



## APPENDIX 4 EHI-ROVI PUKA CONSERVANCY

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## 1. DEMOGRAPHICS

### 1.1 Gender

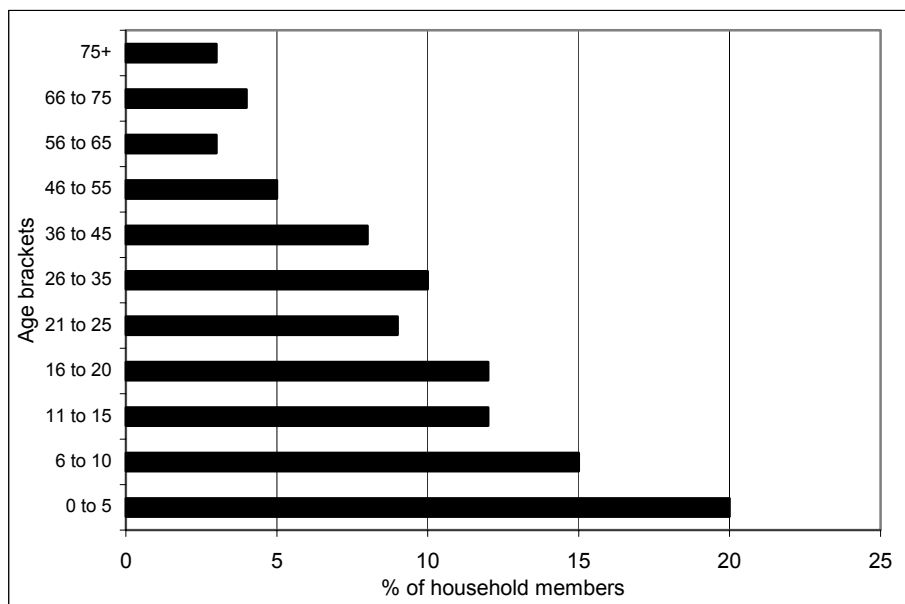
- 150 households responded (representing 1,216 household members).
- 60% are male-headed households; 39% female de jure; and 1% female de facto.
- 46% of household members are male and 55% female.

### 1.2 Location

The average number of household members living in the household is eight (median=6, ranging from one to 20); on average, one member lives away (with a range of none to six).

### 1.3 Age

**Graph 1 Age distribution**

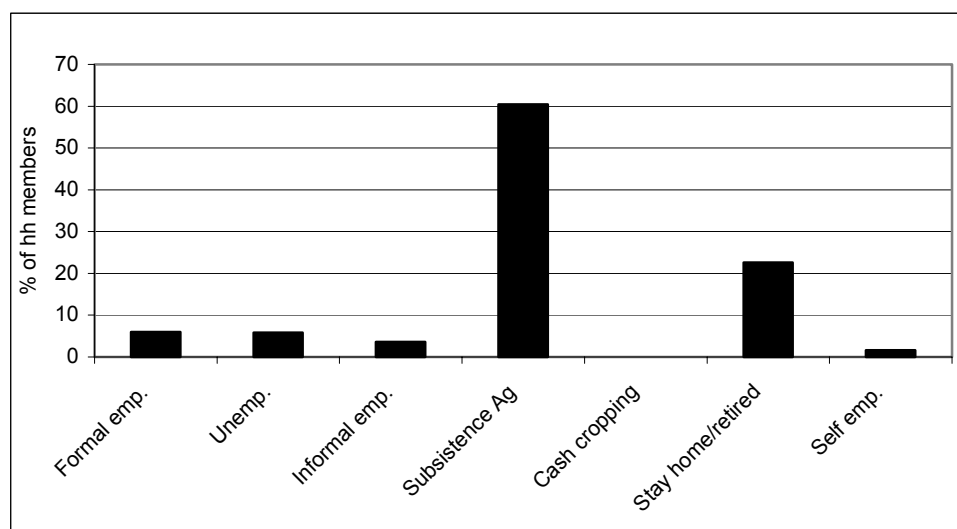


### 1.4 Education

- Of residents over 20 years old, 56% have had no formal education at all and 1% do not know what their highest level of education is. 19% have completed primary school as their highest educational level; 15% have completed Grades 7-9; and 8% have completed Grades 10-12. Only 1% (three individuals) have completed any higher education.
- 26% of household members are currently in school.
- 15% of households have children not attending school because of an inability to afford school fees or other school-related costs. Of these households, more than half have only one child out of school; one third have two; and the remainder have three, four or five children out of school.

