

APPENDIX 8 SORRIS SORRIS CONSERVANCY

Table of contents

1. DEMOGRAPHICS	130
1.1 Gender	130
1.2 Location	130
1.3 Age	130
1.4 Education	130
1.5 Employment	131
1.6 Household income and other contributions to the household	131
1.7 The household head	133
2. LIVELIHOODS	134
2.1 Livestock	137
2.2 Crop production/gardening	139
3. NATURAL RESOURCE USE	140
3.1 NR contribution to livelihoods and cash income	140
3.2 NR utilisation by households	140
4. THE CONSERVANCY	141

List of graphs and tables

Graph 1 Age distribution	130
Graph 2 Main occupation (15–65, not in school)	131
Graph 3 Weighted average household income	132
Graph 4 Most important livelihood activities to households	134
Graph 5 Second most important livelihood activities to households	134
Graph 6 Third most important livelihood activities to households	135
Graph 7 Most important sources of cash income to households	135
Graph 8 Second most important sources of cash income to households	136
Graph 9 Third most important sources of cash income to households	136
Table 1 Annual income of (income-earning) household members	132
Table 2 Stock ownership, trading and income	137
Table 3 Crop production and income	139
Table 4 Number of households ranking resource utilisation as important (any rank)	140
Table 5 Number of registered members per household (n=115)	141
Table 6 Impact of conservancy on availability of natural resources for household use	142

1. DEMOGRAPHICS

1.1 Gender

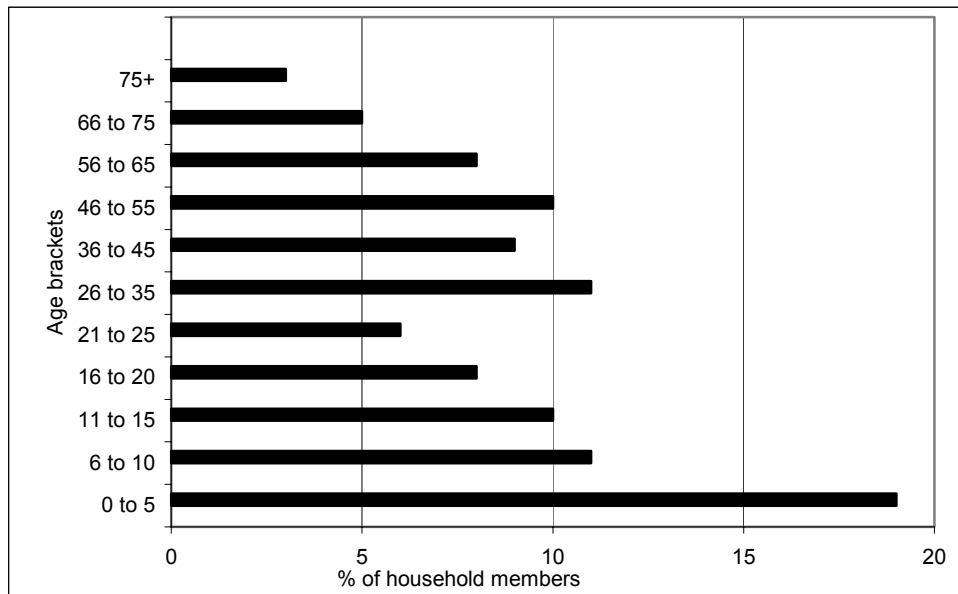
- 175 households responded (representing 861 household members).
- 59% are male-headed households; 41% female de jure; and 1% female de facto¹.
- 51% of household members are male and 49% female.

1.2 Location

The average number of household members living in the household is four (median=4; range 0-13); on average, one member lives away (range 0-9).

