Herd management and livestock productivity in Altai mountain of western Mongolia: role of seasonal mobility

Munkhnasan Tsevegmed[1], Eva Schlecht[1]

[1]Animal Husbandry in the Tropics and Subtropics, University of Kassel, Germany

www.watercope.org

IFAD Enabling the rural poor to overcome poverty

Hypotheses

- Present herd management and pasture utilization lead to land degradation and decrease of water availability as well as of herders' income.
- Current amount and quality of vegetation growing on high altitude pasture do not allow for a high level of livestock production.
- Livestock production can be increased by developing appropriate herd management strategies and improving water supply at the pasture.

Objectives

Against the above hypotheses, the study aims to assess the impact of land use and livestock management changes on the availability and nutritional quality of vegetation, livestock production and productivity

From gained insights sustainable livestock and pasture management strategies for the target region will be identified.

Specific tasks:

- Characterize herder households and herd management;
- Identify current nutritional situation and livestock productivity of the herd;
- Determine the grazing itineraries and grazing behavior of livestock herds on pasture;
- Asses efficiency of resource conversion into meat and offspring, and the sustainability of current and alternative herd management options, thereby trying to harmonize ecological and economic aspects.

Figure 2. Assessment of pasture vegetation along the grazing itinerary of livestock herds

Figure 1. Sheep grazing with GPS device and faecal collection bag

Materials and Methods

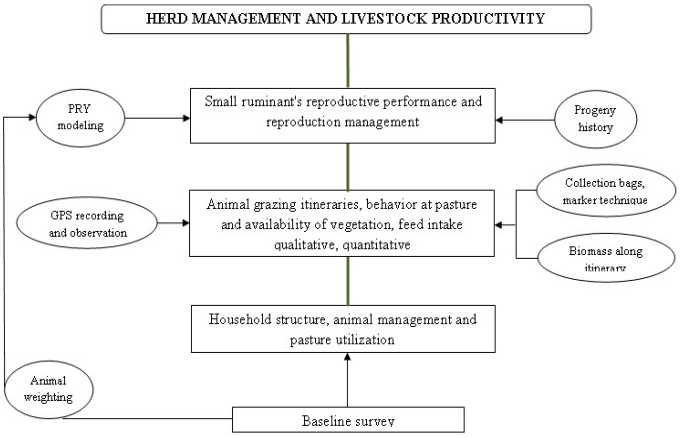

Figure 3. Data collecting approaches and data bases for the PhD thesis (ovals), and outputs of data analysis (rectangles)

Table 1. Schedule for data collecting, analyzing and thesis writing

Period	Activity
06 – 09 / 2012	Baseline survey in 125 households (HH)
01 – 03 / 2013	First data analysis & selection of HH for in-depth studies
05 – 09 / 2013	Field studies: quantification of intake, grazing itineraries (Fig. 1), grazing behaviour, biomass availability (Fig. 2) and reproductive parameters in goats.
12 / 2013 – 04 / 2014	Data analysis and lab work, drafting of first results chapter
06 – 09 / 2014	Field studies: quantification of intake, grazing itineraries, grazing behaviour, biomass availability & reproductive parameters in sheep; body weight determination in sheep and goats.
10 / 2014 – 06 / 2015	Data analysis, sample analysis in lab, writing second and third results chapters (Fig. 3)
07 – 10 / 2015	Writing general introduction and general discussion, handing in thesis
12 / 2015	Defence of thesis