Development of the animal identification and registration systems for the veterinary control

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Introduction

After request of the Republic of Moldova to export animal products to the EU countries the competent EU authorities asked RM to fill up the relevant questionaires. A range of problems were identified in the RM food security and animal health situation. The Moldavian Ministry of Agriculture and Food Industry then elaborated and sent to the European Commission a plan of measures on how to implement the recommendations. One of the recommendations concerned animal identification and traceability which the country is now implementing.

In 2005 the import of live animals and products of the animal origin increased considerably and totalled US$ 17.2 million of which live animals - US$ 1.95 million, meat and edible organs - US$ 1.9 million, and milk and milk products, eggs, natural honey, edible animal products - US$ 13.1 million.
A recent questionnaire done on marketing situation of farm products resulted that 41% of farmers sell their production on the sector market, 20% on the village markets, 36% on the national market and only 3% on the export market.
During the last five years, the main export market of agriculture products was the CIS countries (60%) and Romania (37%) (Figure 1).
Lack of a developed market infrastructure for agricultural products force the farmers to find their market channels, independently.
Even 90% of the Moldavian farmers at the moment are outside organized market structures.
Regarding the future possibilities of development the South Region of the republic is considered to have favourable conditions for growing sheep, due to the past rich experience of the farmers and sufficient good pastures.

At the same time the farmers are aware of the absence of markets for milk products, wool and mutton. For more efficient development of sheep breeding in the south it is necessary to create a network of product collection, establishment of processing and sale of products, introduction of new technologies in raising of sheep and processing the products.

In the Centre and in the North farmers consider that there are favourable conditions for growing fruits and vegetables, as well as for their processing. The conclusion from the research results is that agricultural activities are confronted with difficulties both in production, processing and marketing of products. The state support is considered necessary for improving of the legal framework, creation of a favourable investment climate and for attraction of new investments in this important area of the national economy.

Most of the animals are on family farms, which annually sell about 109 thousand tons of beef and poultry meat, while the agriculture enterprises sell about 10 thousand tons. (Figure 2).

Production volumes of milk and eggs are continuously growing at family farms providing the processing industry with necessary prime material amounting to 628 thousand tons of milk (Figure 3) and 668 thousand tons of eggs with 443 thousand tons from the family farms. To meet the consumer demand the primary production sector will need to concentrate on increasing the production volumes, and the processing enterprises on collection and integral processing of quality end products.
Figure 2. Selling of beef and poultry meat in Moldova, in thousand tons.

Figure 3. Milk production in Moldova, in million tons.

Figure 4. Egg production in Moldova, in millions.
The value of import of live animals and animal products grew US 18.5 million over the imports in 2004. This was a result of the increased bovine meat importation (5.5 times) from Brazil; cheese (2.3 times) from Ukraine, Russia and Poland; meat and fresh or frozen edible organs, (+83.6%) from USA and Brazil, Poland, Hungary, Germany fresh or frozen pork meat (+75.4%) from Brazil and USA. The excessive imports and insufficient stimulation of the local production influenced the national animal populations that have seriously decreased during the last 10 years (Figure 6 to 10).

It was observed an increase in poultry production, the main part is concentrated in family and small farms.

Changes in animal numbers over recent years

Figure 5. Woll production in Moldova, in tons.

Figure 6. Cattle production in Moldova, in million heads.
Figure 7. Pig production in Moldova, in million heads.

Figure 8. Sheep and goat production in Moldova, in million heads.

Figure 9. Horse production in Moldova, in million heads.
In 2005, the value of RM exports of live animals and products of the animal origin was US$ 20.1 million, of which cattle were 3,786 heads; sheep 20,283 heads; goats 501 heads with a total value of US$ 1.7 million. Export of cattle meat was 200 tons; sheep meat 303.4 tons; and edible organs 8,728 tons while milk and milk products exports were 5,750 tons. Poultry eggs, natural honey, edible animal products were exported for a value of about US$ 9.5 million. The production and export potential of dairy enterprises is about 4 thousand tones of butter, 2.5 thousand tones of hard pressed cheese and 10 thousand tons of skim and full milk powder.

To increase meat production, the strategy plans for sector revitalization of some complexes of pork meat production and poultry factories is expecting to achieve in 2008 about 100 thousand tons of meat, annually.

It is a main concern of the government that infectious animal diseases such as foot and mouth disease, BSE and other diseases can cause death or compulsory slaughter of many animals with consequent large economic losses. An animal identification and recording system has a major importance for permanent monitoring of animal health situation and for planning and implementation of preventive measures and control of diseases.

