The Possibility of Indigenous Ox-Plow Agriculture in Africa: A Focus on Human-Cattle Relationships among the Oromo of the Centlal Ethiopian Plateau

2nd year student Nepal Field School Research Area: Ethiopia Toshikazu Tanaka

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Background and objectives of my research

People in the central highlands of Ethiopia rely on traditional form of agricultural practices that are strongly tied with livestock raising, particularly that of cattle. People use cattle (oxen) as important sources of agricultural input. Ox-plow agriculture in this area has achieved self-sufficiency in food production although arable land areas are limited. Therefore, cattle in this area are considered as one of the most important resources for the farming systems. Cattle have multiple functions. They provide the basis of livelihood such as: 1) manure for important crops; 2) foods, especially milk and occasionally meat for the family; 3) traction for plowing; and 4) a source of wealth that can be cashed in times of need. Cattle are also kept to show the scale of wealth and as a symbol of prestige among farming communities.



Fig.1. A man cutting beef.



Fig.2. Oxen plowing the field.

The objective of this research is to understand the indigenous ox-plow agricultural systems in the central highland of Ethiopia from the viewpoints of ecological anthropology, history, and agricultural science including livestock breeding. The study will focus on various aspects of the relationships between people and cattle in the area.

Interim Result and discussion

Each cattle nutrition condition was examined simply using BCS (Body Condition Score). It is a method used in livestock breeding science. As a result, plowing oxen remain in better condition as compared to bulls and cows. I think that oxen are the most important among all other cattle for plowing within the agricultural community, and I plan to conduct further research on its importance from the aspects of stock breeding science and ecological anthropology.

Weights of manure (dung) collected by people were measured in dried state and its local usage by the farming community was studied. Its use was not only limited to manure for important crops, but also for building materials and fuel source for cooking. The demand of dung for cooking consumption was found to be higher among the community. Wet manure was not included for this analysis and awaits further research.



Fig.3. A boy collecting dry dung