Animal Health and Welfare Education Gaps-/Needs Survey in Kenya

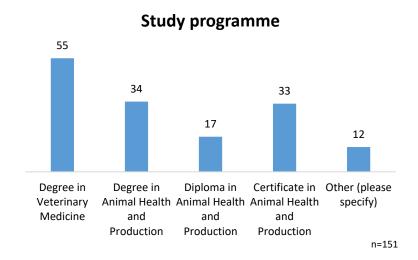
@WTS 2021

Participant background information

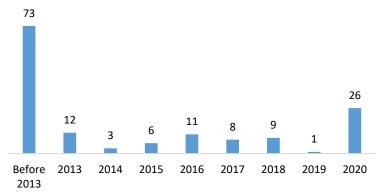
A total of 154 valid responses were recorded:

Educational institution 54 37 24 18 16 0 Nairobi Egerton Pwani Massai Mara Animal Health Other (please University University University University and Industry specify) Training Institute (AHITI)

Other, among others are: Kenyatta University (n=7), Jommo Kenyatta University of Agriculture And Technology (n=4) & Mount Kenya University (n=3) $_{\rm n=152}$

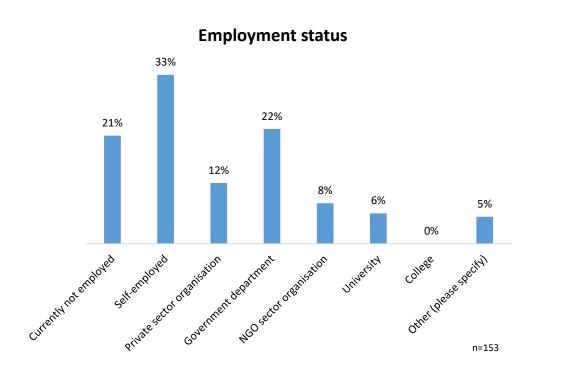


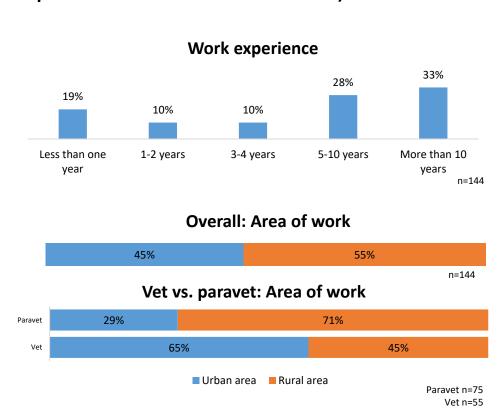
Graduation year



Current employment and work experience

- 86% of participants are currently employed, with 33% of them being selfemployed, followed by 22% working for a government department and 12% working for a private sector organisation
- The majority of participants has more than 5 years of work experience
- 60% of participants work in rural areas (71% of paravets vs 45% of vets)

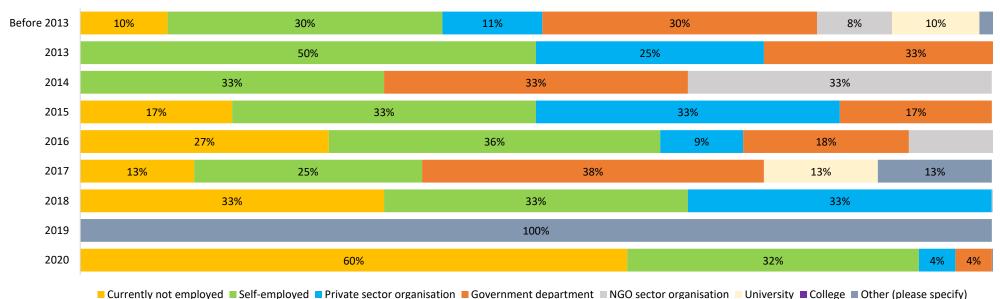




Current employment continued

- 60% of graduates from 2020 are currently unemployed
- Apart from graduates from 2020, graduates from most years are most commonly working:
 - Self-employed: Around 30-35% of graduates of most years are self-employed apart from 2013, where 50% of the graduates are self-employed.
- Participants responding with "Other" to this question are, among others, for example currently completing an internship or retired

