



# Building More Resilient Livestock Production Systems in Mongolia

## BACKGROUND

The livestock sector provides employment for 26 percent of Mongolia's work force, but accounted for less than 13 percent of the gross domestic product in 2016, and less than 8 percent of exports (ITA 2017). Meat processing facilities use only 16.2 percent of their slaughtering capacity (GFA Consulting Group 2015). What has followed is a cycle in which herders flood the market with products that all too often never make it to the consumers who demand them. Meanwhile, global demand for organic, grass-fed and hormone-free meat continues to grow. In this context, Mercy Corps aims to: 1) identify the key factors preventing Mongolia from unlocking the economic potential in the range-livestock sector; and 2) outline market-oriented solutions to these challenges.

## INTRODUCTION TO THE RESILIENT COMMUNITIES PROGRAM

The Resilient Communities Program (RCP) addresses the challenges to the development of the livestock sector through an integrated, market systems approach. In concert with a network of small to medium-sized enterprises in eight provinces, herders and herder cooperatives, and government stakeholders, this project works in seven different intervention areas: animal health, breeding and animal husbandry, feed and forage production, financial inclusion, livestock production, export markets and rangeland management. RCP aims to strengthen the capacity of the veterinary sector to prevent and control the spread of diseases; improve the productivity of beef cattle; increase the supply of and demand for high-quality feed and forage; link small-scale entrepreneurs to financial services; and build export-compliant meat supply chains.

## ANIMAL HEALTH

Without an underdeveloped veterinary sector, Mongolia struggles to contain outbreaks of livestock disease. Instead of seeking treatment for sick animals, most herders slaughter the infected livestock, regardless of the health risk the resulting meat products could present to the public. This, in turn, has limited the capacity of meat producers to access high-value markets. To support a stronger veterinary service, Mercy Corps has forged partnerships with development organizations, government stakeholders and private veterinary units to undertake the following interventions.

- Introduced portable corrals to veterinary units, which have since decreased overhead costs by USD 2,200 in some businesses; increased productivity by 30 percent and facilitated the vaccination of 675,000 head of livestock.
- Conducted an analysis of private veterinary units (PVUs) in Mongolia as a means to understand how feasible and profitable they can be; and to develop a set of recommendations to drive a more robust market for animal health care services.
- Trained hundreds of veterinarians and veterinary professionals in disease-prone provinces in the prevention, diagnosis, and treatment of FMD.



95 percent of the population, including herders and herder communities, have cell phones, which can provide information on weather and livestock prices. Appropriate technology can forge better linkages between herders and markets.

## LIVESTOCK PRODUCTION

In Mongolia, many traditional herder practices emphasize the value of having a large number of livestock. Where beef-cattle production is concerned, the same idea holds true. Every year, thousands of herders generate income through volume-heavy beef cattle sales, even though it can take as long as four years before a steer reaches slaughter weight. Such practices, however, can have a negative impact on rangeland quality and produce older, and therefore lesser quality beef.

Quality-focused beef cattle production, on the other hand, which enables steers to reach slaughter weight in a shorter time period, provides a more environmentally-sustainable alternative to traditional herder practices, and produces higher-quality beef (Fig.1). Mercy Corps has developed an operational model using current market values to compare quantity-focused cattle raising practices against quality-focused practices. It found that herders shifting from quantity-focused beef cattle production to quality-focused beef cattle production can expect two years of negative net-profit to reflect the transition cost of the shift, after which Mercy Corps projects a series of positive outcomes.

This model makes a financial case for adopting quality-focused cattle raising, involving advanced bull selection, and animal husbandry and nutrition practices, which, in Mercy Corps' estimation, will incentivize herders to adjust their own behaviors in pursuit of increased profitability and sustainability. Mercy Corps is using this model, as well as case studies from the Global North, as a basis to introduce evidence-based cattle production practices that reduce "vertical transactions and market access cost, while creating conditions favorable to input specialization (Ifft and Zilberman 2012)."

To that end, Mercy Corps is assisting to establish an eight-hundred head capacity feedlot in Bulgan Province, to serve as a demonstration and training site for herders and private sector entities. Feedlots, which are more often used in industrial economies to fatten livestock for slaughter, are proven in many contexts to provide greater carcass yield and fetch higher prices at the market (RBZ 2013).

