

# **National Agenda for Animal Health 2007-2015**

*Prevention is better than cure*

|                                                                            |           |
|----------------------------------------------------------------------------|-----------|
| <b>CHAPTER 1: INTRODUCTION</b> .....                                       | <b>4</b>  |
| <b>INTERMEZZO: ANIMAL HEALTH IN THE NETHERLANDS</b> .....                  | <b>6</b>  |
| <b>CHAPTER 2: VISION AND GOALS</b> .....                                   | <b>8</b>  |
| Vision .....                                                               | 8         |
| Goals .....                                                                | 8         |
| <b>CHAPTER 3: THE ITEMS ON THE ANIMAL HEALTH AGENDA</b> .....              | <b>11</b> |
| <b>3.1 Strategic objectives</b> .....                                      | <b>11</b> |
| <b>3.2 Pets</b> .....                                                      | <b>12</b> |
| Introduction .....                                                         | 12        |
| Present situation and problems.....                                        | 12        |
| Objectives .....                                                           | 13        |
| Envisaged results .....                                                    | 13        |
| Actions .....                                                              | 14        |
| <b>3.3 Hobby animals</b> .....                                             | <b>15</b> |
| Introduction .....                                                         | 15        |
| Present situation and problems.....                                        | 15        |
| Objectives .....                                                           | 16        |
| Envisaged results .....                                                    | 16        |
| Actions .....                                                              | 16        |
| <b>3.4 Commercially farmed animals</b> .....                               | <b>18</b> |
| Introduction .....                                                         | 18        |
| Present situation and problems.....                                        | 18        |
| Objectives .....                                                           | 22        |
| Envisaged results .....                                                    | 22        |
| Actions .....                                                              | 22        |
| <b>3.5 Animals in the wild and endangered kept animals</b> .....           | <b>25</b> |
| Introduction .....                                                         | 25        |
| Present situation and problems.....                                        | 25        |
| Objectives .....                                                           | 26        |
| Envisaged results .....                                                    | 26        |
| Actions .....                                                              | 27        |
| <b>3.6 Horses</b> .....                                                    | <b>28</b> |
| Introduction .....                                                         | 28        |
| Present situation and problems.....                                        | 28        |
| Objectives .....                                                           | 29        |
| Envisaged results .....                                                    | 29        |
| Actions .....                                                              | 29        |
| <b>3.7 Fish, crustaceans and shellfish</b> .....                           | <b>31</b> |
| Introduction .....                                                         | 31        |
| Present situation and problems.....                                        | 31        |
| Objective.....                                                             | 32        |
| Envisaged results .....                                                    | 32        |
| Actions .....                                                              | 32        |
| <b>CHAPTER 4: DETAILING OF AGENDA ITEMS FOR ANIMAL HEALTH ISSUES</b> ..... | <b>33</b> |
| <b>4.1 Introduction</b> .....                                              | <b>33</b> |
| <b>4.2 Risk-based policy</b> .....                                         | <b>34</b> |
| Introduction .....                                                         | 34        |
| Present situation and problems.....                                        | 34        |
| Objectives .....                                                           | 35        |
| Envisaged results .....                                                    | 35        |
| Actions .....                                                              | 35        |
| <b>4.3 Categorisation of animal diseases</b> .....                         | <b>37</b> |
| Introduction .....                                                         | 37        |
| Present situation and problems.....                                        | 37        |
| Envisaged results .....                                                    | 38        |
| Actions .....                                                              | 38        |
| <b>4.4 Allocation of costs for animal disease control</b> .....            | <b>39</b> |
| Introduction .....                                                         | 39        |
| Present situation and problems.....                                        | 39        |
| Objectives .....                                                           | 40        |

|            |                                                                 |           |
|------------|-----------------------------------------------------------------|-----------|
|            | Envisaged results .....                                         | 40        |
|            | Actions .....                                                   | 40        |
| <b>4.5</b> | <b>Veterinary organisation and infrastructure.....</b>          | <b>42</b> |
|            | Introduction .....                                              | 42        |
|            | Present situation and problems.....                             | 42        |
|            | Envisaged results .....                                         | 43        |
|            | Actions .....                                                   | 43        |
| <b>4.6</b> | <b>Veterinary medicines .....</b>                               | <b>45</b> |
|            | Introduction .....                                              | 45        |
|            | Present situation and problems.....                             | 45        |
|            | Envisaged results .....                                         | 46        |
|            | Actions .....                                                   | 46        |
| <b>4.7</b> | <b>Knowledge, research and development .....</b>                | <b>47</b> |
|            | Introduction .....                                              | 47        |
|            | Present situation and problems.....                             | 47        |
|            | Envisaged results .....                                         | 48        |
|            | Actions .....                                                   | 48        |
| <b>4.8</b> | <b>Climate change, globalisation and emerging diseases.....</b> | <b>50</b> |
|            | Introduction .....                                              | 50        |
|            | Present situation and problems.....                             | 50        |
|            | Envisaged results .....                                         | 50        |
|            | Actions .....                                                   | 51        |
| <b>4.9</b> | <b>Control at the source.....</b>                               | <b>52</b> |
|            | Introduction .....                                              | 52        |
|            | Present situation and problems.....                             | 52        |
|            | Objectives .....                                                | 52        |
|            | Envisaged results .....                                         | 52        |
|            | Actions .....                                                   | 53        |
|            | <b>Definitions.....</b>                                         | <b>54</b> |
|            | <b>List of abbreviations .....</b>                              | <b>57</b> |
|            | <b>References .....</b>                                         | <b>58</b> |

## CHAPTER 1: INTRODUCTION

Society attaches great importance to animal care and health. This applies not only for pets such as cats, dogs and rabbits, but also for wild animals and animals that are kept for commercial reasons. The latter has regularly been the subject of negative publicity in recent years, with outbreaks of animal diseases such as foot and mouth disease, avian influenza, swine fever and - more recently - bluetongue. In addition to these outbreaks, a number of other developments have made it necessary to re-examine the Dutch animal health policy and to formulate an integrated National Agenda for Animal Health.

### *Background*

The evaluation of animal health policy launched by the European Commission in December 2004 and the development of a Community Animal Health Strategy, were the direct reasons for the Netherlands to develop a National Agenda for Animal Health. The Netherlands was one of the driving forces behind the evaluation of the Community Animal Health Policy, organising an international conference on EU animal health policy in 2004. The need for the evaluation was prompted mainly in the enlargement of the EU, recent outbreaks of animal diseases and the increased trade in animal products. The evaluation brought a number of issues to light, such as the ad hoc development of the present animal health policy, which as a consequence is fragmented and sometimes untransparent, and the need for the new policy to focus on risk management and prevention. The subtitle of the European Strategy is therefore *'Prevention is better than cure'*.

These two conclusions also largely apply for the Dutch situation. The government has therefore taken this opportunity to carry out its own evaluation and to develop a strategy for Dutch animal health policy. The last integral policy memorandum on animal health dates from 1998, and many events have taken place since then which justify an update.

### *External developments and trends*

In addition to policy developments, a great many national and international trends have an influence on animal health in the Netherlands<sup>1</sup>. The ongoing process of globalisation is one such trend. Additionally, the international trade in animals and animal products continues to grow, as does the economic integration of different continents. Moreover, people travel more frequently and over greater distances. Both these trends mean that diseases are able to reach the Netherlands more quickly and more often.

Increasing prosperity in South and East Asia and other continents is also giving rise to growing demand for animal products. This puts more and more pressure on the available natural resources and is leading to further upscaling of animal production. This trend is reinforced further by the growing demand for biofuels; these 'green' fuels compete with food and textile crops for the available arable land.

Climate change is an issue that is currently attracting a great deal of attention. We are taking measures to reduce greenhouse gas emissions, and will also have to learn to live with the consequences of rising temperatures and more unpredictable rainfall patterns. In the light of this, the Netherlands also needs to prepare for potential emerging diseases<sup>2</sup> which until recently did not occur in the Netherlands, or occurred only on a very small scale.

Urbanisation is an ongoing trend in the Netherlands. Agriculture no longer self-evidently plays a leading role in the rural regions, as other functions such as housing and nature assume ever greater importance. The wildlife corridors which are being established throughout the country create new challenges for animal husbandry.

---

<sup>1</sup> These trends and developments have been distilled into a year from the LNV-WING Report 'Diergezondheid in de samenleving van morgen' ('Animal health in tomorrow's society') and the ASG report 'National Agenda for Animal Health: an Exploratory Study' ('Verkenning Nationale Agenda Diergezondheid') (see References)

<sup>2</sup> See Definitions.

More and more people are also keeping farm animals as a hobby; there has been an enormous increase in the number of horses, as well as the number of chickens, sheep and goats kept by amateurs as a hobby. The presence of these 'hobby animals' alongside wild animals and commercially farmed animals will only increase in the future.

Greater attention is also being given to the relationship between humans and animals. This can be seen from the increased interest in animal welfare and the media interest whenever animal welfare problems arise.

These national and international developments demand an active role from the government in order to prevent potential animal health problems and to raise the general level of animal health. With reference to the policy programme put forward by the Cabinet, the government will mainly seek to play a facilitating role and to create the necessary frameworks. Society will then be given the greatest possible scope to resolve social problems itself.

#### *Scope*

The National Agenda for Animal Health 2007-2015 is concerned with animal health in the Netherlands. However, this cannot be seen entirely in isolation from the international context: animal diseases are not constrained by national borders. In principle, the strategy relates to all animals in the Netherlands, both those kept for food production and those kept as pets or as a hobby, as well as animals used for entertainment (circus, zoo) and those living in the wild. The concept of animal health is closely linked to the opposing concept of animal disease. This Agenda is concerned with all animal diseases, i.e. including 'farm-specific' diseases. Apart from setting out an overarching strategy for the period 2007-2015, the National Agenda for Animal Health also describes out which activities and exploratory studies will be implemented and developed in the coming years.

#### *Creation of the Agenda*

Good policy is based on practice. The fourth government led by Prime Minister Jan Peter Balkenende (the 'Balkenende 4 government') uses the motto 'Working Together, Living Together' ('Samen Werken, Samen Leven') to express its ambition of developing solutions to social problems together with citizens, civil-society organisations and other public authorities.

The National Agenda for Animal Health was compiled following extensive public consultation. Discussions were held with representatives of commercial farmers, people keeping animals as a hobby, nature organisations, consumer organisations, animal protection organisations, the trade and transport sector, the retail sector, etc. This enabled the main problems and possible solution pathways to be mapped out. The consultations were carried out both by e-mail and through interviews. The Ministry of Agriculture, Nature and Food Quality (LNV) also wished to look at possible developments further in the future and what these could mean for animal health in the longer term. A working conference was held with opinion leaders and other stakeholders to build possible future scenarios and translate these into future animal health policy. Finally, a 'Public Café' was organised in which a number of dilemmas were put to a wide group of stakeholders in a kind of 'parliamentary debate'.

#### *Outline*

The National Agenda for Animal Health consists of four chapters. Chapter 2 describes the vision and goals for animal health policy for the period 2007-2015, and fleshes out the most important principles and objectives. Chapter 3 looks at the items covered in the National Agenda based on six categories: pets, hobby animals, farm animals, wild animals, horses and fish. Chapter 4 then outlines a number of themes which demand extra attention, such as emerging diseases and the veterinary infrastructure.

The National Agenda is not a static document, but an agenda for improvement. This means it contains a plethora of new policy initiatives which will be taken up by the government in collaboration with stakeholders. In addition, the Agenda sets out a clear direction and course, in which the future distribution of responsibilities across the parties is made clear. At the end of this year the government will publish a working programme containing details of the actions to be undertaken. It will also commission an inventory of the social costs and benefits; the results of this exercise are likely to be available in the autumn of 2008.

## **INTERMEZZO: ANIMAL HEALTH IN THE NETHERLANDS**

This intermezzo gives an indication of the breadth of the concept 'animal health' and of the policy themes it involves. The various topics are discussed in more detail in the ensuing chapters.

### *Animal care*

In the relationship between human beings and animals, the care provided by the keeper of the animal is the most important element. Generally speaking, a kept animal is dependent for its welfare and health on its carer. Even animals living freely in the wild are to some extent dependent on human care, because human society has a major impact on the (geographical) conditions under which they live.

Animals are kept for a variety of reasons, for entertainment and as pets and for commercial gain. In all these cases, the owner is expected to look after his or her animals, and abuse of animals is a punishable offence in our society. This principle is based on the view that animals as well as humans have a right to welfare and good health.

### *Housing and feeding*

Good housing and good feeding are important aspects in the care for animals. The welfare of animals which are not properly housed will quickly deteriorate and they will have a heightened risk of contracting a disease, as will animals which receive too little or poor quality feed and drink. Every animal has the right to good care, in the form of proper feeding and housing. Many problems with animal health and welfare could be avoided if one of these two basic needs were better met.

### *Prevention is better than cure*

These considerations give rise to policies such as the preventive vaccination of many animals. These measures are aimed primarily at increasing the 'specific resistance' (resistance to specific diseases). In addition, the 'basic resistance' (less specific or natural resistance) of animals can also be increased by providing the correct housing and feeding regimes, but also through breeding and selection, for example.

As well as the focus on animals themselves, a great deal of effort also goes into prevention in other areas. Examples include the thorough disinfection of dog kennels, pigsties and animal transport vehicles in order to prevent disease outbreaks. Chickens are sometimes kept indoors in order to prevent them contracting a fowl pest infection, and at Amsterdam Airport Schiphol checks are carried out on travellers to try and prevent them bringing exotic diseases into the Netherlands along with foreign products. All these measures cost a considerable amount of time and money. Yet they are still preferable to measures to cure or prevent disease, because the damage that disease can cause both to animals and society is always much greater.

### *Animal diseases*

Despite these efforts to protect animals against diseases, the possibility that animals will become sick can never be completely ruled out. In every environment bacteria, viruses, fungi, parasites and other organisms try to undermine the health of animals. Some of these diseases affect only the animal itself and pose little or no threat beyond this; but there are also diseases which are highly infectious, and these can pose a great threat to other animals, to human beings and to society as a whole. Animals can also become sick as a result of exposure to toxic substances, for example via their feed, or a chance genetic deviation may occur in an offspring which subsequently causes a disease or disorder. Discovering and identifying new and/or highly threatening diseases at the earliest possible stage is of huge importance in preventing major outbreaks.

### *Veterinary medicines and the role of the veterinarian*

Although many kept animals have a good immune system, human help is still often needed in order to overcome a disease, and it is necessary to use veterinary medicines and/or treatment. In these cases a veterinary practitioner is often brought in, because veterinary medicines have to be used in a professional way - not just because of the importance of using the right agent to treat a particular disease, but also because careless use can give rise to all kinds of negative

(side-)effects, for example due to residues in animal products or in the environment and the development of resistance to antibiotics by bacteria, which consequently become difficult to eradicate and can present a threat to both animals and humans. The veterinarian is the expert on animal diseases, both as regards prevention and cure or treatment. The veterinarian fulfils this role at the juncture of a range of interests including animal welfare, public health and financial interests.

#### *The role of the animal keeper and the role of the government*

The keeper of an animal is responsible for its day-to-day care, welfare and health. The frequent presence of the keeper means they are in the best position to know when something is wrong with their animal and to call in medical help. In many cases this works well and the keeper and the veterinarian resolve the animal's health problems. This does not of course apply for wild animals, where health problems form part of the process of natural selection.

Only where the abilities of the keeper fall short (e.g. in the case of highly infectious diseases or where there is a danger to public health), or where the keeper fails to take their responsibility (e.g. animal abuse or neglect), does the government have to step in. It has a number of instruments at its disposal for this, from providing information and encouragement or setting rules governing the prevention of disease, to monitoring or treatment with veterinary medicines. If infectious diseases enter the Netherlands which pose a threat to large numbers of animals, to public health or to trade, the government is expected to adopt a more interventionist role. In some cases the government may be forced to take on the control of the disease itself. Emergency vaccination may play an important role here. In the most extreme case, it can even be necessary to cull animals in order to protect other animals and other interests. In considering all these measures, the government bases its decisions on sound risk analysis and a weighing of interests.

#### *Living together*

The Netherlands is a densely populated country. Not only does it have one of the highest human population densities per square kilometre, but also one of the highest animal population densities in the world: 94.3 million chickens and other poultry, 3.7 million cattle, 11.3 million pigs, 1.7 million sheep and goats, more than 5 million dogs and cats and a half a million horses and ponies. There are also large grazing animals in nature reserves and wild boar regularly cross the border from Germany.

There are wide differences in the interests of the keepers of these different animals. Some prefer national disease control programmes in specific situations to prevent animals in their region becoming infected or to prevent the value of animal products from falling. Others may consider the mandatory keeping of poultry indoors to be pointless or may attach more importance to animal welfare.

In short, with so many animals and so many different interests it is sometimes difficult to live together. The government therefore attempts in its animal health policy to strike a good balance between all the different interests. Sometimes it has to ignore the wishes of individual animal keepers in order to serve the wider interest. Sometimes, learning from earlier mistakes, it has to develop new policy which is better able to address all the different interests. At all times, however, the government seeks to involve all stakeholders to the maximum in devising, formulating and implementing animal health policy. It is for this reason that this Agenda has not been compiled simply as an animal health agenda for the government, but as an animal health agenda of and for everyone.

The following chapters build on this and discuss how the government, in collaboration with others, wishes to translate its ambitions into practice and how in doing so it will take into account the trends and developments taking place in society.