Current employment in context of graduation year



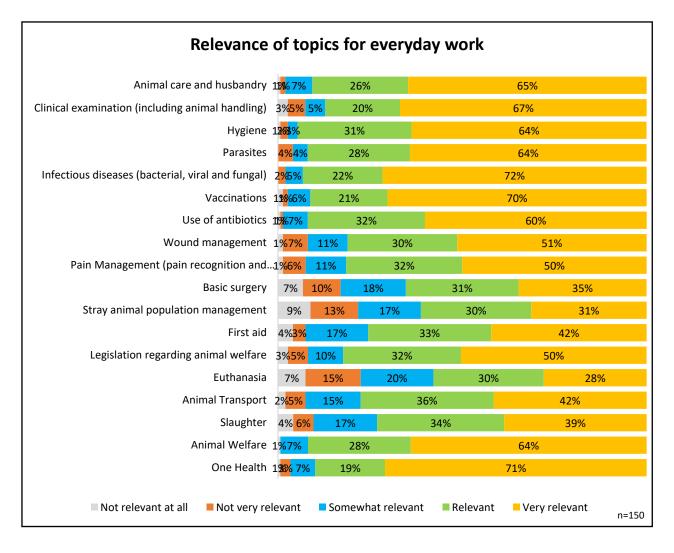
How relevant are the following topics/areas for your everyday work?

Top most relevant topics:

- Infectious diseases
- 2. One Health
- Vaccinations

Top least relevant topics:

- Euthanasia
- Stray animal population management
- 3. Basic surgery



Relevance of the following topics/areas for your everyday work by work area

Topics of highest relevance for people working in urban areas are

Topics of highest relevance for people working in rural areas are

- Infectious diseases
 - One Health
 - Vaccinations

- Clinical examination (including animal handling)
 - Vaccinations
 - One Health

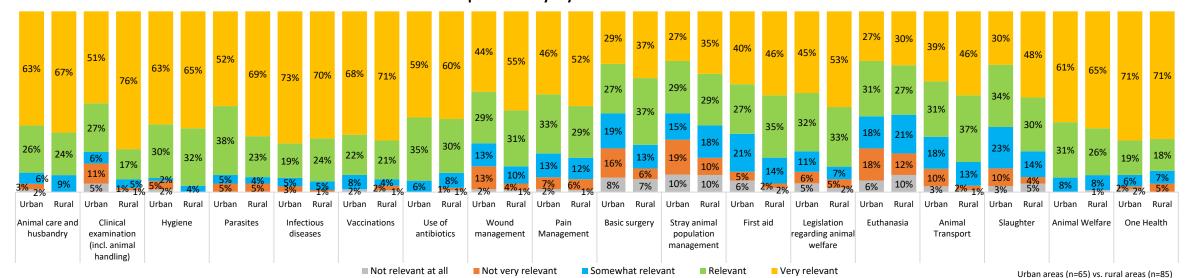
Topics of lowest relevance for people working in urban areas are