## 1.5 Employment

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



### 1.5.1 CBNRM and tourism-related occupations

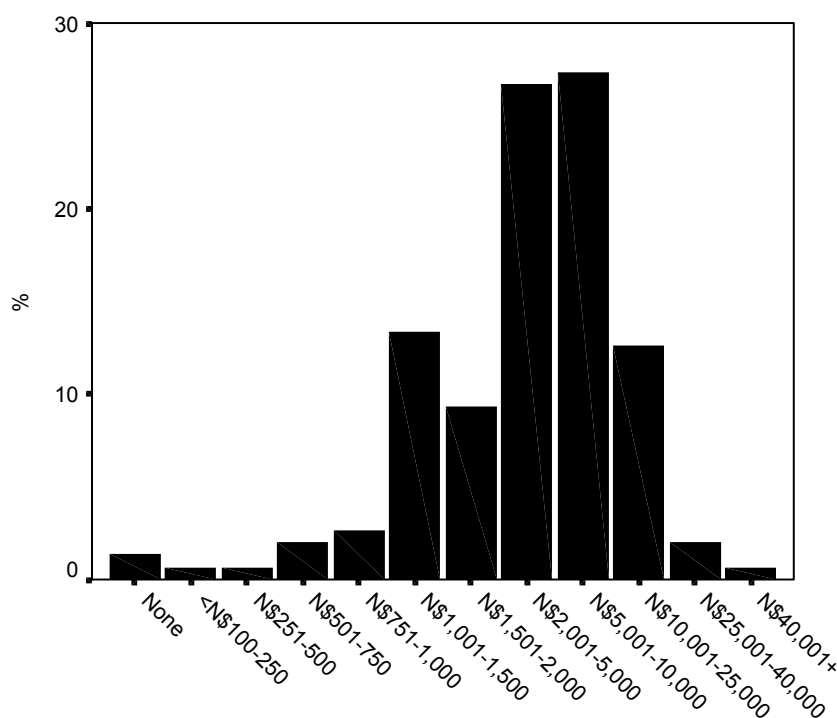
Six individuals are employed in CBNRM or tourism-related activities as their main occupation – four are conservancy committee members and two are CGGs/CRMs/shepherds.

## 1.6 Household income and other contributions to the household

57% of household members stated that they had no income (including under 15s). Table 1 shows the annual income of the remaining 275 (income-earning) household members.

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

Income bracket	% of respondents
<N\$100-250	2
N\$251-500	3
N\$501-750	7
N\$751-1,000	7
N\$1,001-1,500	15
N\$1,501-2,000	18
N\$2,001-5,000	39
N\$5,001-10,000	5
N\$10,001-25,000	4
N\$25,001-40,000	0
N\$40,001+	0
Don't know	0

**Graph 3 Weighted average household income<sup>1</sup>**

- 99% of households receive contributions to cash income from members. 95% of these households receive cash from one or two members; the remainder from three members.
- 97% of households received contributions in kind from household members. 88% of these households receive contributions in kind from one or two members. No household receives contributions in kind from more than four members.
- 28% receive remittances from someone living away. 36% of these households receive these remittances from one member; 48% from two members; 14% from three members; and 2% from four members.
- 47% of households have a member(s) receiving a pension. 67% of households have only one pensioner; 30% have two; and the remaining 3% have three pensioners.

