

The Social and Environmental Impact of Pastoralism on ACP countries

Committee on Social Affairs and
the Environment

ACP-EU JPA 22/03/2013

Joep Van Mierlo,
Director VSF-Belgium



VSF- Europa



DIERENARTSEN | VETERINAIRES
ZONDER GRENZEN | SANS FRONTIERES

BELGIUM



Intro!

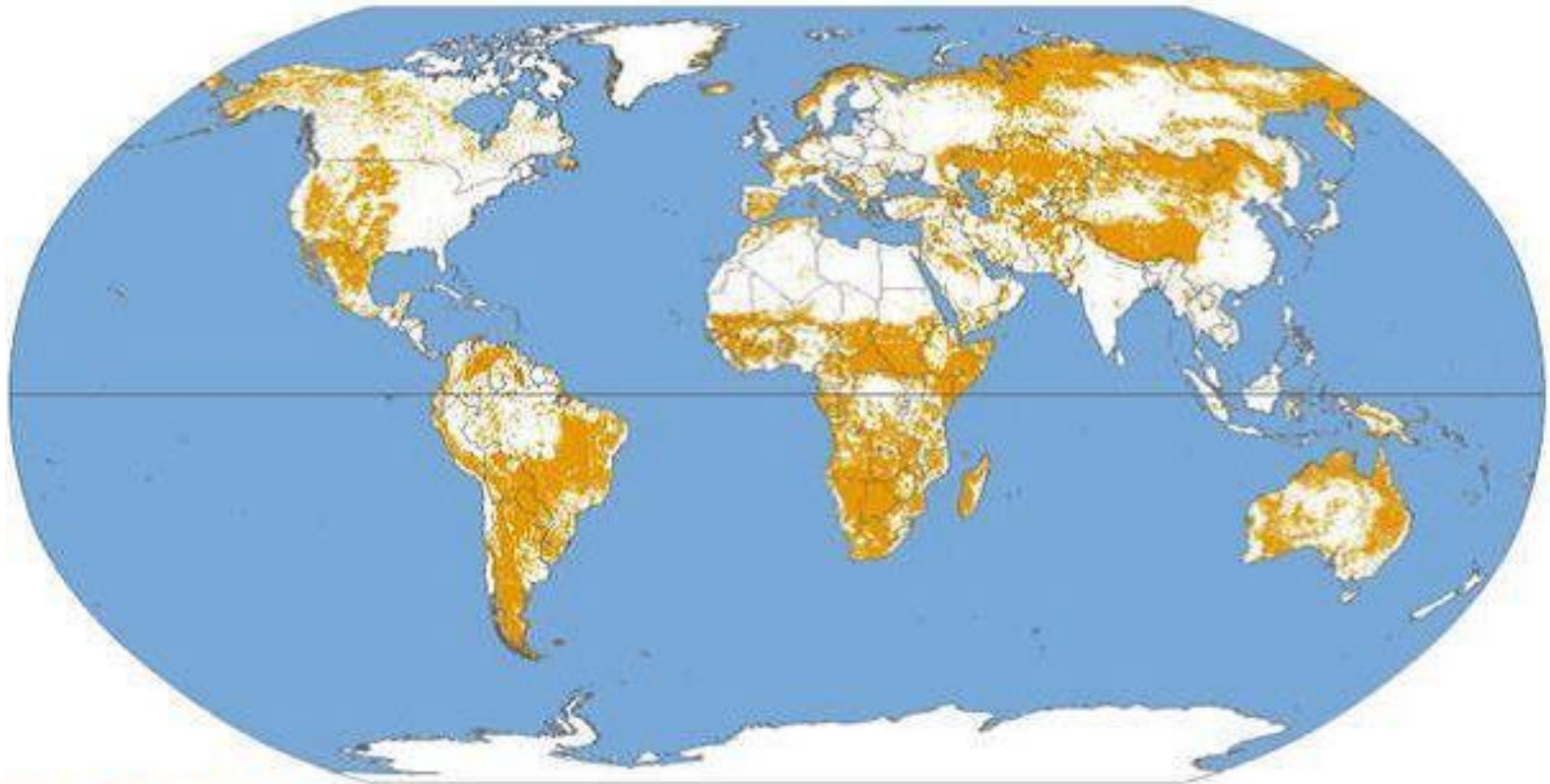
✦ “Pastoralism is mobility, mobility is pastoralism”
(Borana Proverb)¹

✦ “Pastoralism is practiced on 25% of the global land area (*where crops can't be grown*), supports 200 million households, who raise nearly 1 billion head of camels, cattle and smaller livestock. Half of the pastoralists live on less than \$2/day”².

