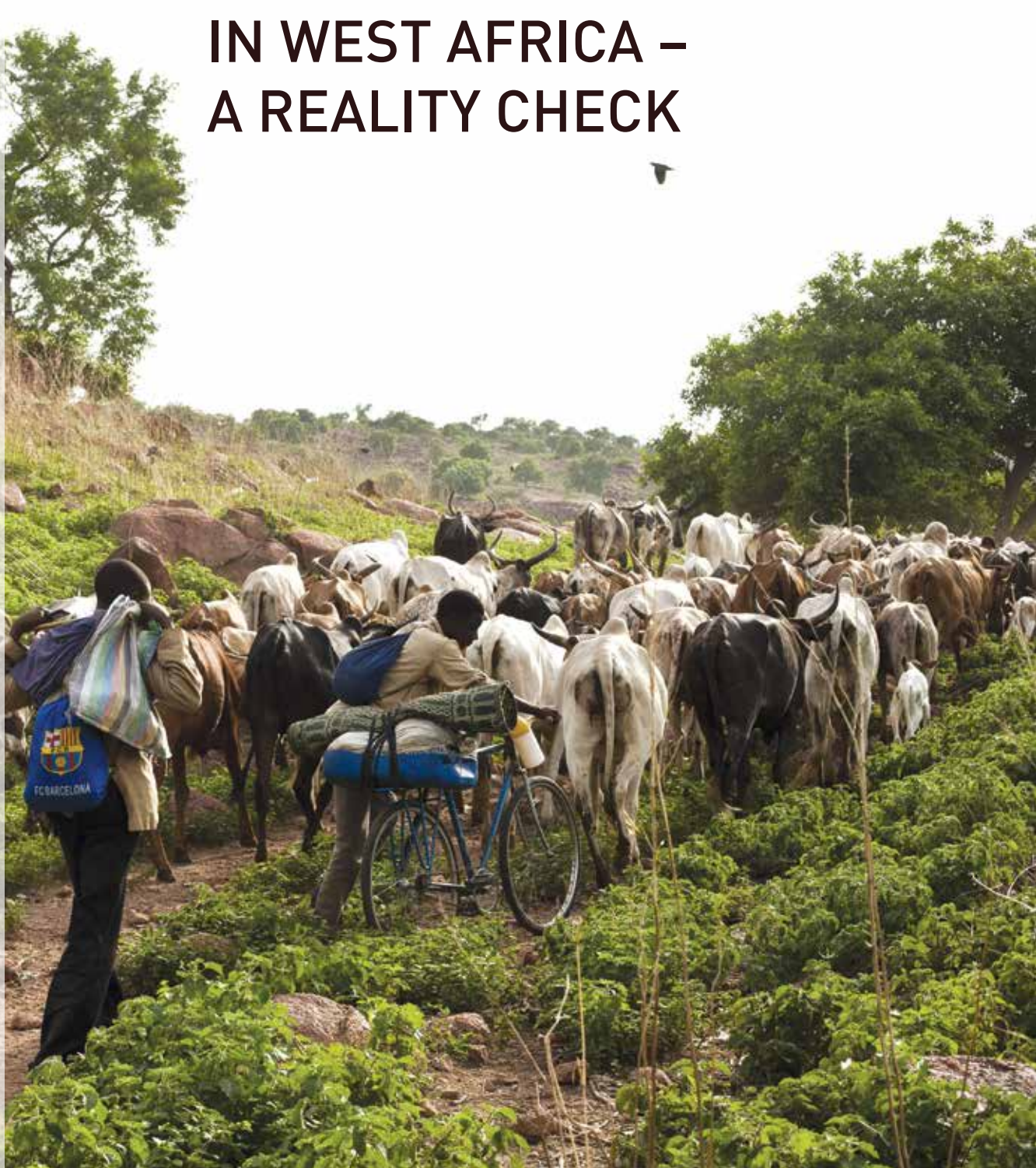




A Research Study on Transhumance in the Sahel (2014-2017)

10 KEY FINDINGS ON LIVESTOCK MOBILITY IN WEST AFRICA – A REALITY CHECK



**ACTING
FOR LIFE**



Editorial team:

Brigitte Thébaud (Nordic Consulting Group),
Christian Corniaux (CIRAD-PPZS, Dakar),
Arnaud François and Annabelle Powell (Acting For Life)

English adaptation by Dolf Noppen (Nordic Consulting Group)

The suggestions and opinions expressed are those of the authors only.

Cover photo:

Herds from Burkina-Faso returning from transhumance in Togo (@Gilles Coulon/Tendance Floue for AFL, 2016)

Graphic design:

©Sandra Derichs

A Research Study on
Transhumance in the Sahel
(2014-2017)

**10 KEY FINDINGS
ON LIVESTOCK MOBILITY
IN WEST AFRICA –
A REALITY CHECK**

March 2018

This brochure has been prepared as part of the project “Strengthening Resilience through Livestock Mobility”, implemented by Acting For Life together with local partners, funded by UK-Aid and co-financed by the European Union.



**Groupement National des
Associations des coopératives
Pastorales**



**Initiatives-Conseils-
Développement**



**Réseau Billital
Maroobé**



**Entente des Groupements
Associés pour le développement
à la Base**



**Lay Volunteers International
Association**



**KAWRAL
AYNAABE**



**Comunità Impegno
Servizio Volontariato**



ONG-TASSAGHT



**Vétérinaires sans
Frontières-Belgique**



**Conseil Régional
des Unions du Sahel**



**Association pour
le Développement
de Namarel**



**Réseau de Communication
sur le Pastoralisme**



**Association de Développement
Intégré et Durable**



**Union Régionale
Filière Bétail-viande**



**Association Citoyenne
Pour la Défense des Droits
des Enfants et des Femmes**



GAJEL Sudubaba



**Association pour la Redynamisation
de l'Elevage au Niger**

FODEPA-SUD

**la Fédération des OCB pour
le Développement du Pastoralisme
et de l'Agropastoralisme
dans la zone sud**

SUMMARY

Introduction	5	FINDING 6	17
FINDING 1	7	In addition to inter-annual climate variations, mobile herders are faced with increasingly recurrent extreme events	
Livestock mobility is practised throughout West Africa and is part of highly diversified livelihood systems		FINDING 7	19
FINDING 2	9	Animal health remains a critical problem for mobile herders	
Year after year, the contribution of mobile herders to local economies is considerable and benefits a wide range of actors		FINDING 8	21
FINDING 3	11	Apart from diseases, mobility involves other risks which also result in animal losses	
By being mobile, transhumant herders, together with commercial livestock trekkers, are able to supply the value chain at competitive prices		FINDING 9	23
FINDING 4	13	In the face of increasing difficulties, transhumance becomes a real obstacle course	
Mobility is essential for livestock production, as well as for preserving the herd during periods of crisis		FINDING 10	25
FINDING 5	15	Securing livestock mobility is urgent, and requires a global approach, from local to trans-border	
Transhumance movements extend over time and space but they are more than a mechanical movement from point A in the north to point B in the south		Conclusion	26
		AND WHAT IF LIVESTOCK MOBILITY BECOMES VIRTUALLY IMPOSSIBLE?	28

ACRONYMS

AFD:	Agence Française de Développement (French Development Agency)
ARED:	Associates in Research and Education for Development (Dakar-Sénégal)
BRACED:	Building Resilience and Adaptation to Climate Extremes and Disasters Programme
CIRAD:	Centre de Coopération Internationale en Recherche Agronomique pour le Développement (Agricultural Research for Development)
ISRA-BAME:	Institut Sénégalais de Recherches Agricoles-Bureau d'Analyses Macro-Economiques (Senegalese Agricultural Research Institute - Office for Macro-Economic Analysis)
EU:	European Union
VSF:	Vétérinaires Sans Frontières (Veterinarians Without Borders)



A West African vision of livestock mobility through AFL intervention areas in the Sahel and the coastal countries

The AFL-BRACED project (UK-Aid) covers two trans-border areas, linking, in the west, Senegal with Mauritania and western Mali and, in the east, Burkina with northern Mali (Gao) and western Niger (Tillabéri). With the support of additional funding (including from AFD and the European Union), other AFL interventions in southern Mali, in southwestern Burkina, and in several coastal countries (Benin, Togo, Ghana) have provided a more global picture of livestock mobility throughout West Africa. Such a regional vision became an integral part of the AFL study, since livestock movements between the Sahel and coastal countries are closely interconnected.



Family herd returning to the encampment at the end of the day in northern Senegal (©B. Thébaud, AFL-NCG field mission, November 2015)

The AFL study followed a family-based approach to the economy of livestock production. Questionnaires placed special emphasis on the dynamic relationship between households and their herds, in order to follow closely several resilience indicators related to climate shocks.

Introduction

Since January 2015, Acting For Life (AFL), together with local partners, has been implementing the project “Strengthening Resilience through Livestock Mobility”, as part of the (UK-Aid) BRACED Programme, aimed at strengthening resilience to climate change. For monitoring and evaluation purposes the project collected information each year from a sample of transhumant families, in order to measure their capacity to anticipate, absorb and recover from climatic extremes. Several resilience indicators were monitored, including herd size and composition, as well as the annual income derived from livestock and milk sales. Other questions also needed answers: How long can a transhumance movement last? Who leaves and with which animals? Do mobile herders contribute to the local economy while on the move? How do they gather information? Do they all cross international borders? What role do women play?

The geographical area covered by these surveys encompasses two trans-border areas linking, in the west, Senegal with Mauritania and western Mali and, in the east, Burkina with northern Mali (Gao) and western Niger (see map opposite). Given the growing importance of transhumance movements towards the coastal countries, the study followed a more global approach to livestock mobility in West Africa, integrating also additional research carried out by AFL in Benin, Togo and Ghana through EU and AFD funded interventions.

