



# Department of Animal Breeding and Genetics



## AnGR-activities – ongoing or just finished

1. Capacity building

2. Research

- primarily in SSA in collaboration with ILRI
- both Swedish and foreign students/scientists
- mostly supported by Sida or Ministry foreign Affairs

3. Education - training



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## Capacity building

### **ILRI – SLU project 2000-2011:**

“Capacity Building for Sustainable Use of Animal Genetic Resources (AnGR) in Developing Countries

7 courses in SSA, SA and SEA

9 workshops

138 scientists across 46 countries trained

### **Science communication**

Two courses in Nicaragua 2010-2011; Sida sponsored



## Research projects

### Trypanotolerance of 4 Ethiopian cattle breeds ILRI-EIAR-SLU project

- PhD project by Jennie Stein
- Field and exp station studies for phenotypic characterization
- The **SHEKO** breed found trypanotolerant but endangered
- A plan for conservation, multiplication and improvement of the breed is under way led by MoA, Ethiopia





PhD thesis 2011 by  
Roldan Corrales, Nicaragua

## **Population structure and Phenotypic Characterization as a Basis for Conservation and Sustainable Use of Reyna Creole Cattle**

- Inbred and endangered breed, but records are kept in key farms
- breeding program proposed

Project supported by Sida/SAREC within a 25 year agr capacity building program between SLU and UNA



# INFRASTRUCTURE FOR SUSTAINABLE UTILIZATION OF ANIMAL GENETIC RESOURCES IN SOUTHERN AND EASTERN AFRICA

E. Zonabend, A.M. Okeyo, J.M.K Ojango, S. Moyo, J. Philipsson



5<sup>th</sup> All African Conference on Animal Agriculture, Addis  
Ababa, 25-28 October 2010



## Conservation and improved productivity of sheep in East Africa

- Red Maasai, a breed with high potential under harsh climatic conditions, but endangered due to extensive crossbreeding with Dorper

### ILRI – SLU-project in Kenya (Tanzania?)

- PhD-project for Emelie Zonabend, SLU
- sheep-recording for data collection and practical use
- population structure and genetic parameters
- assessment of breeding objectives
- design of pure breeding and sensible crossbreeding program



# The breed concept as a measure of genetic diversity?

**Breed name is not a unique genetic definition**

What makes a breed extinct?

- Crossbreeding may be the most common reason
- Administrative decisions leading to name changes are common too – Swedish experiences

A survey of extinct breeds in four countries (continents) reveal many such cases

Study by Rawlynce Bett (SLU/ILRI)





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## **Education/training at SLU**

### **Tropical Animal Production (MSc course)**

### **Erasmus Mundus Animal Breeding & Genetics**

- Masters program together with 4 other universities (countries)
- EU financed

### **Erasmus Mundus ABG PhD-program (new)**

- together with 3 other universities