



AFRICAN WILDLIFE FOUNDATION®

Conservation Enterprise & Financing Delivering Livelihood Opportunities

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A CONTINENT OF CHANGE

7 December 2015

*Working together with the
people of Africa to ensure
it's wildlife and wildlands
endure forever.*

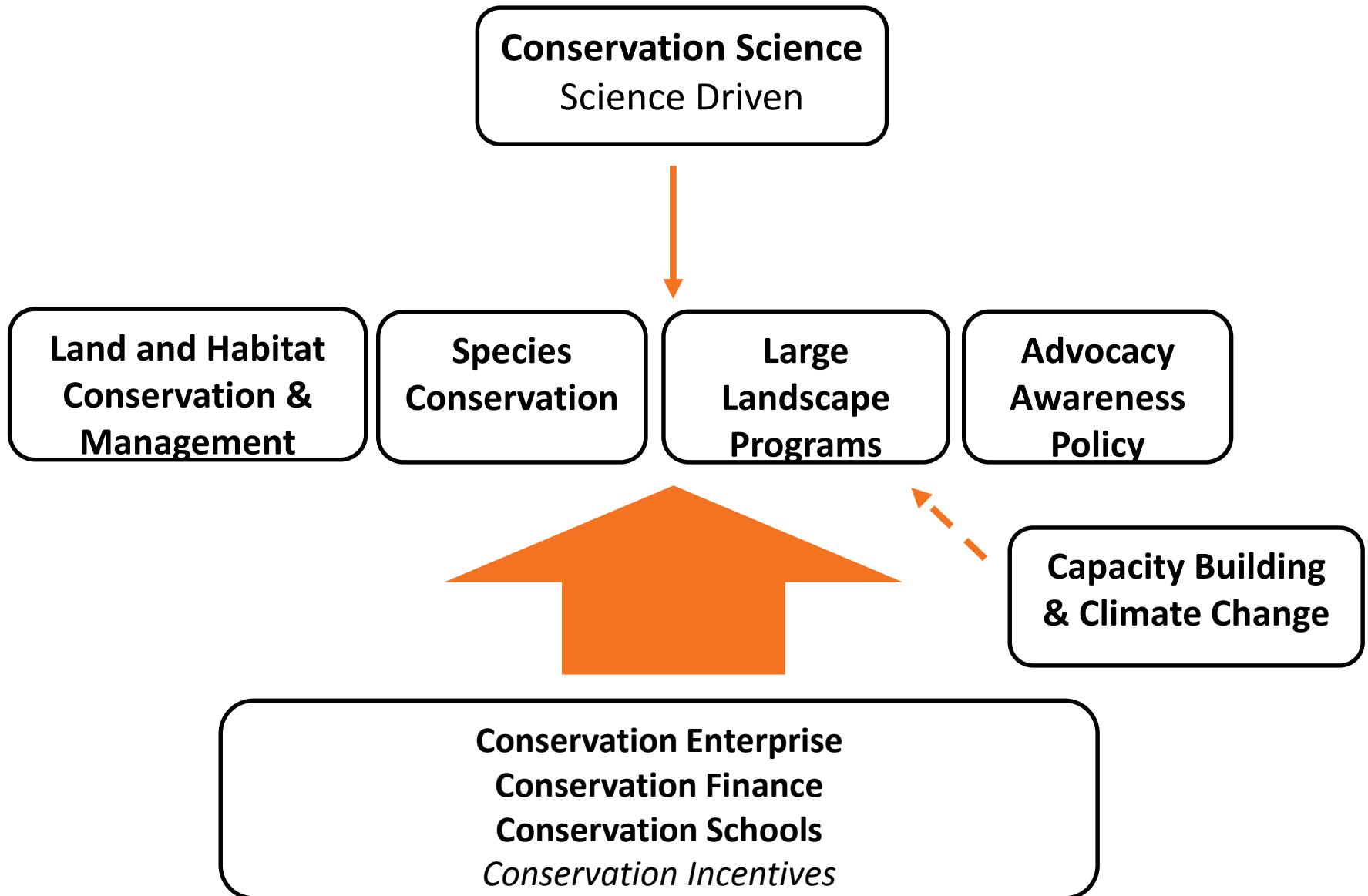




AFRICAN WILDLIFE FOUNDATION®

Founded 1963. Africa based. Africa focused. Africa staff.

