

# Tools for evaluating Veterinary Services: an external auditing model for the quality assurance process

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## Summary

The author describes the reasons why evaluation processes should be applied to the Veterinary Services of Member Countries, either for trade in animals and animal products and by-products between two countries, or for establishing essential measures to improve the Veterinary Service concerned.

The author also describes the basic elements involved in conducting an evaluation process, including the instruments for doing so.

These basic elements centre on the following:

- designing a model, or desirable image, against which a comparison can be made
- establishing a list of processes to be analysed and defining the qualitative and quantitative mechanisms for this analysis
- establishing a multidisciplinary evaluation team and developing a process for standardising the evaluation criteria.

## Keywords

Harmonising criteria – Model – Multidisciplinary team – Organisation – Qualitative measurement – Quantitative measurement – Systemic approach – Veterinary Service.

## Introduction

The exponential increase in the international trade in livestock products and by-products, stemming from the need to satisfy demand for these products in different national markets, has been one of the most important developments in world trade in recent years. Another major aspect is the importance of animal health in international trade today. The World Trade Organization has clearly identified the importance of both these aspects in its Agreement on the Application of Sanitary and Phytosanitary Measures (the 'SPS Agreement') (5).

Every time a process is initiated between two countries for exporting and/or importing animals, animal products and/or by-products, or pharmaceutical products, biologicals or feedstuffs for animals, the importing country has the right to request an evaluation of the Veterinary Services of the exporting country, as stipulated in the *International Animal Health Code* of the OIE (World organisation for animal health) (3).

The evaluation of Veterinary Services has therefore become a real necessity and a key element in risk analysis studies of animal health problems arising from the trade in animals and livestock products. This evaluation is even more necessary if

one considers that the central objective of the Veterinary Services, in addition to protecting the animal health and livestock production of the country concerned, and safeguarding public health, is to show proof of seriousness, reliability and support when issuing certificates.

What is more, evaluation of the Veterinary Services of a country is an effective management tool for the national authority, making it possible to define or redefine the priorities of the organisation and identify critical points or problem areas when determining what measures should be taken to resolve or improve these areas.

Such an evaluation can either be conducted through bilateral negotiation or unilaterally, and should be based on the following aspects:

- existing conditions in the country
- livestock production systems
- the standard of animal health achieved
- the existing standard of veterinary public health
- the type of trade in which the country hopes to engage.

When the evaluation in question is for trade between two countries, it is necessary to analyse the prevailing situation in both countries for each of the five aspects stated above, to identify any differences which may need to be dealt with before trade begins.

## Evaluation instruments: basic model or desirable image

The evaluation of an organisation, just like any other evaluation process based on comparing two or more situations, requires a basic model or desirable image, irrespective of what type of organisation the individual countries may have adopted. This is the case, even when there is no ideal organisational structure which applies to all the diverse conditions that might exist. This basic model or desirable image should be used throughout the evaluation process.

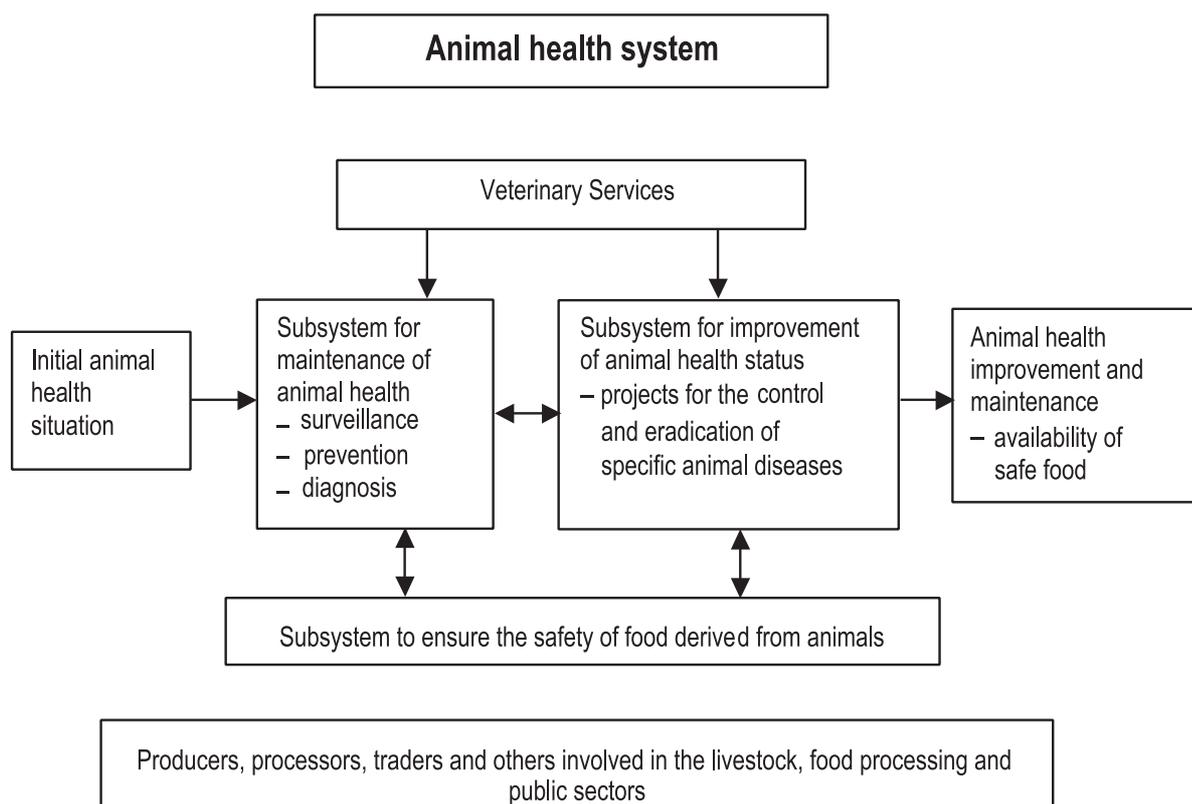
This basic model should include not only the official structure of the organisation, but should also place special emphasis on the integration of private veterinary professionals and