- Euthanasia
- Stray dog population management
 - Basic surgery

Topics of lowest relevance for people working in rural areas are

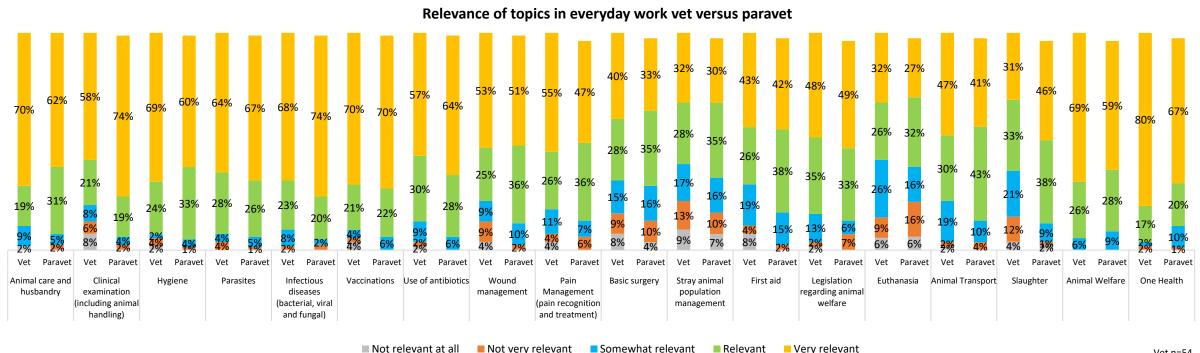
- Euthanasia
- Stray dog population management
 - Basic surgery





Relevance of the following topics/areas for your everyday work for vets versus paravets

- When comparing the relevance of topics in everyday work between these two groups, similarities as well as differences can be found, e.g.:
 - Vaccinations: 70% of both vets and paravets put this topic as "Very relevant"
 - Wound management: 53% of vets versus 51% of paravets rating it "Very relevant"
 - Clinical Examination: "Very relevant" by 74% of paravets, but only 58% of vets
 - Slaughter: is "Relevant" or "Very relevant" for 84% of paravets, but only 64% of vets



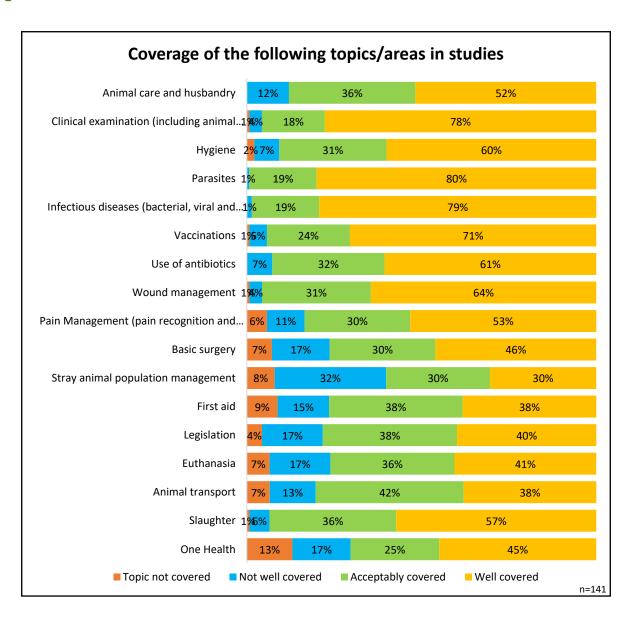
Coverage of general topics/areas in studies

Top best covered general topics during education:

- 1. Parasites
- 2. Infectious diseases
- 3. Clinical examination

Top least covered general topics during education:

- Stray animal population management
- 2. First aid
- 3. Euthanasia



Coverage of the general topics/areas during studies and their link to animal welfare

Top best covered topics during education:

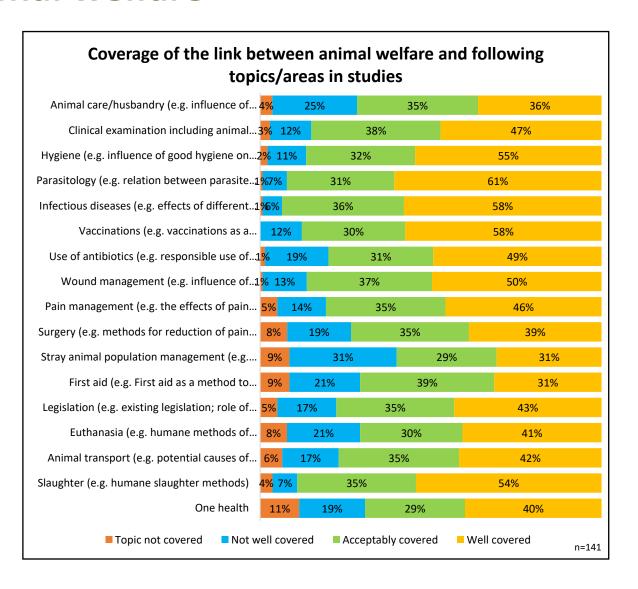
Link between animal welfare and:

