

# Vets United – a Veterinary Education Programme of Welttierschutzgesellschaft (WTG) in Newly Industrialised and Developing Countries

## Contents

<b>1. Abstract</b> .....	2
<b>2. Analysis of the survey VETS UNITED</b> .....	2
2.1 Education .....	3
2.2 Main Tasks for Veterinary Surgeons/skilled veterinary staff .....	4
2.3 Significant Diseases and Pathogens .....	5
2.3.1 Farm Animals .....	5
2.3.2 Pets .....	5
2.3.3 Wild animals/Zoo animals .....	6
2.3 Social Questions .....	7
<b>3. Appendix: Countries, that participated in the survey</b> .....	8

## Register of Diagrams

Fig. 1: Number of Veterinary Schools.....	3
Fig. 2: Deficits in veterinary training .....	4
Fig. 3: Diseases/Pathogens in Farm Animals .....	5
Fig. 4: Diseases/Pathogens in Pets .....	6
Fig. 5: Significant Diseases/Pathogens in Wild Animals .....	7

## Chart directory

Chart 1: Survey feedback continents.....	2
--	---

## 1. Abstract

At the start of our programme Vets United the question arose, how to find suitable partner countries, because our research regarding veterinary care in developing and newly industrialised countries resulted in insufficient data only. So we devised a comprehensive questionnaire regarding veterinary care in order to obtain a broad and knowledge based foundation to decide on suitable cooperation partners and partner countries. The questionnaire was sent out to about 1,000 veterinary schools and animal welfare NGOs (non-governmental organisations). 102 questionnaires from 44 countries were filled in and sent back to us. The assessment of the questionnaires showed that in all countries enormous deficits in the veterinary training exist. More than 30% of the respondents criticized the veterinary training, followed by insufficient training curriculum concerning zoo animals and wild animals and surgery. 58% of the respondents answered in the negative whether animal welfare was included in the veterinary curriculum. 44% furthermore remarked that especially veterinary surgeons hardly had any understanding of animal welfare. The answers concerning the biggest problems in animal welfare referred to stray dogs, over population, the methods of transportation of animals and the methods of slaughter. According to the opinion of the majority of all respondents the lack of awareness for animal welfare issues is caused by inadequate or non-existent animal protection laws. Thanks to the feedback gathered we shall now be able to find suitable countries and cooperation partners for our programme. Important selection criteria, for example the dire need for veterinary training and for the enhancement of skills for better animal protection as well as the possibilities and the will to establish a sustained cooperation with Welttierschutzgesellschaft, will be taken into account for this purpose.

## 2. Analysis of the survey VETS UNITED

In order to reach the aims of the programme VETS UNITED, to realize them and to find suitable partners in all the world, at first a survey was made with regard to animal health and current veterinary care. It included aspects of animal welfare, major diseases and the tasks of veterinary surgeons and veterinary staff. From 148 developing and emerging countries 85 countries were addressed that have at least one veterinary university/college and 113 countries that have at least one non-governmental animal welfare organisation. The questionnaire was sent out to approximately 1,000 institutions of veterinary training and NGOs in 113 countries. 102 questionnaires from 44 countries (see appendix) were filled in and returned. (Chart 1)

Chart 1: Returned questionnaires according to continents

Continent	Number of countries	Replies
Africa	13	29
America	10	19
Asia	15	30
Europe	6	24
Total	44	102

The results visualized in the following focus in short on the most important quintessence, which result from the detailed answers. Thanks to that procedure single answers or estimates do not influence the universal validity of the statement.

## 2.1 Education

We started the questionnaire by asking the number of veterinary schools (state-run/private) existing in each country. The data shown in figure 1 are percentages related to the total of answers. In 9% of the countries (Gambia, Cape Verde, Liberia and Dominica) according to the statement of the respondents there are not veterinary schools at all. In our analysis it must be considered, that many respondents had to make a guess with regard to figure 1, as no data was available publicly.