The study looked at three consecutive dry season transhumance cycles: 2014-2015, 2015-2016 and 2016-2017. Annual surveys were usually carried out around six weeks after the families had returned to their home base. The baseline survey of 2014-2015 covered 386 households spread between northern Senegal (70), southern Mauritania (70), northern and eastern Burkina (70), western Niger (71), northern and western Mali (105). Among these households, 1,300 men, 450 women and 670 children left on the 2014-2015 transhumance, along with 40,000 head of cattle, 47,000 sheep and 16,000 goats. According to the resilience indicators used, the baseline identified sixty at-risk families on which the study focused for the two surveys that followed¹.

In addition, the monitoring system enumerated each year the number of people and animals moving along the livestock corridor, during the most intense period of transhumance departures, between October and January.

The protocol for this exercise was implemented and data interpreted by CIRAD in Dakar. In total, 50 counting points located along key trans-border corridors were monitored. It was tempting to add up the numbers counted across all the counting stations. However, the risk would have been to count the same individuals and animals several times since livestock corridors are not watertight and transhumant families can enter or exit at any moment. Therefore, to be properly interpreted, results from each counting station were compared on an annual basis.

The study also included a wide range of subjects: perceptions of climate and environmental changes, need for information, risk analysis, animal health. In order to pay the necessary attention to the situation of women (in particular those leaving on transhumance), a separate questionnaire was used for 131 women, selected from one third of the families surveyed.

The survey provided the opportunity for each family to review in detail the difficulties encountered during transhumance movements and the strategies used to resolve them. A specific section also addressed the situation of livestock corridors and their level of equipment (markers, water points, transit areas).

This brochure summarises the main conclusions in the form of 10 key findings which, we hope, will contribute to facilitate an informed debate on livestock mobility in the West African context.

A study of this magnitude would not have been possible without the financial support of UK-Aid, as part of the BRACED Programme. The European Union co-funded the research study, especially in western Mali and in Mauritania, as part of the Project for Building Household Economic Resilience through livestock productivity in the south and east of Mauritania (PRREF). For the baseline survey, field work preparation, coding and data input were carried out in collaboration with ISRA-BAME and ARED in Dakar, as well as VSF-Belgium in Bamako. Subsequently, for the following two surveys, this work was completed by Nordic Consulting Group, together with ARED.

1. This study can be downloaded from www.acting-for-life.org (AFL-NCG, B. Thébaud, Résiliences pastorales et agropastorales au Sahel: portraits de la transhumance 2014-2015 et 2015-2016 (Pastoral and Agropastoral Resilience in the Sahel: Portrait of the 2014-2015 and 2015-2016 Transhumance)).

A. SAHEL COUNTRIES

Country	Cattle	Sheep	Goats	Camels
Burkina Faso	9	9.3	13.9	0.02
Mali	10.3	14.4	20	1
Mauritania	1.9	9.1	5.7	1.5
Niger	11.4	11.1	14.5	1.7
Senegal	3.5	5.4	5.4	0.05
Chad	7.8	3.2	6.8	1.5
TOTAL	43.9	52.5	66.3	5.8

B. COASTAL COUNTRIES

Country	Cattle	Sheep	Goats	Camels
Benin	2.2	0.9	1.7	0
Ivory Coast	1.6	1.74	1.4	0
Ghana	1.7	4.3	6	0
Nigeria	19.4	40.5	71	0.3
Togo	0.5	2.2	2.8	0
TOTAL	25.4	49.7	82.9	0.3

Estimates of the number of ruminants in the Sahel and coastal countries in 2014 (Source: FAOSTAT, in millions, figures rounded up)

Although statistics need to be treated with caution, livestock estimates in West Africa tend to confirm the growing importance of large and small ruminants in coastal countries. While rainy seasons are longer, livestock mobility remains essential for local herders. Animals must be removed from crop-growing areas during the rainy season and herded to high-quality grazing areas during the dry season. Transhumance systems are found in Benin, Togo or Ghana. In Nigeria, seasonal movements of livestock can extend over long distances.



The importance of livestock production in coastal countries: the example of Togo (©B. Thébaud, AFL-NCG-CIRAD field mission, October 2016)

From the north to the south, livestock markets in Togo are evidence of the importance of mobile livestock systems in coastal countries. Left: on the Burkina Faso border, the Koundjoularé market is always thriving, even outside the transhumance season, especially for marketing draught animals. Right: in the "Garbal" of Sokode, cattle trekked on-the-hoof are about to be loaded on trucks for transport to their final destination in Lomé.

FINDING 1

Livestock mobility is practised throughout West Africa and is part of highly diversified livelihood systems



WHY

Mobile livestock production systems were found in all the areas surveyed, including in the southern regions (southeastern Burkina, western Niger) where, in addition to climate instability, the lack of pastoral resources resulting from the expansion of crop farming is a strong incentive to move. The accounts given by families going on transhumance to coastal countries and field research carried out in Togo, Benin and Ghana confirm that in these countries local livestock production is also based on mobility, both in the rainy and in the dry season.

Far from the image of mobility being restricted to “pure” herders in the north, mobile livestock production is part of complex agro-pastoral livelihood systems which include other activities: agriculture as well as trade, transport, skilled trades, along with remittances from migrants. The more diverse these activities are, the greater tends to be the resilience of families to climate shocks.

MORE ON THIS

Three quarters of the 386 transhumant families surveyed also practise agriculture. The types of production vary according to the area: millet, maize, cowpeas, groundnuts, sorghum, sesame, rice, and cotton. More than half of the families cultivate between three and seven crops, with no family relying on only one crop. Involvement in agriculture is found in all the areas surveyed, including in the arid region of northern Mali (Gao).

In addition to agriculture, the majority of families are also involved in livestock trading, small retail businesses, transport, artisanal gold mining, butchering meat and skilled trades. One third of families surveyed have migrants working elsewhere who send remittances, which are often reinvested into the family herd. Most migrants remain within West Africa: Benin, Ghana, Nigeria, and Ivory Coast. The indicators used during the study (including the size of the herd and profits from livestock sales) show that the diversity of activities constitute a key element of household resilience to climate shocks.

Even though livelihood systems are based on a multitude of activities, livestock mobility is found everywhere, including among local populations in coastal countries. Hence, during the transhumance season, movements tend to follow a chain reaction, with one group pushing the next. When transhumant herders from western Niger leave Tillabéri for Fada N’Gourma in Burkina, the ones from Burkina leave for Togo or Benin. And when they arrive, it will be the turn of local herders to move further south.



WHAT ABOUT WOMEN?

All women surveyed reported heavy work schedules, with agricultural tasks being performed in addition to those related to livestock production. Whether they accompanied the transhumance movement or not, the women underlined the importance of mobility for their own animals, failing which they would have to give up livestock production. Several of them also benefited from the remittances sent by migrants to purchase animals and livestock feed.

IN BRIEF

Contrary to the classic image of pastoral mobility limited to herders living in the north of the Sahel, mobile livestock production is found throughout West Africa, and is part of a web of complex livelihood systems which also incorporate agriculture, trading, skilled trades, remittances from migrants. The more diverse the families’ activities are, the stronger their capacity to weather climate shocks tends to be.



HERDERS’ TESTIMONIES

I grow millet, sorghum, cowpeas, maize and cassava. In my family we also trade livestock, repair bicycles and drive a motorcycle taxi. This year, I went on transhumance with my herd as far as the border between Burkina and Benin. (Amadou Abdouramane, Diagourou, western Niger).

1	Livestock feed (agro-industrial by-products)	543,000	44%
2	Food	268,000	22%
3	Veterinary products	80,000	6.5%
4	Telephone	52,500	4.3%
5	Watering costs	52,000	4.2%
6	Other expenses	40,000	3.3%
7	Access to pastures	35,000	2.9%
8	Salt for the animals	28,000	2.2%
9	Human health	25,000	2%
10	Small equipment	25,000	2%
11	Fodder	20,000	1.6%
12	Cart purchase and repair	18,500	1.5%
13	Border crossing	15,500	1.2%
14	Water drawing and water storage materials	13,500	1.1%
15	Bicycle purchase and repair	8,500	0.7%
16	Other taxes	2,800	0.2%
17	Payment to local governments	2,600	0.2%

Breakdown of the average budget per transhumant family in 2014-2015 for an amount of 1,230,000 CFA spread over 17 budget lines (Source : AFL-BRACED surveys).



Livestock feed: a significant cost item for transhumants (© B. Thébaud, AFL-NCG field mission, November 2015)

Livestock feed is a significant cost item, not only by the size of the budget allocated, but also because of its strategic role in the maintenance of the herd, especially during the first weeks of transhumance. When available, agro-industrial cakes (cotton, groundnuts) are preferred by herders or, failing that, cotton seed and wheat bran.



Costs for watering (© B. Thébaud, AFL-NCG field mission, November 2015)

Surface waters (where watering animals is much easier than from deep wells) are much sought after by transhumant herders. In 2014-2015, the largest payments made for watering livestock were found among transhumant families from Senegal and Mauritania who rely on boreholes, where fees are high.

FINDING 2

Year after year, the contribution of mobile herders to local economies is considerable and benefits a wide range of actors



WHY

Being mobile costs money. During a transhumance, sick animals have to be treated, access for water often needs payment, food for the family has to be bought. During the dry season 2014-2015, the 386 families spent almost half a billion CFA, both while moving and in the hosting areas. A significant part of the budget was allocated to household necessities and livestock feed.

Even though the level of expenditures may vary from one year to the next, and also depends on the destination, these are considerable economic spin-offs, benefitting numerous actors over vast areas. Transhumance contributes to local economic growth and job creation.

MORE ON THIS

The total expenditures reported in 2014-2015 by the 386 families surveyed amounted to 475 million CFA, with an average budget of 1.23 million CFA per family. The largest amounts were spent on livestock feed (44%) and food (22%), with 6.5% for veterinary drugs, 4.3% for mobile phones, and 4.2% for watering costs. The budget overview confirms the strategic role of livestock feed during transhumance, especially at the onset, if the animals are weak, following a poor rainy season. The total amount of taxes paid is low (1.6%), but this does not include fees paid at livestock markets. Furthermore, between fines, hosting or transit taxes, usage fees and local government taxes, transhumant herders find it difficult to determine what they pay and to whom, with the same payment often being divided between several actors.

