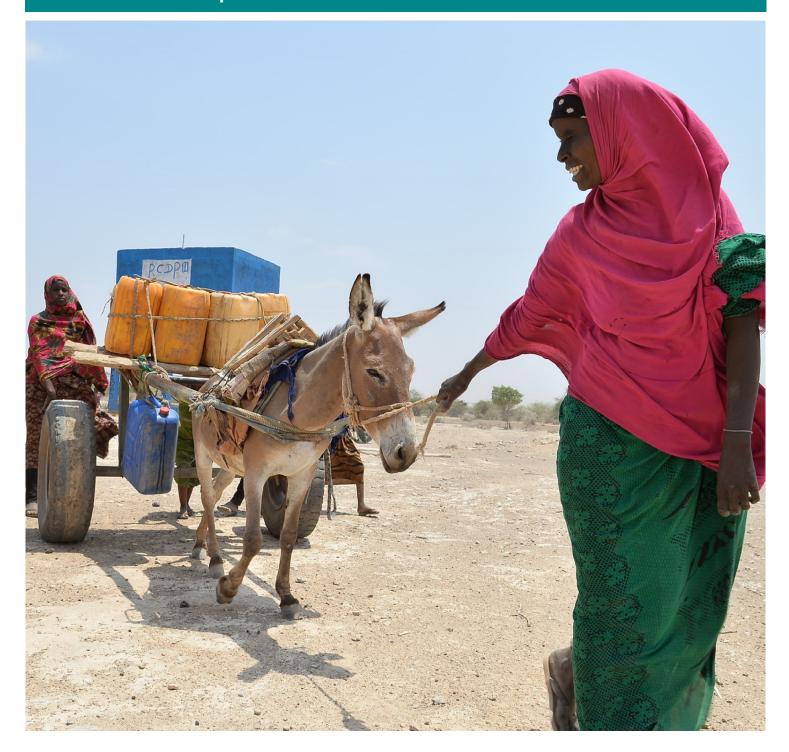


# **Lessons learned**

Engaging with pastoralists – a holistic development approach

## **Pastoral development**



The Lessons Learned series is prepared by IFAD's Sustainable Production, Markets and Institutions Division and provides a compilation of past experiences relating to a particular topic and a reflection on evidence-based best practices and failures. "Best practices" refer to processes or methodologies that have been proven to produce good results and are thus recommended examples to be replicated.

These publications are "living" documents and will be updated periodically based on new experiences and feedback. If you have any comments or suggestions, please contact the originator.

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## **Acronyms**

CAHW community animal health worker

CBD Convention on Biological Diversity

EU European Union

ICAF Isiolo County Adaptation Fund

ICTs information and communication technologies
IUCN International Union for Conservation of Nature
RECP Renewable Energy Cooperation Programme

STVS Sheikh Technical Veterinary School and Reference Centre

WISP World Initiative for Sustainable Development

### Introduction

The general lessons presented here rely mainly on three documents recently supported by IFAD (IUCN, 2011; FAO and IFAD, 2016; IFAD, 2010) and are pertinent to any pastoral context. Lessons learned specific to IFAD-supported projects in support of pastoralists are available in other documents (FAO and IFAD, 2016; Jonckheere, Liversage and Rota, 2017; IFAD, 2014a).

These lessons learned have been developed for planners and policymakers: (a) to help them avoid investment strategies and policies that impact negatively on pastoralists; and (b) to enable them to ensure that specific policies and plans for pastoral development are more closely tailored to the needs of pastoralists. In the first case, there are many examples of policies and investments that have undermined pastoralism and increased poverty in the drylands. Examples include some investments in irrigation agriculture in drylands, especially in dry-season grazing reserves, as well as some policies that have promoted "fortress" conservation in which landowners are excluded from land and resources. The negative implications of a policy can often be hard to ascertain, and competing interests have to be reconciled, but there may be many unnecessarily adverse situations that can easily be avoided if planners and policymakers are more aware of the opportunities and constraints of pastoralism.

In tailoring specific pastoral development to the needs of pastoralists, rather than looking for technical blueprints, it is more important to pursue genuinely empowering approaches that go beyond mere consultation, and to address underlying governance and institutional failures. The examples cited in this report are not prescriptions for pastoral development; rather, they are examples of what can be achieved when appropriate development processes are followed and pastoralists have a greater say in policy and planning. It is important to maintain a global view of pastoralist development as there are many informative experiences to draw on from industrialized as well as developing countries. However, it is essential to keep in mind the failures of the past, where pastoralists' successful approaches were discarded in favour of technologies borrowed from rich countries, which ultimately increased poverty and degradation, because pastoralists were not consulted and because outsiders assumed that they knew the development objectives of pastoralists.

The review of positive and negative experience in engaging with pastoral development shows that solutions to the challenge of working in pastoral development can and should be found in ways that do not compromise the basic operating logics of pastoral systems.

## **Principles of minimum standards**

The "principles of minimum standards for sustainable pastoral development" were developed by the International Union for Conservation of Nature (IUCN) within the experience of the World Initiative for Sustainable Development (WISP), with IFAD co-funding. They are guidelines to help decision makers "to make better decisions over policies and investment that impact on pastoralism and their environments", and to avoid negative impacts (Jonckheere, Liversage and Rota, 2017). Four basic principles have been identified that should inform both development projects specifically aimed at improving the life of pastoralists, as well as other types of projects implemented in prevalently pastoral areas. They therefore provide key guidance, especially during IFAD's decisional process about entering into partnership with other financing organizations, during project design and for monitoring and evaluation.

Minimum standards for pastoral development are defined by a balanced combination of four principles.

# Minimum standards for pastoral development

1. Develop country strategies that recognize and support pastoral systems

2. Avoid investments and policies that undermine pastoral systems

3. Place governance and rights, including those of minorities, at the heart of pastoral development

4. Promote investments and policies that support pastoral systems

Recognizing pastoralism (standard 1) means understanding its logic of production. Investments need to be understood in relation to this logic if they are to avoid impacting negatively on the pastoral system (standard 2) and indeed support them (standard 4). When higher returns can be expected from focusing investments on a specific sector of intervention (e.g. water development or animal health), interventions have to be planned and assessed with a view of the whole system and its broader context, looking not just at the expected output but at the potential overall outcome, both intended and unintended.

In large projects with a pastoral development component, this means assessing the potential impact of the other components against the risk of undermining pastoral systems. In interventions targeting a particular subgroup of people in pastoral systems (e.g. the most vulnerable, the poor, women, youth, children), it means assessing the potential impact of the intervention against the risk of undermining the system as a whole. None of the above can happen without addressing underlying governance failures at the root of marginalization and exclusion (standard 3). People operating the pastoral systems (across gender, age and wealth) need to be included in pastoral development planning processes at all levels, both directly and by supporting their civil society organizations. Institutional accountability needs to be strengthened, not just with regard to financial responsibilities but also in terms of goals and representativeness.

Under these four general principles of pastoral development, the IUCN document mentioned above highlights a number of particular lessons embedded in corresponding recommendations. Overall, these lessons concern the need to: (a) upgrade knowledge about pastoralism; and (b) pay special consideration to its context of intervention. These were also dominant themes, together with (c) a concern for the understanding of risk management, in the lessons that emerged in the recent evaluation of IFAD's past decade of engagement in pastoral development (FAO and IFAD, 2016:17, point 3).

