



The Sahel Livestock Paradox: High Stakes, Low Support

The major livestock countries in the Sahel (such as Niger, Mali and Burkina Faso) offer little support to the livestock sector, both in proportion to the general State budget and compared to the support provided to crop farming. Analysts—at the World Bank, the FAO, in ranchers' organisations and even the Ministries of Livestock themselves in these countries—are unanimous in this observation. This is surprising in these countries that are presented as being 'top-of-the-class' when it comes to fulfilling the Maputo commitments (the pledge by African States to devote 10% of their national budgets to agriculture, including livestock). It is above all surprising in 'agropastoral countries' for which animal value chains are seen by all as strategic, promising or a priority. Finally, one can wonder why countries in the Economic Community of West African States (ECOWAS) do not invest more heavily in these sensitive value chains that—depending on the policies adopted—could become either a cornerstone of regional integration or a serious bone of contention. This brief, produced in partnership with the APESS network, is based mainly on data collected in four countries: Burkina Faso, Mali, Niger and Senegal.



Brief produced in partnership with the Association pour la Promotion de l'Élevage au Sahel et en Savane (APESS).

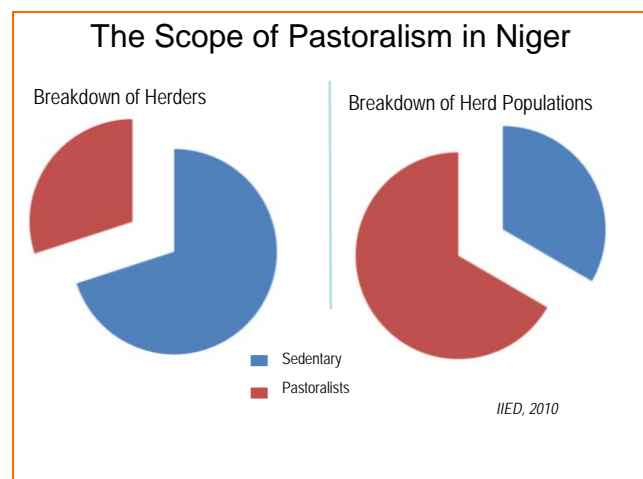
I. Livestock in the Sahel: Major Economic and Social Stakes

A. A Strong Tradition of Pastoral Livestock Rearing in the Sahel

Populations of ranchers, populations of farmers. Sahel countries are often seen as livestock countries or countries with a pastoral vocation. In addition, in this zone, animal rearing is often synonymous with livestock (in particular, cattle, goats and sheep). Accordingly, the meat supply throughout the region is largely dominated by meat from these livestock. (One should remember, however, that poultry farming for example is steadily and rapidly on the rise and accounts for more than 20% of regional production (8% to 10% annual growth, compared to 3% for cattle).) Briefly speaking, a distinction is traditionally drawn in Sahelian countries between populations of ranchers (or herders) located more to the North and sedentary farmers located in the wetter zones to the South. This economic 'specialisation' also corresponds to different modes of life and ethnic traditions. It is also linked to the climate: the large arid spaces in the North are unsuited to crop farming and are mainly exploited by large herds and transhumant livestock rearing. However, herders do not have a monopoly over livestock rearing. Even if they do not derive the bulk of their income from it, most farmers in the South own animals and practice a more sedentary form of livestock rearing. To give orders of magnitude—even though the data must be used with caution—it is reasonable to say that in Sahelian countries herders make up a minority of all animal farmers (all livestock owners combined) but that this minority holds the bulk of the livestock population.

Evolving modes of production. The duality between (mobile) herders and (sedentary) farmers must be strongly qualified today. Indeed, more and more traditional herders are developing agricultural activities and becoming what we call

'agropastoralists'. Similarly, more and more traditional crop farmers are investing in livestock rearing (some even speak of 'pastoralisation'), which provides important agricultural services (manure and draught animal power) and is a profitable activity. Finally, 'new stakeholders'—large landowners with thousands of heads of cattle—have made their entrance into the sector, many after the major droughts. Some of them are large traders who took advantage of the on-going worsening of the terms of trade for cattle/grain and the impoverishment of herders, who have frequently become shepherds. There are also a few 'modern' dairy or mixed-production farms on the outskirts of cities practicing sedentary, semi-intensive or even enclosed livestock rearing. They are strongly encouraged by the authorities.

