P21. The role of yak milk in the local development of the Qilian Mountains, Tibetan plateau, China

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The sustainable management of the rangeland is a great challenge for China due to the huge rangeland area (around 6.5 million km² or 2/3 of the country, mainly in the North and West), and his role in water supply, soil erosion and biodiversity conservation. So, specific public policies have been launched since the end of the 70s in order to reduce the herd management impacts on the rangeland degradation. The Qilian Mountains are located in the North-Western part Tibetan Plateau, along the ancient "Silk Road". The household herds are composed of 40-80 yaks and 150-200 sheep. The herd management is based on the mobility from the winter-spring pastures in the lowlands (2500-3000m) to the summer-autumn pastures in the highlands (3200-4000m). The yak milk production is a major function of the herd, especially for home consumption and income of dairy products (butter, yogurts, ...). But the daily production is low, less than 1.5-2 I/day/yak, needs a lot of time and the price is not very attractive compared to the other productions. A similar trend exists for the wool of yak and sheep. So many breeders do not milk more, or just for the home consumption, and give priority to the meat production, both yak and sheep. However, the first results of our research show the multi-functionality of the herd as a key-factor the resilience of these socio-ecosystems. Especially the yak milk production appears a good business in some conditions. Moreover, by increasing the productivity per animal, it allows to reduce the pressing on the pasture. So, the research-development challenge is, using participative methods and technical knowledge, integrate efficient innovations into these socio-ecosystems, including new rangeland management practices, new accesses to the market and relevant public policies, in order to boost the local development based on yak milk production.