

**APPENDIX A: INTERVIEW DATA FOR AGROPASTORALISTS FROM
NORTHEASTERN BOTSWANA**

Date: 6 June 2000

Village: Lentswe Le Moriti, Botswana

Population: ~250

Map Coordinates: 22.20572S/029.03974E

Person Interviewed: Male Village Leader

Crops:

- Main crops: sorghum, beans, peanuts, butter beans
- Fields are located 5 to 10km from the village
- Small garden lots around some houses in the village
- Plowing begins with the first rains, usually at the end of September/beginning of October
- Fields are planted by December
- Fields are only rainfall fed
- All varieties planted in the same field, but in different rows
- Weeding begins in January
- Harvest begins at the end of May and continues through June and July
- Soil considered important criteria for field selection. The soils needs to be easy to plough and retains moisture
- At the beginning of the plowing season people move to the land
- Men help plough and clear the soil, and harvest the crops
- Women are stay at the fields to tend to the crops, men return to the village or the cattle kraal
- People return to the village during the dry season
- This year the crop was poor because there was too much rain, and the birds ate the seeds

Livestock:

- Main livestock: cattle, goats and sheep
- Cattle, goats and sheep kept at cattle posts located ~20 to 30km from village
- Cattle will graze up to 25km away from the post
- Goats and sheep will walk several kilometers, ~10km, to find the fruit of the Umbrella Tree; considered favourite food
- During the wet season livestock stays around the kraal
- Most grasses are gone by the dry season
- During the dry season the cattle do not like the Mopane leaves very much, but will browse on other tree leaves and fruits, this often extends into September and October
- During the dry season livestock is taken the riverbeds to graze
- If there is a borehole at the cattle post, livestock will stay there during the dry season, as there is enough water

Further Information:

- Town was initially settled in 1953, and then people left (no leaving date given); moved back to the village in 1988
- Elephants are a problem during the dry season; attack people and livestock; attribute crop and vegetation loss to elephants
- The Limpopo use to flow from January to January
- 1997 drought killed many of the cattle

Date: 6 June 2000

Village: Mothabneng

Population: ~1500

Map Coordinates: 22.17895S/028.87668E

Persons Interviewed: Male Village Leader (came to the area in 1952); Farm Labourer

Crops:

- Main crops: sorghum, beans, millet, maize, sunflower, malapalm
- Fields are ~5 to 15kms from the village
- Plow and plant crops between November and December, but may take place up until February, depending on the rains

- Women take care of the crops, but men, women and children all help plow
- All of the seeds are planted at one time, but different crop in different rows
- Rely just on rainfall
- Some people have gardens associated with their village house
- This year the sorghum crop was ruined do to birds and the heavy rains
- Purchase seeds from other places when crops fail

Livestock:

- Main livestock: cattle, goats and some sheep
- Livestock are kept at cattle posts located between ~5 to 10km from the village
- Cattle looked after by the men, boys look after sheep and goats
- Cattle stay near the cattle post during the wet season, but taken further away during the dry season to browse when there is no grass
- After crop harvest, livestock feed off of field stubble

Further Information:

- Elephants cause damage to crops
 - Cattle and field posts are located on flat plain between the river and rocky outcrops that are ~1.5km from the river
 - Some crops are planted near the river bank, while others fields are located further back along the flat plain
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Date: 7 June 2000

Village: Mathathane

Population: ~3000

Map Coordinates: 22.27753S/028.75397E

Person Interviewed: Male Village Leader (born in the village in 1942)

Crops:

- Main crops: maize, sorghum, watermelon, beans, pumpkin
- Fields begin at the edge of the village
- Plow and plant between October and January
- Pray for rain on 1st October of each year
- All crops are planted at the same time, but in separate in rows
- Sorghum and maize harvested at the same time
- Both men and women participate in the planting and harvesting
- This year rain spoiled all the crops
- Even with little rain crops will grow, especially sorghum

Livestock:

- Main livestock: cattle, goat, sheep, donkey and horses
- Cattle, goats and sheep are kept at cattle posts
- Livestock kept away from crops, but once crops are harvested they allowed to graze off of the stubble
- Livestock, mainly cattle, are taken to the river during the dry season

Further Information:

- Most the 3000 people are farmers
 - This year elephants also contributed to the ruining of the crops
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Date: 7 June 2000

Village: Madiope Cattle Post 1

Population: 7 people in 1 house homestead

Map Coordinates: 22.09244S/028.01552E

Person Interviewed: Male Farmer

Crops:

