

Status of Activities on Conservation of Farm Animal Genetic Resources in Botswana



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Background cont'd



- In Bots. L/stock vital due to low unreliable rainfall (persistent droughts)
- But indigenous breeds are adapted
- Local Threats to existence of Breeds
- indiscriminate crossbreeding
- Other threats: livestock diseases e.g. CBPP, FMD, Newcastle, drought



Drivers to National AnGR Activities

- GoB NDP Project on Conservation of Indigenous Livestock Species.
- **FAO/UNDP/SADC Regional Project**
- Botswana's membership in the FAO's Intergovernmental Technical Working Group for AnGR (ITWG-AnGR)



Involvement of AnGR Stakeholders

- National Priorities identified by Stakeholders, 14 – 15 Sept. 1999 under FAO/UNDP/SADC Project
- 15 member National Advisory Committee, NCs on FAnGRs appointed
- DAR- National Focal Point
- Regional Focal Point - Pretoria
- Global Focal Point - Rome.



Activities identified in 1st W/shop in 1999:

- Breed surveys & data base
- Characterization of indig. Spp
- Development of National Training plans on FAnGRs work
- Initiate the development of livestock recording schemes



Other Issues Raised

- NFP to lead in initiating plans and FAnGRs policy development
- Legislation on conservation & sustainable use – awareness, avoid uncontrolled crossbreeding etc
- Concerns on Intellectual Property Rights
- Need for GMOs & Biosafety legislation
- Review of obsolete legislation



Policy & Capacity Devt Achievements

- Awareness created on AnGRs
- Local & international networking
- Guidelines on the Devt of National and Regional Policy on AnGR developed by SADC Project
- Capacity built (equipment, training)
- L/stock Improvement Act enacted



Achievements Characterization cont'd

- A survey completed on Indigenous pigs
- Physical characterization of other species (goats, sheep, pigs)
- Breed Standards for Tswana sheep & Goats developed
- Molecular characterization (cattle, goats, sheep, chickens)
- Material Transfer Agreement Form



Characterization contd

- Studies initiated (breed survey, characterisation)
- Breed Field Guide developed
- Local material assembled for virtual library



Mainstreaming of AnGR into National Plans

- AnGR issues are covered in:
- National Devt Plans 8 & 9 projects
- National Biodiversity Strategy and Action Plan
- State of the Environment Report
- National Biosafety Framework
- GEF-Small Grants Programme



Achievements on Conservation

- GENEBANK constructed: (For storage for germplasm in liquid Nitrogen, DNA & repro work)
- Equipment (A.I.Cryo vessels, DNA analysis)
- National Beef cattle performance recording and Testing Scheme

Indigenous L/stock Spp Purchased

SPECIES	SITE	ORIGIN	Total Purchased	Current Total
Cattle	Makhi	Boteti	55	122
Sheep	F/town	F/town	50	54
Goats	F/town	F/town	50	119
Chickens	Sebele	F/town, Central* Western*	51	131
Pigs	Sebele	S.E.-7, Kgat-5, Kwen-2	15 (M9 & F6)	27



National/Regional/Global AnGR Networking

- Collaboration with BCA, DAHP, SSBA, ILRI, ARC-AII (RSA)
- 2nd Phase of Regional Project pursued
- Bots-Member of ITWG-AnGR
- Participated in the SoW 2003/4
- Interlaken Global Conference Sept 07



Future Activities

- Follow up on SoW /GPA recommendations
- Pursue community based approaches
- Genetic Resources Policy
- L/stock Improvement legislation to provide oversight structure

