LEAGUE FOR
PASTORAL PEOPLES
AND ENDGENOUS
LIVESTOCK DEVELOPMENT
LIVESTOCK FUTURES
An international Conference about
The Future of Livestock Keeping
Bonn, 6-7 September, 2012
THE FUTURE OF LIVESTOCK KEEPING: WHAT'S AT STAKE?

Introductory presentation by Ilse Köhler-Rollefson
Jordan – 8000 years ago
Evidence of the beginning of animal husbandry
Livestock in crisis – another critical moment?

Livestock is projected as:
- the biggest enemy of the environment
- 18% of total anthropogenic GHG emissions (calculations are being revised)
- responsible for land degradation
- source of pollution (esp. marine and waterways) with nitrogen and phosphorous
  - green tide
- biodiversity loss
In Germany....
Current initiatives

• Global Agenda of Action towards sustainable livestock sector development (GAA) - a multi-stakeholder platform led by FAO, Worldbank, ILRI

• DAFA – German Agricultural Research Alliance has the goal of measurably improving the livestock sector and bridging the gap to societal expectations.
Livestock population bomb

Source: Presentation by Tony Weis: The Meat of the Global Food Crisis
Growth in animal slaughter

Source: Presentation by Tony Weis: The Meat of the Global Food Crisis
Livestock is central to all critical issues

Livestock

- Environment
- Animal welfare
- Public health
- Food security
- Nutrition
- Economy
- Livelihoods
- Climate
LPP’s entry point

- Has roots among pastoralists, especially in India
- Registered as a development NGO/charitable organisation since 2002
- Facilitated the development of Livestock Keepers’ Rights during „Interlaken Process“
- The LIFE Network grew out of this process
Significance of livestock for the poor

✓ 100 million rural poor (defined as existing on less than $2.00/day).
✓ More than 70% are fully and partially dependent on livestock.
✓ Livestock is the most important asset of the rural poor
Pastoralists

- Worldwide an estimated 120 million pastoralists utilize the 41 percent of the earth’s land surface where crops can’t be grown: tropical and subtropical drylands, mountainous and high-altitude zones, very cold areas.
- By means of grazing they convert the local vegetation into food and energy that can sustain people.
Smallholders/women

• About 600-700 million smallholders raise small numbers of livestock on crop residues, left overs, in “interstitial” spaces (along road sides)

• Zero to minimal input, but often highly profitable – interest rates much higher than in bank

• Enables education exit strategy from livestock keeping
Livestock Revolution

- The situation changes when people switch from local breeds to high-input systems, as during the “Livestock Revolution”.

- The Livestock Revolution is a term coined in 1999 to describe a development in the livestock sector which is similar to the “Green Revolution”:

- Local breeds are replaced with high input and high output hybrid animals (poultry and pigs) – farmer loses breeding function and becomes totally dependent on purchased inputs.
From Asset to Liability?

- Farmers often get into a debt trap squeezed between escalating input prices and the consolidated power of the food processors and supermarket chains on the other.

- The financial squeeze “forces many farmers to cut costs wherever they can, and creates strong incentives to unethical behaviour.”
Concentration and consolidation

• In **India**, the most rapid growth in livestock population has been among large landholders, and concerned especially industrial poultry units. The number of stock owned by the poor, including small ruminants, pigs, and poultry, is decreasing dramatically (Chacko in FAO, 2010).

• In **Brazil** (Rio Grande do Sul) the number of pig producers shrunk from 85,000 to 10,000 between 1995 and 2008

• In **Romania**, pig producers declined by 90% in 4 years
Loss of jobs and debts in Europe

Dairy farmers in Denmark

<table>
<thead>
<tr>
<th>Year</th>
<th>Number of Dairy Producers</th>
</tr>
</thead>
<tbody>
<tr>
<td>1984</td>
<td>33,800</td>
</tr>
<tr>
<td>2008</td>
<td>3,780</td>
</tr>
</tbody>
</table>

Debts average € 2.25 million/per farm
€ 19,000/per cow (Mathias, 2012)

Dairy farmers in Germany

4000 (about 4%) are expected to go out of business this year (website Green Party Germany)
So what is the future of livestock?
So what is the future of livestock?

View 2 – FAO, Worldbank, ILRI

- Global demand for livestock products to grow by 70-80% until 2050.
- This demand can only be met by expanding industrial sectors, with emphasis on pig and poultry.
- These systems will create the need for more grain as feed (which will account for more than 40 percent of global cereal use in 2050).
So what is the future of livestock?

View 3

**Livestock production in tune with local resources.**

- There is considerable scope for increasing the output of “decentralised” production systems.

