GLOBAL LIVESTOCK PROGRAMMING
2021 PERFORMANCE REVIEW

Livestock production plays a critical role in the livelihoods of billions of individuals in low- and middle-income countries around the world. Animal agriculture contributes 30 percent of agricultural gross domestic product (GDP) and supports resilience and economic growth by creating viable livelihoods within crop-livestock systems and pastoral areas where crops cannot be easily grown. Livestock provide a high-value asset, store wealth, increase agricultural production, and diversify income sources and diets for smallholder farmers. Livestock production can also serve as an important pathway to promote gender equity, as two-thirds of livestock managers worldwide are women. Due to the high nutrient density of animal source foods (ASFs), livestock serve an important role in improving diet quality in low-income settings, specifically by increasing protein and micro-nutrient consumption.

The impact of climate change is rapidly becoming more evident in all agricultural systems including livestock. The increasing occurrence of extreme weather events coupled with higher ambient temperatures has led to reduced feed and water availability, destruction of infrastructure, and increased heat stress and disease emergence for livestock in many regions. Although the impacts of climate change on livestock production are serious, livestock can also play a key role in mitigating climate change. This mitigation largely comes through reductions in greenhouse gas emission intensity by assisting farmers in producing more animal-sourced food while lowering emissions per unit of food produced through established protocols and good practices. Livestock are also a key source of resilience for low-income farmers as they are less affected by seasonal changes than many crops, provide a resilient storage of wealth, and help diversify production in the face of changing environmental conditions.

Overview

In 2021, Feed the Future, the U.S. government’s global hunger and food security initiative, supported approximately 50 activities aimed at improving livestock production through either development programming or research and innovation programs. Of these activities, 27 were managed by USAID’s country-level Missions and three were managed by regional

Resilience In Focus

The Feed the Future Zimbabwe Fostering Agribusiness for Resilient Markets (FARM) activity seeks to increase smallholder farmers’ food security, incomes, nutritional status, and resilience through climate-smart, market-driven initiatives including the promotion of small livestock enterprises for diversification of smallholder production. This diversification is made possible because small livestock enterprises require low initial capital investments and have the potential to generate rapid returns on investment. FARM improved resilience, defined by the ability to recover from shocks and stresses, among target groups by 32 percent in 2021.

Missions. The remaining 20 activities were managed by USAID’s Bureau for Resilience and Food Security (RFS). Most activities implemented by RFS were research-based, and many of them were conducted by Feed the Future Innovation Labs. Of the 30 countries participating in Feed the Future programming (including the 20 Feed the Future target countries), 18 reported the support of activities related to livestock in the USAID Development Information Solution (DIS) system. While some activities exclusively focused on livestock production, others had broader scopes that were inclusive of livestock but multi-sectorial in nature. This report examines the successes and challenges of Feed the Future livestock programming as presented in the DIS annual performance narrative reports.

**Nutrition In Focus**

The **Victory Against Malnutrition Plus (ViMPlus)** project in Burkina Faso works to ensure sustainable food and nutrition security in communities that face recurrent crises. The activity launched an agricultural inputs program, which distributed over 9,000 vouchers for households to purchase agricultural inputs, including poultry and small ruminants. ViMPlus also strengthened the capacity of poultry and small ruminant producers, producer organizations, and community veterinary agents. Increasing livestock productivity and decreasing animal losses through enhanced disease control interventions has been shown to strengthen resilience and improve household nutritional outcomes.

**Successes and Challenges**

**LIVESTOCK-SPECIFIC PROGRAMMING**

In 2021, Feed the Future livestock programming that focused predominantly on improving local livestock production achieved significant successes across varied geographies and production systems. Feed the Future partners increased the production of animal source foods and their supply to households and local markets. Globally, Feed the Future livestock programming also increased gender equity, built public-private partnerships, enhanced household nutrition, and helped farmers respond and adapt to climate change, drought, and animal disease outbreaks.

For example, Bangladesh’s Livestock Production for Improved Nutrition activity focused largely on cattle production. The activity has benefited about 180,000 livestock producers –88 percent of whom are women—through improved access to livestock services, technologies, finance, and market linkages, which resulted in higher household incomes and improved nutrition. While livestock disease outbreaks, the COVID-19 pandemic, and natural disasters posed significant challenges to Bangladesh’s livestock sector in 2021, Feed the Future partners helped farmers weather the crises. A key approach was training more than 2,000 “local service providers” to start small businesses that deliver animal healthcare, livestock breeding, and farm management services to farming communities in hard-to-reach areas. The cohort of service providers included over 450 women and a large proportion of them were rural youth. In partnership with the private sector, the Bangladesh Livestock Production for Increased Nutrition activity leveraged over $1.3 million in investments, facilitated trading of over 3,000 metric tons of improved cattle feed to smallholder farmers, and made over $3.1 million in credit available to farmers and small and medium enterprises (SMEs). As a result, Bangladeshi livestock keepers increased the amount of meat they produced by 247 percent and milk by 201 percent, which led to improved consumption, household incomes, and nutritional outcomes in the country.