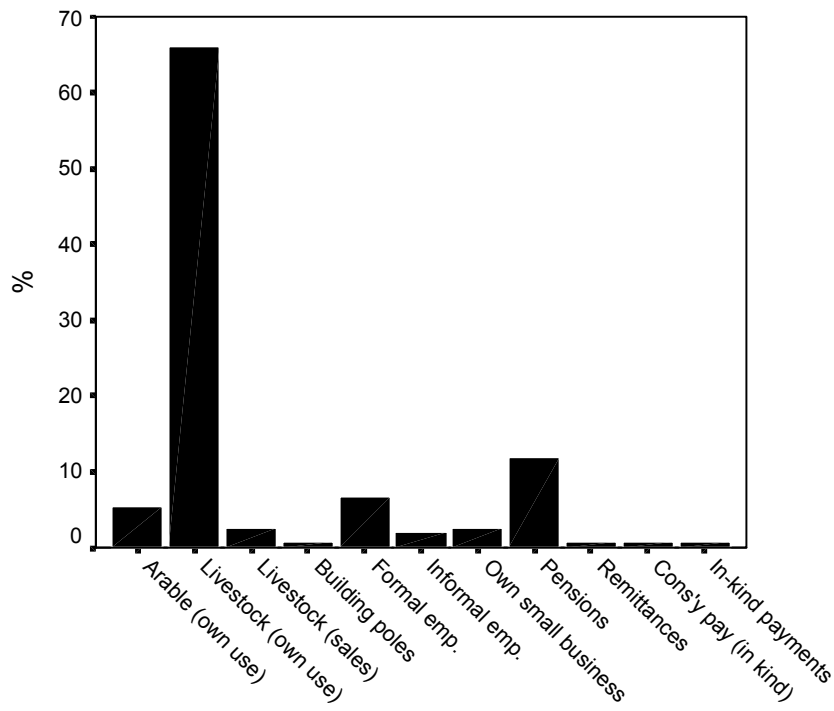
### 1.7 The household head

- 99% of household heads live in the household, with only 1% living away. 77% of household heads have had no formal education; 12% have completed primary school. Grade 7-9 is the highest educational attainment for 8% of household heads; Grade 10-12 for 1%. 1% of household heads have had some form of tertiary/higher education. (Almost 1% did not know).
- 72% of household heads are involved in subsistence agriculture; 15% stay at home/are retired; 8% are formally employed; 4% informally employed; and 1% are self-employed.

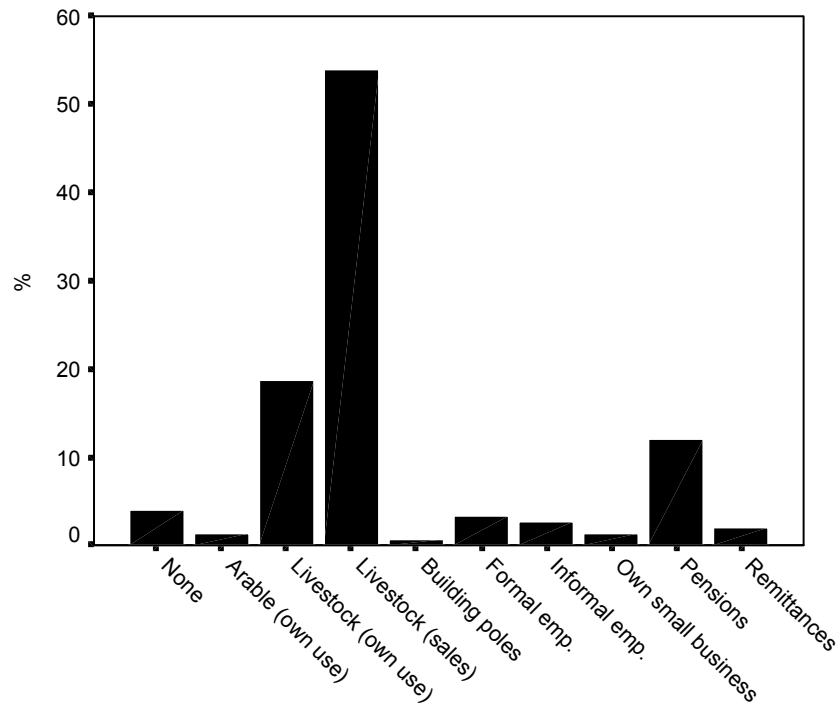
<sup>1</sup> Weighted average household income is the average income of households, excluding household members who do not earn income.