- We need to support and facilitate the optimal utilization by domestic animals of the biomass that is available in remote and marginal areas, as well as in interstitial spaces, for instance along road sides, and improved use of the aftermath on harvested fields.
Advantages of „decentralised“ production systems

• Optimally convert local feed resources into food and energy – are independent of external feed and fodder inputs.
• There is a balance between livestock numbers and available resources.
• Positive effect on biodiversity and not interfering with wildlife
• No problem with accumulation of manure (Integrated nutrient recycling)
• Minimal external energy required (if any)
# Human-Edible Protein Balance in the Livestock Production of Selected Countries (FAO Data)

<table>
<thead>
<tr>
<th></th>
<th></th>
<th></th>
<th></th>
</tr>
</thead>
<tbody>
<tr>
<td>Saudi Arabia</td>
<td>0.19</td>
<td>-659 588</td>
<td>Protein destroying</td>
</tr>
<tr>
<td>USA</td>
<td>0.53</td>
<td>-7 650 830</td>
<td>Protein destroying</td>
</tr>
<tr>
<td>Germany</td>
<td>0.62</td>
<td>-1 183 290</td>
<td>Protein destroying</td>
</tr>
<tr>
<td>China</td>
<td>0.95</td>
<td>-665 276</td>
<td>Protein destroying</td>
</tr>
<tr>
<td>Netherlands</td>
<td>1.02</td>
<td>18 070</td>
<td>~even</td>
</tr>
<tr>
<td>Brazil</td>
<td>1.17</td>
<td>550 402</td>
<td>~even</td>
</tr>
<tr>
<td>Nepal</td>
<td>1.88</td>
<td>40 803</td>
<td>~even</td>
</tr>
<tr>
<td>India</td>
<td>4.30</td>
<td>3 379 440</td>
<td>Protein creating</td>
</tr>
<tr>
<td>Sudan</td>
<td>8.75</td>
<td>340 895</td>
<td>Protein creating</td>
</tr>
<tr>
<td>New Zealand</td>
<td>10.06</td>
<td>638 015</td>
<td>Protein creating</td>
</tr>
<tr>
<td>Mongolia</td>
<td>14.60</td>
<td>35 858</td>
<td>Protein creating</td>
</tr>
<tr>
<td>Ethiopia</td>
<td>16.95</td>
<td>141 395</td>
<td>Protein creating</td>
</tr>
<tr>
<td>Kenya</td>
<td>21.16</td>
<td>202 803</td>
<td>Protein creating</td>
</tr>
</tbody>
</table>
Nutritional value of livestock products from biodiverse production systems versus soybean/corn diet

- Pasture-raised foods have higher levels of vitamins, a healthier balance of omega-3 and omega-6 fats than conventional meat and dairy products.
- Milk from pasture-fed cows has as much as five times the Conjugated Linoleic Acid (CLA) as milk from grain-fed cows.
- Meat from pasture-fed cows has 200-500% more CLA as a proportion of total fatty acids than meat from cows that eat a primarily grain-based diet. iv
- Eggs from poultry raised on pasture have 40% more vitamin A and 400% more omega-3's.
Two models of livestock production

**High input, specialised**
- Financial investment
- Genetics
- Concentrate feed
- Housing
- Energy
- Additives
- High output

**Low input, multi-purpose, decentralised**
- Locally adapted breeds
- Local vegetation
- Ecological, sustainable output
- Human care
- Financial investment
Concentration in the feed industries

In 2003, the ABCD firms controlled 73 per cent of the global grain trade.
Concentration livestock genetics industry
Pharmaceutical industry

Less than 10 companies control more than three-quarters of the animal pharmaceutical market.
By contrast....

• Livestock keepers are dispersed and un-organised
• Their contribution to the livestock economy is underreported (often does not enter national statistics) and undervalued.
• They are almost never consulted when livestock policies are designed
• Are not represented in multi-stakeholder platforms

Although they are the key stakeholder group!
FAO’s State of Food and Agriculture Report (SOFA) 2009:

“The contribution of the livestock sector to poverty alleviation should be enhanced through **appropriate policy reform** and **investments** within a framework of broader rural development policies”

So what are the most **appropriate policy reforms and investments** and how do we support small-scale livestock keepers?
„Livestock Keepers‘ Rights“
**Right No. 2:** Livestock Keepers shall have the right to participate in policy formulation and implementation processes on animal genetic resources for food and agriculture.
Biocultural Community Protocols: A tool for invoking Livestock Keepers’ Rights locally

The concept originated from Convention on Biological Diversity (CBD) process. Now backed by the Nagoya Protocol on Access and Benefit-Sharing. Provides livestock keepers with the opportunity to document their role in sustainable food production and biodiversity conservation.
Livestock Futures?

- Livestock keepers are essential for animal husbandry and sustainable livestock systems.
- Livestock is necessary for income generation and upholding biodiversity.
- Livestock and its keepers are inseparable.
- **Livestock Keepers need a voice!**
Thank you!