Examination
Tropical Animal Husbandry Systems
16.02.2011

1. Global Livestock Population

1a) Fill in the table: in which eco-zones and in which climate is which of the animals below domesticated or the major livestock population?

animals: Chicken (Jungle fowl), Yak, Zebu cattle, Holstein Friesian cattle, Water buffalo, Llama, Camel, Goat

	arid	Semi-arid	Sub-humid	humid	temperate
Lowland					---
Highland			----		

1b) How do the drivers like population growth and urbanization influence the food-patterns, and what are the consequences for global milk and meat demand and feedstuff production?

1c) What might be benefits of such developments (see 1b) for the chance of small-scale farmers for generating income?

2. Small Ruminants

2.1) What is the main classification type of goats?
2.2) What are the main classification types of sheep?
2.3) What are tangible and non-tangible benefits to sheep and goat keeper?

3. Silvopastoral Systems

3.1) Define silvopastoralism and what is the major aim?
3.2) What is the difference between silvo-pasture and pastoral silviculture?
3.3) Choose the right answer:

1. Trees provide N to animals and all contain toxic compounds ☐
2. Trees provide N to animals and some of them contain toxic compounds ☐
3. Trees provide N to animals and the animals can always detoxify the toxic compounds ☐

4. Pastoral Systems

4.1) What are the strategies of pastoralists to cope with the harsh climatic conditions?
4.2) Tragedy of the commons?

5. Camelidae

5.1) Explain how the camelids are adapted to low or poor feed, how is digestive process in the hard conditions. And explain other mechanism to cope the hard conditions.?
5.2)

6. Poultry Production

	Small scale	Industrial
Production Intensity		
Feedstuffs		

Housing		
Problems		

6.2) Name and explain two ways how a small scale farmer can reduce heat stress in his laying hens?

7. Mixed-farming

7.1) Fill in the table.

	Crop residues	Crop by-products
Definition		
Nutritive value		

7.2) Fill in the table. Use for your answers HIGH, MEDIUM or LOW.

	Labour input	Urine recovery	Faeces recovery
Coralling: animals graze during day and are coralled over night			
Zero grazing: Animals are fed at homestead and excreta are collected in a pit near by the stable and brought to field from time to time			
Backyard feeding: Animals graze in the backyard and excreta are collected after night and brought to the field from time to time			

8.)

Imagine you make a trip to the highlands of Kenya. There, you meet 2 farmers: One farmer has 2-3 cows of the local Zebu breed and additionally 1.5 ha. The second farmer has 2-3 cows of Holstein-Friesian and only 0.5 ha.

Fill in the table by stating only YES or NO.

	Zebu	Holstein Friesian
Market oriented		
Own feed production		
Animals sometimes used for draught power		
Feed purchased on the market		
Tolerance to diseases		
Replacement after 3 lactations due to decreased milk yield		
Subsistence		