Fuller discussion of these principles of minimum standards is provided in Annex 1 of the How to Do Note of the pastoral development toolkit.

## Practices in sustainable pastoral livelihoods

Pastoral resource management deals with a number of variable factors and degrees of unpredictability. One year, rainfall might be good, grazing accessible, livestock healthy and markets accessible – and the pastoral economy will grow. However, a few seasons later, a prolonged drought, political instability or an outbreak of animal disease might pose a dramatic threat to local livelihoods. In this perspective, adequate investments that aim at strengthening pastoralists' resilience are critical to supporting their livelihoods. This section provides examples of practical implications following from the lessons learned. It deals with areas of interventions critical for supporting sustainable pastoral livelihoods, and takes into account the pastoralism statement produced at the 2016 Farmers' Forum (Box 1).

#### Box 1. Farmers' Forum 2016

"Often investments come in the name of public interest and national development but directly and indirectly they harm our livelihoods by grabbing land, water and other natural resources. [...] We call upon IFAD to recognize the uniqueness of our livelihoods that need tailored approaches and investments." (FAFO, 2016)

The statement can be downloaded from http://vsf-international.org/statement-pastoralism-fafo/

#### Infrastructural development, ICTs and solar energy

Traditionally, investments in pastoral areas have focused on basic infrastructure and facilities that should provide a development-enabling environment (roads, clinics, water points, markets, etc.). These always deserve careful territorial analysis to assess all potential positive and negative implications. While not underestimating the need for investing in such fundamental and costly assets for improved value chains and service delivery, such investments must take place in a wider, comprehensive framework that enhances the capacity of local communities to access the critical resources needed for their livelihood. In such a framework, the evolution of information and communication technologies (ICTs) has recently provided favourable ground for innovative approaches to service delivery in pastoral regions. These also offer considerable potential to cut the transaction costs of servicing remote, scarce and scattered population groups. Mobile phones (Box 2) and radio networks are increasingly employed to access information on grazing, weather and market conditions, and to communicate and exchange money in real time; these offer real potential for low-cost and mobile service provision in remote territories (Box 3).

#### Box 2. M-pesa: Electronic money in the Horn

The Horn of Africa is an important platform for testing and elaborating innovative technologies that adapt well to the needs and the conditions of pastoralists. A well-known example is the expansion of financial inclusion for low-income and marginalized populations through innovative financial products in branchless banking. The Mpesa system (the M is for "mobile", and pesa is Swahili for money) allows users to send and receive money through the mobile phone network. It enables them to complete basic banking transactions without needing to visit a bank, decreases the transaction costs of servicing remote communities and helps to tackle problems related to carrying money in non-secure environments. Mpesa has been adapted to a variety of alternative uses, including microfinance services (e.g. fast and secure repayment of microloan instalments), as well as interest-bearing savings accounts and other services such as microinsurance. This domain offers interesting opportunities for public-private partnerships.

#### Box 3. Investing in ICTs to decrease transaction costs

In northern Kenya, the Food and Agricultural Organization of the United Nations (FAO) is implementing a programme that makes use of a digital pen that enables participants to scan animal health certificates in rangelands and send them through mobile phone networks to veterinary offices located at terminal livestock markets. The system facilitates transactions while decreasing market-related risks and related negative economic consequences for producers who otherwise move with animals unfit for marketing.

The same holds for alternative energy sources, such as solar panels and wind devices, which hold considerable potential for improving the life of pastoral communities – enabling the generating of electricity, the pumping of underground water, and climate forecasting in remote locations. Experience in the Sahel through the Africa-EU Renewable Energy Cooperation Programme (RECP) shows the great potential of utilizing photovoltaic systems to enhance the provision of good-quality water to rural communities (RECP, 2018). In addition to the benefits in terms of access to clean water, electricity can be supplied to households, schools, health and veterinary posts, and to small-scale facilities to improve milk collection, conservation and processing, and other value chains. The economic benefits of the RECP are tangible: the project has strengthened the photovoltaic energy sector, creating 28 new small enterprises and training almost 1,000 people. In addition to relieving poverty, environmental targets are met through reducing greenhouse gas emissions. Similarly, some basic facilities could be conceived in a lighter form that better fits with pastoral settings – such as the choice of metal bars that could be mobilized and assembled in temporary vaccination camps and/or hotspot parasite-control areas for more decentralized and seasonal animal-health servicing. This option would cost much less in terms of hardware, while necessitating higher degrees of coordination and institution-building.

#### Food security and services for mobile communities

Pastoralists' food-security, nutritional and health patterns are largely dependent on the productivity of their herds. Therefore, pastoralists are highly exposed to conditions as well as the accessibility of available natural resources. Animal health is important, and it is positively influenced by mobility and good nutrition. This importance is reflected in the popular saying "the health of the herd is that of the community". The worsening of livestock conditions has important direct consequences on pastoralists' capacities to access good-quality food. Pastoralists' diets are traditionally based on consumption of animal proteins (mostly milk), but exchange of livestock products against grains and processed food is also a traditional as well as an increasingly common strategy. The pastoral economy has diversified significantly in recent decades, with growing market integration of pastoral livelihoods.

Specific health-related problems associated with pastoral lifestyles include the close relationships with livestock and the direct use of animal products (e.g. zoonosis and other forms of disease transmission between animals and humans), difficulties in immunization coverage as well as exposure to the harshness of the pastoral environment (with extreme climatic conditions and poor shelter). The experience of the "One Health" approach in the Sahel and in Central Asia provides an interesting initiative that integrates attention to the different aspects of human and animal health with the joint provision of veterinary and human health services to pastoral communities, particularly to women and children. Mobile health clinics provide another interesting case.

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<sup>&</sup>lt;sup>1</sup> Blench (2001) identified about a dozen dairy products in Mongolia.



Bolivia © IFAD/Antonio Rota

With regard to delivery of basic services, the sedentary focus of such systems is a barrier to the mobile livelihood that characterizes pastoral communities. This is particularly pronounced during certain seasons, when the household is scattered across different remote areas. As a result, pastoral populations are often those with least access to basic services, including education and health.<sup>2</sup> This requires a rethinking of investments as well as delivery methodologies better tailored to pastoralist lifestyles, so as to enhance the outreach of basic social services in these regions. Experience shows that appropriate attention should be given to community-based services with close attention to the quality of the services and to ensuring their continuation beyond the duration of project support. Important examples include the establishment of community animal health services, ranging from the training of members of herding communities to basic surveillance and vaccination services (community animal health workers, or CAHWs). Such services have been critical in enabling rinderpest eradication efforts in Africa (Box 4). Flexibility in service delivery is key. Service operators must be recruited from within the community. Selection should be carefully designed to prevent technical exclusion (as when "literacy" becomes a more important requirement than being a pastoralist). The training of CAHWs should not be designed in ways that automatically select out the people who need the training (including women), and for whom the concept of CAHW was developed.

<sup>&</sup>lt;sup>2</sup> In Kenya, the national net enrolment rate at primary level was 94.5 per cent for boys and 90 per cent for girls in 2009. In Wajir district, which is predominantly pastoral, it was 31 per cent for boys and 20 per cent for girls.

