Appendix 1

Survey of Veterinary and Agriculture Students’ Attitudes to Animal Welfare at Slaughter and Transport and their Moral Reasoning
Methods to Resolve Ethical Dilemmas relating to Transport

Dear Student,

The purpose of the proposed study is to advance our understanding of attitudes in different Southeast Asian countries in Veterinary and Agriculture Students. We are asking you to complete a survey which will take approximately 10 minutes. If you experience any distress as a result of thinking about transport and slaughter, or for any other reason, you are welcome to stop completing the survey at any time and to contact the project staff.

Your inclusion in this survey will help the University of Queensland to make recommendations to improve transport and slaughter practices and to understand the position of stakeholders in the processes.

Your results will be treated as confidential and you will be able to return the survey form anonymously. Your participation is voluntary. We will provide feedback to the organiser in each country that will be relayed to you if you are interested.

This study adheres to the Guidelines of the ethical review process of The University of Queensland and the National Statement on Ethical Conduct in Human Research. Whilst you are free to discuss your participation in this study with project staff (central staff, Clive Phillips, contactable on +61754601158 & local staff, Prof. Dr Zulkifli Idrus, contactable on 03-89466908), if you would like to speak to an officer of the University not involved in the study, you may contact the Ethics Coordinator on 617 3365 392.

Upon completion of the survey, you can choose to participate in a draw to win a Springer Animal Welfare Series book worth AUD$150 and a T-shirt.

Thank you very much for taking your time to help us out in this survey.
Section 1  Demographic Background

1. Please indicate your gender.
   a. Male
   b. Female

2. Please indicate your age. ______

3. Please indicate your current education status in your university.
   a. First year undergraduate
   b. Second year undergraduate
   c. Third year undergraduate
   d. Fourth year undergraduate
   e. Fifth year undergraduate
   f. Master’s degree
   g. PhD, doctorate or other advanced degree
   h. Other, please specify: __________

4. Please indicate the major subject of your study.
   a. Veterinary science
   b. Animal science / Animal studies / Animal production
   c. Agriculture / Agricultural science / Agribusiness
   d. Forestry / Horticulture
   e. Fisheries
   f. Environmental sciences
   g. Other, please specify: __________
5. Please indicate your religion, if any?
   a. Muslim
   b. Christian
   c. Buddhist
   d. Hindu
   e. Jewish
   f. I don’t follow any religion/atheist
   g. Other, please specify: __________

6. Please indicate place of residence of your family.
   a. Urban - city/town
   b. Acreage/large block
   c. Rural – country town
   d. Rural – farming property
   e. Other

7. Do you have any experiences in looking after farm animals (sheep, cattle, dairy cow, chicken and/or pigs)?
   a. Extensive
   b. Moderate
   c. Some
   d. None

8. Please indicate the duration (number of years) that you have lived with companion animals (pets): ________

9. Please indicate your financial status: how much money would you estimate you usually spend per month, including all living expenses, housing and any sundry expenses?
   Please give an average in local currency: _______
### Section 2  Attitudes to Animal Welfare at Slaughter

In this section, we are focusing on your attitudes towards cattle and sheep welfare at slaughter.

Please rate the acceptability of the practices described below:

<table>
<thead>
<tr>
<th></th>
<th>1 Extremely unacceptable</th>
<th>2 Unacceptable</th>
<th>3 Neither unacceptable nor acceptable</th>
<th>4 Acceptable</th>
<th>5 Extremely acceptable</th>
</tr>
</thead>
<tbody>
<tr>
<td>Killing young animals that are still depending on their parents</td>
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<tr>
<td>Allowing animals to experience pain during slaughter</td>
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<tr>
<td>Using animals that have died naturally for products</td>
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<tr>
<td>Killing animals when they are seriously injured or ill</td>
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<tr>
<td>Letting animals to see each other getting slaughtered</td>
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<tr>
<td>Regarding companion animals only, euthanising healthy and unwanted pets (such as dogs and cats) due to overpopulation.</td>
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</table>
### Section 3  Attitudes to Animal Welfare at Transportation

In this section, we are focusing on your attitudes towards cattle and sheep welfare during transportation.