Feed the Future programming in Kenya also included a significant amount of livestock-specific activities, including impressive successes in gender mainstreaming and digitization of services. Kenyan livestock keepers faced multiple challenges in 2021 including COVID-19, an ongoing drought, and a desert locust invasion. These difficulties compounded to decrease the availability of feed and water, force longer migrations by pastoralists, and contribute to a fall in market prices for livestock. Despite multiple environmental and economic shocks, tens of thousands of farmers -over 60% of
them women- received support from three Feed the Future activities, which led to increased access to animal health services, widespread adoption of improved animal nutrition management techniques, access to markets and an increase in household incomes from the sale of livestock products.

INTEGRATED LIVESTOCK-CROP SYSTEM PROGRAMMING
Although livestock-specific activities were implemented in several countries, the majority of activities that reported working to improve livestock production did so under a wide scope that was inclusive of, but not restricted to, livestock. In addition to being integrated into programs that primarily focused on one or more of the Feed the Future topline goals, livestock programming also formed a part of activities primarily aimed at youth development, food safety, food processing, and public health. These activities also used livestock as a pathway for gender equity, the inclusion of youth and marginalized peoples, and climate adaptation.

Challenges most commonly reported in 2021 by activities that integrated livestock included negative impacts from climate change, ongoing effects of the COVID-19 pandemic, conflict, and other socio-political challenges. Droughts challenged farmers’ ability to provide feed and water for their animals. Flooding destroyed and damaged already limited livestock health and market infrastructure. Animal diseases and pests limited livestock keeper productivity. The ongoing uncertainty and closures related to COVID-19 interrupted some Feed the Future livestock activities, disrupted livestock markets, and led to an increased use of digital tools as an adaptive response to social and economic disruptions.

Socio-political shocks and stresses varied widely from country to country and across regions. Armed conflict and political insecurity were contributing factors in various contexts. Multiple activities noted the need for stronger, pro-livestock policy support from host country governments to advance development and mitigate the impacts of shocks. Programmatic support for pastoralism in Sub-Saharan Africa provided additional opportunities to address social and environmental shocks and stresses. Collaborative partnerships were built to increase access to services and markets for pastoralists, who continued to face marginalization, land grabbing, and rapidly degrading natural environments. Despite numerous challenges, Feed the Future livestock programming was largely able to adapt, learn, and continue to support vulnerable and marginalized groups.

**Inclusion In Focus**

The Feed the Future Innovation Lab for Livestock Systems supported the empowerment of Dalits in Nepal through a targeted community goat breeding program. The study found that livestock systems development is an ideal approach to help women and Dalits, both historically marginalized groups, generate livelihoods rapidly because livestock are a more viable option than crops for those with less access to land. Livestock system development has been shown to serve a valuable role in strengthening social cohesion between different groups.

**Human Nutrition**

A key goal of many Feed the Future livestock activities was to improve nutritional outcomes through the increase in access to and consumption of animal source foods. ASFs serve as nutrient-dense components of diversified diets that provide high quality macronutrients and micronutrients critical for the health of women and children. Livestock activities that supported nutritional gains utilized diverse approaches, from improving access to livestock inputs (e.g. feed, vaccines and medicines) to training of women on household production and distribution of animal sourced foods. Many nutrition
activities featuring livestock also focused on organizational capacity building, private sector partnerships, and policy support to ensure nutrition improvements in target populations were widespread and sustainable.

**Social Equity and Inclusion**

Marginalized groups were intentionally targeted in some livestock programs because of livestock’s ability to strengthen the resilience of the poor and vulnerable. Several activities, particularly those implemented in areas of former or ongoing conflict, successfully used livestock to provide sustainable livelihood support to internally displaced persons. The Tanganyika Conflict Mitigation Reconciliation Project in the Democratic Republic of the Congo provided peacebuilding and livelihood support that included the provision of livestock to 980 individuals, of whom 80 percent were former internally displaced persons.