#### Box 4. Serving pastoral animal health

Some lessons learned from the experience of the Inter-African Bureau for Animal Resources, supported by international agencies, in eradicating rinderpest in Africa include: (a) animal health servicing for mobile communities in remote areas is a long-term process that needs consistent and continuous mobilization of resources; (b) training and active involvement of different stakeholders (from grassroots communities to international research centres, and national and regional veterinary personnel) is a necessary strategy to ensure continuous and effective disease reporting / early warning systems; and (c) investments in human capacities must be complemented with adequate physical and technical resources (e.g. office equipment, vehicles, laboratories, camping equipment and cold chains). Programme flexibility and the capacity to adapt to different contexts and situations have also reportedly been a major strength of the programmes.

The demand for adequate education, formation and training systems, including adult education, is strong among pastoral households. They perceive education as a way of strengthening their position in the pastoral system, by "launching bridges" into the wider economy to create external sources of income and expand social and economic networks (Box 5). Traditional education systems that remain designed for sedentary conditions and focused on "educating pastoral children out of pastoralism" are failing to respond to this demand. Alternative educational delivery systems – boarding schools, mobile schools, special uses of sedentary schools – have been tried in countries such as the Islamic Republic of Iran, Kenya, Mongolia and Nigeria, with some degree of success, although sustainability and quality of service remain major challenges. The Statement of the 2016 Farmers' Forum specifically advocates for investments aimed at supporting capacity-building, business and management skills, and institutional strengthening, especially dedicated to women and youth (FAFO, 2016).

#### Box 5. Sheikh Technical Veterinary School and Reference Centre

The Sheikh Technical Veterinary School and Reference Centre (STVS – http://www.stvs-edu.org) has been an important factor in facilitating exports of high-quality livestock. STVS is located in Somaliland in the heartland of pastoral areas in the Horn of Africa. Funded by the European Union (EU), Denmark and Italy, STVS was initiated in 2002 and implemented by Terra Nuova under the auspices of the African Union, Inter-regional Bureau for Animal Resources, and later the Inter-Governmental Authority for Development. STVS currently offers two diploma courses in livestock health sciences and in livestock product development and entrepreneurship, as well as certificate courses, residentially and online. In 2011, STVS had a student population of 95, including a growing number of girls (20 per cent). The availability of competent human resources to support the health certification of livestock at Somali ports, together with the existence of quarantines, contributed to the lifting of the livestock export ban on Somalia by its traditional trading partners.

#### Natural resources, land tenure and pastoral conflict

Pastoral livelihoods are reliant on range resources (pastures, watering points, fuelwood, wild fruits, salty soils, etc.); dynamics that degrade their productive potential or jeopardize access are a threat to pastoralists' livelihoods, while promoting sustainable management and governance of range resources is key to both prosperity and resilience (AU, AfDB and UNECA, 2010).<sup>3</sup> Investments in this domain entail two dimensions: the availability of resources, and their accessibility.

#### Availability of quality resources - produce and reproduce

The sustainable intensification of resource utilization in pastoral development has traditionally engaged with environmental variability as a problem. Main domains in that respect have addressed forage production, rangeland regeneration, animal genetics, fodder procurement, animal health and water management. Besides their low rate of return (with the exception of animal health), the experience of the systemic impact of such investments in the medium and longer terms calls for careful consideration. However, the specialization of pastoral systems to take advantage of variability – potentially leading to stretching the length of the green season relative to the experience of the herd – is a form of unconventional intensification that has received very little attention. Supporting strategic mobility would be a step in this direction.

Enhancing crop-livestock integration in forms that support and foster complementarity and cooperation between specialized livelihood-system use is a way to enhance management of natural resources; synergies between cropping and livestock husbandry offer many opportunities to sustainably boost overall land productivity while increasing resources. Particularly in West Africa, recent trends indicate that agropastoralism is becoming a widely diffused livelihood strategy along the Sahelian belt, with pastoralist communities engaging more in seasonal crop activities, and farming communities increasingly including mobile livestock-keeping in their production systems. More generally, increasing reliance on extensive livestock-rearing is likely to represent a widely extended mechanism for rural communities to adapt to the vagaries of the changing climate and to manage resources accordingly. This will be particularly the case in the so-defined "transition zones" characterized by the increased probability of failed rainy seasons, as under the analysis by the Intergovernmental Panel on Climate Change. Similar patterns are reported from Central and West Asia, as well as from North Africa.

Interventions in sustainable rangeland management need to be integrated with those on land tenure, rainfed cultivation and livestock. Harmonization of sectoral policies and legislation – e.g. laws on water, forests and environment – needs to be addressed. A large-scale perspective is necessary, with regard to both space (to capture transboundary and long-distance dynamics) and time (to capture seasonal and intermittent use patterns). Land degradation should not be taken for granted but investigated, including a careful assessment of its causes. Simplistic approaches based on limiting access to livestock-keepers may increase rural poverty rather than reduce it, while carrying little impact in terms of counteracting degradation, or even resulting in worse conditions.

As access to water typically represents a main feature that regulates the use of grazing territories through seasons, investments in groundwater sources hold important consequences for both the local ecological and socio-political dimensions (Box 6). The uncontrolled expansion of water sources in a pastoral area without adequate knowledge of the agroecological setting or of local governance systems, together with the involvement of the diverse land users, might have devastating consequences for local livelihoods. Experience attests to the relevance of an ex ante strategic environmental assessment, including land-use and land-tenure analysis, especially mapping of transhumance patterns, and analysis of vegetation cover and local ecological dynamics. Moreover, the technology used to improve water access should also be conceived in an environmentally as well as user-friendly way in order to improve its impact and sustainability.<sup>4</sup>

<sup>&</sup>lt;sup>3</sup> Recently, FAO has found a strong correlation between peak livestock contribution to the supporting and regulating kinds of ecosystems services and to small-scale livestock-keeping and pastoral systems (Hoffmann, From and Boerma, 2014).

<sup>&</sup>lt;sup>4</sup> Relevant documents reporting lessons learned include: FAO (2007) for selected countries in the Horn of Africa, and IRAM (2011) for the Sahel.

#### Box 6. IFAD water investments interfacing productivity and conservation measures

Through the development of sand dams to store water, the IFAD Western Integrated Community Development Programme in Djibouti invests in guaranteeing a steady supply of water. By enhancing aquifer recharge, the programme invests at the interface between productive activities and conservation measures. Sand dams store water accumulated upstream during flooding, which then lies beneath the sand layers in aquifers. The dams help to provide a crucial water supply, particularly during the dry season, when extreme water shortages are common. Water is extracted by: digging a waterhole until the water level is reached and using a jerry-can or goat skin to scoop up the water; equipping a waterhole with a pump to bring the water to the surface; or creating a hand-dug well from which water can be collected in buckets. Fifteen sand water storage dams were constructed in 10 years as a result of the programme, which was implemented in two phases. It worked with 43,000 households, including 240,000 women, men and children who were among the poorest of the 124 communities in the project area.

#### Access to resources – get the governance right

A most important domain to support livelihoods in these regions relates to the capacity of pastoralists to access the short-lived concentrations of pasture resources on the rangelands, and the corridors that link grazing areas, pastoral settlements or encampments, and markets (USAID, 2011). This capacity has been gradually eroded due to the encroachment of different external interests on rangelands, particularly in recent decades.

