



**EC/FAO Programme on Information Systems to
Improve Food Security Decision-Making in the
European Neighborhood Policy (ENP) East Area**

REPORT
Study tour of a Georgian delegation to Romania
Animal identification and registration system

28 May – 1 June 2012

Summary

The animal identification and registration (AIR) system is a high priority for the Government of Georgia in the context of the preparation of negotiations with the EU on the Deep and Comprehensive Free Trade Agreement (DCFTA). The National Food Agency (NFA) of the Ministry of Agriculture (MoA) of Georgia asked the Food and Agriculture Organization of the United Nations (FAO) to organize a study tour to Romania (and later Croatia) to learn from East European countries' experience in implementing AIR systems in the context of the EC/FAO Programme in ENP East Area. A Study Tour was organized in Romania on 28 May–1 June 2012. Romania has a well established AIR system and a husbandry sector structure similar to Georgia with a major share of small household farms.

The main recommendations to the delegation of the Georgian National Food Agency, based on the Romanian experience can be summarized as follow:

1. Importance of developing one single project for the development of the Animal Identification and Registration (AIR) system, that includes all the species of economic interest, based on financial and technical arguments.
2. Interest of identifying all animals in holdings, as a gradual approach will make more difficult project implementation and will lead to increased costs.
3. The national specific situation related to breeding should imperatively been taken into account while designing the AIR system. Most vulnerable and targeted entities are small farmers and most important activity is animal movement (trade, seasonal pasture, slaughter).
4. Importance of providing incentives to the breeders, direct subsidies and indirect support by financing veterinarian activities through the state budget.
5. Special attention should be given to operational costs while designing the AIR system.
6. Interest of testing all the elements of the system within a pilot project comprising 2-3 municipalities before implementing the project at the national level.

The Georgian delegation found the experience of Romania in the development and operation of the AIR system interesting and mostly transferable to Georgia. Most recommendations were considered valuable and relevant to the Georgian situation. They considered however that indirect subsidies to farmers are more effective and affordable than direct subsidies. Free services could be provided to registered animals who are part of the AIR system. Registration could be voluntary for self subsistence farmers and mandatory for the farmers marketing their animal products. Participants found that outsourcing services for AIR system seems effective, but outline the importance of outsourcing services to more than one company to assure competitiveness and avoid monopoly.

1. Background of the study tour

The animal identification and registration system is a high priority for the Government of Georgia in the context of the preparation of negotiations with the EU on the Deep and Comprehensive Free Trade Agreement (DCFTA).

The EC/FAO Food Security Programme provides support to the National Food Agency (NFA) of the MoA which is responsible for establishing a centralized IT management infrastructure required for implementing the animal identification and registration (AIR) system. Several activities are being implemented in the framework of the Programme to support NFA in preparing the implementation of AIR system. The Programme has already provided NFA with IT equipment for Animal Identification and Registration system support.

NFA has expressed interest in learning from East European countries' experience in implementing AIR systems. The programme was asked to organise a study tour for NFA staff to Romania and Croatia. Romania has a well established AIR system and a husbandry sector structure similar to Georgia with a major share of small household farms.

The participants of the visit were nominated by NFA. NFA nominated key staff involved in the AIR system development:

- Mr Zurab Bejanishvili, Deputy Head of the National Food Agency
- Mr Koba Dzamashvili, Chief Veterinary Officer
- Mr Zviad Asanishvili - Head of Animal Identification and Registration Division
- Mr Lado Grigalashvili, Head of IT Department
- Mr Lasha Mshvenieradze, Head of International Relations Department.

The objective of the study tour was for NFA representatives to get better knowledge and understanding of the AIR system implemented in Romania. During the study visit, Government representatives showed particular interest in:

- Structure of AIR system
- Software used for the system
- Management and procedures used for the system
- Ways of involvement of different institutions in the system

The visit to Romania was coordinated by Mr Maximilian Dragan, FAO consultant. The four day visit comprised visits to the National Veterinarian Chamber; the Sanitary, Veterinary and Food Safety Department; the Sanitary, Veterinary and Food Safety Laboratory; and the National Operator of the Animal Identification and Registration System, IQ Management (company outsourced for AIR implementation). The agenda of the study tour is provided in Annex 1.

Romania started implementing an Animal Identification and Registration (AIR) System in 2001. The initial system for bovine registration failed, leaving no data and substantial number of ear tags missing from the storages. In 2003, Romania had 80% of animals in small backyard farms and the veterinary strategy for disease prevention and eradication was not focused on real field situation, leading to difficulties with export because of lack of reliable data and difficulties for farmers to receive compensation for episodic diseases.