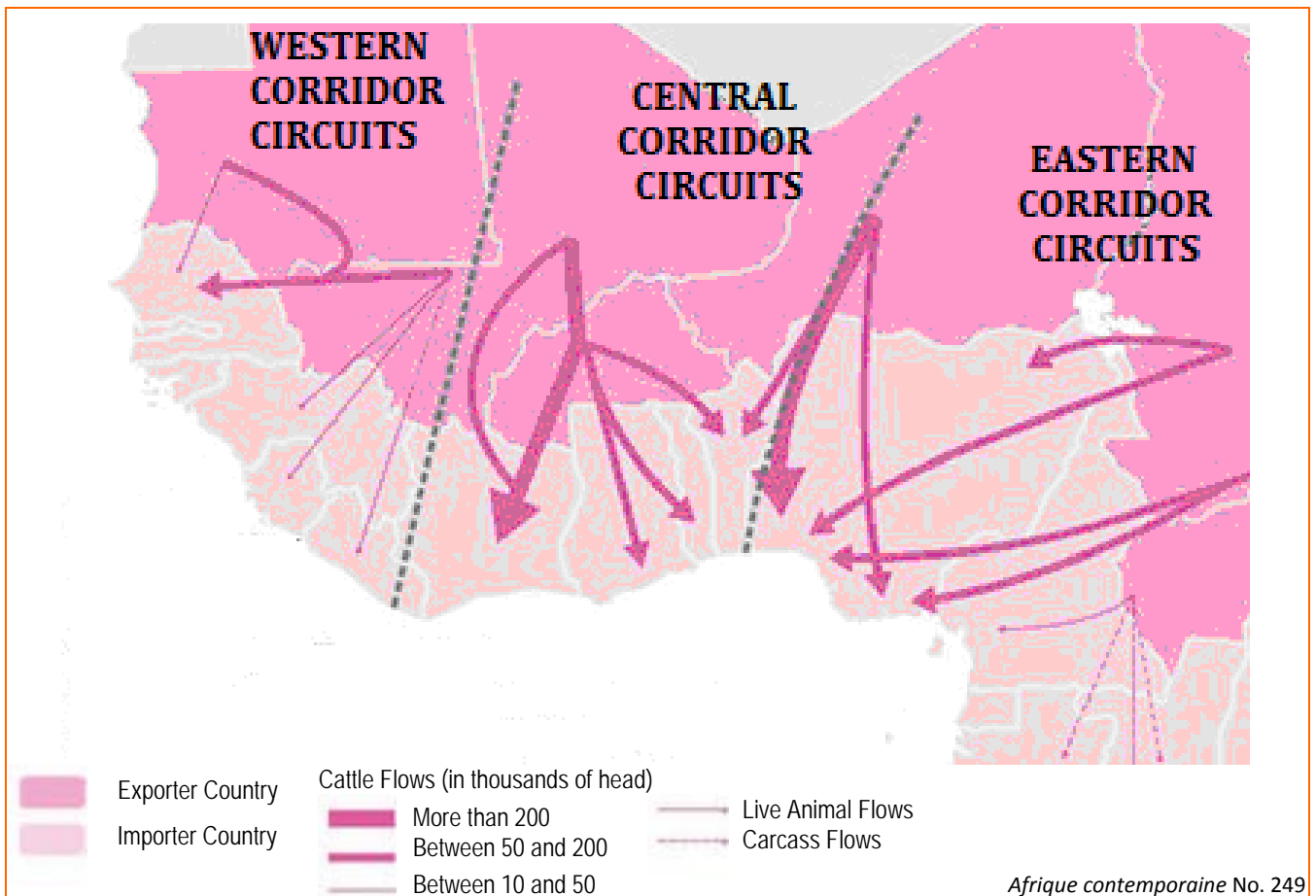
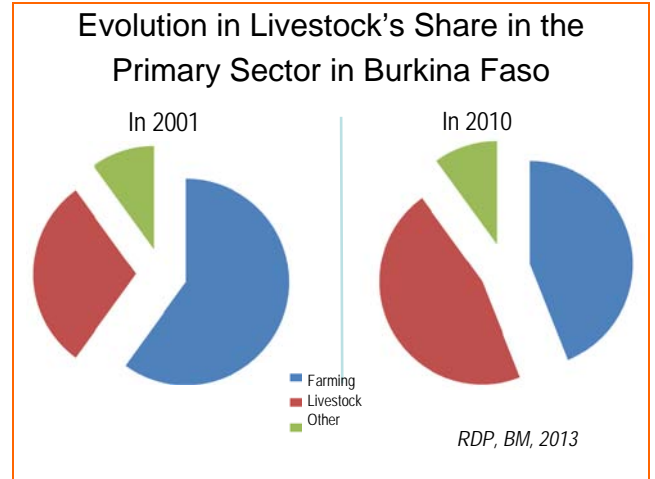


