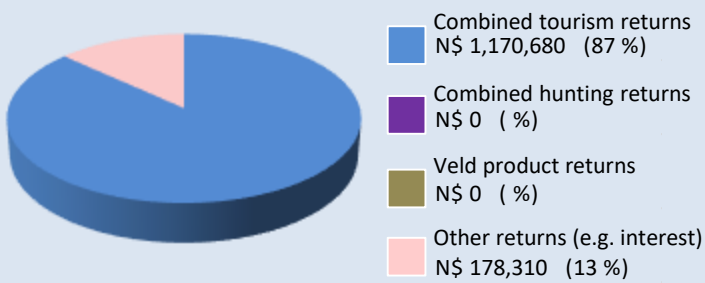# Epupa
Status Summary & Natural Resource Report

maximising wildlife returns by minimising threats...

Conservancy status summary

Returns from natural resources in 2016
the chart shows the main sources of returns and values and their percentage of the total returns

Approximate Total Returns N$ 1,348,990

- Combined tourism returns N$ 1,170,680 (87 %)
- Combined hunting returns N$ 0 (%)
- Veld product returns N$ 0 (%)
- Other returns (e.g. interest) N$ 178,310 (13 %)

Two of the most significant returns for the conservancy:
✓ cash income to the conservancy to cover running costs and invest in developments
✓ employment to conservancy residents

Conservancy income			N$ 307,840
Employment	Private Sector	31 staff	N$ 826,720
	Conservancy	8 staff	N$ 164,200

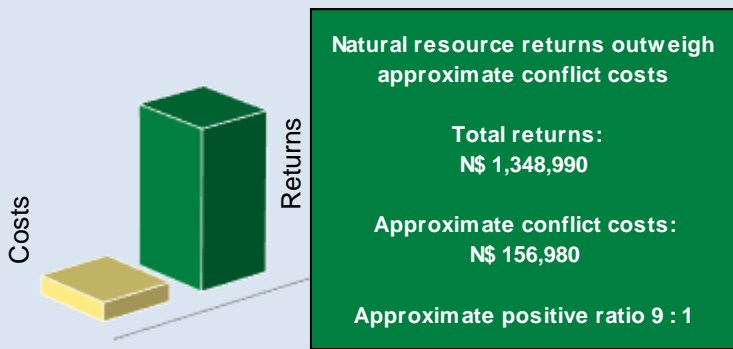### Cost of natural resource conflicts in 2016
estimates are based on average national values

Estimated human wildlife conflict cost	N$ 152,130
Estimated poached high value species loss	N$ 4,850
Total conflict cost estimate	N$ 156,980

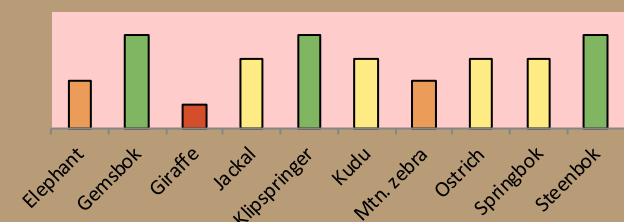### Natural resource cost–return ratio in 2016
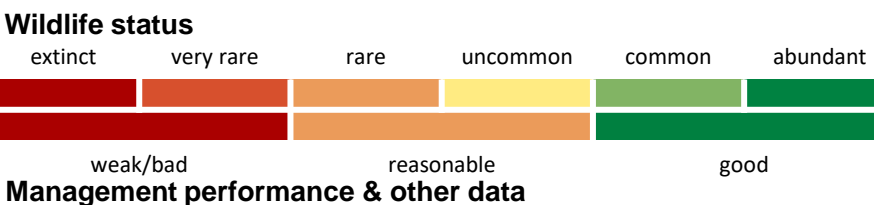the chart shows the approximate ratio of returns to costs