## CHAPTER 2: VISION AND GOALS

### Vision

The government has opted to introduce a new animal health policy. For the period 2007-2015, this choice is based on the following vision:

- I. The most important element in the animal health policy are the animals themselves. It is no longer sufficient simply to focus on controlling highly infectious animal diseases; attention must also be given to broad-based health care for the different categories of animals: commercially kept animals, pets, hobby animals, wild animals, horses and fish.
- II. The emphasis is on preventive animal health measures and knowledge of risks, based on the tenet that prevention is better than cure.
- III. Commercial animals, hobby animals, pets and wild animals live alongside each other in harmony. The different types of husbandry are able to develop. In order to make this possible, a dialogue will begin with civil society and - where possible and desirable - customised solutions and differentiation will be put in place for the different categories of animals.
- IV. The animal health policy is in line with the broad desire for socially responsible animal husbandry. This includes both the care for and welfare of animals and preventive measures such as socially responsible animal disease control.
- V. Responsibility for animal health lies primarily with the owner/keeper. The role of the government in this context is twofold. On the one hand the government restricts itself to creating the right conditions and, in addition to the traditional instrument of legislation, will focus on facilitating, encouraging and communicating on social changes. On the other hand, an attempt will be made to minimise the administrative, compliance and supervisory burden of the remaining legislation, but within the frameworks which are necessary to ensure the safeguarding of the public interest.

This vision results in the following goals for 2015.

### Goals

#### *Broad-based approach to animal health*

The government's aim is that by 2015 keepers of animals across the board will look after their animals in a proper and expert way, backed up where necessary by adequate veterinary care - not just in the event of infectious or other animal diseases, but also to provide broad-based (preventive) health care. This applies for farm animals kept both as a hobby and for commercial reasons, as well as for pets and wild animals.

Based on risk analyses, we will have a better understanding in 2015 of the health risks which the different categories of animals pose to each other. This will enable adequate measures to be developed to enable these animals to live alongside each other without problems. Moreover, the government, in collaboration with other relevant parties, will be able to develop customised solutions for different types of owners.

Despite these measures, conflicts of interest will remain. Formal consultations will therefore be held with the various parties in order to reach agreements on further constraining the risks to animal health.

#### *Emphasis on prevention*

Prevention is better than cure. Consequently, in line with the EU Community Animal Health Policy 2007-2013, the emphasis in this Agenda is on prevention. This is a broad concept which ranges from prevention at individual farm and business level to border checks, and from good hygiene and housing and the possibility of vaccination to strict rules governing the transport of farm animals. However, this concept also encompasses things such as support for programmes in Asia, Eastern Europe and Africa designed to tackle animal diseases at source, tracking and tracing, innovation and the development and dissemination of knowledge.

Developments over the last 30 years mean that more attention is now paid to the potential threat which animal diseases pose to public health (SARS, avian influenza). An active prevention

policy as part of the animal health strategy will lead to a reduction in these risks to public health.

In 2015, risk analyses will be an integral part of animal health care. Risk assessments can indicate where the greatest threats to animal health lie and where priorities need to be established.

An outbreak of a highly infectious animal disease cannot however be entirely ruled out. The government, in close collaboration with the industry, is keen to detect new, threatening and undesirable animal diseases at the earliest possible stage in order to prevent major epidemics or risks to public health. At the same time, the government has a well-practised crisis organisation, which will intervene and rapidly and adequately where necessary, with the full cooperation of parties from the sector and interest organisations.

#### *Sustainable livestock farming*

The government wishes to have a sustainable livestock farming sector in the Netherlands which meets strict criteria in terms of animal welfare, animal health, safety and the environment. Consumer information on the origin of animal products will be the norm in 2015, and will result in increased demand for sustainable products.

In the area of animal health, this means that chain arrangements and risk-aware entrepreneurship will be further developed. As a result, products of animal origin will be safer and will meet the high standards set by the consumer. This will also necessitate extremely prudent and responsible use of antibiotics, among other things in order to minimise the emergence of resistant strains of bacteria. As a corollary to this, where feasible the government favours vaccination as a control strategy, aided by the availability of new and improved vaccines. This strategy will help ensure that the control of animal diseases takes place in a socially responsible way.

The farming industry will make efforts to increase the level of professionalism and entrepreneurship in the industry. It will have less and less need for binding legislation from the government to ensure good health care for animals. The livestock industry will be capable of creating its own intelligent and mandatory chain arrangements and quality systems to ensure a high level of animal health. The attributable costs of controlling animal disease will be borne by the sector.

#### *Steering philosophy*

Responsibility for animal care and health lies primarily with the animal's keeper. In order to raise the level of animal health in the Netherlands to the highest possible level, close cooperation is required between the government, citizens and consumers, the industry, veterinarians, nature organisations, animal keepers and other stakeholders.

The government sees the inherent strength of our society is an important starting point, because the commitment to optimum animal health is a joint commitment. In line with government policy, the emphasis here is on the role of the government in encouraging, facilitating, communicating, knowledge development and knowledge transfer, all in cooperation with groups from society. The government can for example commission research, launch information campaigns and make chain agreements.

The underlying principle is that animal keepers do what they can and the government provides assistance where necessary, for example in the event of outbreaks of highly infectious diseases or where there is a danger to public health. In cases of this nature, the government will take a steering role and may even assume overall responsibility where necessary. The same applies in the event of severe neglect or mistreatment of animals. The distribution of responsibility between keepers of animals and the government will be further clarified in the animal health policy.

In the coming period the government wishes to place more responsibility with the partners in the chain of commercial production of animals and animal products. Specifically, the government calls on those partners to take responsibility for prevention, help in implementing animal disease control measures during crises and the financing of risks.

### *International*

Highly infectious animal diseases often spread across national borders. Sometimes entire continents are affected. Trade can also carry animal diseases between countries which are geographically distant. There has therefore long been a need for international agreements on highly infectious animal diseases in order to prevent their spread, optimise their control and impede trade as little as possible. These agreements are made in the framework of the World Organisation for Animal Health (OIE). They are in principle binding and consequently form the basis for much European legislation in relation to animal health.

Within the European Union, the harmonisation of the legislation on animal health is almost complete. This means that Member States are bound by jointly formulated European legislation, leaving limited room for manoeuvre at national level. However, in the past the Netherlands has succeeded in exerting a fair degree of influence on the process of creating new EU legislation. Moreover, the Netherlands retains some freedom in the implementation of that legislation.

The government will do all it can to continue participating as actively as possible in the coming years in the formulation of new EU policy on animal health. The purpose is on the one hand to maximise the Dutch input at European level (harmonisation), whilst at the same time retaining sufficient flexibility where needed for a specific Dutch interpretation of the implementation of EU legislation (subsidiarity). This National Agenda will accordingly be actively promoted at EU and OIE level.

### *Agenda*

The next part of this document discusses the agenda items. The focus is first and foremost on the various animal categories: pets, hobby animals, commercially farmed animals and animals in the wild. This list is supplemented by two specific categories, namely horses and fish. The second part looks at a number of themes, which either cut across the different animal categories or which warrant special attention. Among the topics discussed are cost allocation in animal disease control, emerging diseases and the veterinary infrastructure.

Finally, the government wishes to emphasise that this document is an agenda and should be read as such. Some policy ambitions have already been worked up in detail and translated into specific policy actions, while others have been placed on the agenda with a view to further development in collaboration between the government and other parties. The government therefore emphatically calls on those concerned in society to make use of this National Agenda and to work together to raise the level of animal health in the Netherlands to a higher level.

## CHAPTER 3: THE ITEMS ON THE ANIMAL HEALTH AGENDA

### 3.1 Strategic objectives

The National Agenda for Animal Health ushers in a new phase of animal health policy in the Netherlands. The strategic objectives for the period 2007-2015 are as follows.

- *Broad-based health care*

The National Agenda is concerned with health care for all animals, including animals kept as a hobby, commercially farmed animals, pets and wild animals. The government is also widening the focus from highly infectious animal diseases to broad-based attention for animal health.

- *Differentiation*

The National Agenda breaks down animal health policy into different animal categories. The purpose of this approach is to deliver more customised solutions which meet the needs and wishes of animal owners. The scope for a differentiated approach will be based largely on (differentiated) risk analyses.

- *Prevention*

In line with the European animal health strategy, prevention of animal diseases is a core theme in the National Agenda for Animal Health. Prevention is a broad concept, which ranges from preventing the introduction and spread of animal diseases to good housing and increasing the basic resistance of animals.

- *Risk-based approach*

Animal health policy will be systematically based on risk analyses. The government believes it is important that it should be clear to everyone how the various risks have been weighed in laying the basis for a new policy.

- *Funding*

Our aim is to reconcile European harmonisation and the passing on of the costs of controlling animal diseases to their owners. In dialogue with stakeholders, efforts are directed towards finding more 'modern' funding structures linked to quality systems. In this context, consideration is also being given to 'bonus-malus' systems within the industry.

- *More cooperation between government and civil-society organisations*

The government is keen to involve society in the development of the future animal health policy. In addition to legislation and regulations, the government would like to increase the focus on initiating, facilitating and communicating and on achieving policy objectives in partnership with civil-society organisations. A central plank of this approach is the responsibility which animal owners themselves can take.

These strategic challenges are discussed in more detail for each animal category in sections 3.2 to 3.7. Chapter 4 then describes the action points for a number of specific focus areas.

## 3.2 Pets

### Introduction

Pets are a new category in the animal health policy of the Ministry of Agriculture, Nature and Food Quality. Although it has always been concerned with a small number of diseases affecting pets, such as rabies, beyond this the Ministry has largely remained in the background. In this National Agenda for Animal Health we outline a number of problems in relation to pet health which may warrant the attention of the government. This chapter is accordingly mainly agenda-setting in nature.

Pet welfare has been in the spotlight on numerous occasions in recent years. Pet health is closely interwoven with animal welfare, and vice versa. The Memorandum on Animal Welfare (*Nota Dierenwelzijn*) looks explicitly at animal welfare in relation to pets.

The bond between pets and their owners is often a close one, and the animal occupies an increasingly prominent place as a member of the family. Pets can also play an important role in the development of children, both as a playmate and as something to cuddle, and also as a way of learning to take responsibility. People living alone or older people often take a pet for company and companionship, but also because of the daily routine a pet brings. Animals also often have a social function: taking the dog for a walk in the park, for example, often leads to conversations with other people or other dog owners. Having a pet also influences the owner's physical health: walking a dog is good for the owner's physical condition, and stroking an animal has a calming, restful effect. Pets can thus have a positive influence on the well-being and health of human beings. In addition to keeping animals as pets, people also keep animals as a hobby, for hunting, for protection, as a status symbol, out of curiosity and as an object of observation.

55% of all Dutch households (4 million households) have one or more pets. In total, there are approximately 30.7 million pets in the Netherlands. The majority of these are fish (19 million), followed by around 3.3 million cats, 1.8 million dogs, 1 million rabbits, almost 1 million rodents, 5 million birds and a quarter of a million reptiles and amphibians (source: *Actieplan 'Gedeelde zorg', Forum Welzijn Gezelschapsdieren*, March 2006).

Responsibility for the health of a pet lies in the first instance with the owner. The health status of pets in the Netherlands is generally reasonable to good, largely because of the affection of owners towards their pets and their responsibility for their health. Veterinary practitioners, for their part, provide adequate animal health care and information when required.

Each year a total of EUR 1.45 billion is spent in the Netherlands on purchasing and caring for pets. The total value of the sector is EUR 2.1 billion, including food, trade, veterinary practitioners, care and education.

### Present situation and problems

#### *Animal health and welfare*

Despite the positive picture outlined above, some problems have been identified relating to the health and welfare of pets (see also: *Actieplan 'Gedeelde zorg', Forum Welzijn Gezelschapsdieren*, March 2006). Examples include the emergence of genetic defects, behavioural problems and stress caused by shortcomings in the breeding policy. There are also problems relating to poor care and housing, the trade in pets and the fact that people sometimes keep animals which are not suited to a domestic environment, such as monkeys and raccoons.

Problems also occur due to poor or incorrect feeding, leading to issues such as overweight. Other problems such as allergies, itching and other skin disorders can also be caused by poor diet. Loneliness and stress can sometimes give rise to behavioural problems and skin disorders in animals. Ignorance of animal health on the part of the owner can thus lead to problems for the animal.

As set out in the Memorandum on Animal Welfare, it is important when acquiring a pet that the owner obtains good information and properly weighs up the implications of acquiring an animal. The owner must subsequently treat their animal responsibly and look after it properly. In order to provide owners with information on the right care and treatment for their pets, the Ministry has joined forces with a number of other organisations to found the National Pet Information Centre (LICG). The LICG provides present and future pet owners with information on animal health care,

The one-sided breeding policy which can itself give rise to health and welfare problems for dogs and cats is addressed in the Memorandum on Animal Welfare and is therefore left out of consideration in this Agenda.

#### *Veterinary medicines*

The use of veterinary medicines such as antibiotics for pets deserves attention because it can give rise to problems such as antibiotic resistance. This is discussed in more detail in chapter 4.6.

#### *Animal diseases and zoonoses*

There are several infectious diseases affecting pets, such as canine and feline distemper, which can harm the animal's health. There are also a number of animal diseases which are zoonotic in nature, such as rabies, psittacosis and toxoplasmosis. However, worms and ticks can also transfer diseases from animals to humans. People can also be allergic to animals. Where someone is considering acquiring a pet, it is important that they are also aware of the various potential animal diseases and zoonoses. The LICG is again used a source of correct information on these animal diseases to present and future owners.

'Emerging zoonoses' and 'emerging diseases' also play a role with pets. These are zoonoses and animal diseases which do not occur naturally in the Netherlands but which are now appearing for various reasons - for example due to climate changes, increased mobility by travellers, the adoption of pets from abroad, the import of exotic animals and the illegal trade in animals. Examples include leishmania and echinocooccus, (tapeworm), both of which can enter the Netherlands via dogs from the Mediterranean area.

The Council on Animal Affairs (RDA) has compiled a list of animal species which are regarded as suitable for keeping as pets. The intention is that this list should be incorporated in legislation. The list also includes exotic animal species which do not occur naturally in the Netherlands. Since these animal species can potentially bring exotic infectious diseases to the Netherlands, consideration will be given when compiling the inventory of emerging diseases and emerging zoonoses to whether there are animal health grounds for objecting to the import of these animal species. Chapter 4.8 of this Agenda ('Climate change, globalisation and emerging diseases') looks in more detail at the spread of animal diseases and zoonoses due to climate change and globalisation. The Memorandum on Animal Welfare discusses the purpose and creation of the list in more detail.

### **Objectives**

- Commitment to optimum communication between the government and all stakeholders in the pets sector.
- Commitment to providing optimum information and communication to owners on the right animal health care for pets.
- Commitment to raising the awareness of present and future pet owners concerning the responsibilities and implications of acquiring a pet.
- Identifying zoonotic risks and emerging diseases affecting pets.

### **Envisaged results**

The government would like to work together with pet owners and with the industry to achieve the following goals:

- People wishing to acquire a pet are well informed and are aware of how to look after their pet properly, including care, feeding, housing, behavioural characteristics and costs. People also know that a pet may be a carrier of zoonoses and are aware of the consequences this

can have for themselves and for the animal. This information is necessary in order to prevent rash impulse purchases.

- People who wish to acquire a pet are aware that while breeding can on the one hand produce 'desired' genetic defects, as required by some breeding standards, these defects can give rise to animal health problems. An example is the 'desirable' defect of drooping lower eyelids, which can lead to chronic inflammation of the eyelid membranes, or short, flattened noses in dogs and cats which lead to respiratory problems and eye disorders. On the other hand, present and future owners are also aware that 'undesirable' genetic defects can arise, for example because a particular breed is extremely popular; examples include aggression and hip dysplasia. These genetic defects are detrimental to the animal's health and welfare.
- People are aware that not every animal is suitable as a pet. Animals such as monkeys, raccoons, poisonous snakes and tigers are wild animals and are unsuitable for keeping in a domestic setting. The government intends to adapt the 'positive list' of permitted animal species in the regulations accordingly.
- Travellers are aware of the risk of bringing in animal diseases through the purchase/adoption of pets and exotic animals from abroad, especially from subtropical (Mediterranean) and tropical regions.
- The risks posed by emerging diseases and emerging zoonoses entering the Netherlands through the import of pets and exotic animals or which migrate to the Netherlands due to climate changes, have been identified and communicated.
- Veterinary medicines, and especially antibiotics, are used responsibly on pets.

## **Actions**

### ***Actions by pet owners and the pet industry***

The government calls on all pet owners and the pet industry to take a number of actions in the years ahead (2007-2015).

- Pet owners inform themselves of the consequences of acquiring a pet and of the correct way to care for it.
- Pet owners give their animal the proper (health) care.
- Pet owners and the pet industry ensure that they have well-organised interest groups and, where these groups are already developed, expand them.

### ***Joint actions by pet owners, the pet industry and the government***

In collaboration with pet owners and the pet industry, the government wishes to implement the following actions:

- 2008-2009: an exploratory study will be carried out into the roles and responsibilities of the government, owners and the industry in relation to pet health.
- 2009-2010: following on from the exploratory study and its findings, a communication strategy will be put in place, specifically targeting pet owners. This strategy will be formulated together with the Royal Netherlands Veterinary Association (KNMvD), scientists (Utrecht Faculty of Veterinary Medicine (FD)), pet shops and related sectors, such as dog training schools and the National Pet Information Centre (LICG).

### ***Actions by the government***

The government itself intends to carry out the following actions in the coming years:

- 2007-2008: an inventory will be compiled of the risks that animal diseases which can affect pets can pose to animals and humans. Particular attention will be given to emerging diseases and emerging zoonoses.
- 2007-2008: an inventory will be made of animal species on the 'positive list' in order to prevent the possible introduction of animal diseases and zoonoses into the Netherlands.
- 2008-2009: the self-organisation of pet owners and the pet industry in relation to animal health will be facilitated.

Chapter 4.6 discusses the approach to be taken on veterinary medicines for pets.

### 3.3 Hobby animals

#### Introduction

Hobby animals are defined here as farm animals which are not kept professionally or for commercial purposes<sup>3</sup>. It is difficult to give a more precise definition, since there are many gradations and intermediate forms. Although it is not known precisely how many hobby animals there are in the Netherlands, the current estimated total is around 5 million.

