



Food and Agriculture Organization  
of the United Nations

## GUIDANCE NOTE

# Livestock in protracted crises

The importance of livestock for resilience-building and food security  
of crisis-affected populations



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This guidance note is part of a series on improving food security and nutrition in protracted crises. Drawing on FAO technical experience, the guidance notes series supports implementation of the Framework for Action for Food Security and Nutrition in Protracted Crises (CFS-FFA), endorsed by the Committee on World Food Security (CFS) in October 2015.



## KEY MESSAGES



- ▶ Livestock contributes **40 percent** of the global value of agricultural input and supports the livelihoods and food security of almost 1.3 billion people.
  - ▶ Half of the **800 million** people living below USD 1.9/day depend on livestock, with both 95 percent of the extreme poor and 75 percent of all poor livestock keepers living in sub-Saharan Africa and South Asia.
  - ▶ Protracted crises affect the livestock sector **in several ways**.
  - ▶ **FAO supports communities and countries**, including pastoralist communities, in shifting from **reactive crisis responses to proactive anticipative risk reduction and management** for sustainable agriculture-food and nutrition outcomes.
  - ▶ Building resilience in protracted crises requires **innovative policy frameworks, better understanding of structural causes, and coordinated efforts to reduce communities' exposure to shocks**.
  - ▶ **FAO works with governments and other partners to build resilient livelihoods and food systems in protracted crises through policy support, information and analysis, and livelihood support.**
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# The importance of livestock in resilience-building and food security for crisis-affected populations

Protracted crises are among the most challenging contexts in which to fight hunger, malnutrition and poverty. They are driven by a combination of recurring causes – human-made factors, natural hazards (often occurring simultaneously), lengthy food crises, breakdown of livelihoods and food systems – and insufficient governance and institutional capacity to deal with the resulting crises. In such contexts, protecting, saving and rebuilding agricultural livelihoods to save lives and create the conditions for longer-term resilience is a key step towards ensuring peace and stability.

Almost half a billion people in over 20 countries and territories are currently affected by protracted crises. In these countries, undernourishment is severe (39 percent compared with 15 percent in all other developing countries).

The livestock sector, which contributes significantly to people's food security and income (alongside other functions and roles including draught power, cultural and social value, and as a safety net), is affected in several ways by protracted crises. This can include disruption to livestock markets and value chains, the reduction in access to veterinary services and inputs affecting the health of animals, undermining of pastoralist livelihoods, as well as the physical loss of productive assets due to conflict.

### INFO BOX 1. Livestock and its role: South Sudan, Central African Republic, Yemen

- South Sudan is home to around 60 indigenous ethnic groups, with a livestock population estimated at 12 million cattle, 20 million sheep and 25 million goats, according to the National Ministry of Livestock and Fisheries Industry. With 11.3 million inhabitants, this is one of the highest animal/person ratios in the world. Yet the contribution of the livestock sector to GDP remains low – a missed opportunity.
- In Central African Republic, 3.5 million cattle and 5 million sheep and goats are owned by pastoralists. Feeding these animals requires permanent mobility.
- In Yemen, livestock contributes an estimated 20 percent to agricultural GDP. Nearly 80 percent of farms have livestock either as a single activity or within their portfolio. Before the conflict started, the livestock population was estimated at 6.6 million sheep, 7.3 million goats, 1.4 million cattle and 282 000 camels for 25 million people.

## The contribution of livestock to the resilience of populations in crisis

The role of the agriculture sector in crisis situations is too often overlooked and the necessary investments are not made. Beyond its direct role in generating food and income, livestock is a valuable asset, serving as a store of wealth, collateral for credit and an essential safety net during times of crisis.