Women, girls, men, boys, and gender-diverse individuals experience shocks and stressors differently. The layered impacts of COVID-19, the ongoing global food and climate crises, and conflict have been shown to disproportionately affect women and girls. Persistent gender inequalities can also lead to women and girls being more vulnerable to food insecurity. Livestock development and research activities played a key role in supporting gender equality and women’s empowerment as well as strengthening the inclusion of ethnic minorities and other marginalized groups. Activities deliberately sought to increase inclusion through participatory and gender-sensitive methods and worked to increase empowerment in consideration of the unique roles of marginalized peoples in livestock production systems. For example, Feed the Future livestock programming in Kenya fostered the inclusion of marginalized pastoralist groups in community-led prioritization exercises, which informed the creation of community-based ward development plans. Through this process, plans for schools, water sources, and rural road networks were developed for the Government of Kenya’s own budget in a manner that included the voices of livestock keepers in the area. Across activities in 2021, participatory methods such as community-led assessments identified opportunities for empowerment and capacity-building. In response to local needs and demands, several activities trained community animal health workers to expand veterinary care to a wider range of livestock and to more households in rural areas. Many livestock activities also worked to include youth in implementation and provide targeted opportunities for youth to adopt improved livestock practices.

**Climate Change**

Several activity reports directly or indirectly referenced climate change as a significant influence on their approaches. Most activities focused on the impact or potential impact of climate change on livestock production and food security, such as climate change causing a loss of animal feed, decreased animal growth rates, and increased incidences of disease outbreaks. Across regions, extreme weather events such as drought and flooding presented challenges to not only livestock production but also implementation of Feed the Future programming more broadly. For example, the Sustainable Agriculture for Economic Resiliency (SAFER) activity in South Sudan reported work stoppages as a result of
the destruction caused by the flooding of livestock market, veterinary service, and food processor infrastructure. The unprecedented movement of livestock triggered by those floods led to communal conflicts and exacerbated the already dire food insecurity levels in South Sudan. Although some activities supported climate smart approaches that improved the mitigation potential and adaptive capacity of livestock systems, most did not explicitly state a direct connection between programmatic goals and climate change.

A few activities explicitly sought to mitigate the impacts of agriculture on climate and the environment. Policy work in East Africa focused on increasing livestock production efficiency to reduce deforestation and environmental degradation through collaborations with forestry departments and other government agencies. The Feed the Future East Africa Market Systems Activity undertook an assessment that informed a regional strategy for climate action in policy, investment, and multilateral coordination. One of the priorities identified for climate action in the region was to mitigate food loss and waste of cereals and legumes by boosting market preparedness and commercializing novel technologies. Environmental degradation and climate change continue to have disproportionate impacts on smallholder farmers, and efforts to strengthen climate resilience, improve natural resource management, and promote sustainable intensification within livestock systems must continue in Feed the Future countries.

Conclusion

Feed the Future’s livestock programming successfully improved food security, nutrition, resilience, and livelihoods across the world. Successes were also seen in empowering marginalized groups through enhanced production of livestock and animal-sourced foods, which demonstrated the ability of livestock programming to ensure that the benefits of agricultural development are widely and equitably shared. While the COVID-19 pandemic, socioeconomic issues, and natural disasters proved to be significant challenges in 2021, programs were able to adapt and find creative solutions to build local system capacity and benefit smallholders.

Feed the Future livestock programming is addressing the climate crisis by strengthening climate resilience and improving system efficiencies, which includes the lowering of greenhouse gas emissions intensity. However, there are opportunities to more overtly address a wider range of impacts and externalities of livestock production including mitigation and adaptation to climate change.

Benefits of livestock programming were not equally distributed across Feed the Future target countries. Few countries reported investing in livestock-specific activities and roughly a third of all Feed the Future countries reported no activities related to livestock, despite the livestock sector contributing between 20 to 60 percent of agricultural GDP in Feed the Future and Resilience focus countries. Since these gaps in programming were not specific to a region or host country income level, more assessment is needed to understand the actual or potential role of livestock in each Feed the Future country strategy and the underlying reasons for apparent under-investment in the livestock sector. Additional investment in livestock systems around the world has significant potential to contribute positively to FTF’s goals of increasing food security, improving human nutritional outcomes, strengthening resilience and addressing pressing threats such as the global food crisis, climate change, conflict, and emerging disease.

*Prepared April 2023 by Peter Bowman, Global Livestock Development Communication and Technical Intern, Bureau for Resilience and Food Security, United States Agency for International Development*