

Sustainable livestock production

The role of sustainable pastoralism



Enabling poor rural people
to overcome poverty

IUCN, a unique democratic union since 1948...

International Union for Conservation of Nature

Members

- 1067 Members worldwide from over 160 countries
- States, Government agencies, NGO
- Over 60 regional and national committees

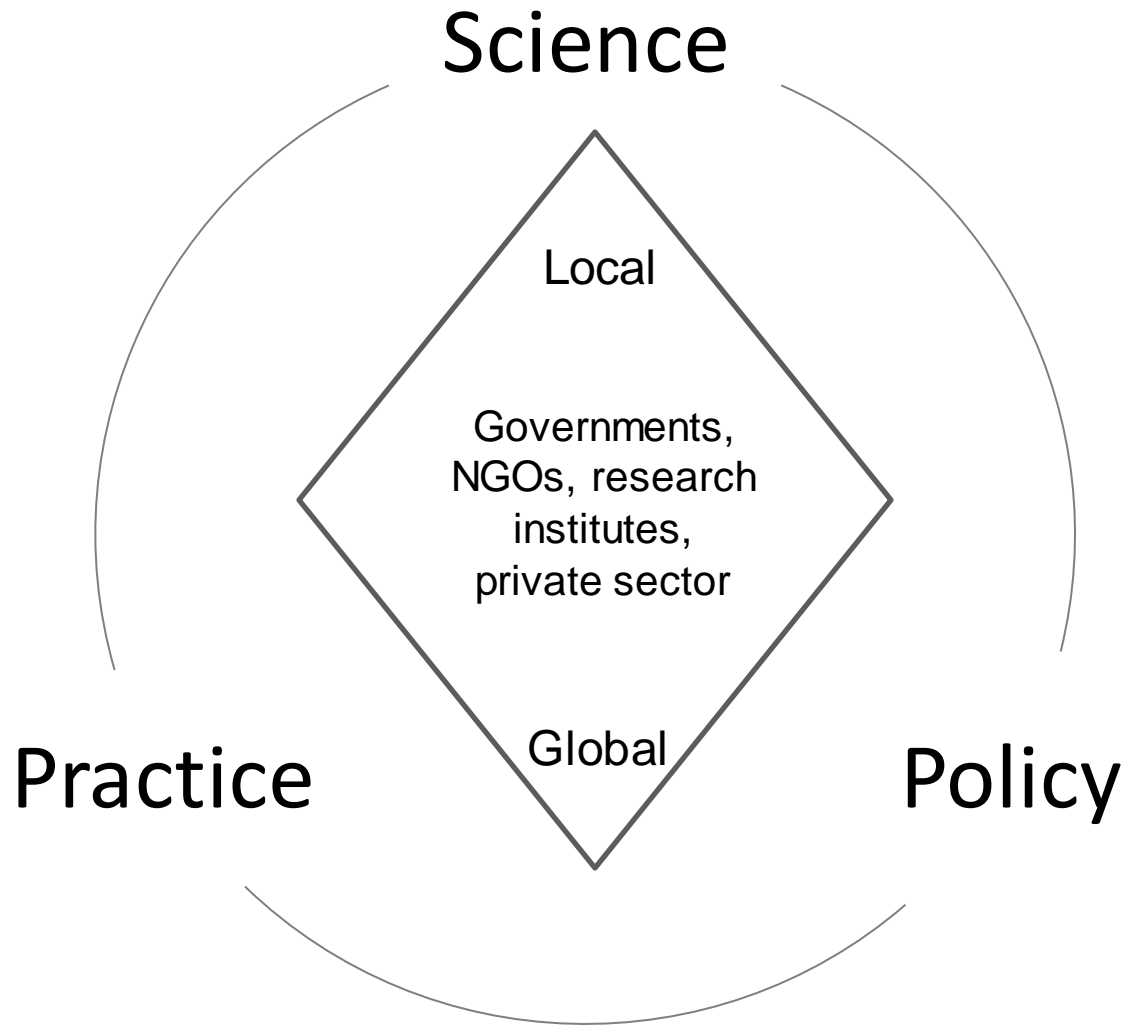
Commissions

- 10000+ voluntary experts in 6 thematic groups:



Secretariat

- 1000 full time staff worldwide
- 350 temporary staff, consultants and interns
- HQ in Gland, Switzerland
- Over 60 offices around the world