Livestock is crucial for resilience and contributes in several ways to daily subsistence:

- **Food production:** Meat, milk or eggs not only provide high-quality and highly digestible protein and energy, but are also an excellent source of readily available micronutrients. Milk products alone are a crucial source of calcium, as it is difficult for children to get the calcium they need on a cereal-based diet.
- **Income generation:** Through the sale of animals and animal products, and the use of by-products such as skins.
- **Labour and transportation:** Animal traction is essential in smallholder farming systems when mechanization is constrained by lack of credit facilities, lack of inputs and a volatile security situation. Animals assist directly with crop production (ploughing, planting, and weeding), distribution and trade.
- **Moveable assets and storing wealth:** In pastoralist communities, livestock remains the best way to store wealth, particularly when the banking system may have collapsed. Moreover, livestock is a moveable asset, which is highly relevant in protracted crises.
- **Integration with other agricultural systems and diversification of activities:** The integration of livestock with other agricultural activities such as crops, forestry and even aquaculture enables the recycling of by-products and a reduction in external inputs (e.g. manure as fertilizer and fuel), while diversification enhances disaster risk reduction. Climate-smart agriculture also promotes sustainable husbandry practices in silvopastoral systems and climate-smart livestock management practices.
- **Valorization of marginalized lands:** Many protracted crises are situated in the African drylands, where livestock contribute to food security by transforming vegetation from non-arable lands, crop residues, by-products from food processing, and organic waste, into human food that is of high nutrient density and nutritional quality. Livestock thus offers one of the most efficient means of utilizing resources that would otherwise go unexploited, in both rural and urban areas.

- **Women's empowerment:** Livestock-keeping offers huge potential for women, depending on the specific socio-economic and cultural context of the country, region or community, and the dynamics of the related livestock system.

## The impacts of protracted crises on livestock systems

Protracted crises, including conflicts, economic breakdown and natural disasters, affect livestock rearing activities in a variety of ways:

- disruption of livestock markets and value chains affecting the sale of animals and livestock products;
- disruption of veterinary services and access to inputs affecting the health of animals and posing a threat of epidemics, including diseases transmissible to humans;
- disruption of pastoralist livelihoods, including mobility patterns, restricting access to pasture and water points and putting pressure on natural resources, which can in turn fuel competition and conflict; and
- death of animals killed in conflicts, indirectly and directly targeted by looting and other exploitative practices.

These impacts lead to increased expenses and reductions in income, and if not addressed, can result in significant loss of productive assets, compromising the capacity of populations to recover and cope with future shocks, and in some cases irreversibly compromising the livelihood system, thus aggravating the crisis.

Protracted crises reinforce existing social inequalities. Disadvantaged groups such as women, orphans, children, the elderly, IDPs and refugees have less access to different resources and coping strategies. In those particular groups, issues of ownership and control of livestock as a livelihood asset become paramount.

### INFO BOX 2. Drought and its impact on livestock in Kenya

In Kenya, the livestock sector was most severely affected during the 2008–2011 droughts. In 2011, Kenya had the highest number of people in need of humanitarian assistance – 3.75 million. The droughts depleted pastures and water, especially in the arid and semi-arid land areas, resulting in the deterioration of livestock body condition and reduced immunity. This triggered massive migration of livestock to other regions with better water sources, and the congregation of migrating herds led to increased and widespread disease outbreaks in most parts of Kenya. Livestock mortality from starvation and disease affected 9 percent of livestock, while disease incidence reached more than 40 percent of herds in the affected districts.

This has changed livestock composition and usage, and depressed livestock productivity, leading to food insecurity, loss of earnings, separation of families, environmental degradation and resource-based conflicts. In addition, high food prices have reduced the purchasing capacity of households and the terms of trade for pastoralists (50–60 percent below the five-year average).



Niger - Tera. Herder moving his cattle in search of water during the dry season. ©FAO/Giulio Napolitano.