#### Present situation and problems

There is enormous variation in the way in which hobby animals are kept, in the species of animals kept and in the extent to which their owners participate in the commercial process. Popular hobby animals include sheep, goats and poultry. Owners sometimes have two animals, but there are also owners with 50 or more. Owners often keep many different species, such as pigs, cattle, ostriches or deer. Although many keepers consume the products from their own livestock (meat, eggs), most of these animals are also kept to a large extent as pets. People have a desire to care for and feed their animals, derive pleasure from having them and consequently feel a bond with nature. This has significance for the way in which people treat their animals as well as for the housing and care that the animals receive. Apart from hobby animals kept at home, many people also come into contact with these animals at a children's farm.

#### *Animal health problems*

In view of the function of hobby animals, their owners are generally strongly committed to their animals. As a result, they usually do their best to keep their animals in optimum health. Since the animals are often kept less intensively, a number of health problems which occur among the commercially farmed animals are less common. On the other hand, there are other health problems which are more likely to affect animals kept as a hobby, for example because they are able to range freely. In addition, partly because of the 'humanisation' of hobby animals, they are exposed to other health problems which can affect their welfare, such as obesity. The Memorandum on Animal Welfare discusses this in more detail.

#### *Zoonoses*

Zoonoses are diseases that can be transferred from animals to humans. The zoonoses already present in the Netherlands can also affect hobby animals; examples include a salmonella, campylobacter and fungal diseases. Since these animals are often kept outdoors, all manner of infections contracted from the environment or through contact with wild animals, including birds and the rodents, can be included in this list. These animals are usually kept close to the owner's home and there is often intensive contact between human and animal. In certain cases, therefore, the zoonotic risk can be greater.

#### *Customisation*

In addition to the animal health problems to which keepers of hobby animals can themselves be exposed when caring for their animals, there are also a number of problems as regards the health policy for hobby animals. The animals kept as a hobby are generally the same species as commercially farmed animals, and are therefore susceptible to the same diseases. Keepers of hobby animals are consequently confronted with animal disease control policy which was originally designed to protect other countries from a number of diseases and therefore safeguard trade. The impact of this policy on keepers of hobby animals whose animals have been culled or in danger of being culled has been enormous, and some keepers have suffered socio-psychological damage as a result. Some keepers have concealed their animals in order to evade control measures. In periods other than during an outbreak of disease, keepers have also protested against the mandatory identification and registration (I&R) systems, and in particular the use of ear tags. Government intervention is seen as an infringement of personal freedom: these animals are after all kept as a hobby, and keepers have an aversion to interference from any outside party. Yet certain guarantees and regulation are necessary, because animals in the hobby sector can also end up in the mainstream food chain.

---

<sup>3</sup> See Definitions

Keepers of hobby animals sometimes view the measures and regulations as a disproportionate burden. They feel that, given the number of animals kept, the type of contact and the way in which the animals are kept, they pose a much smaller risk to animal health than commercially farmed animals. Epidemiological research supports this view to some extent. This has led to an awareness that customisation is needed in the animal health policy. In particular, measures which have a far-reaching impact on the personal lives of keepers of hobby animals, such as regulations relating to the prevention and control of certain animal diseases, need to be amended. A customised approach has been the norm in recent rules drawn up by the government on controlling animal disease, and a separate regime is being set up for keepers of hobby animals. However, not all regulations are currently couched in this way, partly because of constraints imposed by European regulations.

#### *Level of organisation and communication*

When the government tries to engage in dialogue with hobby farmers, it encounters a number of problems. The biggest is the fairly low level of organisation among this group. There are several different organisations representing the interests of keepers of hobby animals, each representing only a small proportion of all keepers. In addition, it is not always entirely clear how many keepers and how many animals there are in the Netherlands, making it difficult for the government to investigate and consult on the best way of gearing its policy to this sector. It is also difficult to reach hobby farmers in the right way with information and education. In the past, the government has had difficulty in its communication with this group of keepers; the government uses terms and concepts which do not apply for hobby farmers or which they do not understand, and the usual communication channels are not effective.

There is a need for improvements on all these fronts, because good communication is essential for a good (animal health) policy.

#### **Objectives**

- Commitment to optimum communication between the government and keepers of hobby animals.
- Creating scope for customisation in animal health policy.
- Reducing the zoonotic risks of hobby farming.
- Identifying the role of hobby animals in the introduction and spread of animal diseases.

#### **Envisaged results**

The government wishes to work with hobby farmers and the hobby animal sector to achieve the following goals:

- By 2008 the government will have a separate communication policy specifically designed for hobby farmers. There will also be a permanent consultation structure with hobby farmers to ensure that this group are involved in policy decisions.
- By 2011 an evaluation will have shown that stakeholders are satisfied with the communication between the government and hobby farmers.
- By 2011 the policy on animal disease control, prevention and I&R will where possible contain customised solutions specifically aimed at hobby animals.
- The Dutch efforts are designed to ensure that by 2011 all European regulations on animal health have been amended as far as possible to allow customised solutions for hobby animals.
- By 2015 evaluation research will show that hobby farmers are sufficiently aware of the main health risks for their animals.

#### **Actions**

##### ***Actions for hobby farmers and the hobby animal sector***

The government calls on owners of hobby animals and the hobby animal sector to take a number of actions in the coming years (2007-2015).

- 2007-2009: hobby farmers are able to take responsibility for the organisation of their own interest group and, where such a group already exists, to expand it.

- 2007-2015: hobby farmers are able to undertake training to cover gaps in their knowledge about the care for their animals and the health risks to their animals.
- 2007-2015: hobby farmers may be expected to provide optimum care for their animals and to take the necessary hygiene and other preventive measures aimed at keeping their animals disease-free.

***Joint actions by hobby farmers, the hobby animal sector and the government***

In collaboration with hobby farmers and the hobby animal sector, the government wishes to implement the following actions in the coming years:

- In 2008 the government, in consultation with hobby farmers, will put in place a communication policy specifically geared to this group. Special attention will be devoted to developing new means of communication. An exploratory study will also be carried out to ascertain whether the definition of the term 'hobby farmer' can or should be refined.
- Facilitating the self-organisation of hobby farmers. From 2008, the best method of achieving this will be explored.
- 2007-2009: international lobbying for acceptance of a differentiated disease control policy at international level (input in the context of CAHP).
- 2009-2010: a study of alternatives for the identification of hobby animals. Where keepers of hobby animals have objections to the present means of identification, consideration will be given to alternative means of identification such as subcutaneous transponders.
- 2011: evaluation of the communication policy for hobby farmers.
- 2015: study of the degree to which hobby farmers are aware of animal health risks.

***Actions by the government***

The government intends to carry out the following actions in the coming years:

- 2008-2009: improved risk analysis for policy decisions in order to make customisation possible (see chapter 4.2, Risk analysis).
- Differentiation is one of the core themes being promoted by the Netherlands in Brussels in the development and implementation of the European strategy on animal health 2007-2013 (CAHP<sup>4</sup>).
- 2008-2010: amendment of government regulations to facilitate customisation.

---

<sup>4</sup> See Definitions

### 3.4 Commercially farmed animals

#### Introduction

##### *Commercially farmed animals and livestock farming*

This chapter is concerned with all animals which are kept for commercial purposes. It is difficult in some cases to distinguish commercially kept animals from animals kept as a hobby<sup>5</sup>. The important point here is in any event that providing an income is the main purpose of keeping these animals; the animals are used as a means of production or as a product. This commercial livestock farming includes the cattle, pig, sheep, goat and poultry farming industries. There are also a number of smaller sectors (e.g. rabbit and mink farming), as well as sectors where the boundary between commercial and hobby farming is even more blurred, for example the keeping of bees and horses.

The Dutch livestock farming industry is an innovative sector which makes a major contribution to gross domestic product<sup>6</sup>. With a few exceptions, livestock farming in the Netherlands is generally characterised by high livestock densities, large numbers of animals, a high volume of national and international transport and heavy dependence on exports. There are currently 3.7 million cattle, 11.3 million pigs, 1.7 million sheep and goats and 94 million chickens and other poultry being commercially farmed in the Netherlands.

#### Present situation and problems

##### *Animal health and interests*

It is important that farmed animals are healthy, both from the point of view of the animals themselves and for the farmer. Although most livestock farmers are happy to give their animals optimum space, rest and care, the opportunities to do so are sometimes limited, particularly in intensive farming, due to the associated costs. The animals are after all kept in order to generate an income and it is therefore important to minimise the costs of keeping them. This commercial interest also plays a role in the health care of these animals. In farming systems which are aimed primarily at boosting productivity, raising efficiency and protecting economic interests, animal health and welfare can come under pressure. The welfare of commercially farmed animals is discussed in the Memorandum on Animal Welfare; animal health is discussed in this chapter.

##### *Categorisation of animal diseases*

The owner/keeper has primary responsibility for the health of their animals. The majority of animal health problems can be solved by the owner of the animals, possibly with the help of a veterinary practitioner. A limited proportion of animal health problems can however only be resolved if most or all keepers work together. When it comes to infectious animal diseases, individual control measures are generally not effective and a pooling of resources is called for. In principle, controlling or combating disease can be carried out either by the industry or by the government.

The present distribution of responsibilities for animal disease control measures, both in the Netherlands and in Europe as a whole, has developed historically and sometimes appears to contain little logic. There are some diseases, such as swine vesicular disease, which must be controlled by the government pursuant to European regulations, but which do not in reality pose a major threat to animal health. By contrast, other animal diseases, which can cause serious animal health problems or which can have consequences for public health, such as Q-fever, are left to farmers themselves to deal with. The present categorisation system is not based on objective criteria and is not always consistent. It is therefore no longer fit for purpose. A new, clear classification of animal diseases is necessary for the allocation of responsibilities in disease control (see chapter 4.3, Categorisation of animal diseases).

##### *Farm-specific animal health problems*

Farmers are in the first place responsible for the health of their animals themselves. Through good management, stock farmers can ensure that their animals achieve optimum production

---

<sup>5</sup> See Definitions

<sup>6</sup> According to the Netherlands Bureau for Economic Policy Analysis CPB, in 2005 the livestock industry created added value of around EUR 3 billion and provided employment totalling more than 80,000 employment years

and are in the best possible health. These two objectives do not always go hand in hand, since the focus by farm managements on production and efficiency improvement can jeopardise the health of the animals.

Although most livestock farmers adopt a professional approach to maintaining the health of their animals, there are thus still a number of widely occurring farm-specific health problems. Examples in the cattle industry - and in particular the dairy sector - include lameness and udder infections, while respiratory infections and diarrhoea are common in the veal industry, and in the pig farming industry there are issues with respiratory infections and stomach ulcers. The poultry sector is confronted among other things with health problems arising from bird mite infestations. Furthermore, while it is effective and efficient for production to divide the production cycle of animals across different enterprises (specialisation), this can have negative consequences for animal health, because animals of different origin are brought together.

These farm-specific disorders can moreover lead to increased use of antibiotics, leading to the danger of antibiotic resistance (see chapter 4.4, Veterinary medicines).

In recent years, the emphasis in the animal health policy has mainly been on preventing and controlling highly infectious animal diseases and zoonoses; less attention has been given to (other) farm-specific diseases. Some of these farm-specific animal health problems ensue from the housing, feeding and breeding methods used. These topics are discussed in the Memorandum on Animal Welfare; the National Agenda for Animal Health places farm-specific animal health problems on the agenda as a shared action for both individual farmers and the industry.

#### *Highly infectious animal diseases*

Some infectious diseases potentially have major consequences for animal health and are able to spread rapidly, including across national borders. It has been agreed at EU and OIE level that these diseases should be controlled. Responsibility for controlling these highly infectious diseases, such as foot and mouth disease and avian influenza, again lies in the first instance with the farmer who, together with the veterinary practitioner, has a responsibility when noticing symptoms of disease to alert the authorities as quickly as possible. This early warning system can help minimise the risk of an outbreak. However, prevention and control of outbreaks of infectious animal diseases cannot be achieved by individual farmers alone, and are therefore just as much a task for the government. A European control obligation applies, partly because these diseases can have major socioeconomic or public health implications and impact on other EU Member States and the international trade in animals and animal products. The health status of animals in the Netherlands is good as regards highly infectious diseases, and a great deal of experience has also been gained in recent years in successfully dealing rapidly and forcefully with an outbreak of such a disease.

#### *Prevention*

Preventive measures are taken partly on the voluntary initiative of farmers and are partly imposed by the government. People who keep animals (either professionally or as a hobby, and both producers as well as dealers and transport companies) are themselves responsible for the health of their animals and must therefore take measures to prevent their animals becoming sick. Particularly in sectors where there is a direct relationship between preventive measures and profits, for example in the intensive farming industry, farms take measures to prevent the introduction of animal disease. Strict hygiene measures form a natural part of the business operations in these sectors. Where there is no such direct relationship, for example in sheep farming or the livestock trade, few if any spontaneous initiatives are taken in the area of prevention. Then there are government measures, partly at national level and partly European, which are designed to impede the introduction and spread of animal diseases. The latter are aimed mainly at highly infectious animal diseases and include rules on vaccination, certification requirements for the transport of animals and animal products between different countries, rules on the cleaning and disinfection of vehicles used to transport livestock, rules on gathering animals and on animal identification and registration.

Many of these government rules have been developed and introduced in the wake of animal disease outbreaks. Imposing long-term preventive measures has not proved easy; support for these rules quickly evaporates after the outbreak has been controlled. The collective sense of

responsibility in the farming industry for the prevention of animal diseases is also limited; a livestock dealer does not automatically feel responsible for the health of the animals at the farm's where he collects or delivers animals. Support for and spontaneous compliance with the prevention rules introduced by the Ministry of Agriculture, Nature and Food Quality has been limited, and enforcement of these rules is also complex and labour-intensive. Yet it is crucial that all parties are aware of the importance of prevention. Preventing a disease is better in every respect than controlling it afterwards, both financially and in terms of the social impact of an outbreak. Animal disease prevention covers the whole spectrum from preventing animals becoming sick on the farm up to and including border controls. The present preventive regulations are therefore being revised. In practical terms, this implies among other things that the commercial sector will need to work on prevention measures commercial terms, The practical implications of this for the commercial sector in the coming years include working on prevention measures in relation to the gathering of animals, limiting high-risk animal contacts and cleaning and disinfection of livestock vehicles.

### *Vaccination*

Although no one objected to eating meat or drinking milk from vaccinated animals, a non-vaccination policy was adopted in the 1990s for a number of highly infectious diseases such as classical swine fever and foot and mouth disease. The advantages of vaccination no longer outweighed the drawbacks. Vaccination is expensive and because it was not possible to distinguish between vaccinated and infected animals, the livestock trade was affected. It was also assumed at the time that laying a *cordon sanitaire* around Europe offered sufficient protection against outbreaks of animal diseases and that, if an outbreak did occur, we would be able to eradicate it very quickly. Both assumptions proved incorrect. In the last ten years the Netherlands alone has seen four major outbreaks of infectious animal diseases (classical swine fever, foot and mouth disease, avian influenza and bluetongue). In controlling the most infectious animal diseases, preventive culling of healthy animals in a zone around the centre of infection is regarded as an important control measure. However, this has encountered more and more public resistance, and the calls for vaccination during serious outbreaks of infectious animal diseases in the Netherlands are becoming ever louder. Vaccination can avoid the need for preventive culling of healthy animals, while advances in the development of vaccines and diagnosis mean that one of the objections to vaccination - the fact that no distinction can be drawn between infected and vaccinated animals - has been eliminated for a number of important animal diseases. All these developments have had a major influence on the thinking on a strict non-vaccination policy and have led to this policy being seen more in the round at both national and European level.

One of the measures designed to protect the livestock population against infectious animal diseases is preventive vaccination. This is possible for some animal diseases, but not (yet) for others. In cases such as Newcastle Disease in poultry, preventive vaccination has in fact long been compulsory, and it is now also available for avian influenza in poultry and other birds. This is however not yet possible for other animal diseases such as African swine fever, because no vaccine is yet available. Some available vaccines also leave something to be desired in terms of the way they are administered. This is the case with avian influenza vaccination, for example, where the animals have to be injected individually several times - something that is not practicable in the midst of an outbreak. Research is currently under way to find a method of mass application which could be employed in a crisis situation. The efficacy of vaccines is also not always optimum.

The Netherlands has made efforts in recent years to open up the way within European regulation for vaccination to be used during an outbreak of infectious animal diseases as an alternative to culling, a process referred to as emergency vaccination. Although some results have been achieved, the Netherlands wishes to widen the scope for vaccination as a control strategy in order to meet public demand. One problem with emergency vaccination which needs to be addressed relates to the restrictions on the marketing of products from animals which have been vaccinated as part of a disease control programme (such as the obligation to keep products from vaccinated animals separate from products from non-vaccinated animals ('compulsory segregation')).

In the coming years, the government will continue to carry out research in conjunction with the industry into new vaccines and their application, the development and testing of diagnostic

techniques and the development of vaccination strategies. The government will also continue to lobby within and outside the EU and will continue to support the industry in the sale of products from vaccinated animals.

#### *Identification and registration*

Another key instrument for the effective control of animal diseases is a good identification and registration system. While such a system is already well developed for cattle, pigs and poultry, it is currently insufficiently well organised in the sheep and goat farming sector.

#### *OIE compartmentalisation*

OIE compartmentalisation is a new and promising instrument in the field of animal health, which segregates (potentially) infected from uninfected animals. A compartment consists of one or more farms operating under a single biosecurity system, in which biosecurity measures and good identification methods, applied under strict conditions, ensure the segregation of (potentially) infected and uninfected animals and their products. A compartment thus creates a functional separation. The ability to impose such a separation is particularly important if the compartment lies within a designated infected area. OIE compartmentalisation thus complements the geographical segregation of (potentially) infected and uninfected animals that has been applied to date.

There is currently both a national and international willingness to explore the application of OIE compartmentalisation in practice. It is up to the industry to take the initiative for this. The government will assess whether farms meet the criteria, and where this is the case will work together with the industry on the possible implementation of the system.