B. Livestock Value Chains, Particularly Cattle, that Weigh Heavily in the Economy

Between one-third and half of agricultural GDP: livestock is a key activity... Livestock occupies a large position in the economies of Sahelian countries such as Mali, Burkina Faso and Niger. This is also the case in Mauritania and Chad. This sector also generally accounts for more than one-third of these countries' agricultural GDP. According to the OECD, if one counts livestock's contribution to agriculture (manure, draught power) and other services (by-products, savings), its contribution to the agricultural GDP of these countries is 50%. According to the World Bank, in Burkina Faso, livestock's weight in the primary sector is even on the rise (increasing from 30% to 45% between 2000 and 2010). If we look at the weight of livestock in the economy as a whole in these countries, however, some analyses are alarmed at its decline, notably because of the emergence of other sectors of activity in the formation of GDP: 'the relative weight of livestock in national economies is on a downward trend; today it accounts for only 10% to 15% of the GDP of Burkina Faso and Niger, although it still holds a large share of export revenues in Burkina Faso,' (CILSS, 2010).

mode is also characterised by low production costs, making Sahelian cattle highly competitive. Over the past two decades, livestock transactions between West African countries have increased considerably, attaining nearly one billion US dollars (ATP, 2013). They are said to have doubled between 2000 and 2010. In the opinion of several experts, real cattle flows between Sahelian and coastal countries are largely under-estimated: 'Official statistics represent probably and on average approximately one-third of real transactions in value,' (Josserand, 2013).

Cattle, one of the main exports from Sahel countries to coastal countries. Along with mining products and cotton, cattle (sold mainly live) is one of the main exports from Sahelian landlocked countries, often ranking third after gold and cotton as in Burkina Faso. It is the most widely traded product between Sahelian countries and coastal countries; as such, it is an important factor in regional integration. The extensive production

