Enhancing Livestock Resilience and Pastoral Livelihoods in Africa

May 17, 2012

Presenters
Francis Chabari, CNFA
Jurjen Draaijer, CNFA
John McPeak, Syracuse University
Upcoming Events

• May 22 | Breakfast Seminar: Feed the Future's NAFAKA Project in Tanzania

• May 30 | Ag Sector Council Seminar

• May 31 | MSU Food Security III Event
Pastoralism Resilience in North Eastern Kenya

Francis N Chabari, Chief of Party
USAID-Funded Kenya Drylands Livestock Development Program (KDLDP)
Pastoralist Resilience

Resilience
The ability of a social or ecological system to absorb disturbances while retaining the same basic structure and ways of functioning, the capacity for self-organization, and the capacity to adapt to stress and change

Pastoralists
Pastoralists are agriculturalists who keep domesticated livestock on natural pastures and depend upon their animals as their primary source of income
Horn of Africa Pastoralism

• 200M pastoralists around the world; of which approximately 20 – 25M live in the Horn of Africa

• Many pastoral groups in the Horn of Africa straddle international borders

• Control of rangeland resources shifted from local pastoral communities to national governments in the Horn of Africa in the 1900’s
Resilience Initiatives

Inter-Governmental Authority on Development (IGAD)
The meeting in Sept 2011 in Nairobi led to the following outcomes:

- A Commitment to Sustainable Development by ending drought emergencies;
- Recognized the role of mobility, improved markets, access to education, technological advancements, and early warning in pastoral areas.

Council of Ministers of Agriculture (COMESA)
The meeting held in October 2009 in Victoria Falls, Zimbabwe, declared support for cross-border mobility of pastoralists.

Trends

- Droughts are becoming more frequent and intense; while rainfall is not decreasing.
- La Niña events are set to worsen in coming years.
Resilience Studies

• International Livestock Research Institute (ILRI) Assessment of the 2008 – 2009 drought:
  – Herding is superior to crop agriculture in many of the arid and semi-arid lands
  – Timely interventions help pastoralists cope with drought

• Kenya lost 18 -20% of its livestock in the 2011 drought. The total loss was estimated at US $8 Billion from 2008-2011 (Government of Kenya)

• Pastoralism evolved over time to cope with shifting resource availability
Human & Livestock Populations in North Eastern Province, Kenya, 2009

<table>
<thead>
<tr>
<th>Species</th>
<th>Numbers ('000s)</th>
</tr>
</thead>
<tbody>
<tr>
<td>Cattle: Exotic</td>
<td>80</td>
</tr>
<tr>
<td>Indigenous</td>
<td>2,695</td>
</tr>
<tr>
<td>Sheep</td>
<td>4,260</td>
</tr>
<tr>
<td>Goats</td>
<td>7,887</td>
</tr>
<tr>
<td>Camels</td>
<td>1,701</td>
</tr>
<tr>
<td>Donkeys</td>
<td>382</td>
</tr>
</tbody>
</table>

Human population: NE Prov. + T/River
A. Estimate population – 2.6M
B. Households - 352,670
C. Land size – 164,340 km sq.
   (1/3 size of Kenya)

Over 70 percent of the meat consumed in East Africa comes from pastoral herds
For the Future

- Proposed key land tenure reforms and DRR planning
- Access rights to key resources: wetlands, forests, water, mineral/salt licks
- Strengthening pastoral associations, indigenous civil society and advocacy forums
- Growth of pastoral contribution to national economies
• Capacity building – a necessary foundation for technological interventions

• Expanded use of ICT for market information and mobile banking facilities

• Important to conserve local breeds of livestock

• Control of trans-boundary and other economically significant range diseases for uninterrupted trade
Trade Livestock flow from North Eastern Kenya and X-border trade
For the Future (cont’d)

• Human population control

• Policies facilitating cross-border mobility

• Institutional structures for resources management and conflict resolution

• Inclusion of women in decision making structures

• Representation of LVC actors in devolved government structures

• Expanded physical and social infrastructure and opportunities for formal education for pastoralist children
For the Future (cont’d)

• Diversified livelihoods with greater attention to pastoral drop outs

• Early commercial off-take of non-core breeding stock when drought is imminent

• Livestock mix: more camels in drylands

• Expand production where feasible; this competes very effectively with other farm enterprises
USAID-Funded KDLDP Key Interventions