#### *Differentiated approach to highly infectious diseases*

Prevention and control of highly infectious diseases in commercially farmed animals also affects virtually all other animal categories. Whereas in the past these categories were subject to the same government rules and measures as commercially farmed animals, a good deal of public resistance has arisen to this policy, accompanied by demands for a differentiated approach. In the new animal health policy it remains logical to coordinate the prevention and control policy with all stakeholders. Where possible, customised solutions will be provided. This is discussed in more detail in the sections on the other animal categories in this Agenda.

#### *Monitoring and surveillance*

In order to minimise the risks to public health and the (external) impact of animal diseases, it is very important to have a properly functioning monitoring system in the Netherlands. This is aimed partly at identifying unknown or new diseases, or familiar diseases which do not normally occur in the Netherlands but which are highly threatening, at the earliest possible stage. It is therefore important to monitor trends and developments in animal diseases and animal health, partly in the light of animal welfare and sustainability. A broad-based network, which includes livestock farmers, the Animal Health Service (*Gezondheidsdienst voor Dieren*), the Food and Consumer Product Safety Authority (VWA) and the Central Institute for Animal Disease Control (CIDC) and which possesses the necessary instruments and expertise, is essential here.

#### *Information and communication*

It is important that keepers of animals have sufficient knowledge of the symptoms of infectious animal diseases so that they are able to recognise the signs early and alert the authorities. Information and communication about the symptoms of animal diseases are therefore essential. Information on preventive measures which can be taken by farmers themselves is also important. People are travelling more and further and are visiting countries where infectious animal diseases are endemic; for example, foot and mouth disease occurs in more than 100 countries throughout the world. Travellers are often not aware of the prevalence of infectious animal diseases and of the need to prevent them being brought back to the Netherlands.

#### *Basic (natural) immunity*

Little attention has to date been devoted in the livestock industry to breeding animals with an increased basic (natural) immunity to disease, though a few studies have recently begun focusing on animal robustness. Although boosting and making better use of natural immunity offers little protection against serious infectious diseases such as FMD, there are indications that

it increases resistance to farm-specific animal health problems and promotes the effectiveness of vaccines. The precise mechanisms and potential applications of natural resistance are not yet fully understood.

#### *Structure of the livestock industry*

A very important factor which influences the health of commercially farmed animals is the structure of the livestock industry. Livestock farming in the Netherlands has for many years been regarded as an economic success story, but also has its limitations. The high livestock densities in some regions, the high volume of national and international transport and the dependence on import and export make the Dutch livestock sector very vulnerable, and this vulnerability appears to be increasing. Some aspects of intensive farming make it inherently vulnerable to disease. For example, there is an imbalance between the production of piglets in the sow farming sector and the number of fattening pens in the Netherlands. The result is that most piglets are exported, mainly to Germany. If an outbreak of animal disease were to make the export of these piglets impossible, there would quickly be a large surplus of piglets in the Netherlands. This would lead to housing problems and in turn to animal welfare and health problems. In other sectors, too, such as the veal sector, there are animal health risks associated with the structure of the industry. The Netherlands fattens many calves originating from other countries. If one of these countries experiences an outbreak of disease in cattle, there is a chance that infected animals could enter the Netherlands. It lies outside the scope of this Agenda to reopen the discussion on the structure of the veal industry, but we cannot close our eyes to the many animal health problems which are inherent in that structure. These aspects therefore deserve explicit attention.

#### **Objectives**

- The industry sees the prevention of animal diseases as an absolute priority, and this is further optimised. As a result, the risks of introducing an animal disease are minimised and the extent of any outbreaks is limited.
- Animal disease control is carried out in a way which is acceptable to the public.
- Farm-specific animal health problems have been reduced as far as possible and the roles of government and the industry are clear.
- Stimulation by the government of sustainable livestock farming in which animal health policy is given a full role.

#### **Envisaged results**

The government would like to work together with the industry to achieve the following goals:

- 2008: it has been determined what role the government should play in relation to farm-specific diseases. A joint plan has been drawn up by the industry, the government and other stakeholders on reducing certain farm-specific animal health problems. This plan sets specific targets for the longer term.
- 2008: the prevention rules have been reformed and the risk of the introduction of animal disease has been minimised. The prevention policy has been developed as far as possible by the industry itself without government regulation.
- Travellers are sufficiently aware of the risk of the introduction of diseases and how they can reduce that risk.
- 2009: an identification and registration system is in place for sheep and goats.
- 2008: there are good opportunities for vaccination strategies to control highly infectious animal diseases (for which a vaccine is available) as an alternative to culling. These strategies have been coordinated with the European Union.
- 2009: vaccination has become a generally accepted strategy within the EU for controlling outbreaks of highly infectious animal diseases. Obstacles to the sale of products from vaccinated animals have been removed as far as possible.
- 2009: OIE compartmentalisation is an accepted instrument within the EU alongside and as a complement to zoning in animal disease control.
- 2013: research has revealed the scope for boosting the basic (natural) resistance of animals in order to improve animal health in the livestock industry. If there are practical opportunities, the industry will collaborate with the government to develop a plan to put them into practice.

- 2007-2015: animal health occupies a key place in discussions on the structure of the livestock industry.

## **Actions**

### ***Actions by the sector***

The government calls on the sector to take a number of actions in the years ahead (2007-2015).

#### *Farm-specific animal health problems*

- 2007-2015: reduction of important farm-specific animal diseases, including through implementation of a plan developed by the relevant sector to this end.
- 2007-2015: the development of new farming systems takes explicit account of animal health. See also the section on integral design in the Memorandum on Animal Welfare.

#### *Prevention*

- 2008-2010: setting up of quality systems and linked preventive measures in order to guarantee a high level of disease prevention and stimulating risk-aware business operations.
- 2008-2010: development and further realisation of systems for the cleaning and disinfection of livestock transport vehicles.
- 2008-2009: development of a plan to reduce the number of collection stages at home and abroad, from the point of view of both animal health and animal welfare (see also Memorandum on Animal Welfare).

#### *Control*

- 2008-2015: communication to the rank and file on animal disease control and the measures to be taken during a crisis.
- 2008-2015: deliver input to the government for the design of measures for use during crises.

#### *Vaccination*

- 2007-2008: make agreements on the sale of products from animals that have been vaccinated as part of a control or prevention programme.

#### *Natural resistance*

- 2007-2015: study how natural resistance can be used as a means of improving animal health.

#### *Structure of livestock industry*

- 2007-2015: the structure of some parts of the industry needs to be examined in order to improve animal health and reduce the present risks of animal disease introduction.

### ***Joint actions by the sector and the government***

In collaboration with the sector, the government wishes to implement the following actions in the coming years:

#### *Farm-specific animal health problems*

- 2008: carry out an exploratory study in conjunction with the cattle, poultry, pig, sheep and goat farming sectors into the role of the government in farm-specific diseases.
- 2008: draw up a plan in conjunction with the cattle, poultry, pig, sheep and goat farming sectors aimed at reducing important farm-specific animal health problems.

#### *Prevention*

- 2008: the government and the industry will make agreements on the independent introduction of preventive measures by the industry. These agreements will be implemented in 2009-2011.
- 2012: evaluate the functioning of the new prevention regulations and preventive measures.
- 2008-2009: investigate the feasibility of further limiting animal contacts which pose a danger in terms of the introduction and the spread of animal diseases.
- 2008-2009: improve the efficacy of the identification and registration system for sheep and goats through the introduction of an electronic I&R system.

- 2008-2015: keep the identification and registration system up to date and develop it as appropriate.

#### *Control*

- 2008-2009: categorisation of animal diseases to make the distribution of responsibilities clear in the control of animal diseases; see chapter 4.3.
- 2008: with the aid of a pilot, the industry and government map out the implications of OIE compartmentalisation.
- 2009-2013: the industry and the government each define their respective roles in OIE compartmentalisation.
- 2008-2010: exploration of ways in which the early warning system can be improved.
- 2009-2010: exploration of how better use could be made of the input of stakeholders in decisions on control during animal disease outbreaks.

#### *Vaccination*

- 2007-2015: lobbying in countries within and outside the EU to remove obstacles to the sale of products from animals which have been subject to preventive vaccination as part of a disease control programme.
- 2007-2015: collaboration between government and the industry on bringing new and better vaccines and diagnostic resources to market.
- 2007-2015: permanent efforts to improve the international standards at OIE level and relevant EU legislation in relation to vaccination.

#### *Natural resistance*

- 2009-2015: launch one or more pilots and practical studies (communities of practice) in which livestock farmers go through a learning innovation cycle and available knowledge is communicated.
- 2015: the knowledge on the basic (natural) resistance is reassessed and - if possible - the industry then works in collaboration with the government on an action plan to put the theory into practice. If it is not possible to formulate a plan, the need for further research is identified.

#### *Structure of the livestock industry*

- 2008-2015: in the social and political debate on the structure of the livestock industry, ensure that animal health is one of the central themes for discussion.

#### **Actions by the government**

The government intends to carry out the following actions in the coming years:

#### *Prevention*

- 2007: the review of the prevention regulations is complete.
- 2008: the review of the enforcement policy for prevention rules is complete.

#### *Control*

- 2008-2015: keep the control policy up to date via the policy procedures. Gear this policy to social needs. This means more customisation, more alternatives to (preventive) culling and the building of broad public support.
- 2008-2015: continue to practise the procedures regularly with the crisis organisation.
- 2007-2015: good agreements are made with neighbouring countries and other relevant Member States on the approach to controlling infectious animal diseases. Where necessary, joint exercises are held.
- 2007-2015: continued efforts at international level to have the Dutch viewpoint accepted as widely as possible.

### 3.5 Animals in the wild and endangered kept animals

#### Introduction

The purpose of the nature policy is to maintain stable populations and promote biodiversity. The creation of the National Ecological Network (EHS), which among other things links nature areas through the creation of ecological connections, is a key element in this policy.

As far as possible, wild animals are left to their own devices. Disease and mortality are a natural fact of life in the wild. From a nature protection perspective, therefore, allowing infectious animal diseases to spread among wild animals is logical. Frequently the disease will burn itself out and a population will recover naturally.

This chapter looks at the relationship between nature policy and animal health. It focuses on the following categories of animals: protected animals in the wild, large wild herbivores and endangered animals in captivity.

#### *Protected wild animals*

Virtually all naturally occurring mammals, birds, fish, amphibians and reptiles in the Netherlands are protected. Human intervention in the life cycles of protected species is minimised, and is permitted only where there are specific interests at stake. These aspects are regulated in the Flora and Fauna Act.

#### *Large herbivores in the wild*

In the 'large nature units' as described in the guidelines for management of large herbivores (*Leidraad Grote Grazers*), large herbivores have the legal status of 'animals in the wild'. The currently designated units are Oostvaardersplassen, Veluwezoom and the Zuid-Kennemerland National Park. These areas afford space for natural processes and provide a habitat for large herbivores such as Heck cattle, Scottish Highlanders and Konik horses, which are regarded ecologically as wild animals. This allows a population to develop under the most natural conditions possible. In other nature areas, large farmed herbivores are used for the management of the area. From the perspective of the animal health policy, these animals all fall under the same regime, as kept farm animals.

#### *Endangered kept animals*

These are animals which have entirely or almost entirely disappeared from the wild and which have international protection status<sup>7</sup>.

#### Present situation and problems

Experiences with crises in recent years have largely shaped policy on animal diseases and nature. Several procedures stipulate what actions should be taken in relation to nature areas and animals in the wild during animal disease crises. The most important principles are as follows:

#### *Creating calm*

The rule of thumb during an outbreak of an animal disease is to create a calm environment for wild protected animals and herbivores living in the wild. This prevents wild animals or birds from migrating over large distances and possibly helping to spread the disease further.

With a view to maintaining this calm environment and also sustaining biodiversity, mass culling of wild animals (including wild herbivores) is not carried out when controlling an infectious disease through a 'stamping out' regime<sup>8</sup>. Culling would cause a number of animal movements, only increasing the risk of the further spread of the disease. Moreover, it is virtually impossible to cull all wild animals in a population.

---

<sup>7</sup> Species listed in Annex A of the CITES regulation, with the exception of species which are bred on a relatively wide scale, and/or species listed in the categories critically endangered (CR), extinct in the wild (EW), Endangered (EN) or Vulnerable (VU) on the IUCN Red List.

<sup>8</sup> See Definitions

During outbreaks of classical swine fever it can however be necessary at a certain stage to reduce the number of susceptible animals. This can be achieved either through oral vaccination of wild boars or by reducing the population through a targeted and regulated cull. This then has to be weighed against the disruption this will cause to the rest of the population.

Other measures designed to create a calm environment may include closing nature areas to the public, compartmentalising nature areas to combat migration of wild animals, suspending activities in nature areas, banning hunting, controlling management and damage, discouraging recreational activities, etc. The various management procedures explain in more detail how these measures are to be implemented.

#### *Exceptions to culling*

When controlling an animal disease using the 'stamping out' approach, in which all susceptible animals within a certain radius of an infection source are culled, animal species which have almost or completely disappeared from the wild<sup>9</sup> are exempt from culling. There are conditions: they must be placed in quarantine and the necessary measures must be taken in respect of cleaning and disinfection. The species which are eligible for this exemption have special international protection status.

The ambitions for the animal health policy for animals living in the wild relate to prevention, monitoring and risk analysis and communication.

#### *Prevention*

According to current scientific knowledge, the chance of infectious animal diseases being transferred from the wild population in the Netherlands to farm animals is very remote<sup>10</sup>. That chance does however increase if it is decided when establishing ecological connections to interconnect agricultural and natural functions. As the consequences of such an outbreak can be very considerable, the government wishes to minimise the risk.

#### *Monitoring*

Although animal diseases in natural populations often die out of their own accord, this does not always happen. There is currently no clear picture of the incidence of infectious animal diseases in these populations. In order to be able to respond adequately, both in 'times of war' and in 'times of peace', this information gap needs to be filled.

#### *Risk analysis and communication*

Opinions are divided on the role played by wild animals in the spread of animal diseases. The commercial farming industry is extremely concerned about the potential risks of the spreading of infectious animal diseases by animals living in the wild, especially in relation to the creation of the National Ecological Network and ecological connections. The risks cited by livestock farmers include the potential risk of disease being spread by wild horses and cattle, wild boars and (migrating) (water) birds.

By contrast, nature organisations have concerns about diseases crossing over from farm animals to healthy wild populations.

This mutual distrust leads to a polarisation between civil society groups and to diminishing support for nature policy.

### **Objectives**

- Improve the monitoring of infectious diseases in natural populations.
- Improve the communication on the risks of animal diseases in natural populations.
- Improve the coordination of animal health policy and nature policy:
  - Take animal disease risks into account when establishing zones for ecological connections.

---

<sup>9</sup> Species listed in Annex A of the CITES regulation, with the exception of species which are bred on a relatively wide scale, and/or species listed in the categories critically endangered (CR), extinct in the wild (EW), Endangered (EN) or Vulnerable (VU) on the IUCN Red List.

<sup>10</sup> *Robuuste verbindingen en wilde hoefdieren*, Alterra report 1506, 2007 (see References)

- Take full account of the interests of nature when considering control measures.
- Improve the enforcement of the policy that wild boars may only occur in the Veluwe and Meinweg areas.

### **Envisaged results**

The government would like to work together with the provincial authorities, nature organisations and the stock farming industry to achieve the following goals:

- By 2015 the incidence and prevalence of animal diseases in natural populations is known.
- By 2015 the risks of animal diseases being spread by wild animals are known.
- By 2015 public opinion is more balanced due to the distinction between hard risks and perceived risks.
- By 2015 measures have been taken to combat the risks of animal diseases being spread by wild deer when establishing ecological connections and the National Ecological Network.
- By 2010 enforcement of the zero status policy for wild boars has improved.
- During the plan period, full account will be taken of nature interests and biodiversity objectives in the decision-making on animal diseases and disease crises.

### **Actions**

#### ***Joint actions by the government, nature organisations and centres of expertise***

In collaboration with stakeholders, the government wishes to implement the following actions in the coming years:

- 2008: completion of an exploratory study on expanding monitoring and coordination. The possibility of assigning a coordinating role to the Dutch Wildlife Health Centre<sup>11</sup>, in collaboration with centres of expertise in the fields of ecology, epidemiology and veterinary medicine, will be studied.
- 2009-2010: formulation of a monitoring plan and a communication plan with a view to increasing the existing monitoring of the incidence of infectious animal diseases in wild populations and birds.
- 2010-2011: the government, together with livestock farmers and nature organisations, will draw up a communication plan which, based on risk analysis and monitoring, will generate a clearer picture of the actual risks, create a more balanced public perception of the role of wild animals in the spread of animal diseases, and consequently improve the communication between the various parties.
- 2007-2015: the provincial authorities will formulate a joint plan together with the livestock industry on the establishment of ecological connections in order to combat the spread of animal diseases by wild animals, based on risk analysis. Possible measures will include preventing direct contacts between wild animals and farm animals through zoning or fencing off (keeping free range pigs temporarily indoors; temporarily placing cattle indoors; fencing off farms or nature areas). These plans and the associated division of responsibilities will be established at administrative level between nature area managers, farmers, central government and provincial authorities.
- 2007-2015: the ability to control an outbreak of an animal disease will be taken into account in establishing the National Ecological Network.

#### ***Actions by the government***

- 2007-2015: attention will be given to increasing the input of provincial authorities to enforce policy in the areas where wild boars may not occur. The habitats designated for wild boars, the Veluwe and Meinweg areas, will be exempted.

---

<sup>11</sup> See Definitions

## 3.6 Horses

### Introduction

The Dutch horse sector is a rapidly growing and important part of the economy. It is estimated that there are between 350,000 and 500,000 horses and ponies in the Netherlands and around 450,000 people actively participating in equestrian sports. It is a highly diverse sector which can be broadly divided into three segments: horse breeding, horse trading and sport and recreation. Various suppliers, such as equestrian sports businesses, blacksmiths, veterinary practitioners and stable builders play an important role in all of these segments.

Horses are not farmed for meat production in the Netherlands, though ultimately large numbers of horses from all three segments are eaten. Few horses are slaughtered in the Netherlands itself, though animals are exported for slaughter.