AWF Programs



**AWF's
Program to
combat Wildlife
Poaching and
Trafficking**

1

PROTECT: Support Boots on the Ground



2

**DETECT and ARREST:
Increase Security and
Law Enforcement**



3

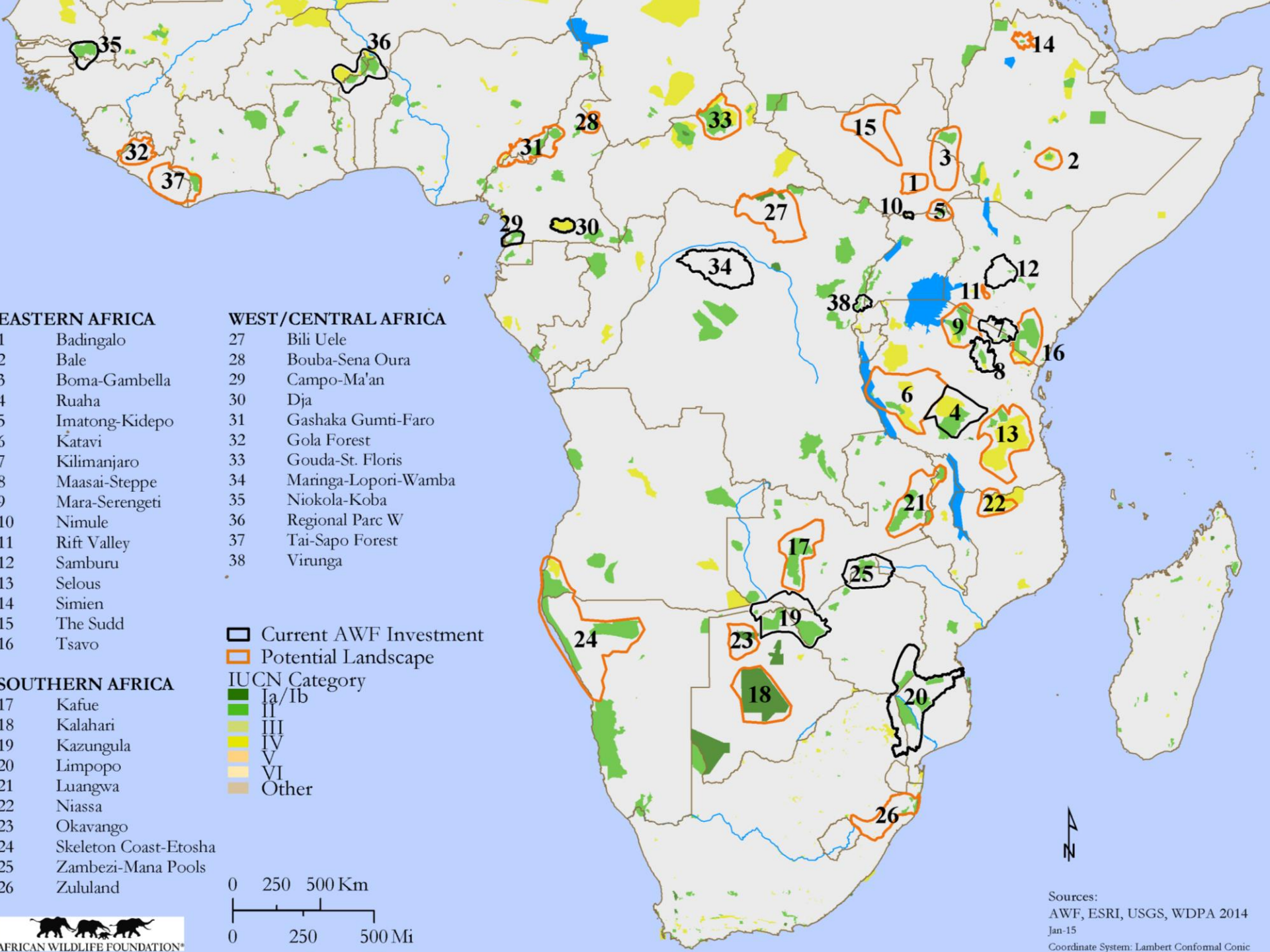
Curb Demand



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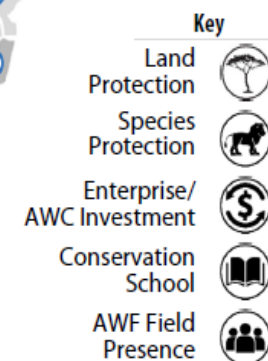
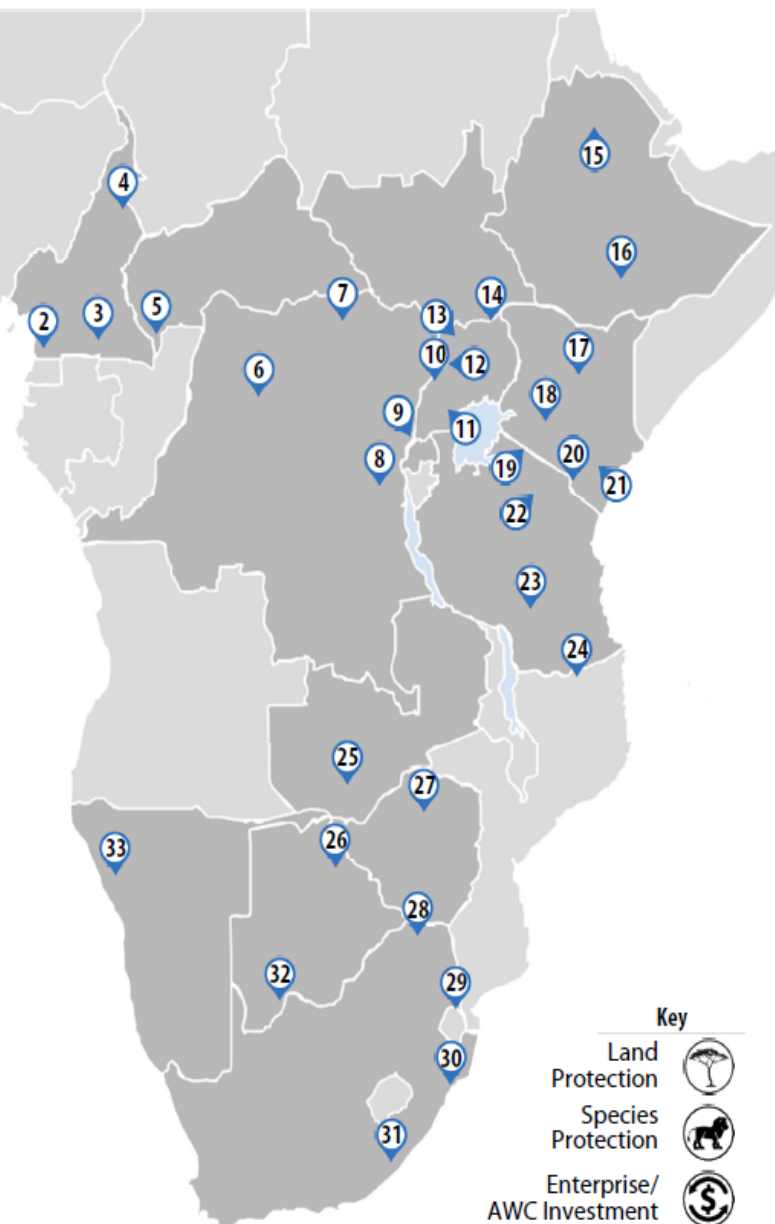
Push Policy at the International Level





Programmatic Footprint

#	Landscape Name	Country	Land Protection	Species Protection	Enterprise/ AWC Investment	Conservation School	AWF Field Presence
1	Niokola-Koba	Senegal					
2	Campo Ma'an	Cameroon					
3	Dja	Cameroon					
4	Bouba-Sena Oura	Cameroon					
5	Dzanga-Sangha	CAR					
6	Maringa-Lopori-Wamba	DR Congo					
7	Bili-Uele	DR Congo					
8	Kalinzi	DR Congo					
9	Virunga						
10	Budongo	Uganda					
11	Lake Mburo	Uganda					
12	Murchison Falls	Uganda					
13	Nimule	Uganda					
14	Imatong-Kidepo	S.Sudan/Ug.					
15	Simien	Ethiopia					
16	Bale	Ethiopia					
17	Samburu	Kenya					
18	Rift Valley	Kenya					
19	Mara/Serengeti	Kenya/Tanz.					
20	Kilimanjaro	Kenya/Tanz.					
21	Tsavo	Kenya					
22	Maasai Steppe	Tanzania					
23	Ruaha	Tanzania					
24	Selous	Tanzania					
25	Kafue	Zambia					
26	Kazungula	4 Corners					
27	Zambezi-Mana Pools	Zimbabwe					
28	Ngwizi	Zimbabwe					
29	Limpopo	Moz./S.Africa					
30	Zululand	South Africa					
31	Great Fish River NR	South Africa					
32	Kalahari	Botswana					
33	Skeleton Coast Etosha	Namibia					





Landscape Planning – Holistic Programs—Quid Pro-quo

Conservation Enterprise

A commercial activity that generates economic benefits that support conservation & communities.



