

Is there a light at the end of the tunnel for our rhinos?

Dr Mike Knight
Dr Richard Emslie

Sam Ferreira



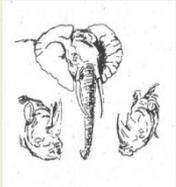
Global



Continental & Rhino Reporting to CITES



Regional



RESG



East African RMG

National Rhino Plans





Protection, LE, Investigations & Intelligence

To adequately protect rhino and secure their derivatives by the implementation of effective legislation and strengthened coordinated collaborative law enforcement actions (between countries and across different arms of government), improved investigation, increased cooperative intelligence sharing and analysis, effective prosecution and application of best available technology, knowledge and skills.

Biological Management

To cooperatively manage and expand rhino populations across the African landscape to achieve sustained growth rates*, and to conserve genetic diversity with decision-making informed by adequate standardised monitoring.

Political Support

To foster and encourage collective political support for rhino conservation

Adequate Financing

To explore and develop financing mechanisms and structures to adequately and sustainably fund rhino conservation efforts

Socio-Economic

To incentivise and secure support for rhino conservation by improving livelihoods and empowering local people* through the promotion of benefits derived from wildlife resources.

Capacity

To ensure that sufficient, skilled and appropriately equipped human resources are deployed efficiently and strategically

Goal Target: Ensure that Continental rhino numbers increase over the next five years

Coordination

To improve coordination between range states through active participation in international forums* to ensure the implementation of rhino related issues, including, range expansion, law enforcement, enhanced livelihoods, training, biological management & CITES issues

Communication & Public Support

To ensure understanding and broad scale support from the public and stakeholders for rhino conservation efforts through effective conservation action and targeted communication

Enabling policy and legislative framework & Cross Cutting need for innovation & research

Cross-cutting. The need to investigate innovative options for rhino conservation and adaptively manage is recognised. Applied research should also be undertaken as needed to inform decision and policy making. It is also essential to have enabling policy and legislative frameworks in place.

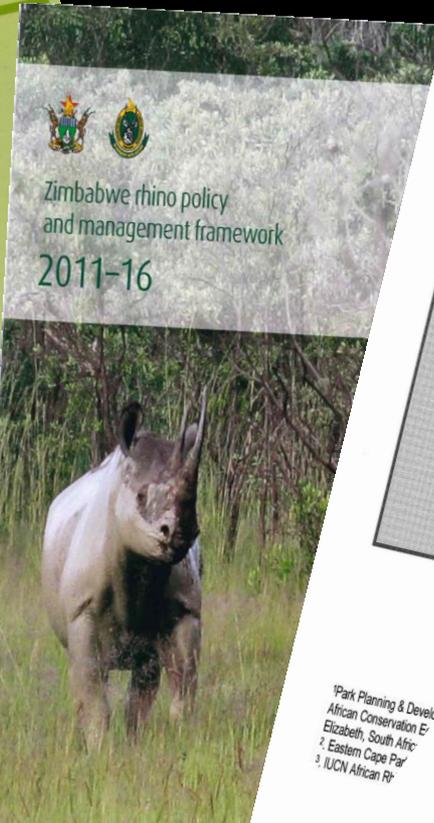
The hierarchy of plans

AFRICAN RHINO RANGE STATES'
AFRICAN RHINO CONSERVATION PLAN



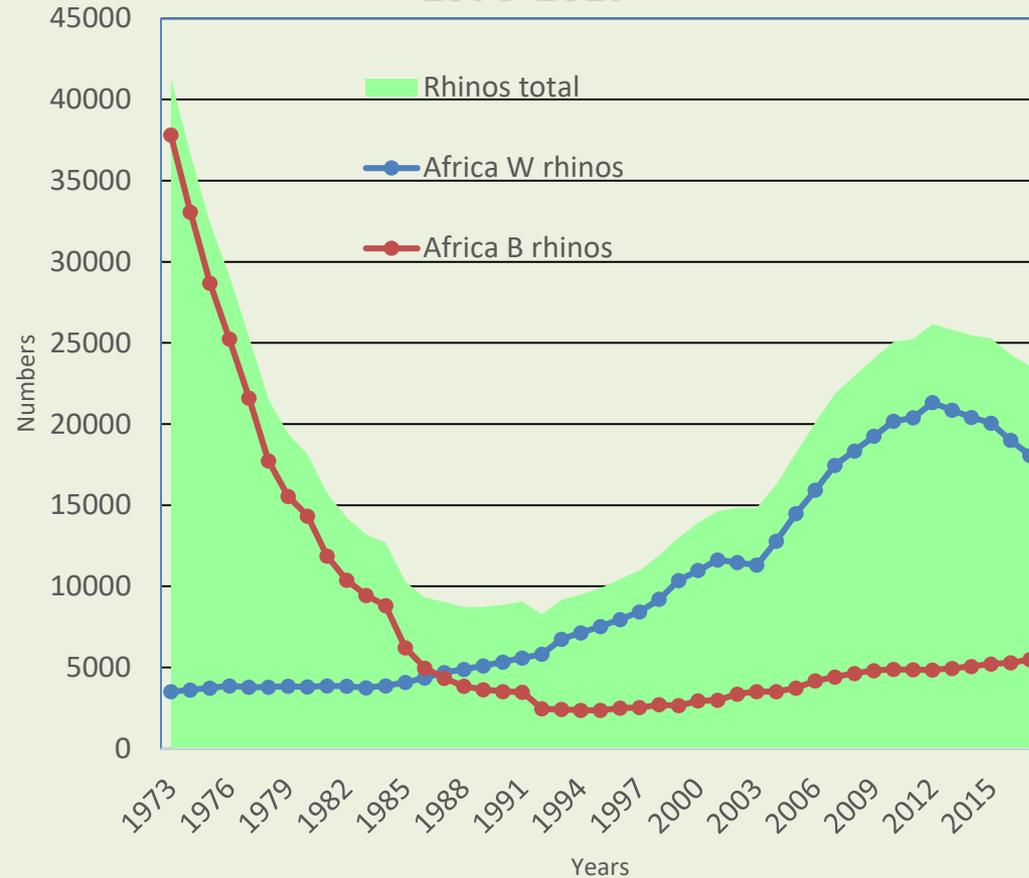
Status Survey and Conservation Action Plan

African Rhino



Where have we come from?

