

## LOCAL VETERINARY ATTENTION

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**Summary.** The field of action of a system of veterinary attention is defined as a set of public and private institutions that produce activities organized to act over the profile of the health of agricultural animals and public health. The change in the role of the state observed in Latin America and the Caribbean facilitated the patterns of social participation. It has contributed to strengthen the process of decentralization and the configuration of veterinary attention systems at the local level, as an alternative to face, more efficiently, the activities for the control and eradication of animal diseases. The systems influence the modification of traditional schemes of the official services. This is a process in which a substantial part of its success depends on a decentralization (transfer of power and resources, without rupture of communication and mutual influence) since it renders viable the reinforcement of the local levels, mainly providing maneuvering capacity in technical-administrative aspects at the field level.

The veterinary services in South America, Central America and the Caribbean appeared as a product of the sectorial needs and, in many cases, due to the demands of the most important nations in the world as far as international trade is concerned. Starting from the implementation of different health campaigns they were legitimized and obtained significant results in the prevention, control, and also, in the eradication of several diseases.

Today, veterinary services are responsible for impelling the sectorial policies and executing a significant part of the actions and services derived from these policies. They are formed by technical administrative units that are in charge of producing and distributing animal health actions over the livestock population throughout the geographical range of each country.

Their field of action is integrated to a system of veterinary attention, meant as a set of public and private institutions that produce organized activities to act over the profile of the health of agricultural animals and public health. These institutions (manpower, equipment, machinery,

physical elements, and procedures), when they are official, are located preferably in the agriculture sector.

In the past years, the stimulus for the configuration of these systems of attention is the relevance obtained, operating at the local level with a high social participation, as an alternative to face the activities for the control and eradication of animal diseases, with better results.

In this task, the initiative taken by producers through their organizations in several countries has been of decisive importance. Likewise, the actions generated by this approach promote changes from the viewpoint of the organization, finances, and the development of mechanisms of health assistance (vaccination, control of foci, and the transit of animals) and of information and epidemiological surveillance systems. The bases of veterinary attention at the local level, the new demands for information and epidemiological systems, and some of the consequences derived from their application are pointed out in this document.

## VETERINARY ATTENTION

The veterinary attention is responsible for materializing the specific policies through the execution of organized actions and services in accordance with the features and global strategies designed in each country, and in the context of its physical and social ecosystems.

Veterinary attention is a social response that has several potentialities for producing animal health actions. To every veterinary assistance model corresponds distinct results regarding its production of specific services, which are evaluated according to:

- a) the adequacy in the rendering of services to distinct animal populations that express different health profiles.
- b) the directional efficacy of its operations and actions to face the problems of health and livestock production, specific for each animal population.
- c) the socio-economic efficiency in the production of animal health services, measured through the utilization of available resources.
- d) the participative modality of the society, in the relationship between the production of services and the real health needs of the human and livestock populations.
- e) the adaptation to the national and specific objectives of public health.

The veterinary attention articulates an institutional structure with an accumulated ability of production of services; a technology for the production of specific actions; a set of programs; a type of relationship between the provisioning of animal health actions and the part of the livestock sector waited on, with the agencies that operate in animal health and other actors involved; a set of rules that establish the mechanisms of financing, of formation and utilization of human resources and the rendering of services; a political criterion of direction; and a certain adaptability in relation to situational changes.

The role, hierarchy, and relationship of these components in the configuration of a system of health attention of animals as a whole, allow the characterization of the different assistance models.

These are ways of organization of the different entities which provide attention, in a cattle space.

Most countries have a system of veterinary attention directed to animal health, diversified in three sectors: the official veterinary service, veterinary services of cooperatives, associations or integrated agencies production, and private attention.

The interrelationships between these forms of veterinary attention vary according to the country. Frequently, there are no formal mechanisms that orient the relationship between these various sectors, and they act under scarce coordination.

The restrictions regarding the expenses of the official services for veterinary attention are a challenge to their operation and management. The systematics of work of the veterinary services force development of their actions by analyzing the possibilities for intersectorial actions with other areas of cattle development, livestock credit, education, universities, technical-scientific institutions, agriculture and health, among others, which facilitate the mechanisms of control over the animal diseases.

The current political definitions to eliminate some animal diseases, as part of the development process, are accompanied by greater demands from the systems of veterinary attention. This assumes that the new requirements for change do not refer exclusively to quantitative changes in terms of resources, but also to qualitative changes in the way of operating and organizing the veterinary attention systems.

Several experiences of the countries of this region confirm the usefulness of strengthening the technical administrative infrastructure of the local levels.

