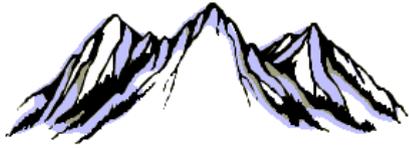


# Omo Valley Biomedical and Cultural Documentation Expedition



All photos by Jim Larrick or Greg Slick



# SYNOPSIS

1. Carry out health survey, HIV testing and provide basic medical care to isolated tribes in the lower Omo Valley, Ethiopia.
2. Obtain digital video documentation to create a “BARAKA-like” “Visual poem” of the native peoples of the Omo Valley.
3. Obtain digital photographic documentation of native peoples of the Omo Valley of sufficient quality to publish a book to be distributed on Amazon.com.
4. Document visits to hospitals and health outposts in Addis Ababa as well as smaller towns enroute to Omo Valley. Establish dialog with healthcare workers at outposts prior to clinics in Omo Valley. Determine feasibility of TB and Malaria testing using novel point-of-care diagnostics developed by ID-FISH.
5. Visit OMOCHILD Foundation, learning more about program and potential areas for future collaboration with Sankofa Center for African Culture and Dance.

# TEAM

***Physician Scientist:***

James W. Larrick MD PhD  
Sunnyvale, California, USA

California Physician and Surgeon License #: G45346  
NPI #:1275960783; DEA#: AL2482785

***Photography:***

Greg Slick, Independent Photographer and  
Film maker; Sausalito, California USA

***Logistics:***

Anteneh Endale Mamo and Shato Woldearegay  
Addis Ababa, Ethiopia

***Valuable support:***

Ronnie Shaw (<https://thesankofacenter.org/>), John Wages,  
Leslie Loven, Jun Chen

***Financial Support:***

LaRuke Development; Panorama Research

***Contact:***

Jwlarrick@gmail.com; cell: +1-415-264-6311

# ETHIOPIA

## የኢትዮጵያ ፌዴራላዊ ዲሞክራሲያዊ ሪፐብሊክ

Capital: Addis Abba  
Population: 94M  
Language: Amharic  
Size: 1.1M sq. mi.  
Per capita: \$520  
Currency: 20 Birr = \$1

>75 ethnic groups:

- 34.5% Oromo
- 26.9% Amhara
- 6.2% Somali
- 6.1% Tigray
- 4.0% Sidama
- 2.5% Gurage

Most UNESCO World Heritage sites in Africa

Cradle of modern humans



# Omo River, Ethiopia

**Source:** SHEWAN HIGHLANDS, ~7600 ft.

**Termination:** LAKE TURKANA (Northern Kenya), 1600 ft.

Major source of water for Lake Turkana endorheic (closed drainage) basin

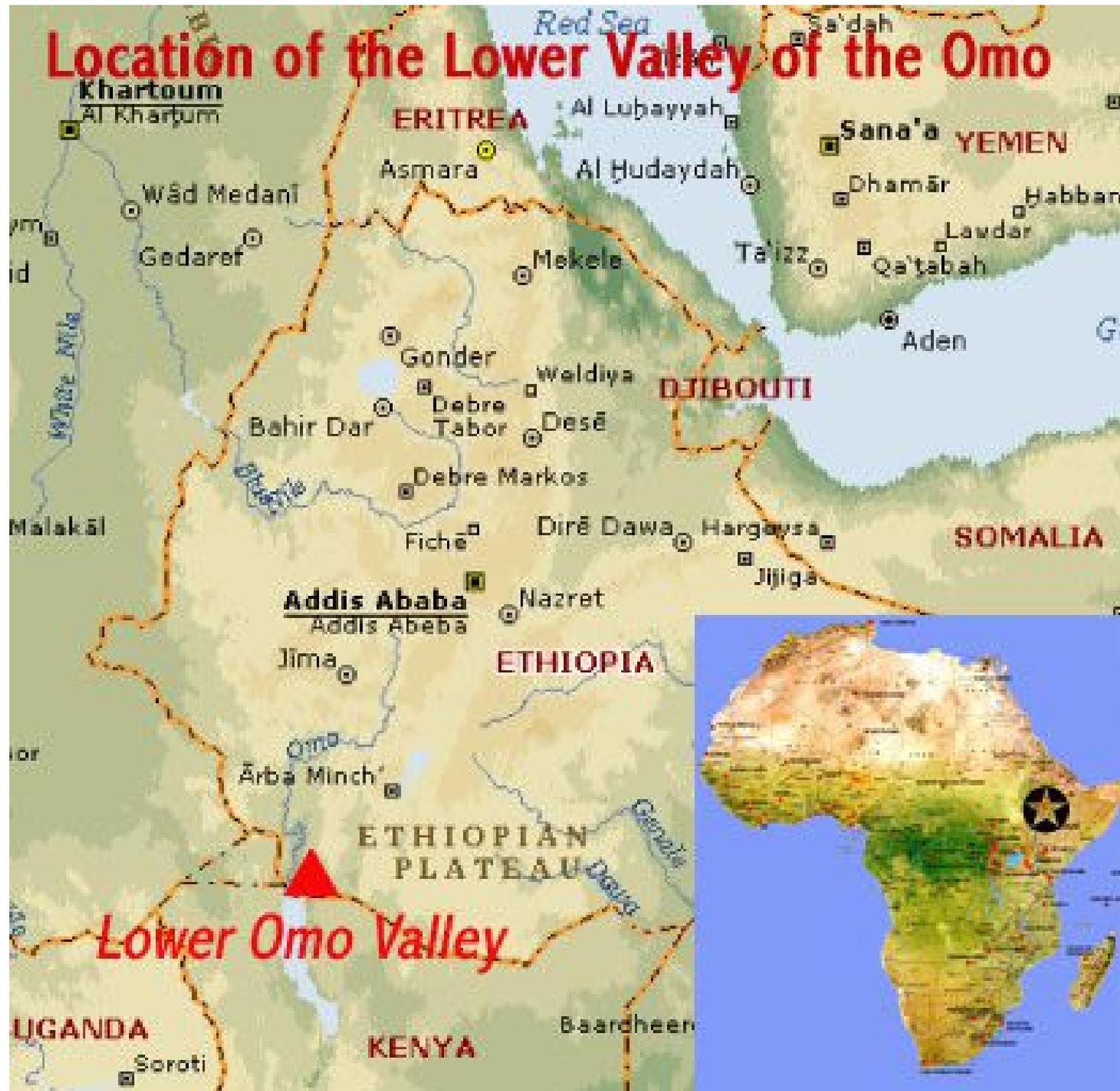
**Length:** 472 miles, entirely within Ethiopia