## 2. LIVELIHOODS

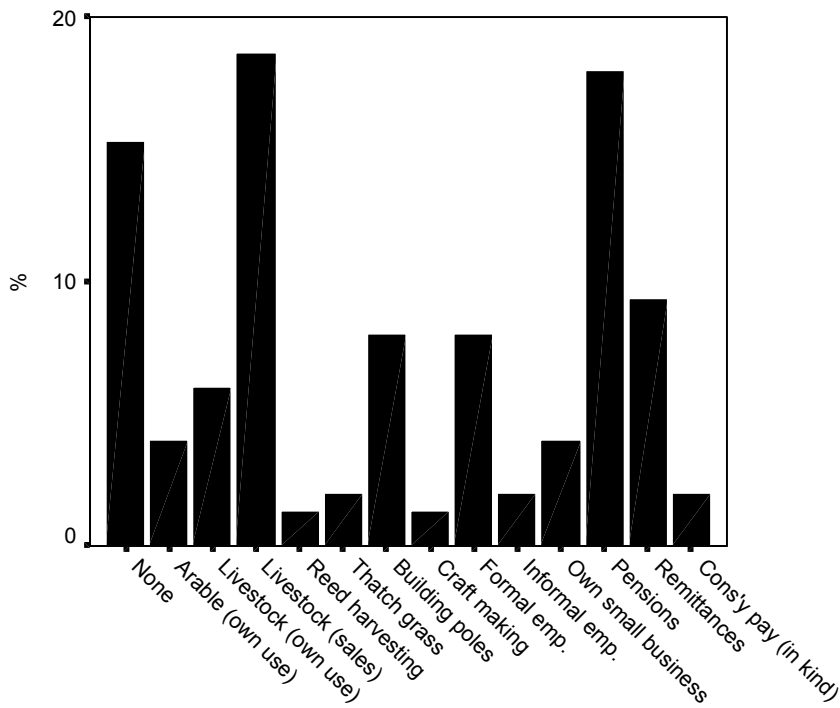
**Graph 4 Most important livelihood activities to households**



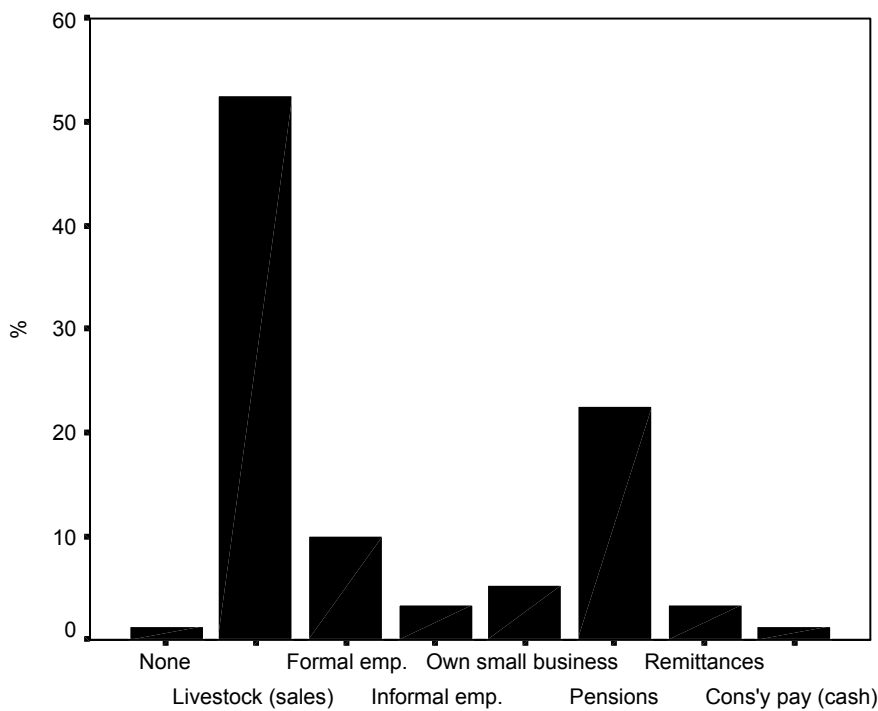
**Graph 5 Second most important livelihood activities to households**



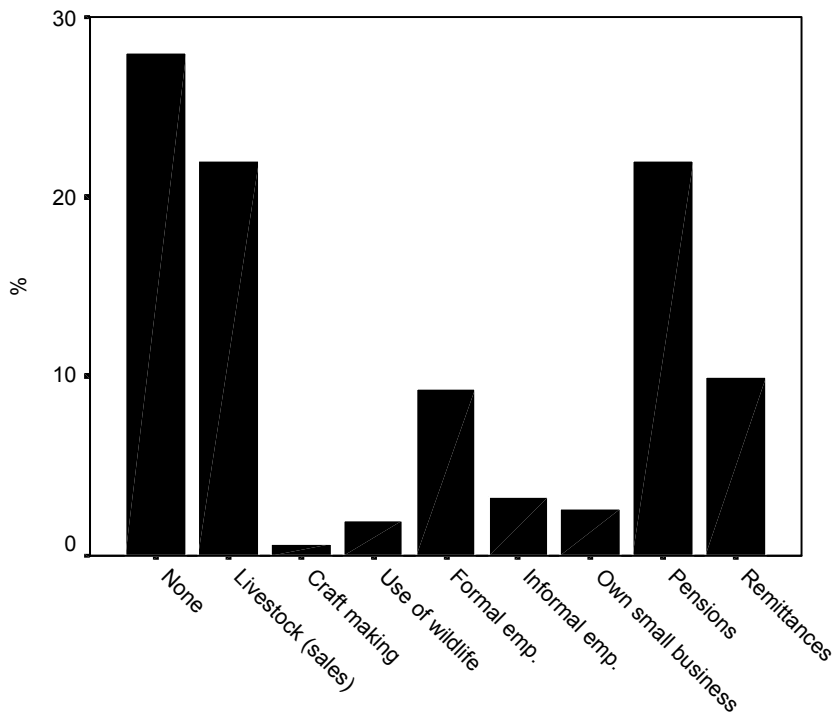
**Graph 6 Third most important livelihood activities to households**