paraprofessionals into this structure, through accreditation processes or similar schemes. The model should also include the positive and crucial process of interaction with private producers and, in general, with all those involved in the field, such as the processing industry, the marketing sector, importers and exporters, researchers, teachers and others.

Coverage is also a key element of the basic model, so it is necessary to consider the existing levels within the organisation. These existing levels usually include the following:

- a central management level, comprising co-ordination, supervision, control and evaluation of services
- an intermediate co-ordination level
- a local implementation and operational level.

Furthermore, this desirable image should include a systemic approach designed for the specific characteristics and priorities of each country, encompassed within the 'stable to table' or 'farm to fork' concept, as it has come to be called. This image should also include both the permanent processes established for maintaining the animal health status achieved by the country, and any provisional or specific processes for improving animal health (Fig. 1) (2, 4).



**Fig. 1**  
**Design of an animal health system**

These permanent processes for maintaining animal health, which can also be termed subsystems for maintaining the animal health status of a country, and which make it possible to tackle the great majority, if not all, animal health problems, are as follows:

- epidemiological surveillance, or full knowledge of the internal and external animal health status of the country (which includes conducting risk analysis studies, aspects of statistical design, etc.)
- quarantine control, both internally (at internal barriers and places where animals are concentrated, e.g. auction markets) and externally (at barriers situated at border posts, ports and airports), to prevent the entry of exotic pathogens and the dissemination of those already in existence
- laboratory diagnosis and the control of biologicals, pharmaceutical products and feedstuffs for livestock, to identify the causal agents of existing animal diseases and to guarantee the efficacy and safety of products for animal use
- the control and monitoring of residues and microbiological contamination incidents.

The transitory or specific processes, or subsystem, for improving animal health basically consist of implementing specific projects to control and eradicate animal health problems. These projects should have clear starting and finishing dates. This subsystem also includes activities to improve the safety of animal products for human consumption.

In addition to the above permanent and transitory processes, the basic model must include advisory, support and auxiliary processes, which are vital to the operation of the organisation, such as planning, communication, administration and finance and information technology, etc. (Fig. 2).

**Basic criteria which must be included in the evaluation process**

A list of the specific processes which must be included in the evaluation process is essential for conducting the audit. This list should take the form of a detailed description of the processes to be evaluated, as well as the type of measurement to be used in each case – namely, qualitative measurement (opinion) or quantitative measurement – and its specific description.

Surveillance							Maintenance of animal health status
Prevention (quarantine system)							
Laboratory diagnosis							
Registration and control of products of animal origin							
Control programme for foods of animal origin in the food industry and retail sectors							
				Control of disease outbreaks			
		Vaccination	Detection of reagents	Canine vaccination			
	Vaccination	Detection of reagents	Disposal of reagents	Control of vampire bats			
	Control of disease outbreaks	Disposal of reagents	Other disease control or prevention measures				
Animal health problems	Foot and mouth disease	Brucellosis	Tuberculosis	Rabies	Exotic diseases	Others	Improvement of animal health status

**Fig. 2**  
**Structural approach to animal health and food safety**

Some of the points which can be included (1, 3) in this list of evaluation criteria are described below.