**Rapid flow:** Drops 6000 ft.

**Major tributary:** Gibe River

**Eco-controversy:** Gilgel Gibe III hydroelectric dam 243 m high roller-compacted concrete – will be largest hydropower plant in Africa: >1850 megawatt (2x all of Ethiopia)

# Location of the Lower Valley of the Omo



# Tribes of OMO Valley

## Visited in 2014:

Hamar (50,000 people)

Banna (30,000)

Kara (1500)

Konso (50,000)

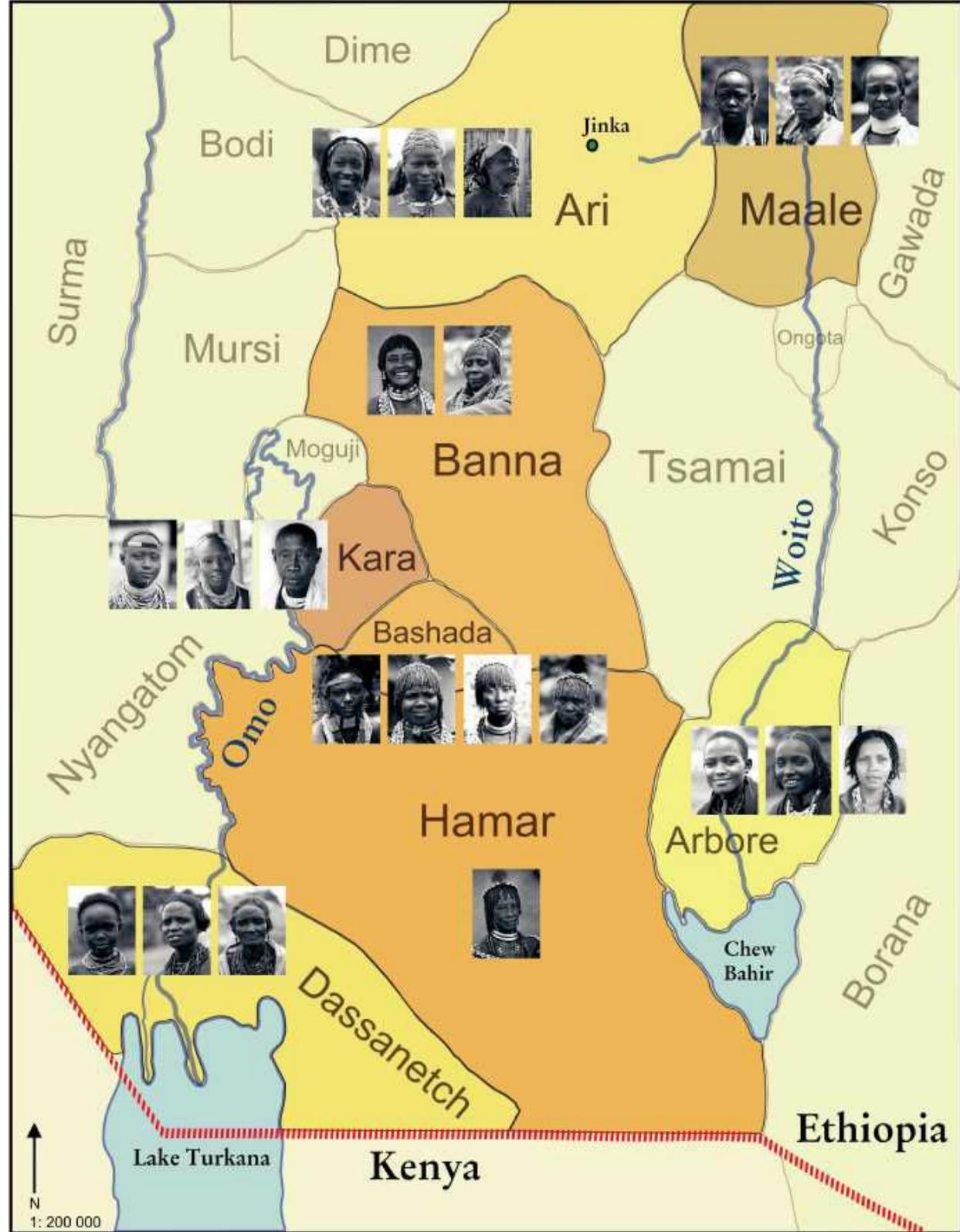
Dassanetch (48,000)

Arbore (8000)

Ari (300,000)

Mursi (7500)

Dorse (5000)



# ETHIOPIAN and TRIBAL FLAGS





# ETHIOPIA

Addis Ababa

Rift Valley

Lake Abiata-Shala N.P.

