



Better lives through livestock

Cattle in sustainable, healthy food systems: perspectives from Africa

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Global Roundtable for Sustainable Beef webinar: The significance of animal protein

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Africa's cattle



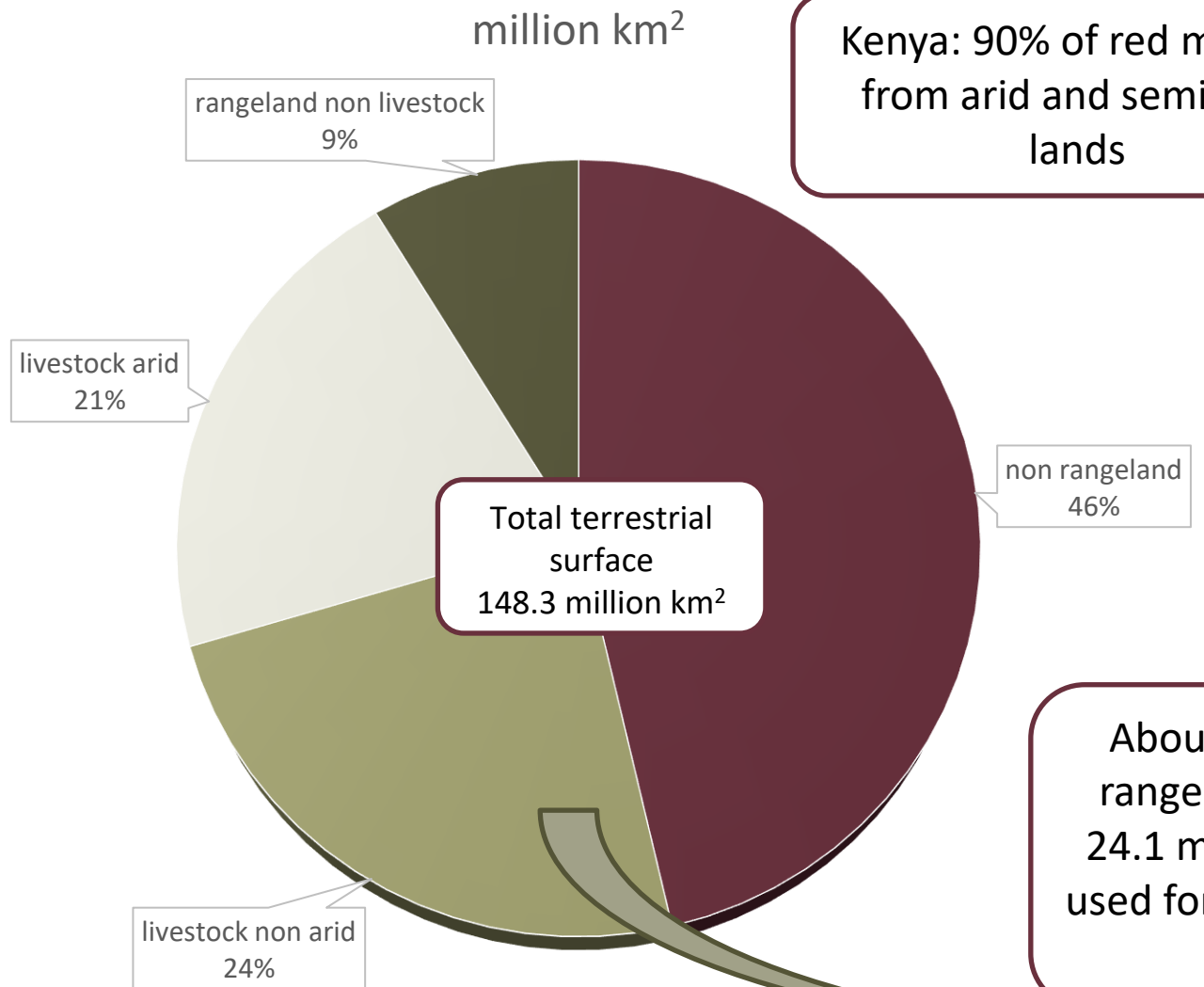
Africa is home to 360 million cattle
Ethiopia has the most with 63 million
Kenya has 21 million