• Access to markets and market linkages

• Value addition to livestock products

• Productivity and competitiveness

• Creating enabling policies for production and marketing

• Adaptation to climate change
Vaccinating Livestock
Competition for Key Resource: Irrigable/Wet Land

Rice Mill Store in Tana Delta: How about the Rice straw and husks as livestock feed in droughts?
Fodder production on local farms (Garissa)

Manual Hay Baler
Manually Baled Hay in Storage

(Lady Owner is Beneficiary of Matching Investment Funds)
Value Addition

Processing Camel Milk into Yoghurt
Value Addition

Two Volunteers from Oklahoma State University (right)
Conclusion

Pastoralism has survived over millennia because it changes and adapts

Pastoralism is here to stay

Thanks
Competitiveness improvement of the livestock value chain in Somaliland

Partnership for Economic Growth (PEG)

Funded by USAID/East Africa
Implemented by DAI and CNFA
Somaliland context

• Unrecognized but functioning Government
• No official banking system – money transfer system
• Diaspora Remittances (> livestock export)
• Arid (100 – 300 mm / y)
• High unemployment (47%)
• High energy cost ($1.20 / kWh)
Somaliland Livestock Production

- 65% of GDP
- Pastoralist extensive livestock production system
  - goats & sheep / camels / cattle
- Large export and regional trade – live animals
- 30% of Gov. revenue from livestock export
- Large number of transactions / animal
- Burao largest market (10,000 per day)
- Unreliable data and figures
Berbera Livestock export numbers – (source: FSNAU)

**goats and sheep**

![Bar chart showing the number of goats and sheep exported from Berbera over the years 1994 to 2011.](chart1)

**camels**

![Bar chart showing the number of camels exported from Berbera over the years 1994 to 2011.](chart2)
Berbera Livestock export – no. goats and sheep (source: MOL)
Berbera Livestock export – no. camels / cattle (source: MOL)
### Berbera Livestock export (source: MOL)

<table>
<thead>
<tr>
<th>2011</th>
<th>Export numbers</th>
<th>Est. Value ($)</th>
</tr>
</thead>
<tbody>
<tr>
<td>Small Ruminants</td>
<td>3,100,000</td>
<td>186,300,000</td>
</tr>
<tr>
<td>Cattle</td>
<td>150,000</td>
<td>51,000,000</td>
</tr>
<tr>
<td>Camels</td>
<td>107,000</td>
<td>59,000,000</td>
</tr>
<tr>
<td><strong>Total</strong></td>
<td><strong>3,357,000</strong></td>
<td><strong>296,300,000</strong></td>
</tr>
</tbody>
</table>
Berbera Livestock export – destination (source: MOL)
Berbera Livestock export – destination (source: MOL)

**Small ruminants**
- Saudi Arabia
- Yemen
- Oman
- UAE
- Egypt

**Cattle**
- Yemen
- Oman
- Saudi Arabia
- Egypt
- UAE

**Camels**
- Saudi Arabia
- Egypt
- Yemen
- Oman
- UAE

**Total export value**
- Saudi Arabia
- Yemen
- Oman
- Egypt
- UAE

Harnessing the **POWER** of the Private Sector
Regional linkages

Berbera animals originate from:
• Somali region in Ethiopia (50 %)
• Other Somalia regions (10 %)

Other Ports: Djibouti, Bossaso

Livestock export to: SA, Yemen, Oman, Egypt, UAE

Links to regional bodies – IGAD, AU, COMESA
• policies (trade, pastoralism)
Harnessing the POWER of the Private Sector
Harnessing the **POWER** of the Private Sector
External regional challenges

• Animal health
  – Livestock bans (past loss $ 150 million - 2000)
  – Spread of diseases (Somalia regions, Ethiopia)
  – Animal disease certification for export (brucellosis, RVF)

• Inland “port” in Ethiopia

• Somalia Conflict
Constraints and challenges in livestock sector:

- Shortage of feed / water
- “Livestock harvesting”: – livestock breeding limited
- Support services limited
  - financial services - loans
  - Animal health
  - Extension
  - Input supply
- Droughts and unreliable rainfall
- Degradation of rangelands
- Little private sector investments
HI-AAL
AGRO-VETERINARY
Muwooyinka Xoolaha Beeraha & Siidhka
Tel: 710184 [FELSO] 34122 STC
Mob: 437302
Economic Growth Impact (30 points)

