



Pastoralism in Sub-Saharan Africa: Know its Advantages, Understand its Challenges, Act for its Sustainability

On the global scale, extensive pastoral production accounts for 10% of total meat production (or a billion head of camels, cattle and small animals on all continents)¹ and supports some 200 million pastoral households. Yet, despite the considerable benefits conferred by pastoral production systems, they are often denigrated as being archaic. [R1] On the African continent, despite these subjective views, pastoral systems are showing remarkable vitality. Spread out from east to west, some 50 million herders and up to 200 million agropastoralists live in arid and semi-arid zones in Africa. They own a third of livestock and half the small ruminants; they supply 60% of the beef, 40% of the meat from small ruminants, and 70% of the milk of this group of countries. [R2]

At a time when pastoral communities are going through a multitude of crises (drought, spoliation of natural and land resources, conflicts between farmers and herders), going so far as to find themselves victims of armed conflicts in the Sahel,² it is increasingly necessary to provide keys to understanding their production systems, values, potential, constraints and even the challenges they need to overcome to ensure sustainability.

In recent years, much research and many studies have provided a more nuanced vision of pastoral systems, their specificity, their adaptability, and their interest. This summary does not claim to be exhaustive. Instead, it seeks to emphasize a few keys to understanding the dynamics and challenges of pastoral systems. [R4]

1. Knowing Pastoralism Through its Many Economic Benefits

Pastoralism goes beyond the simple form of traditional herding whose economic benefits would be limited to only the resources derived from the sale of meat, milk and by-products from herding (leather, horns). [R5] Yet, national economies focus too frequently on these indicators, ignoring the social, safety and ecological advantages that mobile livestock raising confers on economies. This tendency is intensified by the often informal nature of transhumant herding activities, notably when it comes

to the sale of live animal that, avoiding customs posts at borders, is not counted in States' already little reliable statistics. This section aims to present the various facets of pastoralism's economic value, whether direct (taking into account measurable production and economic weight in agriculture and job creation [R6]) or indirect (because not always identifiable through monetary exchanges).

A. Various Direct Economic Benefits

Pastoralism, an efficient production system. Pastoralism is a production system that attempts to maximize productivity by exploiting grazing imbalances, a predominant characteristic in the Sahel and northern Sudan. [R4] Research has recently shown that pastoral systems in these zones are 20% more productive than sedentary animal rearing systems. [R1]

Managing products with high economic value. Among the direct economic values of pastoralism, we can cite: (i) income from the sale of pastoral products (meat, milk, leather and hides), despite under-exploitation of high potential for value addition on products (notably through processing); (ii) the stimulation of considerable national, sub-regional and international livestock trade (see Part 1.2); and (iii) the provision of raw materials for

local industries (dairy and non-wood forest products (NWFPs) such as gum arabic).

Pastoralism also provides various services to other sectors and therefore makes up a complementary resource for the country's overall economy, supplying not only services to the agricultural sector (animal traction, fertilizer, labor) that result directly in increased agricultural yields and environmental benefits, but also financial services—investment opportunities in livestock for rural populations that do not have access to a reliable banking and savings system, insurance (the herd is a true safety net in herders' risk management strategies). Finally, the sector supplies many jobs for pastoral communities and a wide diversity of actors involved in livestock marketing circuits and value chains for other products. [R6]

¹ "New challenges and opportunities for pastoralism in ACP countries", Brussels Policy Briefing No. 26, Feb. 2012, CTA: http://brusselsbriefings.files.wordpress.com/2012/02/br26_pastoralism_note.pdf

² Read the call by the Billital Maroobé network: www.maroobe.org/IMG/pdf/Plaidoyer_pour_le_pastoralismeVFF-4.pdf

A Numerical Tour of Africa and the Economic Value of Pastoralism [R4]

In terms of the pastoral product supply and populations' food supply

- Pastoral and agropastoral systems in the Sahel contribute more than 80% of the animal product supply. Pastoralism there accounts for 70% to 90% of cattle rearing and 30% to 40% of sheep and goats. Transhumant pastoralism supplies an estimated 65% of beef, 40% of mutton and goat meat, and 70% of milk (*Promoting and Supporting Change in Transhumant Pastoralism in the Sahel and West Africa*, ECOWAS, CSAO, Policy Note No. 3: <http://www.oecd.org/dataoecd/35/14/38402714.pdf>)
- Animals that have traveled more than 450 miles from southern Somalia account for 26% of the beef eaten in Kenya and 16% of the beef eaten in Nairobi.
- The traditional herding in Tanzania is the source of 70% of national milk production, which came to 770 million liters in 2006.