1.3 Age

Graph 1 Age distribution



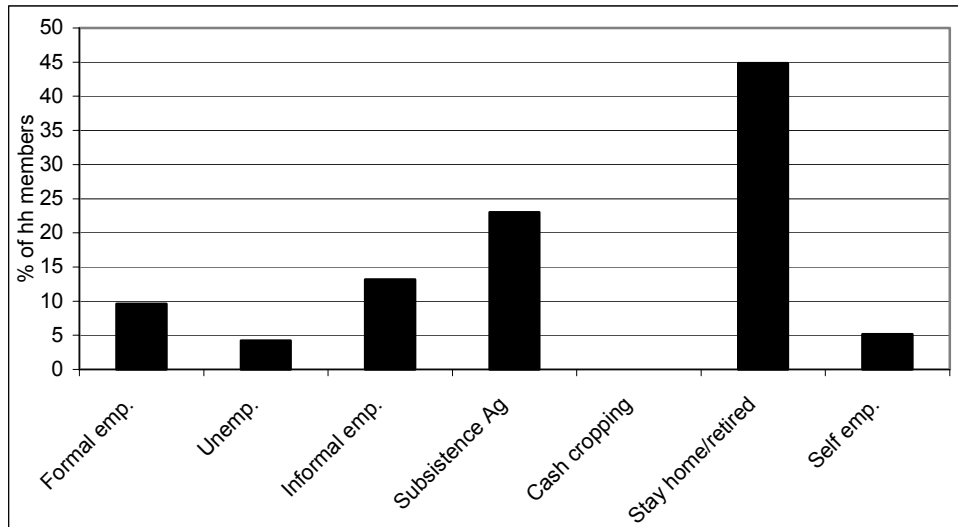
1.4 Education

- Of residents over 20, 28.1% have had no formal education and 34.5% have completed primary school. 20.8% have completed Grades 7–9; and 9.5% Grades 10–12. Only 1.5% (seven people) have completed higher education and 5.5% don't know their highest level of education.
- 20% of householders are currently in school.
- Only 6% of households have children not attending school because of an inability to afford school fees or other school-related costs. Of these 11 households, 82% have one child away from school; 9% (one household) have two; and a further 9% (one household) has three.

¹ Some totals may not add to 100% due to rounding.

1.5 Employment

Graph 2 Main occupation (15–65, not in school)



1.5.1 CBNRM and tourism-related occupations

- Only 14 individuals have their main occupation in CBNRM and tourism-related activities (approximately 2% of householders). Six individuals have their own enterprise (selling crafts to tourists); four are conservancy committee members; two have their own enterprises (selling to lodge/tourists). One is a CGG/CRM/shepherd and another is employed at a private lodge/campsite.
- 13 individuals have their own enterprises (selling crafts to tourists) which they considered to be secondary occupations and two conservancy committee members considered their job to be secondary to their main occupation.

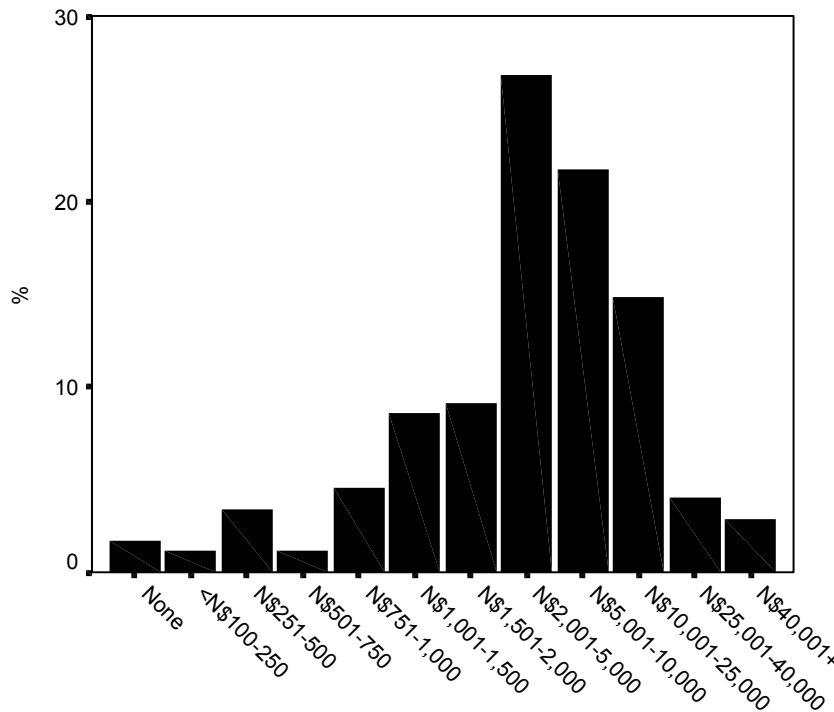
1.6 Household income and other contributions to the household

43% of household members over 16 years old stated that they had no income. Table 1 outlines the income distribution of those individuals who do earn income.

