



REALIZING LIVESTOCK'S POTENTIAL

Mercy Corps strategy for livestock systems in East & Southern Africa

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The Opportunity

Roughly 60 percent of livestock in East and Southern Africa (>200 million goats, sheep, cattle and camel) are owned by smallholder households. Smallholder production moves primarily through informal market channels and makes up 60 to 90 percent of all meat/offal, milk and eggs consumed by urban and rural consumers alike. Driven by increasing urbanization and rising incomes, the projected three to four-fold growth in demand for animal sourced foods by 2050 presents one of the greatest economic opportunities ever experienced by smallholder livestock producers. Whether linked to informal or formal markets, the relative competitiveness of smallholder production is yet to be determined.

The Challenge

Even with great opportunities, challenges persist.

- Increasingly politicized competition for land and water resources;
- Increasingly variable and extreme weather patterns altering fragile, but traditionally productive, landscapes;
- Weak land tenure systems;
- Weakening customary institutions;
- Relatively cheap import options from countries with developed industrial livestock production systems

Will these challenges be too great for smallholders to remain competitive?

Without concerted public and private investment in **SUSTAINABLE INTENSIFICATION** and growth of **INCLUSIVE MARKET SYSTEMS** coupled with enactment of **GOOD GOVERNANCE AND PRO-POOR POLICIES**, it is unlikely smallholder production systems will remain viable.

Mercy Corps knows the investment necessary to ensure smallholders are part of the solution to meeting regional and national demand for animal-sourced foods is small compared to the long-term economic, health and social benefits that would be experienced when millions of livestock keeping households are engaged. To focus our efforts, we have put in place a regional strategy for livestock. Through this strategy, we focus Mercy Corps proven approaches to **MARKET SYSTEMS DEVELOPMENT, RESILIENCE, AND WOMEN, YOUTH AND GIRLS** to East and Southern Africa's livestock systems.



› CAPTURING LIVESTOCK'S FULL POTENTIAL

Indigenous breeds remain the most efficient producers of eggs, meat and milk in the ASAL context. Use of improved husbandry practices, namely preventative health treatments and supplemental feeding, can overcome the productivity gap and increase yields up to 300 percent holding all other factors (genetics, production system) equal.

Under the Uganda Northern Karamoja Growth, Health & Governance (GHG) program, Mercy Corps conducted field trials in partnership with Karamojong herders to demonstrate the potential of the regions indigenous stock. In 2017, GHG's livestock advisor worked with herders to develop two supplemental feeding regimes consisting of native forages (as hay), local mineral supplements and added protein supplements. Milk production increased between 25 percent with a locally available protein source and 175 percent with a protein source imported from a neighboring region.

For ASAL households, milk is an important source of protein, fat, minerals and micronutrients as well as income from surplus sales. Training on improved practices is standard in productivity enhancing programs but adoption remains low. Mercy Corps' use of herder-led field trials coupled with cost-benefit analysis provided a tangible rationale for investing in improved practices. The returns on investment for the two feeding regimes were 98 (locally sourced protein) and 75 percent (regionally imported protein source).

Livestock in the Arid and Semi-Arid Lands

Of the 200 million plus ruminant livestock in East and Southern Africa, 20-30 percent reside in the arid and semi-arid lands (ASAL) under transhumant and sedentary agro-pastoral production systems. Within arid lands, livestock account for 80 percent of the economy with over 90 percent of on and off-farm employment being in the livestock sector. Although livestock is the backbone of ASAL economies, a herder's ability to prosper is dictated by the **SIZE AND HEALTH OF THEIR HERD** as well as **SOCIAL NETWORKS** (social capital¹) that oftentimes controls access to superior breeding stock, prime grazing lands and favorable market linkages. Conflict and insecurity compound the challenges facing herders in the ASAL regions. Stemming from political, ethnic and resource-based disputes recurrent conflict is one of the biggest suppressors of human, economic and social well-being, especially within fragile arid and semi-arid areas.