Raising cattle



- Cattle are raised
- On small farms and
 - On Africa's vast rangelands

New: Rangelands Atlas



Kenya: 90% of red meat is from arid and semi-arid lands

About one third of the rangelands are in Africa
24.1 million km² in Africa used for ruminant livestock production

<https://www.rangelandsdata.org/atlas>

Types of ruminant livestock production systems found in rangelands

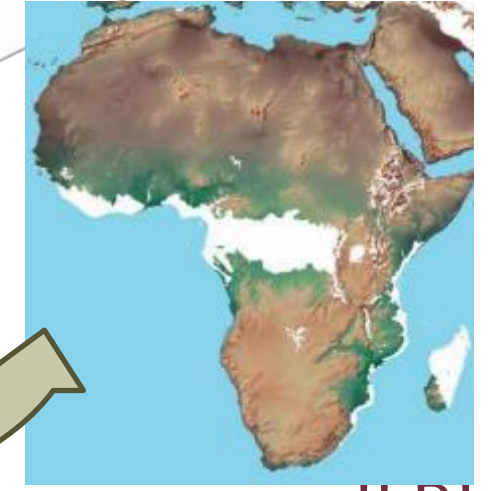
Livestock may be raised primarily for subsistence or local sales or may be raised to supply international markets with large quantities of produce. The scale, purpose and nature of livestock enterprises is known as the production system. The type of ruminant production system is largely determined by agroecology and land use, but also influenced by capital investment, degree of specialisation and whether the animals are raised on pastures, forests or as part of mixed crop-livestock production systems in rangelands.

KEY DATA

1. Livestock production systems in rangelands cover 64,416,556 km², that is 43% of global terrestrial surface. Livestock production systems cover 50% of rangelands.
2. 46% of livestock production systems in rangelands are found in arid areas that is land that is most cases cannot be used for growing crops. Livestock-only production systems in arid areas cover 31,000,000 km².

Combining improvements in the livestock production system with rangeland management and rehabilitation: The case of Medenine in Tunisia

With nearly one-quarter of Tunisia covered by rangelands – both arid and desert areas – the country has a diverse livestock sector. Sheep are the most dominant species, with an average of 4.5 million, followed by 1.2 million goats, 400,000 dairy cattle and 200,000 other cattle. Based on 2018 figures, Camels and avian species, donkeys, and mules represented 214,000, within cattle species, dairy cattle are the most dominant, accounting for 80%.



The image shows a stylized globe with the continents of South America and Africa visible. Overlaid on the top left of the globe is a white rectangular box containing the logos for ILRI and CGIAR. The ILRI logo consists of the letters 'ILRI' in a large, bold, serif font, with 'INTERNATIONAL LIVESTOCK RESEARCH INSTITUTE' in a smaller, sans-serif font below it. The CGIAR logo features a green stylized plant icon above the word 'CGIAR' in a bold, sans-serif font.

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<https://www.nature.com/articles/s41588-020-0694-2>



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Article | [Published: 28 September 2020](#)

The mosaic genome of indigenous African cattle as a unique genetic resource for African pastoralism

Kwondo Kim, Taehyung Kwon, Tadelles Dessie, DongAhn Yoo, Okeyo Ally Mwai, Jisung Jang, Samsun Sung, SaetByeol Lee, Bashir Salim, Jaehoon Jung, Heesu Jeong, Getinet Mekuriaw Tarekegn, Abdulfatai Tijjani, Dajeong Lim, Seoae Cho, Sung Jong Oh, Hak-Kyo Lee, Jaemin Kim, Choongwon Jeong, Stephen Kemp, Olivier Hanotte  & Heebal Kim 