In the Republic of Moldova the animal traceability is lacking and animal carcasses are only accompanied with veterinary certificates. This system does not satisfy the requirements requested by the EU on the animal traceability and products of animal origin, particularly for cattle and cattle meat. The state is committed to improve the situation to an internationally acceptable level.
The animal identification and registration system, which will be implemented in the Republic of Moldova, will have to assure the traceability and control of the whole chain from producer to consumer. The minimum requirements of the system will be:

- Protection of producer against the potential animal health risks.
- Consolidation of consumer trust in food safety.
- Control and prevention of animal diseases.
- Monitoring of animal diseases.
- Compatibility with the EU and WTO requirements regarding the origin and quality of animals and products of animal origin in international trade.

The main objectives of the Animal Identification and Traceability System are:

- Improving the efficiency of the work of the Veterinary Sanitary Department.
- Assure traceability as principle of food safety in RM.
- Control of animal movement to reduce the risk of serious infectious and contagious diseases.
- Improved administration of the animal sector.
- Assure qualified staff for covering all the reference area of the organization.
- Prevention of infectious and contagious diseases from animals to animals and from animals to humans.
- Planning and control of sector related state subventions, premiums.

As mentioned before in May 23-27 2005 took place the the EU/FVO on-site inspection, which resulted with a number of requirements to RM in order to allow the entry into to the European Union. The Ministry of Agriculture and Food Industry elaborated and sent to the European Commission a plan of measures regarding implementation of these recommendations, including implementation of an animal identification and traceability system.

In the European Commission Food Security Program Financing Agreement dated 7th of April 2004, one of the conditions was the identification of 5% of cattle using an animal identification and registration system that will be similar with those actually running in the EU.

- In July 2005 - the amount of 75 000 Euros was allocated by revising the state budget for animal identification.
- In August 2005 - was signed the MAIA order for launching a Pilot project of animal identification and registration in the Straseni region and is adopted the sanitary veterinary norm regarding animal identification.
- In September 2005 - EC FSP offered technical assistance for the Pilot project, fact that allowed transfer of data in the data base from Romania.
In October 2005 - Pilot project in Straseni began and the system was operational in 48 hours and it was consistent with the EU practice.

In October 2005 - the EU Embassy visited and positively appreciated the fulfilment of conditions of the financing agreement to identify and register 5% of the cattle effective; this allowed the allocation from the state budget of 7.6 million Euros, including 0.8 million Euros for animal identification.

In January 2006 all the animals from Straseni region were identified and registered in the data base (about 3 000 heads). The system covers 40 localities, over 20 000 exploitations, 4 slaughter houses, and a market, 3 sanitary veterinary circumscriptions with 8 veterinary points in which work 23 veterinarians. At the moment in the Republic of Moldova only the Pilot system for animal identification and registration is implemented which is viable and it works. The aim of the Pilot project is to implement the Action Plan EU – Moldova.

For 2006 in the state budget, it was foreseen the sum of 19 500 thousands Lei for system launching at the national level that will allow the implementation of the animal identification and traceability system in about 10-12 regions from the 37 in the Republic of Moldova.

The implemented animal identification and traceability system assures the acquaintance of administration for the animal identification of cattle, sheep, goat, swine and equine species and allows the management of the directly obtained information, in real time, from the data base currently constituted and exploited in DMV areas of activity.

The advantages of implementation of this system are those which were already listed above in this report.

The integrated pilot system benefits from data hardware on 3 levels:

1. The central server using operation systems and software specific for animal identification and registration system.
2. The rational monitoring station (1 – the Veterinary Sanitary Service of Straseni raion), with web access to applications that deal with animal and holding identification and registration system.
3. Work stations with operation systems, and specific applications for animal identification and registration, as well as communication protocols with the central server.

The implemented infrastructure is modular and scalable, so it will be possible to add new functionalities to the implemented structure (scalability on horizontal), as well as enlargement of the number of users, connection improving, compatibility with the technologies which will appear in the next future.

System assures a non-stop year around functioning. The external pressure (financing) from EU and the implemented project created the premises for implementation of the animal and holding identification and registration system extended to the whole territory of the Republic of Moldova, by preparing and training the veterinarians at the local level, in a short time using an identification system “of trying”
The success of development of the animal identification and registration system depends on the country’s capacity to exploit the existing human and financial resources. This needs a mentality change and Government contribution for the public sector. The Republic of Moldova 3.4 million human population is divided in 1.3 million (38.7%) in towns, 2.1 million (61.3%) in villages.