- 1. Parasitology
- 2. Infectious diseases
- 3. Vaccinations

Top least covered topics during education:

Link between animal welfare and:

- 1. Stray animal population management
- 2. First aid
- 3. Surgery as well as One Health

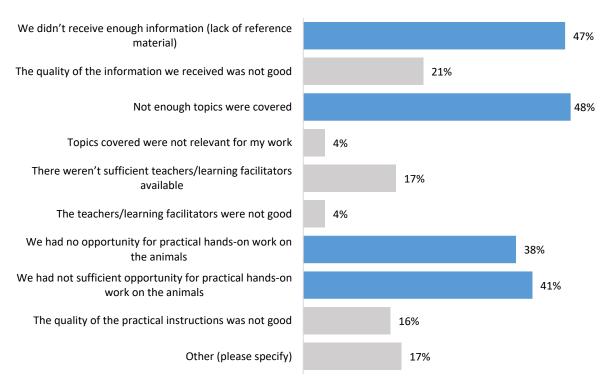


Reasons why coverage of some topics/areas was rated low

The top reasons for low coverage are:

- 1. "Not enough topics were covered" (n=49)
- 2. "We didn't receive enough information" (n=48)
- 3. "We had not sufficient opportunity for practical hands-on work" (n=42) and "We had no opportunity for practical hands-on work" (n=38)

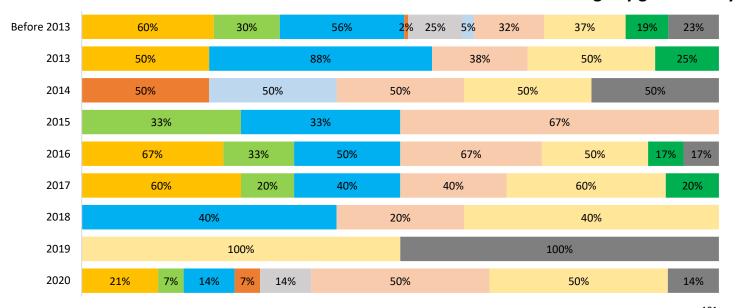
Reasons for low coverage



Reasons for low coverage by graduation year

- All but one group (graduates from 2015) gave "We had not sufficient opportunity for practical hands-on work on the animals" as a reason for their low scoring of some topics
- All years, apart from graduates from 2019, also named ""We had no opportunity for practical handson work on the animals" and "Not enough topics were covered" as one of their main reasons
- 2019 Other: "Unavailability of some animals for practical"

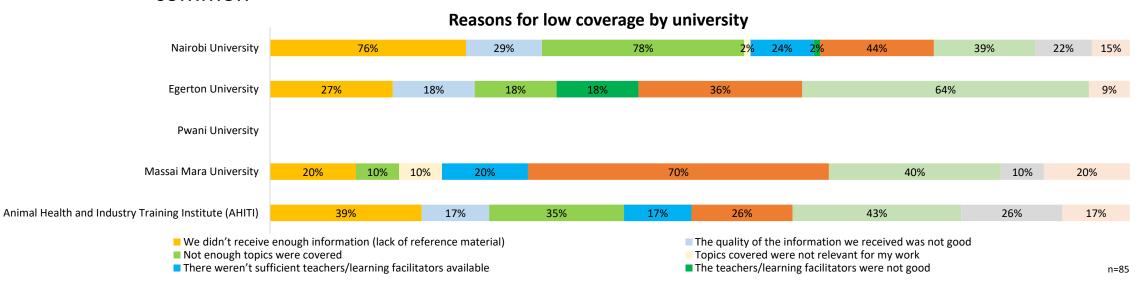
Reasons for low coverage by graduation year