Traditionally, development interventions in rangelands have favoured the conversion of wetter zones to crop farming, often through irrigation schemes. In pastoral terms, the cost of these interventions is much greater than the productive value of the areas being converted. Losing access to these pockets of highly productive land, which are critical reserves for animal-feeding during dry seasons, jeopardizes the possibility of making productive use of much larger but drier areas. For example, the conversion of valley bottoms or riverbeds can hamper the utilization of the grazing resources of the whole valley. Experience also shows that such a "conversion" can trigger important environmental degradation, such as the salinization of large pastures in pastoral regions of the Horn of Africa, the Sahel and Central Asia following the establishment of cotton schemes.

A further step into rangeland encroachment is represented by so-called international land lease schemes. Pastoral areas have become an investment frontier, especially in Africa, with external interests targeting pastoral territories for extractive (mining and drilling), productive (irrigation and agrofuel production) or recreational (game reserves, tourist resorts, etc.) purposes – resulting in local people losing access to the resources on which they depend for their livelihoods (IIED, 2010). However, not only land area is shrinking for pastoralists. After years of uncontrolled water-drilling and irrigation schemes, the water table in parts of the Horn of Africa is reportedly falling at a worrying rate, thus leaving many traditional pastoral wells useless. Large areas of dryland forest in the Horn of Africa have been cut down to make room for other forms of investment (e.g. agrofuels or gum plantations) or for charcoaling purposes. With the Rangelands Observatory, the International Land Coalition has tried to set up a community-based monitoring of ongoing conversion and fragmentation of rangeland ecosystems with a view to enhancing informed and participatory decision making on land use and investments in rangelands, and on the trade-offs involved (ILC, 2013).

Failure to properly govern access to, and responsibilities in, rangeland resources engenders considerable potential for social tension and/or environmental degradation. The land tenure system and, more specifically, the institutions for the sustainable management of rangeland resources must be capable of representing the economically functional complexity of pastoralists (Pratt, Le Gall and De Haan, 1997; van den Brink et al., 2005; USAID, 2011; IFAD, 2014b). In particular, they should:

- protect pastoral systems against the alienation of their resources;
- preserve and ensure functional access to key resources;
- prevent resource concentration in the hands of a few at the expense of the system as a whole;
- enable flexible, multiple and overlapping uses by a variety of actors;
- encourage legal change within the context of a comprehensive political strategy, rather than as an isolated pastoral issue;
- ensure that negotiations take the herders' perspective into account.

Development planners need to be aware about historical factors that have affected the viability of the pastoral system and have changed relations among the occupational or identity groups (Box 7). This awareness is key to:

- avoiding and managing pastoral conflict;
- orienting pastoral legislation, policymaking and the implementation thereof (Box 8).

#### Box 7. Successful IFAD experience in addressing changing migration patterns in Senegal

In the last three decades, the expansion of irrigated cultivation combined with the impact of the Manantali Dam has drastically reduced floodplain pastures in the Senegal River Valley in eastern Senegal. This has affected the northward transboundary seasonal movement into Mauritania, as well as the southward migration into the Ferlo region during the flood season. Migration patterns have changed, with an effect on the presence of the livestock in the more heavily cultivated areas in the middle latitudes. IFAD-supported projects (the Agricultural Development Project in Matam, and the Support to Agricultural Development and Rural Entrepreneurship Programme) have adopted the "pastoral unit" approach to improve management of natural resources and to address the frequent conflicts between livestock-keepers and farmers. Pastoral units are new local institutions made up of a group of pastoralists sharing the same pastoral areas and using the same water points. They have played an important role in decision-making in the Ferlo region, negotiating sustainable access to pasture and regulating the sinking of new boreholes (Jonckheere, Liversage and Rota, 2017; IOE-IFAD, 2014).

#### Box 8. Successful IFAD experience in addressing institutional change in Kyrgyzstan

In Kyrgyzstan, herders traditionally used a transhumant system, seasonally moving mixed herds at different altitudes. The Soviet Union introduced intensive livestock production with the use of imported feed. When Kyrgyzstan gained independence, livestock was distributed to individual households, but the number rapidly decreased. Slowly, the number of livestock increased, but fragmentation of livestock holdings and the collapse of traditional governance mechanisms led to intensification and permanent use of the more accessible pastures. In 2008, when IFAD implemented the Agricultural Investments and Services Project together with the World Bank and the Swiss Development Cooperation, large extensions of pastures near farms and settlements were highly degraded, while the high-altitude rangelands were underutilized. The project engaged in legislative efforts that led to the adoption of the "Pasture Law" in 2009. This law reintroduced transhumant practices by connecting different national and local administrative bodies, with pasture land management entrusted to pasture users unions. The project supported the formation of these unions and implementation of the law (Jonckheere, Liversage and Rota, 2017).

Currently, in sub-Saharan Africa, a main trigger for conflict is represented by constraints on the movement of livestock, especially the reduction of critical corridors along migration trajectories and the hardening of national frontiers (Box 9). In Central Asia, a matter of concern relates to the re-establishment of national frontiers following the end of the Soviet system; restrictions on crossing borders are an important constraint on groups that traditionally utilize grazing resources in different countries.

#### Box 9. Successful experiences in managing livestock corridors

Some projects have involved significant innovations. In Sudan, the Western Sudan Resources Management Project set up a regional land policy committee to formulate a natural resource management strategy. It used a participatory process in the demarcation and management of livestock transhumance corridors, involving both mobile and settled communities (IOE-IFAD, 2009). In Senegal, rangeland management committees built on customary use patterns, and cooperation between pastoralists and farmers worked well (IOE-IFAD, 2004).

A similar intervention by the EU included the use of GPS and mapping of underground water and stock routes – together with capacity-building in conflict resolution. The intervention was complemented with the physical rehabilitation of key wet-season grazing areas, demarcation of two emergency reserves, and enclosure of areas suffering environmental degradation. The final evaluation revealed a good degree of local stakeholders' appreciation of the intervention and a reduction in conflict incidences, acknowledging the consistency of complementing institutional capacity-building with adequate physical investments. This shows that communities' assets can be strengthened (while supporting appropriate policies, processes and institutions) as part of a sustainable strategy to tackle resource-based conflict in the region (Nori, 2012).

The French and Swiss development cooperation agencies have pursued a similar approach in an effort to secure pastoral cross-border mobility between Chad, Niger and Nigeria, using water investments as the "entry point" to accommodate movements across different ecosystems and to evolve local governance systems accordingly (Nori, 2012).

The capacity of pastoral systems to operate usually rests on strong integration with other livelihood systems, either directly or through contracts and/or markets. Today, most pastoral systems exchange their products and services with those of other livelihood systems. These exchanges benefit as much those living in farming areas, urban centres and coastal regions, all of whom profit from livestock services, regional trade and the value chains of pastoral products (FAFO, 2016).

Functional interactions reveal the importance of peaceful relationships and effective marketing for sustainable pastoral livelihoods. While such interactions are open to conflict, they also enable people to talk to each other across distances and cultural barriers, and to learn to negotiate differences. When identifying pastoral systems, it is therefore important to remember that their boundaries can be porous and changeable, and that this is not a sign of fragility, or the mark of a transitional process, but simply another

way of embedding variability. When identifying the people directly and indirectly affected by pastoral development interventions, the existence of multiple and flexible forms of integration between herding households and other livelihood systems should therefore be kept in mind. Interventions that succeed in investing in these interfaces by promoting or supporting functional integration (without causing harm elsewhere) strengthen all parties, while processes that undermine it weaken them.