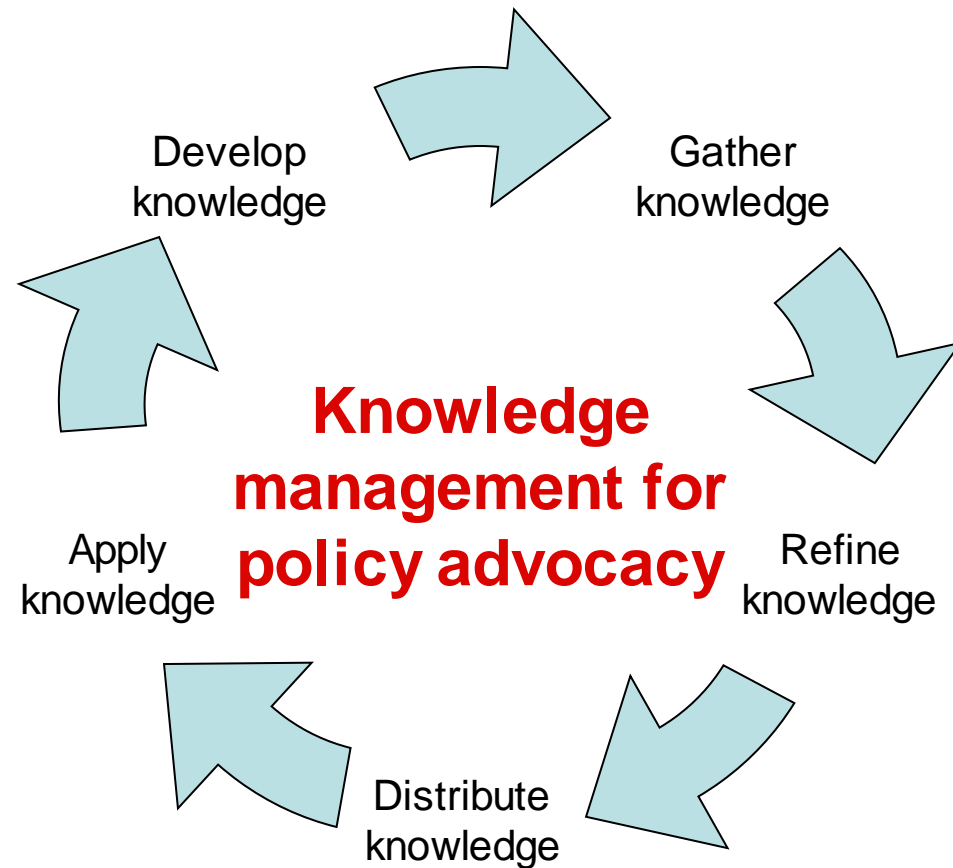


The Global Programme



What is WISP?

- Knowledge management on pastoralism and empowering practitioners
- Provision of mechanisms to understand the rationale of this livelihood, including own studies
- Long-term advocacy at UN fora for understanding pastoralists and pastoralism.