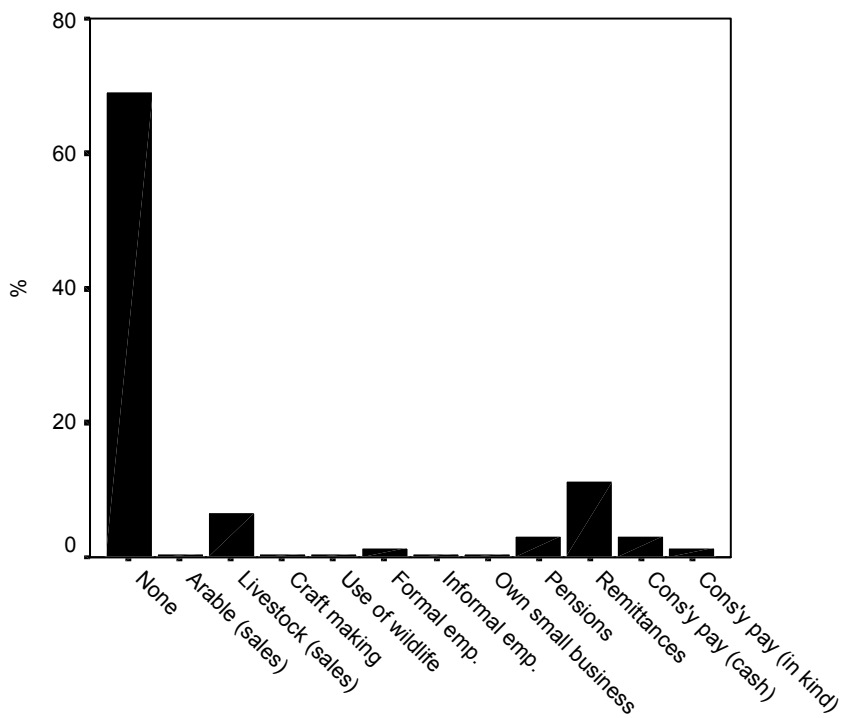
**Graph 7 Most important sources of cash income to households**



**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

95% of households own or have regular access to livestock (178 households).

**Table 2 Stock ownership, trading and income<sup>1</sup>**

	Cattle	Sheep	Goats	Poultry	Donkeys	Horses
<b>Ownership</b>						
No. of hhs	135	22	112	94	84	35
Mean (median)	41 (20)	21 (8)	33 (23)	7 (5)	5 (4)	2 (2)
Range	1-741	2-243	1-270	1-39	1-24	1-10
<b>Purchases</b>						
No. of hhs	10	-	5	-	-	-
Mean (median)	3 (3)	-	2 (1)	-	-	-
Range	1-5	-	1-5	-	-	-
<b>Milk consumption</b>						
No. of hhs	129	-	28	-	-	-
Mean (median)	9 (6)	-	7 (4)	-	-	-
Range	1-50	-	1-50	-	-	-
<b>Meat consumption</b>						
No. of hhs	5	4	26	10	1	-
Mean (median)	4 (2)	1 (1)	2 (2)	2 (1)	1 (1)	-
Range	2-10	1	1-6	1-3	1	-
<b>Milk sales (N\$)</b>						
No. of hhs	1	-	-	-	-	-
Mean (median)	1,300 (1,300)	-	-	-	-	-
Range	1,300	-	-	-	-	-
<b>Meat sales (N\$)</b>						
No. of hhs	1	-	3	2	-	-
Mean (median)	500 (500)	-	200 (180)	16 (16)	-	-
Range	500	-	120-300	1-30	-	-
<b>Transport sales (N\$)</b>						
No. of hhs	-	-	-	-	1	-
Mean (median)	-	-	-	-	100 (100)	-
Range	-	-	-	-	100	-
<b>Live sales (N\$)</b>						
No. of hhs	28	3	24	3	3	-
Mean (median)	2,942 (1,650)	165 (100)	325 (240)	34 (32)	834 (860)	-
Range	700-14,500	95-300	100-800	30-40	600-1,050	-
<b>Losses to predators</b>						
No. of hhs	18	2	14	7	2	-
Mean (median)	5 (2)	7 (7)	4 (4)	5 (6)	4 (4)	-
Range	1-15	6-7	1-12	1-11	3-4	-
<b>Bartered</b>						
No. of hhs	2	-	-	2	-	-
Mean (median)	4 (4)	-	-	2 (2)	-	-
Range	1-6	-	-	1-3	-	-

