

EXECUTIVE SUMMARY

Background

The direct objective of this action plan is to provide the Government of Moldova, donors, and international organizations a comprehensive framework for the analysis, design, and implementation of capacity-building efforts in the area of food safety and sanitary and phytosanitary (SPS) measures. The ultimate objective of improving food safety and SPS management is to enable people in Moldova to participate fully in and to reap the benefits of international trade while better protecting human health and strategically strengthening measures to protect health of livestock and crops. A food safety and agricultural health² management system based on WTO principles and good practice for market economies will improve Moldova's competitiveness and allow its agricultural sector to diversify into more demanding, premium-price market segments.

Agriculture is Moldova's most important economic sector. Despite sluggish growth in recent years as compared with other sectors, primary agriculture still contributes over 20 percent of total GDP (Table 1). If agro-processing is included, agriculture and the agro-food industry account for more than one-third of the national economy. Agriculture is also the largest economic sector in terms of employment, with over 40 percent of the working population.³ More importantly, agriculture and agro-processing dominate Moldova's exports: in the last five years food and agricultural products have accounted for over half of total export.

Table 1: Economic growth and agriculture's contribution to GDP, 1997 – 2005

	1997	1998	1999	2000	2001	2002	2003	2004	2005
GDP annual growth, %	1.6	-6.5	-3.4	2.1	6.1	7.8	6.6	7.3	7.0
Agriculture value-added, annual growth, %	12.1	-6.2	-3.9	2.3	4.3	3.7	-10.3	13.7	3.2
Agriculture value-added, % of GDP	30.2	31.8	27.9	29.0	26.0	24.1	21.5	21.3	21.3

Source: Development Data Platform, the World Bank. Last accessed May 2006.

Moldova has been a member of WTO since 2001, but it has not yet fully benefited from participation in international trade. This is particularly true for the agriculture and agro-processing sectors. The main reason is that Moldova's transition from a centrally planned economy to a

² *Food safety* deals mainly with microbial or chemical contamination, levels of natural toxins, zoonotic diseases, food additives, allergens, the indirect addition of residues of chemical substances (for example, pesticides, heavy metals, antibiotics, hormones, and other drug or animal-feed additives), and decomposition of the product. These factors affect both domestic and global market access. *Agricultural health* deals mainly with the protection of the importing country from the introduction of plant pests and animal diseases. Agricultural health standards include lists of pests, defined under the aegis of the International Plant Protection Convention (IPPC), and lists of contagious diseases, as defined by the World Organization for Animal Health (OIE), affecting international trade.

³ This includes employment in primary agriculture, hunting and forestry, and fishing. *Statistical Yearbook of Moldova 2005*.

market economy is not yet complete, and an issue of particular importance during this transition is the effectiveness of its SPS system. Much of Moldova's legal, regulatory, and institutional framework for food safety and SPS remains tied to the GOST⁴ standards of the former Soviet Union. Moldovan public services still use these standards as their basic framework for monitoring, surveillance, and inspection. Actions are being taken to shift from a GOST-based system to one based on international standards appropriate to a market economy and more effective in protecting human and agricultural health.

Moldova and many other small, low-income countries have difficulties meeting international requirements for market access because of resource constraints. Transition economies face the additional challenge of reforming their systems while struggling to reorient and rebuild their collapsed primary production and manufacturing sectors to meet the demands of rapidly evolving domestic and foreign markets. While these countries make great efforts to address these challenges, external assistance by donors and international institutions could facilitate the transition by enhancing the sharing of experiences as well as providing the funds needed for various reform and capacity-building activities.

This action plan is based on analysis of information on human and agricultural health, performance of the agro-food sector, and the capacities of Government and private sector entities to manage food safety and agricultural health. This action plan cross-cuts many professional fields – legal, enforcement, scientific disciplines, trade, commerce, diplomacy, and others – and involves many stakeholders. Therefore, many interviews and several rounds of stakeholder consultation were held during the preparation of this action plan to take into account the full range of perspectives.⁵ The analysis also aims to offer good practice recommendations based on experiences and basic principles from other countries (see Box 1).