## Livestock-based livelihoods in the CFS Framework for Action for Food Security and Nutrition in Protracted Crises (CFS-FFA)

In line with FAO Strategic Objective 5 (SO5) which aims to increase the resilience of livelihoods to threats and crises, this Guidance Note sets out to illustrate how FAO work in supporting livestock-based livelihoods can contribute to the implementation of the CFS-FFA, and in particular to the following principles:

Livestock-based livelihoods in the CFS-FFA	
Are a core objective of CFS-FFA principles	<p><b>Principle 1:</b> Meet immediate humanitarian needs and build resilient livelihoods</p> <p><b>Principle 2:</b> Focus on nutritional needs</p> <p><b>Principle 9:</b> Contribute to peacebuilding through food security and nutrition</p>
Also contributes to these CFS-FFA principles	<p><b>Principle 5:</b> Empower women and girls, promote gender equality and encourage gender sensitivity</p> <p><b>Principle 7:</b> Strengthen country ownership, participation, coordination, stakeholder buy-in, and accountability</p> <p><b>Principle 10:</b> Manage natural resources sustainably and reduce disaster risks</p>

### KEY FACTS

Livestock contributes 40 percent of the global value of agricultural input and supports the livelihoods and food security of almost 1.3 billion people.





# Strengthening the resilience of livestock-based livelihoods

FAO work is based on a policy framework for risk management, from risk monitoring and early warning systems, and resilience analysis, to emergency preparedness and response through vulnerability reduction and crisis prevention. This can include both physical dimensions (i.e. income and food access; access to basic services; assets; social safety nets; climate change adaptation and mitigation; and enabling an institutional environment), and capacity dimensions (i.e. adaptive capacity and sensitivity).

FAO supports communities and countries – including pastoralist communities – to shift paradigms – from reactive crisis response to proactive anticipative risk reduction and management for sustainable agriculture-food and nutrition outcomes.

This support takes a number of forms, as outlined below:

## **Recommendation 1. Investing in information and early-warning systems to prevent and mitigate the impact of crises on livestock and possible threats to human health**

The Global Information and Early Warning System (GIEWS) continuously monitors food supply and demand in all countries of the world and compiles and analyses information on global production, stocks, trade, export prices and food aid. It also provides early warnings of impending food crises in individual countries. For countries facing serious food emergencies, FAO/GIEWS and WFP also carry out joint Crop and Food Security Assessment Missions (CFSAMs).

EMPRES – the Emergency Prevention System for Transboundary Animal and Plant Pests and Diseases – provides information, training and emergency assistance to countries to prevent, contain and control the world's most serious livestock diseases, while also monitoring newly emerging pathogens. EMPRES aims to prevent and control diseases at their source, through early warning, early detection, early reaction, enabling research, coordination, and communication.

## Recommendation 2. Addressing immediate needs in combination with longer-term interventions to strengthen resilience

FAO advocates for longer-term and more flexible approaches in protracted crises, bridging short-term humanitarian and longer-term development interventions. Sustainable investment is required to rebuild the asset base of conflict-affected herders, support alternative income-generating activities, create or strengthen local institutions and learning centres, and develop capacity through tailored extension services, or using the farmer and pastoral field school methodology. At the same time, emergency needs must be answered promptly and efficiently to avoid the deterioration of animal health and aggravation of the impact of a crisis on livestock-based livelihoods.

The Livestock Emergency Guidelines and Standards (LEGS) initiative originated in the early 2000s, as livestock relief-providing agencies set out to improve the quality and professionalism of their interventions. FAO supported the development and publication of the Livestock Emergency Guidelines and Standards Handbook (LEGS).

To complement the LEGS handbook, FAO has prepared the FAO Manual of Livestock-related Interventions during Emergencies.

Initiatives to support vulnerable livestock owners include:

- provision of livestock (re-stocking);
- provision of feed and water supply (emergency measures);
- provision of shelter (natural hazards);
- support for commercialisation (assistance for livestock value chains, destocking, transport to markets, re-establishment of markets, training in commercial matters, training in hygiene, inspection, and safe production procedures for products of animal origin);
- provision of animal health services (treatment, vaccination to prevent the spread of animal diseases);
- training in resilience-relevant techniques (Farmer and Pastoralist Field schools); and
- cash-for-work or voucher systems.