Since 2004, Mercy Corps has partnered with over 200,000 livestock-keeping families in East and Southern Africa's ASAL areas. Working along the relief-recovery-development continuum, Mercy Corps has tested direct and facilitative approaches to rebuild lost herds and strengthen production systems. **LESSONS LEARNED GAINED THROUGH INVESTMENTS AND PARTNERSHIPS** in **LIVESTOCK MARKET DEVELOPMENT, ANIMAL HEALTH SERVICES AND RANGELAND AND WATER POINT REHABILITATION** have led Mercy Corps to reframe our thinking about livestock.

Livestock production, especially in the ASAL regions, is in the midst of a **SOCIAL, POLITICAL, ECOLOGICAL AND ECONOMIC TRANSITION**. We must adapt our approaches, whom we work with and how we work with them.



COMPLEX CRISES

Although conflict and weather-extremes are known attributes of ASAL areas, the frequency and severity of these events over the last decade are creating larger and longer complex crises across the region. Conflict stresses fragile mosaics of social networks critical to herd composition, mobility and livestock marketing while recurring drought or flooding reduces biomass and water quality and triggers disease outbreaks; reducing the productivity and resilience of the overall system.

¹ Mercy Corps' [SOCIAL CAPITAL AND GOOD GOVERNANCE A Governance in Action Research Brief](#) provides a working definition of social capital and outline its importance in positive development and good well-being outcomes.

Addressing Livestock Systems

Mercy Corps believes that for families and communities to benefit nutritionally and economically from livestock we must address livestock within the larger socio-economic, political and environmental systems in which they reside. We have moved beyond livestock to take a holistic approach that broadens partnerships, includes intra-household dynamics and considers the interconnected and interdependent relationships between families, their livestock and larger forces at play. (Figure 1). A livestock systems approach incorporates the social, ecological, political and economic factors positively and negatively affecting livestock productivity. Mercy Corps approach to livestock systems includes explicit focus on the connection points and layers of impact, from household to regional.

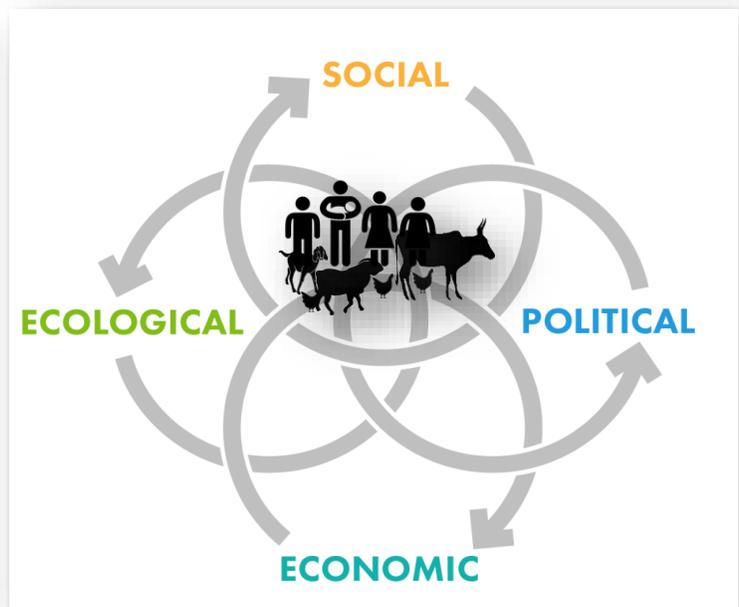
Understanding Livestock Systems vs Livestock

Livestock-specific approaches seek to maximize animal productivity for increased income and consumption of animal source foods. Activities often focus on breed improvement, promoting productivity enhancing practices and inputs (animal health, feeding), marketing of live animals and livestock-sourced commodities such as milk and eggs, and improving post-harvest handling. Farmer or herder coordination and organization may be addressed, as will other approaches to develop a positive enabling environment. The focus remains on the animals and livestock-based products and often does not consider additional positive (as savings, social capital) and negative (added labor burden to women and girls, source of zoonotic diseases) outcomes.