Box 1: Basic trends in design and management of food safety and agricultural health

The approach to the management of food safety and agricultural health is changing in many countries. Two forces drive these changes: the WTO SPS agreement, which brings new discipline to regulatory authorities and requires international harmonization and transparency, and the recent series of food scandals (dioxin, pesticides, salmonella, BSE, hepatitis, and so on) and food scares that have led to greater public awareness of food safety issues. As a result, consumers demand their nations' food safety management systems provide better safeguards and more transparency. In response, both politicians and private enterprises have been changing their systems. These changes include the following:

- a. The traditionally fragmented, decentralized state human, animal, and plant health systems are making way for a more holistic approach to the management and functioning of an integrated system concerned with both food safety and agricultural health;
- b. A traditionally inward-looking style of public management has fallen under pressure to provide more accountability and transparency, to use science-based measures, and to reduce conflicts of interest within the system by separating institutional responsibilities for policy setting, implementation, and monitoring;
- c. A policy of dominant reliance on controls and inspections principally of end products has shifted to a more balanced system of preventive measures, undertaken by the private sector, based on the use of quality and safety management standards throughout the supply chain;
- d. The former orientation toward the interests of state regulatory services has given way to a more balanced perspective that considers the impact of the total regulatory system and of individual measures on the cost of doing business and competitiveness;

⁴ GOST is an acronym derived from the phrase gosudarstvennyy standart (state standard).

⁵ See Appendix 9 for a list of people interviewed or consulted during the preparation of this action plan.

- e. Priority-setting based on the power of involved bureaucracies has been reduced, and setting policies and investment priorities based on risk assessment and cost-benefit analyses has increased;
- f. Public and private sector requirements are increasing in scope and intensity. These changes are most prominent in industrial countries, but they are gradually being adopted in developing and transition economies. These changes incur costs, however, as well as creating benefits and developing and transition economies often find it difficult to mobilize the investments needed to make them.

Source: These materials derive from information gathered for and presented in this report.

Market Opportunities and Challenges for Moldovan Agriculture

Reform measures undertaken in the late 1990s have resulted in readjustment and some recovery of growth in Moldova's food and agriculture sector and increased integration with the international economy. Products with proven export potential so far are wine and spirits, fruit, vegetables, and nuts. Further opportunities may come from fish, dairy products, and some meat products, but signs of the potential for these products are weaker. Moldova heavily relies on the Commonwealth of Independent States (CIS) markets for its export: CIS countries buy roughly 75 percent of Moldova's export of food and agricultural products. Exports to the European Union and other industrial countries are small because exporters have major difficulties in meeting food quality and safety requirements and lack competitiveness. As countries in Central and Eastern Europe join the European Union and adopt the higher EU food standards, Moldova has also lost market access to these countries.

In recent years, the broadening and tightening of food safety requirements has become an international trend – not only in OECD countries but also in a growing number of developing and transition economies. In addition to government standards, supermarkets and other major buyers of food and agricultural products often have higher requirements for food safety and quality, and these have become increasingly important for market access. As income levels rise in Russia and Ukraine, Moldova's primary markets, and as more and more food products are sold through supermarkets, market segments accepting products produced according to former GOST standards will shrink and will offer lower prices than will be attained in segments requiring international standards.

Modernization of the Moldovan system of management of quality, food safety, and animal and plant health will therefore be necessary both to maintain access to profitable market segments in CIS countries and to maintain and increase access to new export markets through diversification, especially in the expanding EU. Replacement of the present system of mandatory standards and overlapping inspections by one based on fewer mandatory regulations, voluntary standards, and streamlined inspections will reduce costs — hence increasing competitiveness — at the same time it improves food safety and agricultural health.

Food Safety and SPS Institutions, Legislations, and Capacities and Recommended Actions

The following presents the main issues in Moldova's current food safety and SPS system and makes recommendations for improving the system and capacity building.

Institutional setup. The organization of public services for food safety and SPS management in Moldova requires adjustment. Moldova has many institutions involved in food safety and SPS management despite severe budgetary limitations. Overlapping responsibilities lead to repetitive inspections and high costs for Government and private sector. The situation also allows too much scope for rent seeking. The organization falls short of following the generally held principles of delineation of tasks between health and agricultural authorities and separation of responsibilities between standard-setting and food safety management. To make better use of its scarce resources, Moldova should clarify the responsibilities of each agency and to eliminate duplication and overlaps. One particular way to achieve this is by creating a single food authority combining the food control functions currently distributed to the Ministries of Agriculture and of Health and Moldova Standard.⁶