Table 1 Annual income of (income-earning) household members

Income bracket	% of respondents
<N\$100-250	2
N\$251-500	4
N\$501-750	6
N\$751-1,000	7
N\$1,001-1,500	9
N\$1,501-2,000	11
N\$2,001-5,000	37
N\$5,001-10,000	12
N\$10,001-25,000	4
N\$25,001-40,000	3
N\$40,001+	1
Don't know	4

Graph 3 Weighted average household income²



- 97% of households receive at least one contribution to cash income from household members. Of these, 64% receive a contribution from only one member; 32% from two members; and 4% from three members.

² Weighted average household income is the average income of households, excluding household members who do not earn income.

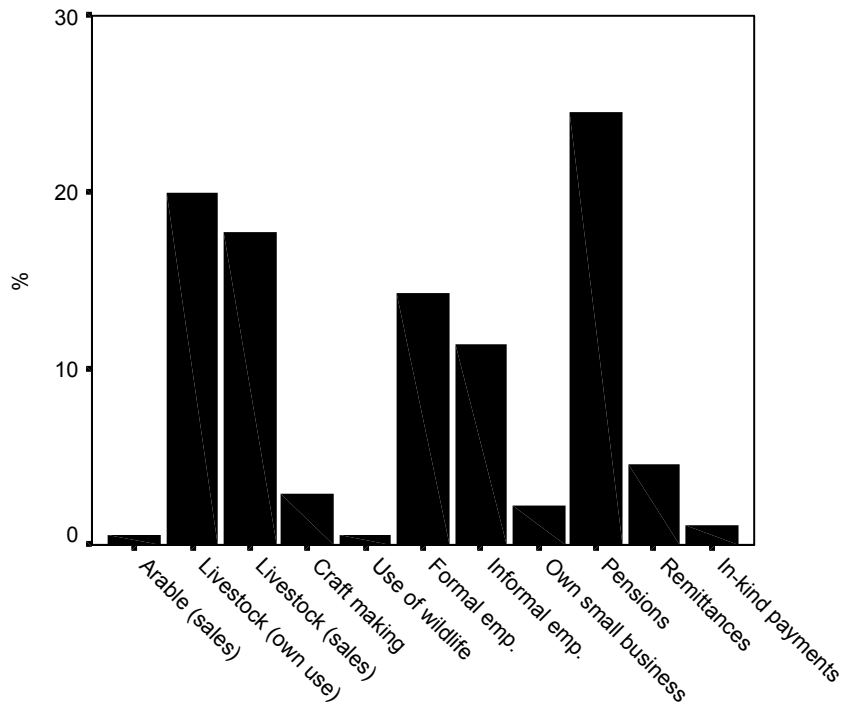
- Only 61% of households receive contributions in kind. Of these, 52% receive this contribution from one household member; 36% from two members; 9% from three; 3% from four; and 1% from five.
- 23% of households receive remittances (from someone living away). Of these households, 68% receive them from one member and 15% from two. One household receives remittances from up to six members.
- 40% of households have a member(s) receiving a pension. Of these households, 63% have one pensioner; 33% have two; and 4% have three.