Shifting our focus to livestock systems reframes our end goal and asks the questions;

- 1) Who are we trying to reach and what role do livestock play in their health and well-being, both positively and negatively?
- 2) What role do livestock play in creating healthy, safe, and inclusive households and communities resilient to natural and economic shocks and stresses?; and
- 3) In the specific operating environment, how do we facilitate and strengthen livestock's multiple benefits to households, communities, nations and regions?

Figure 1: Livestock systems are the interconnected and interdependent relationships between livestock and humans as well as the social, ecological, political and economic systems in which they reside and operate.



This subtle shift, and broadening, of our approach allows us to more clearly articulate the change we want to see and better define livestock's role in creating that change. This approach also appreciates that the benefits livestock offer can be for the producer, other market actors or the consumer. For example, we may want to

improve market opportunities, and thus incomes, for poor herding households. A livestock systems approach will look at all factors negatively affecting market access. Root-cause analysis may reveal such diverse factors as average herd sizes that are too small to viably sell animals; limited social capital restricting relationships and bargaining power with livestock traders; or a disconnect between a livestock herd's youth caretakers and its elder decision-maker preventing investments in animal health services needed to attract better market prices. Looking at the larger livestock system of social, political, economic and ecological influences leads to stronger and more impactful programming.

Our Approach

Mercy Corps' livestock strategy sits on a foundation of **THREE GUIDING PRINCIPLES**;

Use a systems approach: Meaningful and lasting change can only occur when the linkages and interactions within the whole of the livestock system are evaluated and addressed. This means taking a wider pro-poor perspective. We are cognizant of the fact that livestock systems, especially when working with pastoralist communities, are remote, mobile and can cover large geographic areas including across international boundaries. Livestock-cultures are dynamic and nuanced. To ensure we benefit the poor, we carefully analyze social dynamics and social capital, mobility, and resource access and sharing. By considering multiple factors, we are able to invest in the system and partner or collaborate with key agents of change within the system to address the underlying constraints that prevent the poor and vulnerable from receiving tangible economic and health benefits from the greater livestock sector.

Design and implement for resilience: Within Mercy Corps, resilience is a process, a way of thinking, acting and learning. For our local partners, **RESILIENCE IS THE CAPACITY TO COPE, LEARN ADAPT AND TRANSFORM WHEN FACING ANY SHOCK OR STRESS**. Through our Resilience Framework, we strive to build resilient livestock systems that include 1) the ecological health and function of the production base; 2) human knowledge and capacity to cope, learn and adapt as the local context changes; 3) local economies able to respond and adapt to changes in the supply and demand of goods and services; and 4) responsive and representative social and political environments.



Mercy Corps' **Strategic Resilience Assessment (STRESS)** assists stakeholders in deepening their understanding of vulnerability and resilience and identify a set of resilience capacities. These capacities serve as the foundation for the development of integrated approaches and programming

Make women, youth and girls central to the approach: When we omit women, youth and girls, who can make up to seventy percent of the population, from livestock programs we miss the opportunity for them to share their input, perspective, effort and influence to improve the livestock system and their quality of life more quickly. Although livestock are traditionally considered men's domain; some animals, especially poultry, small ruminants and milking animals, are most-often managed by women or youth. Women, youth and girls are often times the primary caretaker, but not the decision maker, of livestock, as well as the processors of milk and meat products. We cannot reach the full potential of the system without including their voice and addressing their barriers to full participation.