West Bank and Gaza Strip - Hazzaleen. A Bedouin harvesting corn and barley in a field set aside for grazing of animals and land rehabilitation. ©FAO/Marco Longari.

Cash transfers and vouchers and use of mobile technologies (e.g. for market information and disease reporting) are promising options to support livestock-based livelihoods, especially when facing the need for finding alternatives to market commercialization during protracted crises when markets are adversely affected. Cash and voucher-based interventions (including production of animal feed, construction of dams and water holes, and animal health care) drastically reduce the cost for technical interventions in comparison to in-kind provision.

### **FAO in action - BOX 1. Feed provision in protracted crises: alternative fodder production in the West Bank**

Recurrent droughts and overgrazing have contributed to the fragility of local livestock production systems in the West Bank, where the majority of families are dependent on livestock as their main source of income. Fodder is the largest expense (70 percent of costs) needed to sustain herders' livelihoods. Since 2011, FAO has been promoting the use of hydroponic technology (soil-less plant propagation) by vulnerable herders and their cooperatives, providing a low-cost, high quality source of fodder available year-round. This approach increases the profitability of livestock production and helps herders stay in business. The fodder is produced by 15 livestock cooperatives and has been used by all cooperative members, benefiting in total 750 households.

### **FAO in action - BOX 2. Enhancing the food security of returnees, IDPs and vulnerable host communities in South Sudan**

FAO helps to improve the food and nutrition security of flood-affected households and pastoral communities in the targeted areas of South Sudan, through the provision of agricultural, fishing and veterinary inputs and services. More than 60,000 beneficiary households have received agricultural, fishing and veterinary inputs and services, including vaccination, treatment for wounds and parasites of 5.5 million animals in 2015.

Cash-for-work schemes have been established to construct shallow wells/water collection ponds for livestock during the dry season. Two carcass disposal facilities have been established for the safe disposal of animals. Outbreaks of livestock diseases have reduced by 10 percent, the quality of livestock has been improved and mortality reduced, enhancing meat and milk production. This has all contributed to improved food and nutrition security.

## **Recommendation 3. Supporting livestock systems and livestock value chains**

Trade in livestock and animal products is directly affected by protracted crises, with negative consequences for the livelihoods of livestock producers, middlemen, traders, butchers, market attendants and other service providers, as well as consumers. Logistical problems linked to insecurity, and physical damage to infrastructure as a result of natural disasters, often contribute to the disruption of market and processing systems, with impacts on energy, transportation and supplies for products such as milk and meat.

In protracted crises, markets may be deactivated and trade routes interrupted due to insecurity and/or damage. Producers lose regular access to commercial feed. Veterinary drugs and vaccines are no longer available, or in very limited supply, and subject to price increases. The price of live animals and animal

products tends to increase significantly due to the limited inputs on offer, leading to fake veterinary drugs, expired or spoiled vaccines, and degraded fodder, especially in the absence of formal governmental structures and institutional support.



Afghanistan - Herat province. 2013. Afghan children and men carrying jugs loaded with milk to a milk collection centre supported by a FAO project. ©FAO/Shah Marai.

### **FAO in action - BOX 3. Support for Pastoral Livelihood Development – Promoting an internationally competitive Somali meat industry (funded by the EU, 2010–2013)**

In Somalia, some 135 000 meat sector stakeholders have benefited from the Meat Inspection and Control Act and the quality assessment system (QAS); 80 households from meat value addition skills development; 1 250 households from direct capacity building activities; and 270 000 individuals from awareness raising activities.

The capacity of public and private sector institutions to regulate the meat sector and consumer protection has been enhanced, resulting in better quality meat in local markets, the prevention of food-borne diseases and increased trust in the quality of inspected meat.

Business opportunities in Somali meat exportation, and boosting the local economy through the production of by- and core-livestock products have diversified project beneficiaries' sources of income and created new employment opportunities. The main activities were the establishment of a Meat Inspection and Control Act, a Meat Hygiene Code and QAS, as well as ten hygiene units in Somaliland and Puntland.