**Estimated number of African rhinos
1973-2017**



Black rhinos:

94% reduction from 1970s to mid 1990s

Doubled last 2 decades.

White rhinos:

SWR: From near extinction to 17,300

NWR: From 2,200 to 2 since 1960!

History:

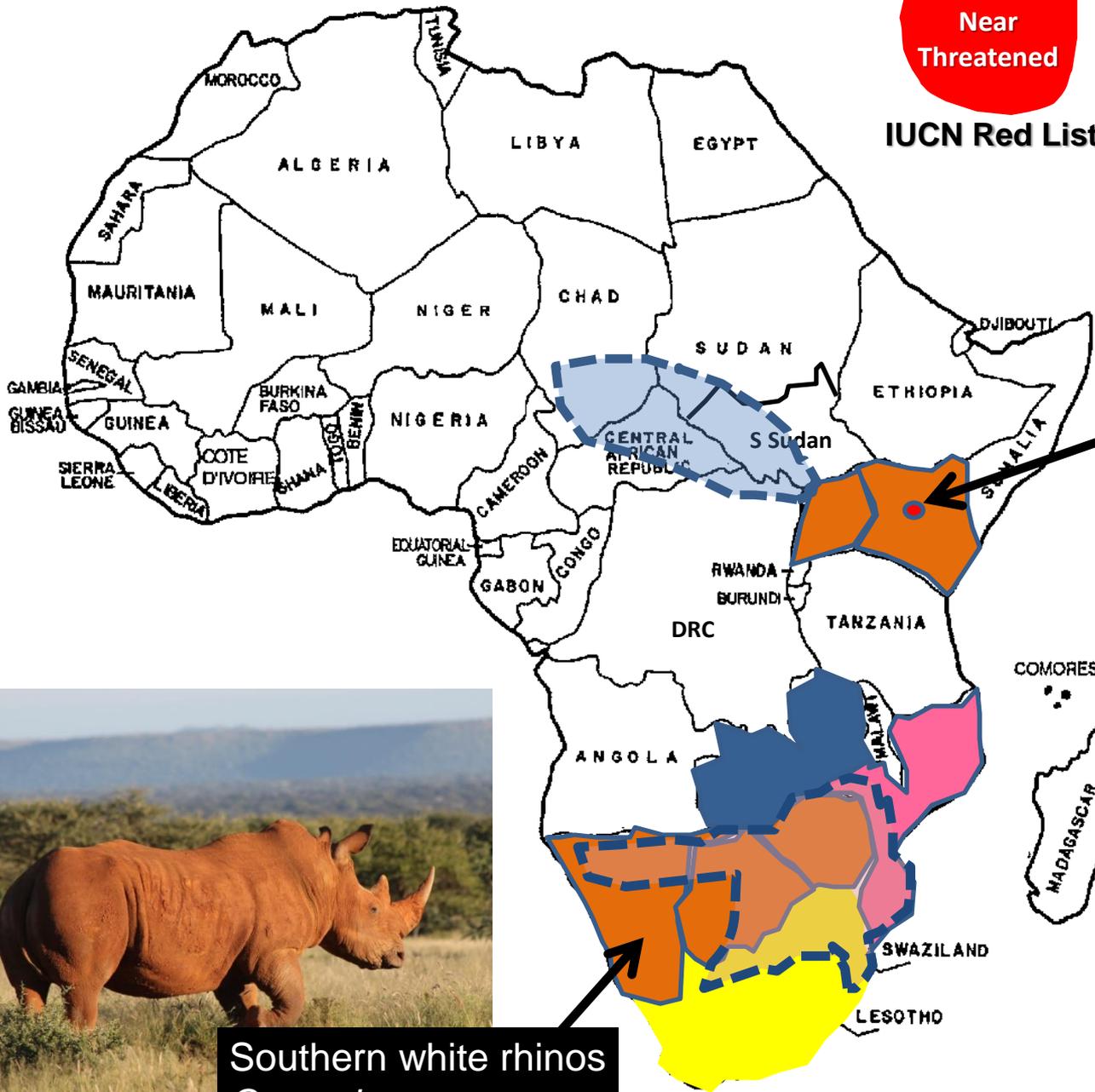
Rhinos lost from 75% range states
Have been re-establishment.

Only 12 countries, with bulk in the
Big 4

White Rhinos *Ceratotherium simum*

NT
Near
Threatened

IUCN Red List



Northern white rhinos
C. s. cottoni

- Resident
- Re-introduced
- Possibly extinct
- Introduced



Southern white rhinos
C. s. simum

Africa's white rhinos

DOWN:
20,378 in 2015

In 2017 = 18,067

Big 4 (9 range states):

- S Africa 86%
- Namibia 6%
- Kenya 3%
- Zimbabwe 2%

Where are they?