Following a good rainy season, the cost of transhumance may be lower (for example on livestock feed). However, despite such variations, the level of expenditures will remain high, which explains in part the need to have a herd large enough to generate sufficient income during transhumance through the sale of livestock.

Year after year, money is spent over long periods and vast areas. During 2014-2015 dry season, thousands of transactions were made daily by transhumant families at markets (60%), directly with villagers (15%) and for the rest: health centres, veterinary pharmacies, livestock services, private vets, blacksmiths, welders and mechanics, well-diggers, water management committees, chargers of mobile phones, water and forests services, bicycle, motorbike and cart mechanics, boatmen. Livestock mobility and transhumance create jobs.



WHAT ABOUT WOMEN?

A certain number of transhumant women also contribute to cover some costs. Their main expenses are staple foods, livestock feed and salt for their own animals, human health, water, veterinary drugs, crop residues. Other expenses include clothing, prepaid phone cards, soap, tea, kitchen utensils. In 2014-2015, these women contributed up to 10% of the total expenditures of their families. This is far from being negligible.

IN BRIEF

Mobility involves costs which are reflected in the significant amounts paid by transhumant families, in particular for food, animal health, livestock feed, water and mobile phones. Consequently, each year, transhumance movements make a significant contribution to the local economy in the hosting areas, which benefits numerous actors, creating long-term jobs and reducing poverty.



HERDERS' TESTIMONIES

To be able to go every year on transhumance, you need to be strong, have enough labour and money also, because it is expensive. It's not worth leaving with less than 40 head of cattle. You run the risk of losing too much. (Hama Hamidou Aljouma, Titabe, northern Burkina)



Transhumant herders marketing livestock (© Gilles Coulon/Tendance Floue for AFL, 2016)

Located in south-eastern Burkina, the Fada N'Gourma market is at the crossroad of transhumance and commercial routes towards coastal countries. Being mobile, transhumant herders have access to a broad range of livestock markets which they monitor closely. Therefore, during a transhumance movement, sales of livestock are spread over time and space. In the hosting areas, the increase in supply of livestock enables local populations to access good quality animals for meat, draught power or fattening at competitive prices.



Livestock mobility and cost-effectiveness of the value chain (© B. Thébaud, Lomé abattoir, AFL-NCG- CIRAD field mission, September 2015)

In order to maintain an attractive price for meat, livestock traders must constantly keep their profit margins tight. In fact, the livestock value chain in West Africa is considered to be very efficient, with a multiplying factor (price from producer to consumer) of 1.5 to 2.3 (compared to 5 to 8 in Europe). As an imperative factor for final profitability, butchers at the end of the value chain need to maximise the so-called 5th quarter (head, liver, heart, intestines, skin...). Consumption of skin is part of culinary habits in several coastal countries. Here, in the Lomé abattoir (Togo), cattle skins are singed, then washed before being sold in town. The export of refrigerated carcasses (without the 5th quarter) by a number of Sahelian countries would mean a significant loss for coastal markets.

FINDING 3

By being mobile, transhumant herders, together with commercial livestock trekkers, are able to supply the value chain at competitive prices.



WHY

The numbers of livestock marketed by transhumant families are significant and directly benefit the livestock value chain. All species, sexes and ages are sold. In 2014-2015, the 386 families surveyed sold livestock for almost half a billion CFA, i.e. the same amount as their expenditures. Hence, in total, around 1 billion CFA was injected into the local economy.

The income generated by the sale of livestock is, therefore, substantial and directly reinvested in the hosting areas, in order to cover costs. Moreover, commercial trekking on-the-hoof provides (often in combination with transportation by truck) the most cost-effective way of supplying meat to urban markets at competitive prices.

MORE ON THIS

During the 2014-2015 transhumance, families sold 5% of their cattle and 12% of their small stock for a value of 496 million CFA, i.e. just over the total amount of expenditures. Transhumant herders sell their animals at markets, in their encampments, or directly to villagers (draught oxen, animals for fattening). Among cattle sales, the number of female is significant (40%). Animals sold are often young: half of males were between one and three years old, while 60% of females were heifers or reproductive cows.

Grazing during transhumance allows the animals to fatten up before being sold. Therefore, hosting areas benefit from these animals without having to raise them during their first years. Both transhumant herders and livestock traders trek animals, often following the same itineraries and facing the same difficulties. Commercial trekking on-the-hoof by traders is a common production strategy, as is also the case for transhumant herders: spread out over weeks and months, mobility allows animals to fatten up while on the move.

Given the limiting factors of transporting live animals or refrigerated carcasses by truck, mobility is therefore also essential for livestock traders in the value chain. Thus, livestock mobility is fundamental for the economic integration of the West African sub-region, while providing meat at competitive prices to both rural and urban consumers.



WHAT ABOUT WOMEN?

Around one quarter of transhumant women surveyed sold some of their animals (cattle and small stock) during the 2014-2015 transhumance.

Referring to their lack of experience in selling on the markets, women often rely on the men of the family. However, many of them also sold their animals directly to villagers in the hosting areas. These sales, in addition to dairy products sold or exchanged, contribute to developing and consolidating the socio-economic relations between transhumant women and local populations.

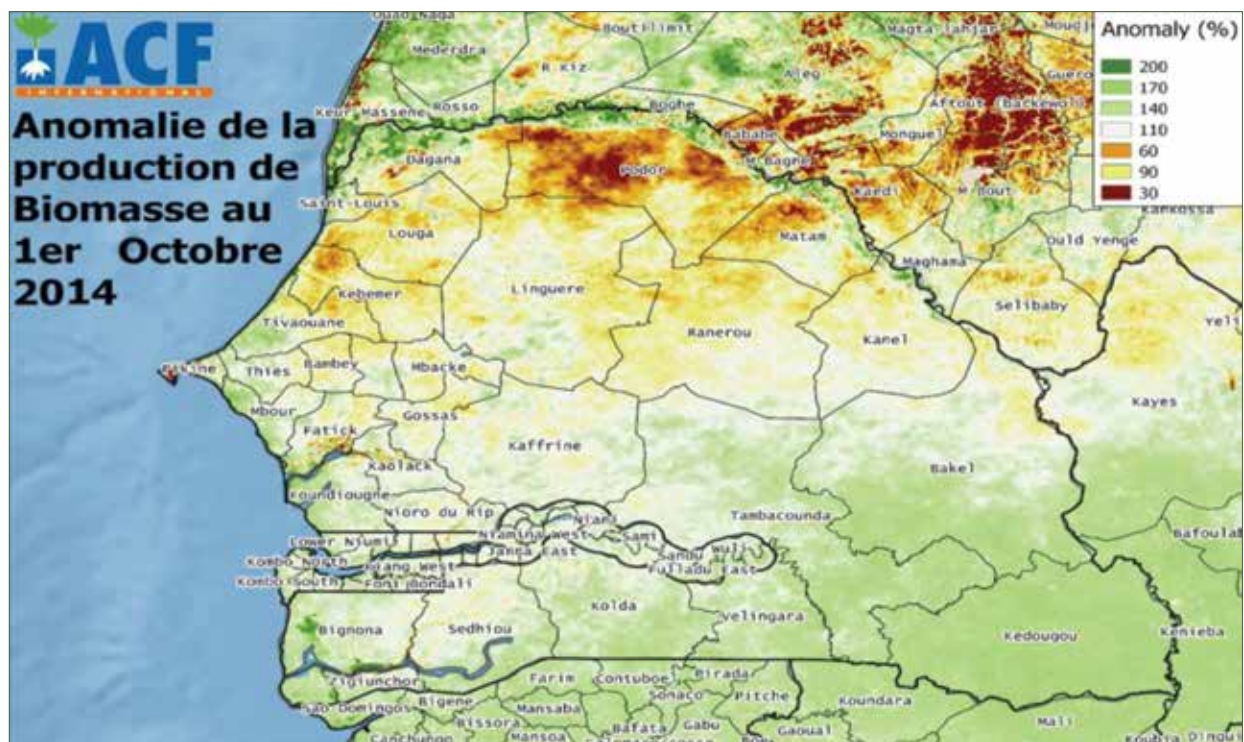
IN BRIEF

Year after year, mobile livestock production systems are a major contributor to the value chain in West Africa. Whether for production (transhumance) or trade (commercial trekking on-the-hoof) mobility remains a cost effective strategy for supplying rural and urban markets at competitive prices. Livestock mobility is therefore a fundamental determinant of sub-regional economic integration. However, transhumant herders or livestock traders are faced with the same difficulties, which highlights the crucial need for securing mobility.



HERDERS' TESTIMONIES

This year, I sold 15 head of cattle during transhumance. My first sale was while moving down to the border between Burkina and Benin in December 2014. I sold all the others in Benin on several markets. The last two males, I sold them when returning in June 2015 to bring money home. (Barry Alhadji Sadio, Kantchari, south-east Burkina).



The 2014-2015 drought in northern Senegal (Source: Action Against Hunger International)

In 2014-2015, following a catastrophic rainy season, fodder deficits were severe in northern Senegal (areas shown in dark red). As a result, early departures on transhumance were massive: more than 90% of sheep and cattle were trekked to refuge areas in the south.



Transhumance movements from northern Senegal in 2014-2015 (Source: AFL-BRACED survey, October 2015)

Even before the end of the 2014 rainy season, herders left for the south with most of their animals – in many cases the entire family herd. Following their usual transhumance routes, families took refuge either to the south of the groundnut basin or to eastern Senegal (Kounguel, Kompentoum, Tambacounda). Out of the 70 families surveyed, 15 of them went to western Mali (Kayes region) and The Gambia. On their return, one family explained: “this year the drought was different. In the hosting areas we saw a lot of cattle and a lot of old people also”. Indeed, the capacity of hosting areas to absorb the massive flow of animals from the north was remarkable, a conclusive sign that close social ties exist between local populations and the herders coming from the north.