- What are your projections for total revenue of prior year and year 2 of the business operation?
- How do you expect to increase your business? Have you made any changes in your approach?
- What will you do with the new employees? Have you made any adaptations to your approach?
- What impact will your new employees have on the business?
- How will your business impact the growth of the industry?
- Has your involvement led to any changes or improvements in the industry?
- What kind of impact do you think your business will have on the market?
Improving competitiveness through support to:

— Animal feed
— Animal health
— Partnership Fund for economic growth
  — Small matching grants < $100,000
  — ± $300,000 livestock
— Puntland component
  — Livestock / under formulation
PEG – improving competitiveness

Activities will result in:

- Lower Feed transportation costs (down to 30%)
- Better quality animal health service
- Improved input supply
- Improved quality of veterinary drugs and use
- Improved body condition:
  - More animals marketed
  - Higher farm prices for animals
- Livestock businesses supported

Harnessing the POWER of the Private Sector
Conclusions and Recommendations

- Extremely High Value of Livestock sector
- Thriving Regional Trade
- Great opportunities exist

Need for:
- Improvement of public support sector
- private sector investments
- better end-market analysis
- Marketing livestock products?
Mahadsanid! - Thank you!
Part 2 | Changing Livelihoods in a Risky Environment: Findings from the Pastoral Risk Management Project
Changing Livelihoods in a Risky Environment: Findings From the PARIMA Data

John McPeak – Syracuse University
PARIMA data, book with Peter Little and Cheryl Doss
The opinions expressed herein are those of the author and do not necessarily reflect the views of GL CRSP, BASIS AMA CRSP, LCC CRSP, the U.S. Agency for International Development or the U.S. government.

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BASIS / AMA CRSP: This research was made possible by support provided in part by the US Agency for International Development (USAID) Agreement No. EDH00-06-0003-00 awarded to the Assets and Market Access Collaborative Research Support Program (AMA CRSP).

LCC CRSP: This presentation was made possible by the United States Agency for International Development and the generous support of the American people through Grant No. EEM-A-00-10-00001.
Key Messages

• Risk is pervasive and multifaceted
  – Climate risk is key problem faced

• Despite considerable change, livestock are and will be the foundation of the economy and people’s livelihoods in this area
  – Access to livestock combined with access to ways to earn cash is the most rewarding outcome

• Diversification and education will allow people to build livelihood strategies not directly reliant on livestock and livestock products
  – Some will be indirectly based on livestock and livestock products
Overview of the PARIMA Survey work

• PARIMA repeat round survey work
  – Baseline March 2000
    • 330 Households, individuals within households
    • 11 sites in Kenya and Ethiopia
  – Quarterly (3 month periods) June 2000 – June 2002
  – Area sampled was a location / kebele

• Other modules fielded between survey rounds will be mentioned as well

• IBLI baseline and monitoring work launched in 2009, surveys run 2010 and 2011
### PARIMA Research sites

<table>
<thead>
<tr>
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<th></th>
</tr>
</thead>
<tbody>
<tr>
<td>NDVI (CV NDVI)</td>
<td>0.42 (0.33)</td>
<td>0.31 (0.39)</td>
<td>0.30</td>
<td>0.30</td>
<td>0.28</td>
<td>0.27</td>
<td>0.23</td>
<td>0.22</td>
<td>0.21</td>
<td>0.19</td>
<td>0.10 (0.25)</td>
</tr>
<tr>
<td>NDVI</td>
<td>0.31</td>
<td>0.30</td>
<td>0.30</td>
<td>0.28</td>
<td>0.27</td>
<td>0.23</td>
<td>0.22</td>
<td>0.21</td>
<td>0.20</td>
<td>0.19</td>
<td>0.10</td>
</tr>
<tr>
<td>CV NDVI</td>
<td>0.33</td>
<td>0.39</td>
<td>0.32</td>
<td>0.35</td>
<td>0.52</td>
<td>0.35</td>
<td>0.35</td>
<td>0.42</td>
<td>0.45</td>
<td>0.25</td>
<td></td>
</tr>
</tbody>
</table>

**Survey Sites in Southern Ethiopia and Northern Kenya**

- Major Towns: Hagere Mariam, Finchawa, Qorat, Negelle, Dida Hara, Wachille, Dillo, Moyale, North Horr, Marsabit, Dirib Gumbo, Logoogo, Kargi, Marala, Suguta Marar, Marigat, Isiolo
- Survey Sites
- Major Roads