- We didn't receive enough information (lack of reference material)
- The quality of the information we received was not good
- Not enough topics were covered
- Topics covered were not relevant for my work
- There weren't sufficient teachers/learning facilitators available
- The teachers/learning facilitators were not good
- We had no opportunity for practical hands-on work on the animals
- We had not sufficient opportunity for practical hands-on work on the
- The quality of the practical instructions was not good
- Other (please specify)

Reasons why coverage of some topics/areas was rated low by university

- Coverage of topics varied between the different educational institutions.
- Responses indicate that the quality of the training offered was not necessarily lacking, but rather the amount and type of training offered could be improved upon
 - Reasons such as "The teachers/learning facilities were not good", "The quality of practical instructions were not good" or "The quality of information we received was not good" were chosen more seldom
 - Reasons such as "We had no opportunity for practical hands-on work on the animals" or "We had not sufficient opportunity for practical hands-on work on the animals" more common



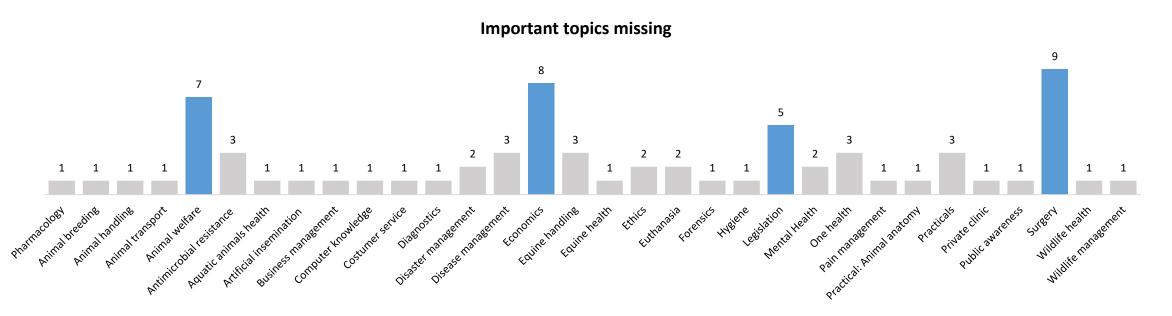
Important topics missing in university/college education relevant for current employment

When asked which important topics were missing in your university/college education that would help you in your job now, participants named, among others,:

- Surgery
- Veterinary economics (e.g. Sales/Accounting, Business Management, Marketing)
- Animal welfare
- Legislations

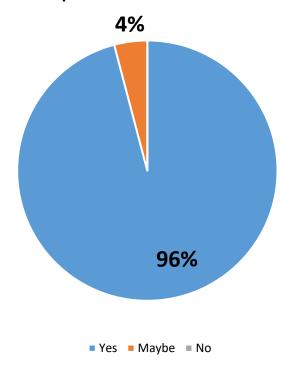
Paravet vs. vet:

- Vets (n=37): veterinary economics (n=7), animal welfare (n=3), disease management, equine handling & mental health (all n=2)
- Paravets (n=33): Surgery (n=9), legislations (n=4) and animal welfare (n=3).

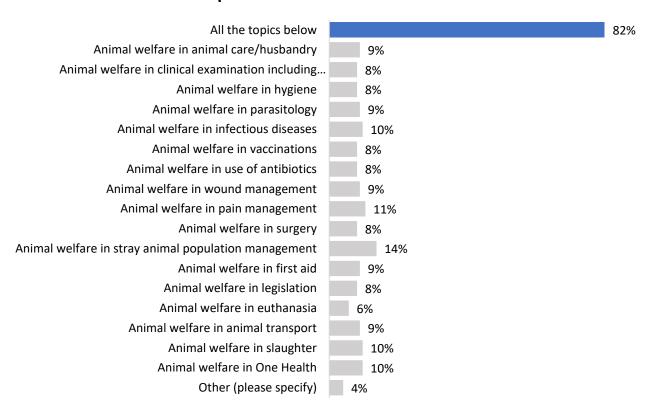


Adding animal welfare aspects to the curriculum

Do you see value in adding Animal Welfare aspects to the curriculum?