In terms of national GDP

- In Mauritania, stock-farming contributes 70% of total agricultural GDP.
- In Uganda, herders and small stock farmers contribute 8.5% of total GDP.
- In Ethiopia, the stock farming sector ranks second in foreign currency generation. In 2006, Ethiopian exports of livestock and products from stock farming generated 121 million US dollars.
- In Kenya, the livestock raised by pastoralists accounts for 800 million US dollars per year.
- In Mali, live animal exports amounted to 44.6 million US dollars in 2006.
- In Chad, the livestock belonging to pastoralists makes up one-third of exports and feeds 40% of the population.

B. Close Up on Pastoralism's Role in Generating Considerable Livestock Trade

When it comes to the livestock trade, the numbers speak for themselves. In West Africa, official cross-border trade represents more than 150 million dollars and the sector's expansion potential is even greater. Bets are on 250% growth in the demand for products from animal farming in the Sahel and West Africa by 2025, mainly under the influence of urban population growth, notably in coastal countries.

In East Africa, the intra-regional livestock trade constitutes a large and booming industry with an annual value of more than 65 million US dollars. [R6]

Beyond generating considerable currency for national economies, the livestock trade is also profitable for transhumant pastoralists and their families, and generates non-negligible tax revenues for local governments. [R6]

C. The All Too Often Ignored Indirect Economic Benefits of Pastoralism

Beyond the direct services and benefits that pastoralism provides to national wealth, pastoralism provides multiple indirect services that are rarely quantified, often poorly appreciated and ultimately under-evaluated. Pastoralism has a stabilizing effect on societies that live in marginal, sometimes hostile zones [R3] and is therefore a source of peace and security. It is also a social asset because it is rich in important know-how that is spread within society and along transhumance routes.

activities, the elimination of dead biomass at the end of the dry season, and preparing the land to supply new grasses. Pastoralism also helps limit bush fires, plays a role in natural land fertilization, and facilitates water penetration into the ground through animals' trampling of the ground. Transhumance also enables the transportation of seeds to increase plant biodiversity. By utilizing and maintaining these natural areas, pastoralism has an impact on carbon fixation and therefore improves the GHG emission balance.

Pastoralism is also one of the production systems with the most diverse environmental benefits, and we know that ecological land management is a true source of economic benefits over the medium and long term. Among these environmental benefits, we can first cite the exploitation of natural areas unsuited to other

Finally, pastoral systems do not require one to invest in clearing land, or buy fences, costly surveillance systems and chemical products to regulate the ecosystem. [R5]

2. Understand the Stakes Behind Pastoralism: Mobility, Adaptability and Innovative Capacity

Pastoral societies are currently facing many challenges in the face of population growth and urbanization, changes in land use, commoditization of activities, monetarization of trade, globalization and the multiplication of conflicts. [R6] Despite long-standing predictions that pastoralism will progressively decline,

we are forced to note that it is resisting and adapting, notably through the diversification of mobility strategies, multiplication of activities, and many changes and innovations in production techniques. [R3]

A. Securing Mobility: Why Is this a Sizable Challenge?

One of the first conditions to preserve pastoral stock farming in sub-Saharan Africa (SSA) is to secure its mobility. Indeed, mobility is the only way to access water and pastures, maximize animal productivity, and access markets. In addition, the need for mobility imposed a culture and rules that allow several production systems to coexist with a minimum of conflict. [R6] This is why pastoralists' mobility is essential, in several ways.

as possible before the dry season, and optimize dairy production and the nutritional quality of the meat. In the dry season, mobility through transhumance makes it possible to move herds over variable distances, often across borders, in search of pastures and water. Mobility is therefore essential for production. [R5]

Be mobile to produce better. In the rainy season, mobility aims to access the richest pastures when they are the most nourishing (this depends on the quantity of rain, stage in the plant growth cycle, soil, etc.) in order to allow animals to gain as much weight

Be mobile to access markets and generate incomes. The mobility of pastoral stock farming allows herders to access markets to sell livestock, which are often far from the best production zones. These marketing opportunities are also purchasing opportunities for traders and intermediaries for whom demand is growing (notably in large urban centers), and also for

farmers selling grain, necessary food for pastoral households, on these markets. These transactions can be local, national or even international. Often, the trade implies covering long distances and moving animals safely therefore plays a pivotal role.