<sup>1</sup> Over the three months prior to the survey

- Multiple stock ownership: 106 households own both cattle and goats; 33 owned sheep, cattle and goats.
- Reasons for livestock sales: 42% of households would sell stock to meet subsistence needs; 33% to meet educational needs; and 24% to meet medical needs (n=144).

## 2.2 Crop production/gardening

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

**Table 3 Crop production and income<sup>1</sup>**

	Maize	Millet	Pumpkin/ Squash	Beans	Melons	Green Veg	Tree crops
<b>Dryland area planted (m<sup>2</sup>)</b>							
No. of hhs	22	4	5	17	15	1	1
Mean (median)	2744 (750)	17580 (15150)	417 (50)	2676 (300)	2362 (500)	30 (30)	2 (2)
Range	2-30000	20-40000	4-1500	2-30000	2-10000	30	2
<b>Irrigated area planted (m<sup>2</sup>)</b>							
No. of hhs	2	-	1	-	-	3	1
Mean (median)	30 (30)	-	10 (10)	-	-	352 (50)	9 (9)
Range	10-50	-	10	-	-	5-10000	9
<b>% consumed by hh</b>							
No. of hhs	8	1	1	5	6	3	1
Mean (median)	100 (100)	100 (100)	100 (100)	90 (100)	100 (100)	100 (100)	100 (100)
Range	100	100	100	50-100	100	100	100
<b>Crop sold (N\$)</b>							
No. of hhs	-	-	-	1	-	-	-
Mean (median)	-	-	-	30 (30)	-	-	-
Range	-	-	-	30	-	-	-
<b>% damage (wild animals)</b>							
No. of hhs	2	1	-	1	1	-	-
Mean (median)	70 (70)	15 (15)	-	100 (100)	100 (100)	-	-
Range	40-100	15	-	100	100	-	-
<b>% destroyed (domestic animals)</b>							
No. of hhs	2	1	-	1	1	-	-
Mean (median)	15 (15)	100 (100)	-	100 (100)	50 (50)	-	-
Range	10-20	100	-	100	50	-	-
<b>% destroyed (pests)</b>							
No. of hhs	2	1	2	1	-	1	-
Mean (median)	25 (25)	10 (10)	10 (10)	100 (100)	-	5 (5)	-
Range	10-40	10	10	100	-	5	-

<sup>1</sup> Over the 12 months prior to the survey

40m<sup>2</sup> of 'other' crop was planted by one household, but none was harvested. 20m<sup>2</sup> of tomatoes was planted by one household, but none was harvested.

- Damage by wild animals: elephants and monkeys are each responsible for 38% of damage to crops, with the remaining damage (25%) caused by warthog.
- The reason for selling crops is entirely to meet subsistence needs.

### 3. NATURAL RESOURCE USE

#### 3.1 NR contribution to livelihoods and cash income

A range of natural resources are important contributors to household livelihoods. Wildlife utilisation appears to be particularly important – 10 households ranked it as the fourth most important contributor to livelihoods. Building poles is also relatively important – 36 households ranking it as the third or fourth most important contributor to livelihoods. As can be seen in Table 4, craft making, reed harvesting and thatch grass harvesting are also important livelihood activities.