Lake Langano

Lake Awassa

Wendogenet

Omo

Arba Minch

Mago

Key

Yirga Chefe

Mursi N.P.

Aler

Nechisar N.P.

Jinka

Konso

Omorate

Turmi

Lake Turkana

# KENYA

**Overland route**

**Travel by 4WD necessary, local buses access larger towns**



# Hamar woman



**Mursi woman  
exhibiting clay  
lip plate**



# Medical clinics in each village



# Limited Health Service in Omo Valley

Our base @Turmi in heart of Hamar territory

Major towns have government-supported health clinics

Very basic: enormous need for basic medicines, equipment,  
trained personnel

Patients self-pay and care for relatives

Simple laboratories, poorly trained staff

Villages only visited sporadically

Infectious disease/trauma predominate (survey follows)

# TURMI Clinic Morbidity

(n.b.-2005 in Ethiopian calendar = 2012)

2011 100

10 TOP MORBIDITY CAUSES OF FEMALE IN 2005 EFY.

Rank	CAUSES	IN NO	IN %
1	HELMINTHIASIS		
2	MALARIA	322	14
3	ACUTE URTI	225	10
4	TRAUMA	185	8
5	DYSPEPSIA	136	6
6	TYPHOID FEVER	133	6
7	INF <sup>n</sup> OF SKIN & SUB-TISSUE	128	6
8	DIARRHEAL DISEASE	114	5
9	PNEUMONIA	60	3
10	DISEASE OF EYE	51	2
11	OTHER	44	2
12	⊕ TOTAL	922	40
		2320	100

10 TOP MORBIDITY CAUSES OF MALE IN 2005 EFY.

RANK	CAUSES	IN NO	IN %
1	HELMINTHIASIS		
2	MALARIA		
3	TRAUMA	435	15
4	INF <sup>n</sup> OF SKIN & SUB-TISSUE	300	11
5	ACUTE URTI	236	8
6	DYSPEPSIA	217	8
7	TYPHOID FEVER	186	7
8	DISEASE OF EYE	128	5
9	UTI	127	5
10	DIARRHEAL DISEASE	79	3
11	OTHERS	78	3
12	TOTAL	68	2
		957	34
		2811	100

10 TOP MORBIDITY CAUSES OF

5 TOP MORBIDITY CAUSE OF 2-5 YEARS CHILDREN IN 2005 EFY.

CAUSES	IN NO	IN %
DDS	430	29
MALARIA	225	15
PNEUMONIA	140	9
ACUTE URTI	80	5
HELMINTHIASIS	500	33
OTHER	1495	100
TOTAL		

**Simple ultrasound machine (works)  
No X-ray  
No ECG  
No anesthesia**



**Contact at TURMI Health Post  
Bachwosen Mechak, Surgeon  
[mbachwosen@yahoo.com](mailto:mbachwosen@yahoo.com)  
Tel: +521-0926530424**



**Tuberculosis, skin, lung, GI involment**



**Cerebral malaria**

**Rounds at Turmi Clinic**



**Transport boy to Turmi with exposed ulna --compound fracture in need of surgical repair**





**Solar panels provide some power**



**“Bush ambulance”**



**Black mamba snake bite, died following day**



# Maternal Health, a priority



# Support OMO CHILD

**MINGI** – Traditional belief among the Omotic-speaking Karo and Hamar tribes that adults and children with physical abnormalities are ritually impure.

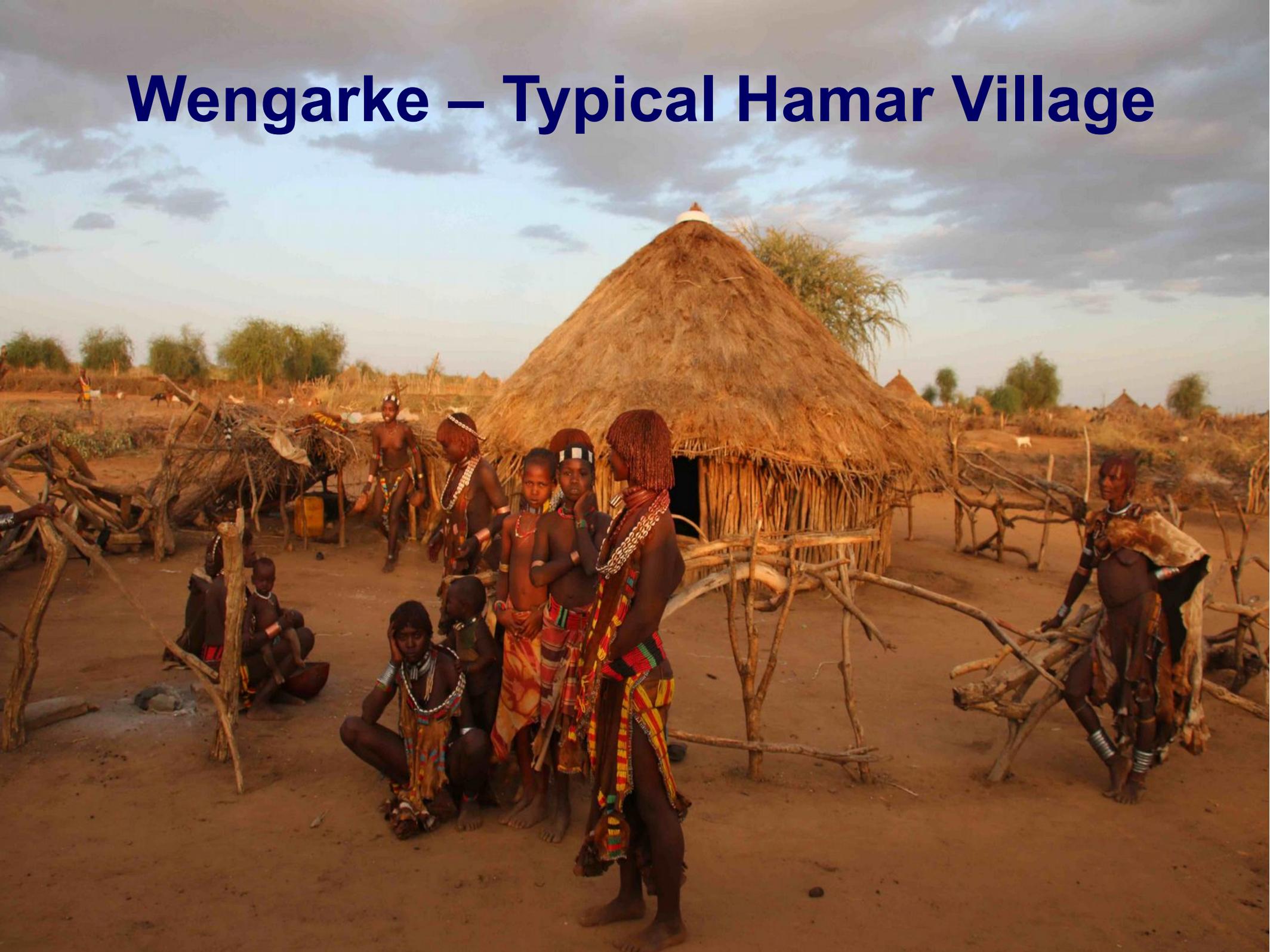
Believed to exert evil influence upon others, Mingi infants historically killed by forced permanent separation from the tribe being left alone in the jungle or by drowning in the river.