Costs / Returns

Natural resource returns outweigh approximate conflict costs

Total returns: N$ 1,348,990

Approximate conflict costs: N$ 156,980

Approximate positive ratio 9 : 1

Management performance in 2016

Category	Performance
1 Adequate staffing	
2 Adequate expenditure	
3 Audit attendance	
4 NR management plan	
5 Zonation	
6 Leadership	
7 Display of material	
8 Event Book modules	
9 Event Book quality	
10 Compliance	
11 Game census	
12 Reporting & adaptive m/ment	
13 Law enforcement	
14 Human Wildlife Conflict	
15 Harvesting management	
16 Sources of NR income	
17 Benefits produced	
18 Resource trends	
19 Resource targets	

Wildlife status summary in 2016

Elephant, Gemsbok, Giraffe, Jackal, Klipspringer, Kudu, Mtn. zebra, Ostrich, Springbok, Steenbok
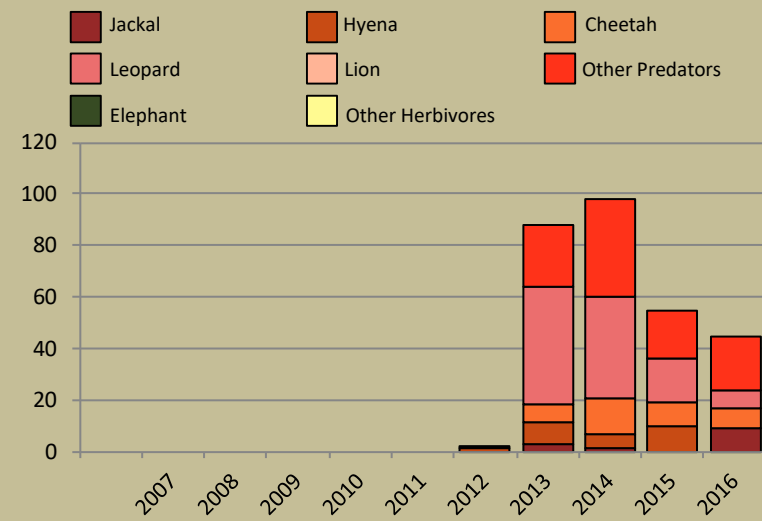
Human wildlife conflict

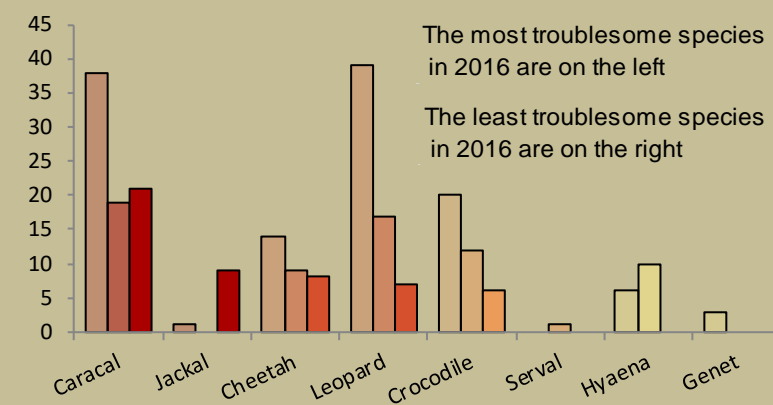### Human wildlife conflict trend
the chart shows the total number of incidents each year, subdivided by species, grouped as herbivores and predators

- Jackal
- Leopard
- Elephant
- Hyena
- Lion
- Other Herbivores
- Cheetah
- Other Predators

Most troublesome problem animals 2014-2016
the chart shows the number of incidents per species for the last 3 years; the darkest bar (on the right) indicates the current year for each species

The most troublesome species in 2016 are on the left

The least troublesome species in 2016 are on the right

Caracal, Jackal, Cheetah, Leopard, Crocodile, Serval, Hyaena, Genet

Type of damage by problem animals 2014-2016
the chart shows the number of incidents per category for the last 3 years; the darkest bar (on the right) indicates the current year for each type