## Advocacy and networking

Engaging in the definition of supportive policy frameworks at international, regional and national levels in order to regulate the legitimate rights of pastoralists to their lands is, therefore, critical to ensuring viable livelihoods as well as sustainable management of rangelands. Such a challenge is often a dual one, as it implies working with and through government bodies, while also investing in building the socio-political capacities of pastoral groups to have their needs and interests recognized in the policy arenas. A lasting solution is likely to include not only identifying the right tenure arrangement, but also establishing and supporting effective governance systems that are capable of defending and securing pastoralists' rights to land and resources (USAID, 2011). Community-based participatory approaches, which delegate management responsibility to pastoralists, are more often associated with good results.

Regional and international networks and alliances are being established among community-based as well as international organizations with the aim of strengthening pastoralists' visibility and advocacy capacities in the different fora (Box 10). Pooling resources enables production of studies that enhance knowledge of pastoralism for use by practitioners, decision makers and policymakers, and for advocacy (Box 11).

#### Box 10. The Regional Learning and Advocacy Programme for Vulnerable Dryland Communities

Networks of NGOs are a very efficient way of raising awareness. They operate by promoting thematic studies, best practices and events, often in collaboration with scholars based in local academic institutions. The Regional Learning and Advocacy Programme for Vulnerable Dryland Communities was established in Kenya as a component of the disaster risk reduction efforts of the then European Commission Humanitarian Aid Office (now the Directorate-General for European Civil Protection and Humanitarian Aid Operations). It provided a forum on the experience of the various NGOs engaged in the implementation of the projects funded by the European Commission Humanitarian Aid Office. It produced several relevant publications on resilience and disaster risk reduction, and made important contributions on issues connected to water development in the East African drylands.

Networks, associations and alliances of organizations representing the interests of pastoralists have played an important role in drawing attention to pastoralists' perspectives and needs, mainly in the form of statements and declarations, and by attending the relevant international fora.

#### **Box 11. The World Alliance of Mobile Indigenous Peoples**

The World Alliance of Mobile Indigenous Peoples is an international association of mobile peoples (pastoralists, hunter-gatherers, shifting agriculturalists, sea nomads, etc.) interacting through local and indigenous NGOs, community organizations or customary leaders representing local communities. It originated from international fora – IUCN and the Convention on Biological Diversity (CBD). It started as an informal network of pastoralists, indigenous leaders and customary leaders, and later established its own formal structure, with the support of foundations and international organizations (including IFAD). In the field of biodiversity conservation, it has achieved the adoption of several IUCN Recommendations and provisions in the CBD Programme of Work and in the Aichi Biodiversity Targets. These measures provide a solid basis of international soft law for changing the paradigm in biodiversity conservation, with the emphasis shifting from conventional protected areas managed by governments to recognizing the biodiversity value embedded in mobility and extensive rangeland use, based on customary governance by pastoral communities (Bassi, 2017).

The experience of WISP and the special session on pastoralism at the 2016 Farmers' Forum – both supported by IFAD – are important experiences in this respect (IUCN, 2018; FAFO, 2016). The recent declarations of N'Djamena (2013) and Nouakchott (2013) also indicate that policymakers are starting to properly acknowledge pastoralists' potentials and rights (Box 12).

#### Box 12. Highlights from the declarations of N'Djamena and Nouakchott

"CONSIDERING that the future of the Saharo-Sahelian areas is inconceivable without pastoral livestock herding and the irreplaceable role it plays in economic and social development, as well as environmental and land management. [...] that this livelihood relies on the mobility of herds and families [...]. Put the pastoral livestock sector at the heart of stabilisation and development strategies for the Saharo-Sahelian areas in the short-, medium- and long-term. [...] Facilitating the use of modern communication technology (transport, telephony, Internet) and access to banking services; exploring the options to achieve full network coverage of the national territories; [...] Implementing permanent technical-economic monitoring measures for the main types of livestock, involving research bodies and universities, with a view to strengthening scientific knowledge of pastoral stockbreeding." (Déclaration de N'Djaména, 2013)

"WE, the representatives of the governments of the six countries of the Sahel [...] WHEREAS [...] Pastoralism is a driver of growth, security, peace, stability, and job creation, and contributes to reducing food insecurity, malnutrition, and poverty in regions to which it brings life and structure. [...] Pastoral populations have until now benefited little from national and regional development policies [...]. Public policies, including those involving decentralization, have rarely taken account of the specificities of these populations [...]. UNANIMOUSLY AFFIRM: That viewpoints have changed and pastoralism is now recognized as an effective practice and lifestyle suited to the Sahelo-Saharan conditions. [...] That [...] pastoralism should be placed at the center of strategies and policies promoting stabilization, sustainable development, and national and regional agricultural development, while incorporating issues relating to the sustainable management and equitable sharing of natural resources, political inclusion, security, access to markets, health, education, and gender." (Déclaration de Nouakchott, 2013)

## Institutional development

Securing the institutional framework for the sustainable and peaceful operation of a particular function or process is a core dimension of development, relevant across the whole spectrum of interventions. Investments, assets, facilities, services and infrastructures need to be governed, and these only translate into benefits for people when nested in institutions that ensure this happens. Following the minimum standards, institution-building for pastoral development should support the rationale of pastoral resource management (Box 13).

#### Box 13. What is "institutional development"?

Institutional development acknowledges that assets and infrastructures are to be used by people, and serve particular uses. Institution-building is a way of integrating an asset or a process in the way the pastoral system works. For example, in animal health, a common intervention consists in treating herds with anti-parasites, or the occasional disinfestation of strategic areas such as water points. As isolated events, the impact of these interventions remains very limited. An institutional approach to this issue would involve setting up a parasite-control system. In a hotspot infestation area such as a crowded water point, herders – coming from long distances and pressed to take their animals back to the pasture – could co-manage such a system and provide feedback, but they are in a difficult position to organize it and run it entirely by themselves.

Pastoralists' institutional settings, including their clan-based organizations, information networks and decision-making systems, are tailored to govern large marginal territories and to manage a variable and unpredictable resource base through herd mobility, resource sharing, conflict management and risk-spreading mechanisms using systems of reciprocity and obligations (Box 14). Project design should coordinate with the existing institutional setting, avoiding the proliferation of different models and different powers and funding. Design should consider that existing customary institutions, as well as local knowhow, are usually tied to specific functions and contexts, not general organizational forms deployable for whatever collective action the customary office holders might want to promote.

#### Box 14. The Pastoralist Communication Initiative

The Pastoralist Communication Initiative consisted of a series of projects by the United Kingdom's Department for International Development, housed by the United Nations Office for the Coordination of Humanitarian Affairs in Ethiopia, from 2002 to 2008. It focused on the political arena, bridging communicative and representational gaps between pastoralists and formal state institutions, and promoting mutual communication among pastoralists. It supported the establishment of the Pastoralist Affairs Standing Committee at Ethiopia's Federal Parliamentary Assembly, and favoured dialogue between formal and customary institutions. Its work contributed to the establishment of pastoralists associations at the federal and state levels in Ethiopia. It scaled up activity from the Ethiopian arena by organizing and supporting global gatherings of pastoralists (Brocklesby, Hobley and Scott-Villier, 2010).