## VETERINARY ATTENTION AT THE LOCAL LEVEL

The structural adjustments of the Latin American economies and the consequent reduction of public expenditures, have started to be compensated with the direct participation by the private sector in the collection and administration of the resources (6). Such participation is observed through the different organizational forms assumed by the models of shared management in veterinary assis-

tance and productive service units in the field. Starting from these structures, actions intended to gain impacts with efficacy and efficiency are implemented.

In the case of the animal population, the impact is related to the measurement of epidemiological and productive indicators that express the animal health conditions. Closely related are a series of elements pertaining to the field of organizing service networks for veterinary assistance. Their analysis is of great importance in the configuration of local attention units. This configuration enables the development of a capacity for a greater aid response and a better power to resolve the real problems of a local space, based on the epidemiological method.

The actions of veterinary attention organized systematically at the local level, resolve the priority problems of the human and/or animal population present in this local space. They provide an answer to the priority needs of the human groups and their animal populations.

Achieving a capacity for programming, management, and operation does not depend only on the operational capacity of the unit. The weight that the decentralization "climate" has in each country is fundamental among other things, because a proportion of the possibilities of counting on its own resources originating from the central level, that would serve as complement of those coming from the local community, depends largely on it.

This mode of organization rests upon certain general principles which are highlighted, as follows (1, 3, 4, 5):

a) The administrative decentralization and microregionalization, seen as strengthening and conditioning elements of the development of these local attention units, permit the decision-making process and the administrative management of events to be accomplished at the level in which the problems occur and in which the application of solutions should be more effective. This process has a tendency to become generalized in the management of services in all sectors.

It grants a larger capacity for decision in the local sphere and permits an adequate program-

ming and a better compatibility between the policies and the needs, at a more manageable level.

A very important aspect to be considered is the way the links with the central level are established so that the administrative management does not atomize the institution. An harmonious management is necessary between the local and the central levels.

b) Social participation is another aspect of great importance in terms of development of local veterinary attention systems. It should be conceived as a process of reciprocal responsibilities between the human populations and the veterinary attention services. The local power structure and the ways it is manifested over the inhabitants of a local space, directly affect the social participation and therefore, the characteristics of the local modes of veterinary attention.

Linked to the previous theme, the way the distinct social actors operate within the local space should be evaluated, as well as the conformation of the stage for meetings and dialogues about a plan or program of veterinary attention. The actors, their powers, conflicts and possible alliances and the adequate mechanisms at every local stage, are decisive aspects for the real viability of the programs at this level.

c) The development and intersectorial relationships are of great importance in the configuration of local modes of veterinary attention. The relationship among the sectors of health, agriculture, and education, (including universities), commerce, specific industries, political levels and others are basic to establish, in a solid and effective way, an integrated action that may be expressed through a larger activity in the changes of the health conditions of the human population and the productivity of the animal population.

d) Strengthening the financial and administrative capacity at the local level. The achievement of the goal of complete coverage of veterinary attention at the local level, with maximum effectiveness and efficiency, in the social, economic, and political context of that environment, depends mainly on the operating capacity and therefore, on the capacity of programming and managing the activities of veterinary attention.

In this context of administration at the local level, management is understood as the process through which a "cooperative group of persons" guide its actions to reach common objectives for solving determined problems or needs in animal health, applying the available resources in the best possible way. It is a process of information-decision-action through which the livestock problems that need solution are identified, guidelines for action are established, and measures to obtain results are applied in accordance with the adopted guidelines.

Management tasks at the local level have three areas: The planning corresponds to the decision-making, process to establish future courses of action. It means to decide in advance on what to do, how to do it, when to do it, and who should do it.

The execution is a process through which the management has to accomplish the decisions taken. It includes the activities of organization, management, communication and management of resources. The control corresponds to the monitoring, evaluation, and corrective intervention of activities and directions to reach what is expected or planned.

It is necessary to change the traditional ways of generating, distributing, and evaluating the financial resources in terms that they meet the real needs, at the local level, of the livestock sectors in accordance with specific risks as well as of the programs of national interest, and that they are applied with more flexibility and efficiency. In this field, the experiences obtained are significant, particularly in Argentina and Colombia, in terms of mobilizing private financial resources in foot-and-mouth disease programs. This process of usage of alternative resources of local financing and its local community administration has generalized a greater effectiveness of health actions.

e) A derivation of these topics is the need to incorporate the strategic-situational thought and other procedures for local planning at the level of veterinary attention. (2)

This conception presupposes an essentially different relation vis-a-vis the normative planning, in that the one who plans is part of the planned reality, a reality that includes other social actors that react in different ways, planning, on a more or less

systematic basis, responses to the plans coming from the government or from any other sector, in accordance with their interests.