Supporting Sustainable Pastoral Livelihoods



A Global Perspective on
Minimum Standards and
Good Practices



Eastern and Southern Africa Regional Office

P.O. Box 88200-00200

NAIROBI Kenya

Tel: +254 20 249 3581/85

+254 724 258 804

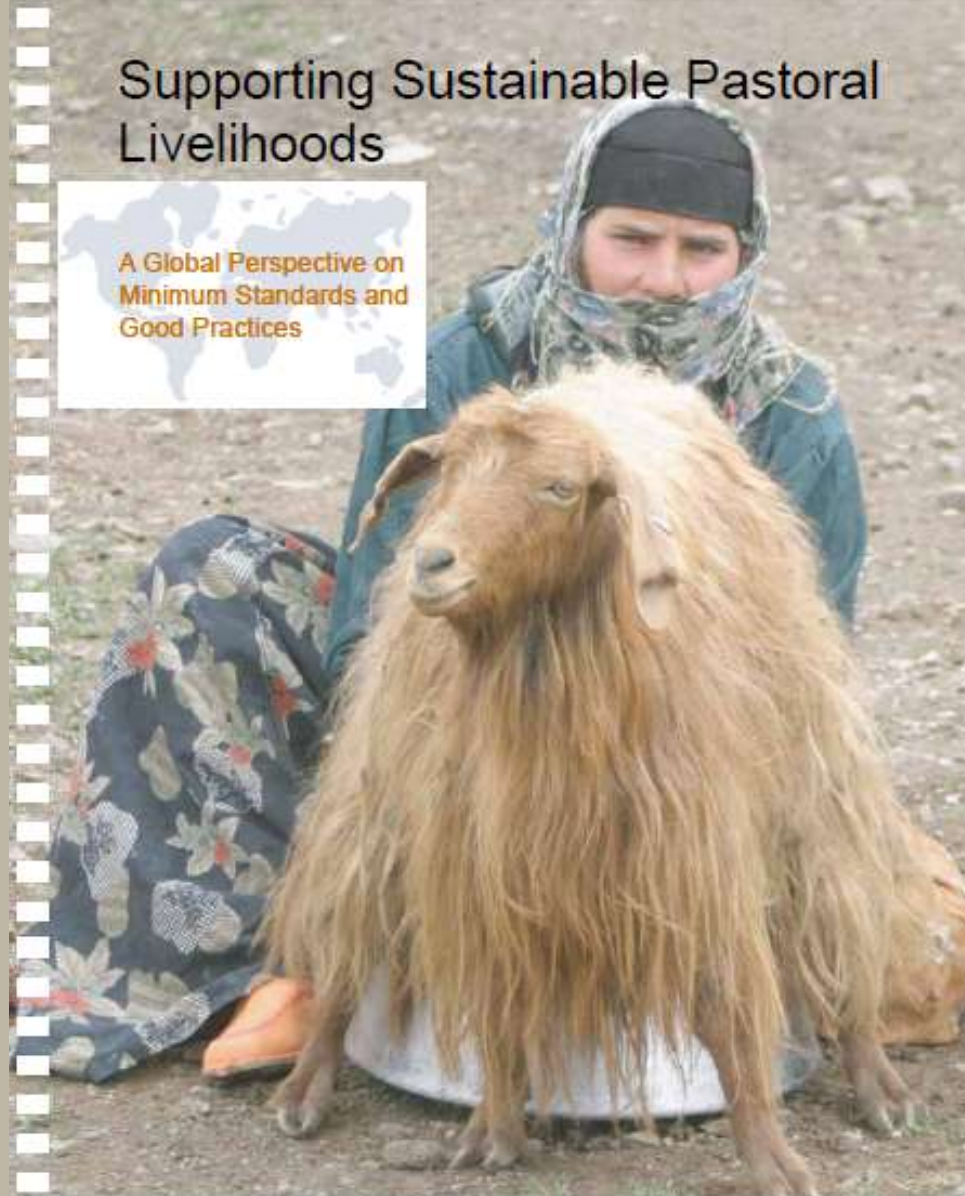
+254 734 788 770

Fax: +254 20 2493570

E-mail: info.esaro@iucn.org

www.iucn.org/places/esaro

www.iucn.org/wisp



FORD FOUNDATION



What makes livestock (un)sustainable?

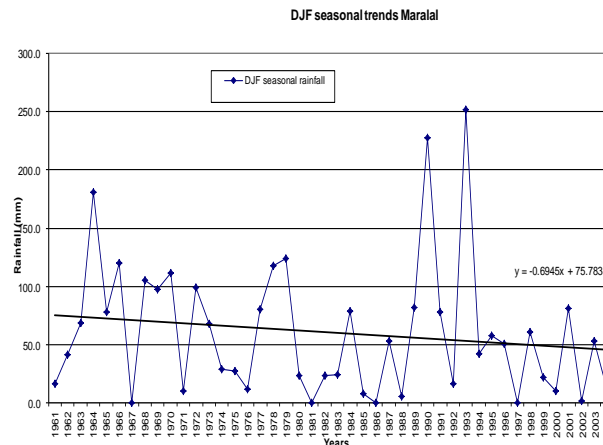
- High use of resources
 - Energy loss at trophic level change (90%)
- High level of emissions
 - Methane (CH₄) emissions
- High level of degradation
 - Effects on soil conservation and biodiv.
- High level of pollution
 - Associated with high concentrations

⇒ every challenge hides an opportunity!