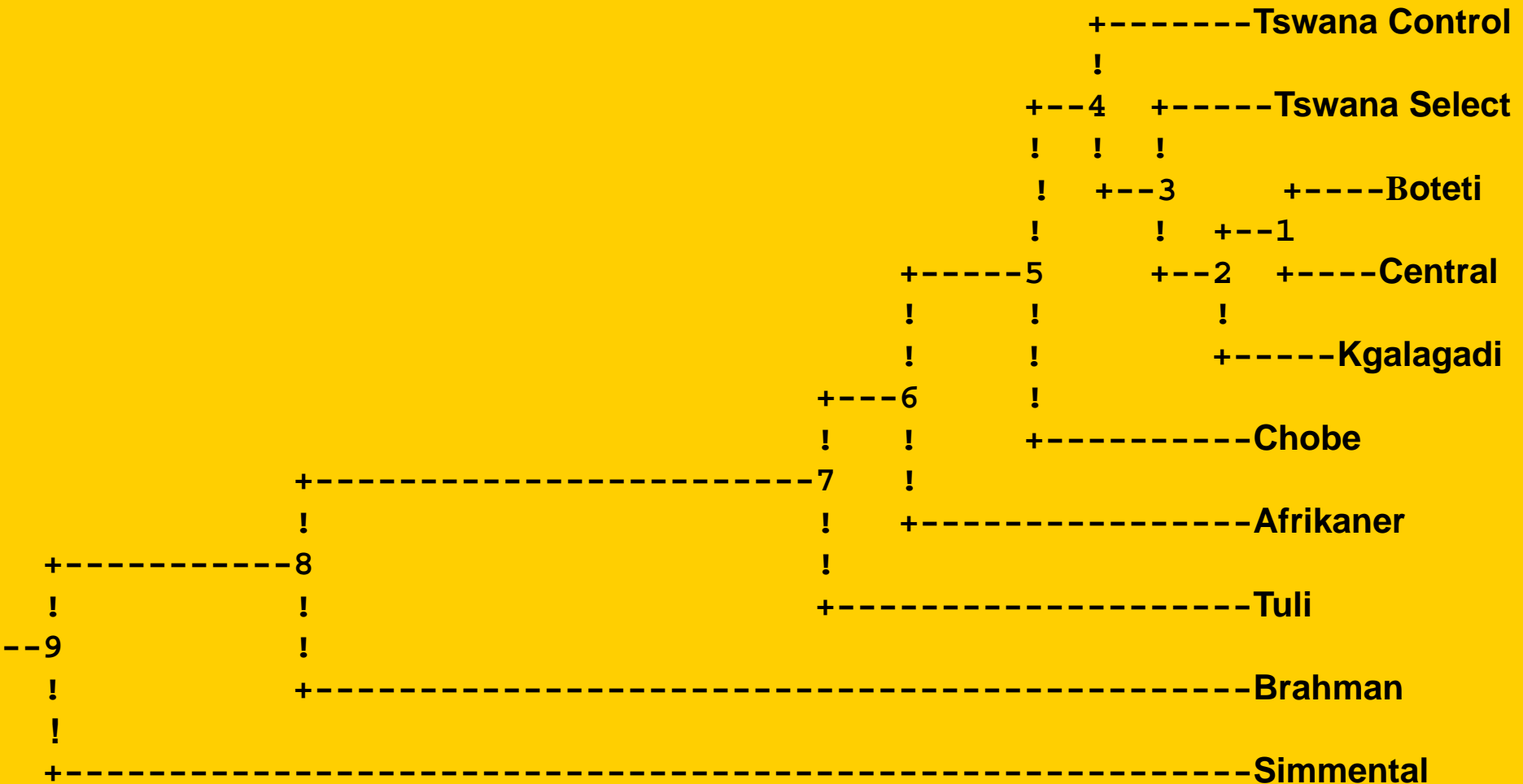


Future Activities- Research Agenda

- AnGR Strategic Plan Activities

- To cryo-preserve germplasm of 5 farm species (cattle, sheep, goats, pigs, camels):
- To investigate the meat quality and adaptational traits of indigenous breeds (cattle, sheep & goats, pigs)
- To evaluate the performance of indigenous breeds under improved management (Chickens, pigs)

Figure 1. Dendrogram (based on Nei's (1978) Genetic distance) for all the Tswana populations and Reference breeds





THANK YOU!!!