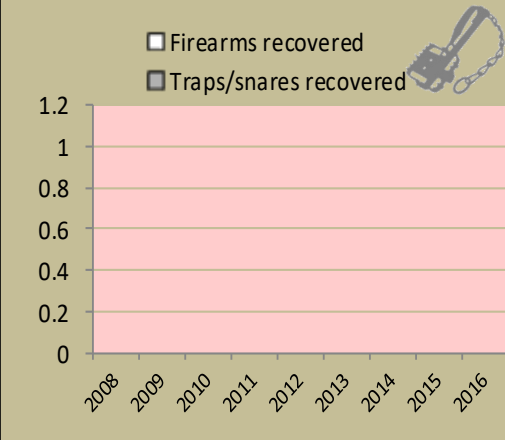Livestock attack, Other damage, Crop damage, Human attack
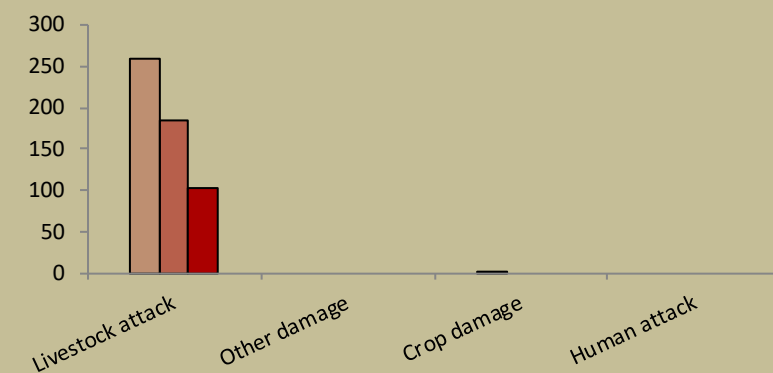
Poaching

Number of incidents per year
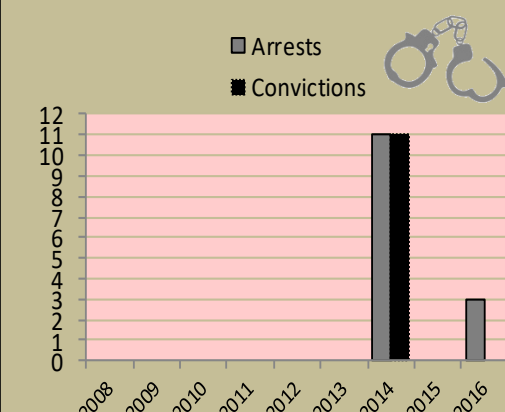Commercial poaching is a serious threat to conservancy benefits. The chart shows the number of incidents per category

- Subsistence
- Commercial
- High Value
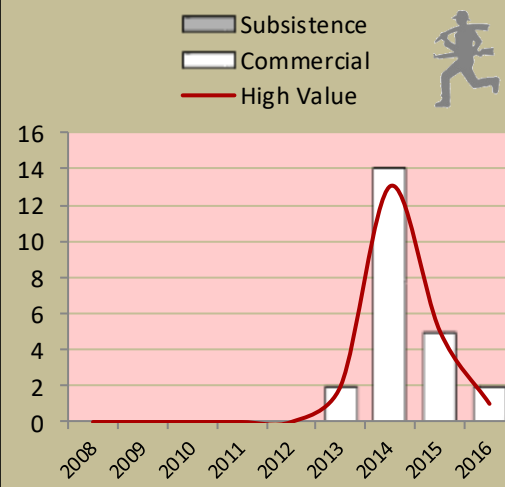
Traps and firearms recovered
number of incidents per category