This way of conceiving the starting point of planning modifies the idea of the planner who manipulates reality in accordance with the elaborated diagnosis and the designed objectives, facing economic agents that react with predictable and rational behavior. The situational conception of planning deals with social actors whose reactions are not absolutely predictable and therefore, in which some events can be forecasted only occasionally, since the usual is to face quasi-structured processes.

In short, veterinary attention at the local level promotes the intersectorial levels, the integration of other sectors, the active participation of several sectors of the livestock segment (producers, private veterinary services, etc.), mobilizing available resources in the community, with the purpose that the activities specific of the veterinary attention have continuity, effectiveness, and efficiency.

#### MANAGEMENT ASPECTS OF VETERINARY ATTENTION AT THE LOCAL LEVEL

Social participation constitutes the main element of success in the campaigns for control and eradication. The plans at the local level generate new needs that arise from the management of resources coming from the public and private sectors. A matter of great interest is the search of procedures that in a fast and effective way, improve the management of veterinary attention. Frequently, these conditions are obtained through its better usage and systematizing what exists and what is being made.

These procedures imply making definitions concerning the maximization of the effectiveness or efficacy of veterinary attention, or the minimization of the operating costs (efficiency) by means of progressive modifications of the services intended to improve the technical efficiency and the use of resources. Other applications of these techniques of rationalization in decision-making may refer to the fields of management of personnel,

vaccination, transport and storage of vaccines, cold chains and others.

Among the resources, the most outstanding aspect is the one related to human resources. The beginning of new integrated mechanisms of health-agriculture and the organization of local modes of veterinary attention at the local level require adaptation of the current ways of training and qualification of professionals, technicians, and assistants. These proposals compel the creation of the necessary conditions to develop a process of teaching animal health in a training scheme which is in contact with reality, in the field, transforming their own local units of veterinary attention into educational units. This education involves the continuous training of all service staff, including the users and the local community as a whole.

Regarding financial resources, costs should be linked to the magnitude and quality of production of services. Techniques for control of unit costs should be applied by the type of services. In addition, as the private sector assumes administrative responsibilities for local management, financing alternatives should be reviewed in terms of expected results.

The existence of an information system for planning and management in animal health to answer these problems, is related to the characteristics of the decision-making process for accomplishing activities inherent to these processes. The logical sequence in these is the following: determination of the variables of results observed and of the goals expected for each one; measurement of results; comparison of the results with the goals; if there have been significant discrepancies (problem) between them, determine the causative factors (why); feed-back this information to the decision-maker; decision about the discrepancies; corrective action.

The vaccinations, the control of transit, and the control of foci, are three fields in which the local units of veterinary attention require an information system that contemplates the consecutive stages which these activities go through. Following is the description of several basic elements to be considered in the substantial activities at the local level:

### *Vaccination*

The program of the vaccination activities includes the delimitation of the geographical space in which the vaccination will be implemented. It should define the number, code, and location of the establishments involved. The data is presented by code in a cross-section map of the working area. For each establishment, there will be an updated size and structure of the herd and the existing infrastructure. There will be evaluation of the accessibility and the routes and vaccination schedules will be designed in terms of the variables of time and cost.

Regarding the availability of vaccines, it should define the demands for their supply in a timely manner. It should organize a safe cold chain. Likewise, the profile of staff hired for the operations will be established. The alternatives for purchase and financing of biologicals, the adequate storage of vaccines, the mechanisms for their delivery and registration, the organization of the transport system, the transport of vaccinators and inspectors, the actions intended to obtain a wide participation of the community and of local organizations, the relationships with other local programs of the region with the purpose of obtaining a greater consistency in the campaign.

The execution presupposes the: need to strengthen the participation of producers, starting from the notification of dates in which each establishment will be visited, completion of the routes and vaccination schedules for each team; the adequate and timely delivery of vaccine to each team, each day of vaccination; the achievement of daily vaccination performances (head/vaccinator/day); the indices of return to some properties for not being ready for vaccination. The "inclusion" of "non-registered" properties; monitoring the level of accomplishments of the commitments of several social sectors during the course of vaccination.

The evaluation of each stage of vaccination in a local unit implies: a quick elaboration and simple analysis of the data; meeting of the Service veterinarians with the local committees with representatives of the diverse community sectors involved (essentially livestock breeders) who have made commitments and assumed responsibilities in vaccination; identification of problems, in the vaccination

stage performance of indicators of efficiency and efficacy; analysis of the role of each social sector in vaccination; adjustments of the responsibilities and in the operations for future stages.

