### SMALL RUMINANTS CASE STUDY

### IMPROVING PRODUCTIVITY AND LIVELIHOODS

OF POOR SHEEP AND GOAT FARMERS IN MYANMAR

View the Prezi on the LMS to get background information on sheep and goat production in Myanmar (please read the instructions on how to use the prezi first if you have not used one before). Then, in your group, answer the following questions to develop your ideas about how productivity could be improved in smallholder sheep and goat farms in the Central Dry Zone (CDZ) of Myanmar.

As you work, compare what you see in the Myanmar production systems with your understanding of ‘best practice’ sheep management in southern Australia. What principles that you know of from Australia could be applied to Myanmar? What outcomes would you seek to achieve by applying them? *Can* they be applied?

This case study draws upon knowledge you are developing from other parts of the course, including genetics, nutrition, infectious disease and epidemiology. Don’t be afraid to think outside the square!

Answer the following questions in your group. These will help you develop ideas for improving small ruminant production in the CDZ. To make things more efficient, you might want to have different group members tackling several questions at once, particularly the questions towards the end that require some research. You can then discuss your different answers to develop an overall view of the system and your group’s recommendations.

My thanks to Dr Angus Campbell for this case study from his work in Myanmar.

QUESTION 1

* What products are being produced by the smallholder sheep and goat farmers in the CDZ?

## QUESTION 2

* What are the key factors influencing the level of this production? Think animal-, environment and management-related factors for a start (some may overlap across these categories).

## QUESTION 3

* What other products could potentially be generated in addition to the current ones?
* How could opportunities for this additional production be created?
* What would be your recommended destination or market for these products?

## QUESTiON 4

* What differences between the sheep and goat farms in Myanmar are mentioned in the presentation?
* Based on your own knowledge, plus additional research if required, of the two species,

what other differences might exist?

QUESTION 5

• Some farmers firmly believe that one species is clearly superior to the other in their production system. What superior aspects are likely to be most important to farm production?

• How could you further measure or examine these differences so that you could make

clear recommendations about choosing one species over the other?

## QUESTION 6

* Contrast the pattern of seasons and pasture production in the CDZ to that of southern Australia. What implications does this kind of annual pattern have for sheep and goat production in Myanmar?

## QUESTION 7

* Highlight the key differences between the management practices in Myanmar and a ‘best-practice’ Australian sheep production system, as detailed in lectures. For each management practice, explain what it seeks to achieve.
* How could each procedure be applied to a CDZ small ruminant farming system and what

would be the likely outcome, compared to the current system?

## QUESTION 8

* What practicalities might impede your recommended management changes in Question 6? (e.g. infrastructure, technical capacity, finances)

## QUESTION 9

* A comparable Australian environment to the CDZ would be the semi-arid tropics of inland Queensland, where sheep are a common livestock species. Find a reputable resource that describes sheep production in this Australian climatic zone (cite it!). Briefly compare and contrast management and the challenges of production in this environment in Australia, with that of Myanmar. (If the Prezi doesn’t give you enough information to identify the similarities and differences, what data would you suggest is collected in Myanmar to aid the comparison?)

QUESTON 10

• Although there is an extensive network of government veterinarians throughout Myanmar in the form of the Livestock, Breeding and Veterinary Department (LBVD) of the Ministry of Agriculture, they generally have little involvement with sheep and goat farmers. What are the current treatments administered by veterinarians? Would you classify these as ‘strategic’ or ‘tactical’ treatments?

## QUESTION 11

Find a reputable resource (cite it) that gives a brief overview of common diseases of small ruminants in the tropics. As a veterinarian conducting a preliminary survey of small ruminant farms in Myanmar, what signs would you be on the lookout for to help determine if these diseases were present or not

## QUESTION 12

* What preventive health treatments might you recommend are performed on these sheep and goat farms? Compare these to the ones you know about in Australia. What barriers are there to implementing these preventive treatments in Myanmar?

## QUESTION 13

* Cattle are common throughout Myanmar too, where they are used extensively as beasts of burden. Identify one or two diseases that could be shared between sheep, goats and cattle (remember that Myanmar might have diseases that Australia definitely doesn’t have!). What are the implications for the wider control of important ruminant diseases

if LBVD vets have little expertise with sheep and goats, plus lesser contact with small

ruminant farmers?

## QUESTION 14

* Having described the small ruminant farming system in Myanmar, and considered some of the challenges and opportunities it faces, what recommendations do you now make for further development work? These could include such things as management changes, a focus on particular animals, training of farmers or other groups or further field research.