1.7 The household head

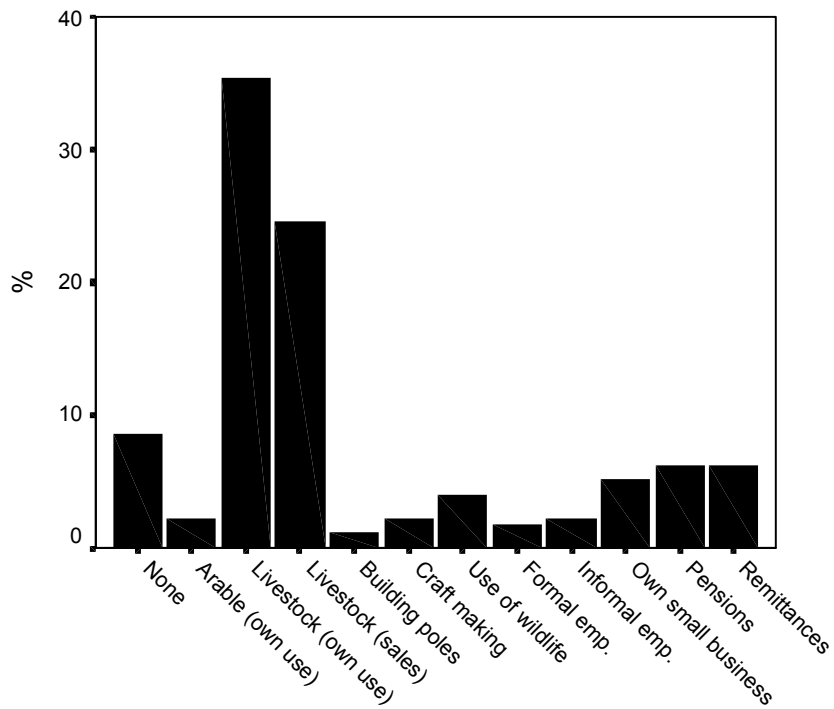
- 96% of household heads live in the household, with 4% living away. 35% of household heads have had no formal education. 37% have completed primary education; 14% have completed Grade 7-9; and 7% Grade 10-12. Only 3% have completed some form of higher education. (3% do not know their highest educational attainment.)
- 66% of household heads' main occupation is subsistence agriculture. 13% are formally employed; 10% are informally employed; 6% stay at home/are retired; 5% are self-employed; and 1% are unemployed and actively seeking work.

2. LIVELIHOODS

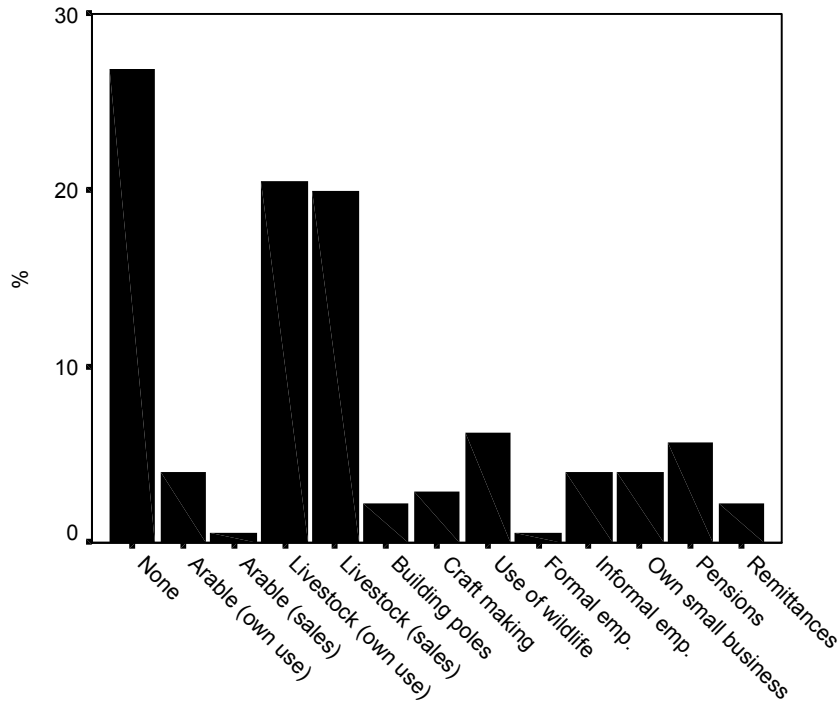
Graph 4 Most important livelihood activities to households



