agri benchmark partners’ projects

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Rome
20.09.2013
Research partners of the Beef and Sheep Network
Selected projects of *agri benchmark* partners
**Livestock farmers mentorship Program in the northern communal areas of Namibia**

<table>
<thead>
<tr>
<th>COVERAGE</th>
<th>WORKING AREAS</th>
<th>IMPACT AREAS</th>
<th>MAIN ACTIONS</th>
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**COURAGE**
- Northern Namibia
- Beef cattle farming
- Communal farms
- 1,6 mill. heads

**WORKING AREAS**
- Low living standard of farmers
- Overgrazing and land degradation
- Low offtake rate
- High livestock mortality

**IMPACT AREAS**
- Sustainable grazing systems established
- Larger numbers of animals marketed
- Higher income from cattle sales
- Improved living standard of farmers

**MAIN ACTIONS**
- Adoption of improved husbandry practices
- Balancing cattle numbers with grazing land and growth available
- Adoption of animal health schemes
- Selection and acquisition of improved breeding cattle
Introducing silvopastoral systems on cattle farms for climate change mitigation and poverty reduction

**Coverage**
- Different ecosystems
- Dry forest (bosque seco)
- Andean forest (bosque andino)
- Tropical humid forest (bosque húmedo tropical)

**Working Areas**
- Low animal performance on tropical regions
- Overgrazing
- Low land productivity
- Expansion of production to natural areas

**Impact Areas**
- Increase livestock productivity
- Improve forage production efficiency
- Improve forage availability on tropical areas
- Reduce production expansion to natural areas
- Reduce GHG emissions
- Increase biodiversity

**Main Actions**
- Introduction of silvopastoral systems in tropical regions used by cattle farms
- Improve soil fertility
- Adoption and adaption of silvopastoral management programs
Monitoring forage productivity on cattle farms, using GIS programs

**WORKING AREAS**
- Variability on forage productivity on cattle farms
- Overgrazing and land degradation
- Short and medium term decisions on balancing numbers of animals and grass availability

**IMPACT AREAS**
- Improving forage use by livestock herds on grazing systems
- Improving Cattle productivity
- Improving socioeconomic conditions for livestock farmers

**COVERAGE**
- Beef regions

**MAIN ACTIONS**
- Detailed monitoring program on forage productivity at the farm level
- Forecasting forage productivity at the farm level
- Balancing animal stock, according to forage availability
Sustainable Livestock Grazing Systems on Chinese Temperate Grasslands

**COVERAGE**
- Inner Mongolia
- Sheep farming

**WORKING AREAS**
- Grasland persistence and resilience
- Grasland management
- Housing and breeding management
- Herds management practices
- Soil fertility and erosion

**IMPACT AREAS**
- Household welfare
- Improving livestock productivity
- Improving soil quality
- Improving forage use by livestock herds
- Improving forage productivity

**MAIN ACTIONS**
- Monitoring grassland performance used by livestock herds
- Measuring land degradation on livestock farms
- Implementing land management practices for improving livestock productivity

Inner Mongolia Agricultural University
Analysis steps – an example

**Introduction of rotational grazing**

**Production factors**
- Labour
  - Own hours, wage
  - Hired hours, wage
  - Contractor price
- Land
  - Purchase price
- Capital
  - Fences price
  - Machines price
  - Corrals price

**Inputs**
- Seeds kg, price
- Fertiliser kg, price
- Fuel liters, price

**Animal performance**
- Daily weight gain
- Stocking rates
- Number of cycles
- Higher sales price * quantity

**NRU**
- Nutrient balance
- GHG Emissions
- Water + energy use
- Biodiversity