- No crops grown, has only lived here for 2 months

Livestock:

- Owns 15 cattle, 30 goats and some sheep
 - Goats and sheep stay near to the post during the day; cattle wonder further, but are herded back to the kraal in the evening
 - At the start of winter the livestock will eat all the vegetation and no longer just grasses
 - Cattle, goats and sheep all give birth at the end of winter; nearly all live
 - Selected location because of nearby stream; do not need to move livestock in the dry season
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Date: 7 June 2000

Village: Madiope Cattle Post 2

Population: 2 house homestead; ~100 in the area

Map Coordinates: 22.09244S/028.01552E

Person Interviewed: Female Farmer

Crops:

- Main crops: sorghum, maize, watermelon, beans
- Selected field location based on soil that is good for the crops
- Plow fields in November and December
- Fields located near to the homestead
- Fields divided according to the crops
- Women and children look after the fields
- Ceremony for rain and good crops done in the village
- This year the rains destroyed the crops

Livestock:

- Main livestock: owns several cattle, goats and sheep
 - Goats and sheep usually give birth in May
 - Cow usually calve near the end of October
 - Livestock will roam between ~5 and 10km from the homestead
 - After the crop is harvested, livestock feed off the stubble
 - Cattle are also feed stock feed
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Date: 7 June 2000

Village: Majale Cattle Post

Population: 18 people in 4 house homestead; associated with the village of Semolale

Map Coordinates: 22.09244S/028.01552E

Person Interviewed: Female Farmer (family moved to area in 1967)

Crops:

- Main crops: maize, sorghum, watermelon, beans, pumpkins
- Between September and November plow fields and plant crops
- All crops are planted at the same time in the same field
- All crops harvested at the same time, mainly in June
- This year there was a good harvest of beans and watermelon, but sorghum did not do well because of too much rain
- Homestead and crops are within 200m of the Majale Rver, soils are good for crop growth
- Rain ceremony preformed in village just before the start of the rainy season
- If crops fail due to drought or too much rain, will eat the root of the Shepard Tree and make porridge and tea from it as well
- Sorghum is most versatile crop

Livestock:

- Main livestock: goats, sheep, donkey

- Livestock kept at the homestead
- Livestock will wonder far during the day, but will come back to homestead in the evening
- Goats and sheep give birth in June

Further Information:

- Less farmers now than before; most people have moved off after development projects started
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Date: 7 June 2000

Village: Semolale

Population: >1000

Map Coordinates: 212.87960S/028.83596E

Persons Interviewed: Male Village Leader (has lived in village since 1985); **Male Village Resident**

Crops:

- Main crops: maize, beans, watermelon, sorghum
- Plowing and planting takes place between October and December
- All crops are planted at the same time, but different crops in different parts of the field
- Crops are all harvested at the same time, May to June
- This year the crops were ruined because of too much rain
- Even if it is dry there is a certain amount of crop produced
- No ceremony attached to planting
- When Chief Mademo was younger the crops were handled by the women, but now everybody participates, in the past fields were small in size
- Also when younger people would trade with people of other areas for crops or livestock, but today this is not common

Livestock:

- Main livestock: cattle, goats, sheep
 - Averages herd sizes: 50 to 70 cows, 50 goats, 50 sheep
 - Some people have ~300 to 500 head of cattle
 - Cattle posts are 5 to 10km from the town
 - Cattle give birth between October and November, but some times as late as December and January
 - During the dry season livestock is taken to the Shashe River to graze and drink, a distance of ~15km
 - During the 1997 drought some people moved their livestock ~170km on the other side of the Shashe River
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Date: 8 June 2000

Village: Mabohwe

Population: ~800

Map Coordinates: 21.82183S/028.82373E

Person Interviewed: Male Village Leader (has lived in village since 1940)

Crops:

- Main crops: maize, sunflower, beans, watermelon, sorghum
- Start plowing and planting fields between October to November, but may be as late as February
- All crops are planted at the same time, but different crops in different areas of the field
- Field locations are kept for a longtime, but frequently change the placement of the crops within the fields
- Crops found at varying distances from the village
- There is no planting near the rivers; fields are ~5 to 10km from the Shashe
- Some crops are now grown at the cattle posts, in the past no crops were grown at cattle posts
- Women look after the crops, men help with the plowing

- This year too much rain ruined the crops
- Beans and sorghum do well with very little rain
- People prefer maize and sorghum
- Rain ceremony takes place just before the rainy season is to start
- If crops fail people use the Shepard Tree or will have to buy grains from elsewhere