- State=65%
- Private= 34%
- Communal=<1%

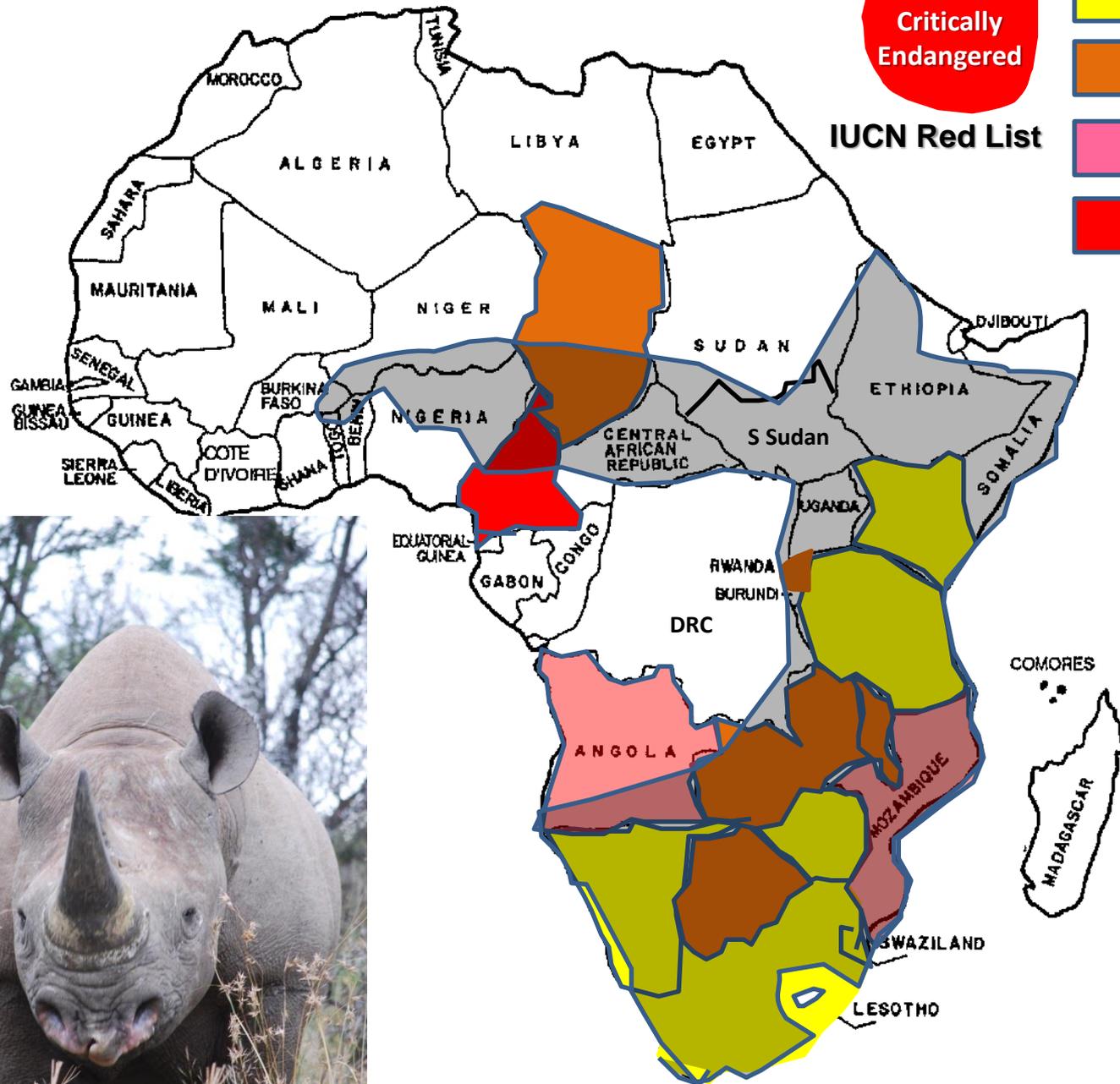


Black Rhino *Diceros bicornis*

CE
Critically
Endangered

IUCN Red List

-  Resident
-  Reintroduced
-  Possibly extinct
-  Extinct



Africa's black rhinos

UP:
5,250 in 2015

In 2017 = 5,495

Big 4:

- S Africa 32%
- Namibia 34%
- Kenya 14%
- Zimbabwe 10%

Africa's Big 4 RHINO countries:

S Africa	17,671 (74%)	DOWN
Namibia	2,832 (12%)	UP
Kenya	1,258 (6%)	UP
Zimbabwe	887 (4%)	UP
Botswana	502 (2%) (Inc 215)	
7 other countries	404 (2%)	

94% in S'n Africa!

Where are they?

- State=67%
- Private= 27%
- Communal=6%



BRUNNEN
LUBRIKATION
SYSTEME

18.11.16









African and Asian Rhinoceroses – Status, Conservation and Trade

A report from the IUCN Species Survival Commission (IUCN SSC) African and Asian Rhino Specialist Groups and TRAFFIC to the CITES Secretariat pursuant to Resolution Conf. 9.14 (Rev. CoP17)

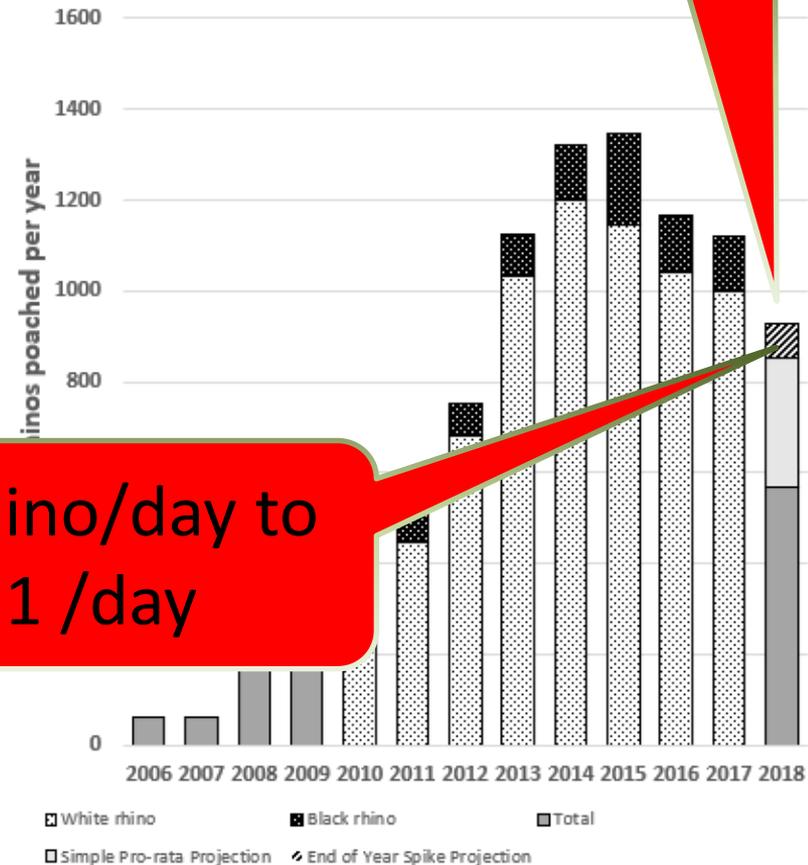
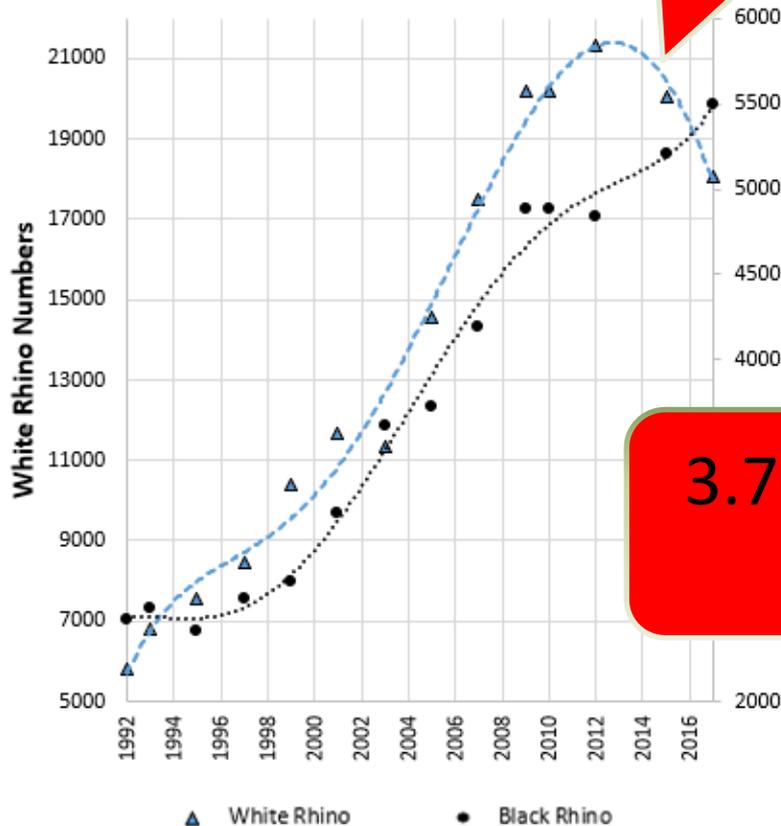
Richard H Emslie^{1,2}, Tom Milliken^{3,1}, Bibhab Talukdar^{2,1}, Gayle Burgess³, Keryn Adcock¹, David Balfour^{1,4} and Michael H Knight^{1,4} (compilers)