CONSERVATION ENTERPRISE: A DECISION SUPPORT TOOLKIT



AFRICAN WILDLIFE FOUNDATION®





Creating the Right Environment



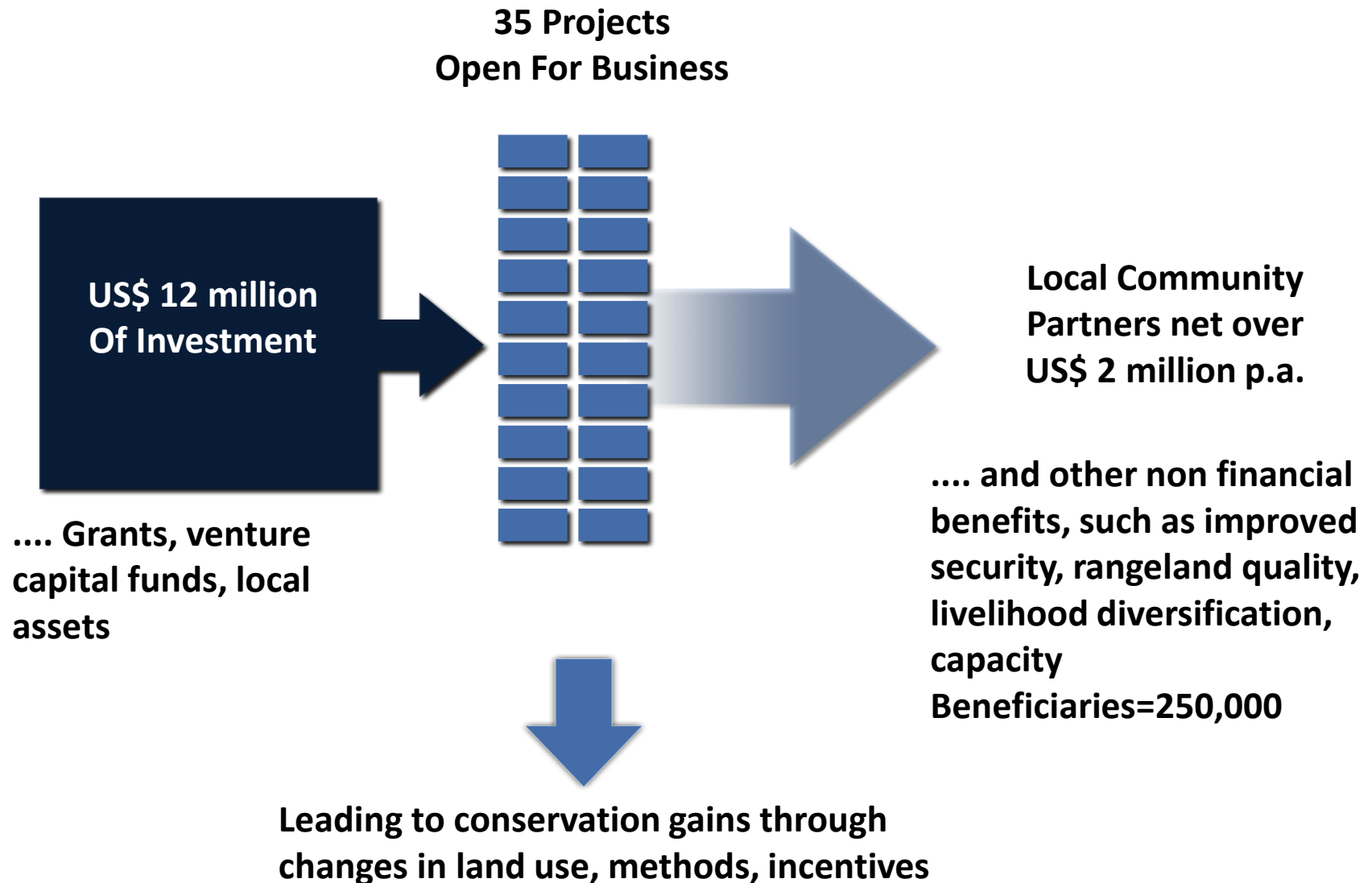
Ol Lentille, Kenya

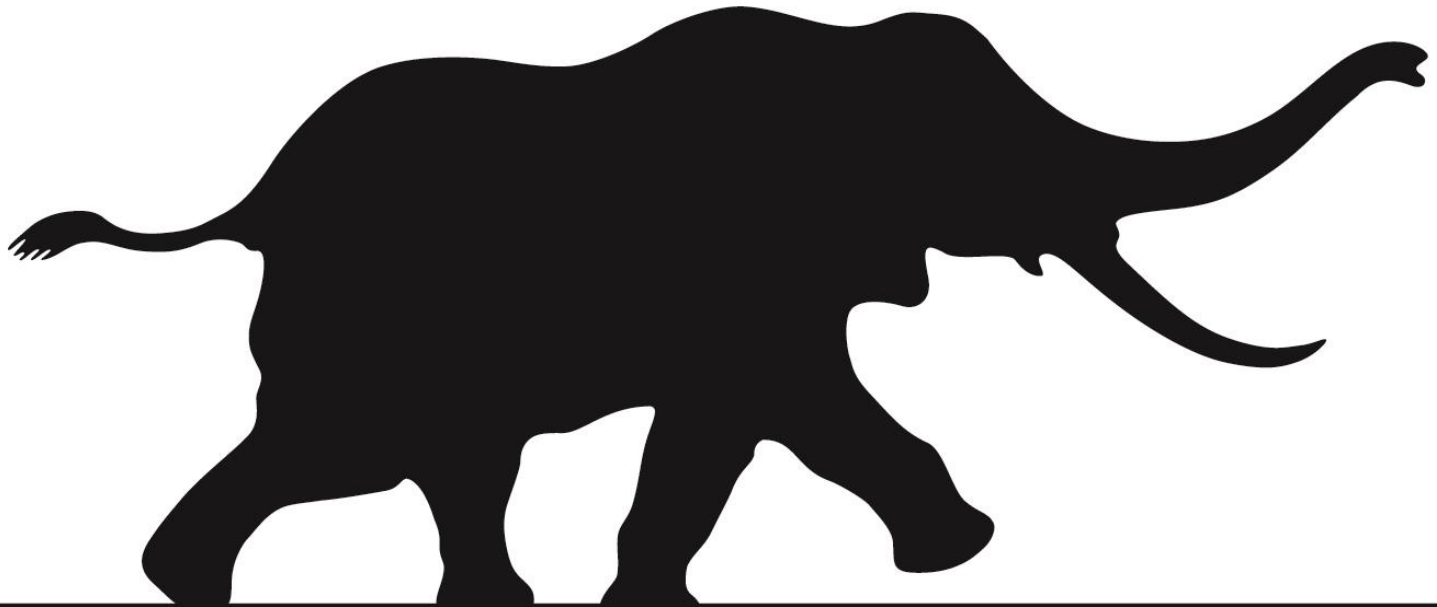


Agriculture & Value Chain, DR Congo



Livestock Value Addition, Kenya and Tanzania





AFRICAN WILDLIFE
CAPITAL

Ethiopia, Uganda
& Kenya



Tanzania, Kenya
& Mozambique



Zambia



Namibia



Ethiopia



Kenya

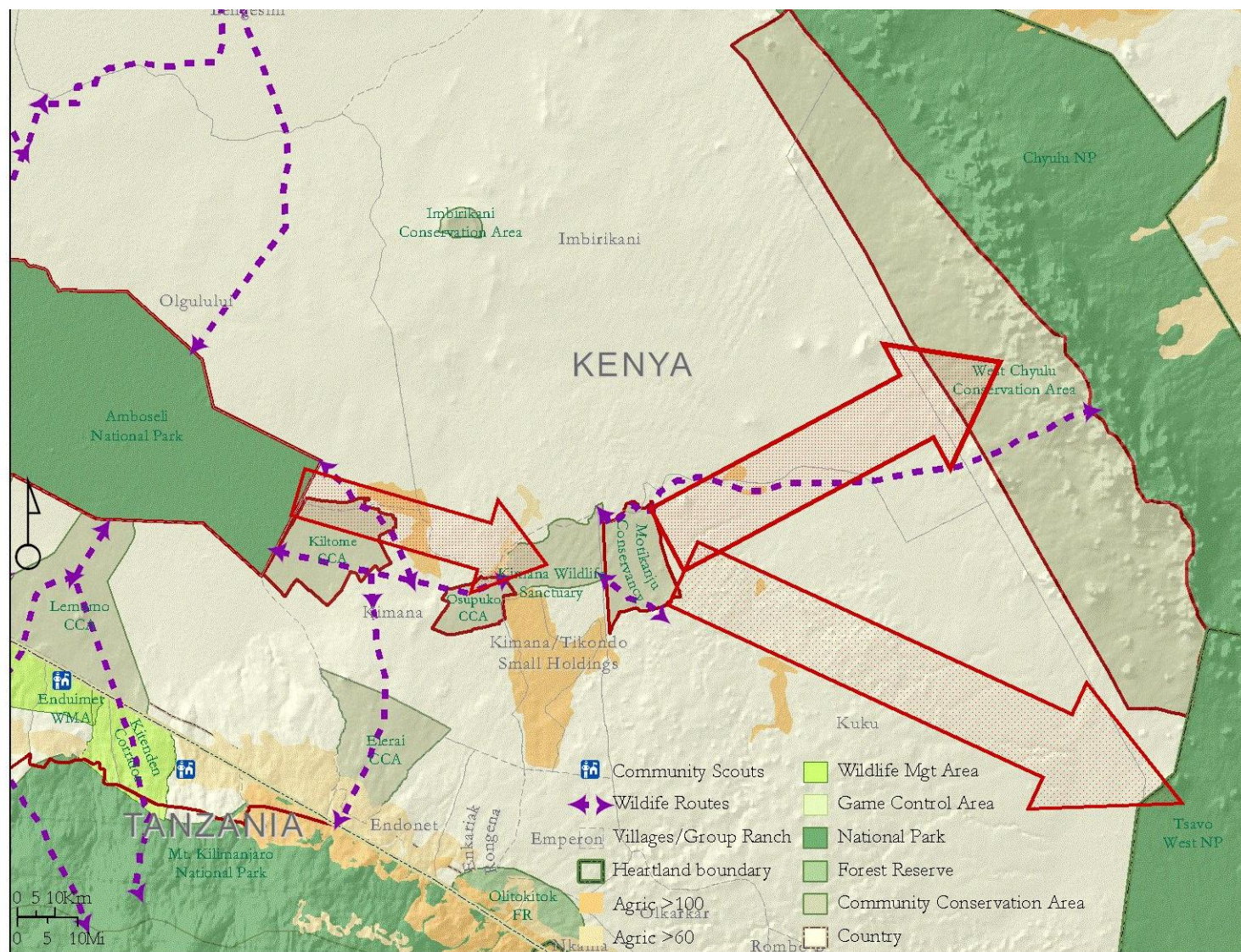


Tanzania





A tool to protect strategic forest lands & provide incentives to forest-dependent communities.