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[Image of a map showing the survey sites in Southern Ethiopia and Northern Kenya]
Number of and reasons given for livestock deaths in PARIMA survey by round

- Drank bad water
- Too much rain/too cold
- Old age
- Killed to save mother
- Accident
- Predator
- Disease
- Drought/lack of pasture/starvation/emaciation
- Other
Besides the risk of livestock loss, other risks were identified

For the 11 communities’ monthly reports over the study period March 2000-June 2002:

– 24% of months were identified as having security problems, 5% reported raids
– 20% of months were identified as having widespread human health problems
– 14% of months were identified as having widespread animal health problems
– 6% of months were identified as being under a market quarantine
Insecurity and Raids

• Insecurity is more common, and has an impact on production; lots of no-go areas

• On raids, for our sample of 336 households in the baseline, 27% had lost animals in a raid in the 1990s

• Median loss in a raid: if camels, 3; if cattle 6.5; if small stock, 19; if donkeys, 3
Risk and climate

- Prices for things to buy higher during drought
- Mean decrease and variance increase in livestock producer prices during drought
- Health problems more pronounced during drought: % of households reporting illness by round (50% malaria, respiratory 8%, ENT 7%, injury 6%,...)

<table>
<thead>
<tr>
<th></th>
<th>Jun-00</th>
<th>Sep-00</th>
<th>Dec-00</th>
<th>Mar-01</th>
<th>Jun-01</th>
<th>Sep-01</th>
<th>Dec-01</th>
<th>Mar-02</th>
<th>Jun-02</th>
</tr>
</thead>
<tbody>
<tr>
<td>%</td>
<td>33%</td>
<td>33%</td>
<td>30%</td>
<td>23%</td>
<td>19%</td>
<td>16%</td>
<td>15%</td>
<td>13%</td>
<td>12%</td>
</tr>
</tbody>
</table>

- Climate information findings
  - More confidence in traditional, but understand and trust official forecast
  - Hear, understand, update, but little action in response
Part of the mystery
Left axis is income, right axis is herd size
Time on the x axis (0600 is June 2000,...)
Livelihood Groups

- Using the median value of the household herd size per capita (1.25 TLU) when we first surveyed the household, we can divide into ‘lower livestock’ and ‘higher livestock’
- Using the median value of cash income per capita per day ($0.0437) in the household when we first surveyed them, we can divide households into ‘lower cash’ and ‘higher cash’
- Somewhat arbitrary to use the median, but it makes sure we have a reasonable size sample in each group
# Livelihood Groups

## Mean Total Income (mean cv over time)

<table>
<thead>
<tr>
<th></th>
<th>Lower cash</th>
<th>Higher cash</th>
</tr>
</thead>
<tbody>
<tr>
<td>Lower Herd</td>
<td>$0.23</td>
<td>$0.24</td>
</tr>
<tr>
<td></td>
<td>(1.32)</td>
<td>(0.90)</td>
</tr>
<tr>
<td>Higher Herd</td>
<td>$0.35</td>
<td>$0.48</td>
</tr>
<tr>
<td></td>
<td>(0.82)</td>
<td>(0.63)</td>
</tr>
</tbody>
</table>

Total income per household per person per day as expressed in USD =

- cash income
- + cash value of home produced and consumed goods (milk, meat, crops)
- + net gifts (including the cash value of food aid)

Differences are significant for higher cash higher herd compared to the lower herd groups. The variation differences are all significant except the .90 and .82 comparison.

*cv is coefficient of variation, higher means more relative variability over time in the flow of income for the average household in the livelihood group*
The Gini coefficient for total income is 0.56, for cash income is 0.68 and for livestock is 0.64
## Livelihood Groups

<table>
<thead>
<tr>
<th>Share of the sample in each category</th>
<th>Lower cash</th>
<th>Higher cash</th>
</tr>
</thead>
<tbody>
<tr>
<td>Lower Herd</td>
<td>29%</td>
<td>21%</td>
</tr>
<tr>
<td>Higher Herd</td>
<td>21%</td>
<td>29%</td>
</tr>
</tbody>
</table>

(By using medians in both variables to categorize, the symmetry is ‘built-in’.)