¹ IUCN SSC African Rhino Specialist Group (AfRSG), ² IUCN SSC Asian Rhino Specialist Group (AsRSG),
³ TRAFFIC, ⁴ Nelson Mandela University, South Africa

Poaching of Africa's rhinos

8,413 (compounded > 10,400)!
Proportionally WR>BR

879



3.7 rhino/day to
3.1 /day

Continental rhino numbers

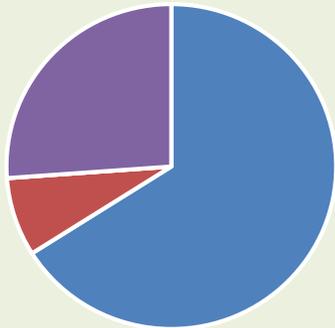
	White	Black	Total
Botswana	50	502	552
Cameroon	2	2	4
Central African Republic	1	0	1
Democratic Republic of Congo	29	0	29
Kenya	745	1258	2003
Namibia	28	28	56
Mozambique	1	30	31
Namibia	91	1857	1948
Rwanda	19	19	38
<i>Senegal</i>	3	3	6
South Africa	15625	2046	17671
Swaziland	66	21	87
Tanzania	160	160	320
Uganda	22	22	44
Zambia	14	48	62
Zimbabwe	367	520	887
Total	18146	23564	41710

Kruger NP
 2015: 8,875
 2017: 5,142
 40% reduction
 Drought & poaching



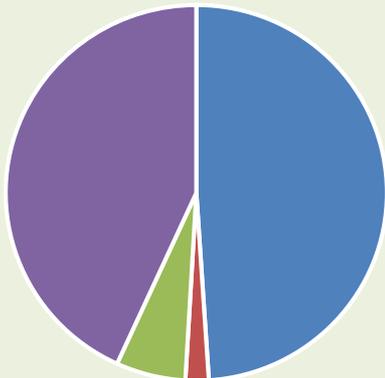
Increasing role of private sector

2018: Namibian black rhino



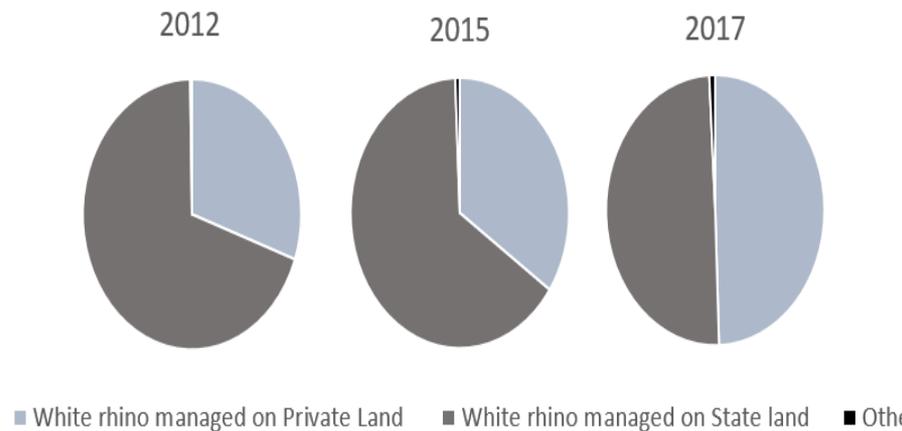
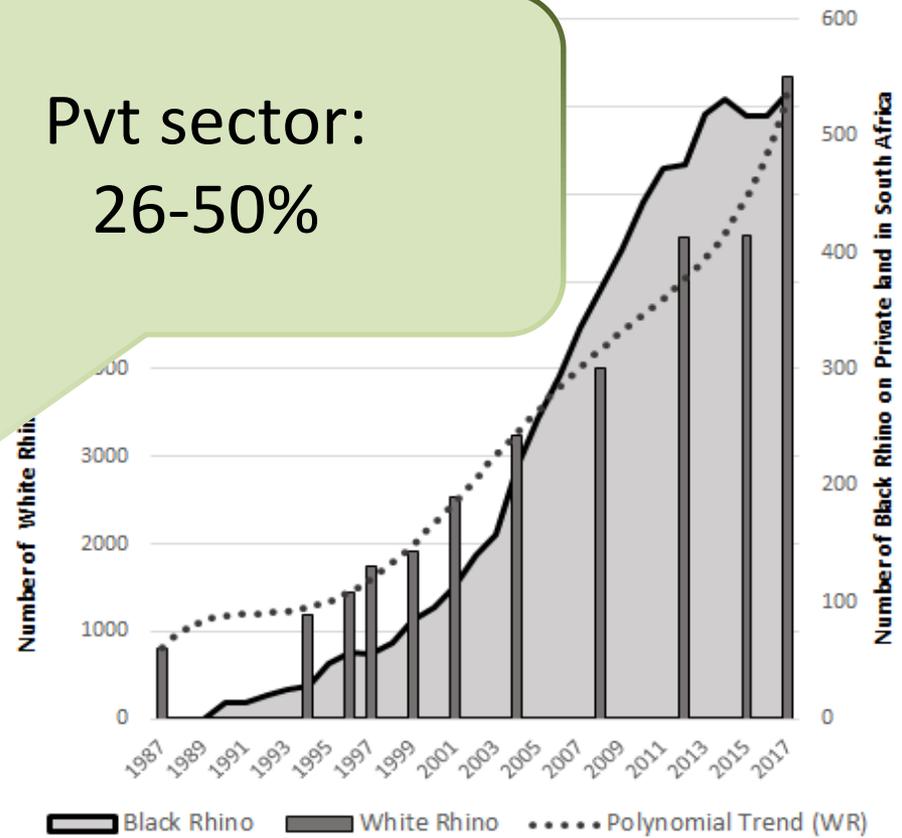
State Communal Municipal Private