Use of resources

Marginal lands

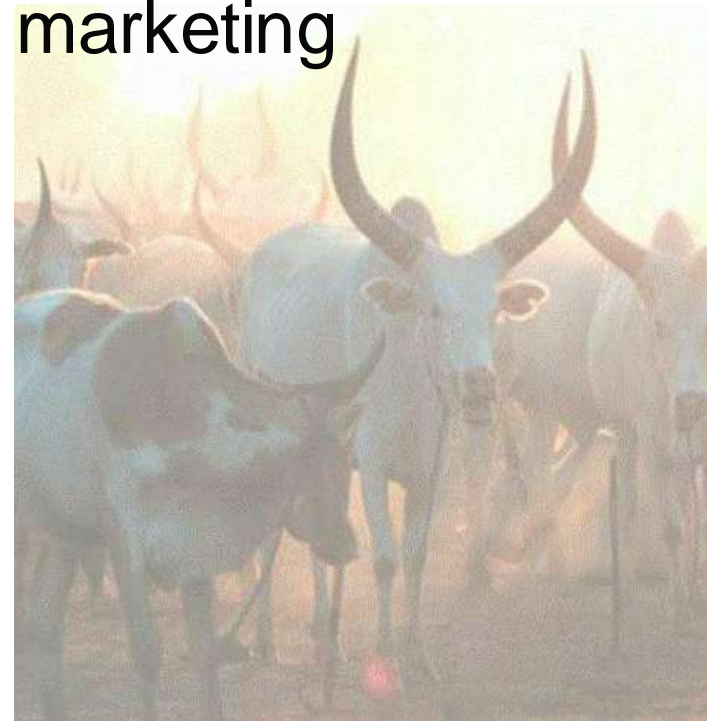
- Marginal lands cannot sustain most land uses
- If livestock is eliminated, others will take their place
- Specialized livelihoods (Krätli & Schareika 2010)
- Biodiversity crisis in abandoned landscapes
 ⇒ Biodiversity needs herbivory!!!



Use of resources

Adapted breeds

- Adapted breeds are more suited to marginal lands than productive breeds (the Ferrari vs. 4WD in rough roads*)
- Outside stimuli usually work in the wrong direction
- Market opportunities – niche marketing



* I thank Laura Cortada González for this genial metaphor.

Use of resources

Market opportunities

- Increasing livestock commodity prices
 - Challenge or opportunity?
- ⇒ Clear opportunity for poverty reduction in marginal areas!!
- ⇒ Clear opportunity to reduce burden on natural resources!!!



Use of resources / pollution

Integration of different production systems

- Agropastoralist systems have a high efficiency in terms of nutrient recycling
- Efficient nutrient recycling prevents faecal pollution
⇒ Win-win situation