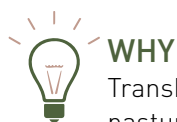


Cattle in the Ferlo (northern Senegal), after their return from the 2014-2015 transhumance (Source: B. Thébaud, AFL-BRACED field mission, November 2015)

Enumerating the livestock of the 70 families returning from transhumance, clearly shows the efficiency of mobility as a survival strategy. A reduction in livestock numbers by only 2 to 4% (depending on the species) was recorded among a total of 4,000 head of cattle, 16,000 sheep and 3,500 goats which had departed on transhumance, a fall which includes those animals marketed. The Gobra zebu photographed here was on the move for eight months; it walked more than 1,500 km and returned in excellent condition.

FINDING 4

Mobility is essential for livestock production, as well as for preserving the herd during periods of crisis



WHY

Transhumance enables animals to access good quality pastures and better watering conditions, especially in hosting areas where the rainy seasons are spread over a longer period. In situations – increasingly frequent – where the rains start late and pastoral resources in the home base are shrinking, mobility allows herders to keep their animals in good condition, increase their productivity and, in a crisis situation, preserve the herd.

During the 2014-2015 dry season, for many herders, being on the move was instrumental in preserving their livestock assets and, consequently, also the national herd. Families, which had left their drought-stricken areas, returned after several months of transhumance with minimal livestock losses.

MORE ON THIS

In addition to the climate factor, other events (disease, thefts, accidents) can result in livestock losses during transhumance, which explains why “sometimes you win by departing, but sometimes you lose”. However, the study shows that, between 2014 and 2017, the vast majority of families surveyed succeeded, by being mobile, in maintaining viable and productive herds, despite erratic and extreme climate events.

In a drought context, livestock mobility is vital. In 2014-2015, a total of 40,000 cattle and 63,000 sheep and goats left on transhumance. Losses recorded on their return were negligible (only 130 head of cattle and 800 small ruminants). This should be compared to the losses after the 1970s and 1980s Sahelian droughts, which frequently reached 50 to 70% of national herds. During the study, the highest losses were recorded among a very limited number of families whose herds were either small in size or composed of one species (for instance, only cattle or only sheep). As a general rule, livestock losses were easily made good, as a result of the excellent 2015-2016 year that followed, even for the worst impacted herds.

Transhumant families also emphasize the importance of being mobile at the local level. In the home base, during the rainy season, the family herd must be kept away from areas under cultivation. During the dry season, as the whole herd seldom leaves on transhumance (except during a major crisis), those animals left behind must also remain mobile, depending on the grazing conditions.



WHAT ABOUT WOMEN?

According to all the women surveyed, having animals of their own and preserving their livestock assets in bad years depends on mobility. In 2014-2015, whether they, themselves, left or not, most women sent their animals on transhumance with the rest of the family herd. They insist that livestock mobility is crucial for the maintenance and the long-term preservation of their livestock assets. Women also consider that, without mobility, they would soon lose those assets.

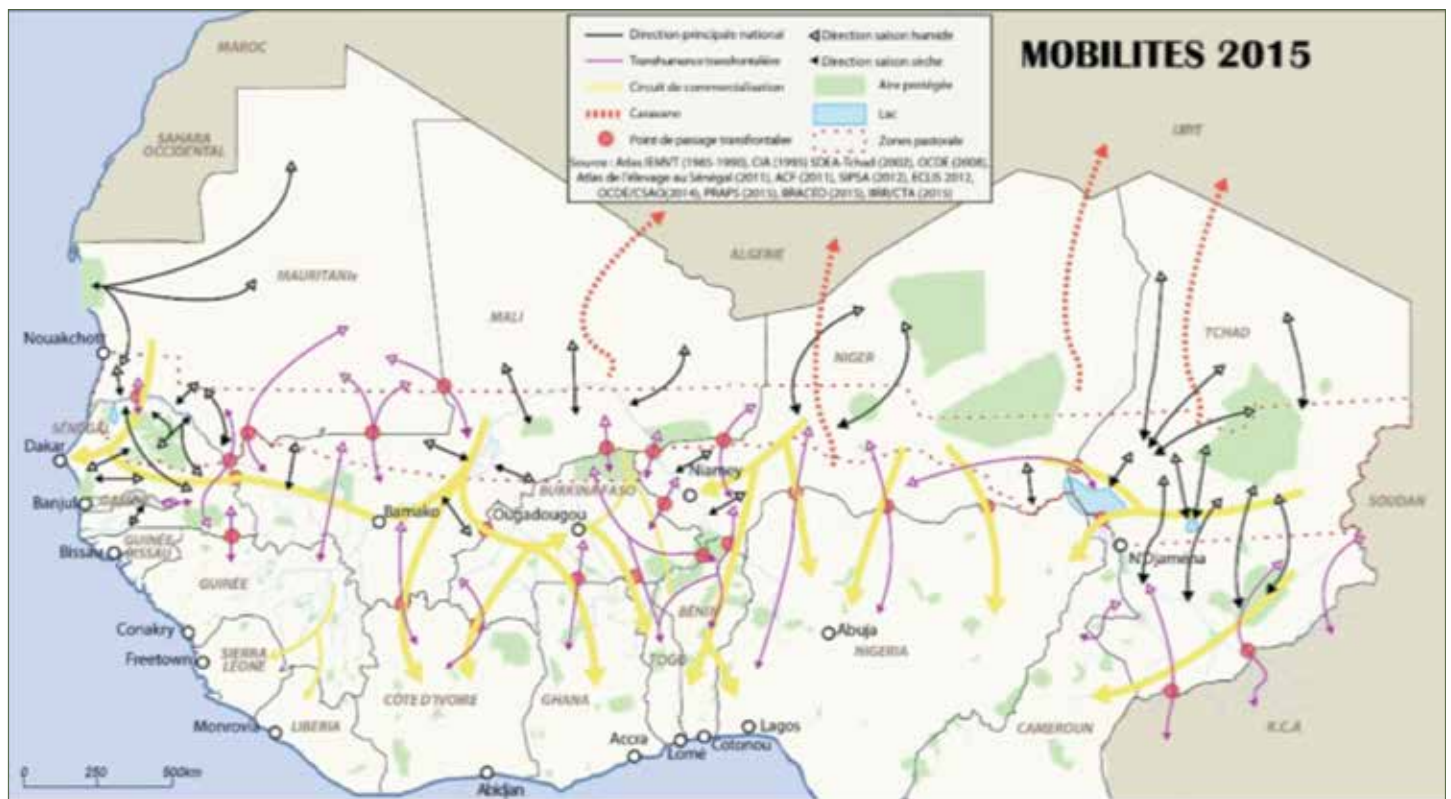
IN BRIEF

Mobility is the keystone of livestock production systems as well as being a safeguard against climate risk. As a result, throughout both good years and bad, the livestock sector will continue to supply the value chain and to generate income. Mobility acts as leverage, strengthening household resilience to climate shocks, while preserving in the long-term the contribution of livestock to national economies.



HERDERS' TESTIMONIES

Without mobility it's the end of the herd and the loss of livestock production. We will lose everything.
(Saidou Abdoulaye, Oursi, northern Burkina)



Livestock mobility in West Africa (2015-



Departing on transhumance in northern Senegal
 (© B. Thébaud, AFL-NCG field mission, November 2015)

These women from northern Senegal are preparing their departure. Equipment must be light and easy to move. Carts are the main means of transport. Male family members have already left, heading for the south with the herd. These women will leave on their own, joining other women along the way, to meet up with the rest of the family in the first hosting area.

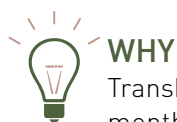


Transhumant women in northern Senegal
 (© B. Thébaud, AFL-NCG field mission, November 2015)

During the transhumance, new situations have to be addressed and opportunities seized. Because, in the hosting areas, they are free from the time-consuming chore of fetching water, these women produce handicrafts, which they sell. They returned to their home base in August 2015 after a transhumance lasting 260 days. By the end of November, they had already left again.

FINDING 5

Transhumance movements extend over time and space but they are more than a mechanical movement from point A in the north to point B in the south



WHY

Transhumance movements are spread over several months, with those to coastal countries usually shorter, as the early start of the agricultural season forces an early return. Far from being a mechanical movement from A to B, following a corridor along which herds trek (like on a highway), transhumance is usually punctuated by numerous stopovers in different hosting areas within which animals will often remain mobile.

The families surveyed (especially those from Niger and Burkina trekking to coastal countries) report a lengthening of transhumance routes venturing further south. However, south-north and east-west movements (following the Nigeria-Benin-Togo-Ghana axis) also take place.

MORE ON THIS

Based on the three surveys (2014 to 2017), the average duration of a seasonal transhumance was around 200 days. In 2014-2015 the longest time spent on transhumance (7.5 months) was found in Mali, compared with 5 months among families from eastern Burkina and western Niger going to Togo and Benin. Several families from northern Senegal, who were forced to flee to refuge areas, were away for almost a full year. In the east (Niger, Burkina Faso, northern Mali), transhumance is primarily trans-border, while in the west (Mauritania, Senegal, western Mali) it remains within national borders – unless there is a drought. With a few variations, transhumant families leave the home base after the harvest or during the cold dry season, returning at the onset of the next rainy season.

Stopovers along the route are built into the transhumance movement and rhythm. Of the 386 families surveyed, only 24 used a single hosting area during the 2014-2015 transhumance. For all other families, the number of areas varied from 5 to 27. Within hosting areas, livestock mobility continues (often linked to manure contracts), with animals moving from one village area to another.