2018: Kenyan black rhino population



State Communal Municipal Private

Pvt sector:
26-50%

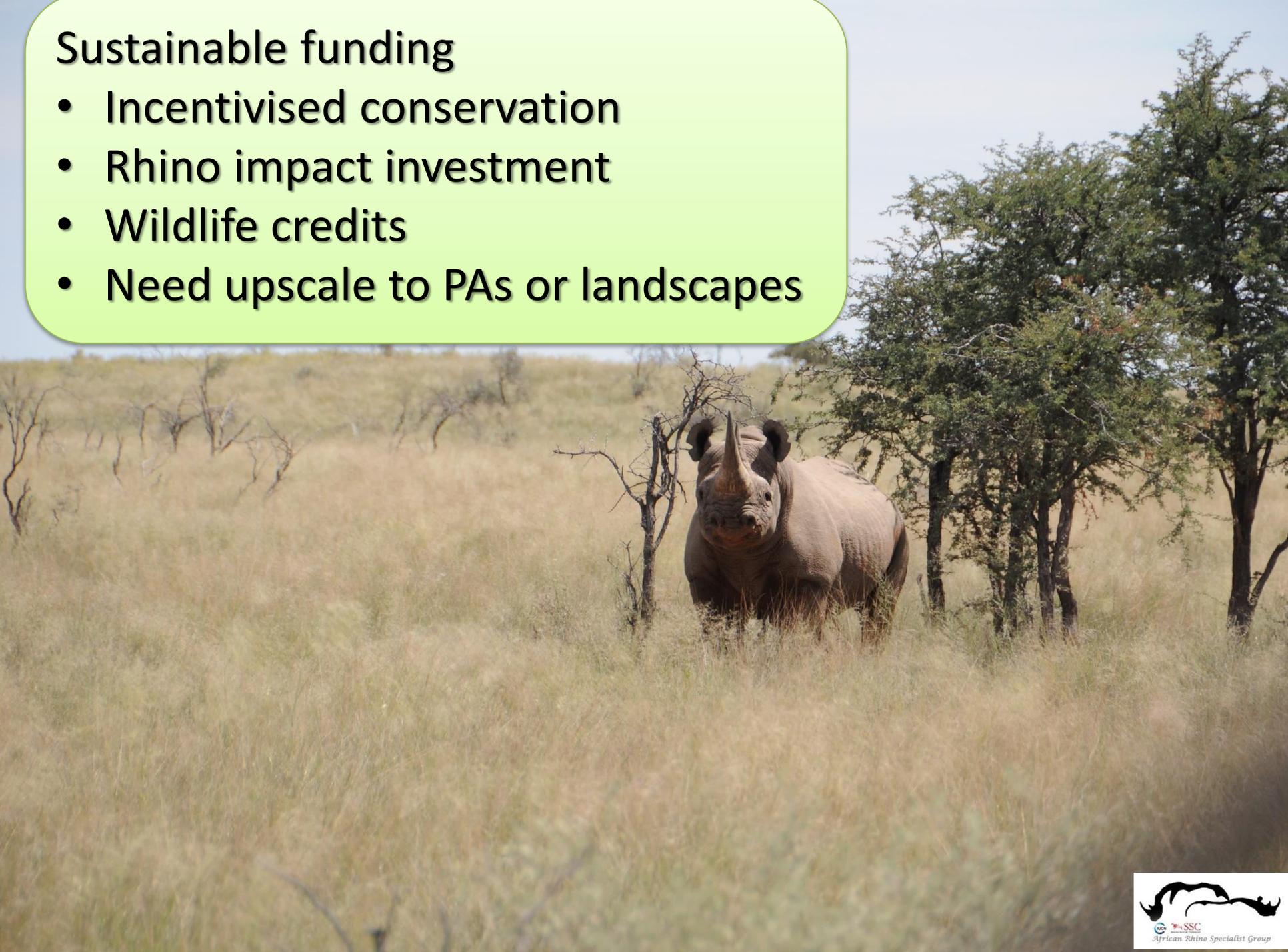


Rhino conservation is expensive

- Kruger NP
 - ~\$800/yr/km² (Total: \$16m)
\$74m/5 yrs (ie ~\$1,600/rhino/yr)
 - Other PAs (\$1,210-\$10,620/rhino/yr)
 - Security costs escalating by ~75%/yr
- Largest private rhino population
 - \$357,000/month (60% sec.)
=\$2677/rhino/yr

Sustainable funding

- Incentivised conservation
- Rhino impact investment
- Wildlife credits
- Need upscale to PAs or landscapes

