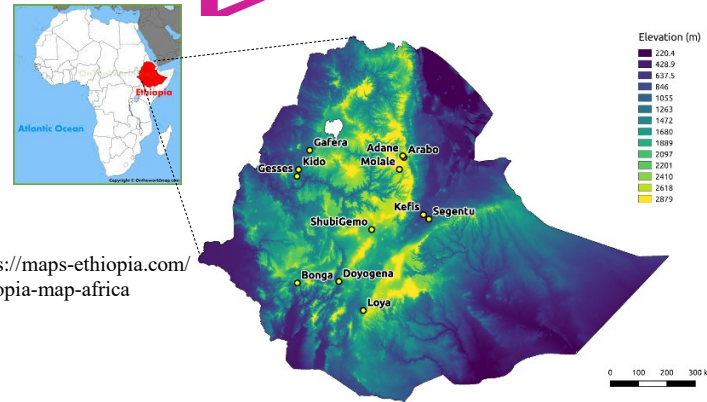




Motivation: Livestock subject to both artificial and natural selection

Ethiopia viewed as gateway into Africa for domesticated cattle and sheep

Ethiopia has wide range of agro-ecological zones and extensive genetic diversity of sheep

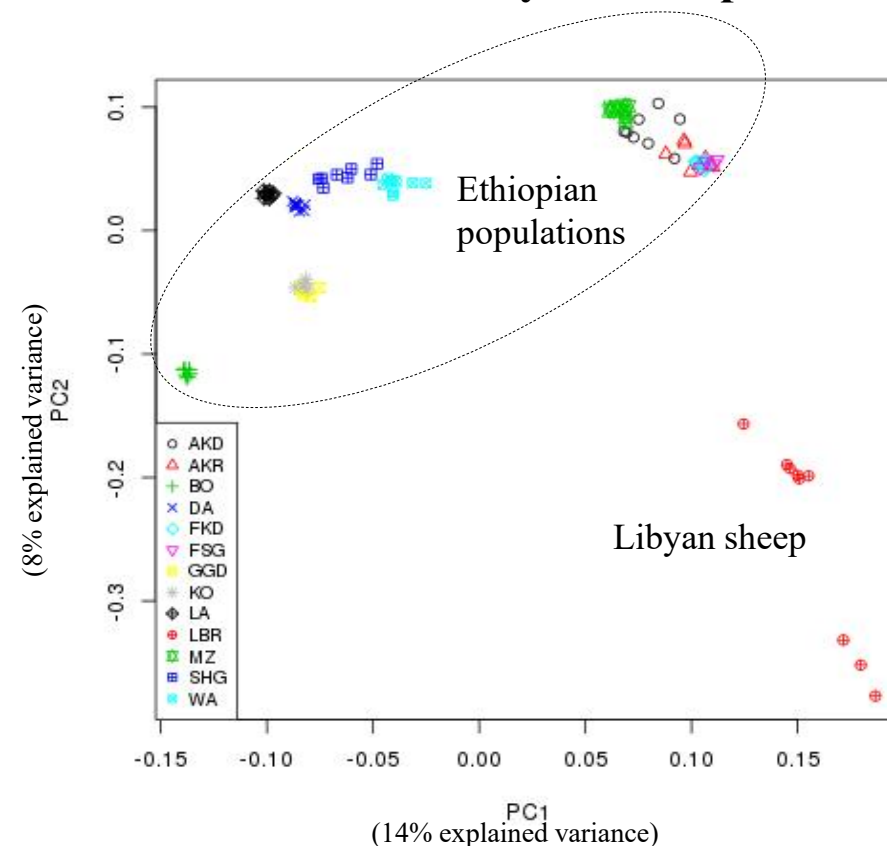
Lower productivity but greater environmental resilience of native breeds vs. improved breeds

Aim: Use of environmental measurements as proxies for adaptation-related phenotypes
→ identification of genomic regions associated with environmental adaptation

Key result: Environmental Association Analysis (BayPass) revealed greater number of genomic associations for precipitation-related measures than measures related to altitude or temperature



Genetic diversity of Ethiopian sheep



Greatest number of genomic associations identified for measures related to precipitation