The decision was made to approach the AIR system differently and instead of implementing and maintaining the AIR system with administrative resources, the services were outsourced. An organization was selected to produce ear tags and provide IT services, communication, logistics and training. This option allowed to reduce the number of staff involved in the maintenance of the system to four at centralized level and 84 at regional level. The new system proved to be successful and, in 2010, Romania registered 2.1 million animal holdings and identified 75 million animals.

The AIR system provides:

- Documents
 - Passport
 - Holding cards

- Registration forms
- Reports
 - Animal individual report
 - Holding register
 - Animal on the holding report
 - Slaughterhouse report
 - Imports report
 - Exports report
 - Statistical report of the movement
 - Cohort report
 - Late notifications reports
 - Statistical report of the late notifications
 - Per age report of the livestock
 - Events report
 - Errors report per work stations (vet)
 - Total errors report
- Charts and statistics
 - Data export to other systems (Animal health and labs)
 - Financing and rural development

The field level procedures of the system are simple. Farmers notify an approved veterinarian to register a change of quantity or other activity in the farm. The veterinarian has to respond within maximum 14 days, issues the identification, movement or event forms; update the passport data and register movement, disappearance or slaughtering of animal in the system. In order to achieve maximal simplicity, the registration form is a one page document and the digital version is identical to the hard copy version.

The animal passport generated by the system provides the following information on the animal:

- Code
- Sex
- Breed
- Birth date
- Dam's code
- Death and slaughter day
- Bars code

2. Programme of the Study Tour

Day 1

The participants of the study tour organized by FAO arrived at the Bucharest airport Henri Coanda on Monday 28 May 2012, and were transferred to the hotel.

A visit to the National Veterinarian Chamber (NVC) took place during the first day of the tour. The following representatives participated from the Chamber:

- Prof. Dr. Viorel Andronie – President of CVD
- Dr. Liviu Harbuz – Senior Vice President

The following topics were discussed during the meeting:

- 1) The history of the institution;
- 2) Territorial organization, composition and total number of staff;
- 3) The activities currently carried out by NVC:
 - a) the main social partner of the National Sanitary Veterinary and Food Safety Authority (ANSVSA) and of other institutions, with consulting character in the process of development and promotion of legal acts with impact on the profession;
 - b) training and continuous education of veterinary doctors in Romania;
 - c) support provided to private veterinary doctors in order to access European funds for the development and variation of services.

The FAO Study Tour Coordinator presented the following elements during the second part of the meeting:

- The structure of veterinary services in Romania
- Comparative situation: Romania-Georgia and Sibiu-Imereti (see Annex 2)
- The programme for the second day of the Study Tour

Day 2

Transfer to Sibiu and visit of the Sibiu Sanitary Veterinary and Food Safety Department (DSVSA), one of the 42 ANSVSA administrative units

Sibiu Department was represented by the following participants:

- Dr. Serban Tichindelean, Executive Director
- Dr. Nicolae Ștefănuță, Deputy Executive Director
- Dr. Dan Mario Farcas, Head of Animal Identification Service
- Dr. Cristian Stănescu, Head of Sanitary Veterinary and Food Safety Laboratory

Dr. Tichindelean presented the following topics to the participants:

- 1) Organization of DSVSA Sibiu: 120 officials
- 2) The actions of the Strategic plan for prevention and control of animal diseases:
 - anthrax vaccination
 - rabies vaccination
 - tuberculation
 - test for Enzootic Bovine Leucosis
 - test for Brucella Ovis
 - test for Equine Infectious Anaemia

Dr. Dan Farcas made a presentation of the main actions carried out or in process of being carried out within DSVSA in the field of animal identification and registration:

1) *Monitoring and correction of nonconformities*

The platforms were presented, for the monitoring of the 48 computers used in the field in 54 Sanitary Veterinary Circumscriptions (CSV), administrated by 48 contracted private veterinary doctors from the animal identification services

2) *Control in the field*

Performed by 8 regional veterinary doctors - state inspectors (CSVZ), within the annual inspection program, covering at least 3% of animals from sheep and goat species

3) *Administration of bovine passports*

Printing and certification of bovine passports based on information from the National Data Base (BND) of the National System for Animal Identification and Registration (SNIIA) and their submission to the animal owners through private veterinary doctors

4) *Administration of ear tags*

It was presented how this action has been fulfilled at the time when procurement of the ear tags was done in a centralised way. Dr. Farcas emphasised and recommended the centralized supply of ear tags the first 3-5 years of the project, which allows a better administration of the ear tags comparing with an unregulated market. It is necessary to have a severe administration of the ear tags before they are used. It is mandatory to have a clear and transparent system for the allocation of the ear tags to the holdings from head office, to minimize possibility of ear tags being lost or miscounted.