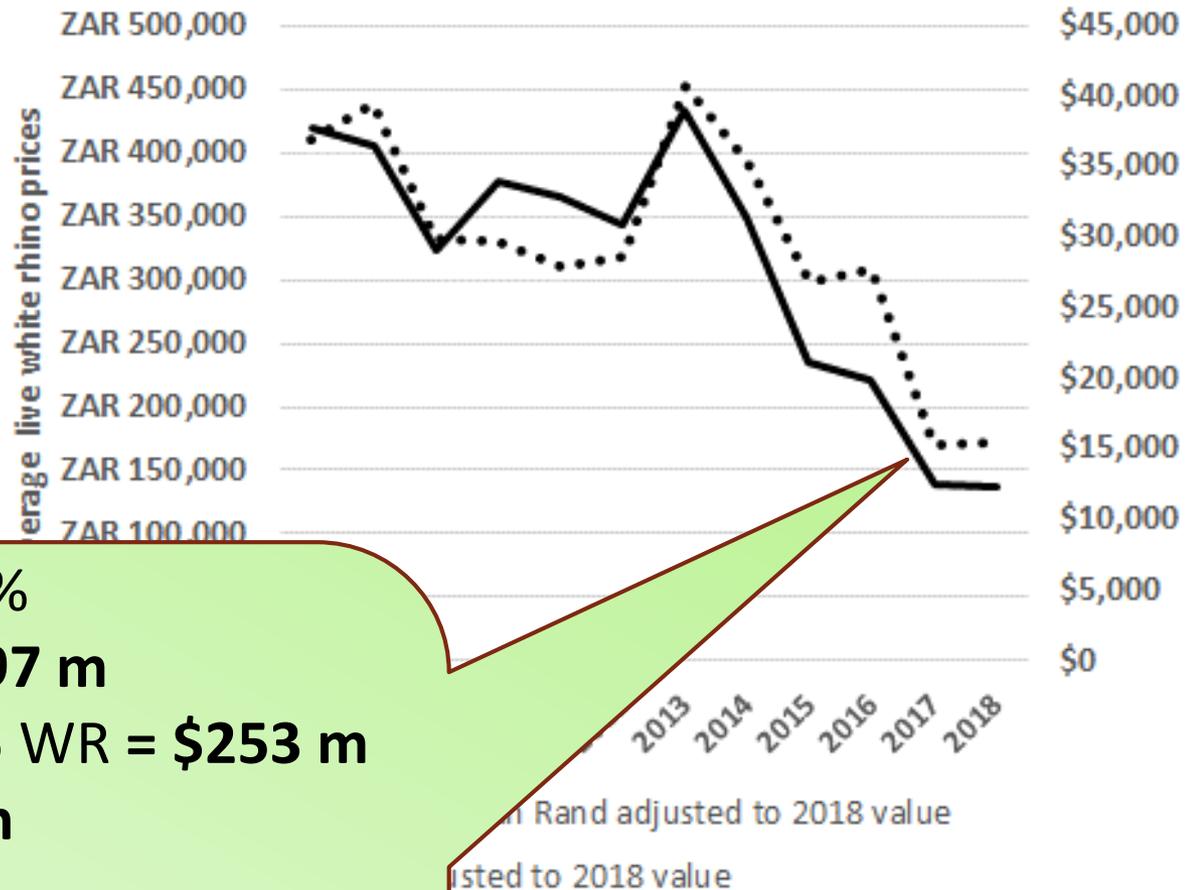


Other costs

- Human lives: Rangers, communities
- Emotional/social: Psychological
- Opportunity:
 - Conservation- <5% conservation
 - Infrastructure degradation
 - Crime
- Reputation:
 - Green militarisation
 - Corruption disease
- Messaging:
 - poacher advertising
 - war of elite on poor



Live Sales



- Loss in sales price 67%
- Asset value loss = **\$397 m**
- Poaching loss of 6735 WR = **\$253 m**
- Breeding loss = **\$60 m**

SUM=\$711m (ie \$105,300/rhino)

- + security costs (**348%**)
- **Fine of \$70k/animal!!!!**

Targeted messages to RHINO poachers?

What's written

What's heard?

What should
be written?

What we want
to be heard?

Producers
On the ground poachers

Number of
rhinos

There is a product

Well managed
rhino pops

Its not easy
to get horn

Number
poached

Its easy to get horn

Poachers
caught, killed,
sentenced,

Not worth
the risk

Price of
horn high

T

d

Stay out
Life at risk

Millions of
users

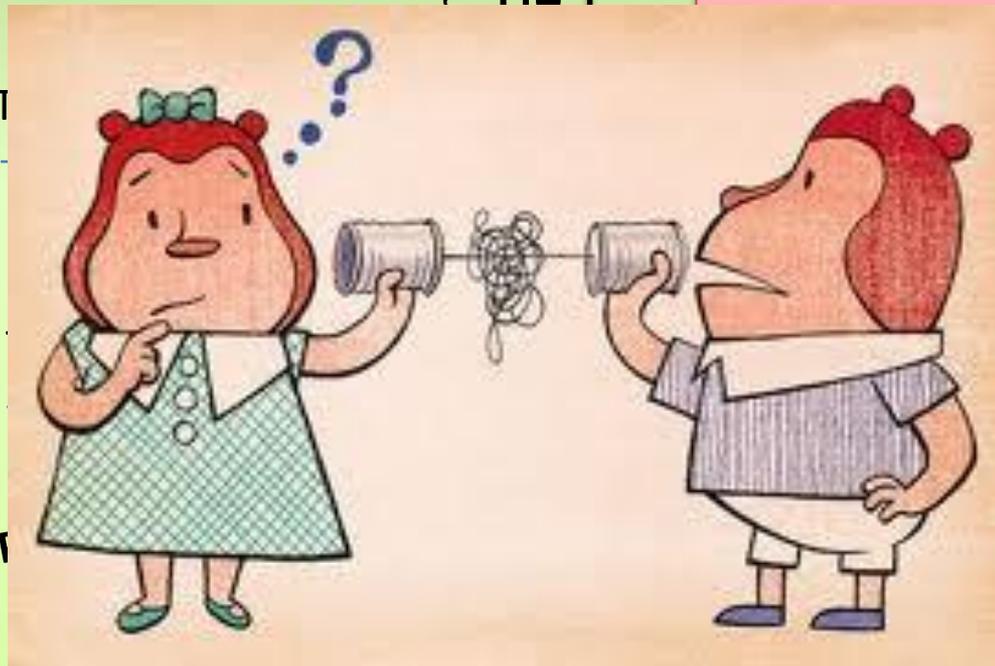
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Sustainable
legal medicine