Karo officially banned the practice in July 2012, while around 50,000 individuals secretly continue to practice it in other Omotic communities.

OMO CHILD Foundation, established in 2008 by Karo native Lalo Lubuko with help of California photographer and entrepreneur, John Rowe, to rescue mingi children.

>35 children ages 1–11 rescued to date: live in Omo Child Orphanage in Jinka

# Wengarke – Typical Hamar Village



# Unique Hamar Appearance



**Goscha:** ochre-colored hairstyle

**Ensenete:** iron neck rings indicative of marital status, wife # (polygamous culture)

# Hamar grandmothers



**This woman walked to Turmi Clinic (>25 miles)  
– because she felt “weak”**

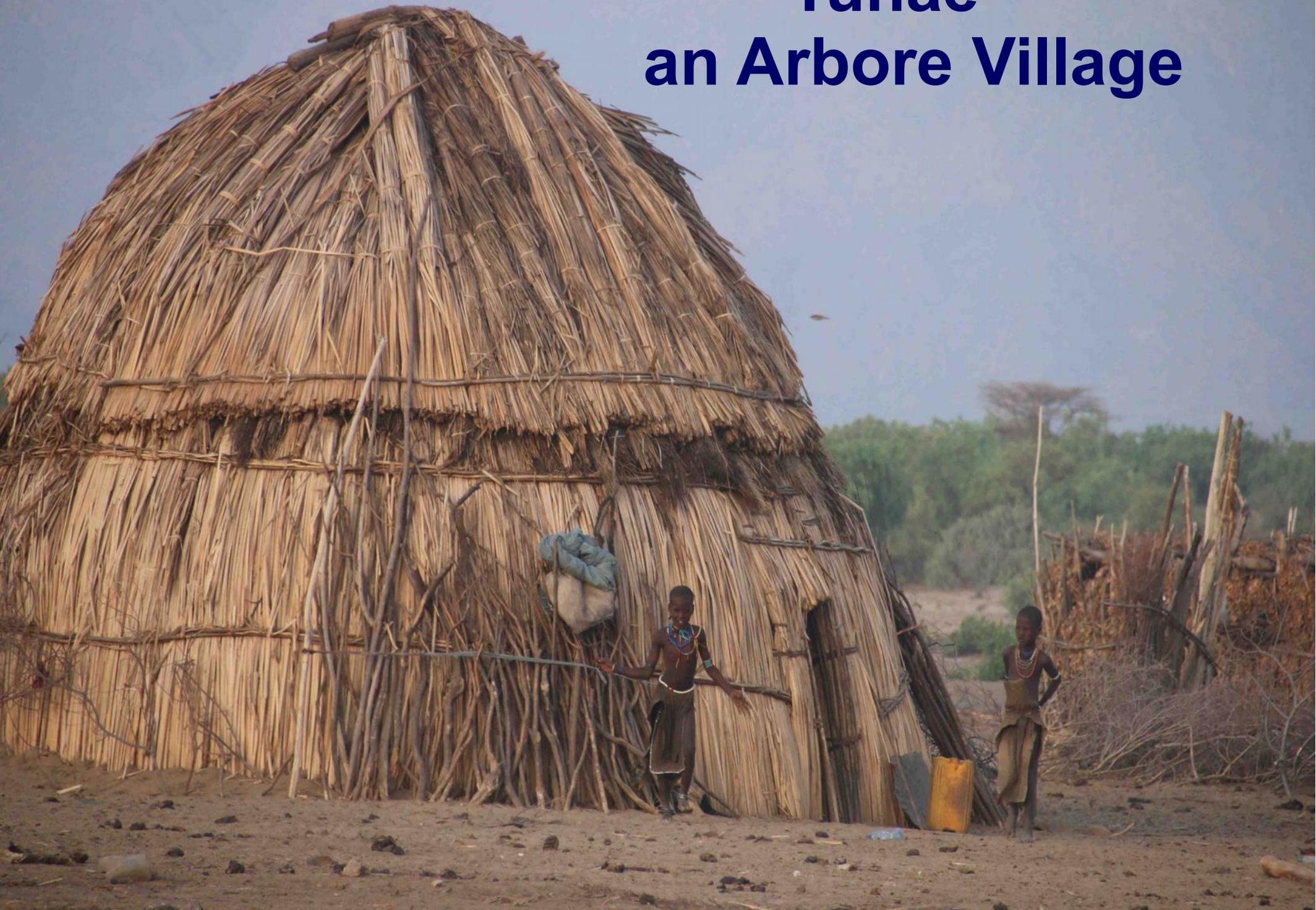
# Borena Hamer Village



# Daybreak Arbore Photoshoot



# Tunae - an Arbore Village





# Market day

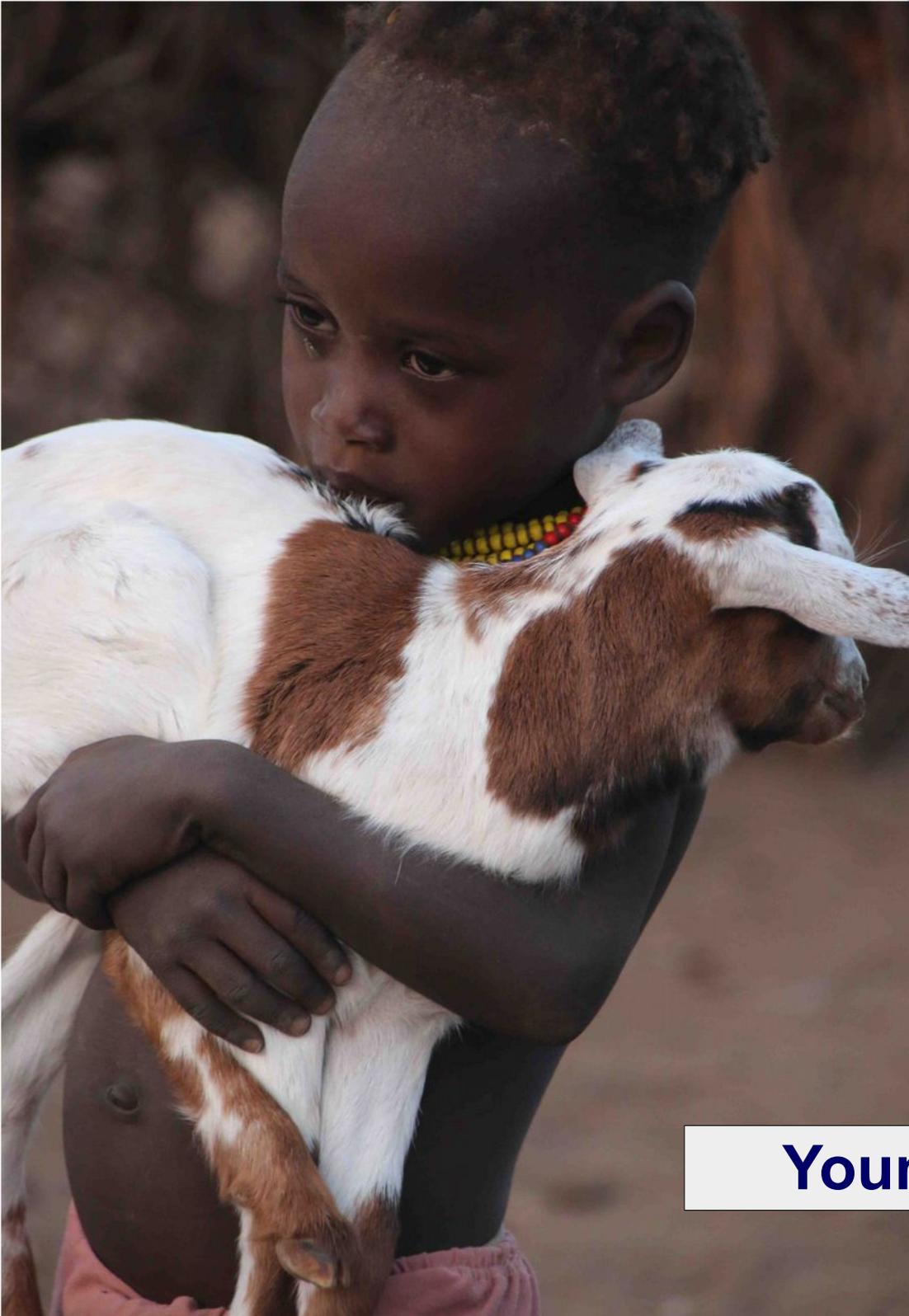