Nature Genetics **52**, 1099–1110 (2020) | [Cite this article](#)

The story of cattle in Africa

Why diversity matters

Download:

https://cgspace.cgiar.org/bitstream/handle/10568/108945/cattle_books.pdf?sequence=2&isAllowed=y

Beef



ILRI/Susan MacMillan

Cattle raised for meat

Africa beef production and trade, 2018

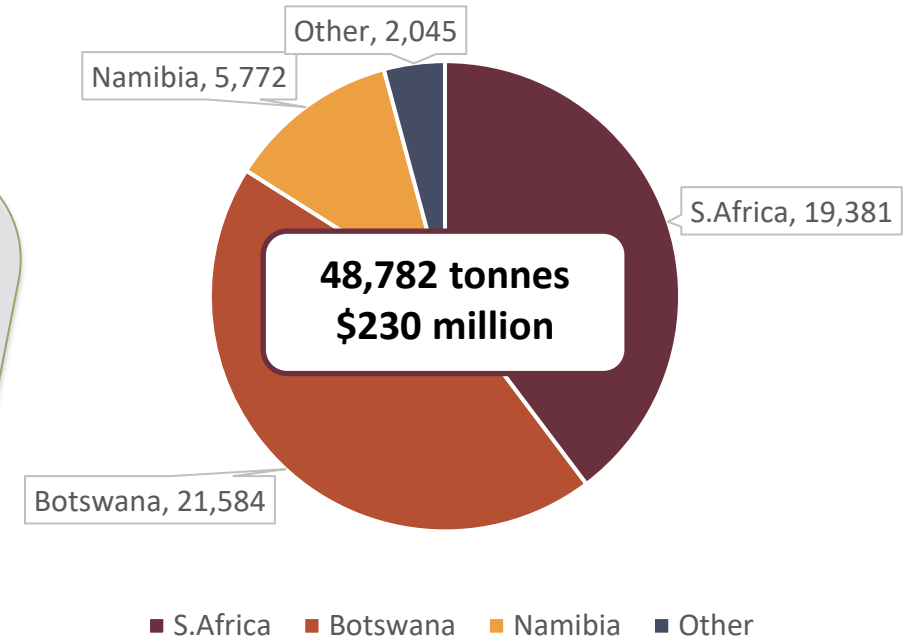
A valuable commodity

Beef: \$15 billion, Africa's third most valuable commodity (behind cassava and maize)
(about 7% of beef's global value)

Beef production: 6.5 million tonnes

Less than 1% exported
(hypothetical: less than 3g protein/cap/day)

Export [Meat cattle (boneless beef and veal)]



**Import bill for
cattle meat
\$1.5 billion**

Much more than beef



Across much of Africa livestock including cattle raised for beef have multiple functions

*Healthy, well-cared-for and productive animals [cattle, sheep, goats, poultry, swine....]
contribute to sustainable, healthier and inclusive future livelihoods worldwide*

Asset and safety net

Prevent falling into poverty
Used to 'step out' of poverty

ILRI/Richard Gangale

Especially important for women

Only asset owned by 2/3 of rural women in LMICs

Close link with household nutrition

Used for risk management, school fees

ILRI/Zerihun Sewunet

Essential for balanced nutrition

Vitamins and nutrients in milk, meat and eggs essential for physical and cognitive development

Livestock-derived foods and sustainable healthy diets

UN Nutrition

Fundamental for many livelihoods

1 in 7 people on the planet depend on livestock for livelihoods
Kenya: 3.6 million people, livestock contributes 40-70% of income
Kenya: 20% of labour force in livestock