<table>
<thead>
<tr>
<th>How we can think of the groups:</th>
<th>Lower cash</th>
<th>Higher cash</th>
</tr>
</thead>
<tbody>
<tr>
<td>Lower Herd</td>
<td>Low access to both cash and livestock</td>
<td>Access to cash but low access to livestock</td>
</tr>
<tr>
<td>Higher Herd</td>
<td>Access to livestock but low access to cash</td>
<td>Access to both cash and livestock</td>
</tr>
</tbody>
</table>
Livelihood Groups: Total income sources

- Lower Herd
- Lower Cash
- Higher Herd
- Higher Cash

Income sources:
- Crop harvest
- Food aid value
- Net gifts
- Salary or wage
- Trade or business
- Livestock sale
- Slaughter
- Milk
Mean total income by round inclusive of and excluding food aid’s value
# Patterns Across Groups 1

<table>
<thead>
<tr>
<th></th>
<th>Average TLU per person</th>
<th>Milk per day per person in liters</th>
<th>Livestock sales over 3 months (TLU)</th>
<th>Household Size</th>
<th>% Female headed households</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Lower Herd</strong></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Lower Cash</td>
<td>1.3</td>
<td>0.1</td>
<td>0.2</td>
<td>8.5</td>
<td>37%</td>
</tr>
<tr>
<td>Higher Cash</td>
<td>0.8</td>
<td>0.2</td>
<td>0.3</td>
<td>8.1</td>
<td>30%</td>
</tr>
<tr>
<td><strong>Higher Herd</strong></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Lower Cash</td>
<td>4.3</td>
<td>0.6</td>
<td>0.2</td>
<td>6.8</td>
<td>23%</td>
</tr>
<tr>
<td>Higher Cash</td>
<td>5.0</td>
<td>0.7</td>
<td>0.5</td>
<td>5.9</td>
<td>33%</td>
</tr>
</tbody>
</table>
## Patterns Across Groups 2

<table>
<thead>
<tr>
<th></th>
<th>% TLU Female</th>
<th>Inherited or Born into herd</th>
<th>Purchased</th>
<th>Gift or borrowed</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Lower Herd</strong></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Lower Cash</td>
<td>76%</td>
<td>77%</td>
<td>6%</td>
<td>15%</td>
</tr>
<tr>
<td><strong>Lower Herd</strong></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Higher Cash</td>
<td>73%</td>
<td>75%</td>
<td>9%</td>
<td>11%</td>
</tr>
<tr>
<td><strong>Higher Herd</strong></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Lower Cash</td>
<td>71%</td>
<td>84%</td>
<td>2%</td>
<td>7%</td>
</tr>
<tr>
<td><strong>Higher Herd</strong></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Higher Cash</td>
<td>64%</td>
<td>78%</td>
<td>8%</td>
<td>9%</td>
</tr>
</tbody>
</table>
## Patterns Across Groups 3

<table>
<thead>
<tr>
<th></th>
<th>Cash Per Person Per Day</th>
<th>livestock and products</th>
<th>trade and business, wage and salary</th>
<th>Net gift</th>
<th>Natural Resource based</th>
<th>Cash income as % of total income</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Lower Herd</strong></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Lower Cash</td>
<td>$0.04</td>
<td>$0.02</td>
<td>$0.02</td>
<td>$0.002</td>
<td>$0.001</td>
<td>29%</td>
</tr>
<tr>
<td><strong>Higher Herd</strong></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Higher Cash</td>
<td>$0.14</td>
<td>$0.03</td>
<td>$0.10</td>
<td>$0.005</td>
<td>$0.003</td>
<td>46%</td>
</tr>
<tr>
<td><strong>Higher Herd</strong></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Lower Cash</td>
<td>$0.05</td>
<td>$0.04</td>
<td>$0.01</td>
<td>$0.003</td>
<td>$0.000</td>
<td>21%</td>
</tr>
<tr>
<td><strong>Higher Herd</strong></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Higher Cash</td>
<td>$0.21</td>
<td>$0.08</td>
<td>$0.12</td>
<td>$0.006</td>
<td>$0.003</td>
<td>35%</td>
</tr>
<tr>
<td><strong>ALL</strong></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td>$0.11</td>
<td>$0.04</td>
<td>$0.06</td>
<td>$0.004</td>
<td>$0.002</td>
<td>33%</td>
</tr>
</tbody>
</table>