Livestock:

- Main livestock: cattle, goats, sheep, donkey
 - Cattle will graze 5 to 10km from the cattle post, goats and sheep do not roam as far
 - In dry season some people will move their cattle some distance to water
 - Cattle are taken to the Shashe River during the dry season, this was also done in the past
 - After harvest the livestock is brought to the fields to feed off the stalks
 - In the past drought has cause the death of the cattle; goat and sheep survive better during droughts
 - During the drought of 1997 some people moved their cattle to a possibly better watered area, but it wasn't and some of their cattle died
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Date: 8 June 2000

Village: Gobojango

Population: ~1000

Map Coordinates: 21.82183S/028.82373E

Person Interviewed: Female Village Resident (~70 years old, grew up in the town)

Crops:

- Main crops: sorghum, maize, watermelon, groundnuts
- When younger:
 - Stayed at fields to protect crops against the elephants
 - Had crops to near the village, but not in the village
 - Plowed and planted fields in December; women did the plowing and looked after the crops
 - Only planted sorghum and maize
 - Planted all types of crops together, but now people separate the crops
 - If crops failed would use the Shepard Tree, ostrich eggs and hunt
 - Rain ceremony performed on a nearby hill; during the ceremony sorghum beer was drank and some was spitted on the ground; ceremony was performed by only one family, all others stayed at home
- Fields selected bases on soil types; clay and loam soils considered the best
- Prefers sorghum to maize, but today maize is more popular with people because sorghum is eaten by birds

Livestock:

- Main livestock: goats and sheep, with a few cows
 - When younger:
 - Kept cattle at a cattle post
 - Live at the cattle post all of the time, came back to the village for meetings
 - During the day cattle would graze far away from the cattle post, but come back at night
 - Kept livestock at the cattle post evening during the dry season and droughts
 - Cattle considered more important than goats and sheep
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Date: 8 June 2000

Village: Matsaganeng Cattle Post

Population: 10 people in 4 house homestead

Map Coordinates: 21.87940S/028.36999E

Person Interviewed: Male Farmer (has lived here for ~50 years; came to the area when he was a young boy)

Crops:

- Main crops: sorghum, beans; when younger his parents grew sorghum, maize, watermelon, groundnuts
- Plant crops nearby; near the river but not on the riverbank
- Crops grow well on these soils
- Start to plant crops in September
- This year the birds ate the sorghum before it could be harvested
- Beans did well this year due to the wetter conditions
- If crops fail will sell livestock from seed
- Women look after the crops
- Rain ceremony performed near the start of the rainy season; chief will come to the fields with sorghum beer and pray for rain.

Livestock:

- Main livestock: goats; his parents kept goats, sheep, cattle
- When younger:
 - Cattle were kept far away from the crops during the day, ~7 hours away
 - Men were responsible for looking after the cattle
 - Goats and sheep stayed nearby, like today
 - When there was no grass or it was dry they would change the cattle grazing area
 - Cattle was not taken from the cattle post to the larger village of Goboiano

Date: 9 June 2000**Village: Lepokole****Population: ~200****Map Coordinates: 21.79302S/028.34516E**

Persons Interviewed: **Male Village Leader** (grew up in the area and is the chairperson of the Lepokole Conservation Project); **Female Village Resident** (has lived in the area for 10 years)

Crops:

- Main crops: sorghum, millet, groundnuts, beans
- Plowing and planting of crops start in November
- Fields are ~2km away from the village
- Fields are divided into sections with different crops in each
- Crops are ready to harvest in June; all crops are harvested at the same time
- Sorghum grows best in little rain
- Maize grows best in lots of rain
- Both men and women do the plowing, planting, weeding and harvesting
- Elephants frequently get into the fields, worst between December and June

Livestock:

- Main livestock: cattle, goats, sheep, donkey
- All livestock kept at the cattle post
- Livestock stays near the cattle post through out the year, but will be let onto the fields after harvest
- Livestock does not do well during the dry season

Date: 9 June 2000**Village: Tshokwe****Population: ~500****Map Coordinates: 21.74366S/028.11699E**

Persons Interviewed: **Male Village Leader** (~70 years old); **Male Town Resident** (~60 years old); **Male Town Resident** (~30 years old); **Male Town Resident** (~30 years old)

Crops:

- Main crops: sorghum, maize, watermelon, beans

- Fields are located not too far from the village and in the direction of the river
- Selected area for the soils
- When younger:
 - Crops were grown at the cattle post
 - There was no village as today, everyone stayed at cattle posts
 - Women tended the fields
 - Planted same crops as today
 - If there was a drought would use wild fruit, pumpkins, hunted birds
- This year the crops are poor, too much rain and too many birds eating the crops