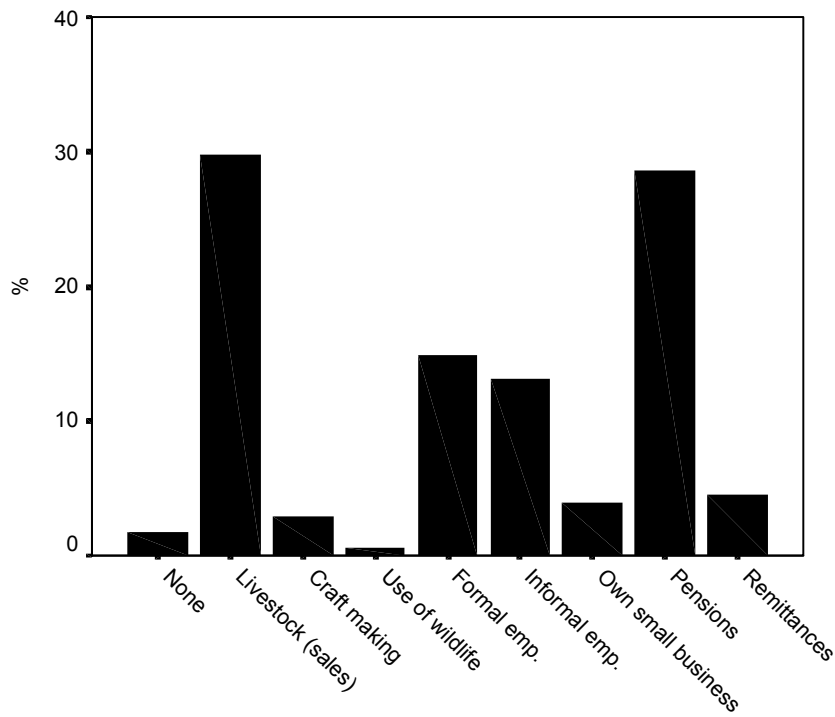
Graph 5 Second most important livelihood activities to households



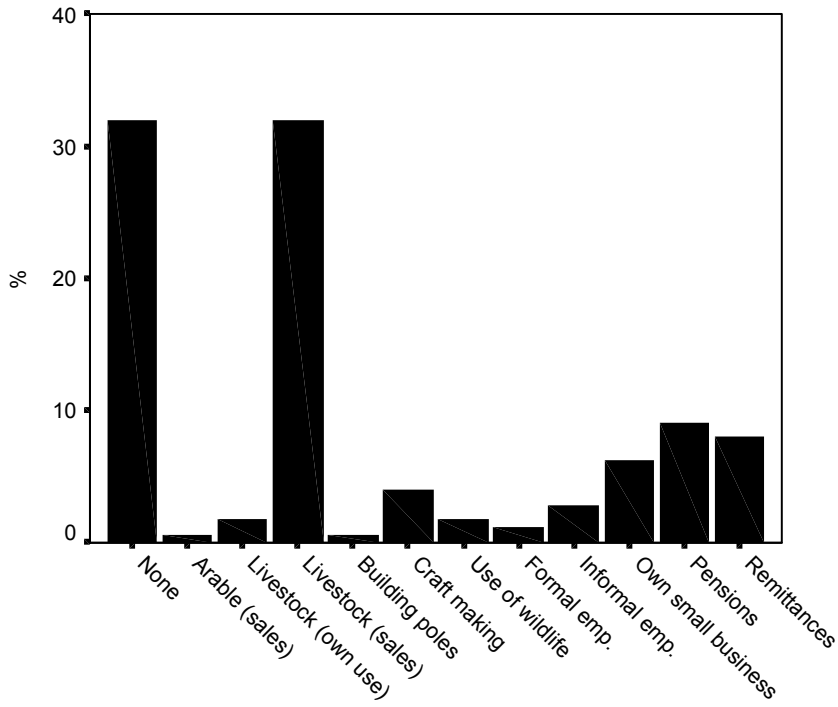
Graph 6 Third most important livelihood activities to households