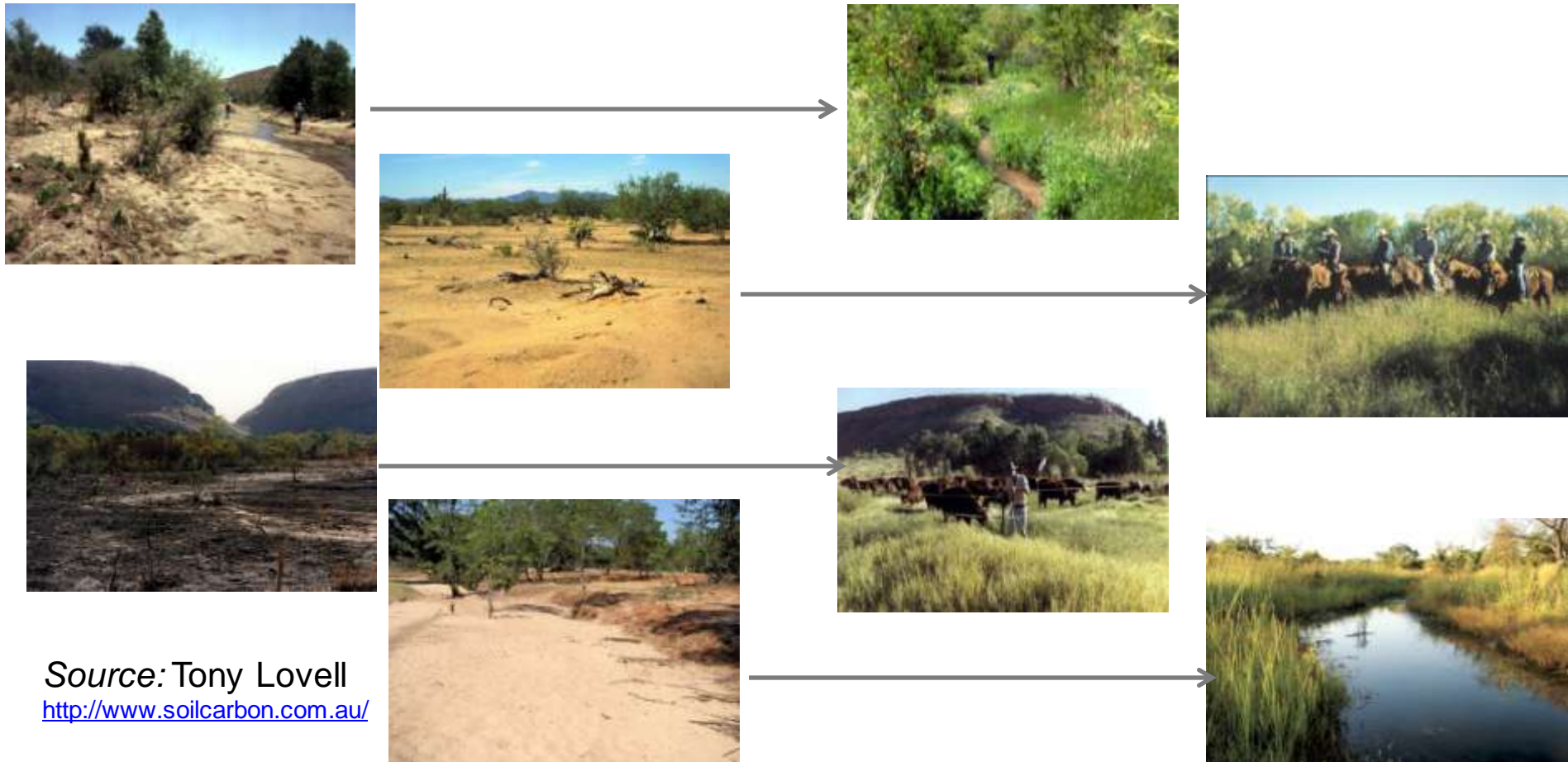
Emissions / land degradation

- The potential of rangeland soils, is it really well quantified?

Biome	Area (billions ha)	Global Carbon Stocks (Gt C)			ratio (t C/ha)
		Vegetation	Soil	TOTAL	
Trop forest	1.76	212	216	428	243.18
Temp forest	1.04	59	100	159	152.88
Bor forest	1.37	88	471	559	408.03
Trop savannah	2.25	66	264	330	146.67
Temp grassl	1.25	9	295	304	243.20
Deserts & semid	4.55	8	191	199	43.74
Tundra	0.95	6	121	127	133.68
Wetlands	0.35	15	225	240	685.71
Croplands	1.6	3	128	131	81.88
TOTAL	15.12	466	2011	2477	163.82

Emissions / land degradation

- Evidence at hand: proper management increases soil carbon



Source: Tony Lovell
<http://www.soilcarbon.com.au/>

Emissions / land degradation

- Reduction of emissions can also be possible through extensification of animal husbandry!

	Transhum by foot	Transhum by lorry	Sedentary
Fodder	54.76	115.20	370.75
Fuel	67.84	138.40	106.67
TOTAL	122.60	253.60	477.41

Life Cycle Analysis, mixed-feeding Spanish sheep farms around the Conquense Drove Road

How can pastoralism be improved?

Governance systems & solutions to solve actual problems

- Updating / formalization of governance systems
- Modernisation (they have already started!)
- Provision of useful services (adapted education, health)



BZ-Interview: José Graziano da Silva*, Jan 21st 2013

“Das Problem sind Methoden, die Erzeugung zu intensivieren aber zugleich umweltschonend zu gestalten. Es geht oft nur um Kleinigkeiten. Die Nomaden in der Sahara müssten nicht weiterziehen, wenn sie Wasserkollektoren hätten, durch die sie in der trockenen Winterzeit ihr Vieh versorgen und ihre Pflanzen wässern könnten.”

(The problem are the methods to intensify the production but at the same time to restructure in an environmentally friendly way. It's often just about trifles. The nomads in the Sahara would not need to migrate if they would have water collectors, by which they could provide their livestock with water and irrigate their plants during the dry winter.)

⇒ Pastoral mobility still considered something that should be eradicated! (perhaps by the journal doing a wrong translation)

*President of FAO

Source: <http://www.badische-zeitung.de/nachrichten/wirtschaft/die-weltemaehrunqsorganisation-will-den-hunger-ganz-ausrotten>



Eastern and Southern Africa Regional Office

Wasaa Conservation Centre,
Mukoma Road (off Magadi Road, City Square)
P. O Box 68200
200 Nairobi
Kenya

wisp@iucn.org

<http://www.iucn.org/wisp>

pablo.manzano@iucn.org