Move to escape risks. Mobility allows pastoral communities to adapt to exceptional events (drought, illness, conflicts) by going to less risky zones. In some extreme and increasingly frequent cases in sub-Saharan Africa, this means fleeing armed conflicts that threaten herds and pastoral communities as a whole.

This mobility is only possible and effective based on a very specific social organization. When demographic pressure is rising, it is crucial to organize the movement of communities and their herds based on the information on water and pasture quality gathered by scouts. This social organization of mobility is based on building and maintaining alliances with sedentary communities along the routes taken by herders.

Mobility relies on vast social networks and the rapid collection of information on quality grasslands. [R6] When movement is planned, scouts are sent ahead to evaluate the state of pastures and begin negotiations with the other groups. The scouts need to have very solid knowledge of the brush and of the animals that belong to the group. The information collected by scouts from other herders and visual inspection is discussed within the transhumant group, but the final decision is up to each household.

B. On the Diversity of Pastoralists' Adaptation Strategies

While weather variability is the main determinant in transhumant pastoralism, pastoral systems also adapt in relation to other changes that are social in nature or related to market connections and laws; these changes require adaptation strategies that act on other means (see the forthcoming publication: *Crop-Livestock Production Systems in the Sahel: Increasing Resilience for Adaptation to Climate Change and Preserving Food Security*, CIRAD, FAO, 2012). Drawing their knowledge from transmitted,

inherited traditional wisdom, pastoralists apply these strategies and adapt them to the context to grasp opportunities rapidly and overcome the constraints they encounter. In this way, they constantly develop new strategies, more than simple mobility modifications, central as we saw above, by adapting transhumance circuits suited to new contexts and new risks. [R3]

Illustration of Adaptation in Strategies:

The Oudah in Niger and Nigeria combine the yearly dispersion in pastoral zones conducive to rainy season grazing with a systematic visit to the regional capital, Zinder, to access the best health services available along their routes.

Agropastoralism, a method of activity diversification and a source of income. The succession of weather crises in the 1970s and 1980s fostered the emergence of agropastoralism. [R2] Agropastoralism is the practice of combining farming by sedentarizing the household with pastoral stock farming by maintaining herd mobility. It is currently the most frequent security strategy in Sahelian and Sudanian zones because of the high level of complementarity between the two activities. This form of sedentarization facilitates access to medical care, school and supplies, as well as facilitating participation in the political life of the country. [R3] It also facilitates the addition of value to pastoral products through the proximity of consumption markets, notably for perishable dairy products.

Risk reduction strategies in the pastoral production system. Pastoral stock farmers have developed a wide range of strategies concerning their production systems. These strategies can

consist of: selecting and using different species or races of livestock (knowing that indigenous races are the best adapted) to optimize use of various ecological niches, in particular in the dry season when resources are rare; managing herd composition in regard to age and sex to meet the dual challenge of meeting household needs and preserving herd viability; and splitting up herds to avoid the risk of over-grazing. The fact of investing in animals is also a risk management strategy because the herd acts as insurance against the risks of drought, illness, theft, etc. [R5] Finally, lending "excess" animals to the needy preserves social cohesion and makes up a sort of social security system. [R5]

Among other strategies, there are also activity diversification (trade, salaried labor, services) and migration of family members (to cities or foreign countries) who can make significant contributions by sending money.

C. Pastoralism and Innovations: Mobile Systems Are Constantly Modernizing

Despite the unique mode of life and geographic isolation of pastoral communities (often established in distant and hostile lands), they are however well integrated in global processes and have shown themselves to modernize constantly. Today, pastoralists follow livestock market prices on cell phones, and drive inexpensive Chinese motorbikes to join their distant herds and follow their animals over hundreds of kilometers to sell them on national or international markets. [R6]

Developed economic innovations. Some herder communities innovate and process milk into cheeses and other by-products (curdled milk, yogurts, sweetened beverages made from whey) to preserve it. This is notably the case with the Peulhs in northern Benin. Similarly, to add value to livestock, setting up self-managed markets with specific regulations favoring stock farmers make it possible to obtain better sale prices. This is also the case for grouped sales. [R4]