1. *Establish a coordination unit consisting of a chief coordinator and contact points from various government agencies involved in SPS management.*
2. *Identify areas of overlap and gaps in responsibilities among agencies managing food safety; assess the best option for Moldova, a single agency for food safety or a multi-agency structure with improved alignment among the present services and clearer definition of the roles and responsibilities of each agency; and make a plan to implement the new structure.*

Risk assessment and economic analysis. Regulations and investments in capacity building for food safety and agricultural health should be based on considerations of costs, opportunities, and risks. Together these assessments form a scientific basis for SPS management. Central to the management of food safety and agricultural health under WTO principles is *risk assessment*, which involves the identification and characterization of hazards, an evaluation of likely exposure to the hazard, and an estimate of the adverse effect of exposure.⁷ Scientific risk assessment is the prerequisite of effective risk management. *Economic assessment* is essential for policymaking. Analysis of costs and benefits should be conducted before the adoption of any regulation or standards. Moldova lacks expertise in both economic analysis and risk assessment, and external assistance is needed to build up capacity in these areas.

3. *Assess Moldova's competitiveness in fish, dairy, and livestock products to determine the potential benefits of investing in EU third-country import status for these products.*
4. *Conduct cost-benefit analysis of current livestock investment strategies of the government and donors.*
5. *Provide assistance to develop and train a core group of risk assessors.*

Regulatory system. At the time of its accession to the WTO, Moldova adjusted its legislation to comply with international requirements. The reform of the regulatory system needed to implement the law is largely still pending, however, and further revisions of the laws may be desirable. The wholesale transposition of GOST standards into Moldovan standards after independence maintained a regulatory morass ill-suited to today's needs. Moreover, because new inspection and technical procedures have not been developed, in practice many inspections continue as if the former GOST standards were still mandatory. Thousands of technical rules transposed from GOST require reassessment for compatibility with international standards principles and to determine whether they contribute to market and private sector development, in particular to the food and agriculture sector. Ultimately, these rules should be abandoned,

⁶ It is our understanding that the FAO may already have provided advice in this regard.

⁷ S. Slorach et al. 2002.

replaced, or changed into voluntary standards. New bylaws based on international standards and regulations should be developed, the operating implications of the revised regulatory rules for quarantine and inspection should be signaled, and changes should be made to daily enforcement practice.

6. *Prepare a program of work for replacing the existing regulatory system with a system compliant with international standards and good practice for a market economy (including resources needed and methods and principles) with priorities on fruit, vegetable, and nut regulations and voluntary standards. Provide support to the regulation-setting task force over the next 2 to 3 years.*

Certification. The goal of the Moldovan certification system for SPS should be to facilitate trade while ensuring that public goals for the health of humans, plants, and animals continue to be met. As Moldova introduces new international and European norms, many aspects of the certification system will change, including the responsibilities of various ministries. During the intervening period, the Government should aim to eliminate duplication and other unnecessary requirements, while allowing the private sector to take on as many responsibilities for certification as possible, albeit under public supervision.⁸

7. *As the Ministry of Health completes the development of the more important horizontal technical regulations regarding food safety, conformity assessment certificates for those food products should no longer be mandatory. In the meantime, for products requiring mandatory assessment, private bodies accredited by the Accreditation Center should be allowed to issue legally valid conformity assessment certificates.*
8. *Review the veterinary certification process. Veterinary certificates should only be issued once for products before entering the market at border points, slaughter points, and meat-packing facilities. Veterinary inspection of the finished or processed good for consumption made from products that have already passed veterinary inspection should be discontinued, except in cases of calamities. Programs for veterinary control of the informal market should be based on risk assessment.*
9. *The Ministry of Economy and the Ministry of Finance/Moldovan Department of Customs should issue letters eliminating the requirement for national conformity assessment certificates for exports at border checkpoints.*

Accreditation. An accreditation system is at the heart of the SPS infrastructure and represents a step toward establishing internationally recognized facilities. The National Accreditation Center will play a major role in ensuring that Moldovan labs, certification agencies, and so on are recognized abroad. The Accreditation Center needs assistance for its efforts in seeking Mutual Recognition Agreements (MRA) with other countries, particularly the European Union.

