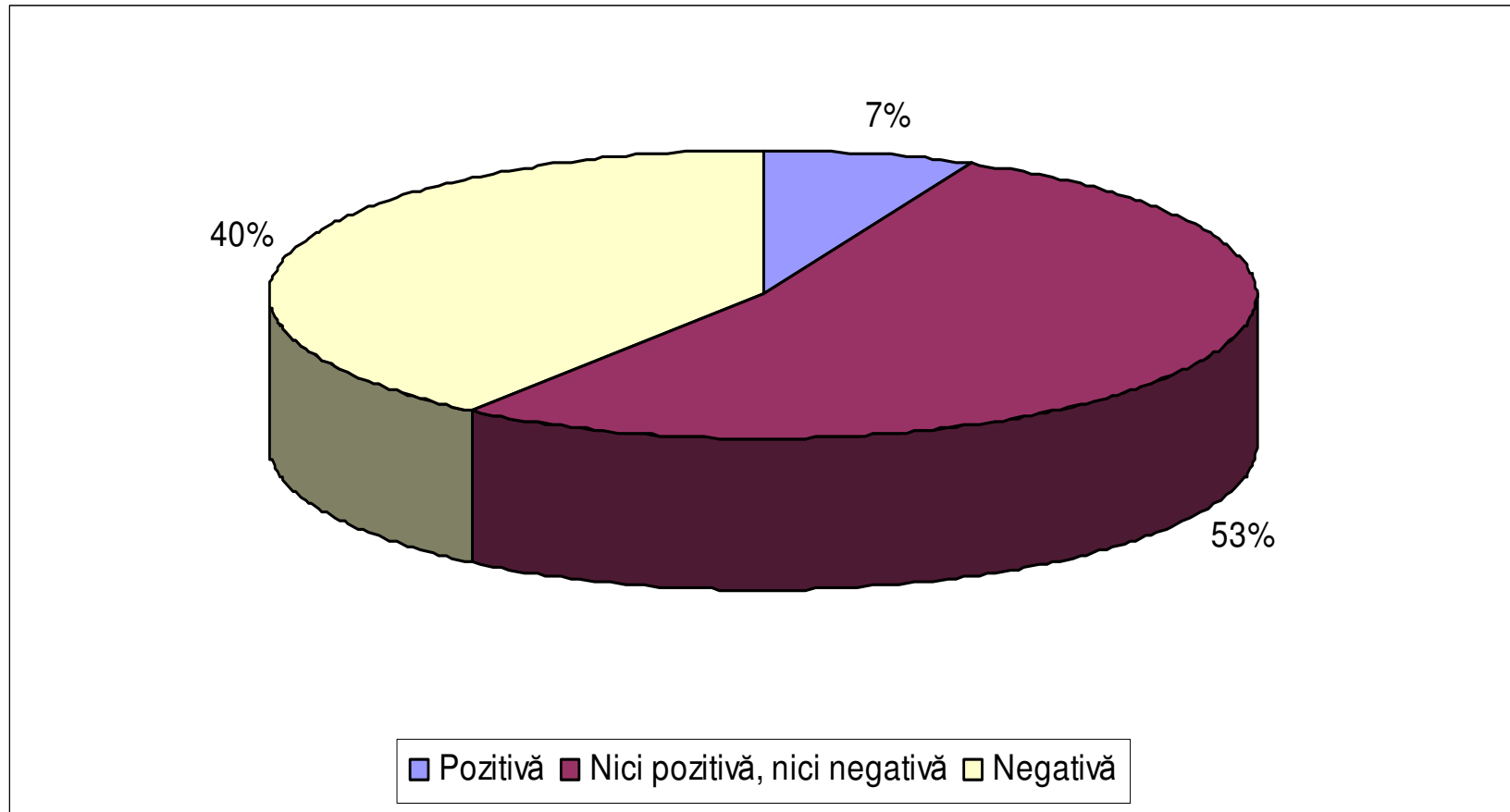
Date of last update

<u>Biosafety Expert</u>	1	2012-09-06
<u>Capacity Building Needs and Priorities</u>	1	2010-05-18
<u>Competent National Authority</u>	2	2012-09-07
Country's Decision or any other Communication	0	-
<u>Law, Regulation or Guideline</u>	5	2012-11-29
<u>National Database or Website</u>	2	2012-09-07
<u>National Focal Point</u>	3	2012-06-28
<u>News</u>	3	2012-02-27
Report on Assignment	0	-
Risk Assessment	0	-
<u>Reports on Implementation of the Protocol</u>	2	2011-09-15
Total number of records	19	

Public opinion pool survey: What is your opinion regarding the GMOs use?:



What are your attitude regarding perspectives of GMOs use in Moldova?