Spotlight on Innovations: [R4]

Self-managed or co-managed markets. These markets, which often require infrastructure investments, are managed by a farmers' organization or management committee. The market, requiring annual memberships from participants, brings together all the main actors concerned (herders and agropastoralists, butchers, traders, witnesses, shippers, etc.). The transactions take place directly between buyers and sellers. The prices are therefore more transparent because of this overt direct relationship. The intermediaries are not completely eliminated, but confined to the role of witness. They authenticate the transactions for the two parties. For doing so, they receive a fixed fee for each authenticated transaction. It is not therefore a question of eliminating a link in the chain but rather restricting the role that the former intermediary played.

Group sales tested by farmers' organizations' umbrella structures. This method of organizing livestock sales takes place through the grouping of animals ready to be sold by a group of herders in the zones of departure, in this case the Sahelian and Sudanian area. This grouping of animals is done by a single umbrella structure that targets joint and direct transport to terminal markets, without going through any intermediary market structure. This form of organization requires prior negotiations with wholesalers in terminal markets on quantity, delivery dates and prices.

Finally, in regard to financial products, tools have been developed and tested in recent years. They are opening loans to pastoralists and offering drought insurance schemes, among other things. [R6]

Suitable technological innovations. Cell phones have been adopted by pastoral communities. Pastoral herders use them

frequently to verify the state of pastures and water points with scouts, compare market prices and minimize cattle theft by rustlers. In addition, some associations are setting up their own websites. [R6]

Other innovations, notably organizational and social innovations, exist and are discussed in the next section.

3. Acting for Sustainable Pastoralism: Technical, Organizational and Policy Keys

Pastoral communities must overcome multiple challenges, but their voices are too rarely heard. Yet, the characteristics of their mobile activity make supporting them very specific. What policy and technical decisions must be made so that pastoral populations sustainably maintain or even increase their services

to economies, human societies and the environment? How can pastoral activities be supported so that the populations concerned improve their living conditions? Are we turning today toward policies that allow pastoralism to overcome its constraints and preserve its viability? A partial answer. [R3]

A. The Status of Policies and Laws on Pastoralism in Sub-Saharan Africa

In Africa, support policies targeting pastoralism differ depending on the geographic zone considered. Thus, the Sahel has progressively availed itself of legislative tools and policies that are more favorable to pastoralism than those in East Africa. In Ethiopia and Uganda, for instance, policies tend to favor the sedentarization of pastoralists and their herds, which is not really the case in the Sahel with the exception of Burkina Faso.

International Transhumance Certificate). In addition, on the national level, pastoral laws and codes exist in Guinea, Mauritania, Senegal, Mali, Burkina Faso and Niger; and numerous bilateral agreements also address cross-border movement. Finally, pastoral organizations in the West African sub-region have been mobilized for several years now to harmonize texts governing cross-border transhumance between the various countries.

Decision A/DEC.5/10/98 by the ECOWAS Heads of State in 1998 facilitated cross-border transhumance (with the adoption of the

Definition: the International Transhumance Certificate. "A tool set up by ECOWAS to allow herders to move from country to country. It is delivered by the stock farming service at livestock entry posts. It also allows the receiving State to verify animal health. Prior to delivery of the certificate, the number of animals and their itinerary must be communicated, and the herder must present the documents attesting to this information at the border before continuing on his way." (Excerpt from an interview with Dodo Boureima, Executive Secretary of the Billital Maroobé Network (RBM)).

However, implementation of these policies is still inadequate. The observation in the previous point does not preclude pastoral herders in the Sahel from encountering many constraints in the field because of a lack of application of these policies and laws.

participatory process comprising regional assessments is planned for its operational implementation).

