

Food and Agriculture Organization of the United Nations

Top 10) benefits of investing in pastoralism

Pastoral activities span more than 100 countries, and contribute to global development and food security. This presents opportunities for securing widespread benefits of pastoralism and its tradition of innovation, including:

Boosting productivity through innovation and adaptability

Pastoralists lay claim to sophisticated methods for benefitting from the spatial and temporal variability of water and forage resources. Pastoralism affords ample opportunities to maintain and boost animal production across a spectrum of mobility under increasingly variable conditions, including those associated with climate destabilization. Building capacity for the development and integration of new methods, tools, and technologies will help to further optimize pastoral production. Examples include advancements in tracking resource availability, better managing seasonality in forage production, and updating health threat emergency response plans to better fit pastoral systems.

Diversifying food production for food security

In a changing world with increasing variability in climate patterns and natural resource availability, securing in-country sources of animal-source foods (ASF), such as meat and milk, through a diversity of production systems – including pastoralism – will help to spread out the risk of production failures. This can provide a buffer for protecting national economies and reducing reliance on food imports. The provision of inexpensive, high quality proteins raised in pastoral systems can supply domestic markets and also help to ensure food security of neighbouring countries through exports.

Achieving climate goals through regenerative grazing and a "circular bioeconomy"

A large proportion of the world's rangelands are degraded and could capture far more carbon in soil organic matter to help offset GHG emissions. A range of specific practices can be deployed to help improve the carbon balance and overall resilience of livestock systems. For example, the mobility of pastoralist livestock enables movement to selective grazing areas and away from degraded areas to allow for recovery. Research, including in drylands, shows that pastoral landscapes have the potential to achieve a neutral carbon balance as regenerative forms of grazing can generate carbon offsets by stimulating plant growth and carbon sequestration in soil. Livestock can also be moved to areas where crops are grown to make better use of crop residues for supplemental animal feed, and to gather animal manure as fertilizer for crops as part of a "circular bioeconomy" to help recycle nutrients.

Protecting native tree species, grasslands and ecosystem services

Halting expansion of deforestation for feed crop production is an urgent priority and grazing systems offer an advantage. Pastoralism is compatible with tree-planting efforts to protect native species and bolster carbon offsets. The introduction of trees into tropical pastures – "silvo-pastoralism" – can help to protect productivity while also generating many social, economic, and environmental benefits. Optimizing the use of grasslands through regenerative grazing can further contribute to improved biodiversity, water use efficiency, nutrient cycling and soil carbon sequestration, as well as making the soil more resilient to a changing and more variable climate.

Expanding conservation initiatives by applying pastoralist knowledge

Pastoralists' intimate knowledge and experience of rangeland ecosystems can assist with biodiversity and conservation assessments, and the development of appropriate protection measures. Respecting, revitalizing and incorporating pastoralist practices and knowledge of rangelands can help to protect vital ecosystem services by more effectively managing species diversity, vegetation cover, soil quality, and water recycling.

Strengthening the labour force and generating more business opportunities

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With millions of pastoralists worldwide at risk of losing their livelihoods, de-marginalizing this group is a priority. Boosting education and training, improving access to services for information, livestock support, health and finances, and facilitating transboundary movement can yield substantial economic benefits. Investing in pastoral systems and in decentralized infrastructure will generate more business opportunities across the livestock value chain, from service suppliers, traders and processors, to wholesalers and retailers of animal-source foods (ASF).

Capitalizing on a growing market and easing feed-food competition

Consumer demand for "grass-fed" ASF continues to expand the retail market for these products, presenting new opportunities for exports and profitability. As nearly 700 million people are undernourished worldwide, according to FAO estimates for 2019, grazing systems can help to speed progress towards Zero Hunger by reducing the burden of competition for cereals as livestock feed versus food for human consumption.

Securing the adaptive potential and resilience of livestock

Locally-adapted pastoralist animal breeds are reservoirs of genetic and phenotypic diversity because of ongoing exposure to highly variable conditions and corresponding selection pressures. This diversity is essential for maintaining the adaptive potential of livestock species in order to protect productivity and economic growth in the face of environmental changes, new or resurgent diseases, and changing market preferences. Pastoral systems are a helpful counterbalance to systems encompassing fewer breeds with less diversity in order to boost livestock resilience globally.

Accelerating progress towards gender equality

Women play a vital role within pastoralist societies as livestock producers, income generators, and caregivers, as well as key organizers and keepers of local knowledge. Ensuring equal access to education and equal representation for livelihood and resource rights expands the capacity and resilience of pastoral production systems in the face of resource loss, conflicts, and climate shock. Supporting pastoralism and championing the role and representation of women will pay dividends in programs designed to help countries in achieving the Sustainable Development Goals.

Promoting "One World and One Health"

It is possible to guard against pandemics by addressing animal, human, and environmental health challenges at the same time. Better monitoring and control of zoonotic disease threats will enable countries to pivot from reacting to outbreaks to proactively preparing for and preventing them. Pastoralists can play an important role in "early warnings" of new infectious disease threats in wildlife populations. As access to animal health support is especially challenging for pastoralists, improving access to veterinary services and infection prevention measures – such as quality affordable vaccines – will help in meeting production needs while reducing risks of disease transmission in pastoralist communities. Support for more responsible antimicrobial use in pastoral livestock will also help protect the effectiveness of these medicines for animal and human health. These prudent use practices will lead to better control of the emergence and spread of drugresistant pathogens through the food supply chain and the environment to protect food security and global health.