5) *Logistic measures*

It includes the collection of non-functioning computers and their handling to the National Operator in order to fix/replace them within a period of maximum 10 days.

It also includes the distribution among the private veterinary doctors of all materials for the running of the National System for Animal Identification and Registration (SNIIA): forms, applicators, holding cards, etc.

6) *Training*

The activity is carried out in accordance with the training program approved by ANSVSA at the national level.

The day continued with the visit of the Sibiu Sanitary Veterinary and Food Safety Laboratory, accredited in accordance with ISO 17025 by RENAR – Romanian accreditation body. The following aspects were

emphasized: explanation of how the animal identification data are used within the laboratory, how this information is transferred from the national data base (BND) and used by Laboratory Management Client System, complying with traceability and confidentiality principles foreseen by the legislation.

The delegation was transferred to Altana

CSV Altana – represents an administrative unit of the veterinary service, comprising the following villages: Altana, Benesti and Ghijasa de Sus, administrated by a private veterinary doctor: Dr. Radu Nechiti. On the premises, Dr. Nechiti presented the equipment he is using in the animal identification and registration process:

- Computer
- Ear tags and microchips
- Application tools (applicators and syringes)
- Forms

The delegation together with Dr. Nechiti undertook a visit to a backyard farm (mini farm), which has characteristics similar to the over 2 million holdings registered in Romania. Five sheep (out of 10) and 3 pigs (out of 5) were tagged, one form for the registration F1 was filled in, the identified animals were then registered on the computer located in the veterinary office, and transmitted afterwards to the central data base. The delegation also visited a traditional sheep farm in extensive system, with 600 heads.

Day 3

Transfer from Sibiu to Bucharest

Visit to the National Sanitary Veterinary and Food Safety Authority (ANSVSA)

The following representatives of ANSVSA participated:

- Mr. Mihai Turcanu – President, State Secretary
- Mr. Marian Pintur – Vice President – State Undersecretary
- Mr. Vladimir Manastireanu – Vice President – State Undersecretary
- Mrs. Iulia Cohen – Deputy General Director
- Mr. Marian Popescu – Head of International Relations Department

Technical issues related to the animal identification and registration were addressed during the meeting. The Romanian delegation briefly presented the history of the project launched in 2004, the main difficulties faced due to the breeding system in Romania (over 2 million holdings with a small number of animals of different species).

The Georgian delegation was interested in the factors that influenced the competent authority in its decision to outsource the services to a consortium of private companies. The services include:

- Supply of the ear tags
- Endowment with equipment of those 2400 veterinary offices (CSV): computers, CDMA internet communications
- Endowment with equipment of those 1000 inspectors
- IT&C Infrastructure: servers, antennas etc.
- Supply of forms for the system
- Supply of applications for the identification and registration system
- Logistics related to the transportation of elements to destination
- Maintenance and support services
- Call-centre
- Training

The ANSVSA representatives presented the main arguments that influence the decision to outsource the services to private companies:

- Maintenance of a sustainable level of costs, taking into account that no payments in advance are executed, provider is paid per animal head validated in the national data base
- Reduced staff in their own structure (4 people at the central level and 2 x 42 at the regional level) who was not able to run a system of such dimensions

- Impossibility to attract qualified specialists with the low level of salaries in public administration: IT developers, call centre operators etc. Example: one IT developer is paid on the private market minimum 2000 Euro per month, this salary exceeding ANSVSA President's salary
- Continuous character of provided services: 24 hours per day and 7 days per week
- Concentration of ANSVSA and of subordinated structures on specific areas of activities: elaboration of strategies and policies, monitoring, control, etc.

The Romanian delegation showed its interest in inter-departmental collaboration in animal identification during the meeting, as well as in other related areas such as animal health, food safety, phytosanitary, through partnership projects.

Day 4

The delegation visited IBM Data Centre premises. The data centre provides to its clients continued services by hosting equipment in highly protected spaces, guarantying continuing functioning of equipment. This solution has been adopted in Romania based on an cost-benefit analysis and the need for guaranteed quality of services.

The visit continued at the headquarters of the National Operator of the Animal Identification and Registration System, IQ Management (IQM). A detailed presentation of the situation in Romania was provided, starting with the launching of the project in 2004, as well as the overall approach of the project. IT specialists made a detailed presentation of IT architecture and explained data flows, as well as procedural aspects of the system.