Veterinarians, meat inspectors, butchers, slaughterhouse workers and meat vendors have been trained in meat hygiene and handling practices, meat inspection procedures, waste management, livestock disease surveillance, and meat retail and marketing.

A behavioural change communication programme to enable broad acceptance of the regulated meat sector across Somalia, domestic meat marketing and labelling strategies has been developed. 3 women's groups have been supported through the provision of training and equipment to set up micro-enterprises for soap production from animal fat and bone craft.

#### **FAO in action - BOX 4. Supporting agricultural livelihoods by improving the dairy value chain in a protracted crisis context in Lebanon**

In 2015, FAO and the Ministry of Agriculture of Lebanon provided technical and institutional support for over 3 500 vulnerable farmers, helping them to produce more and better quality dairy products and to be part of sustainable dairy cooperatives. The project's impacts are visible at three different levels:

- At household level, the project has contributed to increasing farmers' capacities for food production and income, as well as improved milk safety and quality, resulting in better milk prices. Due to this intervention, the proportion of discarded milk fell by 90 percent. The fertility of dairy cattle also improved, with the artificial insemination techniques showing a success rate of 51 percent;
- at community level, the project established or upgraded 34 village dairy producers' associations (VDPAs) and 40 milk collection centres. The cooperatives helped strengthen the producers' market power and the collection centres helped to store products; and
- at national level, the project created a National Union of Milk Producers, and reinforced the capacities of the Ministry of Agriculture.

#### **FAO in action - BOX 5. Women's empowerment through milk merchandising in South Sudan**

FAO is piloting an alternative model for pastoralist livelihood and education in South Sudan's Lakes State with the funding of EU. Under the "Zonal Effort for Agricultural Transformation – Bahr el-Ghazal Effort for Agricultural Development" project, FAO has been working with UNESCO to develop a learning curriculum for adults, youth and children that integrates pastoral field school and pastoral education approaches. Combining literacy and numeracy skills development with training in animal health and production, this pilot curriculum provides a critical opportunity to empower pastoralist households to improve their livelihoods and communities in South Sudan.

Women from the cattle camps will learn the techniques to improve the hygiene of the milk they sell in urban markets, while gaining the numeracy skills needed to count and record the cash they earn, protecting them from being cheated out of their earnings, which has often been the case.

### **Recommendation 4. Maintaining livestock mobility and supporting pastoralist livelihoods**

Pastoralism emerged thousands of years ago in the rangelands of the Horn of Africa, and has evolved and adjusted as a response to climate uncertainty. It is a resilient livelihood mechanism for coping with the harsh environment of arid and semi-arid lands, and optimizing livestock production opportunities within variable and unpredictable rangeland ecosystems.

In most pastoral areas, implementation of veterinary interventions during protracted crises has been controversial in the last decade, due to subsidized and free distribution of veterinary medicines, which undermines the existing private primary animal health service delivery system. In addition, when livestock are to move freely across the range and between different grazing areas, the land must remain under

some form of collective control based on customary or government tenure arrangements. Creating new livestock corridors or rehabilitating commonly agreed ones is essential. Basic services must be provided along the routes to facilitate the movement of animals over long distances. These include water for livestock and people, and grazing areas where animals can rest before continuing their journey, as well as access to markets and health services. The demarcation of the livestock corridors needs improvement and official endorsement to secure livestock mobility. FAO has created the Pastoral Knowledge Hub, an international network to ensure that pastoralists' concerns are integrated in international policy dialogue.

### **FAO in action - BOX 6. Maintaining livestock mobility in Nigeria**

Nigeria is affected by conflicts between farmers and herders. In recent decades, pastoralism has been neglected by the government, and the country is affected by desertification due to the over-exploitation of natural resources. These challenges, and a lack of dialogue between local actors, has led to revenge acts and violence, worsened by the development of gangs. Herdsmen have had to resort to using asphalt roads to move livestock, fueling tensions with local populations.