According to transhumant herders, distances covered are increasing, year after year. Although southern destinations dominate, there are also movements, which go against the flow. Many of the families surveyed in northern Burkina (Dori, Gorom-Gorom) went north to Mali. In western Mali, upon their return from their southern transhumance, herders send their small ruminants to Mauritania in the north, for the duration of the rainy season. Similarly, faced with the expansion of crop farming in their home base, herders from northern Togo increasingly move their herds further north, into Burkina, for the rainy season. There are also east-west movements. Transhumant herders from Nigeria enter central Benin at the Savé border crossing, and by doing so, trigger a movement among local herders, pushing them further west into Togo.



WHAT ABOUT WOMEN?

Women leaving on transhumance are away for long periods. In northern Senegal, the time they spend at their home base between two transhumance movements can be less than two months. Moving from one hosting area to the other, women have to adapt to new situations and contexts. As part of this, they need to strengthen social links with local hosts and populations, collect information on market prices and water facilities, and maintain what is necessary for their highly mobile style of living (light equipment, cart, bags).

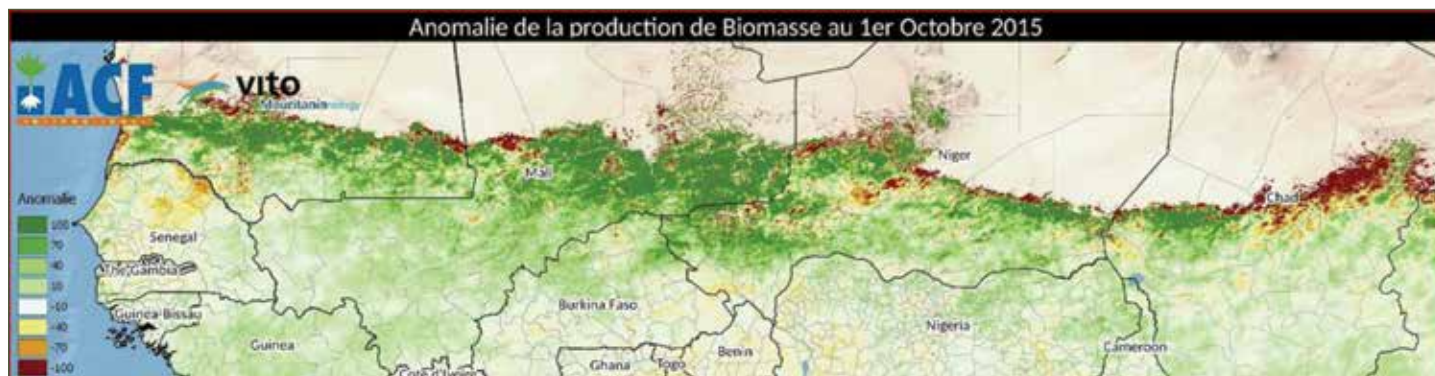
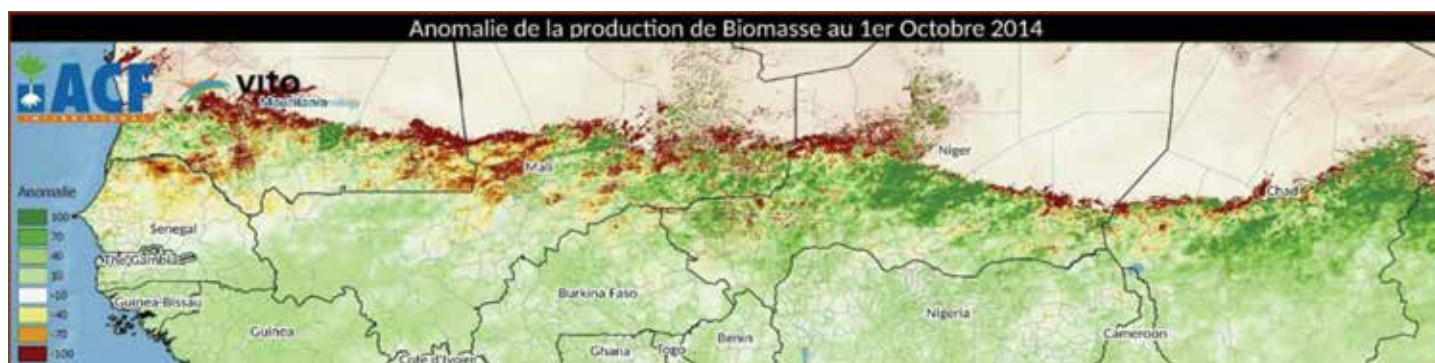
IN BRIEF

A sedentary vision of transhumance must be avoided at all costs. Corridors are not highways moving animals rapidly from point A (home base) to point B (hosting area) from which, once there, they will not move. Having access to different production areas along the route is at the very heart of livestock mobility. Usually punctuated by several stopovers, transhumant movements are complex, raising the question: how to secure livestock mobility?.



HERDERS' TESTIMONIES

I left Benin on 2 January 2014 and I came back with my animals at the end of August 2015. On the way there, I stopped in 15 hosting areas and in 10 on the way back, (Sonde Yacouba, Kantchari, south-east Burkina).



Between drought (2014) and plenty (2015). (Source: Action Against Hunger International, January 2016)

The maps illustrate the situation at the end of the 2014 rainy season (above) and 2015 (below). Areas with severe fodder (biomass) shortages are indicated in dark red, showing a drastic change between the two years. In 2014, drought-affected areas stretching across southern Mauritania, northern Senegal, Mali and Niger. By contrast, in 2015, an abundant and widely distributed rainfall resulted in high levels of fodder production throughout the rangelands.



Beginning of the 2015-2016 dry season in northern Senegal (© B. Thébaud, AFL-NCG field mission, 2015)

This photo was taken in November 2015 in the Ferlo region (northern Senegal), following an excellent 2015 rainy season. The biomass available for grazing is abundant and animals are in good condition. The previous year, following a calamitous rainy season, there was no grass, and all herders left the area with their animals for the south. When a good year follows a bad year (drought), both herders and livestock take the opportunity to recover their strength, in anticipation of the next crisis.



Mobile phone and radio: precious tools to access information (© Gilles Coulon/Tendance Floue for AFL, 2016)

In addition to phone calls, mobile phones can be used to listen to music, take photos, and as a torch. For family members who remain at the home base, mobile phones are essential to maintain contact with those who left on transhumance. In northern Senegal, a woman who stayed behind with her elderly parents during the 2014 drought, explained how she overcame being isolated by showing her mobile phone, and adding "with this, we talked every day, I called them every day, every day they called me".



Solar panels
(© Dr Gilles Vias, VSF-Belgique, 2015)

Even though they still appear as a minor budget item, purchases of small solar panels to recharge the batteries while on the move underline the strategic role of mobile phones during transhumance movements.

FINDING 6

In addition to inter-annual climate variations, mobile herders are faced with increasingly recurrent extreme events



WHY

Between years of drought and plenty, the study took place during a period of extreme events, reflecting the instability characteristic of the Sahel. Inter-annual variations in rainfall and grazing conditions impacted on the flow of persons and livestock enumerated at the counting stations along the corridors.

Mobile herders have an acute awareness of the climate factor and its effects on pastoral resources, both in their home base as well as in their hosting areas. Transhumance requires careful preparation. Information is crucial and transhumant families use numerous information networks. This includes the use of mobile phones, allowing them to maintain regular contact with local hosts, livestock traders, and herders' associations.

MORE ON THIS

The year 2014 was marked by severe rainfall deficits and critical fodder shortages in several Sahelian countries. As a result, 90% of families surveyed considered themselves to be "at risk" for the following dry season, with the drought forcing earlier than usual departures. In the case of northern Senegal, there was a massive movement southward, to refuge areas, often involving all family members together with the entire herd. By contrast, in 2015, rainfall was abundant throughout the Sahel, providing herders with excellent grazing and watering conditions. The following year (2016) turned out to be average in terms of rainfall, resulting in local fodder shortages. Finally, in 2017, drought returned to the western Sahel, with acute fodder shortages in Senegal, Mauritania and Niger.

Results from the annual counting operations showed that livestock corridors, when functional, act like a circulatory system that dilates and contracts according to circumstances. For example, in 2015-2016, following an excellent rainy season which encouraged transhumant herders to remain within national borders, 83,000 head of cattle leaving on transhumance were counted at 19 counting stations along the corridors interconnecting Mauritania to Senegal and western Mali. The following year (2016-2017), their number went up to 253,000 head of cattle, as local rainfall deficits in all three countries resulted in cross-border movements increasing.

Mobile herders closely monitor changes occurring along the route and in the hosting areas (such as floods and water levels in rivers). Numerous information networks are used: scouts, regular contacts with other transhumant herders, livestock traders and local hosts. The use of mobile phones is widespread. They are also used to follow the political situation in the home base or in the hosting country, call a vet for advice, and resolve daily problems.



WHAT ABOUT WOMEN?

Whether they leave on transhumance or not, women pay close attention to changes in the weather and prepare themselves in anticipation. They collect information on the grazing conditions and the availability of water. Women are also keen to know prices on markets and whether there are safety concerns (attacks, robberies). In 2014-2015, half of the transhumant women surveyed had a mobile phone, while the others used their husband's or their children's. In addition, they listen daily to the national or local radio, often in several languages.

IN BRIEF

As the climate factor becomes even more unpredictable, mobile herders need to be able to anticipate and absorb extreme events occurring with increasing frequency. To be efficient both in good and bad years, mobility requires a functional network of livestock corridors providing access to pastoral resources and markets. Hence access to information is crucial to mitigate risks and to prevent conflicts.



HERDERS' TESTIMONIES

In 2014, even the Béli river, which marks the border between Burkina and Mali, dried out; that hasn't happened in 30 years (Ly Abidine, northern Burkina).



Vaccinating livestock before transhumance (© Fomba Soumaïla-AFL, western Mali, 2015)

Almost 90% of the families surveyed vaccinated their animals before leaving on transhumance in 2014-2015, except in northern Mali (Gao) where this service has become almost non-existent due to the unsafe situation. Especial emphasis was placed on including all cattle and small stock.