#### Valorizing customary institutions

A blending of customary with formal institutions provides interesting opportunities for the effective recognition of pastoralists' capacities to sustainably manage range resources, while also accounting for their rights (Boxes 15 and 16). Dialogue with customary leaders often takes place at the informal level during project design and implementation in pastoral areas, but demands are growing for a formalized approach that systematically takes customary governance into account. This is the case of the Yaaballo Statement on the Borana Conserved Landscape, formulated in 2007 by customary leaders and community representatives of the Borana-Oromo in Ethiopia, following action research in the field of biodiversity conservation (Bassi, Tache and Sora, 2008). With this statement, the Borana invited the relevant actors to assist the community to devise mechanisms to make development agencies accountable to the customary leaders for the sake of sustainable use of natural resources. They also demanded increased capacity to independently assess the cultural and environmental impact of private and public initiatives that might affect their landscape (Bassi and Tache, 2011), a demand that could readily be addressed by adopting the "free, prior and informed consent" procedure.

## Box 15. Successful IFAD experience in managing pastoral conflict by bridging customary and state institutions

In Chad, drawing on the experience of a long line of projects supported by the Agence Française de Développement, IFAD's Projet d'Hydraulique Pastorale en Zone Sahélienne used a participatory approach to implement the government's policy of strengthening mobile livestock systems (IFAD, 2014a). For transhumance corridors, the project set up surveillance/monitoring committees designed on the basis of local knowledge along ancient and pre-existing corridors. Advanced mapping techniques were used to identify and monitor overused and underexploited pastures, and the distribution of wells. They served as a tool for planning water development along the corridors. Local committees have been established for the management of the wells and the natural depressions with ponds, involving local institutions, a representative of farmers and pastoral traditional leaders (transhumant tribal chiefs). Several responsibilities have been assigned to the local committees, including sensitizing all users about the relevance of corridors, protecting them from farming encroachment, and preventing and addressing conflict between different users. (IFAD, 2016:43-6; Jonckheere, Liversage and Rota, 2017).

Bridging customary and formal institutions could provide opportunities to translate pastoralists' social capital into political capital, including pastoralists' capacities to organize, represent themselves and advocate for their interests in the wider political setting, and foster their participation and contribution to policy debate. A good example is the Pastoral Parliament in India, an initiative that, by overcoming differences among pastoral groups, is allowing them to assert their identity, identify as a collective, and generate political momentum. The Pastoral Parliament represents a key space for pastoralists to meet, discuss and take decisions about the issues affecting them, without political, religious or caste-based segregation. Ideally, this should lead to institutions that can sustain themselves economically even after the end of the project. In some cases, the only way then to keep them alive beyond the project is to embed them in the public administration and make the necessary changes to the legal system in order to represent and support them.

#### Box 16. Participation delivers value for money

A rapid assessment of investments in natural resource stewardship in Isiolo, Kenya, revealed that the members of local customary institutions invested KSh 5 from their own pockets for every KSh 1 of support received from the Isiolo County Adaptation Fund (ICAF). Benefits achieved by the end of a single long dry season included reductions in livestock mortality, improved livestock health and increased milk production. The members of the local institutions estimated the value of these benefits at almost 90 times their own investment, and more than 400 times the value of the investment provided through the ICAF (King-Okumu, 2015).

## Promoting gender equality, and women's and youth empowerment

A number of features need to be addressed in order to avoid/limit the risks of opposite outcomes and impacts when specifically addressing pastoral women.

Women as household heads – Women are the main providers of water and energy in the household, often with heavy time burdens. Investments in these domains offer considerable potential to improve conditions for pastoral women. However, it is necessary to be wary of arguments calling for the sedentarization of pastoralists on a gender basis; this reduces women's access to livestock, and therefore to milk, with negative impacts on nutrition (Sadler et al., 2009). It can also reduce women's freedom, as they are more easily controlled in urban compounds than in mobile camps, and the social context in settlements might magnify the perceived need for control (e.g. dress codes are often more relaxed in camps). When sedentarization is presented as a way of increasing access to basic services, especially health and education, the argument operates on the assumption that these services can be provided exclusively within settlements. With the opportunities now offered by the revolution in ICTs, this is now a tradition or a political choice, but no longer a necessity. Finally, being cut off from the bulk of the herd compromises and diminishes women's active role and responsibilities in the pastoral system, which remains one of the main avenues for empowerment in these contexts.

Women as milk managers – Through milk management, women are, importantly, aware about animal physiology and health, although veterinary services rarely recognize this. Regular access to fresh milk is a crucial difference in pastoral systems compared to other rural contexts. The small-scale milk economy, be it formal or informal, including gifts and barter, is typically in the hands of women. It plays a key role as a source of nutrition and income but also in terms of status and social capital. A sound understanding of the gender dimension of food sovereignty in pastoral households is necessary. In its absence, altering the milk economy, and especially the profitability of the milk value chain and its modalities of market integration, can result in the milk economy being taken over by men, with negative consequences on both household food and nutrition security, and on women's income.

**Women as market agents** – Interventions concerned with the economic empowerment of pastoralist women are often transferred from crop-farming contexts (Box 17). The assumption that livestock are kept by women only for subsistence is also common. By assuming that pastoralist women only have a marginal role in the pastoral economy, development interventions can effectively contribute to their marginalization in practice. Instead, pastoral women are particularly keen on developing local value chains, petty trading and alternative income-generating opportunities, as also addressed in the Farmers' Forum Statement (FAFO, 2016).

#### Box 17. Successful IFAD experience of women and pastoralism

In the Plurinational State of Bolivia, an IFAD project recognized and supported women's professional role in the pastoralism of camelids (IFAD, 2006). In Senegal, an innovative participatory evaluation ("évaluation populaire") among pastoralists, enabled women and youth to make their voices heard, and opened up the opportunity for their participation in the design of the second phase of a project (IOE-IFAD, 2004; IOE-IFAD, 2013a). This included a "gender observatory" run by community volunteers (men, women and youth) and aimed to raise awareness on gender equality. In an IFAD project in Chad: (1) 40 per cent of the project beneficiaries were women; (2) rural women from nomadic communities (thanks to training, sensitization and support to local water committees) were represented (38 per cent) in local entities and participated in local decisions; and (3) rural women benefited fully from activities related to meat- and cheese-processing, handicrafts and human health.

## **Engaging in the market**

Since the time when nomadic societies were associated with caravan trading and the extended silk and salt trade routes crossing deserts and mountains in Africa and Asia, markets have been vital for pastoral livelihoods. Today, market integration offers new opportunities to expand and diversify the pastoral economy, but it also poses critical challenges to the sustainability of local livelihoods. Integration of pastoral livelihoods in market-based mechanisms proceeds through: (a) growing commercialization of animal products; and/or (b) the economic diversification of pastoral groups. Investments in this domain will therefore be assessed along these lines.

#### **Accessing markets**

The increasing demand for livestock commodities represents a main driver of market integration of pastoralists. Adequate institutional and technical assistance should therefore aim at facilitating the capacities of pastoral systems to respond to this growing demand, and wherever possible to inform demand and develop marketing so as to match the unique qualities of the products that these exceptionally adapted systems can offer. Indeed, improving value addition in pastoral-system products is a main avenue for stimulating economic growth in arid lands, and a way of breaking the cycle of dependence on food relief in certain regions.