How acceptable do you think the practices described below are?

<table>
<thead>
<tr>
<th>Issue</th>
<th>1 Extremely unacceptable</th>
<th>2 Unacceptable</th>
<th>3 Neither unacceptable nor acceptable</th>
<th>4 Acceptable</th>
<th>5 Extremely acceptable</th>
</tr>
</thead>
<tbody>
<tr>
<td>Livestock transport by ship</td>
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<tr>
<td>Livestock transport by road</td>
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<tr>
<td>Exporting livestock from Australia, a developed country, to developing countries in Middle East, Indonesia, and Asian countries</td>
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</tbody>
</table>
Consumption of products from imported animals

<table>
<thead>
<tr>
<th>Issue</th>
<th>1 Extremely unconcerned</th>
<th>2 Unconcerned</th>
<th>3 Somewhat concerned</th>
<th>4 Concerned</th>
<th>5 Extremely concerned</th>
</tr>
</thead>
<tbody>
<tr>
<td>The provision of food and water to animals before or during transport</td>
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<tr>
<td>Transporting animals with sufficient space and proper facilities</td>
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<tr>
<td>Transporting animals in an environment with clear air and minimal ammonia</td>
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<tr>
<td>Transporting animals from a developed country with extensive animal welfare legislation to a developing country with limited or no animal welfare legislation</td>
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</tbody>
</table>

9. Regarding animals’ transportation, what is the maximum distance you consider to be acceptable?
a. Ship transportation: _____ km
b. Road transportation: _____ km

10. Attitudes to animal products that are imported or exported.
  a. I prefer imported products over exported ones.
  b. I prefer exported products over imported ones.
  c. I do not mind either.
Section 4  Case Scenarios Regarding Animal Export

There are 3 case scenarios presented in this section. Several questions will then be given at the end of each case. Please rank the questions in order of importance (1 being the most important and 9 being the least important).

Case 1
Background Information
Thousands of cattle and sheep are sent from Australia to the Middle East each year, a journey of some 10-14 days. En route, the animals will face challenges of heat stress, ammonia accumulation, lack of feed, overcrowding. Exporter companies are required to employ a veterinarian and/or stockperson to accompany long haul shipments of cattle, who should meet with the Captain of the ship regularly to discuss the animals’ welfare, and they should also complete a voyage report, which identifies the mortality and documents any problems during the voyage. If mortality exceeds a threshold of 0.2% for cattle, there is a government investigation. Government theoretically has the power to stop shipments of the animals by any exporter.

Scenario
You are employed by a live export company as a veterinarian or stockperson to accompany cattle on long haul shipments to Egypt. The ship is loaded in Fremantle in August with 500 Angus steers, which have been trucked from Victoria, held overnight and loaded first thing in the morning. Up until the equator the voyage goes well, but as you approach the Persian Gulf the wind drops and the temperatures climb to over 40°C. With limited ventilation capacity on the vessel, the cattle close to the engine room are obviously stressed by the heat, with open mouthed panting and copious salivation. You advise the captain not to enter the Gulf until the temperatures have dropped. He answers that he has a schedule to keep to and must continue.

The next day as you approach the Suez Canal, you find three cattle dead and you notice that the internal temperature on the ship is 46°C. You advise the captain not to enter the Canal, but to wait out in the Gulf where there is a breeze. He insists on continuing and does not accept your report, which includes the mortalities. By the end of the voyage, ten cattle have died and relations between yourself and the captain are even more strained. You are aware that any complaints to the company may jeopardise your position.
We are now going to ask which are the main questions that you would consider in deciding whether to complain to the company. You don’t need to know the answers to the questions, we just want to know which you think are the right questions to ask.

We will offer you nine possible questions. Read these carefully and decide which is the most important, then second most important, third most important and fourth most important, up to the least important.