1. IIED, SOS Sahel UK (2009). *Modern and Mobile*. 92p.
2. Rass Nicolas (2001). Policies and Strategies to Address the Vulnerability of Pastoralists in Sub-Saharan Africa. FAO, PPLI Working Paper 37. 108p.



Where?



■ Pastoralists regions
∩ National boundaries

0 2,500 5,000 km
Robinson Projection



Who and What?

- ✦ Nomads and transhumant (agro)-pastoralists
- ✦ Land use system, based on mobile livestock farming and **communal land tenure** in **arid and semi-arid** regions all over the world.
- ✦ It is a:
 - Way of life
 - Farming system
 - Economical system (e.g. trade)
- ✦ It provides resilience to a whole ecosystem



Mobility for Production

- ✦ Mobility: **best quality grazing areas:**
 - Variability in time and space
 - **Opportunity instead of constraint:** through mobility the livestock has access to a better nutrition
 - Result: in arid and semi-arid lands pastoralists' livestock production levels are higher than in sedentary systems (Comparative Advantage)¹
- ✦ 10% of the world's meat production

De Verdière, C.P. (1995) Les conséquences de la sédentarisation de l'élevage au Sahel. Etude comparée de trois systèmes agropastoraux dans la région de Filangué, Niger. Thèse présentée pour l'obtention du titre de Docteur de l'Institut National Agronomique Paris-Grignon, 220 pp.



Table 3: Estimated total and proportional meat production from pastoral/agro-pastoral systems in West and East Africa (2002).

East Africa	Cattle Meat		Goat Meat		Sheep Meat	
	Pastoral Production	Percent of national production	Pastoral Production	Percent of national production	Pastoral Production	Percent of national production
Djibouti	2,840,763	99%	1,118,748	97%	820,554	99%
Eritrea	13,333,998	58%	1,751,832	38%	1,887,448	38%
Ethiopia	39,254,569	14%	3,006,528	12%	1,839,164	7%
Kenya	33,951,774	34%	10,135,336	42%	5,561,651	33%
Somalia	51,365,707	91%	25,471,753	93%	23,159,968	94%
Sudan	213,561,380	49%	42,140,927	42%	40,016,191	38%
Tanzania	27,021,510	15%	4,389,184	15%	1,060,654	13%
Uganda	3,035,536	5%	249,291	1%	68,889	3%
Total	38,4365,237	46%	88272599	42%	74414519	41%

West Africa	Cattle Meat		Goat Meat		Sheep Meat	
	Pastoral Production	Percent of national production	Pastoral Production	Percent of national production	Pastoral Production	Percent of national production
Burkina Faso	9,258,841	18%	3,684,352	15%	1,728,867	9%
Chad	31,226,264	49%	6,658,882	50%	2,360,544	44%
Cote d'Ivoire	7,273,231	36%	481,716	16%	333,606	12%
Gambia	199,441	5%	30,213	8%	9,378	3%
Ghana	3,107,105	18%	771,306	9%	385,770	7%
Guinea	14,074,627	39%	1,047,547	41%	635,041	40%
Guinea-Bissau	2,178,687	42%	132,899	19%	201,541	47%
Mali	27,908,746	38%	9,761,685	38%	5,273,901	36%
Mauritania	9,932,539	60%	8,371,650	66%	10,153,211	60%
Niger	13,421,365	78%	13,071,666	83%	6,892,218	83%
Nigeria	16,944,859	8%	3,014,727	4%	2,210,143	4%
Senegal	7,729,404	24%	1,227,109	11%	1,565,278	13%
Togo	108,926	4%	27,177	1%	20,363	1%
Western Sahara	980	100%	395,600	100%	59,400	100%
Total	143,365,015	37%	48,284,885	33%	31,423,262	33%

Source: Rass Nicolas (2001). Policies and Strategies to Address the Vulnerability of Pastoralists in Sub-Saharan Africa. FAO, PPLI Working Paper 37. 108p.





Mobility for Trade

- ✦ Local, national and international markets
- ✦ Use of technology e.g. mobile phones for market intelligence and/or grazing opportunities => modernization
- ✦ Challenges:
 - Safety
 - Market access
 - Seasonal variability
- ✦ Profitable:
 - Contribution GDP
 - Changing ownership patterns



Table 1: IGAD - GDP, agricultural GDP and contribution of livestock to agricultural and total GDP.