On the Pan-African level, a framework for pastoralism has emerged. Following a process (2006-2011) led by the African Union, a policy framework for pastoralism was validated in 2011. The objectives of this framework are: (i) act as an advocacy tool to promote pastoralism, (ii) enable the recognition of pastoralists and protect pastoralists' rights, and (iii) be a political pledge to support pastoral communities and provide them with arenas for dialogue (a task force was also set up within ECOWAS and a

While these policy frameworks exist, their implementation is also lacking and the multi-sector nature of pastoral community development weakens their consideration in certain sectors. In recent years, it can be seen that two areas have been the subject of particular attention: laws concerning pastoralism as seen above (notably greater recognition of mobility), and infrastructures (pastoral water, marking transhumance routes, general interest infrastructures: schools, grain banks, health care centers, etc.). However, one can deplore the fact that in addition to actions to make pastoral mobility safer, instigating the equally essential establishment of quality services adapted to mobility

such as basic education and animal and human health care is a struggle. [R3]

B. The Importance of Access to Basic Social Services for Pastoral Communities

Pastoral communities are the first ones excluded from primary social services (health, education). These communities are all too often forgotten by development and decentralization programs and are rarely targeted by public investments (*Le pastoralisme, enjeux et perspectives des politiques sectorielles: Éléments d'analyse régionale pour le Tchad, le Niger et le Mali*, Bonnet & Guibert, 2011: <http://www.iram-fr.org/pdf-publications/506.pdf>). [R7] Yet, basic social services—and education and health at the top of the list—are primordial for pastoral communities. For instance, access to animal health services is decisive in communities' survival. Without herds, incomes are also threatened. For its part, educating the children of nomadic families meets essential needs: acquiring the technical skills to conduct stock farming activities, and learn about individuals' future social roles, a factor in children's integration and socialization. [R8]

Today, schools are widely recognized by herders as being a useful factor in integration. They notably see an interest for developing small retail businesses and earning the recognition and respect of society. [R8]

Risks, constraints and issues in relation to access to health care and education. This lack of basic social services suited to these communities compromises the very sustainability of the model: they may be forced to become sedentary as a last resort. [R7]

Access to care must be a priority to lower the risk of maintaining outbreaks of illnesses eradicated in the rest of the country among both people and animals. Community human and animal health agents and traditional midwives provide important services through stationary or mobile clinics. However, many obstacles remain: mistrust between those who provide social services and pastoralists, lack of consideration for pastors' priorities when it comes to health, pastors' preferences for traditional medicine/treatments, etc. [R7]

Education is all the more crucial in modern society because, without it, pastoral communities are condemned to a live on the sidelines of national politics and the national economy; they are unable to protect their civil rights, for example access to natural resources. [R8] What are the main constraints on the education supply in pastoral zones? The distance and low density make it difficult to attract qualified teachers; the inadequacy or unsuitableness of education infrastructures; educational curricula rarely adapted to pastoral modes of life; absenteeism among herders' children who are called on heavily to work. The low availability of jobs outside the stock rearing sector slows the supply of secondary education. Finally, insecurity can be a threat to school attendance. [R7]

Possible solutions, presentation of innovations, partial proposals. Innovative systems in both the health and education sectors have been tested and some have proven themselves.

In the field of health, it has been shown that combining mobile and stationary health services (strategically located in pastoral

zones) seems to be the best response to sustainable service conditions. In some countries, many pastoralists have received training as "health aids." Trained in animal health, they are in charge of care and purchasing from pharmacies or veterinary health centers. Combining animal health services with human health services is also a solution. Indeed, animal health is of great importance for pastoralists, as is the health of family members. In Chad, one project proposes the combination of vaccination services for pastoralists' wives and children with livestock vaccination services: sharing transportation logistics and equipment between doctors and veterinarians made it possible to cut total costs and the combined supply of human and animal health services is suitable and strongly appreciated by pastoralists. [R7] This strategy has also been beneficial in northern Mali where setting up mixed (human and veterinary) mobile health teams made it possible for 20,000 people to receive preventive care and improve the safety of their herds and therefore their means of survival. Such systems make it possible to generate economies of scale (*Le service mixte de santé humaine et animale en zone pastorale: une expérience innovante et prometteuse*, AVSF, 2010: http://www.ruralter.org/index.php?option=com_flexicontent&view=items&cid=17%3Abase-de-datos&id=300%3Ale-service-mixte-de-sante-humaine-et-animale-en-zone-pastorale-une-experience-innovante-et-prometteuse-&Itemid=100002&lang=fr).

