

Practical 2 – Valuing Resources

The teacher starts the practical by asking what resources would be needed for veterinary interventions. It is recommended to focus on of the following topics:

1. Resources for therapy of companion animals;
2. Eradication of contagious diseases;
3. Reduction of production diseases (e.g., mastitis in dairy cattle);
4. Reduction of welfare problems (e.g., tail biting in fattening pigs) in the intensive husbandry systems etc.

After the introductory session, students will begin a conjoint analysis. The conjoint analysis will involve the students considering themselves as being either a dairy farmer or a pet owner. They need to work through an example to examine the different levels of value they place on a veterinary product and service.

Dairy Farmer

A dairy farmer is considering the implementation of an udder health programme specifically tailored towards farm needs and aiming at improving udder health of the herd. Last year, 22 (30%) dairy cows were diagnosed with clinical mastitis out of your 75-cow herd. The average bulk tank somatic cell count was 220,000 cells/mL and the average daily milk yield of your herd is 27kg. Currently, your working day consists of 9 to 10 hours of farm labour. There are two possible scenarios:

1. The milk price is at its all-time best and stable for a while now;
2. The milk price is currently at a low point and expected to be very volatile the coming year.

Discuss what type of udder health program would be valued by the dairy farmer with the two different scenarios on milk price. The attributes and levels are as follows:

1. Additional price to be paid for implementing the udder health program. Levels: 0, 25 or 50 Euros per cow per year.
2. Additional labour required for implementing the udder health program.
Levels: No additional labour, 15 or 30 minutes per day.
3. Percentage reduction in clinical mastitis incidence.
Levels: no significant effect, 10% or 20% reduction.

Pet Owner

A pet owner has a 5 years old dog diagnosed with diabetes mellitus, a disease where blood sugar levels are not controlled accordingly by the pancreas. There is a therapy available, but the therapy requires daily intervention from the pet owner. This treatment will have to be applied for the remainder of the dog's life and, therefore, affects the pet owner's life too. There are two possible scenarios:

1. The pet owner is a housewife with two children in University. She works 16 hours a week in close proximity to her house. Her partner works full time;
2. The pet owner is a PhD student in her final year, with two children who are less than 3 years of age. She works full time and commutes to work 2 hours a day. Her partner works full time.

Discuss what type of treatment would be valued by the pet owner with the two different scenarios. The attributes and levels are as follows:

1. Additional time requested from the pet owner for the remainder of the dog's life. Levels: 15, 30 or 45 minutes per day.
2. Efficacy of the treatment. Levels: 25%, 60%, 95% probability of a successful treatment.
3. The pain level the dog has to face for the remainder of his life. Levels: no pain, mild or chronic pain.

Summary of the exercise

Students conduct conjoint analyses on the PC using specific software. During the coffee break, the teacher collects the answers provided by the students, summarizes and discusses the results in the plenary. Learning points include that utilities differ between people.