# Dugout canoes to cross Omo River



# Dassanetch Omo River Village





**Young and old**

# Dassanetch Boys



# Beautiful desert plant life



# Clean water from hand-pumped well!



**Open well dug in  
“dry” river bed**



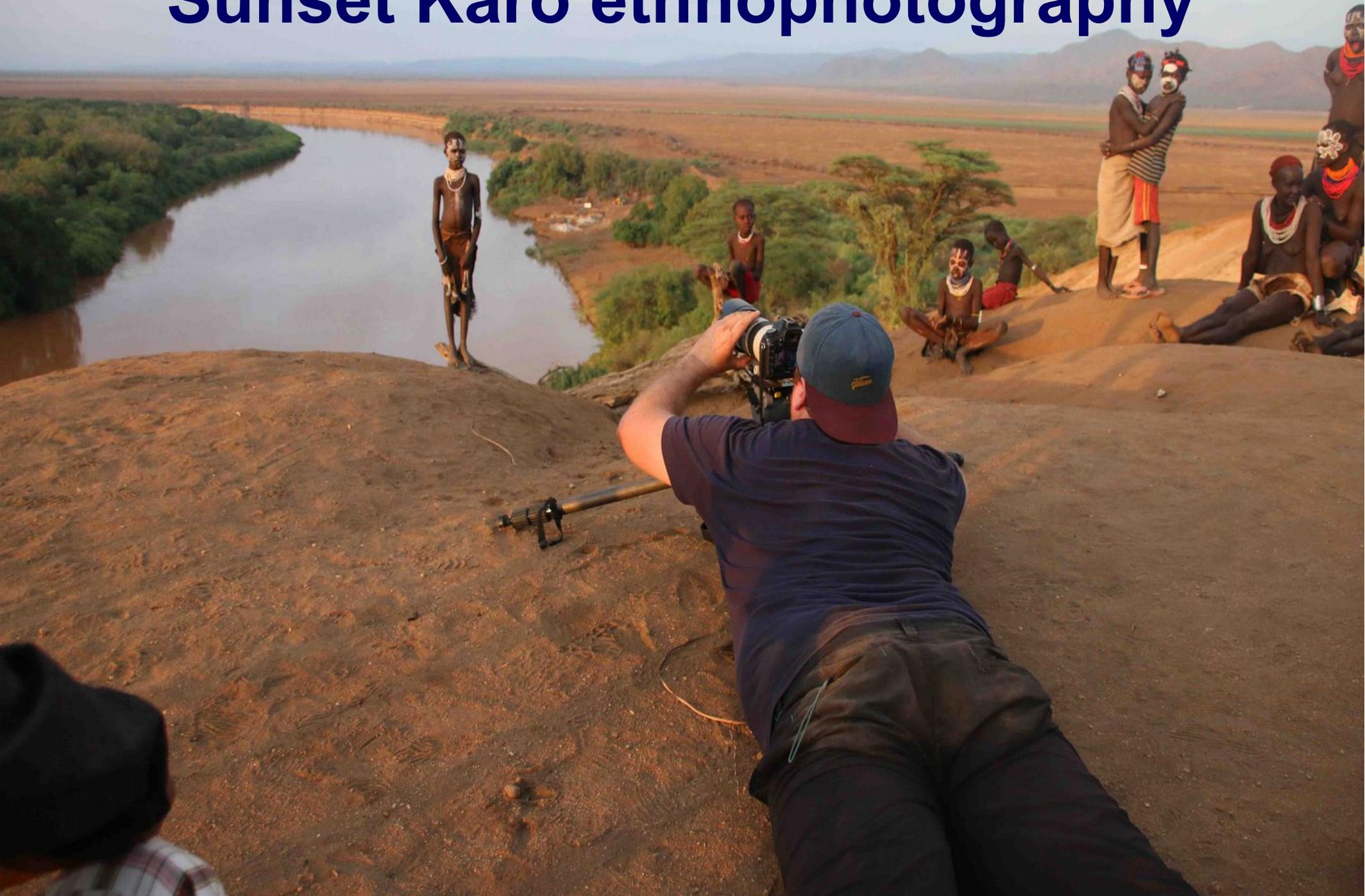


**Kara – a Karo Village overlooking  
Omo River**

# Karo warriors



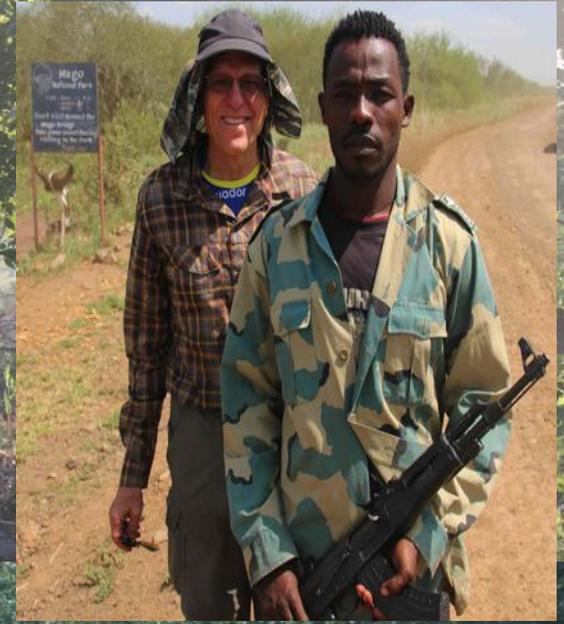