Livestock sales for meat markets represent a traditional opportunity for pastoral economies, with figures that in certain areas are outstanding and represent important portions of regional trade networks – such as Somali and Sudanese sheep serving markets in Saudi Arabia, and the Sahelian cattle trade supplying the West African coastal urban market. Processing and commercialization of milk and dairy products represent an increasingly profitable enterprise in many pastoral regions, stimulating innovative forms of investment, and milk-related value chains provide a range of opportunities for investments aimed at supporting the pastoral economy (Box 18). Today, through the sale of different kinds of yoghurt, butter, cheese and fresh and fermented milk, pastoralists can ensure a daily connection to the urban context. An interesting experience addressing commercialization of local milk products is the programme Lait Sain pour le Sahel, which also provides a useful reference for other pastoral regions.<sup>5</sup>

 $<sup>^{5}\</sup> https://zelsbrucellosis.files.wordpress.com/2015/07/laitsainsahel\_resumes\_seminaire\_03\_03.pdf$ 

#### Box 18. "Milking" drylands

Camels are capable of producing milk also during dry seasons and droughts. Camel milk is a staple item for much of the drylands' population. In addition to its high nutritional value, it is also appreciated for its medicinal properties, and for its capacity to remain unspoiled even in extreme heat. These features have contributed to its recent shift from a local staple into a market commodity, often through women's involvement in Africa (e.g. Kenya, Mauritania, Somalia), as well as in Asia (e.g. India, Kazakhstan). The recent commercialization of camel milk reflects, and induces, important changes affecting pastoral societies. Its increasing role as an income generator in certain regions might provide important challenges to household nutritional patterns and food security (Nori, 2010).

Livestock commodities originating from pastoral areas tend to be undervalued because they are not properly certified, with no or very limited value addition, or because of the large variations in terms of quality and quantity over time (Box 19). Moreover, market prices are influenced by factors that are often not controlled by herding communities. Typical "market failures" associated with pastoral areas include high transaction costs, limited infrastructure base and limited competition in the supply of goods and services. High seasonality and an inability to manage market dynamics disadvantage pastoralists when they want to convert their livestock wealth in times of climatic stress. Experience attests to the fact that, compared to the risks and the costs associated with uncertain production and market conditions, pastoralists often receive a limited/small share of the economic benefits.

#### Box 19. Fluctuating herds

Mongolia's cashmere industry supplies about 20 per cent of the world cashmere fibre market. Following the country's transition to a market economy, goat numbers more than tripled from 5.1 million in 1990 to 18.3 million in 2007 due to the attractive price for cashmere, leading to unsustainable grazing pressure on Mongolia's rangelands. However, in recent years, the price for cashmere has plunged 50 per cent, while the price of flour, the most essential local food staple, has more than doubled. To compensate for low prices, herders, assisted by development agencies, have been increasing supply by breeding more goats – a classic vicious circle where increasing the number of animals is the only option feasible for herders (IOE-IFAD, 2013b).

Monitoring the terms of trade between pastoral and non-pastoral commodities over time (e.g. lambs against cereal bags, or litres of milk against kilograms of sugar) represents an effective way to assess the strength of a pastoral economy and its ability to sustain local livelihoods through market-based exchanges (Box 20). Due to such growing market integration, when the effects of a drought period are compounded by critical events affecting the international market environment, the impact on pastoral livelihoods can be serious. Investments in improving the effectiveness of market information systems is another important domain for enhancing pastoralists' relationships with market dynamics, together with the growing range of opportunities offered by developments in ICTs, with their potential to reduce transaction costs.



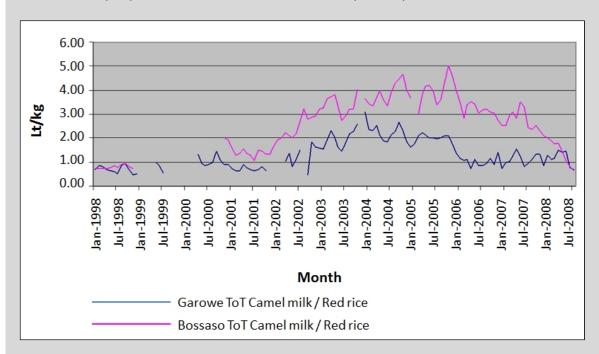
Mongolia © IFAD/Antonio Rota

Growing dependence on market dynamics also has important consequences on pastoral societies — triggering processes of sedentarization, privatization, monetarization of pastoral resources (water, land, labour), and social stratification. Experience shows that poorer pastoral households tend to become more dependent on marketing; they tend to exchange a higher proportion of milk to higher-calorie grains, with potentially negative implications for the health of the household and the herd alike. However, market systems provide consistent and continuous links with the urban environments and economy, which in turn offer opportunities for income generation to vulnerable groups, as well as access to services and assistance in terms of need.

#### Box 20. Monitoring pastoral terms of trade

Monitoring the terms of trade of protein-rich products against cereals and other staples provides relevant indications about the performance of the pastoral economy.

Terms of trade (ToT) - camel milk to rice in Puntland State (Somalia), 1998-2008



These indicators are monitored by various institutions and programmes such as the Food Security and Nutrition Assessment Unit (www.FSNAU.org) and the Reseau de Prevention des Crises Alimentaires (www.food-security.net) for the Horn of Africa and for the Sahel, respectively.

A number of options exist to favour sustainable market integration of pastoral societies depending on the local conditions, with a view to helping create local employment opportunities – especially for pastoral women and youth. These might include support initiatives aimed at:

- adding value to pastoral products by improving local value chains (e.g. dairy diversification, processing and packaging, meat certification schemes, hides and skins-processing);
- reducing transport costs by developing adequate infrastructure (e.g. roads) or facilities (e.g. supporting on-the-hoof livestock trade, equipping livestock market routes, export ports), while also controlling unregulated and often illegal and predatory "taxation";
- decreasing market risks related to animal quality and health conditions (e.g. reinforcing animal health servicing, managing seasonality peaks);
- organizing producers in order to use economies of scale in purchasing certain production inputs (such as the Boutiques d'Intrants Zootechniques, to access cotton by-products in Sahelian countries);
- reducing competition among pastoral producers by organizing producers and by expanding and diversifying trade networks;
- creating specific niche markets (through certification and branding based on the organic nature, excellent animal-welfare practices and reduced health hazards of pastoral products);
- developing schemes to ensure animal health servicing for better livestock quality and pricing;

- assessing opportunities to allow the local use and value-adding of animal by-products;
- helping pastoralists to buffer their seasonal production patterns (e.g. dry meat production) and to cope with prolonged crises (e.g. destocking and restocking exercises).

Another pertinent mechanism for supporting the financial assets of pastoralists is that of livestock insurance, a domain that has been evolving in recent years (Box 21).

#### Box 21. Index-based livestock insurance schemes

Pastoralists have customary mechanisms to manage risks and social welfare. These are often based on the sharing of rights on animals. Financial services such as banking, lending and insurance properly tailored to pastoral needs should aim to integrate and strengthen these arrangements in order to help households survive in bad times and rebuild after losses. However, despite their compelling logic, few experiences exist of buffering risks of pastoral producers vis-à-vis extreme climatic events through financial instruments. In this context, index-based livestock insurance is an interesting model.