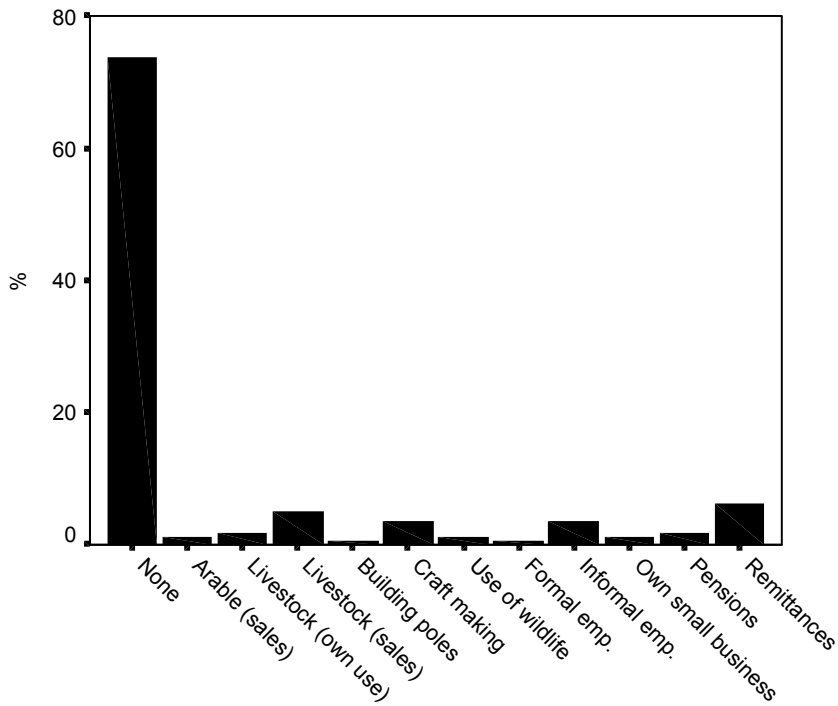
Graph 7 Most important sources of cash income to households



Graph 8 Second most important sources of cash income to households



Graph 9 Third most important sources of cash income to households



2.1 Livestock

87% of households own or have regular access to livestock (153 households), with the remaining 13% (22 households) having no access to livestock.

Table 2 Stock ownership, trading and income¹

	Cattle	Sheep	Goats	Poultry	Donkeys	Horses	Pigs
Ownership							
No. of hhs	89	44	148	137	120	44	2
Mean (median)	16 (8)	30 (19)	86 (52)	12 (10)	7 (6)	4 (3)	13 (13)
Range	1-200	2-192	4-393	1-43	1-40	1-20	3-22
Purchases							
No. of hhs	4	3	11	5	8	1	-
Mean (median)	2 (3)	3 (4)	3 (3)	2 (1)	1 (1)	1 (1)	-
Range	1-3	1-5	1-6	1-6	1	1	-
Milk consumed							
No. of hhs	72	2	102	-	-	-	-
Mean (median)	5 (4)	16 (16)	9 (6)	-	-	-	-
Range	1-40	16	1-50	-	-	-	-
Meat consumed							
No. of hhs	6	8	86	26	8	-	-
Mean (median)	3 (1)	2 (2)	3 (2)	2 (1)	1 (1)	-	-
Range	1-8	1-4	1-17	1-10	1	-	-
Milk sales (N\$)							
No. of hhs	9	-	5	-	-	-	-
Mean (median)	55 (30)	-	21 (10)	-	-	-	-
Range	10-400	-	5-60	-	-	-	-
Meat sales (N\$)							
No. of hhs	3	2	16	-	5	-	-
Mean (median)	1,133 (1,100)	690 (690)	551 (700)	-	1,350 (300)	-	-
Range	600-1,700	180-1,200	100-950	-	200-3,000	-	-
Transport sales (N\$)							
No. of hhs	1	-	-	-	3	2	-
Mean (median)	120 (120)	-	-	-	41 (20)	54 (54)	-
Range	120	-	-	-	10-93	15-93	-
Live sales (N\$)							
No. of hhs	13	5	58	1	1	-	-
Mean (median)	2,542 (1,700)	378 (180)	541 (370)	60 (60)	160 (160)	-	-
Range	700-1,700	150-900	60-2,480	60	160	-	-