Sale of veterinary products at a border market (Burkina-Togo) (© B. Thébaud, Kounjouré market, AFL-NCG-CIRAD field mission, 2015)

Fully aware of their poor quality, transhumant herders buy vet drugs on livestock markets as a last resort. In 2014-2015, 60% of products were still purchased through the formal sector (private vets, livestock services, pharmacies, paravets). Very often, this meant travelling over long distances (motorbike, bus).

FINDING 7

Animal health remains a critical problem for mobile herders



WHY

Animal health risks associated with transhumance are often high and can seriously impact the herd (mortalities, loss of productivity, loss of family income). For most families surveyed, access to quality drugs and professional services is problematic while being on the move. Herders treating their animals themselves or calling upon paravets, if they can be found, is a common practice.

In spite of constant efforts by herders to vaccinate, de-worm and stock-up vet drugs before departing on transhumance, livestock losses can be significant, especially in bad years, when animals leave in a poor condition, following fodder shortages that increased their vulnerability.

MORE ON THIS

In 2014-2015, 90% of transhumant herders surveyed reported animal health problems with their animals. Among the total numbers leaving on transhumance, mortality rates were high: 5% of cattle, 6% of sheep and 7% of goats. The highest rates (17% of cattle and 16% of small ruminants) were recorded in northern Mali where animal health services are no longer functional because of the security situation.

The widespread purchase of trypanocides confirms the extension of transhumance movements to the south, into areas where sleeping sickness is endemic. In fact, the numbers of animals affected by disease were the highest among transhumant herds from Burkina moving to coastal countries. However, high rates of survival were recorded (90%), as a direct result of high investment by herders in vaccination, de-worming, vet drugs and paravet services, prior to and during the transhumance.

While vaccination and de-worming before and after transhumance is commonly practised, one third of families could not build up stocks of vet drugs due to lack of access to quality products. On many occasions, herders reported struggling to find animal health professionals or medicines.

Because of limited access to livestock services or private vets, transhumant herders often either treat their animals themselves or call upon community animal health workers (paravets). These paravets play a key role in providing decentralised animal health services.

In the following years (2015-2016 and 2016-2017), surveys showed that there was a tendency for mortality rates to decrease. This is seen as being linked to the major improvement in the grazing conditions.



WHAT ABOUT WOMEN?

Although women often rely on men to treat their own animals, some prefer to get involved directly. They report constant difficulties to access animal health professionals and good quality drugs. Women will resort either to treating their animals themselves or to using paravet services in the hosting areas.

IN BRIEF

For mobile herders, keeping animals healthy is a constant preoccupation. However, economic and physical access to animal health services is insufficient. Following the withdrawal of public services and the inadequate support provided by private services, animal health coverage remains limited. While transhumant herders clearly want to vaccinate and de-worm their livestock, provision of such services is in short supply. Consequently, building up networks of trained community animal health workers is vital.



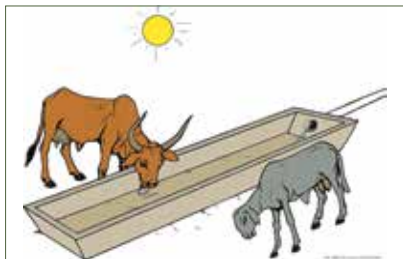
HERDERS' TESTIMONIES

In our area, there are no more animal health professionals or vet drugs available. My animals were sick. I had to go to Niger, in order to find a paravet. But by the time we came back, it was too late. I lost 30 cattle and 36 sheep. (Alhousseini Ag Oumar, Tessit, northern Mali).



Road accidents (© Soumaïla Fomba-AFL, western Mali, 2015)

When access to livestock corridors is a problem, transhumants are often required to follow tracks or roads. This often leads to collisions. The photo shows a transhumant family with donkeys used to transport equipment.



Broken-down boreholes (© B. Thébaud, Ferlo region in Senegal, 1990s)

The borehole pump has broken. The sheep were quickly taken to a neighbouring borehole (30 km away), but some herders remained on site with the cattle, hoping for a quick repair. On the third day, the young animals started to die, as well as some horses and donkeys.



Off-season rains in northern Senegal (© ARED-Senegal, November 2002)

Violent rains storm during a time of the year when temperatures are low (especially at night). Despite the efforts of herders lighting fires in shelters and bring sheep inside to try to warm them up, the losses suffered were considerable.



A transhumant herd from Burkina crossing a river in Togo (© Gilles Coulon/ Tendance Floue for AFL, 2016)

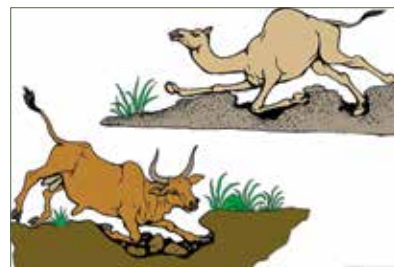
Transhumant families and their animals often have to cross rivers and streams, risking drowning. This is especially the case for herders from western Mali and Mauritania, and those from western Niger and Burkina moving to coastal countries. Occasionally, herders also report small ruminants or calves drowning in the muddy waters which often surround boreholes.



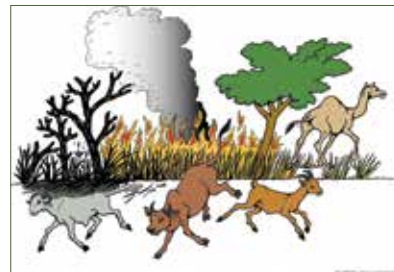
Floods



Predators



Injuries



Bush fires



Snakebites



Livestock theft

FINDING 8

Apart from diseases, mobility involves other risks which also result in animal losses



WHY

In addition to livestock diseases, transhumance movements involve many other risks. Animals can drown when crossing rivers and streams. When herds are forced to exit blocked livestock corridors and move along roads, collisions may occur. Thefts or attacks by predators are frequent. The risk can also be climate-related. If mobility remains a key strategy for mitigating drought, transhumant herders may face floods and off-season rains in the south.

In 2014-2015, out of all the cattle leaving on transhumance, these risks accounted for a loss of 4%. Combined with mortalities resulting from diseases, total losses amounted to 9%, which is significant both at household and national level.

MORE ON THIS

Predators, injuries and snakebites were the risks most frequently encountered during the 2014-2015 transhumance. Livestock thefts were also reported by almost half of the families surveyed. In addition, one family out of four experienced attacks at the family encampment or were held to ransom. Losses among the total numbers leaving on transhumance were significant: 4% of cattle, 6% of sheep and 16% of goats.

The following year (2015-2016), predators, injuries and livestock thefts still dominated. However, as a result of improved grazing and watering conditions, fewer families were affected by other risks. For instance, with access to abundant surface water (ponds, rivers), no mortalities due to broken-down boreholes were reported. As a result, final losses were lower. Nevertheless, even if risks can vary from one year to the next, they will remain critical.

All those risks may severely impact the household economy, especially if the family herd is small, since large stock (cattle, camels) has a slow growth rate. By contrast, losses are more easily absorbed by families with larger herds.

After adding disease-related mortalities, final losses amounted to 9% of cattle, 12% of sheep, and 23% of goats. Such rates are considered significant, particularly for cattle, which reproduce slowly.



WHAT ABOUT WOMEN?

Women face similar risks for their own animals. During the 2014-2015 transhumance, they reported significant losses (especially among their small ruminants) resulting mostly from thefts and highway robberies. In fact, women give equal importance both to the impact of the drought and to armed robberies when explaining the decrease in the number of animals they own.

IN BRIEF

Apart from diseases, livestock is exposed to other risks (such as predators, injuries, thefts), which can severely impact the herd. All those risks combined often result in significant losses during transhumance. These findings underline physical safety issues both for transhumant herders and their livestock assets. They also stress the importance of exploring the feasibility of livestock insurance options for mobile herders, including climate index-based insurance products.



HERDERS' TESTIMONIES

During the 2014-2015 transhumance, jackals attacked 10 of my calves. I was only able to save four. I sold the other ones for almost nothing to a villager. (Mohammed Ould Bilal, southern Mauritania)



Ending trans-border transhumance by moving permanently to the hosting country: a solution for some
 (© B. Thébaud, AFL-NCG-CIRAD field mission, September 2015)

Given the difficulties related to trans-border mobility and the substantial taxes that need paying, some transhumant families decide to settle permanently in the hosting country. Above, an encampment of Fulani herders from Burkina, who settled in the Mango area in Togo, several years ago. Below, Fulani originally from Benin have settled in the "6th continent", also in Togo. This sparsely populated region, stretching from the south of Bassar to the border with Ghana, attracts many transhumant herders from the Sahel during the dry season. The vegetation there is dense, and the humidity is constant.

FINDING 9

In the face of increasing difficulties, transhumance becomes a real obstacle course



WHY

For most families surveyed, transhumance is becoming increasingly difficult. Harassment when crossing borders, blocked livestock corridors, restricted access to grazing and water resources, livestock thefts and physical attacks may lead to conflicts, extortion and extra costs (money, animals). Yet, all the problems reported during the 2014-2015 transhumance were resolved in a peaceful manner thanks to the social links with the local populations and the support of civil society. However, transhumant herders underline the growing number of rules constraining access to hosting areas and the weakening position of local hosts, in a context where more and more new actors are involved in the management of transhumance.

MORE ON THIS

All the families surveyed emphasize the many difficulties to be faced during a transhumance, specially following a poor rainy season resulting in massive movements of livestock to refuge areas and increased competition over resources. Usually, negotiation remains a basic strategy for solving problems. During the 2014-2015 transhumance, most payments made were related to farmer-herder conflicts (6 million CFA), harassment when crossing borders, and passing through gazetted parks and forests. Cash payments were often combined with payment in kind (milk, animals).