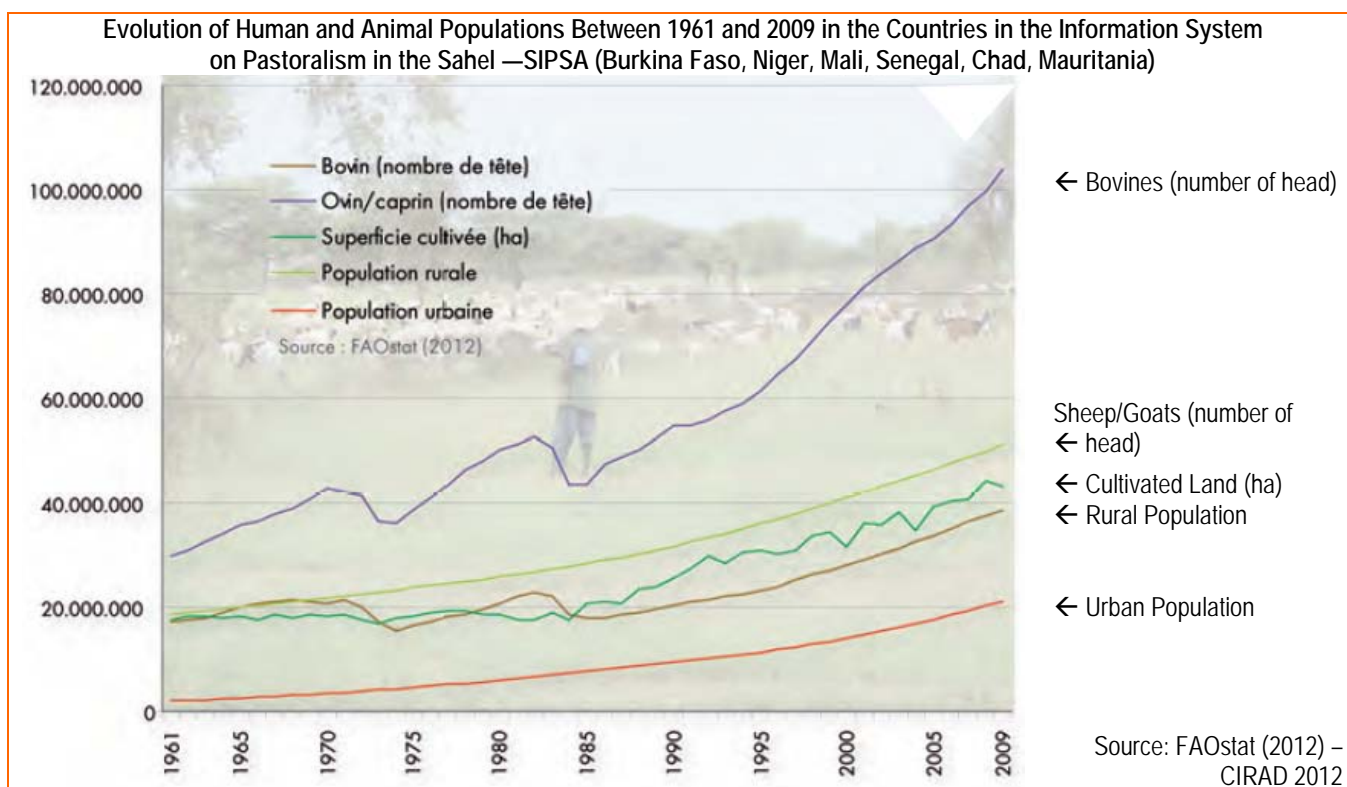


A strongly growing livestock population, despite repeated crises. According to estimates—which are known to be unfortunately little reliable—the cattle populations in Niger, Mali and Burkina Faso are more than nine million head each. With Nigeria (around 16 million), they are the largest producers of red meat in

ECOWAS. The sheep and goat population has been growing strongly in the four countries since the major droughts and despite repeated climate crises (2002, 2005, 2008, 2010 and 2012—five major food crises in the space of ten years). The bovine population curve compared to that of the rural population reveals long-term

effects of crises on livestock rearing. By noting the changes in the bovine-to-human ratio, we can see that cattle rearing has never truly recovered from the major droughts in the 1970s and 1980s.

Many data on livestock rearing are approximate: the herd census conducted in Niger in 2007/2008 (RGAC) showed that real population size was under-estimated by half...



C. Value Chains Stretched to the Limits

Production conditions worsening for herders. In all four countries, the living conditions and production conditions of many ranchers have, however, worsened under the effects of constraints of all types. Climate crises, prices that offer little incentive to produce or sell, barriers to mobility between countries, growing conflicts with farmers whose fields are encroaching more and more on pastures, urbanisation, and finally the rise of physical insecurity in distant zones are as many realities facing herders. For example, pasture zones, cattle crossing routes, transhumance corridors, and pastoral enclaves are being whittled away. Like pastures in pastoral zones, they are being 'colonised' by fields or the private property of new players (traders, civil servants, elected officials). States have not been able to reverse the trend and have, overall, focused their policies on the stakes of export crop production.

Supply not keeping pace with demand. Both an advantage for and pressure on the sector, animal production is driven by booming urban demand from coastal countries. Animal products are consumed more and more: in 2008, food spending was divided in three roughly equal shares: one-third animal products, one-third sauce products, and one-third staple starches. In 2005, growth in urban demand for meat products was estimated at 4% per year, and it was estimated that this growth will have more than tripled between 2005 and 2025 (OECD). Overall, it seems that the supply of animal products, while growing, is not growing enough to follow the acceleration in demand. While potential is great, the risks of seeing the meat livestock value chain in the Sahel come under heavy competition from other regions is real in a context of sharp growth in demand. 'If economic operators in the Sahel do not get organised rapidly, meat from Southern

Africa could flood their market in the next 20 years,' (CILSS, 2010). Estimated at 'only' 2% per year, growth in the supply of animal products is running up against the paucity of resources and the spread of the agricultural front in pastoral zones. However, if the regular effects of droughts were lessened and if rapid support to rebuild herds after crises was provided, the cattle supply could be increased.

