Food safety and animal health in the Abergelle Tigray sheep and goat value chain

**Background**

Most inhabitants of Abergelle Tigray are Orthodox Christians hence production and sales are influenced by national and religious holidays. Goat production is seasonal with peaks in November-December. The predominant production system is mixed livestock and crops. Most milk is produced after the rainy season from August to September when sufficient feed is available.

**Value chain challenges**

The main meat production constraints in Abergelle Tigray are predation followed by starvation (Figure 1). Religion plays a role, as 70% of the year is dominated by fasts when meat sales are limited. During food shortages, sheep and goats are often sold (at low prices due to their poor condition) to buy grains and staples. Milk is very important, but its availability is reduced by feed scarcity. After the rainy season when feed is abundant, butter, yoghurt and cheese are produced. Some of the extended fasting periods overlap with periods of peak production (November-December) so much production is under-utilized.

Generally there is a lack of meat in people’s diet. If meat is available, men receive the best parts. Women do not drink whole milk.

**Livestock mortality**

The main reasons for livestock deaths in the region are predation then starvation (feed scarcity). Deforestation and erosion lead to seasonal feed shortages. In case of diseases, veterinary services are said to be mostly absent, faulty or insufficient.
Food safety

Abergelle Tigray people care for food safety. They have some knowledge they use to mitigate foodborne zoonoses. Some observations include:

- Diseased animals are not consumed. There are some reports of emergency slaughter and consumption of diseased animals.
- Malaria is associated with milk consumption by Abergelle people. This could be a coincidence, attributable to synchronicity of peak milk production and consumption with the onset of the malaria season. It may be that people acquired a milk-borne zoonosis and misinterpret the symptoms.
- Slaughter is done carefully and smell, colour and texture are used to assess meat quality and safety. Meat considered to be unsafe is trimmed and boiled thoroughly.
- Milk is only sometimes consumed raw, and milk containers are usually smoked before use. Suspicious milk is not consumed.
- Milk is often processed into butter, yoghurt or cheese.

Future goals

During the value chain assessment process and subsequent discussions (early 2013), stakeholders from the district identified the following vision for their part of the small ruminant value chain development program in Ethiopia: By 2020: We endeavor to see (safe) sustainable and market oriented Abergelle goat farming benefiting all actors and satisfying consumer requirements and contributing access to balanced nutrition for all.