## General processes

### *Organisation*

The following structural elements may be included in this category:

- the design and approach of the organisation (its vision, mission, objectives, animal health system approach, etc.)
- the values of the organisation (equity, integrity, efficacy, efficiency, transparency, the quality of service, participation by all interested parties, etc.)
- the spatial (geographical) and temporal coverage of the organisation
- an organisational chart detailing the levels of management, staffing and functions of the organisation
- the relations of the organisation with public and private and national and local organisations
- co-ordination with the private sector and internal and external participation, e.g. accreditation of private veterinary professionals and technicians
- subsystems for planning, budget/accounting, control and internal and external auditing
- identification and description of the overall characteristics of macro-processes and technical processes within the organisation
- establishment of manuals detailing the functions of the organisation.

### *Resources*

There are three types of resources, as follows:

#### *a) human resources, which include:*

- staffing, according to the levels, categories and units in the organisational chart
- levels of training and instruction according to defined categories and the technical processes employed
- training and instruction policies and programmes
- mechanisms for the recruitment, selection, hiring, retention, registration and dismissal of staff.

#### *b) material resources, which include:*

- infrastructure
- vehicles
- laboratory equipment
- field equipment

- communications
- computing and information technology
- health education material
- other material resources.

These material resources require analyses of their quantity, adequacy and obsolescence, in line with the requirements and processes of the organisation.

#### *c) financial resources, which include:*

- the budget, its origin and adequacy for existing resources, the timing of the resources provided, and to what extent the resources are used on an annual basis
- the ability to charge tariffs or fees for services provided, the volume of (financial) resources generated.

### *Legal and regulatory matters*

This area includes the following:

- a list of the legal and regulatory provisions which confer authority on the organisation and define its tasks
- analysis of and opinion on the application and adequacy of such legal and regulatory provisions for conducting the processes of the organisation
- the authority and capability of the organisation to develop and apply norms in the animal health field.

### *Management capability*

Management capability includes the following elements:

- the existence of a management system, with concrete goals and indicators, measurement systems and accountability
- a complaints and appeals system
- the degree to which the Service interacts with the community
- the degree to which the Service interacts with other national Veterinary Services and international bodies
- analysis of and opinion on the operational capacity of the existing organisation.

### **Technical and operational processes**

As well as the general processes that have just been described above, the following technical and operational processes should also be included in the list of evaluation criteria:

- measures to maintain animal health
- measures to improve animal health
- measures to protect food and agriculture
- measures to control and register consumables for animal use
- support measures.

*Measures to maintain animal health*

The following elements are used to maintain the animal health status of a country:

- disease surveillance
- a quarantine system
- laboratories for diagnosis.

Each of these elements must be analysed, and judged on their basic characteristics, structure, coverage, operational capacity and, more especially, their legal and regulatory basis.

*Measures to improve animal health*

This subsystem encompasses the design and application of specific projects to control and eradicate animal diseases, such as foot and mouth disease, classical swine fever, Newcastle disease, and so on.

The analysis should also include the basic characteristics, structure, coverage, operational capacity and legal and regulatory basis of such programmes.

*Measures to protect food and agriculture*

This subsystem encompasses programmes to ensure the safety of food of animal origin which is intended for human consumption.

*Measures to control and register consumables for animal use*

This area involves programmes to control and register biologicals, pharmaceutical products and feedstuffs for animal use.

*Support measures*

Crucial support measures for the Veterinary Services include, as follows:

- health education
- communication
- information technology.

These support measures must be analysed and an opinion given on their adequacy for the purposes of the organisation, as well as on their processes, structure, coverage, operational capacity, basic characteristics, etc.

**Veterinary Service certification of export processes**

A record of all the export processes endorsed by Veterinary Service certificates must be maintained.

**Evaluation team**

The evaluation team is the key element in this process. Establishing this team is crucial to the success of the evaluation, due to the wide range of areas involved. A multidisciplinary team, who can evaluate all the different aspects that exist in any complex organisation such as a Veterinary Service, is vital.

It is also important for the evaluation team to receive training to ensure that the team members use common general criteria for analysing the organisation and its processes, to prevent inconsistencies in evaluation results.

**Conclusions**

In conclusion, the following tools are considered fundamental to the process of evaluating Veterinary Services:

- the existence of a basic model or desirable image against which the actual organisation can be compared
- a detailed list of the processes which should be analysed, the qualitative or quantitative characteristics of the analysis and its corresponding scales of measurement
- the establishment of a multidisciplinary evaluation team with common general criteria for analysing the organisation and its processes.



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