Public opinion pool survey

- **Approx. 60% of respondents confirmed that they are informed about GMOs**
 - **Public consider the most credibility of available information regarding GMOs that is offered by scientific community (62%), medicine (59%) and environmental organizations (47%)**
 - **About 2/3 of respondents accept GMOs use for researcher scopes, but not in the field of agriculture**
 - **Categorical reject any GMOs use in agriculture about 80% of respondents**
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Biotechnology and Biosafety education and university training

- **State University of Moldova**
 - Faculty of Biology and Pedology
 - **State Agrarian University**
 - Faculty of Agronomy
 - **State University of Medicine and Pharmacy**
 - **Moldova's Technical University**
 - **The University of the Academy of Sciences**
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Biotechnology Curriculum
Moldova State Univeristy, Faculty of Biology and Pedology,
speciality “Biology”, licentiate

Module standarts / Subjects	
Specific competences of the discipline	<p>1. Knowledge and understanding</p> <ul style="list-style-type: none"> • Define the concepts regarding biotechnology; • Identify the sections of Biotechnology; • Describe the main stages of traditional and modern biotechnology; • Identify the main groups of enzymes and vectors used in genetic engineering; • Describe the methods used in biotechnology;
	<p>2. Application</p> <ul style="list-style-type: none"> • Compare traditional and modern biotechnology; • Establish a correlation between biotechnology and economic development; • Determine the criteria for protecting the environment; • Use biotechnology techniques to solve various problems; • Determine the conditions for the use of biotech products.
	<p>3. Integration</p> <ul style="list-style-type: none"> • Define the tasks of biotechnology; • Offer solutions for the problems of raw materials, food supplies, energy resources, healthservice, environmental protection; • Developing projects with the use of various biotechnologies; • Offering a biotechnological solution for preserving the biodiversity; • Develop strategies for the use of various biotechnologies.

Biosafety Curriculum at SUM

Nr.	Module name	Lessons			
		Courses	Seminars	Labor.	Ind.dwork
1.	<i>Introduction. Subject, objectives and methods of research.</i>	2	2		3
2.	<i>Genetic and molecular basis of modern biotechnology and obtaining GMOs.</i>	2	2	3	5
3.	<i>Genetically modified organisms: the use in agriculture, economy and medicine. Transgenic plants, animals and microorganisms.</i>	2	6		10
4.	<i>Legal framework biosafety. Cartagena Protocol on Biosafety. Principles and main objectives.</i>	4	6		10
5.	<i>Development and decision-making regarding GMOs. Consumer rights and population participation in decision-making</i>	2	6	3	10
6.	<i>Methodology for determining of risks resulted from use GMOs. Assessing to human health and environment</i>	2	6		10
Total		14	28	6	48

Manuals, books and brochures on Biosafety published

Techniques and Requirements regarding Biological Security, 2008, book	Angela Port, Maria Duca, Angela Lozan
Genetically Modified Organisms and Ensuring Biosafety, 2007 Russian (published). Brochure	Ivan Ignatiev, Iliia Trombitki, Angela Lozan
Brochure Amendments to the Aarhus Convention as an international mechanism ensuring public access to the decision making for Biosafety, 2006 English, Russian (published)	Sergei Vihrist, Alexei Anguret, Ivan Ignatiev, Iliia Trombitski
Operational Guide of the Biosafety portal, 2008, book	I. Amarfii, A, Lozan
Genetically Modified Organisms and Human Health, 2008, book	A. Lozan, V Holostenco
Biosafety- National institutional and legislation framework, 2008, book	
Biosafety concerns of the Republic of Moldova: opportunities and challenges, 2008, brochre	A.Lozan
Methodological aspects in testing of genetically modofied plants, 2008, book	M. Duca, A. Lozan, A. Port, A. Glijin, V. Lupascu
Classical and Modern Biotechnology, 2010, book	Mihai Lesanu, Angela Lozan
Guide on Public information and participation in the field of Biosafety, 2010, brochure	Ilya Trombitky, Angela Lozan
Guide on Risk assessment and management on GMOs, 2010 brochure	Ivan Ignatiev, Angela Lozan