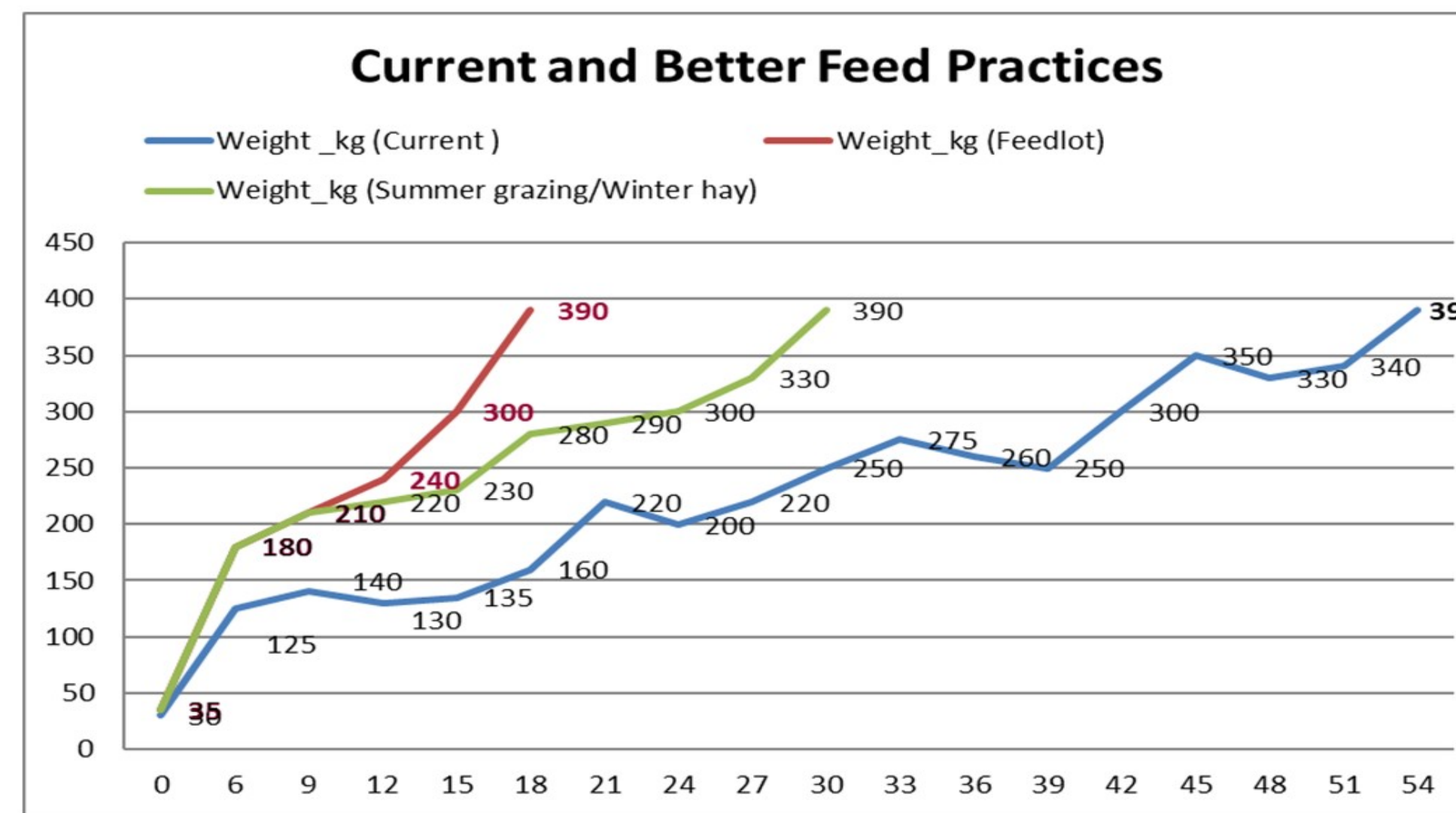


Figure 1: Under traditional practices it can take four years before a steer reaches slaughter weight; with improved feeding, cattle can reach market weight in 15-18 months.



Traditional practices emphasize numbers of animals, but market forces are making more herders realize the benefits of raising fewer, higher quality animals.

## BREEDING AND ANIMAL HUSBANDRY

In the 1970's, Kazakh Whitehead cattle —a close relative of the Hereford breed—was imported from Kazakhstan and crossbred with native Mongolian cattle. The original Kazakh-Mongol hybrid was a bigger, more productive animal that was well adapted to the Mongolian environment. When Mongolia's planned economy collapsed in 1990, so did its livestock breeding program. Although Kazakh Whitehead cattle can still be found in parts of Mongolia, many are subject to animal husbandry practices that often prevent calves from reaching their full genetic potential. Mercy Corps' strategy here is to drive the development of the Hereford and Kazakh Whitehead cattle breeds through the following interventions:

- The development of a 100-head nuclear herd of high-performing Kazakh Whitehead beef cattle and a 1,000-head herd of Hereford and Kazakh Whitehead beef cattle in Selenge Province to provide breeding animals to herders and to train herders about the difference that high-quality cattle can make with regards to livestock productivity and profit.
- The facilitation of the passage of an eight-year strategy document on animal husbandry in Selenge Province. The strategy, which was created in collaboration with the breeding consultancy firm Khugnu Meej, makes the argument for advanced husbandry practices that, if implemented in local cooperatives, have the potential to increase the supply of and demand for premium grade beef cattle; strengthen the capacity of cooperatives; create a legislative environment conducive to economic growth and make advanced animal husbandry an economically viable practice for herders by the year 2025.

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