Sources: AWF, KWS, Monduli District, FAO-Africover
SRTM 90m, Tracks4Africa



Chyulu Hills

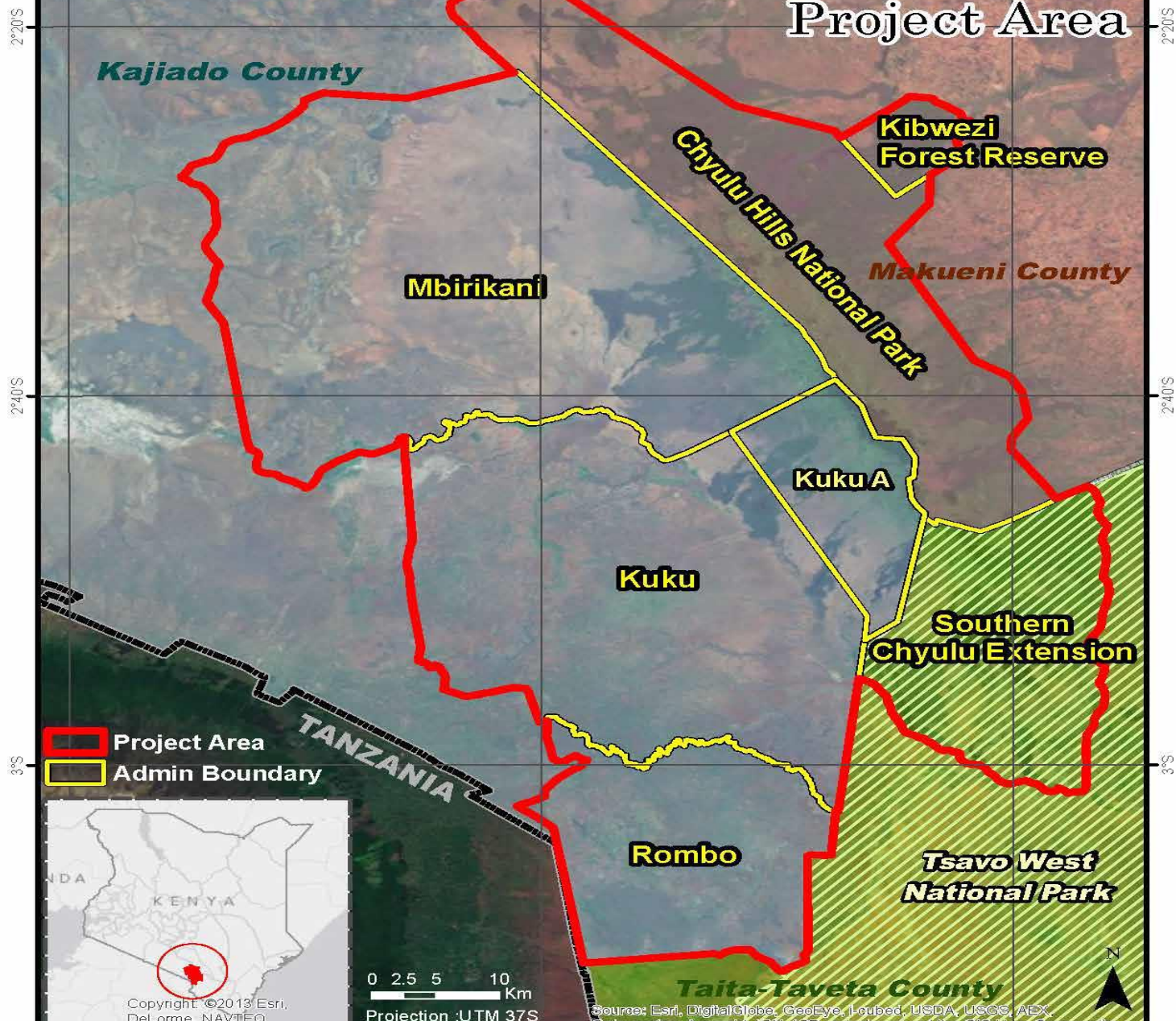
REDD+ Project



Chyulu Hills
REDD+ Project

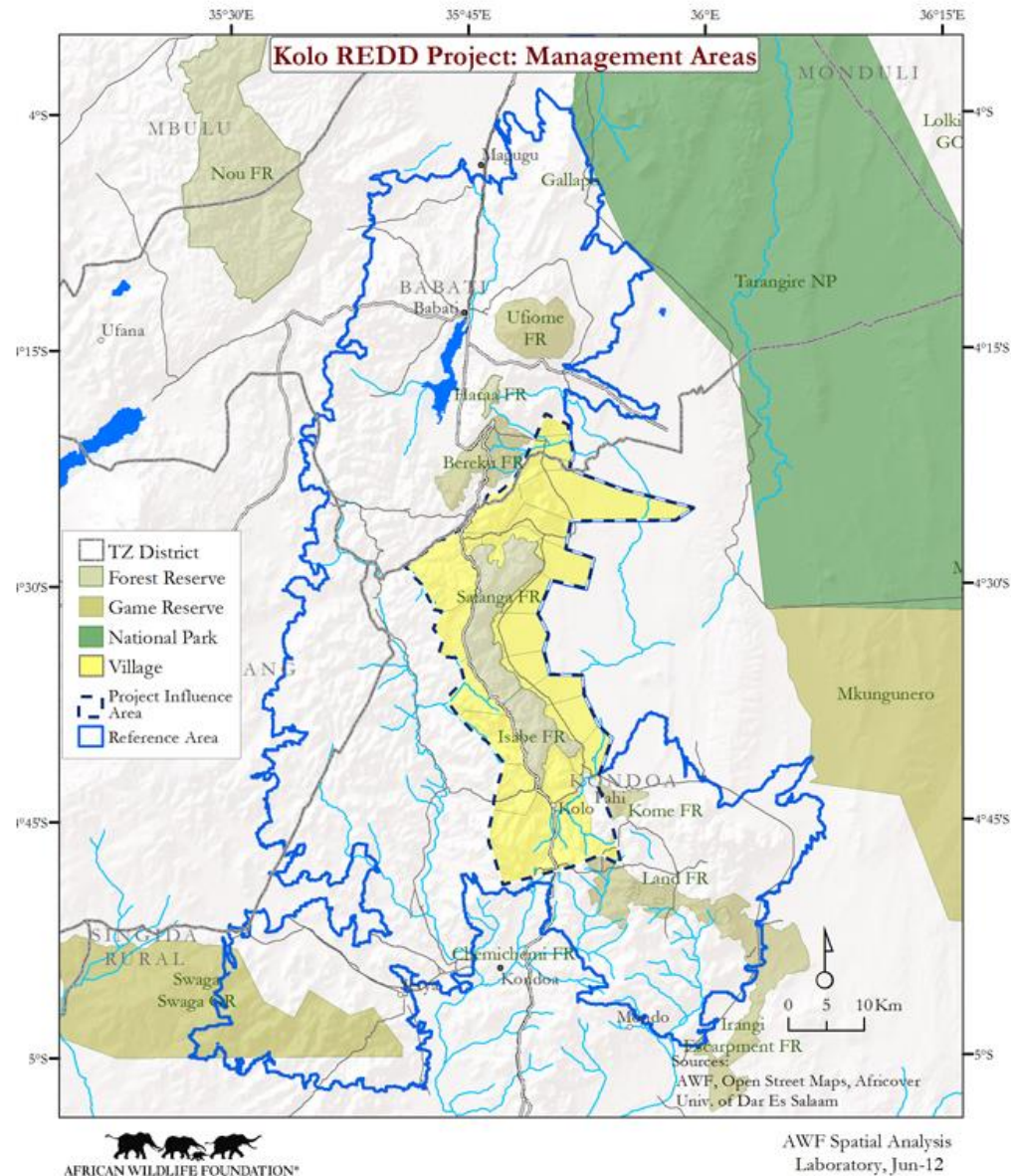


Project Area



REDD+: Kolo Hills, Tanzania

The Lifeline of Tarangire National Park



REDD+: Kolo Hills Tanzania



Headwaters Tarangire River

- 22,000+ hectares of forest
- Prevent GHG emissions
- Generate Revenue
- Provide alternative livelihoods to forest dependent communities
- Validated by Plan Vivo Foundation



Payment for Ecosystem Services



Biodiversity Offsets & Mitigation Measures



Increasing Protected Area Revenue



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Impact of Conservation Enterprises

A Case Study

Kilimanjaro Landscape, Kenya

A CONTINENT OF CHANGE

Conservation Enterprise

A commercial activity that supports the attainment of a conservation goal

Single ventures e.g. tourism



Value chain e.g. Coffee, livestock marketing, non-timber natural products



Key Question:

- Do enterprises work as conservation strategy?
- What is their impact?