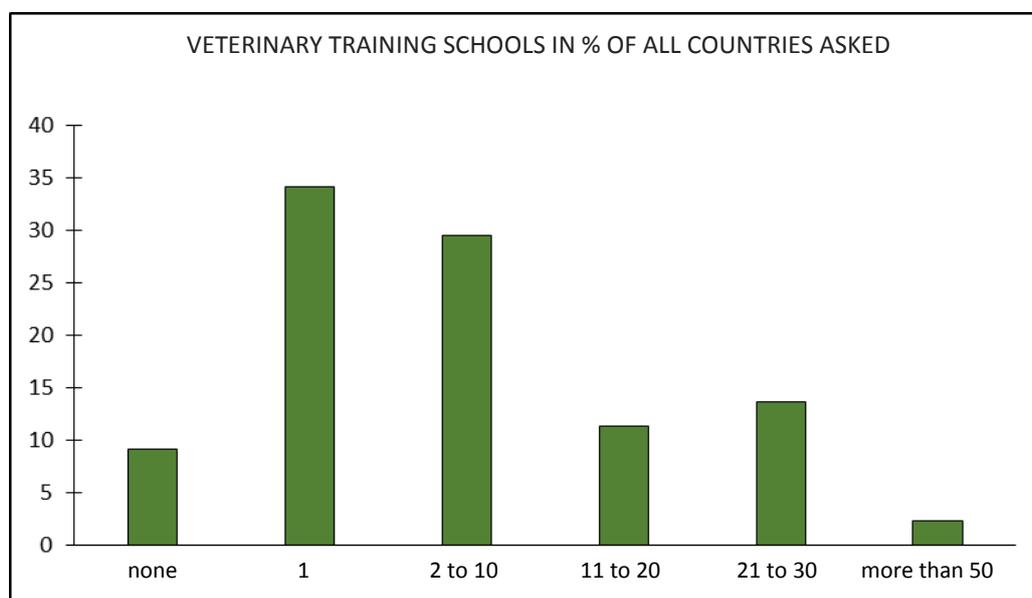


Fig. 1: Number of Veterinary Schools

Furthermore we asked about the structure of veterinary training in each country, which contents regarding animal welfare and animal health are addressed as main topics in the curriculum and what the vocational prospects for future veterinarians in the respective countries are.

All persons asked mentioned huge deficits in the training. The following diagram shows, which areas of responsibility are concerned (fig. 2).