Horses are usually kept as a hobby, and to a lesser extent for commercial purposes. There is wide public interest in the sector, which consequently has a different social and emotional character from the usual farming sectors. The contact point is the *Sectorraad Paarden* (SRP), an umbrella organisation for horses representing various organisations from the different segments. The SRP aims to represent the combined interests of the entire horse sector.

### Present situation and problems

The potential health problems in the horse sector can be divided into two categories: health problems occurring at the level of the individual animals, and diseases that create problems at population level or which pose a risk to public health.

The cause of health problems at individual level often lie in the housing, feeding, breeding and use of horses. There is thus a clear interface here with the Memorandum on Animal Welfare. The extent to which these problems occur is not known.

The diseases which create problems at population level or which pose a threat to public health are infectious diseases. The problems here are on a different plane. The Dutch horse sector has to date not been confronted with an outbreak of a notifiable infectious disease. However, given the growth of the sector, globalisation, climate change and the many international contacts in the horse sector, it is not unlikely that an exotic infectious equine disease could occur in the Netherlands in the (near) future. An example of such a disease is African horse sickness.

Since most (highly) infectious horse diseases are exotic in origin, veterinary practitioners and keepers are usually unfamiliar with the symptoms. It can therefore take longer before a disease is recognised, allowing it to spread unnoticed.

The horse sector is perhaps insufficiently aware of the potential consequences of an outbreak. Since horses play a very different role in society from production animals, it will be difficult to take some of the measures that are needed to control a disease.

There are also likely to be problems with regard to good and effective control of infectious horse diseases because the necessary conditions are less well developed in this sector. For example, the identification and registration (I&R) system, unlike the I&R systems in the other animal sectors, is not suitable for use in disease control in its present form. And in contrast to the other sectors, no agreements have been made in the horse sector on the allocation of the costs of controlling highly infectious animal diseases.

In addition to diseases which only affect horses, there are also horse diseases which can pose a threat to public health (zoonoses). The same problems with regard to good and effective control also apply for these diseases. However, due to the role played by horses in society and the generally close contact between humans and horses, an outbreak of such a disease will have even more serious consequences.

Despite the rules governing the transport of horses, the risk of the introduction of disease as a result of transport remains a point for concern. There is a huge volume of international horse

transport, and the horse sector has a relatively high degree of freedom compared with other animal sectors. Registered horses are permitted to cross the national border provided a special veterinary certificate has been issued, but within the Benelux region no such certificate is needed for non-commercial transport. Moreover, not all transport movements are logged as is usual in other animal sectors, which means they are not easy to trace.

### **Objectives**

- The sector is well informed about animal health.
- Both the Ministry of Agriculture, Nature and Food Quality and the sector are prepared for potential outbreaks of exotic diseases. An inventory has been compiled of potential health problems at individual level and efforts are under way to resolve these problems. The risks associated with transporting horses are known and the sector acts accordingly.

### **Envisaged results**

The government would like to work together with the horse sector to achieve the following goals:

- Further development of the organisation and representation of the horse sector so that interests can be properly represented and effective cooperation is possible.
- Communication on health in relation to horses is structured in such a way that the entire sector can be effectively reached.
- The roles and responsibilities of both the horse sector and the government in relation to certain diseases are clear and both parties are able to assume these responsibilities.
- The Ministry, in conjunction with the sector, is well prepared for the prevention and control of highly infectious horse diseases. The same applies for the financing aspects.
- The significance of animal health problems at individual level is known and actions are being undertaken to reduce or resolve those problems.

### **Actions**

#### ***Actions by the sector***

The government calls on the horse sector to carry out a number of actions in the coming years (2007-2015).

- 2007-2008: the Dutch Equestrian Board (SRP) is working on the further professionalisation of the representation of the horse sector.
- 2007-2015: a communication plan is developed for communication on animal health topics which involves the entire sector.
- 2007-2008: the sector ensures that it is well prepared for its own roles and responsibilities during an animal disease crisis.
- 2008-2010: account is taken of animal health problems at individual level in the actions taken to improve the welfare of horses.

#### ***Joint actions by the sector and the government***

In collaboration with the horse sector, the government wishes to implement the following actions:

- 2008: together with the Ministry, the sector will provide education and information on horse diseases which can create problems at population level or which can pose a threat to public health. The target group are horse owners.
- At the end of 2007, the *Groep Gezondheidszorg Paard*, a division of the Royal Netherlands Veterinary Association (KNMvD) dedicated to equine health issues, will begin developing guidelines for veterinary practitioners on infectious horse diseases. The Ministry supports this initiative, which will contribute to better and faster recognition of horse diseases.
- 2008-2009: the Ministry and the Dutch Equestrian Board (SRP) will jointly explore the possibilities that modifying the present I&R system could offer for disease control.
- 2008-2009: the Dutch Equestrian Board SRP and the Ministry will jointly consider what the objectives should be of a monitoring system for horse diseases and whether there is a need to develop such a system.

- 2008: the roles and responsibilities in relation to certain diseases will be clarified and made explicit. The proposed categorisation of animal diseases as described in chapter 4.3 will be taken as a model here.
- 2007-2008: the Dutch Equestrian Board (SRP) and the Ministry will launch a joint awareness-raising campaign to inform the sector of the risks of the high volume of horse transports, inter alia through communication on highly infectious diseases. Where possible and necessary, action will be taken to limit risks. The main thrust here is to prevent the introduction of animal diseases.
- 2008-2009: the government and the horse sector will jointly explore the possibilities of creating a system of public-private cost sharing in the control of horse diseases.

#### ***Actions by the government***

The government intends to carry out the following actions in the coming years:

- 2007-2008: the Ministry will commission a study of vector-borne diseases.
- 2008-2010: the Ministry will where possible facilitate research aimed at the development of a vaccine for horse sickness.
- 2007-2008: the Ministry will compile policy procedures for African horse sickness and will involve the horse sector in the development of this policy.
- 2007-2008: the Ministry has commissioned an inventory of which zoonoses could be important for the Netherlands in the future and what the risks are.

### 3.7 Fish, crustaceans and shellfish

#### Introduction

A distinction is made in the fisheries sector between farmed fish and fish caught in the wild, either professionally or recreationally. In the latter case the fish are generally put straight back in the water alive, whereas in professional fishing the fish caught are killed almost immediately and then processed for consumption. Animal health is not an issue here. The situation is different when it comes to fish farming (or aquaculture), where fish are under the care of the fish farmer for a considerable period with the aim of producing a marketable product.

Although fish farming has been practised for hundreds of years, especially by small farmers in Asiatic countries, large-scale commercial fish farming is only around 30 years old. Stagnating revenues from fishing and growing demand for fish for human consumption, together with technological breakthroughs, are the drivers behind the strong growth in the global production of farmed fish. Since 1990, that production has been increasing by around 11% per annum, making fish farming the fastest-growing food producing sector in the world. Dutch fish farming grew out of the experimental stage in around 1994, and is now a young, rapidly developing industry.

Fish farm production in the Netherlands has increased since 1990 from 1,500 tonnes to around 10,000 tonnes per annum. The main product is eel, and to a lesser extent catfish, tilapia and other species. The Dutch fish farming sector is relatively small within Europe (less than 1% of European production), while Europe serves less than 20% of the world market. Despite this, this young sector is developing in the Netherlands and has the potential to grow further. This growth will come from the cultivation of different species and a shift of production locations in Europe. In contrast to other countries, farmed fish are not kept in open systems in the Netherlands, but in enclosed recirculation systems. These are land-based systems in which the water from the fish tanks is reused after mechanical and/or biological treatment. In addition to fish farming, there is a sizeable shellfish farming sector in the Netherlands. The mussel farming sector is the most important, though oysters are also farmed. Shellfish are farmed in open water, in the Oosterschelde and Waddenzee areas (together covering 6,000 ha). Farming of tropical shrimps also began recently.

#### Present situation and problems

##### *Fish farming*

Since fish farming in the Netherlands takes place almost exclusively in closed systems, the risk of the introduction and spread of animal diseases is low in comparison with traditional forms of fish farming in open systems, where the fish are in open contact with the natural ecosystem, allowing easy transfer of diseases. Moreover, in a closed system the water quality can be tailored precisely to the needs of the fish, further reducing the chance of a disease outbreak.

This is a young industry, often consisting of individual businesses which are not (yet) organised in an integrated production chain. There is often a lack of knowledge, particularly with regard to preventive health care and optimisation of water quality. Veterinary practitioners also have only limited knowledge of fish diseases. In addition, the sector has no access to veterinary medicines that have been registered in the Netherlands: the pharmaceutical industry has not registered any drugs for treating farmed fish in the Netherlands because the high costs of research are not justified by the sales in this small sector. However, the sector does have a need of certain essential drugs, and has therefore voluntarily restricted the use of veterinary medicines to a number of agents which are registered for other target species and which are incorporated in the 'code of conduct for Dutch fish farmers'. A further problem is that it is unknown in many cases how long the agent/active ingredient remains in the fish, information that is needed in order to gauge the length of time between treatment and permitted consumption. It is also not always known whether residues of a veterinary medicine can accumulate in the water and possibly find their way into the natural ecosystem.

##### *Shellfish and crustaceans*

There are few problems with disease in the shellfish and crustaceans industry, and extensive monitoring ensures rapid detection of any diseases which do occur. As the shrimp farming

sector uses recirculation systems and Specific Pathogen Free (SPF<sup>12</sup>) larvae, the risk of diseases occurring is slight.

### **Objective**

A sector with sufficient expertise in the area of diseases, both among scientists and among veterinarians and fish farmers, and which has access to essential veterinary medicines.

### **Envisaged results**

The government would like to work together with the sector to achieve the following goals:

- Better knowledge of preventive health care and water quality among fish farmers and veterinarians.
- More veterinary practitioners specialising in fish diseases.
- Registered veterinary medicines for fish.
- Better knowledge of the health implications of keeping fish in enclosed recirculation systems.

### **Actions**

#### ***Actions by the sector***

The government calls on the sector to carry out a number of actions in the coming years (2007-2015).

- Improve the knowledge of fish farmers through better chain organisation.
- Create greater support and recognition among fish farmers for the need to operate within the code of conduct so that it is recognised and observed by all farms.

#### ***Joint actions by the sector and the government***

In collaboration with the sector, the government wishes to implement the following actions:

- The Ministry and the sector will together compile an inventory of which aspects of fish health have priority, and will formulate a joint action plan. This will in any event include information on fish diseases and prevention.
- The Ministry, in collaboration with the Royal Netherlands Veterinary Association (KNMvD), will explore ways of improving the knowledge of fish diseases among veterinarians.

#### ***Actions by the government***

- The Ministry will commission a study on the health implications of keeping fish in enclosed recirculation systems.

---

<sup>12</sup> See Definitions

## **CHAPTER 4: DETAILING OF AGENDA ITEMS FOR ANIMAL HEALTH ISSUES**

### **4.1 Introduction**

Several topics within the animal health policy will receive additional attention in the coming years. A number of these are discussed in some detail in this chapter. The topics covered are:

- Risk-based policy (4.2)
- Categorisation of animal diseases (4.3)
- Cost allocation in animal disease control (4.4)
- Veterinary infrastructure and crisis organisation (4.5)
- Veterinary medicines (4.6)
- Knowledge, research and development (4.7)
- Climate change, globalisation and emerging diseases (4.8)
- Control at the source (4.9)

## 4.2 Risk-based policy

### Introduction

Risk analyses are becoming an ever more important element in animal health policy. The starting point is that the extent of the measures should be geared to the extent of the risk. It is important that measures are taken which are most appropriate to the danger and risk that exists, and that the best possible means is found of minimising the risk. In addition, the government must for example not impose a greater administrative and financial burden than is necessary.

The World Organisation for Animal Health (*Office International des Épizooties*, OIE) has described a method for risk analysis. Figure 1 (based on the OIE's Terrestrial Animal Health Code) shows the four components of risk analysis. The OIE method enables the following questions to be answered:

- what can go wrong;
- how likely it is that it will go wrong;
- how serious it would be if it went wrong;
- what can be done to reduce the chance of this happening.

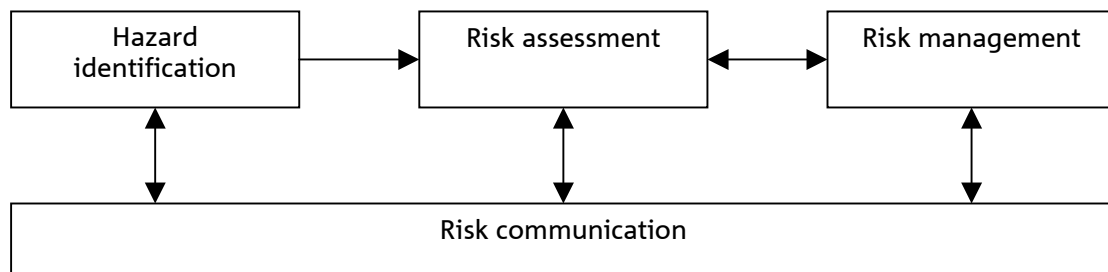


Figure 1. OIE risk analysis model (OIE, Terrestrial Animal Health Code, 2006).

### Present situation and problems

The terms 'risk analysis' and 'risk assessment' are often confused and their meanings interchanged. As the above model shows, risk assessment forms part of the whole process of risk analysis, as does risk management.

Hazard identification and risk assessment are in principle carried out by or (frequently) on the instructions of the Risk Assessment Unit (*Bureau Risicobeoordeling*) of the Food and Consumer Product Safety Authority (VWA), but may also be commissioned by the policy department. Other people and organisations are often brought in (e.g. the Central Institute for Animal Disease Control in Lelystad (CIDC-Lelystad) and the State Institute for Quality Control of Agricultural Products (RIKILT). There is currently no permanent organisational structure for risk analyses, which are therefore carried out in a somewhat ad hoc manner.

Risk assessments may be qualitative, involving an estimate of the extent of the risks is made and a decision taken on the best approach based on existing knowledge. This method is often used where decisions have to be taken quickly and sufficient knowledge is available. Even where precise statistical material is not available, however, risk assessment is often qualitative. Risk assessment can also be quantitative, i.e. designed to obtain sufficiently precise information on the extent of the risks to enable the likely results of possible actions to be calculated. Both types of risk assessment can be used, depending on the issue to be addressed. The choice must however be made transparently. In many cases a quantitative risk assessment is not needed; such an assessment generally requires a major time investment (from several months to several years).

It is sometimes found that not all information needed to carry out a risk analysis is available. For example, if the risk of the incidence of an animal disease in a particular area has to be analysed,

information is not always available on the animal contacts in that area, what kind of contacts these are, etc.

Optimum use is also not always made of risk analyses in other European countries.

## **Objectives**

The main objectives in relation to the use of risk analysis are as follows:

- Further develop structure and organisation in relation to risk analysis, improve transparency and clarity and use the structure and organisation systematically: less ad hoc and more systematic use, with clear responsibilities for the various parties involved in the risk analysis.
- Risk analysis is also used as effectively as possible at international level, both within the European Union and worldwide, in the knowledge that risks elsewhere can quickly reach the Netherlands.

## **Envisaged results**

The government wishes to achieve the following outcomes in the coming period:

- Risk analyses make risks visible, but also expose dilemmas and uncertainties in the development and implementation of animal health policy. This increases the transparency and lays a solid basis for communication. Human risks and zoonoses are an important focus of attention.
- The organisation of risk analyses in the Netherlands is clear to all concerned. Whether the issue at stake is an urgent, ad hoc policy decision or a comprehensive and integral analysis, it is clear to the policymaker which assessor needs to be contacted and what the procedure and timeline will be.
- There is a clear division of tasks between the parties involved in risk analysis in the Netherlands. There is a clear separation (independence) between risk assessment and risk management. If little is known about particular risks, the precautionary principle plays an important role.
- Risk analysis is a logical step whenever a bigger decision has to be taken with regard to policy and its implementation. Risk analyses present a clear picture of new emerging risks and enable customised solutions to be delivered for different categories of animals.
- Further development of the risk analysis instrument.

## **Actions**

Turning risk analysis into a more efficient and effective policy instrument is a key aspect of progressing this Agenda. The government therefore wishes to undertake the following actions together with the Dutch Food and Consumer Product Safety Authority (VWA) and national and international research institutes.

- 2008-2015: further development of risk analysis as a policy instrument and optimisation of its use.
- 2008-2010: development of a clear structure and organisation for risk analysis. The term 'organisation' is used here to mean the process from initial request up to and including advice and implementation. The government (Ministry of Agriculture, Nature and Food Quality, and the Food and Consumer Product Safety Authority VWA) will take the initiative for this, in collaboration with the Central Institute for Animal Disease Control (CIDC), the State Institute for Quality Control of Agricultural Products (RIKILT), the National Institute of Public Health and the Environment (RIVM), Wageningen University and Research Centre/Animal Sciences Group (WUR/ASG) and other relevant organisations. Moreover, relationships will be developed with other countries which have set up risk analysis units (United Kingdom, France, Switzerland, New Zealand, Canada, USA). This will help the Dutch structures to develop better and to make better use of experiences gained with the organisation and knowledge. The data and information channels needed in order to carry out risk analyses will be developed. Where necessary and useful, this will again take place at international level.
- 2008-2010: formulation of good protocols/agreements to ensure that questions, results and advisory reports are in the right place, in the right way and at the right time. This will make the process clear and transparent for everyone.

- 2008: development of a communication plan indicating the possibilities for publicising the results of risk analyses (e.g. via the Internet).
- 2008: the Netherlands will place the topic of risk analysis on the European agenda, at the level of the European Food Safety Authority (EFSA) and in the context of the review of European animal health policy. There will be a drive to create a European risk assessment network. The Dutch government could build on steps already taken in this regard in the context of the EU Network of Excellence EPIZONE. This could enable expertise to be shared between countries whilst at the same time encouraging the use of risk analysis in the development of animal health measures. For new emerging risks, for example, it would be very useful to have access to expertise from countries with experience of the risk or hazard in question. A stronger role will be created for EFSA.
- 2007-2008: exploration of the role that the industry itself can play in relation to risk analyses for animal health.

