THE DYNAMICS OF ANCIENT *TULA* WELLS CULTURAL LANDSCAPE: ENVIRONMENTAL AND SOCIAL HISTORY

Tula wells

- One of the ancient water systems in Eastern Africa
- Nine tula well complexes-Tula salan
- Main source of permanent water during dry season (about 90 %)
- Important culturally, politically, socially, religiously, and economically
- Key resource in Borana pastoral production



cont



Borana perception of the wells

- Pivotal roles of wells explained by linking to family, cattle economy, and peace of Borana(Nagaa)
- Elli loon (the well is cattle)
- □ Elli Niitii (the well is wife)
- Elli warra (the well is a family)
- □ Elli handhura (the well is nuclear, inherited)

The Dynamics of wells reflect:

 Historical imprints of natural disasters like floods, droughts, and epidemics

 Socio-political disturbances that disrupted the system and influenced the operation of wells

What influence the operation of the wells?



Impacts of flood

Collapse many wells

Influence water availability and hence livestock production

Re-excavation demand huge cattle investment

Droughts

- Collapse cattle economy
- Collapse in cattle economy resulted in famines,
 causing human demographic decline
- Force pastoralists to abandon the well, resulting in disuse

Re-opening require investment and human labour

Some of the droughts remembered by folklore Songs (1768-1776; 1808-1816) as:

Oolaa Bulee Dhadacha drought of gada Bule Dhadacha

Oolaa Saaqoo Dhadacha drought of gada Saaqoo Dhadacha

Oolaan abbaa fi ilmaa the droughts of fathers and sons

Duuti haadhaa fi ilmaa death is that of mothers and offsprings

Climatic variability and water availability

Change in water table reported

 Forced pastoralist to dig down, and modify use rules

 Concentrate on few, abandoning the less productive wells

Recent changes

- Land use changes
 - Settlement in dry season grazing
 - Expansion of cultivation
 - Increased private ownership of land and shrinkage of grazing land
 - Abandonment of wet-dry season grazing system
 - These threatened the operation of the wells

Conclusion

 The dynamics of the well is connected to pastoral economy

- Climatic variation influence the operation of tula wells (use, disuse), and hence pastoral production
- Status of tula wells is related the health of pastoral production and hence livestock marketing