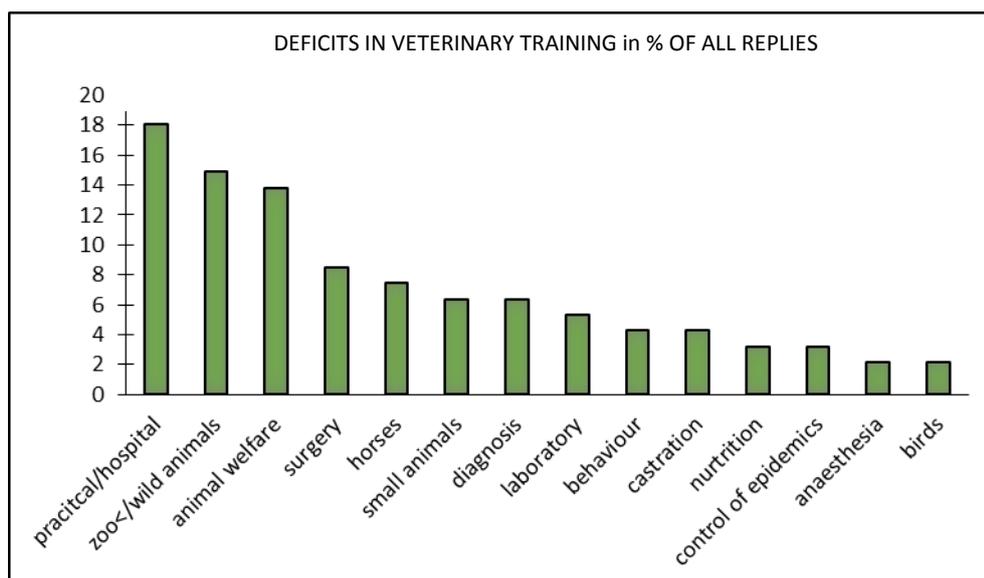


Fig. 2: Deficits in veterinary training

The biggest deficiencies in veterinary education according to 18% of the responses are the lack of skills in the practical and clinical veterinary practice, followed by insufficient teaching of expert knowledge regarding wild animals/zoo animals (15%) and with 14% insufficient or non-existent animal welfare in general in the curriculum. Only in the curriculum of 50% of the institutions animal welfare is included, even if sometimes only rudimentarily. These three thematic blocks stand for almost 50% of the mentioned deficits. According to 30% of all answers, practical skills including surgery and castrations are not sufficiently taught in the standard veterinary curriculum. This impression is fueled by the lack of opportunities for later post-graduate training. In 50% of all cases post-graduate training has to be paid for, whereas in 18% there is no further vocational training available at all. The question, whether further training without having to pay for it would be beneficial, was confirmed by more than 90% of the respondents.

## 2.2 Main Tasks for Veterinary Surgeons/skilled veterinary staff

In the second thematic block we asked about the main fields of activity of the vets and their specialist staff. This is the feedback in order of priority:

1. Treatment of farm animals/animal husbandry
2. Diagnosis in general/treatment
3. Control of epidemics
4. Care of pets/treatment of domestic animals
5. Vaccinations
6. Meat and food safety

The terms "treatment" and "care" as well as "diagnosis of diseases" of farm animals and pets here include all the necessary measures to be taken by a vet to guarantee the health of the animal. Among them there are for example: basic knowledge of husbandry and animal health, diagnosis, first aid under adherence to important hygienic minimum standards and smaller surgical treatments as well. Another often mentioned topic by vets and veterinary

staff is the monitoring and control of epidemics. Very often the respondents mentioned, that the controlling of meat and other food is another important task for vets or veterinary staff.

## 2.3 Significant Diseases and Pathogens

The third topic we asked about were the most common diseases respectively their pathogens. As diseases and germs differ considerably between different animal species, in the following we shall address domestic animals, farm animals and wild animals one by one. With regard to diseases the germs often could be grouped together and specifically mentioned parasitic diseases like ticks or heart worm were subsumed as parasites.

### 2.3.1 Farm Animals

The most important diseases and groups of pathogens affecting farm animals are summed up under figure 3. The frequency of nominations in percent relate to the total of answers in the bar diagram.

