



Animal identification and product traceability from the farm to the fork must be progressively implemented worldwide

04/04/2008 Marking animals to know who their owners are is a very ancient practice. Traditional livestock marking systems have existed since time immemorial. They were not generally motivated by health reasons. However, with the progressive intensification of animal production, new tools have been developed to enable animal marking methods to meet a multitude of new needs. Today, animal identification and traceability are important management tools in animal health and food safety. In many countries traceability of live domestic animals and of products of animal origin is a legal requirement.

The pillars of a traceability system are founded upon the identification of individual animals or homogenous groups of animals, the ability to track their movements, proper identification of premises, and recording of this information in appropriate registers.

In its capacity as a leading international standard-setting organisation for animal identification and traceability, the World Organisation for Animal Health (OIE) helps its Member Countries and Territories to implement animal identification and traceability systems in order to improve the effectiveness of their policies and activities relating to disease prevention and control, animal production food safety, and certification of exports. The OIE first addressed the issue of traceability in 1998 at the international seminar "**Permanent animal identification systems and traceability from farm to fork**", in Buenos Aires, Argentina. In 2001 the OIE devoted an entire issue of the *Scientific and Technical Review* to traceability. In 2005 an *ad hoc* Group of experts was established and, in March 2006, the OIE Terrestrial Animal Health Standards Commission established a first series of guidelines on identification and traceability on behalf of OIE Members, which democratically adopted them in May 2007 as official OIE standards.

Why have national or regional animal traceability systems?

First of all they help producers and the institutions that support them to manage their animals more effectively, to implement herd/flock health programmes or to apply breeding or genetic improvement programmes. Whether in response to disease outbreaks or in the context of disease prevention, traceability can help countries to put in place a wide range of measures, including surveillance, early detection and notification of outbreaks, rapid response, control of animal movements, and zoning or compartmentalisation. With regard to food safety, traceability can help to prevent food contamination and to respond promptly and effectively in the event of a crisis. Furthermore, it can help to eliminate unjustified trade barriers, since a sound traceability system provides trading partners with assurances on the safety of the products they import. Traceability techniques can provide additional guarantees as to the origin, type or organoleptic quality of food products.

There must be a means of linking the identification and traceability of live animals and the traceability of products of animal origin so as to achieve traceability throughout the animal production and food chain – from farm to fork –, taking into account the standards established by the OIE and the Codex Alimentarius Commission. Also, in consultation with relevant governmental agencies and the private sector, the Veterinary Authority should establish a legal framework for the implementation and enforcement of animal identification and animal traceability in the country. This legal framework will include elements such as the objectives, the scope, the animal species involved, the organisational arrangements – including the choice of technologies used for identification and registration –, the obligations of the parties, confidentiality, information accessibility issues and methods of information exchange.

Various factors can influence the design of a national or regional animal identification and traceability system. Factors such as the animal and public health situation in the country, animal population parameters (such as species and breeds, numbers and geographic distribution), types of production, animal movement patterns, available technologies and their cost, as well as the way trade in animals and animal products is organised, must be taken into account at this level. Cost/benefit analysis and other economic, geographical and environmental considerations, as well as cultural aspects, should not be neglected when designing the system.

With the technical collaboration of experts involved in the work of the Codex Alimentarius Commission, the OIE is planning to organise an international conference on animal identification and traceability in Buenos Aires from 17 to 19 March 2009. The aims of the conference will be to emphasise the importance and benefits of identification and traceability, to raise awareness of existing OIE and Codex standards, to determine future requirements for standards, and to provide advice and assistance on implementing standards, especially on behalf of developing countries. The participants will be from the national administrations concerned, animal research and production groups, and countries that have implemented effective traceability systems. Presentations will cover all sectors of livestock production as well as traceability of food products. The particular needs of both developed and developing countries will be addressed, as well as the different technologies of identification and traceability available on the market.

New technologies in animal production, such as animal cloning and transgenic animals, will create a need for additional arrangements to trace animals. Under certain circumstances authorities would have to trace every individual animal and animal product derived from these novel production methods. New technologies may also offer solutions. For example, DNA identification makes it possible to identify and monitor animals and animal products through to the retail level. Nonetheless, whether using high-tech or simple paper-based filing systems, the principles of traceability as defined in the *Terrestrial Animal Health Code* are universal, and apply equally in all situations.

As a tool for controlling disease in animals and food safety, a traceability system should enable an animal product to be traced back to the animal's farm of origin, and to be identified throughout the food production chain. Traceability constitutes the link between animal health, food safety and the organoleptic characteristics of food linked to its origin. The forthcoming conference in Buenos Aires will help all countries to progressively implement effective traceability systems compatible with their resources while respecting the standards of both the OIE and the Codex Alimentarius Commission.

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