# Sunset Karo ethnography





**Canoe on Omo River at dawn**

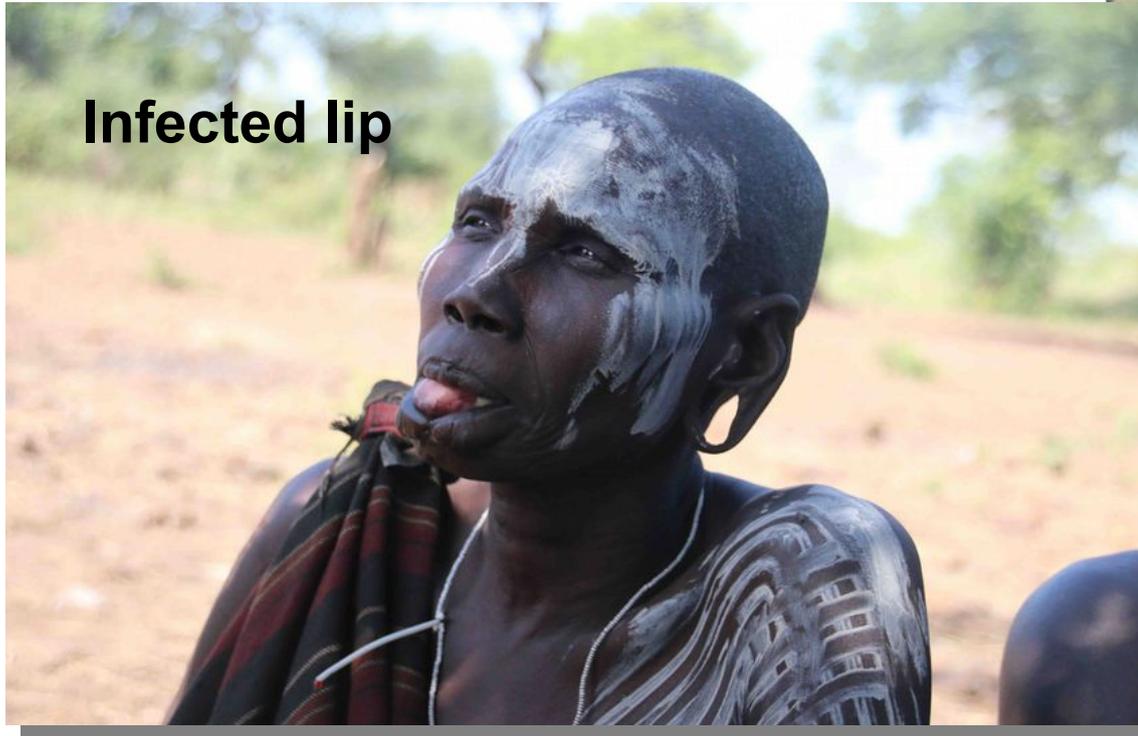
**Pre-dawn arrival for clinics –  
requires AK47-armed escort**



**Typical homes of agropastoralist Mursi tribe**



# Body decoration of Mursi Women

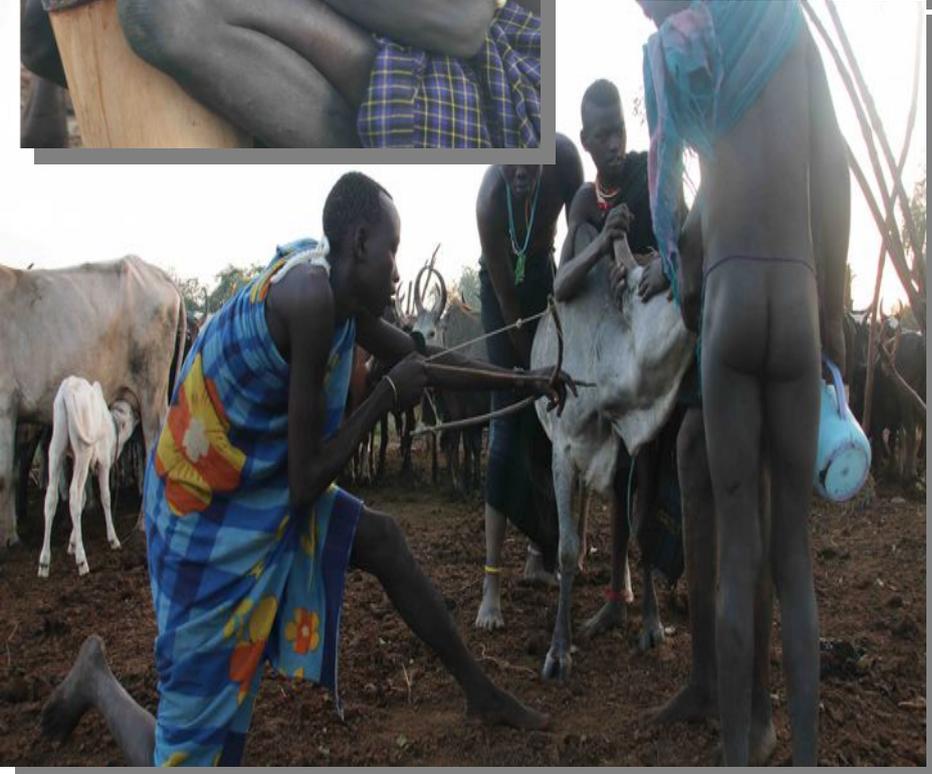


- Ears enlarged beginning in childhood
- Utilize herbal anesthetic
- Lower lip slit at puberty, gradually expanded
- Also remove 4 lower incisors
- Large lip plates made of clay