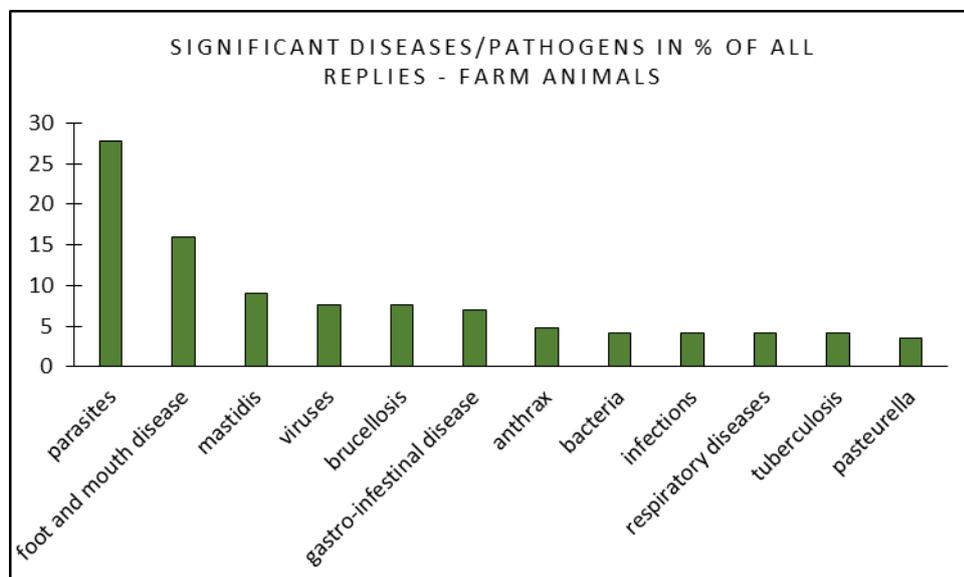


Fig. 3: Diseases/Pathogens in Farm Animals

A big share in the diseases/pathogens of farm animals have parasites with 28%. Of the virus caused diseases the most common one is foot and mouth disease mentioned in 16% of all answers. These two diseases/pathogens represent 40% of all diseases. Parasites are the most common causes for illnesses (28%), followed by diseases caused by bacteria with 27%, such as mastitis, anthrax, tuberculosis, brucellosis. Viral diseases were mentioned in 24% of cases. Further diseases are general respiratory diseases and gastro-intestinal diseases in 13% of all cases.

### 2.3.2 Pets

As before regarding farm animals the most important diseases/pathogens of domestic animals have been grouped together in a bar diagram (fig. 4) according to the percentage of replies.

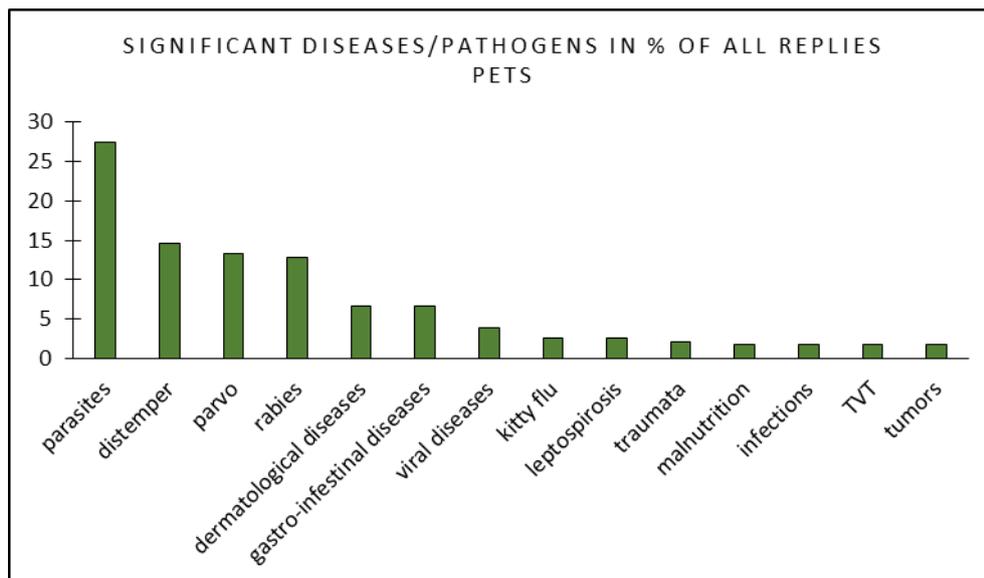


Fig. 4: Diseases/Pathogens in Pets

By far parasites are the biggest and most common group of pathogens of diseases domestic animals suffer from (27%), followed by distemper (15%), parvovirus (14%) and rabies (13% of all replies). These four diseases stand for 69% of the most important diseases respectively pathogens. Concerning pets most often mentioned were viral diseases (45%) like distemper, parvovirus, rabies, and viral diseases in general, followed by diseases caused by parasites (27%), and diseases caused by bacteria with only 3%. Amounting to 18% general dermatological diseases have been cited relatively often, and gastro-intestinal diseases with 8%. Traumata, malnutrition, infections and tumors account for 11% of all cases.

### 2.3.3 Wild animals/Zoo animals

Figure 5 sums up the combined groups of diseases/pathogens of wild animals and zoo animals. For wild animals and zoo animals, too, diseases caused by parasites are mentioned most frequently (36%), followed by rabies (30%) and diseases in general caused by bacteria or viruses. These three diseases/pathogens make up for 83% of all diseases. Apart from them malnutrition is mentioned in 10% of all cases, tuberculosis and anthrax with 5% each.