- Firearms recovered
- Traps/snares recovered

Arrests and convictions
number of incidents per category

- Arrests
- Convictions

Wildlife removals – quota use and value

Species	Quota 2016			Animals actually used in 2016						Potential Trophy Value N$	Potential Other use Value N$
	Total	Trophy	Other Use	Trophy	Own Use & Premium	Shoot & Sell	Capture & Sale	Problem Animal	Total Use		
Baboon	5	5								700	
Cheetah	1	1								16,300	
Duiker	2	2								1,900	
B-f Impala	5	5								13,800	
Kudu*	15	5	10							8,100	48,500
Leopard	1	1								32,400	
Steenbok	5	5								1,600	
Mtn Zebra	5	5								7,400	

Potential value estimates (N$) for species are based on:
- **Potential trophy value** - the average trophy value for that species in the conservancy landscape
  - trophy values vary depending on trophy quality, international recognition of the hunting operator and the hunting area
- **Potential other use value** - the average meat value for common species
  - the average live sale value of each high value species (indicated with an *)[high value species are never used for meat]

Key to the status barometer

Wildlife status

extinct — very rare — rare — uncommon — common — abundant

weak/bad — reasonable — good

Management performance & other data

Success/threat flags

success/ benefit created

weakness/ action needed

Conservancies reduce environmental costs while increasing environmental returns. Returns from wildlife can far outweigh human wildlife conflict costs.
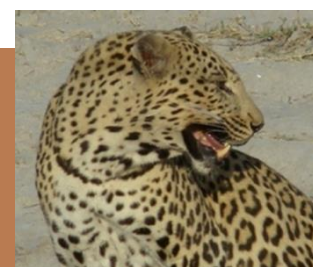
monitoring numbers and trends for a healthy conservancy...

Current wildlife numbers and status

Species	Animals Seen 2016	Estimated population range	Wildlife Status		
			Count Trend	National Guideline	Desired Status
Elephant					
Gemsbok					
Giraffe					
Jackal					
Klipspringer					
Kudu					
Mtn. zebra					
Ostrich					
Springbok					
Steenbok					

Wildlife Status

**Count trend** – gives the species status in the conservancy based on game count trend data.

National guideline – gives the species status in the conservancy using national guidelines for the conservancy; for example, lions may cause local problems, but are of high value and are rare at landscape level.

Desired number – gives the species status in the conservancy based on what the conservancy would like to have.

dark green (abundant) – there should be less;
light green (common) – the desired number is reached;
yellow (uncommon) – there should be more;
light orange (rare) – there should be more than double;
dark orange (very rare) – there should be more than triple;
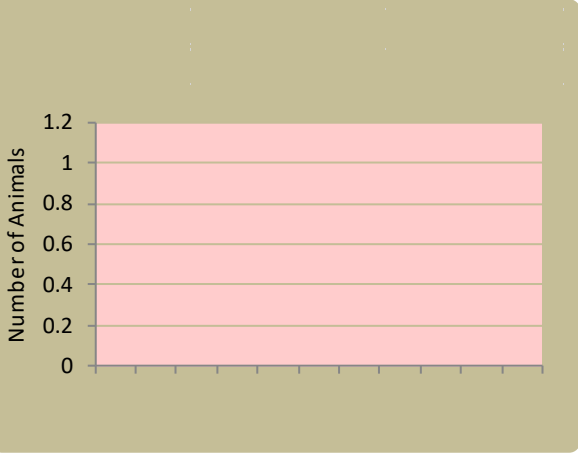**red** (extinct) – the species needs to be reintroduced.