Criteria for impact assessment

- Commercial performance
- Socio-economic Livelihood Impact
- Conservation Impact

Satao Elerai Lodge Case study



Methods for measuring impact

A. PIMA System

- Systematic monitoring of key impact indicators
 - *Commercial performance, employment, benefit distribution etc*

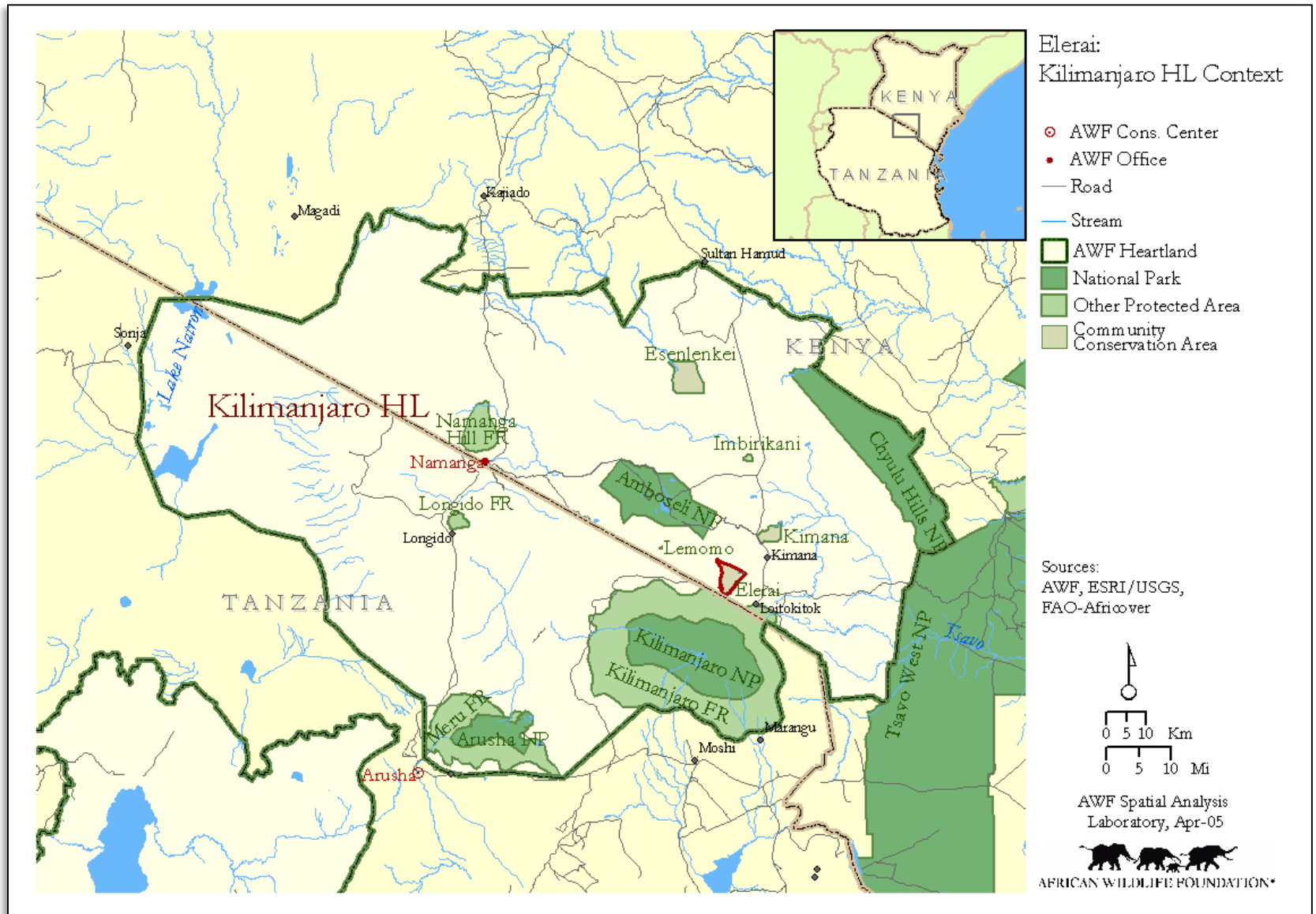
B. WELD Methodology – livelihood impact

- Mixed methods – qualitative and quantitative
- Socioeconomic surveys – h/h questionnaires (n=248)
- Focus Group Discussions
- Participatory Wealth Ranking
- Not used control groups
- Focuses on intervention NOT site/landscape

C. GIS analysis of land use change

D. Aerial wildlife census and tourist sightings

Satao Elerai Geographical Context



Satao Elerai Lodge: Brief

- Partnership between Southern Cross Safaris & Elerai Group Ranch
- Investment = \$600,000
- 15 year lease
- Opened June 2007
- 28-bed lodge
- Rates: \$530 (peak) - \$340 (low)
- Secured 4350 acres of corridor & dispersal area to Mt Kilimanjaro
- Beneficiaries 253 households, 1500 people
- Employs 30 people
- Livelihood activities - Farming, livestock production