The veterinary service in the Republic of Moldova is supporting improved efficiency of animal production by higher birth rates, prolificacy, productivity and safety of food.

Over 2500 veterinarians are the main human resource and social capital to support the implementation of the system of animal identification. The other positive aspects are:

- Existence of the veterinary infrastructure (already formed, and functioning) specialized on priority areas of activity.
- Well prepared specialists, that are in charge of the animal movement, protection of animal health at farm level, quality products in production units, processing, storage, and transportation and accounting. It is excluded at this stage to use farmers for implementation of the system of animal identification, as practiced in other countries.

The direct beneficiary of the animal identification and traceability system is the Department of Veterinary Medicine from the Ministry of Agriculture and Food Industry. The Department of Veterinary Medicine is the responsible authority in the veterinary area and in food safety under the Ministry of Agriculture and Food Industry.

The implementation process of the animal identification and traceability system development will evolve at the national and local level. At the national level the responsibility for implementation of the strategy components will be on the Ministry of Agriculture and Food Industry and other ministries, while at the local level the implementation will be responsibility of the local sanitary veterinary services with adherent circumscriptions and the authorities of the local public administration. The respective coordination and monitoring of the process is under the responsibility of the Veterinary Medicine Department. The other ministries are: the Ministry of Finance, Ministry of Internal Affairs, Ministry of Justice, Ministry of Health and Social protection, and Ministry of Informational Development. The actions that the central public institutions, including elaboration and implementation of the legislative framework, will be directly realized by them and will not amount to additional costs to the state budget. Regarding the actions with a direct effect on the implementation of the system at the national level, or which require additional costs for the implementation, they will be financed form the state budget and/or the foreign donor resources. The
implementation of these actions will be realized in collaboration with the partners of the Republic of Moldova Government in the process of the Strategy implementation, including:

- The organizations that represent the interests (Ministries).
- Performers of the identification services.
- The international financing institutions and donor organizations.

Implementation of the strategic actions through the non-governmental organizations and private sector using transparent methods of selection the respective institutions will contribute to efficient administration of financial resources allocated for this purpose and to increase the expected effects. The institutional framework and logistic implementation of the Strategy of sustaining and development of the identification system and animals traceability for 2006-2008 is as follows:

The total amount of central and local public authority institutions, the supporting infrastructure and the foreign donor’s assistance constitute the institutional framework for the maintenance of the animal identification and traceability system for 2006-2008. The nucleus of the institutional and logistic framework for the implementation of the strategy will be Ministry of Agriculture and Food Industry - public institution with functions of maintaining the animal identification and traceability system, through which will be channelled financial resources designated for the implementation and will be collected information regarding the results and effects obtained for the Government of Republic of Moldova examination and conclusions.
The medium term objective of the Republic of Moldova is to obtain commercial preferences from the EU. The Action Plan Republic of Moldova - EU creates the necessary political premise for requesting of such preferences. Thus, this Plan will identify the next prioritized action: “Acting in order to receive from EU the Commercial Preferences by assuring the effective control of origin and quality from the Republic of Moldova”.

The legislative analysis demonstrated that the normative base of the Republic of Moldova regarding animal identification, registration and traceability, assure only some elements and do not correspond to the EU requirements. For a legal harmonization it was necessary to introduce respective changes in the RM legislation.

The main normative documents of EU which the Republic of Moldova takes as a guide are:

- EU Directive as of the 27th of November 1992 for animals identification and registration
- EU Decision nr. 1760/2000 of the European Council and Parliament as of the 17th of July 2000, which stipulates the system for the identification and registration, labelling of the cattle meat and cattle meat products and which repeals the EU Council Decision nr 820/97.