In such a context, mobility can be a daily source of tensions and conflicts. Apart from the devastating clashes in recent years (especially in coastal countries), the constant efforts both by transhumant herders and local populations contribute to maintaining a social capital without which conflicts would constantly erupt. However, there are limits to how far social capital can be effective. Transhumant herders report the reduction in entry points to hosting areas, the extreme fragmentation of grazing resources, the weakening position of local hosts and the multiplication of actors involved in negotiations. Therefore, the role of national and local governments, along with civil society, particularly herders' associations, is becoming increasingly crucial in order to ensure every year peaceful transhumance movements.



WHAT ABOUT WOMEN?

Women also experience difficulties during a transhumance. The lack of security (attacks, highway robberies) has become such a problem that many women are reluctant to leave. Those surveyed also emphasize the lack of livestock corridors, herder-farmer conflicts and aggressive behaviour around water points.

Women play a key role in preventing conflicts, by building up social relationships with local populations in the hosting areas. They are often part of village events (marriages, funerals), purchase crop residues and staple foods, exchange information on markets with local women and sell dairy products and animals.

IN BRIEF

Mobile livestock production is facing a growing number of obstacles. Transhumance (above all trans-border) has become an ordeal which many families dread. Problem solving and conflict prevention still rely on long-standing social relationships between herders and local populations. Increasingly, this is not enough, and civil society organisations along with national and local governments are expected to play a decisive role in facilitating each year peaceful transhumance movements.



HERDERS' TESTIMONIES

Every day you have to deal with problems. Fortunately, this year, the transhumance went kind of OK. Apart from highway robbers and attacks in the camps, we can't complain (Hama Ousseini, Djagourou, western Niger).



Securing corridors-a demanding process (Above ©Brigitte Thébaud, AFL-NCG-CIRAD field mission, October 2015 / Below © Gilles Coulon / Tendence Floue for AFL, 2016)

The photo above was taken in northern Togo, in October 2015. It shows an area under cultivation (these are sesame fields). On each side, trees have been marked with white paint. This is a pre-demarcated corridor, i.e. negotiations were completed, and it was agreed that the fields could be cultivated for a last rainy season. The photo below shows a corridor in an area close-by which has been formally demarcated with concrete markers. Months of work and negotiation are often needed. In northern Togo, the process of securing the 70 km long east-west corridor linking the Cinkassé and Koundjouré markets, took almost a year (AFL-PAPEBA Project, AFD funding).

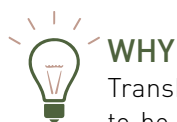


In order to be sustainable, securing corridors requires a bottom-up approach (© Aliou Sall, Kawral Aynaabe, January 2016))

This photo was taken in Senegal, in the village of Samba Konta (Bakel). The meeting is about securing the corridors between Senegal and Mauritania. The issue also includes access to a livestock market and to a large pond. Securing corridors is a process which takes time. Several villages must be involved, along with local governments and technical services. Negotiations between different stakeholders are necessary. Initially, the route has to be identified with paint and potential land claims resolved. The corridor must be legally endorsed, for example through a by-law. When demarcating formally, government standards (width, types of markers) will apply. In the following years, a monitoring system has to be implemented involving all the villages and local governments concerned in order to prevent conflicts and to keep the corridor clear of fields. Therefore, additional funding must be raised, to cover maintenance and monitoring costs.

FINDING 10

Securing livestock mobility is urgent, and requires a global approach, from local to trans-border



WHY

Transhumant families emphasize the many obstacles to be overcome when they are on the move with their herds. Livestock corridors are often non-existent or blocked by cultivated fields. Infrastructure and services along corridors (water points, transit areas, access tracks to surface water, pastures and markets) are inadequate. As a result, herdsman are forced to leave the corridors, risking exposure to conflicts. While regional and trans-border movements are vital, being mobile at the local level is equally important, both during the rainy season and also for those animals remaining at the home base during the dry season. In addition, flexibility is paramount, as transhumance routes can – and must be able to – change, as a response to circumstances: climatic events, conflicts, livestock diseases.

MORE ON THIS

Half of the families surveyed do not follow livestock corridors either because they were non-existent or deteriorated to such an extent that bypassing them is a safer option. For many herders, the only alternative is to trek along the roads. Mixed views were held by those families who used the corridors. The lack of water points forces them to trek over long distances without watering their animals (up to 95 km), often having to move at night, in order to limit their dehydration. Sooner or later, exiting corridors becomes unavoidable, as a result of cultivated fields blocking the route. During the 2014-2015 transhumance, 1,300 forced exits were recorded, with some families having to leave the corridors on 30 occasions.

Transhumant herders insist on the importance of taking a wide-ranging view to securing mobility, which goes far beyond the physical demarcation of corridors. Tracks linking the corridors with ponds, grazing and hosting areas, markets, animal health facilities, and retail outlets for livestock feed must also be secured. For most herders, livestock mobility in their home base is also crucial all year around. During the rainy season, animals must be held at a distance from areas under cultivation, and during the dry season, those remaining behind also need to be mobile. Equally, for those which left on transhumance, mobility within hosting areas is necessary. Regardless of the distances covered, livestock movements at local, national and trans-border levels are intertwined and interdependent. Itineraries must remain flexible, as a response to climatic variations and other events (diseases, conflicts).



WHAT ABOUT WOMEN?

Transhumant women consider that the absence of corridors or their occupation by cultivated fields remain a major source of difficulties. When forced to exit corridors in order to fetch water for their animals and for the family, tensions frequently arise with villagers around wells or boreholes, and they find themselves in the front line.

IN BRIEF

Securing livestock mobility has become an absolute necessity, and goes well beyond the demarcation of corridors. Access to water, pastures, markets and basic services must also be provided. In order to be sustainable, securing corridors requires a bottom-up approach reconciling diverging interests and building legally endorsed consensus among stakeholders. The matter is urgent. This is especially the case in densely populated areas where the longer one waits to secure corridors, the more conflictual and costly the process is likely to be. Conditions must be created to network local, national and trans-border livestock movements, through a coherent approach to securing mobility.



HERDERS' TESTIMONIES

"Livestock corridors have become like cultivated fields. Crop farming on corridors is so widespread that you have to climb over hills to bypass them. In fact, for us there are no corridors any more"
(transhumant families in western Mali).

Conclusion

Livestock mobility – particularly transhumance – is often considered to be outdated, unproductive, and confrontational. As a result, a number of West African coastal countries (Ivory Coast, Benin, Ghana, Togo) have been vocally in favour of measures restricting trans-border movements of livestock, going as far as closing their borders for certain periods of time. The view is that expected benefits far outweigh potential losses, as mobile herders, after all, are mostly interested in plundering natural resources and then leaving again without having contributed anything to the local economy.

Is restricting livestock mobility pertinent in a West African context characterised by climatic uncertainties, and by high rates of poverty and unemployment? And what would the repercussions be on regional economic integration and on adaptation to climate change?

Livestock mobility is enshrined in history. Contrary to the classic image of pastoral mobility limited to nomadic herders living in the northern Sahel, mobile livestock production is found throughout West Africa, as part of a web of complex livelihood systems which also incorporate agriculture and other activities. Since the 1970s, as a result of recurring droughts, agro-pastoral systems have become the cornerstone of adaptation to climate risk. Pastoral communities have invested in agriculture in order to recover from a crisis and rebuild their herds, while the acquisition of livestock would allow farmers to safeguard the family's income in bad years and invest profits from agriculture in good years. Previously confined to northern pastoral areas, livestock systems have extended over the last decades into the southern Sahel, as well as into coastal countries. Mobile systems are also found in Benin, Togo, Ghana and Nigeria, where seasonal movements of livestock can extend over long distances.

The increasing importance of livestock production within agro-pastoral systems could theoretically have resulted in a process of sedentarisation. Reality proved more complex. Intensification needs inputs, which are costly. Intensified livestock production systems have mostly developed in a few selected areas with permanent access to high-quality animal feed: the River Niger Delta in Mali (bourgoutières), the groundnut basin in Senegal, and cotton areas in Burkina and Mali (agro-industrial by-products) or around urban areas and markets.

Therefore, for the vast majority of rural communities, livestock mobility remains an absolute necessity to optimise utilisation of scattered and unpredictable resources, even more so in the present context of climate change. By providing animals with

access to different types of rangelands, mobility increases herd productivity, while building-up its resilience to withstand upcoming crises. Mobility generates economic activities, both on markets and among local populations within hosting areas. In a drought context, mobility is vital to preserve livestock assets both at household and national levels, and by doing so, sustains the long-term contribution of livestock to national economies.

Livestock mobility should not be approached solely from the angle of transhumance (whether national or trans-border). While seasonal movements to coastal countries are on the rise since the 1980s, being mobile locally and over shorter distances is equally important. During the rainy season, animals must be held at a distance from areas under cultivation, and during the dry season, those remaining at the home base also need to be mobile.

Often described as a problem or a threat, transhumance is seen as an extractive practice, a perception that ignores the considerable contributions that mobile herders make to the local economy. Mobility involves money. Year after year, mobile herders sell livestock and, with the income generated, cover their expenses (food, watering fees, access to pastures, taxes, livestock feed, animal health, mobile phones). In 2014-2015, the 386 transhumant families surveyed by AFL as part of the BRACED Programme (UK-Aid) sold livestock and then spent on-the-spot around one billion CFA in total, while on the move. The annual contribution of transhumance can therefore be estimated as being at least several dozens of billions of CFA, which benefit a wide range of actors: health centres, veterinary pharmacies, livestock services, private vets, blacksmiths, welders and mechanics, well-diggers, water management committees, chargers of mobile phones, water and forests services, bicycle, motorbike and cart mechanics, boatmen. Transhumance generates revenue, creates jobs, and helps to fight poverty.