Locally rare species

Sightings indicator

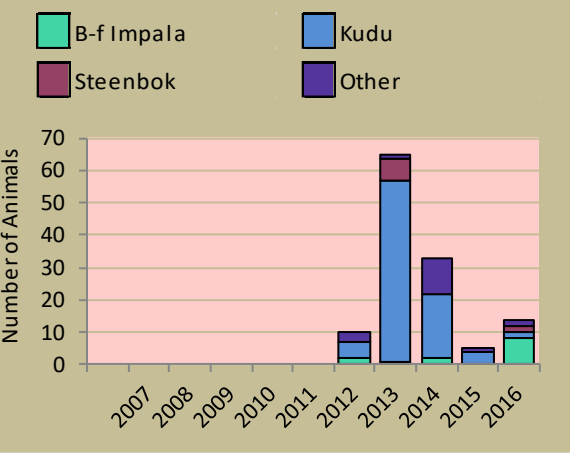☐ 2014 ☐ 2015 ☐ 2016

B-f Impala   Mtn Zebra
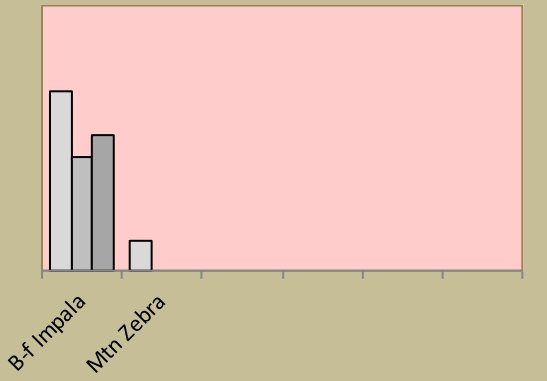
Locally rare and endangered species
are not found very often in the conservancy and need special conservation attention.

Wildlife introductions
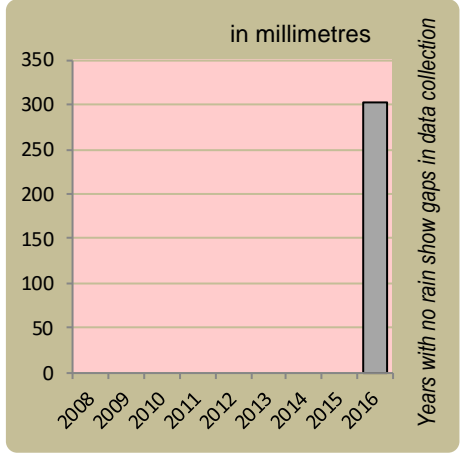
Number of Animals

Wildlife mortalities

☐ B-f Impala ☐ Kudu
☐ Steenbok   ☐ Other

Number of Animals

2007 2008 2009 2010 2011 2012 2013 2014 2015 2016

Annual rainfall

in millimetres

Years with no rain show gaps in data collection

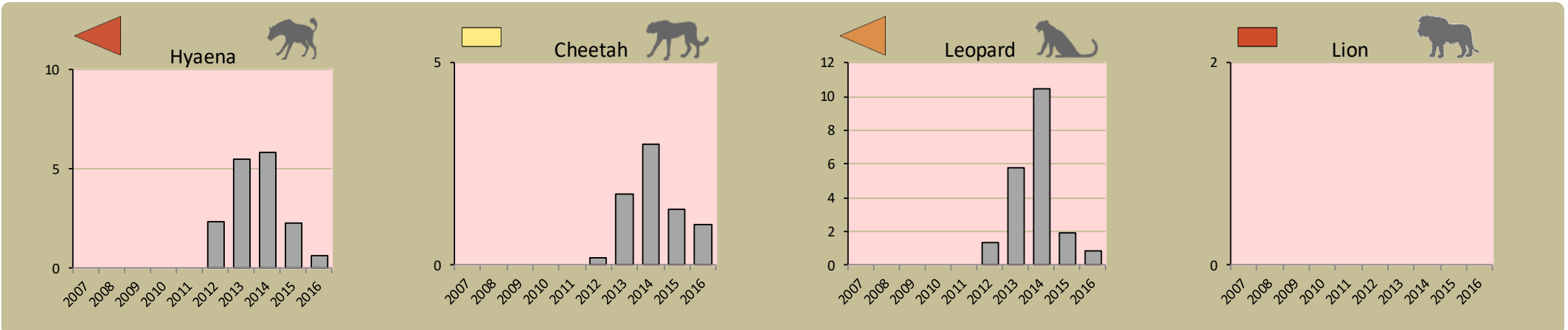2008 2009 2010 2011 2012 2013 2014 2015 2016
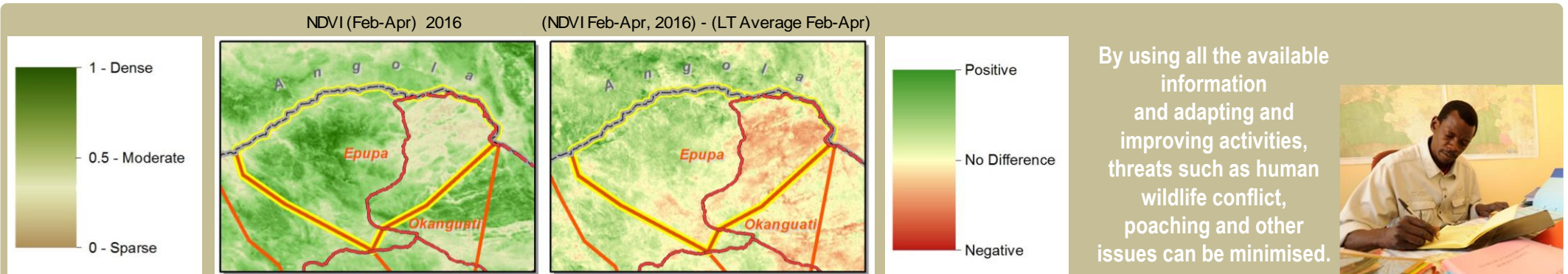
Annual game count   No counts done