The stipulations of these documents were introduced in the law project regarding Animal Identification and Registration and the law project regarding the modification of the Code regarding the administrative Contraventions, as a legislative base of the Republic of Moldova for animal identification and registration. To implement the national system for animal identification and registration of animal holdings the Ministry of Agriculture and Food Industry prepared the following legislative acts:

- Order of Ministry of Agriculture and Food Industry No. 156 as of the 27th of July 2005 regarding assignment of the Veterinary Medicine Department as a Competent Authority with responsibility to apply at the national level of the system for animal identification and registration.
- Order of Ministry of Agriculture and Food Industry No. 191 as of the 4th of August 2005 the Veterinary Sanitary Norm regarding implementation the Pilot System for animal identification and registration from Straseni region.
- Order of Ministry of Agriculture and Food Industry No. 54 as of the 24th of March 2006 regarding constitution of the working group for elaboration of the Concept for the animal register and elaboration of the technical specifications for the National Program of Animal Identification and Registration of the Exploitations.
• The “Concept regarding the Animal Identification and Traceability System in the Republic of Moldova” and the sanitary veterinary norm regarding technical specifications of the identification means and animal registration in Moldova, approved by the Order of Ministry of Agriculture and Food Industry No. 40 as of the 2nd of March 2006. The WTO had introduced into practice the Agreement of using the sanitary and fitosanitary measures (the SPS Agreement) as from January 1995. This agreement forces the WTO member states (Moldova is member of WTO) to implement the traceability system as measure stipulated in SPS.

The bilateral juridical framework between the Republic of Moldova and the European Union is based on the Agreement of Partnership and Cooperation and the Action Plan EU – Republic of Moldova, signed in Brussels at the beginning of 2005, which foresees a number of necessary actions and measures to be realized by the Republic of Moldova to assure transition to a more advanced stage of collaboration. These measures foresee reformation of the legislative and institutional framework with a view to conform the Republic of Moldova to the European values, and at the last moment obtaining of the commercial preferences in the relations with EU for the products of animal origin and live animals.

Contributions to marketing and processing issues effect will be:
• Modernization of the regional infrastructure.
• Sustaining of emergent sectors like breeding sector by offering subsidies, strengthening the existing sectors like food industry etc.
• Implementation of projects and programs for export oriented rural development, programs for stimulation of the business associations creation, including cooperatives, at the local level within the sectors that have production potential of the products of animal origin and their processing.
• Encouraging the creation of the alliances between the producers (ex.: consortiums of producers and exporters) by increasing the exportation volume of the products of animal origin.
• Stimulation the creation of special economic zone (that will rule to concentration of industries in some zones, to stimulate subcontracting activities on a value chain), that will favour the development of the breeding sector and the creation of work places.
• Stimulation of the business alliances at the local level between group of companies with products or similar services or related in different interconnected sectors that can benefit from the synergy effect in increasing of the exportation effort, financing stimulation at the local level of the breeding cooperatives and processors of products of animal origin.
• Supporting creation of commercial centres to effectuate activities regarding collection, sorting, processing, packaging, storage and delivery of products of animal origin.
I step:
1. Harmonization of the legislation of the Republic of Moldova to the EU regarding animal identification and products of animal origin traceability.
2. Implementation of the system for animal identification at the national level through the objectives for 2006:
   - Elaboration of the conditions of the contract and of the terms of reference for the tender in order to extend the animal identification and registration for all the animals.
   - Organization of tender and contract attribution regarding animal identification and registration.
   - Training of veterinarians for implementation of the procedures regarding the animal identification an registration system.
   - Beginning of the animal identification and registration.
   - Establishing and implementation of the control procedures and measures.
   - Monitoring and control of animal movement.
3. Animal and holding identification.

II step:
1. Evaluation of the animals productivity and the potential for products of animal origin potential.
2. Identification of the weak points of the breeding sector and industry processing.
3. Elaboration of the sector development strategy, with emphasis on support to the animals breeders and of processing enterprises.

III step:
Elaboration of the centralized collection and processing network of animal products emphasizing direct contact of the producer with processor.

IV step:
Develop domestic and export marketing channels.
Implementation of the new system for animal identification and traceability at the national level will offer the possibility of animal traceability at all the existence stages, will assure the necessary information regarding animal and products of animal origin circulation from the moment of birth, the entire period of the commercial network and till consumer, as a result to assure the taking of corresponding control measures in case of necessity.

In order to active export trade, the following opportunities of intensification processes of European integration and international economic cooperation should be promoted:

- Efficiency of the Republic of Moldova participation in the multilateral negotiations of WTO.

Steps that should be made for the future priorities (that a country must do)
Development of AI in Moldova

- Negotiation with the EU of a preferential commercial regime as part of implementation of the Action Plan “Republic of Moldova - EU”.
- Active participation of the country in the regional zone of free exchange with the beneficiary countries of the Stability Pact for the South Eastern Europe and increase of the relations of free trade with Romania and Russian Federation.
- Obtaining from local and international financial institutions financing support for export oriented to enterprises in rural area.