## 4.3 Categorisation of animal diseases

### Introduction

In order to be able to assign responsibility for animal disease control measures in a uniform way, animal diseases need to be classified on the basis of objective criteria. The majority of animal health problems can be resolved by the owners themselves, possibly with the help of their veterinary practitioners. A limited proportion of animal health problems can however only be resolved if most or all owners work together; for many infectious diseases, individual control measures are for example not effective. In principle, controlling or combating disease can be carried out either by the industry or by the government.

### Present situation and problems

The present distribution of responsibilities for animal disease control measures, both in the Netherlands and in Europe as a whole, has developed historically and sometimes appears to contain little logic. There are some diseases, such as swine vesicular disease, which must be controlled by the government pursuant to European regulations, but which do not in reality pose a major threat to animal health. By contrast other animal diseases, which can cause serious animal health problems or can have consequences for public health, such as Q-fever, are left to the owners themselves to deal with. The present categorisation system is not based on current and objective criteria and is not always consistent. Moreover, it has been observed at European level that there are wide differences between the Member States in the degree of involvement of owners or the government in controlling animal health problems. This level of involvement also has consequences for the passing on of costs, and here again there are wide differences across the EU.

The goal is to create an objective, clear and consistent classification of animal diseases in order to be able to determine the role played in disease control by the government, the industry and individual farmers. The general principle is that individual farmers are in the first instance responsible for the health of their animals. With a number of infectious diseases, however, control by the individual owner is not effective and measures by the wider industry or government intervention are then needed. Several factors need to be taken into account in classifying animal diseases in order to determine who is responsible for implementing control measures:

- The risk to human health;
- External effects of the animal disease;
- The control measures to be applied;
- European obligations.

#### *Risk to human health*

Since the level of risk posed by different diseases can vary, it is useful to break down the risks to human health into a number of categories. Some diseases are transferred from animals to humans through the eating of animal products (milk, meat, eggs); these are referred to as 'alimentary zoonoses', and include diseases such as salmonella. In addition, there are diseases which are transferred from animals to humans through contact with infected animals: the 'non-alimentary zoonoses'. Livestock farmers and others working in the sector are the risk group for animal diseases which can only be transferred via direct contact, such as fungal skin infections. By contrast, the entire population is a risk group for those animal diseases which can also be transferred without direct contact, such as Rift Valley Fever, or which can spread between humans, such as certain forms of avian influenza. The consequences for human health also vary in their severity; some animal diseases produce only slight symptoms in humans, while others can even be fatal. The means of reducing the risk - for most alimentary zoonoses simply by heating the product thoroughly - also has an important bearing on the degree to which account needs to be taken of the risk to human health.

#### *External effects of the animal disease*

Animal diseases also vary in their external effects, and the nature and extent of those effects are also distinctive criteria for disease classification. Some diseases spread very quickly and are not constrained by national borders. Generally speaking, these animal diseases also have major

implications for the animals affected, which become seriously sick or die. Such animal diseases can cause great social unrest and also have major economic consequences, both due to problems affecting the trade in the animals and animal products affected and the measures that have to be taken. These economic consequences are not limited to the owner of the animals alone, but can affect the whole sector and even other sectors.

#### *Nature of the measures to be applied*

Not all animal diseases are the same, and the control measures therefore also differ. Where effective control goes beyond the taking of measures by individual owners on their own farm, upscaling is necessary. The first escalation is to sector level, with farmers acting together to implement control measures. The organisations representing livestock farmers have a particular role to play here. If this combined approach by farmers is also not sufficient for effective control and measures have to be taken that affect everyone, it is up to the government to take those measures. An example are the bans on animal movements and the culling of suspect animals.

#### *European obligations*

There is a limited number of animal diseases for which the EU imposes a mandatory control obligation. The nature of the measures prescribed by the EU in these cases are often so radical and far-reaching that they can only be implemented by the government. For other animal diseases, the government is required to issue a certificate declaring that a country is free of the disease. This does not mean that the government then has to implement the control measures itself. However, the European disease classification has also developed historically and will need to be amended on the basis of the above or comparable criteria. The Dutch classification will have to be largely in line with the European classification.

The EU evaluation of animal disease control on which the European Commission reported in 2006 marked a first step towards a new categorisation of animal diseases. The Dutch categorisation will be in line with this.

#### *Categorisation*

The government will address the issue of categorising animal diseases in the coming year. A decision will be taken for each disease, based on assessment criteria, as to the category in which each disease should be placed: a category where control is carried out by the individual owner (category 1), a category where control is carried out by owners acting jointly (category 2), or a category in which the government implements the control measures (category 3). The results of the evaluation by the Animal Health Fund (*Diergezondheidsfonds*) will be explicitly taken into account.

#### **Envisaged results**

The government wishes to achieve the following outcomes in the coming year:

- Infectious animal diseases have been classified to determine who takes responsibility for their control.
- Depending on the category of animal disease, agreements are reached with the industry on the implementation of control measures.
- The Dutch philosophy on the categorisation of animal diseases is broadly adopted within the European Union.

#### **Actions**

- 2007-2008: categorisation of animal diseases in consultation with the industry.
- 2007-2008: the categorisation of animal diseases will be tabled by the Netherlands as input in the development of the European animal health strategy 2007-2013 (CAHP).

## 4.4 Allocation of costs for animal disease control

### Introduction

Controlling animal diseases is expensive. Where the government implements control measures, it also bears the costs in the first instance. However, the fact that the government implements the control measures is not a sufficient argument for having these costs borne by the taxpayer. Based on the principle that owners are responsible for the health of their animals, it is justified to pass these costs on to the sector. This section deals among other things with the allocation of these costs.

The costs of animal disease control consist in the first place of the costs of implementing the control measures (salaries, vaccines, warning notices, etc.). In addition, the government pays compensation to affected livestock farmers where a control measure involves the culling of animals or the destruction of products. The compensation paid to owners whose animals are culled is strictly speaking separate from the costs of controlling the disease, but the two are often considered together, including at European level. Possible consequential loss (e.g. due to loss of markets or unused capacity) is a business risk and is therefore borne by the individual farmer, but can also influence the control. This consequential loss is therefore also briefly discussed in this section.

### Present situation and problems

#### *Cost allocation*

Animal diseases are controlled by individual owners, by joint owners acting together or by the government. The categorisation of diseases (see section 4.3) makes clear who is responsible for implementing control measures for which diseases. A decision is also taken on who is initially responsible for the costs of implementing control measures. Where the individual owner or the sector carries out the control measures, the costs are borne by the individual owner or the sector; where the government carries out the control measures, the costs are initially borne by the government but are passed on to the sector via the Animal Health Fund (DGF).

Owners can cover their own costs among other things by taking out insurance. This also offers opportunities for encouraging prevention through premium differentiation, building in an excess, etc. At present, virtually no use is made of the possibility of insuring these risks.

#### *Animal Health Fund*

The government uses the Animal Health Fund (DGF) to pay the costs of animal disease control. The DGF funds come from contributions from farmers of ungulates (except horses), pigs and poultry, from EU contributions and from central government. The industry contribution is based on a covenant for the financing of the control of infectious animal diseases agreed between the Ministry of Agriculture, Nature and Food Quality, the Marketing Board for Livestock and Meat (PVV), the Poultry and Eggs Marketing Board (PPE) and the Marketing Board for Dairy Products (PZ) (*Convenant financiering bestrijding besmettelijke dierziekten LNV- PVV – PPE – PZ*) and is intended to cover the costs of control which are implemented by farmers themselves. This covenant is due to be extended at the end of 2009. Based on the principle that owners are responsible for the health of their animals, the costs of disease control, up to a ceiling agreed for each species, are passed on to the sector in full. The open-ended costs and the costs of control for private individuals and hobby farmers are borne by central government. No covenant has been agreed with the horse sector, which currently does not contribute to the costs of disease control.

#### *Europe*

The EU makes a substantial contribution to the costs incurred by the Member States in controlling animal diseases. This enables the EU to exert an influence and provides the Member States with financial support during crises. The EU has spent many billions of euros in this way in recent years. Within the EU, the Netherlands and the United Kingdom have been major recipients of European funds for animal disease control in recent years. The European Commission has indicated that it will have less money available for this in the future.

The present method of cost allocation is also under discussion. The allocation of costs not covered by the EU (the national portion) for animal disease control varies widely between the different Member States. There are some Member States which pass on little or nothing of the costs to the sector and which even pay compensation for consequential loss. The differences between the Member States can lead to competitive disadvantage.

Another problem that has been highlighted in the European discussion is that the present financing of costs provides no incentive for the prevention of animal diseases at individual level.

#### *Risk profiles*

How the sector decides on the amount to be contributed to the Animal Health Fund is up to the sector itself. In principle, the government has no influence on the way in which the industry passes on the costs incurred by the government in disease control to owners, though there is a good deal of contact on this between the industry and the government. At present, no differentiation is made in the passing on of these costs according to the risk profile of individual farmers or sectors; each owner pays a contribution in proportion to the size of their farm, the number of animals or quantity of products produced. This system thus offers no incentive to farmers or sectors to reduce the level of risk in their business operations.

#### **Objectives**

- Explore the possibilities for building in risk profiles in the Animal Health Fund. The system whereby the attributable costs incurred by the government for control measures, where these are not reimbursed by the EU, are fully passed on to the industry is in principle a good one. This system fits in with views on the distribution of responsibilities as set out elsewhere in this Agenda. The government wishes to retain the system in the future but to improve it, for example by examining the possibility of using risk profiles.
- Explore the possibilities of developing insurance cover for those animal diseases where the government plays no role.
- Explore the possibilities of developing a private-public cost allocation system for the control of equine diseases.
- Seek harmonisation of cost allocation within the EU in order to prevent market distortion due to differences in government funding of the control of animal diseases. The Dutch principles will be put forward here.  
Harmonisation of cost allocation within Europe is a matter of give and take. There is virtually no chance that this harmonisation will lead to the passing on of 100% of the costs as envisaged by the Netherlands. The European animal health strategy 2007-2013 (CAHP) assumes a high degree of harmonisation.
- Explore the possibilities for using risk profiles for the passing on of the costs incurred by the Animal Health Fund, as a means of reducing the risks in business operations and to encourage preventive measures at farm level, possibly linked to a bonus-malus system within the industry.

#### **Envisaged results**

The government wishes to achieve the following outcomes in the coming period:

- Extension of the covenant on financing the control of infectious animal diseases (*Convenant financiering bestrijding besmettelijke dierziekten LNV- PVV – PPE – PZ*) in revised form.
- A system for passing on the costs of control measures implemented by the government to owners of horses.
- Harmonisation of cost sharing in the different Member States.
- The industry applies differentiation by risk profile for determining the contributions to the Animal Health Fund.
- A larger proportion of the sector uses the possibility of insuring against consequential loss and against the costs of controlling diseases where the government has no involvement - 'category 1' and 'category 2' diseases.
- An insight into the possibilities of creating public and private European funds to reimburse the cost of all animal disease outbreaks, and their possible implementation.

## **Actions**

### ***Joint actions by the government and the sector***

In collaboration with the sector, the government wishes to implement the following actions in the coming years:

- 2008 - 2010: preparation for extension and amendment of the covenant on financing the control of infectious animal diseases (*Convenant financiering bestrijding besmettelijke dierziekten LNV- PVV – PPE – PZ*).
- 2008 - 2010: an active role at EU level in fleshing out the harmonisation of the cost allocation in accordance with the Dutch model.
- 2008 - 2010: the government supports initiatives by the sector for the development of instruments to cover the business risk, for example via insurance.
- 2008 - 2010: the government support initiatives by the sector for the development of instruments to facilitate differentiation by risk profile.
- 2008-2009: an exploratory study of the possibilities of creating a system of private-public cost allocation in the horse sector for the control of horse diseases. See also chapter 3.6, Horses.

## 4.5 Veterinary organisation and infrastructure

### Introduction

Veterinarians play a key role in animal health and food safety. There are several categories of veterinarians: veterinary practitioners who serve the daily needs of farmers or private citizens; specialist veterinarians; government veterinarians; veterinarians involved in education and research; and a veterinarians working in industry. The specific knowledge possessed by a veterinarian in the fields of animal health, animal welfare and food safety is the reason that this is a regulated profession. The competent authority - in the Netherlands the Ministry of Agriculture, Nature and Food Quality - determines who is permitted to practise veterinary medicine and maintains a register. In addition, the national and European legislator has assigned a number of tasks specifically and exclusively to veterinarians.

The actions of veterinarians in relation to food safety and animal health require organisation where they go beyond the interests of the individual animal. This interplay of veterinary practitioners, (government) veterinary services and research institutes and laboratories is designated here using the term 'veterinary infrastructure'.

The government has a special responsibility in the control of highly infectious animal diseases. A crisis organisation exists within the government for the control of these diseases, in which the public veterinary organisation and the official control laboratory, first and second-line veterinary practitioners and the veterinary research institutes each play a specific role.

International organisations such as the OIE and the World Bank regard animal health and the veterinary organisation as a global common good. They therefore stress the need for society to maintain the level of its veterinary crisis organisation and the need for continuous training of that organisation. The veterinary crisis organisation is comparable in this regard to an organisation such as the fire service. It must for example always be immediately ready to act, must carry out controlled exercises, must process large numbers of samples, regulate the communication between the various services and maintain stocks of equipment and vaccines.

### Present situation and problems

Recent developments such as climate change, globalisation and trends in trade and the economy, as well as increased mobility (see also chapter 1) are changing the field of activity of the veterinary infrastructure. Other relevant developments include national political choices such as faster diagnostic capabilities and increases in the scale of livestock farms. The veterinary infrastructure - including the crisis organisation - will need to adapt its organisation and working methods to these developments in the coming years.

#### *The veterinary organisation*

The Netherlands has a well-developed veterinary infrastructure. Veterinary practitioners, research institutes and the Animal Health Service (*Gezondheidsdienst voor Dieren*) and government veterinary services deliver high-quality services. They have however been a number of changes in recent years, especially in relation to laboratory facilities. The number of relevant animal diseases is increasing, diagnostic resources are changing and the number of providers of laboratory diagnostic services within and outside the Netherlands is growing. This has consequences for the crisis organisation.

In addition, national political choices influence the effectiveness of the veterinary crisis organisation in the government. Spending cuts make it more likely that manpower, knowledge and expertise will be lost in the areas of policy, implementation and enforcement. In order to maintain the quality of the veterinary organisation, including the crisis organisation for incidents and animal diseases and for ensuring animal health and welfare, a good and efficient government organisation continues to be necessary.

#### *Scientific developments*

Research will continue to be needed in the coming years, for example into the diagnosis of new diseases and into the possibilities for treating those diseases with vaccines. In addition to these developments in relation to potential new diseases, the situation regarding conventional animal

diseases is also not static. The development of a new generation of diagnostic tests, such as PCR-tests in the laboratory and on-site tests (diagnoses on the farm with the help of a portable test kit), is proceeding at a rapid pace. This is leading to a seachange in the procedures used for infectious animal diseases. If the veterinary practitioner and the farmer are able to carry out a test themselves to demonstrate the presence of an infectious disease, this could have consequences for the early warning system. Development of new generations of vaccines is also proceeding apace. The government needs to make efficient use of these scientific developments.

There are a number of veterinary institutions in the Netherlands carrying out high-level scientific and policy research. Among other things, this has a positive effect on the image of Dutch animals and animal products. It also contributes to innovation and development in the agro-economy. In order to maintain this good position, these research institutes need to respond to the above developments. There is a need for more - and more efficient - cooperation between the different veterinary research institutions within and outside the Netherlands. Dutch laboratories could also offer their services to other countries. This is discussed further in chapter 4.7, Knowledge, research & development. The relationship between laboratory facilities and the crisis organisation is also discussed here.

Dutch veterinary institutions contribute to a positive Dutch veterinary image through education, capacity building - such as the Indonesian AI project - and training, for example as part of the EU-organised training programmes for safe food. One positive effect of these activities is that the Netherlands gains a better insight into the animal disease situation and the organisation of veterinary services in these countries. This in turn plays a role in preventing the introduction of diseases from other countries. See chapter 4.9, Control at the source.

#### *The first-line veterinary practitioner*

One important development is the increase in scale of some livestock farms. The emergence of these large farms has an influence on the position of the veterinary practitioner. Traditionally, the vet occupied an important and almost monopoly position in providing advice and support to farmers. This enabled the veterinary practitioner to retain economic and ethical independence. The increases in scale mean that the veterinarian has become just one among many advisors. They can consequently more easily be put under pressure to do or not do things which are in conflict with good veterinary practice.

The independence of the veterinary practitioner is important for a number of reasons: for example, vets are required by the government to carry out a number of tasks, such as notifying infectious animal diseases, reporting the presence of new, unknown and potentially threatening animal diseases, ensuring the responsible use of veterinary medicines, such as antibiotics, and supervising animal welfare. The veterinary practitioner has a clear role as a gatekeeper here.

A further development is that the number of veterinary students working in the livestock sector is falling sharply. However, the government has an interest in maintaining good first-line veterinary care, and also calls upon veterinarians for the certification of animals for things such as export and the control of animal diseases.

#### **Envisaged results**

The government wishes to achieve the following outcomes in the coming period:

- The veterinary organisation and infrastructure are strong, work effectively and efficiently and are prepared for animal disease crises, incidents, emerging diseases, zoonoses<sup>13</sup> and new technological developments.
- The various veterinary research institutions in the Netherlands collaborate efficiently with each other and with European partners.
- The various veterinary institutions ensure that their knowledge and expertise are disseminated within and outside the Netherlands.
- The position of veterinary practitioners is clear and independent vis-à-vis the livestock industry and the government.

---

<sup>13</sup> See Definitions

## **Actions**

### ***Actions by the sector and/or veterinary institutions***

- Keeping pace with changes and technological developments, and taking targeted action to respond to these changes.
- Looking for cooperation in the Netherlands and abroad to strengthen their position.