Presentations and discussions were focused on the following issues:

- Situation of the breeding sector before the identification process started
- The structure of the joint venture that implemented the project
- The structure of the veterinary services and IT&C infrastructure
- Description of the functions of registration application (CSV level – private veterinary doctor)
- Description of the functions of monitoring application (regional and central level)
- Description of the functions of GIS application – a tool for the management and monitoring of outbreaks
- Description of the functions of the rapid alert system in case of epizooties

IQM facilities were visited and the department's functions were presented, being responsible for the implementation of the project in order to ensure contracted services:

- Administration of the ear tags
- Endowment with equipment of the 2400 veterinary offices (CSV): computers, CDMA internet communications
- Endowment with equipment of the 1000 inspectors
- IT&C Infrastructure: data base servers, communication servers, antennas etc.
- Supply of forms for the system
- Supply of applications for the identification and registration system
- Logistics related to the transportation of elements to destination
- Maintenance and support services
- Call-centre
- Training

The business model of the entire animal identification and registration system was presented, as well as the metrics "per animal head" used in invoicing the services. Mr. Ovidiu Vladu, IQM President concluded the meeting by expressing interest in involving IQM in similar projects in Georgia. He confirmed their availability in providing consulting services to an eventual project.

3. Conclusions and recommendations

Based on the Romanian experience, the recommendations to the delegation of the Georgian National Food Agency can be summarized as follow:

- Importance of developing one single project for the development of the Animal Identification and Registration (AIR) system, that includes all the species of economic interest, based on financial and technical arguments.
- Interest of identifying all animals in holdings, as a gradual approach will make more difficult project implementation and will lead to increased costs.
- The national specific situation related to breeding should imperatively been taken into account while designing the AIR system. In the case of Romania (and Georgia which presents a very similar situation), the situation is characterized by a large number of holdings with a limited number of animals and holders in an advanced age. Special attention shall be given to small farm activities. The AIR system is a complex tool for animal health and food safety, the traceability capacity of the system assists competent authorities in designing and implementing strategies and policies that impact the entire animal health country status. Based on risk analysis, the most vulnerable and targeted entities are small farmers and the most important activity is animal movement (trade, seasonal pasture, slaughtering).
- Importance of providing incentives to the breeders, direct subsidies and indirect support by financing veterinarian activities through the state budget.
- Special attention should be given to operational costs while designing the AIR system. They are frequently ignored but have a major impact on the sustainability of the system. Ignoring them at the design stage could lead to the collapse of the system in the following years.
- Interest of testing all the elements of the system within a pilot project comprising 2-3 municipalities before implementing the project at the national level.

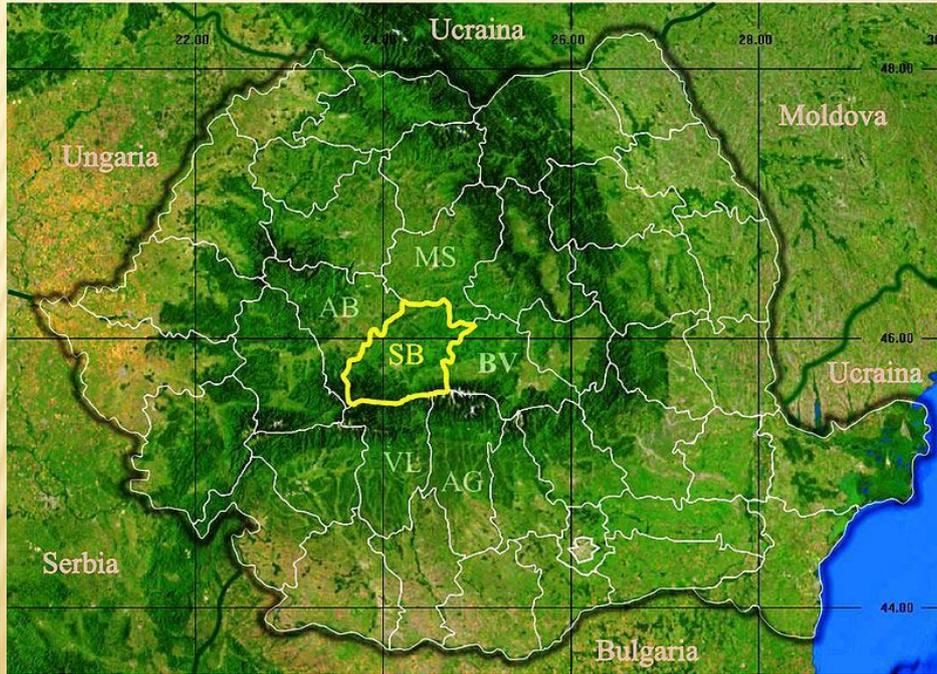
The Georgian delegation found the experience of Romania in the development and operation of the AIR system interesting and mostly transferable to Georgia. Most recommendations were considered valuable and relevant to the Georgian situation. They considered however that, indirect subsidies to farmers are more effective and affordable than direct subsidies. Free services could be provided to registered animals that are part of the AIR system. Registration could be voluntary for self subsistence farmers and mandatory for the farmers marketing their animal products. Participants found that outsourcing services for AIR system seems effective, but outline the importance of outsourcing services to more than one company to assure competitiveness and avoid monopoly.