Such a scheme has shown interesting potential in Kenya and Mongolia. In order to subscribe to the scheme, herders pay an annual fee based on the size of their herd. The threshold for payouts is a predefined percentage drop in herd size (livestock mortality) based on historical data linking climate to economic impacts in the region. Whenever the mortality rate of an area exceeds that of the predefined threshold, herders receive compensation for their losses. The innovative concept is that insurance payments are not directly linked to the specific performance of a herder but rather to regional data, thus cutting down on the transaction costs related to monitoring and control losses on the ground. In the Mongolian case, funded by the World Bank, a "layered" approach applies, in that private insurers cover a band of 7-30 per cent livestock mortality, while the government meets the payout costs if mortality exceeds 30 per cent (IOE-IFAD, 2013b). In a similar scheme recently tested by the International Livestock Research Institute, with financial support from the office for northern Kenya of the United Kingdom's Department for International Development, a normalized difference vegetation index based on satellite imagery of vegetation growth proved an accurate predictor of livestock mortality. The European Commission has engaged in supporting the follow-up. Similar schemes are also being debated for the Maghreb and Mashreq regions.

#### **Economic diversification**

Although pastoralism is an efficient system, the productivity of rangelands is hardly able to satisfy the development needs of a fast-growing population. While the enhanced integration of pastoral economies into market dynamics has supported a growing pastoral population for decades, this mechanism is showing its limits. It remains unclear to what extent shrinking rangelands can effectively carry the burden of an increasing population, without major productive reinvestments in land itself. Household economies in pastoral areas are nowadays said to "rely on a foot in the rangelands and the other one in town". In some regions, the proportion of income from non-pastoral sources is significant (among many East African groups, it might easily exceed 20 per cent), and economic diversification is an increasingly popular risk-management measure among herding households. The 2016 Framers' Forum Statement specifically advocates for supporting the development of alternative and complementary income-generating activities, in particular those promoting traditional knowledge and practices through capacity-building and institutional-strengthening, and especially those dedicated to women and youth (FAFO, 2016).

This implies that, while a portion of the household/community will continue herding animals as a main livelihood strategy, some "excess" people may move away from pastoralism as a way of life and move towards alternative livelihoods, as is more generally the case all over the world, with rural outmigration having been a trend in recent decades. However, the shifting of livelihood patterns should be an informed and voluntary choice, which requires adequate levels of education, information and decision-making capacities – together with levels of investment that make such alternatives effective and viable. Yet, these options are reputedly scarce in most pastoral regions today.

As discussed, regional and international markets provide increasing opportunities to expand and diversify the pastoral economic base, with demand for animal proteins and also for charcoal, frankincense, mining products, handicrafts, medicinal plants and other products and services. Opportunities offered by tourism associated with environmental services are also increasingly appreciated in a number of pastoral regions – from the Masai in the conservation areas between Kenya and the United Republic of Tanzania to the Jordanian Bedouins in the Wadi Rum, and the Tuaregs of the Ahaggar region in the Algerian Sahara. An example of support to pastoral economies comes from the EU programme Sustainable Integrated Land Use of the Eurasian Steppes, which promotes extensive beef production, sheep-raising and ecotourism as measures to enhance sustainable land use in one of the rarest ecosystems in Europe.

Experience shows that, while some forms of economic diversification enhance welfare, others can increase risk and eventually undermine pastoral livelihoods. The effective way to support the diversification of the pastoral economy is often through activities that aim to complement mobile livestock-rearing, rather than those competing with it.<sup>6</sup> Costly infrastructure programmes that encourage the sedentarization of herding communities often do not represent a good alternative livelihood option. Particularly for poorer groups or destitute families, actions to support their livelihoods should provide opportunities for remaining socially and economically connected to the productive parts of the pastoral society. The rationale of many programmes for "restocking" destitute people goes in this direction – although with some critical aspects that deserve attention.

Evolving relationships with other population groups and land users also provide important opportunities for economic diversification. Complementarities and synergies between production systems that hinge on herding and farming offer significant potential to improve local livelihoods. Such strategic frameworks are critical for enhancing integration, rather than competition, among the diverse land users.

Towns in pastoral areas are growing, and the opportunities they provide in terms of livelihood diversification, information networking, service provision, value addition and marketing are significant. In many areas, local petty trading is an important option for vulnerable groups and individuals, particularly for female-headed households. Destitute pastoralists who have lost their animals and/or access to their lands for one reason or another might find it especially difficult to find an economic alternative to herding. Such groups might require tailored support programmes, aimed at providing them with the skills and capacities to set up alternative livelihood systems and find their place in society (Box 22). Migration is also an important option for pastoral households to receive economic support through remittances, as well as to establish networks and extend their social capital.

#### Box 22. Kenya's Arid Land Resource Management Project

An interesting initiative that aims to proactively involve local communities in managing resources and coping with drought events is Kenya's Arid Land Resource Management Project. Its strategy provides both capacity-building to the local institutional setting and opportunities for locally tailored investment, contingency funds and social protection programmes. This approach has proved effective in supporting pastoralists' risk management strategies. The important impact of such a project relates to its capacity to address the vulnerability of local communities in the short and medium terms while also considering opportunities for investments at different scales. Thus, it has inspired longer-term development strategies, such as the establishment of agencies within government that specifically look into policies and investments in northern Kenya and other arid lands (Johnson and Wambile, 2011).

<sup>&</sup>lt;sup>6</sup> This remains the most effective way of managing livelihood risk in these environments (COMESA/CAADP, 2009).

## Strategic recommendations

Development projects in pastoral areas have not only often failed to achieve the expected results, but they have also often produced the opposite outcome of reducing the viability of pastoral systems. The problem has been one of a prevalence of incorrect assumptions and cultural bias about the efficiency of the existing pastoral practices, which in turn has favoured approaches based on the transfer of alien models and the promotion of top-down and engineered development. The attempt to radically transform productive practices has implied change in land and resource tenure, a process that has especially affected middleand low-wealth pastoral families, with their women and children. The failure to recognize the importance of the mobility of herds and people, with the connected flexible governance of pastoral resources, has been a major constraint. For several decades, policy has been based on the assumption that services can only be provided to sedentary communities, promoting the idea that sedentarization is a precondition for development. The review of the lessons drawn from recent experiences shows that very positive results can be achieved by building on existing practices, introducing corrective measures and designing provision of services tailored to the mobile lifestyle of the pastoral communities. This implies recognizing the centrality of people with their own lifestyle, culture, values, productive practices and governance of natural resources. It is a shift from "developing pastoral areas" - where the specific disadvantaged communities are not "seen" or considered – to "engaging with pastoralists" for the design of development measures that, by adopting a holistic approach, address the problematic aspects of the social, economic and political life of pastoral communities. Building on its long experience with disadvantaged rural communities, IFAD has developed a wide range of sector policies and operative instruments that equally apply to pastoralists. However, pastoralism demands that they be applied having in mind the specificities in terms of scale of pastoral systems, social adaptation to difficult environments, mobile lifestyle, seasonal access to natural resources and flexible tenure, customary norms and institutions, and economic, social and political marginality within and across states. Such issues are addressed in the How to Do Note of this pastoral management toolkit.

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