10. *Evaluate the current practices of the Accreditation Center for conformance with current and projected trading partners' accreditation standards, developing an action plan for the recognition of the Accreditation Center by the European Union, and helping the Center develop a training program on EU requirements for Moldovan laboratories.*

Laboratory system. Each government agency involved in SPS management in Moldova appears to have its own system of central and regional labs. Under-funded, poorly equipped, and lacking trained staff, many labs are unable to perform their designated functions. This is particularly the

⁸ Moldova Standard may be in the process or have already enacted a new supplier's certificate of conformity. This needs to be confirmed and reviewed.

case for *rayon* (district) labs. Cases have been found of overlapping testing, which causes waste of public resources and imposes additional costs on the private sector. It is more desirable to develop well-defined authorities backed by central control (reference) laboratories with adequate equipment and staffing. Such labs might allow the consolidation of resources for international accreditation. It would also be desirable to indicate areas in which private sector laboratories can take on an increasing role in certification functions.

11. *Evaluate Moldova's laboratory structure and help develop a strategic plan for the consolidation and future development of Moldova's laboratories.*
12. *Laboratory reinforcement is needed to enable Moldova to deal with the rapidly increasing demands for improved surveillance and monitoring for food safety and agricultural health and to improve the scientific basis for mandatory regulations and voluntary standards. Benefit-cost analysis should be used to determine to what level national public capacity should be developed, compared to use of contract private or regional facilities for high-cost, low-volume analyses.*
13. *Consolidate the veterinary laboratory system at central and rayon levels to meet restructured monitoring, surveillance, diagnostic, and certification strategies, based on priority needs and available budgetary support.*

Inspection, monitoring, and surveillance. The prevailing system of monitoring, surveillance, inspection, and quarantine for food safety, plant and animal health, and agrochemicals was transposed to Moldovan law from the GOST system and loses part of its rationale in the context of commerce based on international standards and market economy principles. Moreover, the system is not sufficiently based on cost and risk assessment and not well prioritized. It should be redesigned during the transition period.

14. *Evaluate inspection, monitoring, and surveillance programs with regard to priority setting and cost effectiveness, propose methods for design, and formulate a program for the first year.*
15. *Adjust law and policy to make the CPM responsible for food safety in the Moldovan marketplace with consolidation of authority for market testing and inspection of all food products as well as sales points for food and beverages.*

Border control. It remains an open question whether Moldova's border control system and border procedures are in compliance with international requirements. Assistance is needed for independent international expertise to assess whether Moldova's SPS control systems and border procedures meet the WTO test of nondiscrimination, and an action plan should be developed for bringing these systems into conformance with international requirements, as necessary.

Moldovan Customs' goods-handling procedures and IT equipment are moving ahead faster than Moldova's veterinary and plant inspection services can handle. Investment in information and communications technology (ICT) for the veterinary and plant inspection services is needed to keep them up to date with customs procedures and to improve the accuracy and transparency of their data management.

Fumigation for plant quarantine is currently a monopoly of the Moldova government. Services are provided in fixed locations using essentially one fumigation technique (methyl bromide). The rigidity of the current system adds unnecessary costs to exports and imports and makes it difficult to introduce alternative treatments that are more environmentally friendly and better suited to some, especially higher-value, horticultural products. To overcome these shortcomings, Moldova

should consider privatizing the plant quarantine treatment service. Assistance is needed to study the benefits, costs, and governance requirements for privatization.

16. *Assess whether Moldova's SPS control systems and border procedures meet the WTO rules of nondiscrimination, with a view towards developing an action plan for bringing these systems into conformance with international requirements, as necessary.*
17. *Judiciously improve the ICT of the veterinary and plant inspection and quarantine services to ensure compatibility with the IT system of the Customs Service and to improve the accuracy and transparency of their data management for veterinary and plant quarantine inspection.*
18. *Improve veterinary and plant inspection and quarantine border-crossing sampling and diagnostic capacity (pilot tools, equipment, and procedures for a selected set).*
19. *Study the benefits, costs, and governance requirements for privatization of fumigation and treatment services for plant quarantine, perhaps combined with restructured truck and railroad car sanitation and fumigation services.*
20. *Following a benefit and cost assessment, draft a plan and budget to upgrade the Central Plant Inspection and Quarantine Laboratory and selected rayon control laboratories to enable them to respond to the WTO SPS requirements.*

Emergency response and stamping out. The present system for stamping out livestock diseases should be combined with a comprehensive restocking program to align producer incentives with public health and agricultural health priorities. The basic system needs to operate for animal and product destruction, as well as rendering or BMB (bone meal and blood) processing and the back-end disposal of waste and bio-hazard materials at the local level. Additional donor funding may be needed initially to support emergency operations related to destruction of free-range poultry flocks (ducks and geese) in the event of the spread of avian flu.