For each scenario, select the question that you think is important. Do not choose the same question more than once. You can change the questions at any time if you wish. At the end of your choices, review what you have selected to make sure that you do not want to change the questions any more.

Rank which of the following questions are most important in solving the dilemma of whether to complain to the company (questions were presented in random order):

Authors: Questions ranked by the students in order of declining importance:

<table>
<thead>
<tr>
<th>Rank</th>
<th>Questions</th>
<th>Moral Judgment</th>
</tr>
</thead>
<tbody>
<tr>
<td>1</td>
<td>Is being cruel to the cattle by allowing them to suffer contrary to</td>
<td>MN</td>
</tr>
<tr>
<td></td>
<td>Australian law?</td>
<td></td>
</tr>
<tr>
<td>2</td>
<td>Do you believe that the morality of allowing cattle to die is more</td>
<td>UP</td>
</tr>
<tr>
<td></td>
<td>important than your future with the company?</td>
<td></td>
</tr>
</tbody>
</table>
Is it a requirement under Australian law for you to provide a report on the welfare of the cattle during the voyage?  

Is allowing the cattle to die in this way contrary to the Australian Standards for the Export of Livestock?  

Do the cattle deserve better treatment than the captain is prepared to offer?  

Can you justify the shipment by the benefits to the Egyptian consumers, who will have a source of safe and nutritious food?  

Would your position with the company be jeopardized by taking action, or enhanced by taking no action?  

Can you find the time to argue with the captain about how he has managed the shipment?  

Would a dispute with the company be long, arduous and stressful?

PI = Personal interest; MN = Maintaining norms; UP = Universal principles
Case 2

Background Information

The increasing demand in Asia for dairy products has created a growing demand for high quality dairy heifers. As there is a shortage of these in most Asian countries and milk prices in Australia and New Zealand are low, dairy farmers in Australian and New Zealand have developed a lucrative trade to send heifers by ship to ports in China, Pakistan and other countries with potentially high output dairy farming industries.

Scenario

You are a veterinarian or agricultural advisor with a client who is a dairy farmer in Victoria. The client has increasing debt problems and increasingly low milk prices, relative to the cost of production. You hear that there is a market for some of his dairy heifers in Pakistan, however, there have also been reports of cows sent there suffering with little food, inadequate care and high mortality rates. You consider the ethical issues about advising him to sell heifers to an exporter who is shipping high quality heifers to Pakistan.

Questions

We are now going to ask which are the main questions that you would consider in deciding whether to advise the farmer to sell his heifers to an export company. You don’t need to know the answers to the questions, we just want to know which you think are the right questions to ask.

We will offer you nine possible questions. Read these carefully and decide which is the most important, then second most important, third most important and fourth most important, up to the least important.

For each scenario, select the question that you think is important. Do not choose the same question more than once. You can change the questions at any time if you wish. At the end of your choices, review what you have selected to make sure that you do not want to change the questions any more.

Rank which of the following questions are most important in solving the dilemma of whether to advise the farmer to sell his heifers to an export company: (questions were presented in random order)

Authors: Questions ranked by the students in order of declining importance:
<table>
<thead>
<tr>
<th>Rank</th>
<th>Questions</th>
<th>Moral</th>
</tr>
</thead>
<tbody>
<tr>
<td>1</td>
<td>Do you believe that the morality of allowing cattle to suffer is the principal issue to consider?</td>
<td>UP</td>
</tr>
<tr>
<td>2</td>
<td>Do you believe it is expected of you as a veterinarian to maintain the welfare of the cows at all times?</td>
<td>MN</td>
</tr>
<tr>
<td>3</td>
<td>Do you feel obligated under Australian policies (e.g. Australian Veterinary Association or Codes of Practice for the Welfare of Cattle) to offer advice to the farmer that will make his business prosper?</td>
<td>MN</td>
</tr>
<tr>
<td>4</td>
<td>Can you justify the shipment by the benefits to the Pakistani consumers, who will have a source of safe and nutritious food?</td>
<td>UP</td>
</tr>
<tr>
<td>5</td>
<td>Would your relationship with the client be jeopardized by withholding this advice, or conversely enhanced by making this recommendation, which might bring further clients?</td>
<td>PI</td>
</tr>
<tr>
<td>6</td>
<td>Is allowing the cattle to die in this way contrary to the Australian Standards for the Export of Livestock?</td>
<td>MN</td>
</tr>
</tbody>
</table>
Do the cattle deserve better treatment than the Pakistani farmers are able to offer?

