

Mahdi Egge Mude 2011: Collective Actions and Local Institutions in Managing Rangeland Resources in Somali Region, Ethiopia. Doctor of Philosophy (Tropical Agriculture), Major Field: Tropical Agriculture, Interdisciplinary Graduate Program. Thesis Advisor: Associate Professor Pichai Tongdeelert, Ph.D. 198 pages.

The main objectives of this research were to describe the characteristics of pasture resources and pasture resources users; institutions that regulate access to and control over the rangeland resources and the interaction between organizations; the types collective actions; and analysis of factors affecting adoption of improved sorghum varieties. The research methodology employed was both qualitative and quantitative techniques. Data were collected using focus group discussion and survey for qualitative and quantitative techniques respectively. Data were analyzed through narrative and ethnographic analysis for qualitative data; and through use of descriptive statistics (percentages, mean and standard deviation), X^2 , T -test and logistic regression model for quantitative data analysis.

The findings reveal that pasture resources, in the study area, have clearly defined boundaries, which primary users use to identify their territory from others. Moreover, the attributes that pasture resource exhibited are high mobility and storage, which enable the resource users to reasonably ensure their livelihood. Pasture resource users were entirely dependent on rangeland resources, had system of assessing the condition of their rangeland resources, trust each other, developed reciprocity arrangements, have autonomous to devise their own institutions and have past experiences of self-organization. There are many ways in which agro-pastoralists have adapted to the uncertainty of their environments, but a key feature is their strong social organization and customary institutions. The use of rangeland resources is regulated and conflicts are resolved by well-established rules and norms (*xeer*).

Government and non-government organizations were found to have been important in managing and conserving rangelands at the local level. However, they operate in very separate world and isolated from the wider experiences of others, and fail to see themselves as part of a broader agricultural technology system. The research conducted also was identified four kinds of collective actions, such as collective herding, labor sharing group, *mag*-paying group, and constructing ponds and water wells, with distinct rules of managing the collective activities. Furthermore, age of household head, farm size, distance to input market and type of house owned were found to have a significant influence on the adoption of improved sorghum varieties.

Student's signature

Thesis Advisor's signature