21. *Design an improved system to support the stamping out of livestock diseases, with a special emphasis on zoonoses, with the understanding that budgetary and technical constraints force Moldova to prioritize carefully; focus initially on a limited number of diseases.*

Reorganization of veterinary services. The size of technical staff in public veterinary service can be reduced by having certain functions privatized.

22. *Separate public and private functions in veterinary services and provide support for the privatization of curative veterinary services.*

Pesticide management. Thousands of tons of obsolete pesticide left over from the Soviet era constitutes severe environmental, agricultural, and health hazard in Moldova. The World Bank project on POPs (persistent organic pollutants) stockpiles management and destruction and EU assistance for the pesticide destruction strategy would enhance confidence in the safety of Moldovan agricultural products in both domestic and foreign markets. Additional assistance is needed to eliminate POPs and design a system for pesticide container collection.

Testing of pesticide formulations for compliance with labels and grades should be assigned to a laboratory with the necessary equipment. The State Center for Certification and Approbation of Phytosanitary Means and Fertilizers has the best capacity to do pesticide formulation testing, but requires further capacity building to do so. The rigid and unnecessary mandatory requirement of three years of testing experience before registration should be abolished, and a new policy

accepting trial information from neighboring countries and similar environments should be adopted before any assistance can be provided in this area.

23. *Conduct cost-benefit analysis and design a system for pesticide container collection and disposal.*

24. *Design and train staff in risk assessment related to the introduction of new phytosanitary means and fertilizers in order to reorient registration policy.*

Information and education. Awareness raising and education for farmers, food handlers, and consumers are important elements in improving food safety and agricultural health, and programs to this end should be developed or reinforced in Moldova. One outstanding issue in public and animal health is the high occurrence of parasite-induced diseases. Public hygiene education and the promotion of better agricultural health practices should be part of the anti-parasitic disease campaign.

25. *Initiate food safety educational campaigns for government staff, farmers, food handlers, and consumers.*

26. *Expand antiparasitic disease campaigns carried out by rayon councils with the support of the local CPM and Veterinary Services. These should be extended beyond human curative treatment to preventive actions with domestic animals (especially dogs) and livestock, that is, the segregation and fencing of slaughter facilities. National authorities can help with the design of these programs, but community-implemented parasite control programs tend to be more successful than those driven from the center.*

Private sector. Moldova's food industry needs upgrading in facilities, equipment, as well as quality and safety management skills. Deficient public infrastructure, such as poor water quality, also increases the cost to the industry of meeting food safety standards, hence final product cost. Serious consideration should be given to providing technical assistance and training to the food processing industry.

27. *Develop a support program for upgrading food businesses. Private sector upgrading projects may cover plant renovation, hygiene facility improvement, quality management, water supply, waste management and supply chain organization. The support should include comprehensive improvement plans for the convergence toward EU principles of hygiene in food processing, accompanied by timetables and a financing plan.*

Other programs. The improvement of water quality and the collection and safe disposal of POPs require large funding and have broad social and environmental impact beyond food safety and SPS. Actions in these areas might be taken under other programs, but they will have a direct impact on food safety and SPS management.

28. *Provide support for packing, transport, insurance, and disposal of highest risk pesticides.*

Funding of Food Safety and Agricultural Health Management

Additional efforts and budget are needed to reform the legal and regulatory system and to upgrade technical and human skills for SPS management in Moldova. Since Moldova is a small country with limited financial resources, however, funding should be selectively applied and carefully

prioritized. The scope of solutions should include efforts that could be contributed by the private sector. For the short- and medium-term, additional investments will be necessary to upgrade the SPS management system. For the longer term, new efforts could be funded from savings from increased efficiency, abolition of outdated mandatory standards and certifications retained from the GOST era, and reduction of efforts for low-priority tasks.

This action plan provides a rather comprehensive – though not exhaustive – set of recommendations affecting food safety and agricultural health management in Moldova for the next five to six years and covers activities of both the public and the private sector. Major investment must be preceded by institutional reform. An estimated total of US\$ 9.7 million will be needed to allow the public sector to address these issues. Roughly US\$ 3.02 million of assistance is proposed for improvement in the private sector. For the Moldovan government, this action plan provides suggestions on basic principles and specific approaches for improving the food safety and agricultural health management. For donors and international organizations, it could serve as a guide for providing technical and financial support to help Moldova achieve these goals.