A. Jarvis

Predator monitoring
charts show the average number of animals seen per Event Book each year
status barometers reflect the general sightings trend over the last 5 years

Hyaena

Cheetah

Leopard

Lion

2007 2008 2009 2010 2011 2012 2013 2014 2015 2016

Vegetation monitoring
Green vegetation index (NDVI). Maps show vegetation cover during Feb-April of the current year and the difference between the current year and the long term average (2001-2015)

1 - Dense
0.5 - Moderate
0 - Sparse

NDVI (Feb-Apr) 2016

(NDVI Feb-Apr, 2016) - (LT Average Feb-Apr)

Angola   Epupa   Okanguati

Angola   Epupa   Okanguati

Positive
No Difference
Negative

By using all the available information and adapting and improving activities, threats such as human wildlife conflict, poaching and other issues can be minimised.

Epupa
Institutional Report

Enabling wise conservancy governance…

Conservancy statistics

Date Registered: October 2012

Population (2011 census)**:** 2970

Size (square kilometres)**:** 2912

Conservancy Governance

Number of management committee members:	14
Date of last AGM:	Tue, November 1, 2016
Attendance at AGM:	Men: 105; Women: 105
Date of next AGM:	Wed, November 1, 2017

Other important issues

Budget approved? ✔

Work plan approved? ✔

Constitutional adherence

Approved constitution	✔
AGM held	✔
Management and utilisation plan	✔
Financial annual report approved at AGM	✔
Financial report external review	✔
Benefit distribution plan	✖

Employment

Conservancy staff: Male	4
Female	4
Community game guards:	8
Community resource monitors:	0
Lodge staff: Male	19
Female	12

Benefits

Cash	In Kind

Conservancy Self Evaluation How well does the conservancy consider it has performed in the past year?

Effectiveness of implementation	Poor	Fair	Good	Explanation of effectiveness rating
Game Management and Utilisation				
Zonation Plan				
Benefit Distribution				
Human Wildlife Conflict Management			Good	Implementation was very effective.
Sustainable Business and Financial Planning		Fair		Financial books were not audited.
Tourism			Good	Activities were very effective and there is only one lodge that is not supporting the conservancy.
Staff Management			Good	The plan was implemented as planned.
Assets Management/Register	Poor			We still don't have assets and an asset register.
HIV/AIDS		Fair		Some people don't use a condom.
Communication			Good	Implementation was very effective.