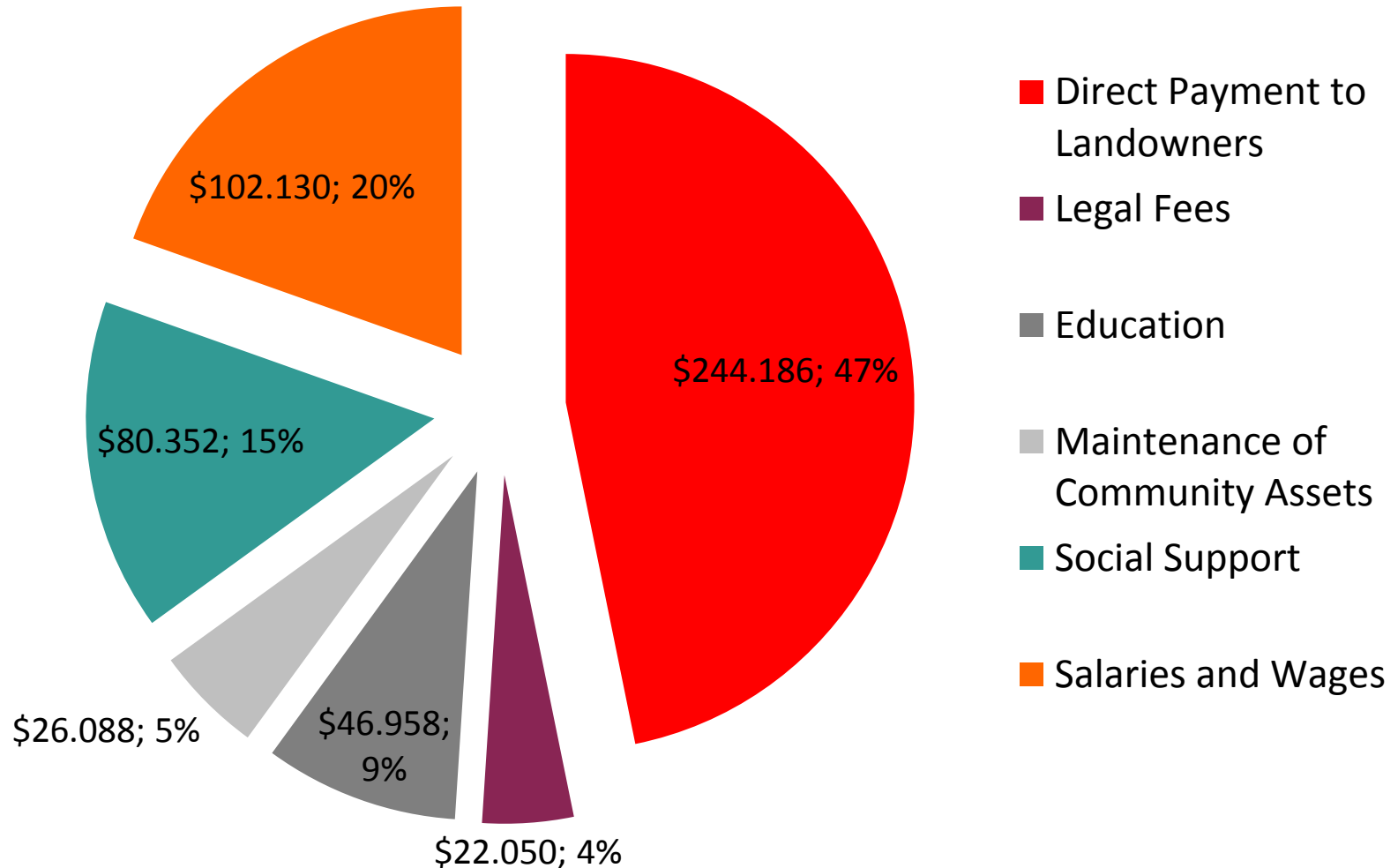
Commercial Performance



	FY2008	FY2009	FY2010	FY2011	FY2012	FY2013	FY2014	Total
Total Bed nights	982	2,318	2,207	4,006	4,016	4533	3686	13,529
Occupancy	9.6%	23%	22%	39%	39.7%	44%	36%	Avg =30%
Gross Revenue	\$96,174	\$297,262	\$335,970	\$600,019	\$701,290	\$615,196	\$449,052	\$2,030,715
Overheads	\$92,047	\$179,637	\$197,955	\$322,476	\$371,684	\$269,118	\$269,431	\$1,163,799
Other overheads: Salaries	\$75,421	\$72,789	\$66,700	\$71,507	\$104,174	\$115,218	\$139,320	\$645,129
Income to community	\$24,332	\$51,179	\$51,070	\$90,863	\$92,818	\$114,190	\$97,312	\$521,764
Profit	(\$95,626)	(\$6,343)	\$20,245	\$115,173	\$132,614	\$116,670	(\$57,011)	\$225,722

Distribution of Community Benefits

Total Benefits = \$521,764

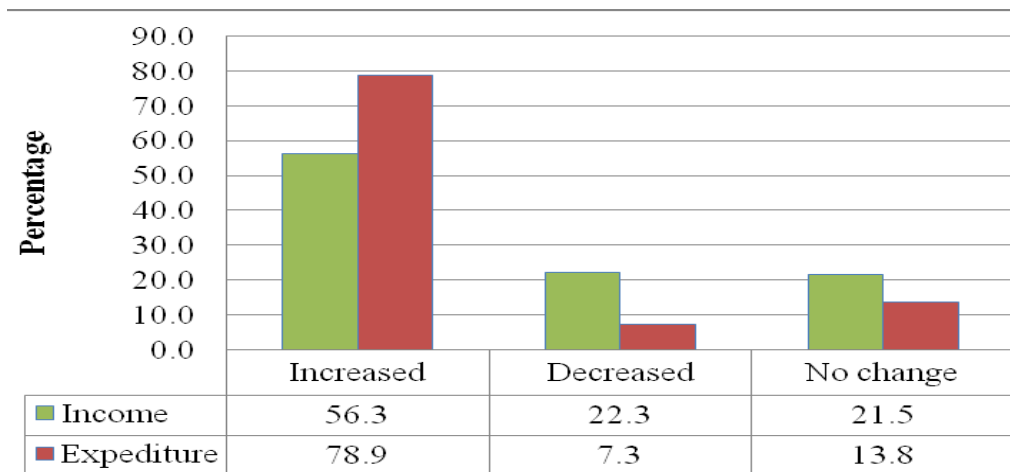


Household Wellbeing

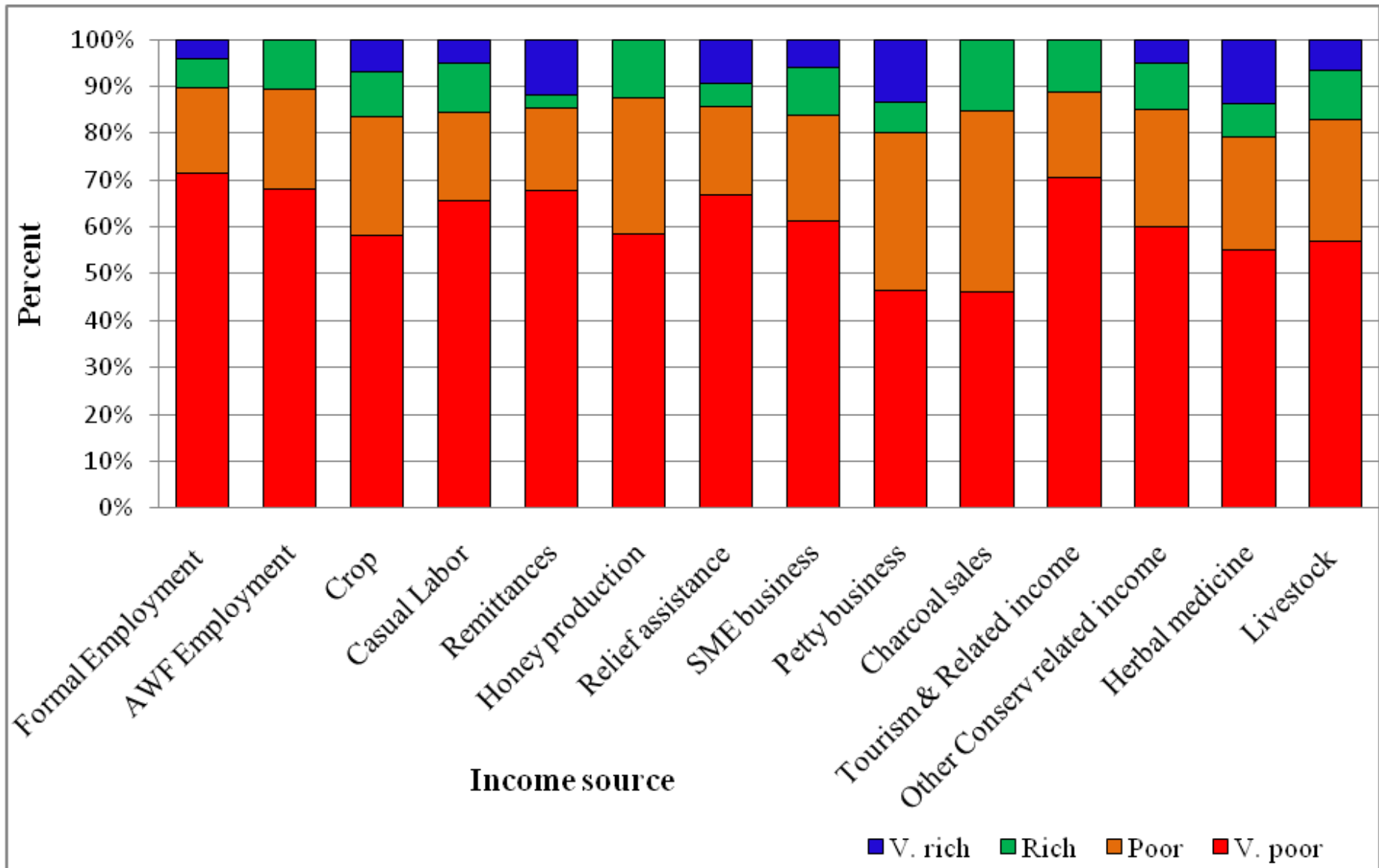
Wealth Index	Frequency	Percentage
Very poor	147	59.3
Poor	60	24.2
Rich	25	10.0
Very rich	16	6.5
Total	248	100.0