ILRI//K.Dhanji

Contribute to national economies

Globally, livestock 40% agGDP

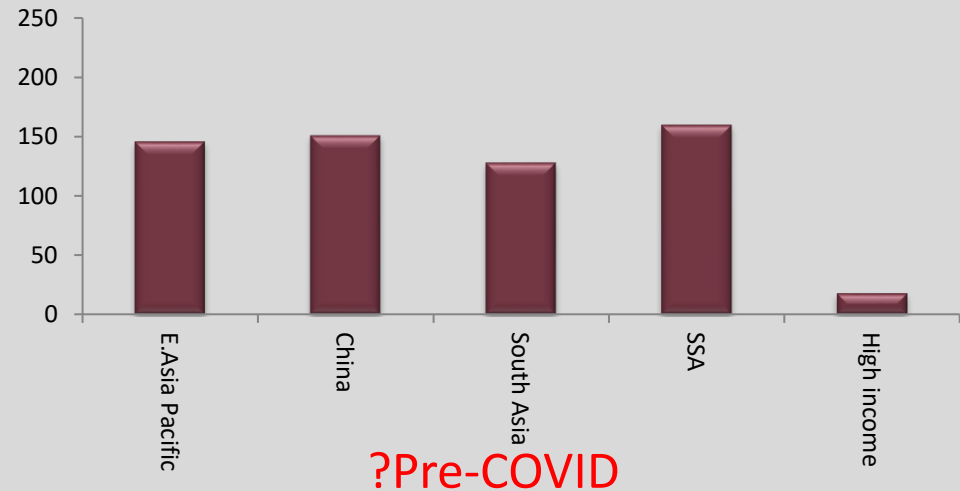
Over 50% in HICs

15-80% in LMICs (and growing)