# Shambele - a Mursi Village



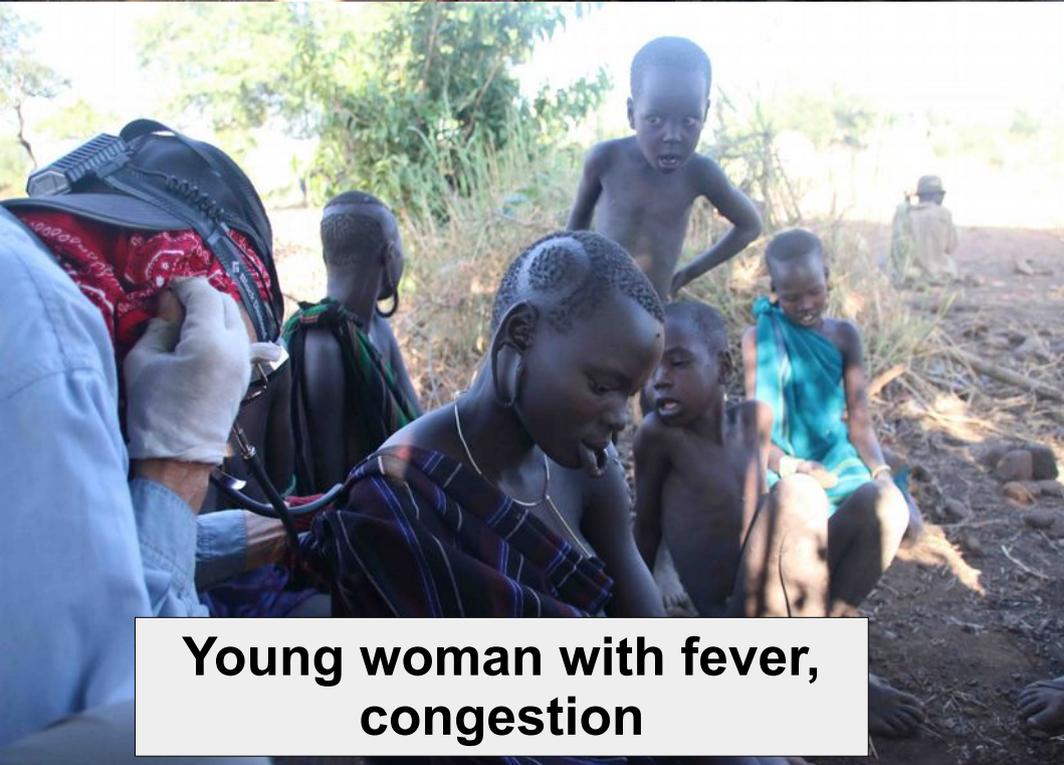
**Pastoralists mix warm milk and blood from cows for early morning refreshment!**



# Lots of sick folks in Ole - a Mursi Village



Many open infected ulcers



Young woman with fever, congestion



Infantile fever, diarrhea

# Tropical Splenomegaly Syndrome (aka Hyperactive Malaria Syndrome)



**Idiopathic enlargement of spleen:  
These two individuals have 2 kg  
spleens!**

**Common in areas of endemic malaria**

**Treat/suppress malaria**

**Do NOT remove the spleens!**

# Many Mursi children exhibited fevers of malaria





**Despite stressful conditions  
many babies thrive!**

# **Big changes coming to South Omo**

*“think American West 130 yr. ago!”*

Hydroelectric dams upriver

Foreign-controlled sugarcane and palm oil plantations

Chinese oil exploration

Roads, electrification, outsiders moving in

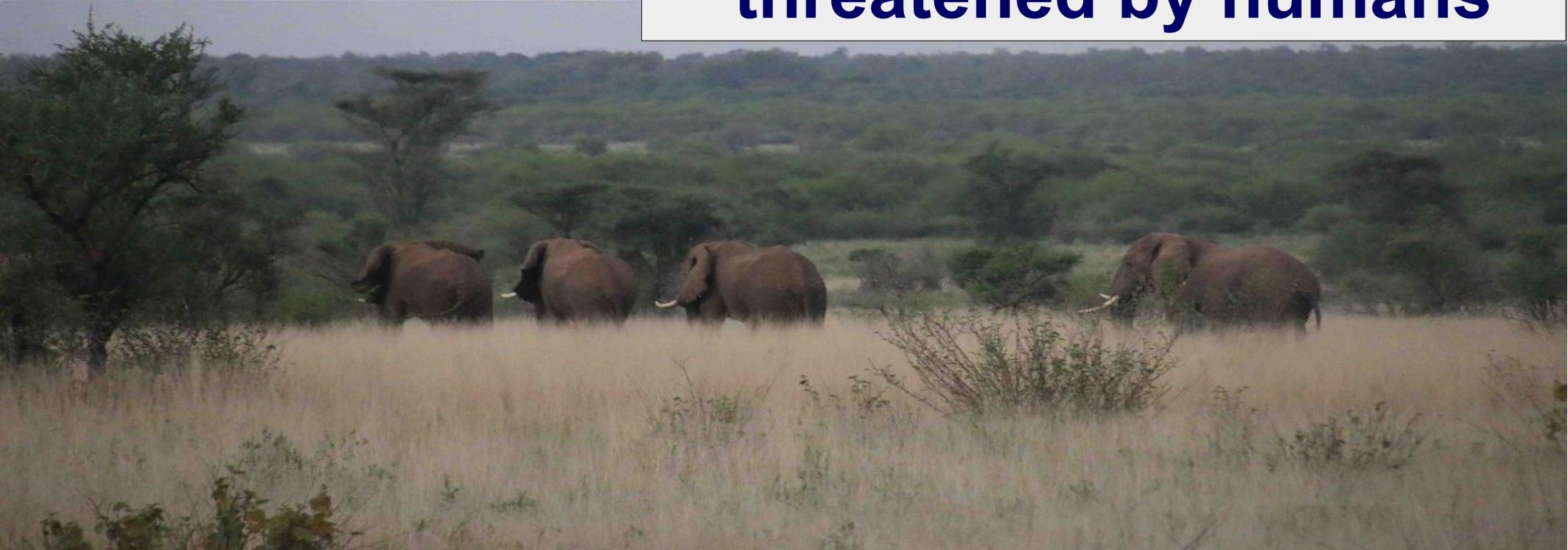
Alcohol, other challenges to health, etc.

Government appropriation of tribal lands

Government re-settlement



**Diverse animal life greatly threatened by humans**



# Ethiopian-Turkish JV for cotton will disrupt Karo way of life



Tribes have already been displaced off most productive land (background)



Omo River water being diverted for irrigation

# Eco-controversy

"The Gibe III dam will be a disaster of cataclysmic proportions for the tribes of the Omo valley. Their land and livelihoods will be destroyed, yet few have any idea what lies ahead. The government has violated Ethiopia's constitution and international law in the procurement process. No respectable outside body should be funding this atrocious project."

Stephen Corry, Director,  
Survival International  
Indigenous rights organization



# An uncertain future