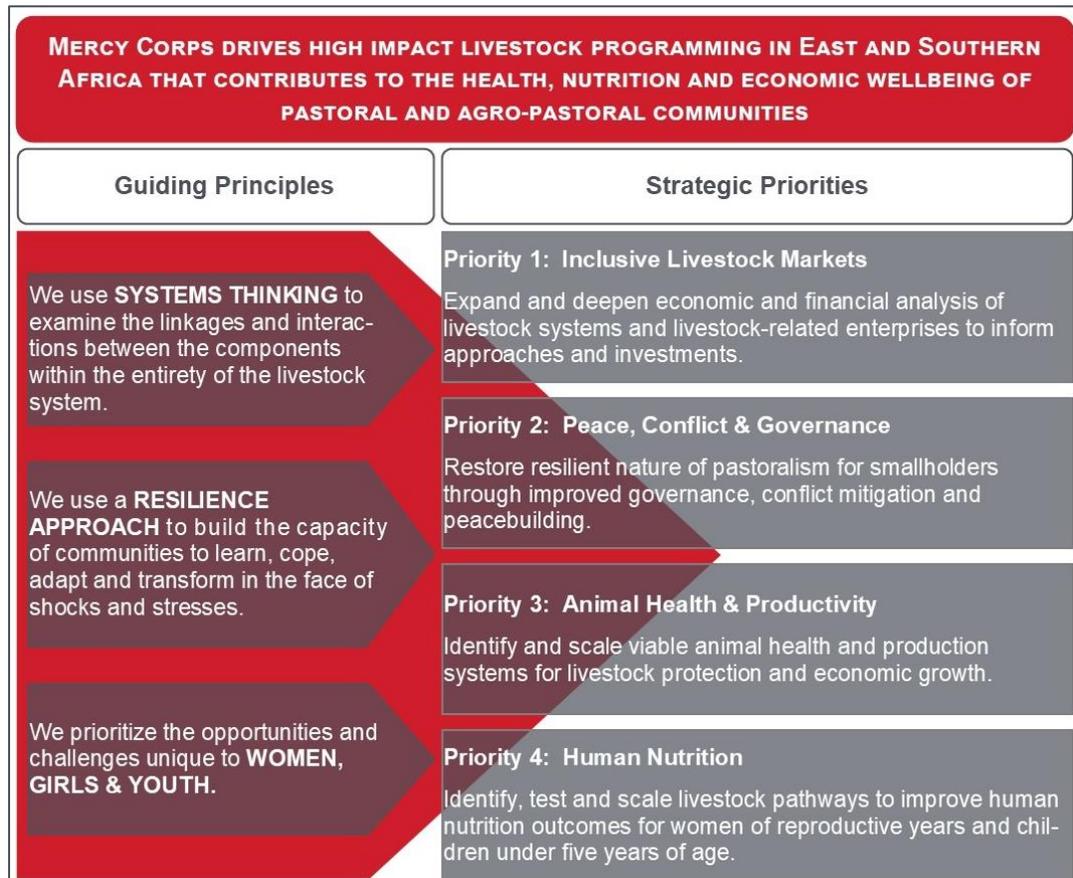


When necessary, Mercy Corps will undertake formative research to fill gaps in information and inform our approaches. For example, we investigated the lives of adolescent girls living in pastoralist communities in Turkana, Kenya to inform our resilience strategy. Key [findings](#) included:

- Turkana girls’ contribution to their household’s immediate food security is key and increases in times of crisis.
- Responsibility for and ownership of livestock are governed by complex cultural traditions that define duties and impact the development of adolescent girls
- Droughts lead to a protection crisis for pastoralist girls.
- Girls in communities in transition, while having more opportunities to increase their capacities, remain vulnerable to droughts.

Strategic Priorities

In order to foster inclusive and equitable livestock systems to the benefit of livestock-owning households, entrepreneurs within the livestock sector and consumers of livestock products, Mercy Corps has set out four strategic priorities (see diagram below). These technical sub-sectors were evaluated as critical to achieving transformative change and are within the technical expertise of Mercy Corps. Through this strategy, we will scale out proven approaches, build new partnerships, pilot and evaluate new approaches and technologies, build up the evidence base and strengthen our collaborative learning and dissemination process. The section that follows provides greater detail on each strategic priority, outlines illustrative approaches and areas of overlap or integration, lists anticipated outcomes and provides additional resources.



