



Deutscher Tropentag, October 8-10, 2003, Göttingen

“Technological and Institutional Innovations  
for Sustainable Rural Development”

## Delivering Systematic Information on Indigenous Farm Animal Genetic Resources of Developing Countries — The Development and Prospects of DAGRIS

WORKNEH AYALEW, J. EDWARD O. REGE, EPHREM GETAHUN, MARKOS TIBBO, YETNAYET  
MAMO

*International Livestock Research Institute (ILRI), Animal Genetic Resources Group, Ethiopia*

### Abstract

This paper describes the objectives, historical development, structure, functionality, content, utility and future prospects of the Domestic Animal Genetic Resources Information System (DAGRIS) of ILRI. This public-domain electronic database is designed to cater for the needs of researchers, policy makers, development practitioners, teachers, students and farmers in developing countries for efficient access to available published and grey literature from past and present research results on the origin, distribution, diversity, present use and status of selected farm animal genetic resources (FAnGR). It is currently available, free of charge, on the web as well as on CD-ROM. It is argued that information on the extent of existing genetic diversity, characteristics and use of FAnGR in developing countries is the basis for their present as well as future sustainable utilization. In developing countries, neglect and lack of accurate information on the diversity and status of the existing farm animal genetic resources are believed to exacerbate the alarming rate of irreversible loss of genetic diversity. Such losses reduce opportunities to improve food security, alleviate poverty and attain sustainable agricultural practices. The other known threats to their conservation are droughts, post-drought livestock restocking schemes that do not take account of undesirable consequences on the indigenous genetic resources, civil strife, well-meant crossbreeding programs that get out of control, lack of markets and gradual shifts in socio-economic settings of traditional communities, which happen to maintain the majority of the surviving indigenous farm animal genetic resources to date. The situation is alarming indeed because 16 % of the finite set of 7000 unique populations (breeds or strains) have been lost since the beginning of the 19<sup>th</sup> century, and a further 32 % are at risk of becoming extinct. Yet the rate of extinction, currently at two breeds per week, is expected to accelerate. The content and functionality of DAGRIS is designed to enlighten all stakeholders, in an efficient way, on the status as well as particularly useful attributes of recognised livestock breeds at the level of individual countries. It is also intended to provide the necessary decision-support tools for the development, sustainable use and conservation of selected FAnGR.

**Keywords:** Conservation, database, developing countries, domestic animal genetic resources information system (DAGRIS)