Animal Welfare aspects that should be covered in the curriculum

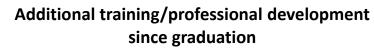


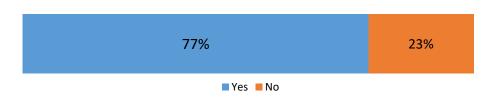
Most important topics/areas in which further development is/was needed

77% of participants

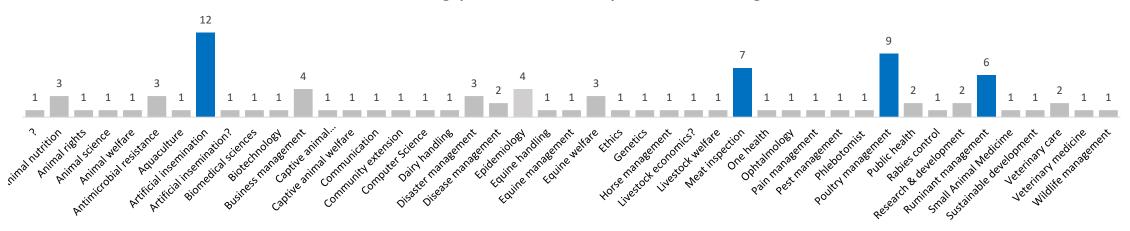
did additional training/professional development since graduating from their study programme

The most common areas in need for further development named were Artificial insemination (n=12) and Poultry management (n=9), followed by Meat inspection (n=7) and Ruminant management (n=6)





Additional training/professional development done since graduation

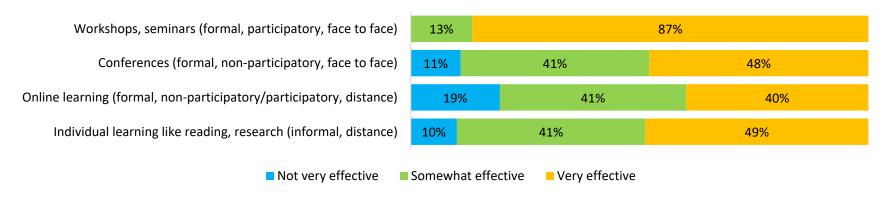


Best way to achieve learning goals

87% of participants named face to face learning methods as most effective when it comes to achieving their learning goals

- Workshops & seminars were rated as the most effective way by all participants
- Online learning was rated least effective

Most effective way to achieve learning goals



Conclusion

Many topics and areas are already covered in the current curriculum; however, the amount of coverage as well as quality of this coverage varies:

- Lack of coverage of the link between general topics and animal welfare
 - especially for very relevant topics in daily work, such as clinical examination (including animal handling), infectious diseases (bacterial, viral and fungal) and vaccinations
- > Certain individual topics need an improved coverage for a specific group
 - e.g. Surgery was exclusively mentioned by paravets as an important topic missing in education that would help with current job now
- Lack of **practical hands-on experience with animals** was named as the main reason for low coverage of topics in general, followed by lack of referencing material

Conclusion

1. Transport not taught so professionals don't take it seriously thus losses and poor welfare

2. At slaughter handling in lairages and crowding not taught so poorly

monitored thus poor welfare and loss

3. Dog population control and responsible dog ownership not taught

- means will not be done properly thus negative impact on rabies strategy 4. Demographic of vets and VPP to determine service availability per constituency. VPPs say surgery major short fall so what is happening to animals.
- 5. Internship and CPDs should be geared towards addressing these challenges
- 6. Curriculum and training review and law review to be considered
- 7. Veterinarian Mindsets which is quite pegged to training as opposed to field scenario