### ***Actions by the government in collaboration with others/the industry***

In collaboration with others, the government wishes to implement the following actions in the coming years:

- An exploratory study of the roles and responsibilities within the veterinary organisation, appropriate for the times and status of technological developments.
- Together with stakeholders, the Ministry will adapt the crisis organisation where necessary, taking into account changing circumstances.
- Together with the Royal Netherlands Veterinary Association (KNMvD) and the Utrecht University Faculty of Veterinary Medicine, an exploratory study will be carried out to ascertain whether the role of the veterinarian as a gatekeeper and as the first link in the veterinary infrastructure warrants further support from the public domain.
- Encouraging laboratories to work together at EU level, both for the sharing of expertise and for further specialisation in specific diseases.

### ***Actions by the government***

- 2008: the present crisis organisation will be reviewed to see where improvements are possible in connection with technological developments and the desire to raise efficiency. Ways will also be sought of making (even) better use of the relationship between the veterinary knowledge infrastructure and the crisis organisation.

## 4.6 Veterinary medicines

### Introduction

Veterinary medicines are an indispensable part of keeping animals. It must be possible to treat sick animals, both in order to help the animal itself and to minimise any further loss or damage. Veterinary medicines must be both safe and of high quality. Commissioned by the Ministry of Agriculture, Nature and Food Quality, the Dutch Medicines Evaluation Board (CBG/MEB) tests new veterinary medicines for their efficacy and the risks for humans and animals.

The EU prescribes that all veterinary medicines must in principle be issued by veterinary practitioners, though an exception is made for a limited category of 'safe' veterinary medicines, which Member States may permit to be sold without the mediation of a veterinary practitioner. The Netherlands has implemented this regulation by creating four categories of veterinary medicines. Depending on the risks associated with their use, these medicines require a greater or lesser degree of supervision by. Non-classified veterinary medicines may be sold and used without the mediation of a recognised dealer); 'URA' medicines may only be obtained on prescription from a veterinary practitioner; 'UDA' drugs may only be obtained directly from a veterinary practitioner; and 'UDD' medicines may only be administered by a veterinarian<sup>14</sup>.

There are also national obligations concerning the administering of veterinary medicines by veterinary practitioners and animal owners. The veterinary medicines regulations also include an obligation to keep a logbook.

The 'health package' was recently implemented in the Netherlands. This is a raft of European regulations governing food production, which make it compulsory to pass on and use food chain information, including information on the use of veterinary medicines. The regulations governing private quality assurance systems, such as Integral Chain Management systems, also frequently include obligations relating to the administering and use of veterinary medicines.

### Present situation and problems

#### *Use*

The sale of antibiotics for therapeutic use increased by 7% in 2006 compared with 2005 (from 508,000 to 543,000 tonnes). This followed an increase in 2005 of 12% compared with 2004. Over the same period, the number of livestock in the Netherlands remained virtually unchanged<sup>15</sup>. Sales of antibiotics in 1997 totalled 350,000 tonnes, which means there has been an increase of at least 55% over the last ten years which cannot be explained by an increase in the number of livestock over the same period. It is assumed that the ban on antimicrobial growth promoters in cattle feed is one of the reasons for the increased use of antibiotics.

#### *Antibiotic resistance*

Bacterial resistance to antibiotics is a growing problem, especially in the veal, pig and poultry farming sectors, which involve the keeping of large numbers of relatively young animals, populations which are more susceptible to bacterial infections. The use of antibiotics is accordingly highest in these sectors and therefore carries a greater risk of the development of resistant bacteria. These resistant bacteria can also affect owners; the cases of MRSA (methicillin resistant staphylococcus aureus) among livestock farmers are a good example. These resistant bacteria can infect humans via the animals, so that increasing antibiotic resistance is not just an animal health problem, but also a public health issue.

The Netherlands was the first country to carry out research into the incidence of MRSA in animals. In the light of the Dutch findings, more and more neighbouring countries have carried out or are carrying out similar research. The first (interim) results suggest that the situation in the Netherlands is probably not very different from that in other European countries.

#### *Incorrect use of veterinary medicines.*

---

<sup>14</sup> See list of abbreviations

<sup>15</sup> In the period 2004-2005 there was an increase of 1.1% in the production of 'live weight' (amount of meat from pigs, chickens and calves)

It is highly likely that there is a relationship between the development of resistance to antibiotics and the incorrect use of veterinary medicines. In particular, underdosing and inappropriate use of antibiotics can be contributory factors.

#### *Residues in foodstuffs of animal origin*

Incorrect usage can leave residues of veterinary medicines in animal products. For all veterinary medicines for which it is necessary, a prescribed waiting period must elapse before animals may be slaughtered or their milk delivered. Checks are carried out on this for milk, with each charge delivered to the dairy being examined for residues of antibiotics, while checks are also carried out during meat inspections if there is a suspicion that veterinary medicines have been recently used.

#### *Reducing efficacy of drugs*

Increasing resistance is leading to a gradual reduction in the availability of effective drugs, and in some areas this is beginning to be a real problem. It is for example known that there are TB bacteria which are no longer susceptible to any antibiotic whatsoever.

#### *Commercialising the sale of veterinary medicines*

Increasing use is being made of new opportunities to purchase all kinds products rapidly and cheaply via the Internet, and this also applies for medicines (both human and veterinary). This is a worrying trend, since it raises questions regarding the duty of care.

The manufacture and sale of veterinary medicines is a commercial activity. Increased use of medicines is therefore lucrative for several stakeholders. Prescribing veterinarians earn money on the sale of veterinary medicines and therefore benefit from higher sales of these products. Moreover, increases in scale mean there is a growing need among livestock farmers/sectors to control and prevent health problems using antibiotics.

### **Envisaged results**

Towards 2015 the government wishes to achieve the following objectives:

- The trend in antibiotic resistance in animals is at an acceptably low level from the perspective of animal and public health.
- The 'spread' of antibiotic resistance to humans via animals has been reduced to a minimum.
- Antibiotics are used responsibly because animal owners and veterinary practitioners are aware of the risks associated with their use and have more knowledge about their application, their usefulness and the need for them.
- Total use of veterinary medicines has been reduced as far as possible.
- The prescribed waiting periods following the use of veterinary medicines are respected everywhere.
- There is a good flow of information on the use of antibiotics between the different links in the food chain.

### **Actions**

In order to achieve a genuine reduction in antibiotic resistance and the use of antibiotics and to foster responsible use of veterinary medicines, the government will agree realistic but ambitious targets with the various stakeholders before implementation of the various measures. By the end of this year at the latest the policy strategy on antibiotic resistance will be tabled in the Lower House with a raft of measures aimed at achieving the objectives outlined above.

## 4.7 Knowledge, research and development

### Introduction

Knowledge is of strategic importance in policy. This not only means the knowledge itself and its development, but also the use of the available knowledge.

### Present situation and problems

#### *Knowledge at national level*

The success of the present animal health policy is related to the high level of knowledge present in the Netherlands. We wish to maintain that level and strengthen it through broader cooperation. The Ministry does this with the DLO research institutes at Wageningen University and Research Centre, which have traditionally carried out much of the research funded by the Ministry, as well as with the Utrecht University Faculty of Veterinary Medicine, the Animal Health Service and other institutes. Since animal health has many interfaces with human health (zoonoses, antibiotics), the cooperation with research institutes such as the National Institute of Public Health and the Environment (RIVM) also needs to be strengthened. In addition, a great deal of knowledge and experience is available in the industry, in the professional field and among animal owners themselves. The Ministry wishes to make more use of this knowledge, especially in relation to practical solutions and the structured utilisation of the available knowledge.

#### *Knowledge at international level*

A great deal of animal health research is also carried out abroad. This can be relevant for animal diseases which already occur in the Netherlands, but also for diseases which could enter the Netherlands in the future. There is already reasonable international cooperation between research institutes, though there is scope for strengthening it. Coordination of the research programming and the contracting of research by research financiers could foster this cooperation and deliver more efficient use of knowledge. A European Research Area network, such as that which has been formed for food safety and organic farming, could fulfil a useful role here.

Other international cooperative arrangements which are important for the development of knowledge in the field of animal health include SCAR (Standing Committee on Agricultural Research) and ETPGAH (European Technology Platform on Global Animal Health). SCAR is a product of the European Commission, and includes a permanent working group in which the Netherlands participates. The European Technology Platform (ETP) is an industry initiative.

#### *Knowledge Agenda for Animal Health*

Since 2007, animal health research has been driven by a knowledge agenda consisting of the main animal health topics for the coming years together with the associated policy background. The Knowledge Agenda for Animal Health (*Kennisagenda Diergezondheid*)<sup>16</sup> sets out the direction and priorities for all knowledge instruments in the field of animal health. In time, the Knowledge Agenda will drive not only knowledge development, but also its dissemination and transfer. The Knowledge Agenda will be updated regularly.

#### *Knowledge infrastructure*

The government is committed to maximising cooperation between knowledge institutes. The Knowledge Chain for Infectious Diseases in Animals (*Kennisketen Infectieziekten Dier*) is a good example of this. It is a collaborative alliance between the Animal Sciences Group (ASG), the Central Institute for Animal Disease Control (CIDC) and the Utrecht University Faculty of Veterinary Medicine. This network is already collaborating in studies of avian influenza (bird flu). Where possible the network will also be used in the coming years for other animal health problems.

#### *Gaps in knowledge in brief*

---

<sup>16</sup> See References

The level of knowledge in the field of animal health is generally high, especially as regards technical veterinary research. In the more social fields, however, there are still knowledge gaps. There are also questions concerning how efficient and effective the research is. Is the right research being carried out? Is research being duplicated (especially with other countries)? And do the results of research end up in the right place, for example abroad? Where an animal disease arises, there is often insufficient knowledge to bring and keep it under control. This can lead to continuous pressure on the Netherlands from animal diseases.

Knowledge development is needed in a variety of areas, for instance on how farmers can be encouraged to take more preventive measures themselves. More knowledge is also needed about the cooperation between the government and the private sector and on dealing with interests in the field. This is a more socio-psychological research approach. When combined with technical veterinary elements, this makes animal health policy an independent research field.

It is important to develop greater knowledge about new diseases which threaten to enter the Netherlands from abroad. Too little is also currently known about the transfer of diseases between the different animal categories (production/hobby/wild). The same applies for the level of knowledge about the consequences of various farming systems for animal health. There is also a need for the pooling and development of knowledge on animal health issues in hobby farming and on the size of the animal population, the distribution range and the infection hazard from and to animals in the wild.

Knowledge also needs to be developed further in relation to the recognition of symptoms and rapid diagnosis, the risk of the introduction of diseases, vectors (insects or other carriers) of diseases and risk models. More sustainable control strategies than culling need to be developed, and a solution needs to be found for the manure problem during crises.

Raising the level of knowledge with regard to the recognition of symptoms, avoiding infection risks and effective preventive measures presents another challenge. To a greater extent than in the past, education, retraining and the media will need to be employed to this end. Training animal owners and veterinary practitioners to recognise disease symptoms at an early stage is a key factor here.

### **Envisaged results**

The government wishes to achieve the following objectives in the coming period:

- Efficient use of research funding: no duplicated research and where possible use of knowledge abroad.
- Research results end up in the right place.
- Better information on animal disease outbreaks abroad, partly through the use of Dutch expertise.
- Research results meet the needs of the animal health policy.
- Good knowledge infrastructure.

### **Actions**

#### ***Joint actions by animal owners and the government***

- In the coming years the government wishes to work with animal owners to devise solutions to animal health problems which draw on the knowledge present within the industry.

#### ***Joint actions by the government and knowledge institutes***

In collaboration with knowledge institutes, the government wishes to implement the following actions in the coming years.

- 2007-2015: strengthening of international cooperation and liaison between knowledge institutes by setting up an ERA animal health network together with other governments and participating in the network. This network will be set up at the end of 2007.
- 2007-2010: development of a toolkit to increase the knowledge of animal health among present and future animal owners and professional groups.

#### ***Actions by the government***

The government intends to carry out the following actions itself in the coming years:

- 2007: updating of the Knowledge Agenda for Animal Health based on the National Agenda for Animal Health. The government will look in particular at the new focus areas in future animal health policy:
  - New animal categories: pets and horses
  - A broadening to take in farm-specific diseases
  - Prevention based on risk analyses
  - Strengthening cooperation between the government and civil society groups
  - Strengthening the use of 'soft' instruments (including facilitating/communicating) instead of legislation and regulations
  - Development of new funding instruments
- 2008-2015: keeping the Knowledge Agenda for Animal Health up to date (annual update from 2007).
- 2007-2015: based on the Knowledge Agenda for Animal Health, aiming for knowledge development and greater dissemination and utilisation of knowledge than in the past.
- 2008-2015: promotion of more and broader cooperation between research institutes. This will be achieved by making greater use of the Knowledge Chain for Infectious Diseases in Animals (*Kennisketen Infectieziekten Dier*) and by increasing the cooperation with research institutes operating in the field of human health care. Research on (potential) zoonoses, new threats and antibiotics lends itself particularly well to this cooperation.
- 2007-2010: strengthening the contact structure between the industry, policy and research by launching expertise groups.
- 2008-2015: a greater role for animal health care in the curricula of general secondary and vocational education; retraining courses for animal owners and professional groups.

## 4.8 Climate change, globalisation and emerging diseases

### Introduction

The fall of the Berlin Wall in 1989, and the process of industrialisation that has taken place over the last 150 years, set in train a number of new developments whose consequences have only recently become apparent. The fall of the Wall led to growing economic integration through the 1990s, in turn prompting enormous growth in trade flows. Additionally, there is a growing consensus that the process of industrialisation and the associated emission of greenhouse gases are leading to climate change. Both effects - increased cross-border trade and climate change - have an impact on animal health policy and demand new efforts from the government.

New diseases which arise in a population or which already occur on a small scale but which have spread rapidly are referred to in this context as 'emerging diseases'<sup>17</sup>. These diseases can also pose a threat to public health. Animal diseases can in some cases be transferred to human beings; recent examples include variant Creutzfeldt-Jakob Disease, caused by BSE and avian influenza. In some cases, diseases can develop and become transferable from human to human. An example was the outbreak of SARS (Severe Acute Respiratory Syndrome) in 2003, while the virulent H5N1 bird flu virus is currently generating real fears of a flu epidemic in humans.

### Present situation and problems

The developments outlined above make the Netherlands vulnerable to outbreaks of new diseases. The boundaries of the habitats for various animal diseases and the vectors which carry them (intermediate hosts - usually insects - which can transfer diseases between other organisms) are shifting towards the poles, and the risk of diseases being introduced into the Netherlands from tropical and subtropical regions is increasing. The recent outbreak of bluetongue is an example of this. In addition to increasing the risk of new diseases being introduced, climate change and globalisation mean that, once established, animal diseases also spread more rapidly. The global trade in live animals and animal products has grown hugely in recent decades. In addition, new diseases are spread not only by farm animals, but can also be transferred by vectors (usually insects) carrying the pathogens to other organisms.

The government is currently undertaking a number of activities in response to the problem of emerging diseases. Policy procedures are for example being drawn up for dealing with African horse sickness, and a new procedure is currently being drafted for bluetongue. Plans are also in hand for a policy procedure for exotic animal diseases which can be transferred to humans. The government is also carrying out a number of studies on new diseases and risk analyses are being prepared to investigate the risk of an outbreak of emerging diseases in the Netherlands. The government has also tightened up checks on travellers passing through Amsterdam Airport Schiphol in order to enforce the ban on bringing in (non-certified) animal products. In order to minimise the risk to public health and (external) effects of new and/or unknown animal diseases, it is important to have in place a properly functioning monitoring system in the Netherlands.

### Envisaged results

Between now and 2015 a great deal needs to be done to ensure that the Netherlands is adequately prepared for emerging diseases. The government wishes in particular to focus on achieving the following results:

- The Ministry and the sector have a greater knowledge of tropical and subtropical diseases which could occur in the Netherlands.
- The measures against emerging diseases are based on risk analyses.
- The chance of foreign animal diseases being introduced into the Netherlands has reduced.
- The efforts to tackle emerging diseases at source, to reduce the chance of them reaching the Netherlands, have been intensified (see chapter 4.9, Control at the source).
- Travellers are aware of the dangers of their travel behaviour in terms of the possible introduction of animal diseases, and also know how they can avoid those dangers.

---

<sup>17</sup> See Definitions

- There is increased knowledge on the transmission of emerging diseases from animals to humans.

## **Actions**

### ***Actions by citizens***

- The government is issuing an urgent call to citizens not to bring high-risk plants, animals and products to the Netherlands from third countries.

### ***Joint actions by the government and civil society organisations***

- An information campaign will be launched in 2009 by the travel industry (e.g. the Netherlands Association of Tour Operators, ANVR), in collaboration with the government so that travellers are aware of the risks of the introduction and spread of animal diseases as a result of travel, and of how they can reduce those risks.

### ***Actions by the government***

The government will implement the following actions in the coming years:

- With a view to increasing our knowledge of emerging diseases, further investments will be made in entomology and the diagnosis of insect-borne animal diseases and their vectors. Cooperation will also be sought with other laboratories in the EU in the field of emerging diseases.
- From 2008, the effects of climate change and the risk of emerging diseases will be explicitly included in risk analyses (see chapter 4.2, Risk analyses).
- In order to guarantee a more integrated approach, an exploratory study will be carried out in 2008 to determine the optimum design of the government organisation with a view to controlling emerging diseases. Liaison will take place in this regard between the various ministries involved (Health, Welfare and Sport, Agriculture, Nature and Food Quality), research institutes (Wageningen University and Research Centre (WUR), the National Institute of Public Health and the Environment (RIVM), the Central Institute for Animal Disease Control (CIDC), the Centre for Infectious Disease Control (CIb), the Utrecht Faculty of Veterinary Medicine (FD) and the Animal Health Service (GD)), as well as implementing organisations (Food and Consumer Product Safety Authority (VWA), General Inspectorate for Agriculture (AID)).
- The chance of foreign animal diseases being introduced into the Netherlands will be reduced in 2008 by tightening up border controls (e.g. at Amsterdam Airport Schiphol) to prevent the introduction of animal products. This will be achieved among other things through a risk-based approach, targeted intensification and the use of new methods, such as sniffer dogs.
- The policy for a number of emerging diseases will be worked up further from 2007 into a number of policy procedures, specifically focusing on African horse sickness and exotic diseases which can be transferred to humans.
- A number of programmes will be set up aimed at controlling animal diseases at source; these will involve providing technical assistance to countries such as Turkey, Indonesia and Egypt (see chapter 4.9, Control at the source).