Livestock:

- Main livestock: cattle, goats, donkey
 - Livestock stay at cattle post; brought into town to be sold
 - Cattle are taken away from the post during the day and brought back in the evening
 - In the dry season will take cattle to a borehole that is ~20km away
 - In the past cattle were taken to the Shashe River during the dry season or drought, but with enough would stay at the cattle post
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Date: 8 June 2000

Village: Madikgaka Cattle Post

Population: ~20 in the area

Map Coordinates: 21.60301S/028.18183E

Person Interviewed: Female Farmer (~70 years old, grew up in the area, born in Lepokole)

Crops:

- Main crops: maize, sorghum, watermelon, pumpkin
- Plow and plant fields at first rains
- Men and women take care of crop planting and weeding
- Sometimes different crops are grown together; sometimes the crops are separated out
- Fields are located near the Shashe River
- Rotates the use of fields
- Harvest all crops between May and June
- Chose field locations for water and soils
- This year some of the crops were ruined by elephants
- Had rain ceremony in the past, but not now; does not remember what happened during the previous ceremony

Livestock:

- Main livestock: cattle and goats
 - Livestock graze locally and are not moved during the dry season, Shashe River is nearby
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Date: 10 June 2000

Village: Robelella

Population: ~100

Map Coordinates: 21.59129S/027.98530E

Person Interviewed: Female Village Resident (65 years old)

- Main crops: she grows only sorghum, but others people grow beans, maize and other crops
- Fields are located around the edge of the village
- Plow and plant crops after the first rains
- Plant all seeds together, no matter the type
- Only women look after the fields, but will hire a man to help plow
- This year the crops did not grow well because of too much rain
- Maize will grow well with lot of rain, but not sorghum
- When younger:
 - Parent grew sorghum, maize, beans, pumpkin
 - Both parents looked after the fields

- If crops failed bought maize from Zimbabwe and South Africa
- Parents had a ceremony for rain, but does not remember it

Livestock:

- Does not own any
 - When she was younger her parents had cattle, which was kept near to the village and was looked after by her brother
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Date: 10 June 2000

Village: Sefpophwe

Population: ~1000

Map Coordinates: 22.18459S/027.96407E

Person Interviewed: Male Village Leader (lived in village all of his life)

Crops:

- Main crops: varieties of sorghum (do not know the types), maize, watermelon
- Most crops are grown around the village, within ~5km
- Picked the fields for their soil fertility, but there are patches of non-fertile soils in the area
- Women look after the fields, men will during harvest
- All crops are planted at the same time, between November and February
- Previously the crops were mixed in the field, but now divided in the field
- Maize and watermelon ripen the earliest
- Harvest is usually between July and August, but this year harvested before the crops were completely ripe because of the birds
- This year the crops did not produce well because there was too much rain
- Conduct rain ceremony just before or just after the first rains

Livestock:

- Main livestock: cattle, goats, sheep
 - Livestock kept at cattle posts, most are within ~30km of the village
 - People have anywhere between 10 and 300 head of cattle, fewer goats and sheep
 - Cattle will browse on tree leaves when there is no grass
 - Men look after the cattle and other livestock and will stay at the cattle post during the summer
 - When dry will take cattle away from the area to get water
 - Cattle give birth between October and December
 - Goats and sheep give birth between October and November
 - Livestock allowed onto the fields after harvest
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Date: 10 June 2000

Village: Molalatau

Population: ~1000

Map Coordinates: 22.06798S/028.59833E

Person Interviewed: Female Village Resident (~ 60 years old, has lived in the village since 1970, previously lived near Francistown)

Crops:

- Main crops: sorghum, maize, beans, groundnuts, sunflower
- When living in Francistown:
 - Lived in village, but stayed at fields until harvest
 - Use to plow the fields at the start of the spring
 - Planted the same crops as at Molalatau
- This year too much was not good for crop production
- When there is too little rain only those who planted with the first rains are able to have some crops
- Use to mix the crops in a field, now divide the fields into different crops
- Harvest crops between June and July

- Other people stay at the fields, but she stayed in the village because their fields were near to the village
- Rain ceremony conducted at the start of the rainy season

Livestock:

- Main livestock: cattle, goats, sheep
- Livestock kept at a cattle post, and away from the crops
- Now and in the past hired people to look after the livestock
- Visits the cattle post on the weekends