Source of Income	% of Households
Crop production	75.4
Livestock production	42.3
Casual Labor	40.7
Conservation/tourism income	27.5
Formal Employment	19.8
Remittances	19
SME business	19

Expenditure Item	Percentage
Food	62.5
Hospital	15.6
School fees	21.8
Loan payment	9.4
Crop production inputs	28.1
Livestock production inputs	25.0



Sources of Income by Wealth Group



Changes in Household Assets

Household items	2010	2006	% Change
Transport/ Logistics			
Motorcycle	14.7	4.7	10
Car/matatu	2.7	2.2	0.5
Bicycle	24.3	25.4	-1.1
Communication			
Television	12.0	12.1	-0.1
Radio	73.3	68.9	4.4
Cell phone	30.5	25.2	5.3
Anti -Conservation			
Charcoal Jiko	13.7	13.8	-0.1
Other			
Bank account	24.9	19.8	5.1
A sewing machine	3.1	2.7	0.4
Sofa set	25.0	24.3	0.7
Table	69.5	68.4	1.1
Mattress	61.1	58.0	3.1
Bed	85.8	81.9	3.9
Mosquito nets	51.1	46.9	4.2
Torch	74.3	73.6	0.7
Blanket	91.1	88.9	2.2

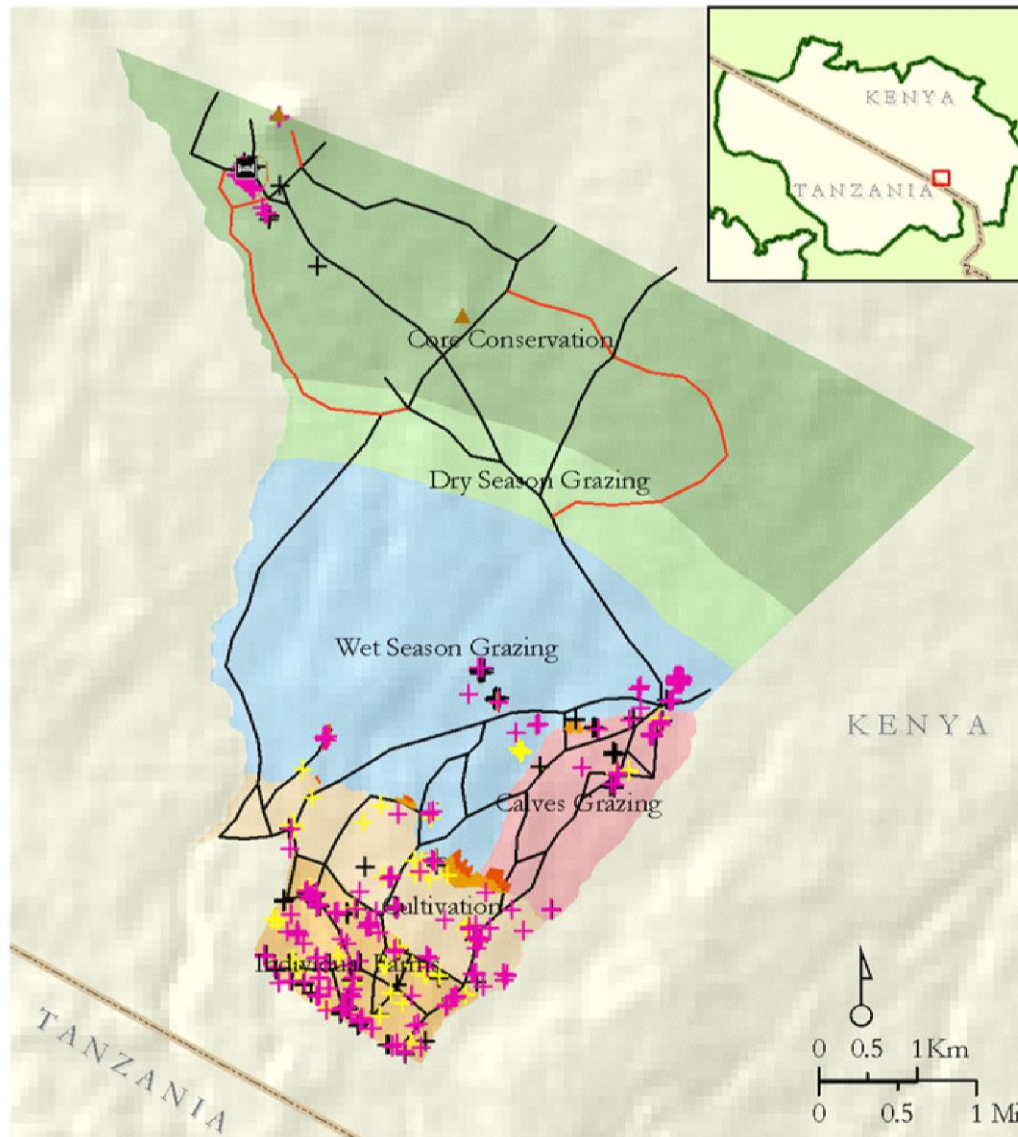
Contribution of Income Streams

Income Stream	Clusters									
	Conservation, crop production		Crop production and livestock		Crop production and business		Crop production and employment		Conservation and business	
	Mean	%	Mean	%	Mean	%	Mean	%	Mean	%
Employment Income	468.8	9.1	17272.5	24.4	3258.3	10.6	44000.0	25.0	8333.3	6.9
Conservation Income	1382.9	26.9	2346.4	3.3	3179.3	10.3	625.0	0.4	55,833.3	46.2
Crops Production	1528.2	29.8	33928.6	48.0	12444.6	40.4	107000	60.7	9900.0	8.2
Business Income	1068.2	20.8	6782.1	9.6	6612.0	21.5	8625.0	4.9	46,666.7	38.7
Livestock Production	684.7	13.3	10339.3	14.6	5283.9	17.2	16000.0	9.1	0.0	0.0
Average annual income	5132 (\$64)	100	70,668 (\$883)	100	30,778 (\$385)	100	176,250 (\$2,203)	100	120,733 (\$1509)	100
N	85	34%	28	11%	121	49%	8	3%	6	2%