ILRI/Stevie Mann

But change is needed

% growth in demand for beef
comparing 2005 to 2030

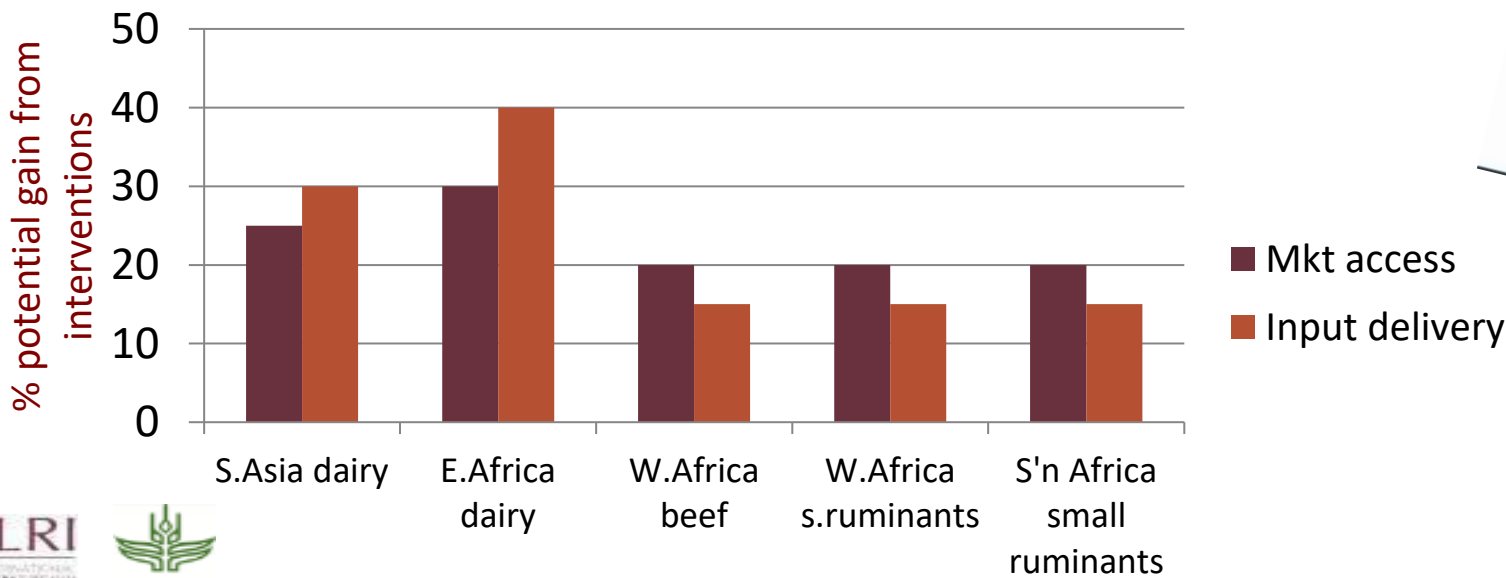
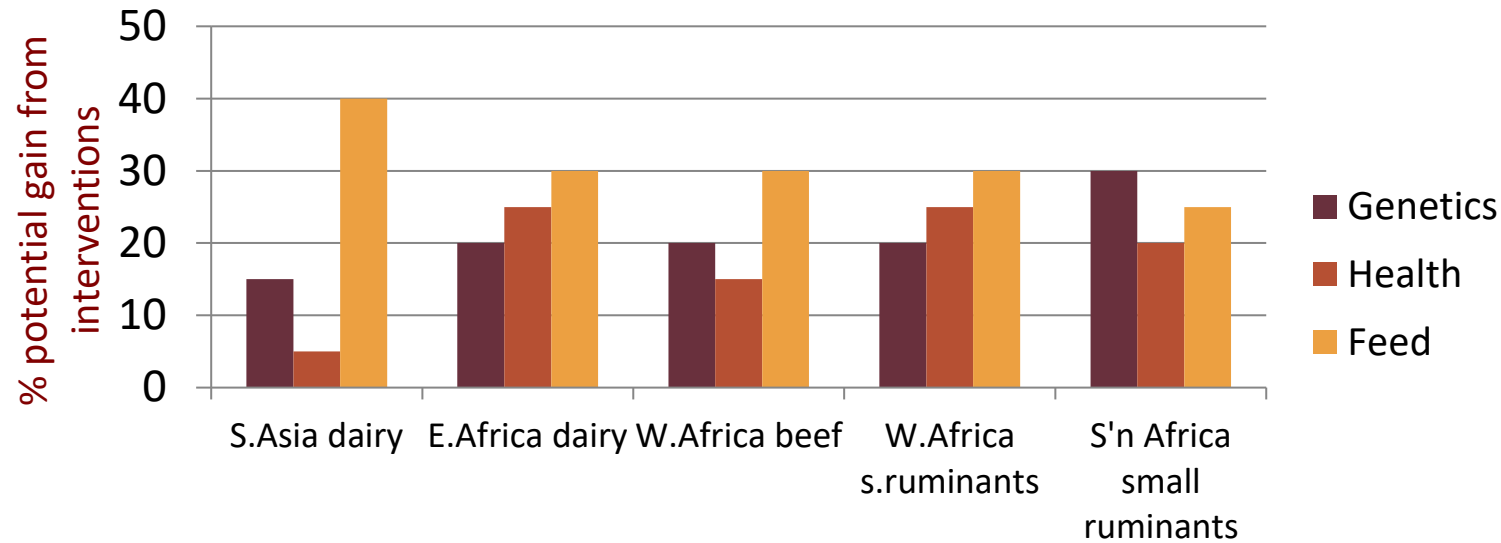


Address demand (double 2018 by 2030?)