In contrast, the contribution to cash income from utilising natural resources is less important. Only one household ranked income from selling building poles as important, but said it was the fourth most important source of cash income. Cash from wildlife utilisation is slightly more important – three households ranked it as providing the second most important source of cash; one household ranked it third; two ranked it fourth; and one household ranked it fifth. Only two households ranked cash from craft sales as an important source of cash income: one as second and the other as third.

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

Resource	Livelihood	Cash income
Building-pole cutting	51	1
Wildlife utilisation	18	7
Craft making	4	2
Reed harvesting	13	-
Thatch grass harvesting	6	-

#### 3.2 NR utilisation by households<sup>2</sup>

- Firewood: All households consume firewood entirely within their household.
- Timber for poles: 26% of households utilise all timber collected within the household.
- Reeds: Only nine households utilise reeds (6%) and all within the household.
- Thatching grass: No thatching grass is sold or bartered by the four households (3%) using it.
- Palm leaves: Only one household utilises palm leaves and 100% is consumed by the household.
- Medicinal plants: 37% of households use medicinal plants. None are bartered or sold.
- Edible plants: 16% of households collect edible plants for use within the household.
- Insects: 35% of households catch insects for use. Half of these households sell on average N\$496 worth (ranging from N\$100 to N\$3,000) and 13% barter roughly 20% of their catch.

Of the utilised resources, more than 50% of respondents believed the following to be in sufficient abundance to withstand increased harvesting: firewood, timber, medicinal plants, birds, large mammals, small mammals and insects. 35% believed there were enough edible plants to sustain more harvesters and 27% believed there weren't. (38% did not know.) For more information on HWC, see tables on livestock keeping and cropping/gardening.

<sup>2</sup> Over the 12 months prior to the survey

2% of households (three) rent a mokoro. One household owns fishing equipment and another has free access. 32% of households own hunting equipment; a further 8% have free access; and 3% rent hunting equipment.

#### 4. THE CONSERVANCY

100% of households are aware of the conservancy in their area (n=150).

**Table 5 Number of registered members per household (n=150)**

Number of members/hh	% of households
0	42
1	15
2	17
3	7
4	7
5	4
6	2
7	1
9	1
10	1
16	1
17	1
20	1

- 25% of households are aware of conservancy management plans and 27% were consulted in their development. 32% of households are aware of the constitution and 30% were consulted when it was being drawn up.
- Of the 96 households (64%) who responded positively to having roles and responsibilities, 44% stated that they had no role other than to be registered. 13% stated that their responsibility was to help to combat illegal poaching; 12% believed it was to provide information to the community; and 10% stated that it was to look after wild animals.
- 38% of respondents (n=150) knew what the roles and responsibilities of various committee members were (62% did not).
- Of the 17 householders who undertook paid work for the conservancy over the previous three months, the average number of days worked was 21 (range 1-92). For this, they earned on average N\$242 (range N\$20-2,100).
- Unpaid work for the conservancy was carried out by 39 (26%) householders, averaging almost ten days work over the previous three months (range 1–60).
- 30% have contributed in kind or in cash to the conservancy (including as unpaid work).
- The mostly commonly cited advantages of the conservancy to the community were: no advantages or conservancy not yet fully functioning (27%); the distribution of meat by the conservancy (22%); the provision of jobs to the community (13%); and wildlife care/protection of animals (11%) (n=216).
- The mostly commonly cited advantages of the conservancy at household level were: no advantages (partly because the conservancy is not yet fully active) (39%); the distribution of meat by the conservancy (25%); the provision of jobs to household members (15%); and the teaching of new things to household members (7%) (n=185).

- The mostly commonly cited disadvantages of the conservancy to the community were: no disadvantages (41%); unfair distribution of meat (13%); and only some people being informed of conservancy meetings (6%) (n=179).
- The mostly commonly cited disadvantages of the conservancy at household level were: no disadvantages – in part because the conservancy is not yet fully active (47%); unfair distribution of meat (16%); and unfair distribution of jobs (6%) (n=174).

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

NR	None (%)	Negative (%)	Positive (%)	DK/NA (%)
Firewood	74	8	13	5
Timber	65	17	12	5
Medicinal plants	79	2	8	11
Edible plants	76	2	7	15
Birds	41	33	22	4
Reptiles	27	33	11	29
Large mammals	28	43	26	3
Small mammals	28	44	24	4
Insects	77	9	9	5

\* Totals may not add to 100 due to rounding. Results not reported where 'Don't know'/'Not applicable' exceeded 50%.