Rhino going
extinct

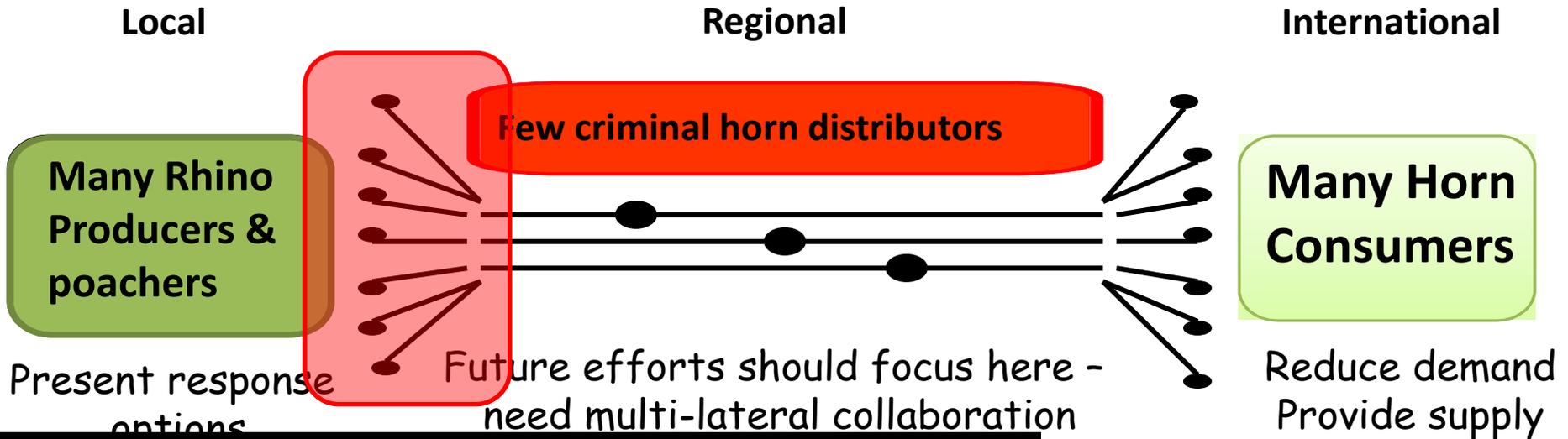
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Not a good
illegal investment