Priority 1) Inclusive Livestock Market Systems

Livestock contribute an estimated 40 to 60 percent of agricultural GDP across East and Southern Africa countries. Informal or local markets supply the majority of livestock products to end users and consumers. By nature, informal markets are very good at sourcing and delivering goods at an affordable price. Because of their breadth and reach, local markets yield great influence or (de-)motivation to livestock producers (agro-pastoralists and pastoralists) to invest in their animals. Investments being use of animal health services and products and improved feeding, including rangeland management, practices.

Formal markets commonly apply quality and safety standards and may offer a premium price, or at least a transparent price, to livestock producers and traders. However, it is inconsistent whether that price differential² will afford the relative high cost of inputs and other transaction costs needed to deliver quality animals or products. More significantly, higher value or formal markets commonly require consistent and often large quantities of quality goods to make the relationship work. Meeting the demand for quality milk, eggs and animals in a consistent manner, and not the ad-hoc needs-based sales method characteristic of smallholder producers, is challenging for the mostly un-organized producers.

As a leader in Market Systems Development thinking and practice, Mercy Corps supports the growth of inclusive livestock markets by analyzing and mapping livestock market systems and actors, facilitating technical trainings and collaborating with local and newly identified partners to conduct detailed financial and economic analysis to inform investments. Conducting economic analysis enables us to develop and test alternative business models suitable to the context. This includes business models for small-scale livestock fattening, animal health service provision, egg production and marketing, animal forage/feed and forage seed supply, etc. Instead of supporting the establishment or growth of a business because the good or service is viewed as needed within the market, Mercy Corps seeks to understand the barriers preventing the private sector from responding to a market opportunity. This includes evaluating whether there is a more viable business model, high investment needs, identifying gaps in relationships or partnerships, or whether another market failure is at play.

The priority opportunities and challenges to be addressed under this theme include:

- Market and weather information systems.
- Reducing producer risk to drive investment in individual animals and herd health.
- Weak networks for reliable quality animal health services and veterinary inputs.
- Weak negotiating power by the primary producer.
- Weak market incentives for investment in animals, herd health and range management.
- Methods for market facilitation during emergency responses and recovery (droughts or floods).

Anticipated Outcomes

- Informed market system development approaches lead to more resilient livestock-based enterprises and increased private-sector investment.
- Poor households have access to safe, clean and affordable animal source foods for improved nutrition.

² Price difference between premium and average quality animals

- Programs increase access to and investment in animal health services, infrastructure, goods and services, and new market opportunities.
- New financial and technological products developed, tested, adapted and scaled to improve market function and inclusiveness.

Additional Resources

- [Farming for Profit: Technical Guidance for Smallholder Farmer Financial Planning](#)
- [Mercy Corps Market Systems Development Tools & Resources](#)
- [Cultivating Economic Opportunity Through a Systems Approach](#)
- [Private Sector Engagement Toolkit](#)
- [Financial Inclusion: Approaches & Principles](#)
- [Guiding Principles to Consider for Agriculture Microinsurance](#)



Over 1.5 million livestock perished in the 2016-2017 drought in Ethiopia; representing economic losses greater than \$350 million. Market failure contributed to these losses as traders stopped purchasing animals even as per animal prices decreased. Ethiopia has robust domestic and export livestock markets that could absorb higher livestock offtake. When traders stopped buying animals, herders were stuck with emaciated and dying animals. With no alternative income sources, herders were unable to buy fodder or water for their remaining animals.

Mercy Corps set out to understand why traders were unwilling to purchase low-priced animals that could be fattened again to market weight. Working alongside producer and trader associations, Mercy Corps discovered that even though animals could be fattened, the majority of animals were emaciated to a condition that made fattening too costly. Traders would lose money.

To address the situation, Mercy Corps piloted a Smart Subsidy with the traders. Instead of covering the entire cost of purchasing an animal through a loan or grant, the subsidy covered the additional cost of fattening an animal. The subsidy (\$10-\$12 and \$42 per head of goat or cow respectively) was the costs traders paid for additional feed/forage to fatten animals before delivering to slaughterhouses. Payments were made after verifiable purchase of animals from target communities. Working with 40 traders, 73,000 animals from 73,000 households were purchased and fattened. Because of the renewed demand for animals, market prices increased to pre-drought levels. The Government of Ethiopia is analyzing the innovative Smart Subsidy and discussing how to adapt the approach into their own drought response plans.