In the field of education, different approaches to supplying educational services for pastoral communities have also been beneficial, notably stationary or mobile community schools in which pastoralists are involved in designing the education supply. Boarding schools for pastoralists can be successful if school fees remain low. Initiatives from other regions of the world also provide many lessons: for example, tent-schools in Iran and Mongolia are managed by teachers who are pastoralists paid by the government (it should be noted that this system is easier in a context where pastoral transhumance takes place mainly between summer and winter pastures in these geographic zones). Functional literacy for adults, when it covers subjects of immediate interest—management, accounting, legal procedures and rights—also receive definite enthusiasm. Finally, boarding schools combined with distance learning (notably through radio stations) have proven themselves. [R7]

The adoption of technologies can, what is more, facilitate the supply of educational services. A study in Chad presents new technologies that have proven themselves when it comes to access to education: for example, the radio in Kenya, and highly successful literacy campaigns in Somaliland. Cell phones are also the subject of promising experiments, for instance in Bangladesh where a mass literacy through mobile telephony initiative was developed. Finally, innovations using Internet (virtual classrooms) are also an option, even if implementation still seems premature in sub-Saharan Africa. [R8]

C. Arenas for professional, social and territorial consultation, for greater political mobilization and social peace.

Institutional changes offer opportunities. Sahelian pastoralists have been able to adapt to vast policy and institutional changes such as the instigation of a multi-party system and decentralization often involving new territorial divisions; this led to clear progress in their involvement in local decision-making bodies. Thus, the decentralization process underway or complete in most countries, which notably gave local governments responsibility for managing natural resources, offers local arenas for consultation suitable for these communities. [R3]

Organizational innovations and innovations in terms of social and political alliances are emerging. In addition to the social innovations through increasingly frequent inter-ethnic marriages, which foster cultural diversity within pastoral communities, other strategies are being increasingly developed by pastoralists to pacify their relations with other categories of actors (building alliances with farmers). For commercial purposes and advocacy targeting different categories of actors, pastoral communities are mobilizing their members and adapting their traditional annual gatherings into forums associating the responsible administrations, development partners, local governments, etc. These events also take on a strategic dimension to demand rights and the passage of laws suited to their constraints from the authorities. They are, what is more, generally organized in cross-border areas, strategic spaces that are often problematic for these communities. [R6]

Organizations are becoming structured and founding regional networks to take action and make demands.

Conclusion

Pastoral systems have resisted a succession of multiform crises in recent decades. Although current policies seek to encourage the sedentarization of these populations, decision-makers must understand that this option can be harmful and threaten the livelihoods of millions of people, particularly as climate variability is accentuating. Mobility is one of the conditions for maintaining these communities that, in addition to providing considerable wealth to States, provide more comprehensive benefits for society. Let us cite a few: food security and the nutritional quality of food, resilience in the face of climate change, and social peace, a non-negligible stake in the Sahel today. Today, stock farmers and herders in sub-Saharan Africa are increasingly vulnerable to crises. This is above all due to a reduction in their access to essential resources, their loss of mobility (cross-border transhumance issues are primordial here), and the de-capitalization of their herds (due to the lack of support for these communities).

Land tenure security, barely touched on here, is of course crucial and must receive considerable attention. The threat of large-scale land grabs combined with the sedentarization trend among

Pastoral herders have been structured on local and national scale for several decades, but their organizations are tending to get stronger—notably on the regional level—through the establishment of regional networks. This type of structure is all the more relevant as pastoral issues must be tackled on the sub-regional scale to take into account one of its main characteristics: mobility via cross-border transhumance. In West Africa, the oldest network, APESS (website: www.apessafrigue.org), is now entering a proactive stage of strategic development “for modern smallholder stock farming for life” (see: <http://www.inter-reseaux.org/ressources-thematiques/les-notes-d-inter-reseaux/article/apess-une-nouvelle-dynamique-est>). In addition, the more recent Billital Marobé network (RBM, website: www.marobe.org) brings together pastoral communities from seven countries in the sub-region through relay branches represented by national pastoral organizations. Beyond the networking function of these organizations with the aim of discussing shared constraints and good practices, RBM aims above all to mobilize its members to build advocacy positions targeting policies in order to influence the establishment and operational nature of actions that benefit the sustainability of pastoral systems. Both of these two actors—APESS and RBM equally—are now seen as unavoidable by politicians and development partners; what is more, they are closely involved in consultation arenas set up by ECOWAS as part of the definition of instruments to implement the regional agricultural policy (ECOWAP).

many pastoral families raise questions as to their rights in regard to available land.