Determinants of Livelihood Patterns

	Crops and conservation			Crops and livestock			Crops and business		
	B	Sig	Exp(B)	B	Sig	Exp(B)	B	Sig	Exp(B)
Wealth Status									
Very poor [®]		.271			.260			.279	
Poor	-.113	.832	.893	-.487	.420	.614	-.162	.693	.850
Rich	.657	.412	1.929	-1.157	.112	.314*	-.047	.935	.954
Very rich	-1.591	.089	.204*	-1.263	.124	.283*	1.537	.065	4.650**
Gender									
Male [®]									
Female	.058	.902	1.060	.937	.099	2.553*	-.450	.243	.638
Marital Status									
Widowed	2.331	.086	10.293*	-1.290	.265	.275	-.208	.834	.812
Other	20.856	1.000	1.14*10 ⁹	21.041	1.000	1.3*10 ⁹	-21.576	1.000	.000
Education Level of HH Head									
No Formal [®]		.607			.684			.317	
Complete primary	-.601	.466	.548	-.570	.441	.566	1.305	.061	3.686**
Complete tertiary	-19.853	1.000	.000	19.535	1.000	3.0*10 ⁸	17.994	1.000	6.5*10 ⁷
Highest Completed education									
Secondary	.492	.509	1.636	-1.778	.039	.169**	1.702	.031	5.485**
Tertiary	19.464	1.000	2.84*10 ⁸	21.666	1.000	2.5*10 ⁹	-21.982	1.000	.000
Age									
Less than 30 Years [®]		.131			.642			.437	
41-50 Years	-1.185	.058	.306**	1.288	.140	3.627	.810	.133	2.248
61 + Years	-1.591	.049	.204**	.646	.478	1.909	.254	.672	1.289
Distance to conservation area	-.176	.000	.839***	.052	.095	1.053*	.024	.274	1.024
Years lived in community	-.020	.342	.980	.020	.436	1.020	.019	.269	1.019
Participation in AWF activities	3.751	.000	42.582***	1.015	.086	2.761**	-1.792	.000	.167***
Constant	4.459	.000	86.411***	-.231	.810	.794	-.382	.637	.682

Conservation Impact: Land-use Change



Elerai Conservation Impact Assessment

■ Ecolodge Building

▲ Observation Point

Buildings/Structures

✚ Constructed 2005-2011

✚ Persists 2005-2011

✚ Removed 2005-2011

Road Network

— 2005

— Constructed 2005-11

Land Use Conversion¹

■ Converted 2005-11

■ Land use 2005-2011

1. Conservation and grazing zones only.

Management Zones

■ Grazing-Calves

■ Grazing-Dry Season

■ Cultivation

■ Grazing-Wet Season

■ Individual Farms

■ Core Conservation

Sources:

Zones: AWF, Elerai,
Community

Buildings, roads, land use:

• 22-aug-05 Quickbird

• 02-feb-11 WorldView2

AWF Spatial Analysis
Laboratory, Jun-11

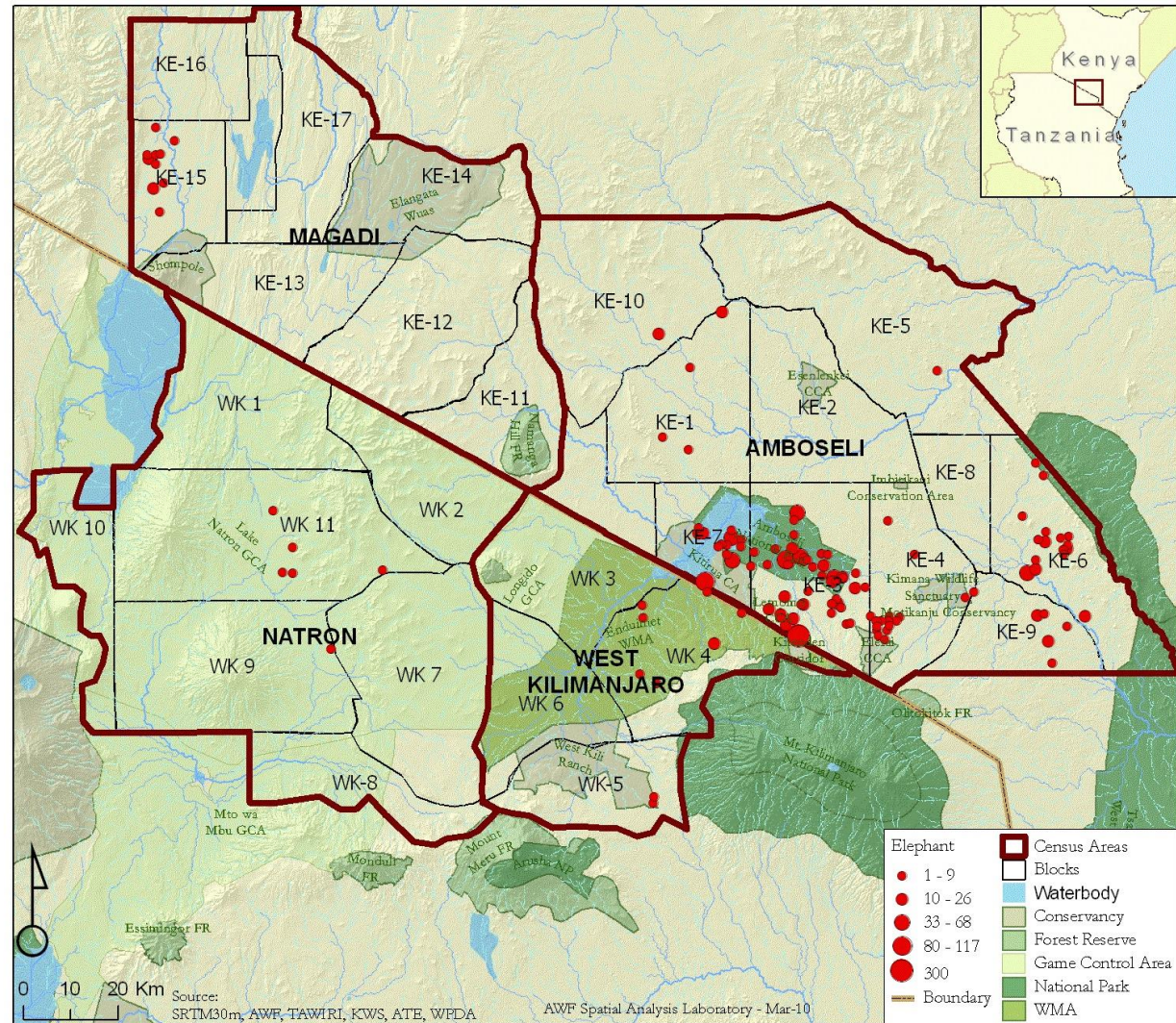
Land Use Change in Acres

Zone	Acres	Converted (2005)	Converted (2005-11)	Total Change	% change
Calves Grazing	638	12.5	21.3	33.8	0.3
Core Conservation	4,350	2.6	7.1	9.7	0.1
Dry Season Grazing	1,144	0	0	0	0
Wet Season Grazing	3,198	18.9	36	54.9	0.6
Totals	9,322	34	64.4	98.4	1.0

Conservation Impact: Wildlife use

Species diversity and use increased

- Elephants (200)
- Cheetah
- Zebra
- Giraffe
- Eland
- Lions
- Various antelopes
- Buffalo



Distribution of Elephant

Improved Wildlife Viewing



- Lodge performing well and generating substantial benefits for community from conservation
- Benefits very important for the poor in Elerai
- Benefits helped to address land use change in keeping conservation area intact
- Impact monitoring key for designing post deal support
 - Need more monitoring cycles
- Community Governance – ongoing challenge
- Spin-off Enterprises important for community benefits



AWF has proven that conservation can deliver tangible benefits to communities and conservation in large socio-economic landscapes. AWF has the tools to scale up our experience across Africa.

Now is the time.





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