Priority 2) Governance, Peace & Conflict

Good governance is necessary for inclusive, equitable and productive livestock systems. Mercy Corps understands that good governance is not just a set of policies and regulations enforced by administrative leaders. Rather good governance is empowered and engaged citizens, a skilled and connected civil society and responsive and accountable decision makers. These characteristics must be present at all levels of organization; from household and community to national and regional and address multiple forms of rights especially as related to livestock. Where weak governance and/or recurring or sustained conflict is a barrier to productive livestock management, Mercy Corps will use tools such as relationship mapping, the Local-Government Capacity Index, and community scorecards to identify ideal points of intervention. Once intervention points have been identified, we facilitate inter and intra community dialogue, resource sharing agreements, and targeted trainings of government officials and local leaders.

Priority issues within livestock systems to address include:

INTRA & INTER-GROUP CONFLICT

- Investment in herd health and management is reduced in areas where inter-group (tribes, clans) conflict persists.
- Movement of animals for protection negatively affects access to important livestock products (milk, manure, collateral) by sedentary family members of the household.
- Prolonged conflict reduces access to dry season grazing areas and water points.

INSECURE LAND TENURE

- Lack of land or resource security (ownership, control of or access to) reduces willingness to invest in herd health or improved management practices.
- Fragmented landscape increases farmer/herder conflict as traditional grazing lands and migration routes are altered.
- Weak or absent land tenure security inhibits investment in rangeland management or climate-smart land management practices.

WEAK, UN-ENFORCED, CONFLICTING OR MUTE POLICIES

- Prevalence of counterfeit veterinary pharmaceuticals reduces trust in public and private animal health services. Livestock keepers forego investment in preventative health treatments that in turn reduce farmer/herder productivity, prevent access to high-value markets, and reduce food safety for consumers.
- Weak, unenforced or absent animal disease surveillance systems drive high livestock morbidity and mortality, limit access to high value markets and create a disincentive to investment in improved herd health and management practices.



Anticipated Outcomes

- Vulnerable and marginalized households have access to quality grazing lands and year-round water resources.
- A strong and representative civil society advocates for marginalized communities and groups at local, regional and national levels.
- Expanded market opportunities facilitated by increased government and private sector oversight and enforcement of quality and safety standards for livestock and livestock products.
- Public and private investments in live animal, meat and milk markets because of increased confidence in animal health and disease surveillance and response systems.
- Investment in improved rangeland and herd management practices stimulated when local and national governments establish secure long-term land rights to indigenous groups (access or control) for mobile pastoralism or full or partial settlement of livestock herds.
- Intra & inter-group conflict reduced to the benefit of herd productivity, market efficiency and household incomes.
- Regional and local stability increases investments and economic opportunities.

Additional Resources

- [Mercy Corps Good Governance Approach](#)
- [CONCUR Program Evaluation](#) (Reducing conflict between farmers and herders in Nigeria)
- [Role of religion and religious leaders in farmer-pastoralist conflict in Plateau State](#) (Nigeria)
- [The Conflict Management System in Karamoja: An assessment of strengths and weaknesses](#)
- [Local Partnerships Framework](#)



PEACE & CONFLICT FOR RESILIENT LIVESTOCK SYSTEMS

Northwestern Kenya is a vast, arid land marked by harsh terrain, irregular rainfall, limited infrastructure, pervasive insecurity and stifling poverty, where 95% of people in Turkana and 69% of people in West Pokot live below the poverty line. Rapid changes including increased settlement, increased recurrence and severity of drought, prevalence of small weapons and the discovery of oil threaten these systems of survival. Depletion of natural resources, increasingly frequent cycles of drought, limited security and oil wells reduce the amount of useable land, intensifying tensions. Without the means to productively manage these changes, the region risks becoming further stuck in a cycle of conflict and extreme poverty.