FAO initiated a set of Voluntary Guidelines on the Responsible Governance Tenure (VGGT) project in the Nigerian arid and semi-arid lands to analyze the conflict and identify mechanisms to reduce inter-community tensions and create a common foundation for dialogue and conflict mediation. Institutional actors have initiated a series of interventions to end the conflict.

The African Union has developed a Pastoral Policy Framework for Africa. At the national level, a Presidential Committee on land reform has been set up. The use of the land is now regulated by a specific law. Demarcating grazing areas and stock routes for mobility, common interests, initiatives between farmers and herders to sustain their relationships, and institutional policy support and local capacities for conflict resolution and peace management have all been crucial in de-escalating these inter-group conflicts.

## **Recommendation 5. Protecting livelihoods through animal health care in protracted crises**

When governmental and private animal health services collapse and cannot be re-established, it is necessary to protect livestock and prevent losses, as well as the emergence or re-emergence of diseases. Veterinary services tend to diminish or even disappear, and the situation only worsens in other areas without services available even in normal times. Vaccine availability, access to vaccination programmes, disease surveillance, diagnosis facilities and curative veterinary services can be disrupted. Diseases cause losses on a large scale either due to increased mortality or – less visibly, but often with higher impact – reduced productivity.

Standards set by organizations such as the World Organization for Animal Health (OIE) cannot be met, which will directly affect livestock trade. Diseases affect all species, from ruminants in pastoral systems to donkeys, draught oxen, pigs or even the few chickens owned by individual households. Zoonoses may spread, with significant public health consequences (such as anthrax, avian influenza, H1N1, among others). In pastoral societies, forced changes in livestock migration patterns associated with conflicts and insecurity escalates the risk of livestock disease outbreaks and spread due to the concentration of animals. Where there are still community-based animal health workers and private vets, they should participate in the design, implementation and monitoring of interventions addressing immediate animal health needs as well as focusing on long-term strategies for resilience building.

### FAO in action - BOX 7. Emergency vaccination, restocking and training on the Lebanon-Syria border

600 000 cattle have been vaccinated against foot-and-mouth disease (FMD) and 400 000 small ruminants against Peste des petits ruminants (PPR), for the benefit of nearly 20 000 livestock owning households. The protection of livestock against diseases helps sustain livelihoods. In addition, 25 poultry farmer field schools (FFS) for 500 beneficiary households have been set up, through which members receive 50 hens, feed, feeders, drinkers, water troughs, laying boxes, egg trays and materials to construct chicken coops. The FFS members have been trained in bio-secure poultry husbandry, adding value to the improved food security and nutrition this intervention supports.



Burkina Faso - Sahelian Zone. Nomads from Mali have migrated into Northern Burkina Faso with their herds in search of pasture. ©FAO/Florita Botts.

### Recommendation 6. Facilitating dialogue and peace building

War and internal conflicts disrupt traditional migration routes and disease patterns. Pastoralists are forced to abandon traditional migration patterns in a desperate search for security, as happened in Mali after the crises in 2012. In South Sudan – a country where cattle are central to the country's economy and society – large-scale and long-distance displacement of livestock took place from conflict-affected states into agricultural zones, outside the traditional pastoral domains. As the government shifted resources from caring for livestock to the war effort, farmers and herders began to compete for the same land. When people are forced to become refugees to save their lives, their main livelihood – livestock – is under increased threat from lack of feed, diseases, and direct harm due to armed conflicts, including robbery by different militias and armed rebel groups.

### FAO in action - BOX 8. Contributing to peacebuilding

FAO has collaborated with the United Nations Peace Building Fund since 2009 to support activities and programmes that contribute to building lasting peace in countries emerging from conflict. The beneficiaries include countries prone to protracted crises (e.g. Central African Republic, South Sudan and Yemen). In these contexts, animal health interventions are seen as an entry point to initiate activities centered on training, education, capacity building, and the rehabilitation of infrastructure, land tenure dialogue or further distribution of seeds, agricultural kits, animal feed, and livestock restocking. Support activities such as vaccination campaigns, serve to build trust both between affected population groups, as well as with humanitarian stakeholders.