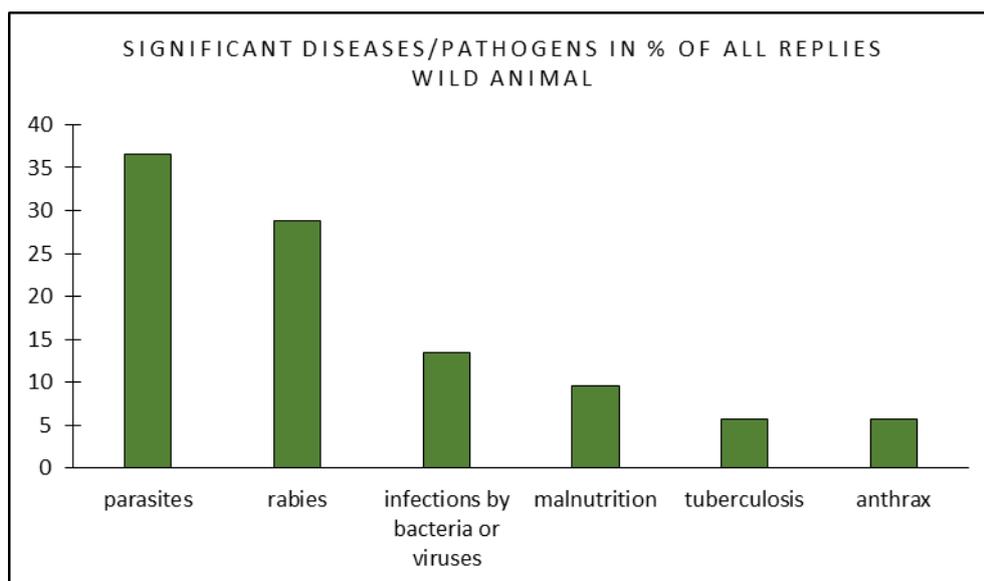


Fig. 5: Significant Diseases/Pathogens in Wild Animals

## 2.3 Social Questions

In the last chapter we wanted to learn more about the significance of animal welfare in each country. As animal protection is a general social task, we asked about the most important problems of animal welfare. In descending order these were:

1. Stray dogs
2. Methods of slaughtering
3. No awareness of animal welfare
4. Overpopulation
5. Animal transportation
6. Hunger
7. Lack of animal protection laws
8. Mistreatment/abuse
9. Diseases
10. Poaching

As one can see from the answers, especially pets and especially stray dogs and overpopulation are a problem of animal welfare that can hardly be coped with. With regard to farm animals many times animal transportation and killing methods were named. The number one topic regarding wild animals is poaching. As problematic result of the lacking awareness of animal welfare animals are often mistreated. According to the opinion of many respondents this is also caused by the fact that in their countries there is no legislation with regard to the protection of animals. We asked the participants to rate the awareness of the vets in their home country about issues of animal protection. 42% replied, that veterinary surgeons have an only rudimentary understanding of animal welfare. 36% estimated the awareness as mediocre and only 18% considered it as being "good", but nobody answered with "very well". For us this is a clear indication, that the protection of animals must be put in the focus of all veterinary activities.

### 3. Appendix: Countries, that participated in the survey

Egypt	Kosovo
Albania	Lebanon
Argentina	Liberia
Ethiopia	Madagascar
Bangladesh	Malawi
Bolivia	Mexico
Bosnia and Herzegovina	Mozambique
China	Namibia
Costa Rica	Pakistan
Dominica	Palestine Territories
Dominican Republic	Panama
Ecuador	Peru
Gambia	Philippines
Guatemala	Zambia
India	Serbia
Indonesia	Sri Lanka
Iraq	South Africa
Iran	Thailand
Jordan	Turkey
Cape Verde	Uganda
Cambodia	Ukraine
Kenya	Vietnam