Under the PEARL program, Mercy Corps is working to increase stability in the region by supporting the Pokot and Turkana communities, government and the private sector to peacefully manage change and increase prosperity. The program incorporates a people-to-people approach to conflict resolution, bringing communities together to discuss natural resource-related drivers of conflict, address grievances, identify shared interests and find alternatives to violence through land use agreements and resource rehabilitation projects. Using a negotiation and mediation manual developed by Mercy Corps, we embarked on capacity building for leaders from both communities who then formed Village and County Peace Committees to initiate dialogues and establish mechanisms which would mediate conflict before they escalated into violence. From these inter-community dialogues, informal agreements were developed and endorsed by elders and kraal (village) leaders. These informal agreements spelled out stolen livestock recovery, the process for justice and reconciliation between the communities. Because of these capacity building and facilitative approach, no fatal violent conflict occurred between the Pokot and Turkana for a stretch of eleven months, marking the longest stretch of peace between these two groups in over two decades, and indirectly improving the lives of approximately 1.3 million people.

Priority 3) Animal Health & Productivity

Modern advances in livestock productivity are limited to intensive production systems where improved breeds are used and the production environment controlled. For the majority of East and Southern Africa livestock producers, semi-intensive and extensive production systems are the norm. In most cases, traditional production systems, especially in the ASAL regions, are the most effective and efficient use of the natural resources with indigenous breeds best adapted to the local environment. These production systems are resilient to environmental shocks. However, increasingly frequent shocks and stresses coupled with increasing competition over land resources, and changes in traditional ways of life have led to increasing settlement of families and herds, decreased herd sizes and weakening customary institutions. The overall resilience of livestock systems is weakening and necessitates changes in animal production and herd management.

Mercy Corps approach to improving animal health and productivity integrates on-farm (or range) herd management practices and identification of promising technologies and practices. Market pull, household nutrition and strengthened livelihoods will often stimulate on-farm (range) investments such as improved feeding, animal health care, improved housing or confinement. Qualitative analysis of specific drivers of behavior change are needed to inform approaches. For example, where animal holdings or herd sizes are small, market pull may not be an effective driver of change. In this scenario, increased milk production for consumption and sale or increased reproduction (offspring born and surviving to maturity) can be an effective motivator to change livestock management practices.

Animal health and productivity connects to most programmatic areas such as Economic Growth & Markets, Public Health & Nutrition, WASH, Gender Youth & Girls, Environment and Peace & Conflict with benefits and negatives flowing in equal direction. These numerous points of connection and overlap stem from the role livestock play in many poor or vulnerable households and some societies (i.e. pastoralists). From chicken to camel, livestock are an important, and thus protected, productive asset and a form of savings or insurance for most households. For example:



A cow's value to a family is not the income she will bring if sold tomorrow but the income the family will receive from her offspring over the next 5 or more years as well as the milk produced after each calving. Improving her health and body condition (weight) for a better market price may have less importance than her value when she produces a strong healthy calf every year instead of a weak slow growing calf every two or more years. Understanding herders perceived return on investment is necessary to improve management practices.

To deepen and scale-out Mercy Corps' impact, targeted investments are necessary. These include

- Analysis of socio-economic factors that influence farmer/herder adoption of improved practices.
- Programming that differentiates use and care of reproductive stock versus animals suitable for marketing or household insurance
- Address barriers to youth engagement in livestock production to ensure replacement of aging farmers and herders
- Testing and evaluating location specific feed rations using locally available resources

- Testing and evaluating income diversification and microfinance and savings to reduce reliance on livestock holdings and self-insurance.
- Partnerships with public and private sector to supply productivity enhancing goods and services.
- Identification of promising and proven productivity enhancing technologies especially in the areas of
 - Drought tolerant fodder varieties
 - Thermo-stable vaccines
 - Improved breeds suitable for specific micro-climates and production systems.
 - Mobile platforms for extension services, micro-finance and savings, and rangeland, weather or market information.