Contribute to development

Mitigate harms

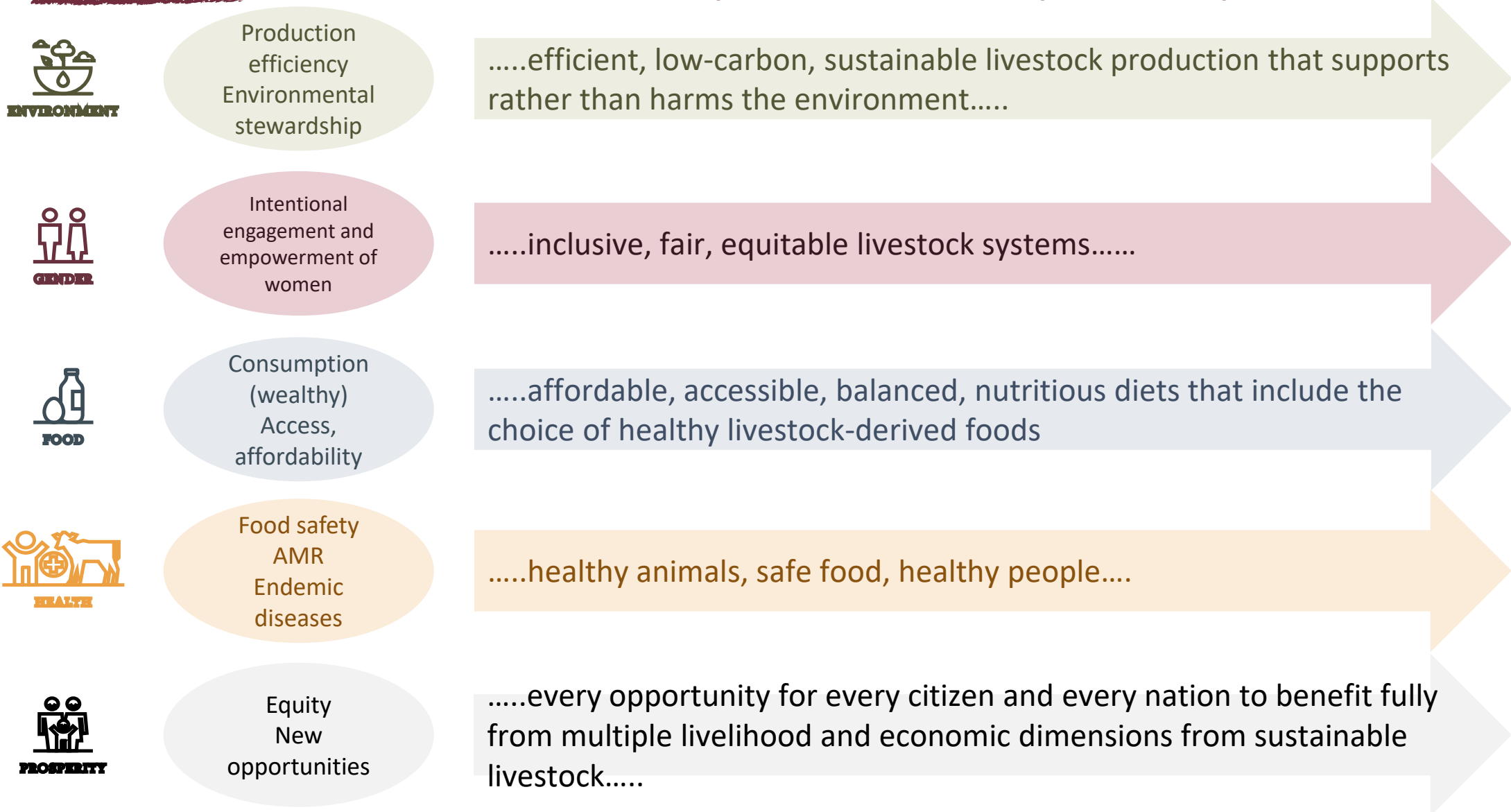
Using technical, market and institutional interventions to assess yield gaps



https://www.ifad.org/en/web/knowledge/-/publication/grant-results-sheet-innovative-beef-valuechain-development-schemes-in-southern-africa?p_l_back_url=%2Fen%2Fsearch%3Fq%3Deswatini

Contribute to development; mitigate harms.....

Common destinations, multiple, different pathways





ILRI/Saskia Hendricks