

## A13M Livestock-based sustainable land use

<b>Module</b>	<b>Livestock-based sustainable land use</b>						
<b>Code</b>	<b>A13M</b>						
Coordinator	Prof. Dr. E. Schlecht						
Language	English						
Stud. Workload	180h (60h contact time)						
Credits	6 ECTS						
Frequency (WS/SS)	SS						
Instructors	Prof. Dr. E. Schlecht, Dr. A. Schiborra, Dr. K. Brinkmann						
Contents	<p>This module highlights the general positive and negative impacts of livestock and livestock management on the natural resources (air, water, soil vegetation) and specifically under (sub)tropical conditions, at the plot to the watershed scale. It discusses options for sustainable livestock-based land use, thereby building upon the beneficial impacts of animals on soils and plants. Management options for reducing negative environmental effects of livestock (gaseous emissions, nutrient excretion) are highlighted, and possibilities for consolidating the interests of livestock keepers with international conventions are discussed. The students are introduced, in lectures, own reading and practical field tests, to up-to date quantitative and qualitative methods that are used in studies on animal-environment interactions.</p> <p>Simple modelling approaches that depict animal-environment interactions at the plot up to the watershed scale are presented and tested by the participants.</p>						
Objectives	<ul style="list-style-type: none"> <li>- To understand the interactions of livestock with the natural resource base and their site- and management specific positive or negative environmental impacts</li> <li>- To get acquainted with and test methodological approaches used in field research on livestock-environment interactions</li> <li>- To learn about simple modelling approaches and the significance of their results</li> </ul>						
Literature	Steinfeld, H., Gerber, P., Wassenaar, T., Castel, V., Rosales, M., de Haan, C. 2006: Livestock's long shadow. Fao, Rome, Italy; Specific scientific articles, distributed in the course.						
Study system usability	Economy		Organic		Tropical		
	-		M		M		
Entrance requirements	Basic knowledge (B.Sc. level) of soil, plant and animal sciences						
Instruction type	Lecture	Seminar	Excursion	Practice	Tutorial	Project	
Duration [h]	40			20			
Examination type	Oral test	Written test	Homework	Sem. speech	Protocol	Work report	Proj. report
		x					
Grade composition	100% written test						