ANTICIPATED OUTCOMES

- Households and livestock keeping communities invest in herd health and improved husbandry practices for more productive (offspring, milk, eggs) animals and resilient livelihood
- Technologies that overcome chronic barriers to good animal health and increased production are identified, tested and scaled.
- Per animal production of livestock products (eggs, milk, offspring) are sufficiently increased to meet household combined needs for food, income and replacement or growth (i.e. offspring to replace older animals or grow the herd or flock).

ADDITIONAL RESOURCES

- [Sector Fact Sheet: Pastoralism](#)
- [Future of Pastoralism in the Drylands of Africa: Technical Discussion Paper](#)
- [Uganda: Got Milk? Uganda Livestock Pilot Proves that Up Front Investments Have Long-Term Gains](#)
- [Young People and Agriculture: Strategic Priorities for Impact](#)
- [Accelerated Behaviour Change and Adoption of Good Farming Practices Among Smallholder Farmers](#)

Priority 4) Human Nutrition

Animal source food (ASF), namely milk, meat/offal, eggs and fish, provide people with protein and bio-available nutrients including iron, zinc, vitamin B-12, riboflavin, calcium and vitamin A, which are difficult to obtain from plant-based foods alone. Consuming these foods, prepared appropriately and in the right amounts, is especially critical during the first 1,000 days of life (from conception to age two), when poor nutrition contributes to irreversible problems such as impaired growth and cognitive performance, decreased educational attainment and productivity. Mercy Corps integrates nutrition education and behavior change communication with improved animal husbandry trainings to strengthen the link between production and consumption. We bring women, men and youth together to discuss intra-household allocation of resources and household decision making around livestock management and use of livestock income.

The relationship between livestock, human nutrition and human health is complex. Livestock can damage human health if animal source foods contribute to poor diets and if they create a reservoir for zoonosis. For example, poor livestock keepers worldwide face daily trade-offs between selling their (relatively expensive) milk, meat and eggs to increase income or consuming the same foods to improve nutrition.



As we address human nutrition we must consider food safety and public health. On-farm health concerns associated with co-habitation and close handling of animals (environmental enteropathy, respiratory infections) can be addressed through integrated animal husbandry and human nutrition education. Milk contamination and meat, zoonotic diseases such as Brucellosis, Cysticercosis, and E.coli are all public health concerns related to animal source foods. Addressing these issues occurs on farm and with off-farm actors such as slaughterhouses, traders, milk processors, butchers, food processors, restaurants, schools and street-food vendors. Thus, food safety and public health require market systems development

approaches. Areas of focus include:

- Use of nutrition-sensitive agriculture and livestock production techniques
- Social and Behaviour Change Communication that include intra-household resource control and allocation.
- Identification of safe food handling, processing and storage technologies appropriate for on and off-farm use.
- Collaboration with government agriculture, livestock, health and nutrition officials for stronger messaging and integration of approaches.
- Market-based approaches to make animal-sourced foods (meat, fish and egg snacks, milk-based products, etc) made available to urban and rural poor at an affordable prices.

ANTICIPATED OUTCOMES

- Increased consumption of safe animal-sourced foods by rural and urban poor.
- Expansion of market-based approaches to supply of safe and affordable animal-sourced foods.
- Increase preventative and curative animal health treatments reduce zoonotic disease incidence.
- Improved safe animal and food handling practices to reduce incidence of food-borne diseases and environmental enteropathy.



ADDITIONAL RESOURCES

- [Nutrition Sensitive Agriculture Approach](#)
- [Mercy Corps Nutrition Capacity Statement](#)
- [Case Study: You Can't Sell Your Fish and Eat It, Too: How Households Prioritize Nutrition and Income Outcomes in a Nutrition Sensitive Market Development Program](#)

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About Mercy Corps

Mercy Corps is a leading global organization powered by the belief that a better world is possible. In disaster, in hardship, in more than 40 countries around the world, we partner to put bold solutions into action — helping people triumph over adversity and build stronger communities from within. Now, and for the future.



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