	Cattle	Sheep	Goats	Poultry	Donkeys	Horses	Pigs
Losses to predators							
No. of hhs	-	1	23	22	-	1	-
Mean (median)	-	8 (8)	4 (3)	7 (6)	-	3 (3)	-
Range	-	8	1-15	1-45	-	3	-
Bartered							
No. of hhs	1	1	9	3	1	2	-
Mean (median)	1 (1)	1 (1)	4 (1)	3 (2)	1 (1)	3 (3)	-
Range	1	1	1-20	2-5	1	3	-
¹ Over the three months prior to the survey							

- Multiple stock ownership: 34 households own goats, sheep and cattle; 88 own goats and cattle; 44 own goats and sheep; and 34 own both sheep and cattle.
- Reasons for livestock sales: 48% of respondents sell stock to meet subsistence needs; 36% to meet educational needs; and medical and ceremonial needs accounted for a further 7% each.

2.2 Crop production/gardening

Only 18% of households surveyed practised crop production or gardening.

Table 3 Crop production and income¹

	Maize	Pumpkin/Squash	Melons	Tomato	Green Veg	Tree crops 1
Dryland area planted (m²)						
No. of hhs	1	2	3	2	2	-
Mean (median)	4 (4)	4 (4)	4 (4)	4 (4)	7 (7)	-
Range	4	4-5	3-5	3-5	5-10	-
Irrigated area planted (m²)						
No. of hhs	11	8	6	9	3	13
Mean (median)	15 (14)	19 (15)	24 (23)	23 (8)	352 (50)	DK
Range	6-39	6-45	6-45	3-130	5-1000	9-DK
% consumed by hh						
No. of hhs	6	3	2	7	5	5
Mean (median)	88 (100)	100 (100)	100 (100)	86 (100)	90 (100)	84 (100)
Range	30-100	100	100	50-100	50-100	40-100
Crop sold (N\$)						
No. of hhs	1	-	1	2	2	2
Mean (median)	300 (300)	-	Na	105 (105)	Na	175 (175)
Range	300	-	Na	10-200	Na	50-300
% damage (wild animals)						
No. of hhs	7	6	4	1	2	4
Mean (median)	91 (100)	90 (100)	85 (100)	100 (100)	100 (100)	80 (85)
Range	40-100	40-100	40-100	100	100	50-100
% destroyed (domestic animals)						
No. of hhs	-	1	1	3	2	2
Mean (median)	-	50 (50)	70 (70)	50 (50)	40 (40)	50 (50)
Range	-	50	70	40-60	40	50
% destroyed (pests)						
No. of hhs	1	-	1	2	2	1
Mean (median)	5 (5)	-	30 (30)	70 (70)	100 (100)	50 (50)
Range	5	-	30	40-100	100	50

¹ Over the twelve months prior to the survey. Na = information not available

- Crop damage by wild animals: 100% of crop damage was attributed to elephants (n=10).
- Reasons for selling crops/garden products were identified as: to meet subsistence needs (67%) and to meet educational needs (33%).

3. NATURAL RESOURCE USE

3.1 NR contribution to livelihoods and cash income

Five households (3%) ranked craft making as the most important livelihood activity and one household (0.6%) ranked wildlife utilisation as most important. Craft making, wildlife utilisation and building-pole cutting were the only NR-based livelihood activities ranked as second most important (2%; 4%; and 1% respectively). These were also the only NR activities ranked as third most important (3%; 6%; and 2% respectively). Almost 93% of those who utilise wildlife ranked the activity as the second, third, fourth or fifth most important activity to the household.

The only activities contributing to cash income were craft making, wildlife utilisation and building-pole cutting. As a primary contributor to income, craft making and wildlife utilisation contribute to 3% and 1% of households respectively. Craft making is the second most important source of cash income to 4% of households and third most important to 3% of households. Wildlife utilisation contributes to 2% of households as a secondary source and 1% as a tertiary source. Building-pole cutting contributes to 1% of households as both secondary and tertiary source.