#### *Control of foci*

The planning contemplates the following steps: to characterize properties/quadrants with risks of occurrence based on entrance of animals from other regions and/or livestock auctions; low coverage of suppliers, slaughterhouses and laboratories in the neighborhood and frequency of disease occurrence; to organize notification committees or other providers of information in the localities; to organize rounds of official inspection or monitoring of occurrence.

The execution of the activities for control of foci require the availability of equipment, material, and transportation. Immediately after the notification and registration, visits should be made to the affected building and the corresponding complementary visits. The affected area will be determined establishing the characteristics of the affected area and of the perifocal area. In this area the following should be put into effect: collection of samples, disinfections, interdictions that might be necessary the restriction in moving animals products and subproducts, and the vaccination.

The evaluation includes: the timeliness of visits and attention; efficacy level in measuring the control of foci, internal morbidity rate, and existence of secondary foci; level of accomplishment of the responsibilities of the several groups involved; costs indicators and efficiency of foci control.

#### *Transit control*

The program is based on the epidemiological control of animal transit. It assumes that in the breeding regions (exit of animals) an exit control should be made, and in the areas of rearing and fattening (entrance of animals), an entrance control should be made.

For the exit control, it is necessary to characterize the risk of propagation of the disease by property or quadrant of the grid map, according to: previous occurrence of the disease in the property, through its effects on the buyers; antecedents of

previous vaccinations; the establish communication channels with the veterinary units of the cattle-receiving areas;

For the entry control, it is necessary to characterize the risk of propagation of disease through establishments or quadrants of the grid map, according to: vaccination history; origin of incoming animals; proximity to properties with cattle supplies, laboratories, and slaughterhouses; information received on the origin of animals upon arrival; establishment of various measures, such as inspection at the origin or destination, according to antecedents; establishment of the routes of transit flow; identification of the places of auctions, fairs, expositions, and slaughterhouses; elaboration of control schemes of movement of animals; and establishment of the responsibilities of the several community sectors.

The execution consists of: developing measures for health inspection of vaccination establishments, whenever exit or entrance controls require; to inspect auctions, fairs and places of cattle concentration; carrying out control of highways and flows of cattle courses; activating the mechanisms for horizontal communication; activating local committees of collaboration in the control of transit of animals.

The evaluation supposes: level of efficiency in the control of the movement of animals (number of secondary foci or movements at a distance); degree of accomplishment of horizontal communications; degree of monitoring situations of significant risk (origin or destination); level of attainment in commitments made by community groups; level of knowledge of the movement of animals.

Insofar as the decisive levels are clearly assigned to the administrative instances of the veterinary attention service, it is possible to recognize the information needs in a specific way, enabling an availability of proper information. The information is only valid as a source or product of the action. A mistake cannot be made in considering the information more valuable than the action. The information process ( compilation, processing, and analysis) is not an end in itself, in the field of veterinary attention.

## CONCLUSIONS

The strengthening of the veterinary attention at the local level is conceived as the attainment of a basic organization to produce animal health services in a determined geographic-population cattle raising space.

Veterinary care should enable the articulation of all existing resources, whether sectorial or extrasectorial, in a geographic locality for its better utilization and its adequacy to the needs of the animal population, defined in terms of risk. It should assume responsibility for attention of cattle herds through the demands of producers, stimulating the participation of the livestock raising community, and establishing a mutual relationship of responsibilities among the different participating social segments in the solving of animal health problems. Local management should incorporate to its action the analysis of:

a) The interpretation by of the different social agents of the problems of public health and animal health in the social, economic, cultural and political context of the given setting.

b) Patterns of veterinary intervention to modify the reality in terms of public health and animal health, in accordance with the needs of the communities.

c) Formulation of an environment favorable to creativity and innovative ideas in the methods of veterinary attention which provide satisfactory answers to existing problems.

d) Development of an information and epidemiological surveillance system that incorporates new users into decision-making.

The local levels of the animal health services are not autonomous entities from the viewpoint of management and assistance. On the contrary, they depend on the higher hierarchical levels, and they are spaces for meetings between the services and the users. In order to advance towards better results, it is necessary to decentralize (transfer of power and resources, without rupture of communication and mutual influence). This renders viable the reinforcement of the local levels,

especially providing them with a maneuvering capacity at the field level, in technical-administrative aspects.

Attempts are made to obtain a greater and better capacity of response to the changing and specific requirements of a livestock population that presents similar epidemiological problems while at the same time, facilitates the interaction of the livestock community with the veterinary services, in the tasks of animal health.

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