Country	Year	GDP ¹ (billion USD)	Share of agricultural GDP in overall GDP ²	Share of livestock GDP in agricultural GDP ² (%)	Share of livestock GDP in overall GDP ² (%)
Djibouti	1980	..	..	86.3	..
	1990	0.5	3.3	89.5	3.0
	2000	0.5	3.7	84.7	3.1
Eritrea	1980	..	..	..	..
	1990	..	..	..	..
	2000	0.6	17.1	56.5 ⁴	9.7
Ethiopia	1980	..	56.1 ⁵	36.8	20.6
	1990	5.1	49.3	39.1	19.3
	2000	7.5	52.3	32.5	17.0
Kenya	1980	5.6	32.6	49.4	16.1
	1990	8.4	29.1	53.3	15.5
	2000	9.9	19.9	52.4	10.4
Somalia	1980	..	68.4	88.0	60.2
	1990	..	65.5	82.5	54.0
	2000	..	..	88.2	..
Sudan	1980	4.3	32.9	54.1	17.8
	1990	4.8	32.8 ⁶	65.5	21.5
	2000	9.9	37.2	61.8	23.0
Uganda	1980	..	72.0	24.2	17.4
	1990	4.1	56.6	20.9	11.8
	2000	7.7	42.5	19.8	8.1

¹ WDI 2002 in constant 1995 US dollars

² Calculated based on agriculture and livestock production indices in FAOSTAT 2003

⁴ 1999 data

⁵ 1981 data

⁶ 1987 data

Source: Knips, V. (2004). *Review of the livestock sector in the Horn of Africa*.
FAO, *Livestock Sector Report: Horn of Africa*. 42p.



Mobility for Resilience

✦ Constraints:

- Droughts/Floods – climate variability
- Diseases (e.g. Transboundary Animal Diseases; TAD)
- National but also other regional and local borders like National Parks, land acquisition, or re-allocation
- Population growth and related land pressure
- Conflicts, often resource-based

✦ Consequence: change of migratory patterns





Pastoralism and Food Security

« Livestock provides more food security than growing crops in many arid and semi-arid areas...
The food crisis in the Horn is essentially a livestock crisis »

Lloyd Le Page, then CEO of CGIAR

Source: Krätli, S., Huelsebusch, C., et al. (2013). *Pastoralism: a critical asset for food security under global climate change*. *Animal Frontiers*, (vol.3)1. p,42-50



Pastoralism and Food Security

- ✦ Farming less adapted to ecological circumstances in drylands
- ✦ Production of livestock products:
 - Milk – source of high-quality protein and other micro-nutrients, especially important for children's growth.
 - Meat – important for cognitive development of children
- ✦ Agro-pastoralism: Contribution to agriculture:
 - Manure and adding value to crop by-products
 - Animal traction and transport





Pastoralism and the environment

- ✦ Climate change
 - Adaptation through mobility
 - Carbon sequestration potential of grasslands
- ✦ Biodiversity and Intellectual Property Rights (animal and plant genetic resources)
- ✦ General environmental services
 - maintaining vegetation/soil to capture carbon,
 - reducing erosion, improving soils and facilitating water holding capacity.



Pastoralism and Enabling Environment

- ✦ Enact rights: Land, Intellectual Property Rights and targeted legislation with full participation of the pastoralists
- ✦ Assessment of impact of pastoralists in civil society (drop-outs, opt-outs and pastoralists)
- ✦ Capacity building in organisational development, awareness raising and advocacy to become a fully participating actor





Challenges?

1. Increasing climate variability
2. Cultural raiding vs. economical raiding
3. Gender issues within pastoralist societies
4. Food insecurity vs. demographic growth
5. Environmental damage => degradation
6. Land tenure and access rights
7. Conflict and disease outbreaks
8. Poor capacity to cope <=> marginalization (socio-political)
9. Market shocks and non-integration in value chains
10. Underinvestment (less than 1% of ODA is allocated to livestock)



Recommendations

1. Recognise pastoralism is a productive and efficient use of resources and re-evaluate their dryland ecosystem services.
2. Make pastoralists visible in government statistics, censuses, trade figures and public discourses and recognize their (land) rights.
3. Protect pastoral land and their crucial transhumance corridors
4. Measure contribution of pastoral production to national economy
5. Improve pastoralists' access to markets and participation in the appropriate value chains and related services (e.g. animal health)
6. Invest in developing pastoralism (e.g. enabling environment) on its own terms instead of investing in replacing pastoralism.
7. Adapted education for pastoralists' children and adults (e.g. PFS)
8. Raise awareness of consumers, professionals and politicians N/S



Pastoralism in Africa

AFRICAN UNION
الاتحاد الأفريقي



UNION AFRICAINE
UNIÃO AFRICANA

*Addis Ababa, ETHIOPIA P.O. Box 3243 Telephone: 011-551 7700 Fax: 011-551 7844
website: www.africa-union.org*

Department of Rural Economy and Agriculture

**POLICY FRAMEWORK FOR PASTORALISM IN AFRICA:
Securing, Protecting and Improving the Lives, Livelihoods and Rights of
Pastoralist Communities**

October 2010
Addis Ababa, Ethiopia



Thank you!

www.vsf-belgium.org

www.celep.info

j.vanmierlo@vsf-belgium.org