Vital economic and financial interests are at stake, including for the livestock value chain. Transhumant herders and livestock traders use the same itineraries and contribute to supplying markets at competitive prices along the way. Spread out over time, mobility also allows animals to fatten up on-the-hoof. In view of the limiting factors related to transporting livestock or refrigerated carcasses by truck, trekking on-the-hoof (often combined with transport by truck for specific segments) remains essential for the supply of rural and urban markets throughout West Africa. Restricting and boxing-in transhumance movements to a point where livestock mobility would become non-functional could therefore have irreversible

consequences, both economically and socially. Apart from the devastating clashes of recent years, transhumance cannot be summed up as a series of incessant confrontations systematically opposing herders and farmers. Totalling up the length of transhumance movements, the 386 families surveyed in 2014-2015 were on the move with their herds for 83,000 days, a considerable length of time. And yet, all the conflicts reported were resolved in a peaceful manner, thanks, in part at least, to the social links actively maintained between local populations and transhumant herders. Thus, livestock production based on mobility is a further factor of social integration.

Whether for production or marketing, securing livestock mobility is urgent, requiring an enabling legislative and regulatory framework that facilitates movement (rather than boxing it in). Failure to do so will have disastrous outcomes. For those agro-pastoralists (both in the Sahel and in coastal countries) facing a constant shrinking of fodder resources in their home base, ending transhumance will result in high animal losses and widespread poverty. Moreover, in a drought situation, thousands of animals blocked at border crossings, could translate into a humanitarian crisis, potentially damaging for the image of West Africa on the international scene. The functionality of the whole value chain is under threat, while the substitution of meat from the Sahel by imports purchased on a fluctuating global market remains a risky bet. At the local level, a decline in transhumance movements and commercial trekking would severely affect livestock markets and limit local populations' access to red meat and animals (for fattening and draught power), with negative consequences on the economic development of rural areas.

West African countries must pay special attention to protecting mobile livestock production systems which remain the cornerstone of rural livelihood systems. In the future, more transhumance movements to and within coastal countries are to be expected, as a result of demographic growth. In addition, the supply of red meat across the ECOWAS zone also depends on such movements.

Mobility remains the basis of livestock production, which directly affects at least 20 million people in West Africa. Therefore, it is not surprising that a growing attention is being paid to mobile livestock systems by a wide range of actors. Regional institutions, international development partners and civil society are increasingly promoting trans-border cooperation addressing, for instance, safety and security, education, decentralisation, human health, along

with securing international livestock corridors. In spite of programmes often overlapping, such interventions would have further impact if national policies were more focused on ensuring the long-term sustainability of mobile livestock production, within the context of regional integration.

Achieving peaceful, productive and sustainable trans-border livestock mobility in West Africa would provide an outstanding demonstration on how regional integration can be accomplished, based on the region's most important value chain.

Today, more than ever, livestock production areas in the Sahel and in coastal countries are mutually dependent. Therefore, shared use of space and of resources is becoming more complex. A common approach at regional level is necessary. Trans-border mobility supplies local and national economies with animal products, fiscal revenues at borders, on markets and for local governments, and provides commercial opportunities.

Facilitating livestock mobility and ensuring peaceful trans-border movements across West Africa, rather than taking the risk of escalating tensions by condemning it, is the right approach. From an economic, social and political point of view, ending mobility would have far reaching consequences.

Securing mobility has become an absolute necessity, and goes well beyond the demarcation of livestock corridors. Access to water, pastures, markets and basic services must also be provided. In order to be sustainable, securing corridors requires a bottom-up approach reconciling diverging interests. The matter is urgent. This is especially the case in densely populated areas where the longer one waits, the more conflictual and costly the process is likely to be.

In the end, livestock mobility in West Africa, especially transhumance, is the keystone of a vital economic sector which combines a number of critical challenges for the future: meat supply to urban markets, food security, poverty reduction, employment and revenues, conflict mitigation and the fight against terrorism.

AND WHAT IF LIVESTOCK MOBILITY BECOMES VIRTUALLY IMPOSSIBLE?



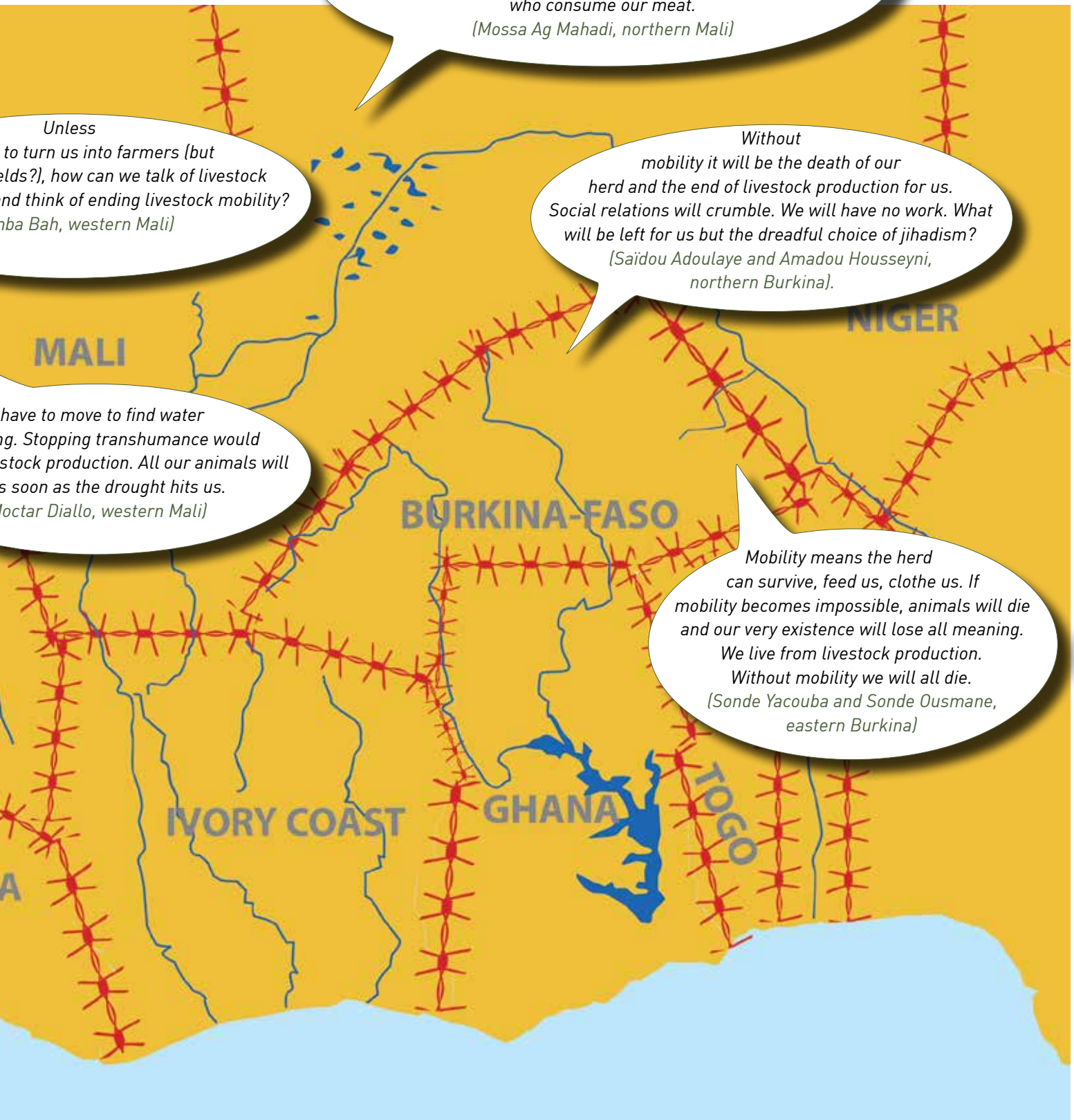
Given the poor rainfall, it is impossible for a herder not to move. Restricting transhumance, it's like an attack on our life as herders. In addition, livestock markets will no longer be supplied and it is the people in towns who will suffer because they are the ones who consume our meat.
(Mossa Ag Mahadi, northern Mali)

Unless we turn us into farmers (but we are not farmers), how can we talk of livestock production and think of ending livestock mobility?
(Moussa Bah, western Mali)

Without mobility it will be the death of our herd and the end of livestock production for us. Social relations will crumble. We will have no work. What will be left for us but the dreadful choice of jihadism?
(Saïdou Adoulaye and Amadou Housseyni, northern Burkina).

We have to move to find water and pasture. Stopping transhumance would stop livestock production. All our animals will die as soon as the drought hits us.
(Doctar Diallo, western Mali)

Mobility means the herd can survive, feed us, clothe us. If mobility becomes impossible, animals will die and our very existence will lose all meaning. We live from livestock production. Without mobility we will all die.
(Sonde Yacouba and Sonde Ousmane, eastern Burkina)



Livestock mobility – particularly transhumance – is often considered to be outdated, unproductive, and confrontational. As a result, a number of West African coastal countries (Ivory Coast, Benin, Ghana, Togo) have been vocally in favour of measures restricting trans-border movements of livestock, going as far as closing their borders for certain periods of time. The view is that expected benefits far outweigh potential losses, as mobile herders, after all, are mostly interested in plundering natural resources and then leaving again without having contributed anything to the local economy.

Is restricting livestock mobility pertinent in a West African context characterised by climatic uncertainties, and by high rates of poverty and unemployment? And what would the repercussions be on regional economic integration and on adaptation to climate change?

As part of the UK-Aid BRACED Programme, Acting For Life surveyed transhumant families over three transhumance cycles (from 2014 to 2017) in order to measure their capacity to anticipate, absorb and recover from climatic extremes. The study covered two trans-border areas linking, in the west, Senegal with Mauritania and western Mali and, in the east, Burkina with northern Mali and western Niger. Given the growing importance of transhumance movements towards the coastal countries, the study followed a more global approach to regional livestock mobility.

Based on solid data, the study sheds a new light on the rationality and impacts of mobile livestock systems in West Africa: How long can a transhumance movement last? Who leaves and with which animals? Do mobile herders contribute to the local economy while on the move? How do they gather information? Do they all cross international borders? What role do women play?

This brochure summarises the main conclusions in the form of 10 key findings which, we hope, will contribute to facilitate an informed debate on livestock mobility in the West African context.