Can you afford to lose a valued client who has reliably consulted with you for several years?

If the farmer finds out that you have not advised in his best financial interests, would he think badly of you?

Case 3

Background Information

The live export trade in sheep to the Middle East provides a ready source of meat, particularly for religious festivals in which the meat is shared with the purchaser’s neighbours and poor people in the region. The journey is long, about 12 days, and there are often welfare problems en route, such as the build-up of ammonia, high temperatures, inability of some sheep to eat, and contagious diseases such as salmonellosis.

Scenario

Sheep are in surplus in Australia as a drought has been decimating farming land for nearly 5 years. A shipment of sheep has been sent to Saudi Arabia but has been rejected at the port because the Saudi veterinary inspector says that he has detected a high prevalence of scabby mouth (pustular dermatitis), 6%. Although another country, Bangladesh, has already said that it will take any sheep rejected, the shipping and export companies would lose millions of dollars in lost revenue. You are accompanying the shipment on behalf of the shipping company in the role of veterinarian or stockperson and are asked to determine the extent of scabby mouth in the sheep. You assess a sample of each deck and come to the conclusion that approximately 7% of the sheep are infected. The captain of the ship meets with you and asks you to consider that some were not very serious cases and it should be reported as 5%, this being the legal limit for sheep to enter Saudi Arabia in live shipments.
Questions

We are now going to ask which are the main questions that you would consider in deciding whether to agree to the captain's demand that you revise your estimate of the prevalence of scabby mouth in the shipment. You don’t need to know the answers to the questions, we just want to know which you think are the right questions to ask.

We will offer you nine possible questions. Read these carefully and decide which is the most important, then second most important, third most important and fourth most important, up to the least important.

For each scenario, select the question that you think is important. Do not choose the same question more than once. You can change the questions at any time if you wish. At the end of your choices, review what you have selected to make sure that you do not want to change the questions any more.

Rank which of the following questions are most important in solving the dilemma of whether to agree to the captain’s demand that you revise your estimate of the prevalence of scabby mouth in the shipment: (questions were presented in random order)

Authors: Questions ranked by the students in order of declining importance:

<table>
<thead>
<tr>
<th>Rank</th>
<th>Questions</th>
<th>Moral Order</th>
<th>Judgment</th>
</tr>
</thead>
<tbody>
<tr>
<td>1</td>
<td>Do you believe that being honest in reporting the prevalence is the principal issue to consider?</td>
<td>UP</td>
<td></td>
</tr>
</tbody>
</table>
Do you feel obligated under Australian policies (e.g. Australian Veterinary Association or Codes of Practice for the Welfare of Cattle) to report the accurate prevalence?

Do you believe it is expected of you as a veterinarian or stockperson to report your most accurate estimate?

Can you justify any falsification by the benefits to the Saudi consumers, who want to ensure a source of safe and nutritious food?

Is falsifying the records in this way contrary to the Australian Standards for the Export of Livestock?

Do the sheep deserve better treatment than the Saudi authorities are able to offer?

Would your relationship with the shipping company be jeopardized by agreeing to this demand, or conversely would you get additional work if you are seen to be flexibly in this way?

Can you afford to lose a valued shipping client who has reliably employed you for several years?
If your veterinary colleagues find out that you have not been honest in your assessment, would they think badly of you?

Thank you very much for taking your time to answer the questions! If you are interested to participate in the draw for an animal welfare book or a Centre for Animal Welfare and Ethics T-shirt, please fill in your email address below.

Email address: ___________________________