Table 4 Number of households ranking resource utilisation as important (any rank)

Resource	Livelihood	Cash income
Firewood	1	-
Thatch grass harvesting	2	-
Building-pole cutting	32	7
Craft making	23	20
Wildlife utilisation	54	7
Reed harvesting	-	1

3.2 NR utilisation by households³

- Firewood: Almost all households utilise firewood, consuming on average 99% within the household. Only two households sell firewood – for an average of N\$260. One household barter firewood.
- Timber for poles: Only 38 households (22%) utilise timber for poles, of which two households sell timber – for an average of N\$80.
- Thatching grass: Only one household utilises thatching grass, all of which is consumed within the household.
- Medicinal plants: 37% of households use medicinal plants. None are traded or bartered.
- Edible plants: 39% of households collect edible plants, consuming on average 96% of those collected within the households. Three households sell edible plants, for an average of N\$123, and one household barter 40% of the household stock.
- Birds: Only one household utilises birds, all within the household.
- Reptiles: Only one household utilises reptiles, all within the household.
- Fish: Only one household utilises fish, all within the household.

³ Over the twelve months prior to the survey; n=175

- Insects: One quarter of households utilise insects, over 90% of which is consumed by the household. Six households sell insects, for between N\$20-200, and one household barter them.
- Honey: Five households (3%) collect honey, most of which is consumed within the household. One household sells N\$80 of honey.

Of the utilised resources, more than 70% of respondents believed the following NRs were in sufficient abundance to withstand increased harvesting: firewood, medicinal and edible plants, birds, reptiles, large and small mammals. 62% believed more people could harvest timber. 50% of respondents believed that insects were in sufficient supply to sustain more people harvesting them, while 39% thought not (with the remaining 11% not knowing). 45% believed that there were insufficient supplies of honey to sustain increased harvesting. For more information on HWC, see tables re: livestock keeping and cropping/gardening.

Only two per cent of households own fishing equipment and 16% own hunting equipment.

4. THE CONSERVANCY

66% of households are aware that there is a conservancy in their area. Table 5 outlines the number of members per household.

Table 5 Number of registered members per household (n=115)

Number of members/hh	% of households
0	55
1	21
2	17
3	2
4	3
6	1
7	2

- 17% of households are aware of conservancy management plans and 21% were consulted in their development (n=115). 26% are aware of the constitution and 23% were consulted in its development.
- Of the households responding positively to having roles and responsibilities, 50% stated that their responsibility was to be registered; 14% to look after wild animals; 9% did not know; and 7% are committee members who help by giving advice. (5% (three people) stated that they were the treasurer.) Other duties mentioned included: having no roles/responsibilities assigned yet; to assist with arranging meetings or enforcing rules/regulations; chairman; secretary; and to help combat illegal poaching (n=56).
- Only 28% of respondents (n=115) knew what the roles and responsibilities of various committee members were.
- No paid work is undertaken for the conservancy in Sorris Sorris.
- 12 individuals undertake unpaid work; on average nine days in the last three months (range 1-91 days).

- Only 6% contribute in kind or in cash to the conservancy (n=115).
- 69% of households believed that there were no advantages of the conservancy to the community, since it was not yet fully functioning. 7% stated the main advantage was the distribution of meat by the conservancy and 6% stated that it was the protection of animals/wildlife (n=124).
- 77% believed that there were no advantages of the conservancy to households yet. A further 9% stated that there will be benefits once the conservancy is gazetted; that there are no advantages because of lack of proper information; or that they had only heard about it and had not yet seen any advantages. 8% believed that their household had benefited from the conservancy meat distribution (n=118).
- 77% stated that there were no disadvantages of the conservancy to the community (48% identified the reason for this as being that the conservancy was not yet fully functioning). 4% identified a disadvantage as elephants brought into the area causing damage to water points/gardens and 3% stated that there were no disadvantages due to lack of proper information (n=119).
- 82% stated that there were disadvantages of the conservancy at the household level. (48% stated that this was because the conservancy was not yet fully active and 4% because of a lack of proper information). 3% identified a disadvantage as elephants brought into the area damaging water points/gardens (n=117).

Table 6 Impact of conservancy on availability of natural resources for household use*

NR	None (%)	Negative (%)	Positive (%)	DK/NA (%)
Timber	14	11	6	69
Medicinal plants	13	3	9	76
Edible plants	22	1	4	73
Birds	2	15	17	65
Reptiles	6	18	11	61
Large mammals	1	19	17	64
Small mammals	1	20	18	62
Insects	23	2	2	73

* Totals may not add to 100 due to rounding.