Annex 1: Agenda

	ACTIVITY	TOPIC	Duration	PARTICIPANTS
DAY 1 28- May	Arrival 9.15 1. TK 387 S 21MAY TBSIST HS1 0415 0545 2. TK 1043 S 21MAY ISTOTP HS1 0750 0915			FAO, GE
	Transfer to hotel		45 min	FAO, GE
	Resting time		2h	
	Lunch		1h	FAO, GE
	Transfer		30 min	FAO, GE
	Visit National Veterinarian Chamber - professional Association	Topic 7	1h	FAO, GE, National Veterinarian Chamber - President DR. ANDRONIE VIOREL, Vice-President - Dr. HARBUZ LIVIU
	Presentation of veterinary structure, system architecture		1h	FAO, GE
	Presentation of the Agenda , discussion		1h	FAO, GE
Transfer to hotel Dinner in Bucharest		30min.	FAO, GE	
DAY 2 29 May	Transfer from Bucharest to Sibiu		4h	FAO,GE
	Visit Veterinary and Food Safety Directorate Sibiu - county authority (oblistar)	Topic 3	1h	FAO, GE, Director of Veterinary and Food Safety Directorate Sibiu County - TICHINDELEAN SERBAN, Animal identification Sibiu - Farcas Dan
	Visit Veterinary Laboratory Sibiu	Topic 4	1h	FAO, GE, Director of Veterinary and Food Safety Directorate Sibiu County - TICHINDELEAN SERBAN, Director of Laboratory - STANESCU CRISTIAN
	Lunch	-	1h	CATERING
	Transfer from Sibiu to Altina		1h	FAO, GE
	Visit Veterinary Circumscription Altina - Data entry Point	Topic 1	2h	FAO, GE, Chef Veterinary from Altina
	Visit ovine holding	Topic 2		FAO, GE, Chef Veterinary from Altina-Dr. NICHITI Radu, Fermer
	Transfer from Altina to Sibiu		1h	FAO, GE
	Check in accommodation in Sibiu		1h	
City tour & Dinner in Sibiu		3h	FAO, GE	
DAY 30 May	Transfer to Central Veterinary Authority		4h	FAO, GE
	Visit Veterinary Central Authority	Topic 5	2h	FAO, GE, National Sanitary Veterinary and Food Safety Authority- State Secretary , General Sanitary Veterinary and Fodd Chain Directorate- Deputy Director COHEN IULIA
	Lunch		1h	FAO, GE

	Transfer to hotel		30 min	GE
	Dinner in Bucharest			FAO, GE
DAY 4 31 May	Transfer to IBM		30min	GE
	IBM data storage		30min	FAO, GE
	Animal traceability system presentation	Topic 8	3h	IQM, FAO,GE
	Lunch on Corbeanca		1h	IQM, FAO, GE
	Discussion/Conclusions		2h	IQM, FAO, GE
	Transfer to hotel		30min	
	Dinner in Bucharest			
DAY 5 01 June	Transfer to airport 09.00 TK 1044 E 25MAY OTPIST HS1 1015		30 min	

ROMANIA MAP



GEORGIA MAP



COMPARATIVE



	GEORGIA	ROMANIA
Area total	69,700	238,391
Human population	4,6	20,2
Administrative unit	11	42
Average Area/reg	5,628	5,676
Average population/regiune	404,032	466,667
veterinary unit	93	2400
bovine	1,2 MIL	2,5 MIL
sheep	1,1 MIL	6,5 MIL
pigs	0,2 MIL	5,5 MIL

SIBIU - IMERETI



	SIBIU	IMERETI
Area	5,432	6,552
Human population	421,000	700,000
Bovine	44,289	253,393
Porcine	69,975	
Ovine	317,885	43,093
Caprine	9,373	
Cabaline	4,749	
Pasari	1,456,800	
Albine	13,600	

Romanian National Project - Infrastructure