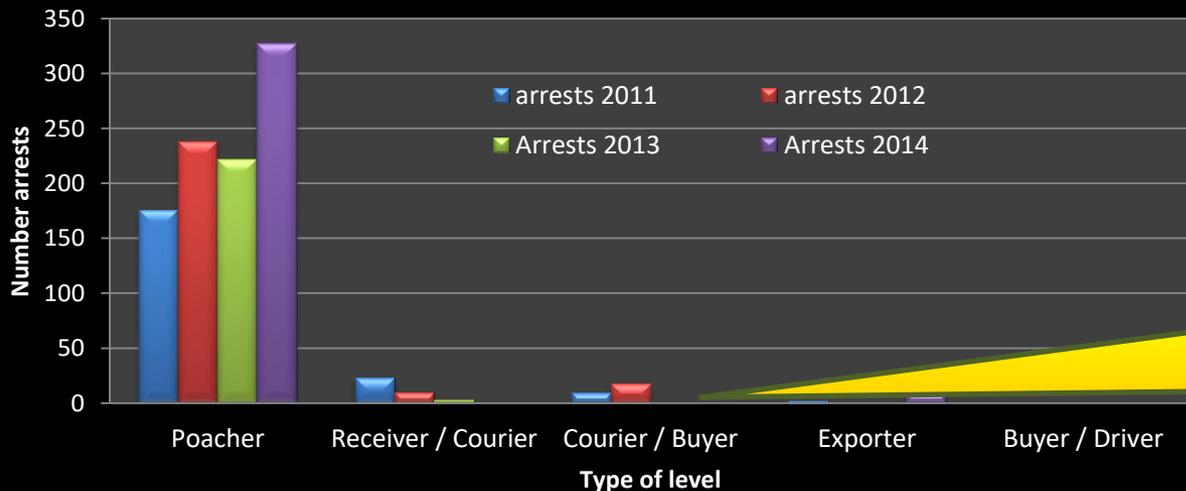


GAME CHANGING INTERVENTIONS

CHANGING INCENTIVES TO POACH



South Africa
Arrests : Levels of Threat 2011 -14

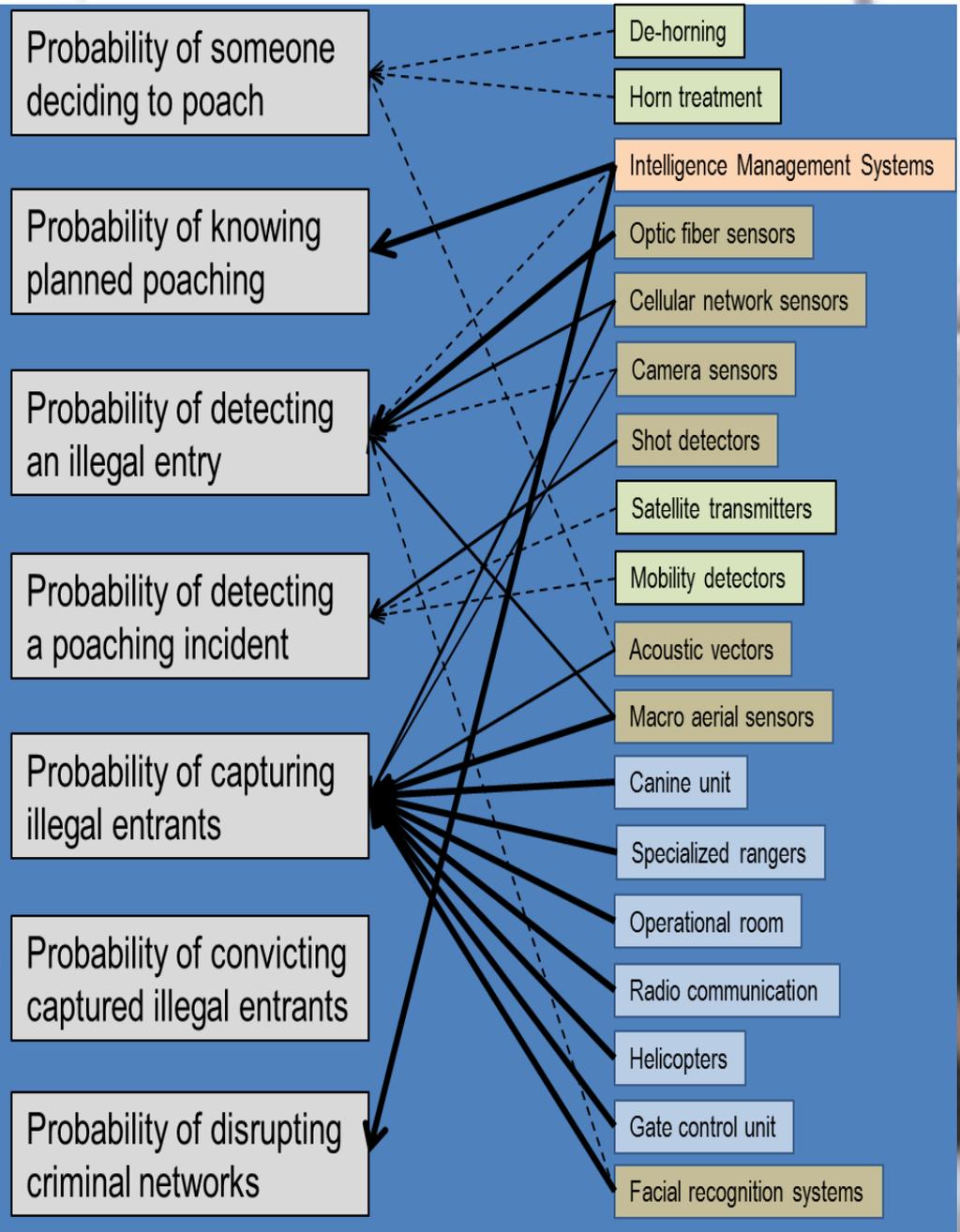


Proactive intelligence
Break govt silos
Incentivise communities

2018:
13% level 3&4 of ~160 arrests
530 rhino cases (750 accused)
70 trails – 93% success

Where should we put our effort?

Business Process Management Systems





eRhODIS[®]: Sampling apps (2014)

Sealed sampling kit photographed

Field data collected via app



RhODIS Sample Submission Form A
Rhinoceros animal sample collection
FORENSIC POACHING

RhODIS Kit Number: VGL-012298 | Date Collected: 22-05-2014 11:30:48
Police Station: Onderstepoort | CAS:

Animal Information

Animal ID / Name	Ear Notches (from front)	Microchip #1 (Body)	Placement 1
		NONE	
		Microchip #2 (Body)	Placement 2
		NONE	

Age: Adult | Sex: Female | Species: White | Subspecies: None

Horn Information (if horns are removed - please complete a separate horn form for each horn and follow the instructions on that form for handling each horn)

Front Horn	Microchip	Placement	Sample Collected
Present	Circumference (cm)	Length Front (cm)	Length Back (cm)
Back Horn	Microchip	Placement	Sample Collected
Present	Circumference (cm)	Length Front (cm)	Length Back (cm)

Sample Information

Type	Number of each sample type	Other Samples	Ear Tag Nr
Blood	0		
Hair	0		
Tissue	0		
Horn	0		

Outer Bag Kit Number: VGL-012298
Inner Bag Kit Number: VGL-022298

Owner Information

Owner	Fam	Tel Number	Cell Number	Email
ERC	Kaai/plase	0125290688	0605286676	ian@gmail.com

Area Information

Area/Town	Province	Country	Lat (S)	Long (E)
Onderstepoort	Gauteng	South Africa		

Veterinarian Name: Alan Guthrie
Authorized Person Name: Gideon | Authorized Person Signature: [Signature] | Sign Date: 22-05-2014 11:30:45



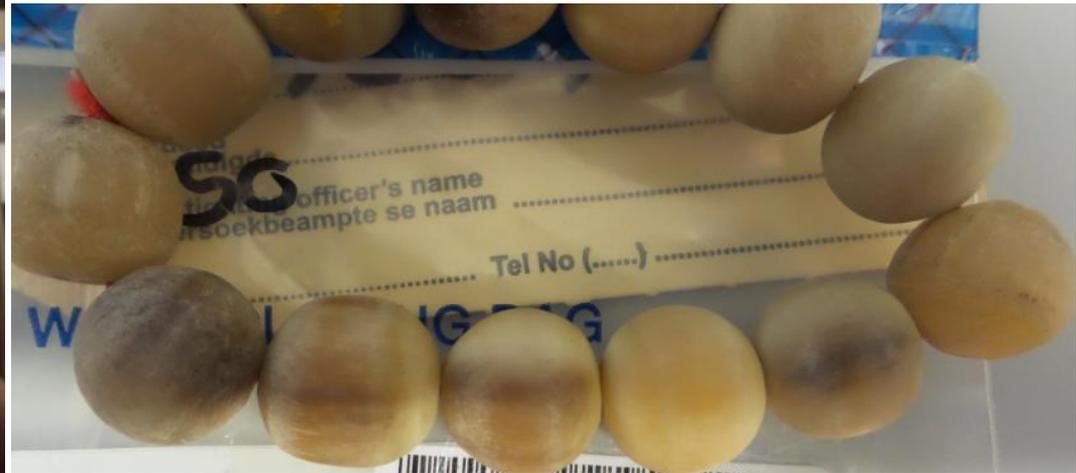
Secure Pdf returned via email

Sample data uploaded directly to the database



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YUNIBESITHI YA PRETORIA

Trends in rhinoceros horn use



Ensuring the future of rhinos?

- WHOLE government response
- Regional cooperation
- Priority crime = ECONOMIC
- Effective law enforcement - break crime networks
- Follow the money
- Enabling legislation
- Increase the value of rhinos
- Responsible & ethical use
- Translocations
- Greater social mandate
- Focused messaging
- Price data
- Innovate & experiment