## 4.9 Control at the source

### Introduction

Animal diseases are not constrained by national borders. All initial outbreaks of animal disease in the Netherlands can be traced to a source beyond the national borders, and sometimes outside Europe. This is for example very clearly the case with infectious diseases such as avian influenza, classical swine fever and foot and mouth disease.

### Present situation and problems

Prevention and control of animal diseases in the Netherlands is of course necessary, but is not always sufficient to bring about a permanent reduction in the risk of the introduction of new and major outbreaks. A high alert situation then continues in the face of outbreaks abroad. Moreover, trade relations are threatened and travel disrupted, which is bad for the Netherlands and for its trading partners. Intensive cooperation in the control and prevention of diseases with our neighbour Belgium, the German federal states bordering the Netherlands and our main EU trading partners is absolutely essential. The Netherlands has been addressing these issues rigorously in recent years. Veterinary consultation takes place with these countries and joint control exercises are carried out, whilst agreements are also in place on communication.

More distant sources of disease can however continue to pose a major threat, partly because the local veterinary infrastructure is often inadequate to bring the problem under control. This was the case for example with the highly virulent avian influenza strain (H5N1)<sup>18</sup> in Indonesia, Vietnam and China, which spread in 2005 and 2006 to countries including Turkey, Romania, Egypt and Nigeria. Indonesia and Egypt, in particular, are unable to bring bird flu under control on their own and have requested technical assistance from the Dutch Ministry of Agriculture, Nature and Food Quality, among others. But EU Member States such as Romania and Bulgaria, for example, also continue to face continuous outbreaks of classical swine fever, which they are unable to control adequately. These animal disease situations pose a threat to Dutch livestock and to international trade.

### Objectives

- The Ministry remains abreast of the development and risks associated with hazardous animal diseases all over the world, such as the highly pathogenic H5N1 avian influenza.
- Improved cooperation between the Netherlands, other donor countries and international organisations on the monitoring of hazardous animal diseases in high-risk countries.
- An effective means will be developed of controlling a number of animal diseases at source in a number of countries, based on good cooperation by the Dutch government (Ministry of Agriculture, Nature and Food Quality, Ministry of Foreign Affairs and Ministry of Health, Welfare and Sport) and research institutions with partner countries and international organisations (e.g. EU, UN, FAO, OIE, World Bank).
- Knowledge-building and development of a knowledge network, building control and prevention capacity (vaccines, laboratories) in the field of international animal disease control.

### Envisaged results

Capacity building<sup>19</sup> and control at source will help limit the spread of hazardous animal diseases in a number of high-risk countries. In addition, international cooperation will enable better use to be made of international knowledge and expertise, especially in relation to (emerging) animal diseases which are less well-known in the Netherlands.

The government will seek to achieve the following results in the period 2007-2015:

- 2007-2010: capacity building for the control of avian influenza (AI) in Indonesia.
- 2007-2008: capacity building for the control of avian influenza (AI) in Egypt.

---

<sup>18</sup> See Definitions

<sup>19</sup> See Definitions

- 2007-2009: scientific cooperation between the Netherlands and Thailand for the prevention and control of avian influenza (AI).
- 2007-2015: scientific cooperation between the Netherlands and South Africa for the prevention and control of Rift Valley Fever.
- 2007-2008: cooperation with the Balkan states on the control of classical swine fever.

## **Actions**

### ***Actions by the sector***

It is also in the interests of the sector to resolve relevant animal health problems affecting key trading partners. The government therefore calls on the sector to undertake activities in other countries in the field of knowledge transfer.

### ***Actions by the government in collaboration with others***

The Netherlands, other donor countries and international organisations are working together closely to bring hazardous animal diseases in high-risk countries under control. The aims including helping to reinforce the veterinary infrastructure in such a way that the risk of virus spread is structurally reduced. The Ministry of Agriculture, Nature and Food Quality is working on this with other partners, such as the Ministry of Foreign Affairs and the Ministry of Health, Welfare and Sport, research institutions, partner countries and international organisations, such as the EU, UN, FAO, OIE and the World Bank. Through this cooperation the Ministry hopes together with its partners to make a contribution to controlling animal disease and building knowledge on all kinds of aspects of the international animal disease problem. In concrete terms the following actions will be carried out:

- Up to 2010, projects will be developed aimed at controlling highly pathogenic avian influenza (Indonesia, Vietnam, China, Egypt, Romania, Turkey). In the context of bilateral cooperation, the Ministry will supply technical assistance from knowledge institutes in the building of control capacity.
- In 2007, 2008 and 2009 the Ministry will provide technical assistance in the control of classical swine fever in Romania and Bulgaria.
- The Ministry will continue the bilateral cooperation with neighbouring countries (and certain other relevant EU countries) in the field of prevention and control.
- 2008-2015: the Netherlands will organise and encourage cooperation between 'donor countries' in organisations such as FAO, EU and OIE for the launch of development projects in the field of animal health. The Netherlands will also encourage these multilateral organisations to support affected countries.
- 2007-2015: the scientific cooperation with other countries (e.g. South Africa) on emerging animal diseases will be strengthened.
- 2008-2015: provision of technical assistance and sharing of knowledge between Dutch and foreign institutes in relation to emerging diseases such as bluetongue, Rift Valley Fever and African horse sickness.

### ***Actions by the government***

- The Ministry's activities are aimed at bilateral cooperation with Asiatic and African countries. The main objective of these projects up to 2010 will be to limit the introduction of animal diseases into the Netherlands in order to increase the level of veterinary safety in the Netherlands. This will be achieved through a better understanding of the infection sources in Asia and Africa and an increase in the sharing of knowledge in this regard. To this end, the Netherlands will provide technical veterinary expertise to these countries from its knowledge institutions. The Dutch contribution will help bring about improved veterinary inspection, a properly functioning monitoring system and the presence of operational procedures for animal control in 2010. For Indonesia, a major project is already under way which runs until 2010. Comparable activities will be initiated among others for Egypt and Turkey and for Romania and Bulgaria in relation to avian influenza and classical swine fever, respectively.

## Definitions

|                                    |                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            |
|------------------------------------|--------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| Alimentary zoonoses:               | (see zoonoses)                                                                                                                                                                                                                                                                                                                                                                                                                                                                             |
| AI (Avian Influenza):              | Bird flu or classical fowl pest. This disease is caused by a variant of influenza and is highly variable, with the constant appearance of new strains. The disease is fatal to chickens and some other bird species, and can also cause illness in humans.                                                                                                                                                                                                                                 |
| Biodiversity:                      | Life forms in all their variety, including animals, plants and microorganisms.                                                                                                                                                                                                                                                                                                                                                                                                             |
| Bluetongue:                        | A viral disease which affects ruminants and is particularly harmful to sheep. A characteristic symptom of this disease is the blue tongue.                                                                                                                                                                                                                                                                                                                                                 |
| Bonus-malus system:                | A system whereby farms which adhere properly to regulations are rewarded (e.g. with more favourable terms), in contrast to farms which are lax in applying regulations.                                                                                                                                                                                                                                                                                                                    |
| CAHP:                              | Community Animal Health Strategy/Policy (full title: A new Animal Health Strategy for the European Union (2007-2013) where 'Prevention is better than cure'). Communication from the European Commission setting out its policy proposals on animal health for the period 2007-2013.                                                                                                                                                                                                       |
| Capacity building:                 | Fostering and strengthening the capacity of professionals and the sector (including interest organisations) to prevent and control diseases.                                                                                                                                                                                                                                                                                                                                               |
| Commercially kept animals:         | Animals which are kept primarily to generate income; the animals are used as a means of production or as a product. The main animals kept are cattle, pigs, sheep, goats and poultry. In addition there are a number of smaller sectors (e.g. rabbit or mink farming) and sectors where the boundary between commerce and hobby is much less clear (e.g. horses).                                                                                                                          |
| Early warning:                     | A notification and control duty applies for certain infectious animal diseases which potentially have major consequences for animal health and which are able to spread rapidly. Initial responsibility in outbreaks of these diseases, which include foot and mouth disease (FMD) and bird flu (AI), lies with the farmer who, together with the veterinary practitioner, has a responsibility to alert the authorities as quickly as possible on first noticing symptoms of the disease. |
| National Ecological Network (EHS): | A network of interconnected nature areas, still partially under development. The purpose of the Network is to sustain and develop these nature areas in order to ensure the continued existence of a large number of species and ecosystems.                                                                                                                                                                                                                                               |
| Wildlife corridors:                | Natural areas which act as links between the different sections of the larger nature areas making up the National Ecological Network. The aim is to 'defragment' the nature areas in the Netherlands.                                                                                                                                                                                                                                                                                      |
| Emerging diseases:                 | Animal diseases which were completely or almost unknown in the Netherlands in the past but which can occur there today, partly due to increased travel, tourism and climate change. An example is African horse sickness.                                                                                                                                                                                                                                                                  |

|                           |                                                                                                                                                                                                                                                                                                                                                                                                                                         |
|---------------------------|-----------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| Pets:                     | Animals which are kept primarily for the company they provide. They often dogs, cats, rabbits, parakeets, etc. As these animals primarily fulfil a social function, they often occupy a very important place in the lives of their owners. In addition to keeping these animals for company, they are sometimes also kept as a hobby, for hunting, for protection, as a status symbol, out of curiosity or as an object of observation. |
| Hobby animals:            | Hobby animals are defined here as farm animals which are not kept professionally or for commercial purposes.                                                                                                                                                                                                                                                                                                                            |
| H5N1:                     | A strain of the avian influenza virus which is harmful to humans. 'H5' refers to the type of haemagglutinin in the protein coat of the virus and 'N1' to the type of neuraminidase enzyme. These are both antigens which play a role, respectively, in the binding to the cell membrane and the release of newly produced viruses from an infected cell.                                                                                |
| Subcutaneous transponder: | A small transponder, for example in the form of a chip, which is implanted in animals so that they can be traced as part of an identification and registration (I&R) system. The advantage is that the animals do not need to carry registration marks on their body, thus reducing the risk of loss and improving the appearance of the animal.                                                                                        |
| I&R:                      | Identification and Registration; a means of monitoring the movements of animals so that it is possible in a disease outbreak to ascertain where potentially infected animals may be located.                                                                                                                                                                                                                                            |
| Compulsory segregation:   | The obligation to keep products from a vaccinated animal separate from products from non-vaccinated animals.                                                                                                                                                                                                                                                                                                                            |
| Foot and mouth disease:   | A highly infectious viral disease which affects cloven-hoofed mammals, especially cows, pigs, sheep and deer. The disease is not harmful to humans.                                                                                                                                                                                                                                                                                     |
| Newcastle Disease:        | Also referred to as ND or pseudo-fowl pest. A highly infectious viral disease to which virtually all birds (wild and domesticated) are susceptible. It is caused by the ND virus, of which several strains are known. Depending on the strain of the virus and the bird species affected, the disease symptoms may be more or less serious. Serious outbreaks can lead to mass mortality.                                               |
| Non-alimentary zoonoses:  | (see zoonoses)                                                                                                                                                                                                                                                                                                                                                                                                                          |
| Non-vaccination policy:   | Policy of not vaccinating to control disease. During major outbreaks of animal disease, this policy has resulted in mass culling, including of healthy animals, because vaccination was not permitted. It is one of the objectives of this National Agenda to move away from an overly rigid view on this.                                                                                                                              |
| Emergency vaccination     | Vaccination of animals during a disease outbreak in order to stem the spread of the virus. In periods when there is no outbreak, vaccination will not be carried out.                                                                                                                                                                                                                                                                   |
| OIE compartmentalisation: | A new instrument in the field of animal health. Groups of animals are separated epidemiologically from other groups on the basis of biomanagement measures and good identification. This is thus a functional segregation, rather than the purely geographical segregation which has been applied to date.                                                                                                                              |

|                         |                                                                                                                                                                                                                                                                                                                                                                                                                                                                            |
|-------------------------|----------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| Preventive vaccination: | Vaccinating animals in order to prevent the outbreak of disease. In principle, therefore, this vaccination takes place before an outbreak has occurred. European agreements and trade policy mean that preventive vaccination has hardly been used to date. It will be used more frequently in the future in order to avoid culling.                                                                                                                                       |
| Recirculation systems:  | Land-based farming systems in which the water from fish tanks is reused after mechanical and/or biological treatment.                                                                                                                                                                                                                                                                                                                                                      |
| Ecological connections: | See Wildlife corridors                                                                                                                                                                                                                                                                                                                                                                                                                                                     |
| Specific Pathogen Free: | A term used to indicate that an animal is free of a particular disease pathogen.                                                                                                                                                                                                                                                                                                                                                                                           |
| Stamping out:           | A method of controlling animal disease by culling all infected animals and animals which are suspected of being infected within the shortest possible time (and sometimes within a certain zone).                                                                                                                                                                                                                                                                          |
| Swine fever:            | A viral disease affecting pigs. Two types of swine fever are known: classical swine fever (CSF) and African swine fever. The two diseases resemble each other closely, but are caused by different viruses. Both are highly infectious and are often fatal. The virus poses no threat to humans.                                                                                                                                                                           |
| Vectors:                | Carriers of infection. In the case of bluetongue, for example, the disease is carried by an insect (midge) which is the vector (carrier) of the disease.                                                                                                                                                                                                                                                                                                                   |
| Fowl pest/Bird flu:     | See Avian Influenza                                                                                                                                                                                                                                                                                                                                                                                                                                                        |
| Zoonoses:               | Infectious diseases which can be transmitted from animals to humans (or vice versa). In the case of alimentary zoonoses, these diseases are transmitted to humans via food of animal origin. In the case of non-alimentary zoonoses, the transfer does not take place via food but via direct or indirect contact. Emerging zoonoses are zoonoses which were previously virtually unknown in the Netherlands but which could occur there more significantly in the future. |

## List of abbreviations

|           |                                                                                                      |
|-----------|------------------------------------------------------------------------------------------------------|
| AI        | Avian Influenza (see Definitions)                                                                    |
| AID       | General Inspectorate for Agriculture (Algemene Inspectie Dienst)                                     |
| BT        | Bluetongue (see Definitions)                                                                         |
| CAHS/CAHP | Community Animal Health Strategy/ Community Animal Health Policy (see Definitions)                   |
| CBG/MEB   | Medicines Evaluation Board (College ter Beoordeling van Geneesmiddelen)                              |
| ETPGAH    | European Technology Platform for Global Animal Health                                                |
| EU        | European Union                                                                                       |
| FAO       | Food and Agricultural Organization of the UN                                                         |
| KNMvD     | Royal Netherlands Veterinary Association (Koninklijke Nederlandse Maatschappij voor Diergeneeskunde) |
| CSF       | Classical Swine Fever                                                                                |
| LICG      | National Pets Information Centre (Landelijke Informatiecentrum Gezelschapsdieren)                    |
| FMD       | Foot and Mouth Disease                                                                               |
| MRSA      | Methicillin Resistente Staphylococcus Aureus, a bacterium which is resistant to most antibiotics     |
| OIE       | World Organisation for Animal Health (Organisation Internationale des Epizooties)                    |
| PD        | Plant Protection Service of The Netherlands (Plantenziektenkundige Dienst)                           |
| SARS      | Severe Acute Respiratory Syndrome                                                                    |
| SCAR      | Standing Committee on Agricultural Research                                                          |
| UDA       | Only issued by pharmacist (Uitsluitend Door Apotheker)                                               |
| UDD       | Only issued by veterinarian (Uitsluitend Door Dierenarts)                                            |
| URA       | Prescription only (Uitsluitend op Recept Afleveren)                                                  |
| UN        | United Nations                                                                                       |
| VWA       | Food and Consumer Product Safety Authority (Voedsel en Waren Autoriteit)                             |

## References

Forum Welzijn Gezelschapsdieren, 2006. *Gedeelde zorg; Feiten en cijfers*. Advies RDA 2006/02.

Groot Bruinderink, G.W.T.A., C.J. de Vos, D.R. Lammertsma, G.J. Spek, R.Pouwels, A.J. Griffioen.T.J.A. Gies, 2007. *Robuuste verbindingen en wilde hoefdieren; verwachte aantallen hoefdieren en mogelijke overlast voor de landbouw, het verkeer en de diergezondheid*. Alterra-rapport 1506

Peet, Geert van der en Ferry Leenstra, 2007. *Verkenning Nationale Agenda Diergezondheid; Analyse van meningen en ideeën van stakeholders met betrekking tot het toekomstige diergezondheidsbeleid*. Wageningen UR, Animal Sciences Group (LNV-rapport, 2007).

Schuttelaar & Partners, 2007. *Diergezondheid: ratio of emotie?* (LNV-publicatie, 2007).

Snijdelaar, Mirjam, Ed van Klink, Marc Roosjen, Wim Ooms, Angelique Nielen, Albert Meijering en Mariëtte Klein, 2007. *Kennisagenda Diergezondheid*. Rapport DK 2007/076. Directie Kennis, Ministerie van LNV, Ede.

Tersteeg, J.L., H. Smit, S.M.J. Mink, D. Brunt, J.M. de Jonge, 2007. *Diergezondheid in de samenleving van morgen; Resultaten en aanbevelingen naar aanleiding van een werkconferentie gehouden op 27 en 28 maart 2007 in het Kurhaus te Scheveningen*. WING Process Consultancy. (LNV-rapport, 2007).

Weijden, W.J. van der, F.C. van de Schans, 2007. *Natuurlijke Weerstand – (on)mogelijkheden voor het beleid* (LNV-rapport, 2007).