## Recommendation 7. Building resilience to climate change with climate-smart agriculture practices

Natural hazards, including droughts, earthquakes, epidemics, floods, cyclones and extreme temperatures represent risks which are, according to projections, expected to worsen in the future.

Climate-smart agriculture (CSA) is an approach that helps drive the actions needed to transform and reorient agricultural systems to effectively support development and ensure food security in a changing climate. CSA is in line with FAO vision for Sustainable Food and Agriculture, underpinning FAO goals to make agriculture, forestry and fisheries more productive and more sustainable, and to build resilience to climate change.

### FAO in action - BOX 9. Climate change adaptation and mitigation in Madagascar

Globally, Madagascar is the fifth most exposed country to risks due to climate change. Between 2013 and 2015, FAO with funding from the Common Market for Eastern and Southern Africa (COMESA) in collaboration with the East African Community (EAC) and the Southern African Development Community (SADC), implemented the “Programme on climate change adaptation and mitigation in the Eastern and Southern Africa region” including Madagascar. The objective was to support the scaling-up of the adoption of climate-smart agriculture techniques to enhance the livelihoods and food security of small farmers.

### KEY FACTS

Half of the 800 million people living below USD 1.9/day depend on livestock, with both 95 percent of the extreme poor and 75 percent of all poor livestock keepers living in sub-Saharan Africa and South Asia.





## Conclusion and way forward

Livestock plays a key role in ensuring food security and as a safety net for vulnerable populations in many parts of the world.

FAO provides assistance to vulnerable livestock owners during emergencies, protecting their livestock through vaccination, feed, shelter, water supply, restocking and destocking of livestock and the use of vouchers and cash-for-work. In protracted crises, the activities to strengthen or re-establish value chains through support for commercialisation and production are important tools for resilience building, together with training activities on animal husbandry, feed production, and product processing.

Fostering practices that enhance long-term resilience tailored to different livestock systems is crucial to protect livelihoods, from facilitating herders' livestock mobility to restocking smallholders' animals.

Conflict mitigation and prevention through the reduction of vulnerability, the strengthening of social protection interventions, the generation of income and employment, community dialogue and social cohesion are important aspects of FAO work. In some cases, livestock interventions have paved the way for dialogue and mitigation of conflicts between herders and settled livestock breeders.

Building resilience in protracted crises requires innovative policy frameworks, better understanding of structural causes, and coordinated efforts to reduce communities' exposure to shocks. FAO works with governments and other partners to build resilient livelihoods and food systems in protracted crises through policy support, information and analysis, and livelihood support.

FAO is working on strategies to mitigate the impact of different types of crises on livestock and value chains, preserve the livelihoods of affected populations, and enhance early warning systems and risk and vulnerability reduction measures, with a view to developing preparedness and early response capacity.

Nevertheless, the importance of livestock for the most vulnerable people, especially in the context of protracted crises, is often underestimated by stakeholders and donors.

Investment in resilience analysis, programming and measures to address protracted crises and recurrent disaster risk in the face of climate change should be increased, and the importance of livestock for food security and its other dimensions must be taken into consideration.

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[www.fao.org/animal-production/en](http://www.fao.org/animal-production/en)

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[www.fao.org/emergencies/fao-in-action/projects/project-highlights/en](http://www.fao.org/emergencies/fao-in-action/projects/project-highlights/en)

[www.fao.org/emergencies/how-we-work/prepare-and-respond/cmc-animal-health/en](http://www.fao.org/emergencies/how-we-work/prepare-and-respond/cmc-animal-health/en)

[www.fao.org/pastoralist-knowledge-hub/en](http://www.fao.org/pastoralist-knowledge-hub/en)

[www.fao.org/resilience/en](http://www.fao.org/resilience/en)

[www.livestock-emergency.net](http://www.livestock-emergency.net)

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For more information, visit FAO portal on resilience  
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