Livestock on the Line and other Cows' Stories

Livestock is on the line, attacked by climatologists, environmentalists, dieticians, disease controllers, children feeling for animals and, last but not least, International development cooperation agencies. Now, as 12,000 years have passed since the first shepherd met the first goat, the future of livestock is uncertain. All the anti-livestock movements of climate savers and urban-socialised decision-makers have well-founded arguments in their specific areas of expertise to advance their quest for getting livestock out of the way. Yet, what they miss is the big picture.

5600 BC: Around seven and half millennia ago, cows survive the first written record of a probable eco-disaster together with wild animal species. While frequently disputed as a legend, scientists at Columbia University link the Sumerian deluge to Noah's Ark biblical myth.

400 AD: The Egyptian civilisation is slowly disappearing. Lyre-horned cows appear in ideograms as means of transport and precious source of milk and meat. The Egyptian *ka* part of the myth of Osiris and the bull Api not only survive as a root in the word cow in many African languages, but the same cows descendant from the pharaohs' herds can still be seen grazing on the African grasslands.

1992 AD: The first international response to climate change is launched at the Earth Summit in Rio de Janeiro. This leads to the signing of the Kyoto protocol in 1997. The concentrations in the atmosphere of greenhouse gases, such as carbon dioxide and methane, which is 100 times more potent, have to be reduced to avoid interference with Gaia, the earth climate system. Rice, meat and milk production are put on the hook as major contributors of methane emissions.

2050-2100 AD: The earth's temperature might have increased by 4 °C due to the combination of anthropogenic greenhouse gases with a natural earth warmer phase. It is the +4 °C scenario. A world map published by the New Scientists in February 2009 gives a glimpse of a cooked world turned into a desert at today's temperate and tropical latitudes. Agriculture is only possible around the Poles, which triggers mass human migratory fluxes. Most scientists agree that even before the end of the century, it will become impossible to avoid the occurrence of all this. The debate is on how soon it will happen, and how many can survive.

Today's Mauritania: A semi-desert disappears in the Atlantic Ocean. Regions called "the granaries of Mauritania" only 15 years ago, where rain-fed sorghum and millet were produced, are the degraded vestiges of once fertile fields today. The UN-funded World Food Programme (WFP) is the new country granary. In the Soninkè villages, traditional farming areas, imported staple cereals are bought via cell phone transfers made by relatives who have migrated to France. What thrives in Mauritania is the herds of the pastoralist Maures. Camels, sheep and goats and the long-horned white Fulani cattle browse on the scanty shrubs and standing hay. Meat exports in the Maghreb and neighbouring countries represent 20 percent of the country's GDP. Meat and milk are the staple diet of poor households, too.

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What have these stories in common?

Even if many regard climate change as a Trojan horse built by hair-shirted environmentalists, a first connection is apparent. It is plausible to think that humanity will experience again, at a global or local scale, an extreme instability of the natural or social environment, affecting the base of food production. A second common ground is that domes-

tic animals have always played an important role in food, culture and the economy.

What can be learnt from these stories?

1. We need to preserve genetic biodiversity of domestic animals as a natural resource and prepare future generations and the poor to survive dramatic changes in the natural environment that are often associated with political and economic failures.
2. We need to appreciate the crucial role of livestock in transforming, in the varied earth environments they have adapted, what cannot be consumed by humans into high value food.
3. Based on the case of Mauritania today, we have to ensure a positive transition of life-style for the rural poor on the way to the +4 C scenario in those countries that lack the capacity to slow down rural exodus and the resources to invest in large scale, sustainable, intensive food production.

This calls for governments to consider livestock as global public goods and prioritise measures

- to limit the impact of industrial livestock farming without reducing poor people's capacity to feed themselves
- to harness livestock's potentials in waste recycling as a key protein source for nutrition and food security
- to invest in sustainable intensification of meat and milk production, based on equity business models benefiting smallholders but not necessarily focused on smallholders' systems.

Cows have been emarginated from our contemporary civilisation by the economic growth development model. Environmental fixes should focus on more obvious methane sources not requiring complex changes of consumption patterns or controversial carbon taxes on staples, such as meat, rice and milk. Cows and other domestic animals have to be re-integrated into society in order to shape the future of food development for the crowded cities of tomorrow and those left outside in rural areas.

Photo: gtz

Livestock industry has marginalised to a production factor the millenary relationship established between man, animals and environment.

Zusammenfassung

Die verstärkte Nachfrage nach tierischen Produkten, vor allem in den Volkswirtschaften der Schwellenländer, gibt Anlass zu Sorge um die Umwelt. Die Viehwirtschaft hat das Jahrtausende alte Band zwischen Mensch, Tier und Umwelt zu einem reinen Produktionsfaktor reduziert. Moderne Großerzeuger, die städtische Supermärkte und Megastädte mit tierischen Produkten versorgen, sind nur ein Aspekt einer hochkomplexen Realität. Von der Viehzucht leben 80 Prozent aller Armen weltweit, vor allem in den ariden und gebirgigen Gebieten der Erde. Aus globaler Sicht ist es dringend erforderlich, die Tierproduktion verstärkt als öffentliches Gut zu sehen. Um wirtschaftlicher Unsicherheit und Umweltveränderungen gewachsen zu sein, müssen tiergenetische Ressourcen nachhaltig gesichert werden, denn sie sind multifunktional und besitzen die einzigartige Fähigkeit, nicht essbare Rohstoffe zu wertvoller Nahrung zu verarbeiten. Rinder sind keine Bedrohung. Die Geschichte hat uns vielmehr gezeigt, dass sie eines der größten Erfolgsmodelle der Natur sind.

Resumen

La creciente demanda de productos animales, especialmente en las economías industriales emergentes, es motivo de graves preocupaciones ambientales. La industria ganadera ha convertido la milenaria relación establecida entre el ser humano, los animales y el medio ambiente en un factor de producción marginal. Las modernas "zoopolis" que proveen productos animales a los supermercados urbanos y las mega-ciudades son sólo un aspecto de una realidad más compleja. El ganado provee ingresos y alimentos para la subsistencia del 80 por ciento de los pobres del mundo, especialmente en las áreas desérticas y montañosas del planeta. Desde una perspectiva global, existe la urgente necesidad de volver a concebir la producción ganadera como un bien público. A fin de afrontar las incertidumbres económicas y los cambios ambientales, los recursos ganaderos deben ser conservados de manera sostenible, dada su múltiple funcionalidad y su excepcional capacidad de transformar la materia no comestible en alimentos valiosos. Las vacas no son una amenaza. La historia demuestra que son uno de los mayores éxitos de la naturaleza.