This brief also reminds readers of the importance of access to fundamental social services to ensure part of these communities' development and their integration in societal discourse, a basic part of allowing their voices and very specific expectations to be heard.

It is high time that pastoral communities receive favorable policies, notably through widespread awareness of their economic weight. Beyond the elaboration of policy frameworks, it is necessary to guarantee their implementation through suitable, multi-sectoral and decentralized measures taking into account actors' reality.

Finally, pastoral organizations, notably regional networks carrying strong dynamics and valuable information, must be strengthened when it comes to structuring and involvement in policy elaboration and institutional governance in the broad sense.

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<http://www.fao.org/nr/tenure/land-tenure-journal/index.php/LTJ/article/viewFile/37/77>

R2 Livestock and Regional Market in the Sahel and West Africa: Potentials and Challenges, ECOWAS, CSAO, 2008, 150 pages. This study provides a broad analysis of the conditions that allow the stock farming sector to play its role effectively as a driver of economic development on the national and regional levels. Chapter 3, "Economic, Social and Environmental Issues Involved in Pastoralism", examines pastoral stock farming more specifically.
<http://www.oecd.org/dataoecd/10/8/41848366.pdf>

R3 Pastoralisme en zone sèche. Le cas de l'Afrique subsaharienne. Comité Scientifique Français de la Désertification, February 2012, 64 pages. This dossier covers sub-Saharan pastoral systems, their relevance, their many roles, the threats to them, and the interactions between pastoralism and natural resources. It also questions the conditions necessary for sustainable pastoralism.
http://www.csf-desertification.org/index.php/bibliotheque/doc_download/147--toutain-bernard-et-al-2012-pastoralisme-en-zone-seche-le-cas-de-lafrique-subsaharienne

R4 Etude régionale sur les contextes de la commercialisation du bétail / Accès aux marchés et défis d'amélioration des conditions de vie des communautés pastorales. IRAM, SNV, April 2009, 96 pages. This study provides keys to knowing and understanding how the "live animal" commodity chain operates on the scale of West and Central Africa. It presents how the trade is organized, livestock trade policies, commodity chain operations at all levels, and innovations in the field.
http://www.reca-niger.org/IMG/pdf/Rapport_Commercialisation_betail_IRAM_SNV_2009.pdf

R5 Pastoralism: Drylands' Invisible Asset? Developing a framework for assessing the value of pastoralism in East Africa. IIED, October 2006, 30 pages. Based on a presentation of the direct and indirect economic value of pastoralism and the challenges involved in evaluating these contributions, this report examines the development of an economic framework to improve overall consideration of pastoralism in the economy of East Africa.
<http://pubs.iied.org/12534IIED.html>

R6 Modern and Mobile: The Future of Livestock Production in Africa's Drylands. IIED, October 2009, 88 pages. This publication examines the vital role played by mobile stock farming in the economic prosperity of Africa's drylands. Full of interviews, technical notes and illustrations, this book defends the mobility of livestock keeping as a modern solution to poverty alleviation and accelerated development in Africa's drylands.
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R7 Learning from the Delivery of Social Services to Pastoralists: Elements of Good Practice. IUCN, WISP, UNDP, November 2009, 37 pages. This study presents innovative methods for the supply of social services to pastoral communities. It presents a literature review of existing initiatives, illustrates the types of services that exist with examples in the areas of health and education, and offers information on good practices.
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R8 Education en milieu pastoral, Chad Ministry of Stock Farming and Animal Resources, AFD, September 2010, 39 pages. The purpose of this study was to identify different scenarios that could be examined to develop nomadic education in Chad, and assess their strengths and weaknesses and the policies and actions necessary to implement them.
<http://www.iram-fr.org/pdf-publications/562.pdf>

These *Food Sovereignty Briefs* are a joint initiative by Inter-Réseaux Développement Rural and SOS Faim Belgium. They aim to provide summaries of food sovereignty-related subjects based on a selection of particularly interesting references. They are published every quarter and distributed digitally. SOS Faim Belgium (www.sosfaim.org) supports farmers' and agricultural producers' organizations in roughly fifteen countries in Africa and Latin America. Inter-Réseaux Développement Rural (www.inter-reseaux.org) is an association that aims to promote networked discussions, exchanges and reflection on the subject of rural development in developing countries.

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