Note non-livestock sources of cash are higher than livestock sources!
# Patterns in Education

<table>
<thead>
<tr>
<th></th>
<th>Percent of household members with any formal education</th>
<th>Percent of enrollable age children enrolled.</th>
</tr>
</thead>
<tbody>
<tr>
<td>Lower Herd Lower Cash</td>
<td>22%</td>
<td>26%</td>
</tr>
<tr>
<td>Lower Herd Higher Cash</td>
<td>34%</td>
<td>44%</td>
</tr>
<tr>
<td>Higher Herd Lower Cash</td>
<td>14%</td>
<td>19%</td>
</tr>
<tr>
<td>Higher Herd Higher Cash</td>
<td>22%</td>
<td>29%</td>
</tr>
</tbody>
</table>

Higher cash and higher enrollment and higher spending on education appear to be related.

Gender ratio about even for both primary and secondary
Spatial patterns in Livelihood Groups

- Higher Cash
- Higher Livestock
- Lower Cash
- Lower Livestock
Part of the story behind the spatial patterns in cash income

Left hand side is income, right hand side $ per TLU
## Total Income by site and site characteristics

<table>
<thead>
<tr>
<th>Site</th>
<th>Total income per person per day by site</th>
<th>Mean annual rainfall</th>
<th>Market Access</th>
<th>Average herd size per person in TLU</th>
</tr>
</thead>
<tbody>
<tr>
<td>Kargi, Kenya</td>
<td>$0.56</td>
<td>200</td>
<td>Low</td>
<td>6.5</td>
</tr>
<tr>
<td>Logologo, Kenya</td>
<td>$0.50</td>
<td>250</td>
<td>Medium</td>
<td>2.9</td>
</tr>
<tr>
<td>Sugata Marmar, Kenya</td>
<td>$0.45</td>
<td>500</td>
<td>High</td>
<td>2.3</td>
</tr>
<tr>
<td>North Horr, Kenya</td>
<td>$0.34</td>
<td>150</td>
<td>Low</td>
<td>3.9</td>
</tr>
<tr>
<td>Ng’ambo, Kenya</td>
<td>$0.29</td>
<td>650</td>
<td>High</td>
<td>0.9</td>
</tr>
<tr>
<td>Dirib Gumbo, Kenya</td>
<td>$0.26</td>
<td>650</td>
<td>Medium</td>
<td>1.7</td>
</tr>
<tr>
<td>Qorati, Ethiopia</td>
<td>$0.17</td>
<td>450</td>
<td>Low</td>
<td>4.1</td>
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<tr>
<td>Dida Hara, Ethiopia</td>
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<td>3.3</td>
</tr>
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<td>Finchawa, Ethiopia</td>
<td>$0.11</td>
<td>650</td>
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<tr>
<td>Wachille, Ethiopia</td>
<td>$0.10</td>
<td>550</td>
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<td>2.2</td>
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<tr>
<td>Dillo, Ethiopia</td>
<td>$0.05</td>
<td>400</td>
<td>Low</td>
<td>0.9</td>
</tr>
</tbody>
</table>
Key messages

• Livestock and livestock products continue to be the foundation of the economy
  – Improving livestock marketing has the potential to have the broadest impact for improving cash income
  – Milk is the largest contributor for all groups. Improving milk productivity has the most potential for having the broadest impact on improving total income
Key messages

• There is already significant diversification out of the livestock production system, especially as seen in the generation of cash income
  – Spatial differences in access to markets and education need to be recognized and addressed if possible
  – ‘Market integrated’ / ‘Diversified pastoralism’ is more successful than ‘diversification out of pastoralism’
  – Diversification out of pastoralism is happening
  – ‘Poverty in pastoral areas’ is a different concept than ‘pastoral poverty’

• Places with extensive rangelands are on average supporting the highest incomes
This is the highest average income site in the sample?

Kargi, Kenya.
Roundtable Discussion With Members of the Global Livestock Discussion Group
Thank you for joining us!

Share Feedback
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Stay In Touch
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zbaquet@usaid.gov

Upcoming Events
May 22 | Breakfast Seminar: Feed the Future’s NAFAKA Project in Tanzania
May 30 | Ag Sector Council Seminar
May 31 | MSU Food Security III Event
Find upcoming events & past presentations: agrilinks.org/events

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