The white meat challenge. Distinctions in the supply situation should be drawn based on products. For red meat, the region is self-sufficient overall. The poultry sector is evolving differently depending on the country. Senegal, after being subject to a large wave of white meat imports, saw a spectacular revival of its local production following a ban on imports for health reasons. Today, it is self-sufficient in white meat and eggs. Niger, on the contrary, is experiencing a phase of sharp acceleration of poultry product imports for reasons poorly explained at this time. Mali and Burkina Faso still seem immune to this phenomenon. However, generally speaking in the sub-region, we see greater consumption of white meat instead of red meat: competition is strong between these two types of meat.

Milk's 'vicious circle'. While consumption of dairy products is on the rise overall, the dairy sector is struggling to grow in the four countries. Supply is not keeping pace with urban demand and milk powder imports are rising at a worrying rate. These growing imports are both a short-term solution to the supply shortfall and one of its causes because the price of imported powdered milk is unbeatable on the market and therefore discourages production and the structuring of local supply chains. Other factors can explain this dairy problem, among which

insufficient feed for cattle during the dry season and structural difficulties, notably for the collection and conservation of these perishable products. Here, too, situations differ from country to country. In Senegal, we see real development of mini dairies and promising innovations for the sector. But, for many observers, the future of this sector is rather dim. With the establishment of the ECOWAS common external tariff (CET) and the end of dairy quotas in Europe, there is a risk that imports will not drop in the short term.

Worrying livestock policies in coastal countries. The livestock policies in force in the coastal countries seem focused on cutting down meat imports from Sahelian countries, and seem to testify

II. Low Public Support for Livestock

A. Sahel Countries, 'Maputo Champions'?

Sahel countries fulfil the Maputo commitments. On average, Sahelian States make up the majority of the 10 out of 54 African countries devoting 10% of their budgets to agriculture (including livestock). Compared to the previous decade, this rate is clearly on a downward trend. During the 1990s, landlocked countries in the Sahel could devote up to 40% of their budgets to agriculture. In 2008, when the food crisis began, Burkina Faso's agricultural budget in absolute value was lower than its agricultural budget in 1991.

But they do not comply with AU-IBAR recommendations on livestock. In 2005, the Ministries in charge of animal resources in the African Union specified that 30% of this share allocated to agriculture should be reserved specifically for livestock, which means that 3.33% of the national budget should be devoted to livestock. The AU-IBAR (Inter-African Bureau for Animal Resources linked to the African Union) and regional institutions are in charge of monitoring application of this decision.

International aid makes up the bulk of agricultural budgets, and little goes to livestock. More than two-thirds, even three-fourths, of the agricultural budgets of Sahelian countries consist of foreign aid funds. Yet, the aid devoted to livestock is generally little. According to the OIE and generally speaking (worldwide), '1.7% of international aid destined for agriculture goes to livestock development programmes and the veterinary services necessary for its productivity and even its survival.' In addition, international aid takes an interest in priority in ('human') food

B. Livestock is the 'Fifth Wheel of the Coach'

Livestock receives on average 10% of agricultural spending. In other words, public efforts for livestock in Sahelian countries approximate 1% of the national budget over the period considered. The poor investment in livestock confirms a relative lack of interest among authorities for this sector, relegated to the back burner in agricultural policies, emphasis being placed on export crops (groundnut, cotton) or more recently on food crops (rice).

An imbalance in favour of export crops. The under-investment in livestock compared to its economic and social importance reveals a bias within agricultural policies in the broad sense. Overall, they remain focused on cash crop production issues and guided by urban bias. Beyond showing favouritism for farmers, the public policies rolled out in the field of agriculture have

to a weak vision of regional interests. As we noted in an earlier *Brief*, 'Côte d'Ivoire is one of the main importers of livestock from landlocked Sahelian countries. Côte d'Ivoire's official data speak of 660,209 head of cattle and 1,384,000 small ruminants imported between 2004 and 2009. The NAIP emphasises this dependency on imports and the production potential in the country to develop a target focusing on improving coverage of needs with domestic production. It does not mention issues relating to the transhumance of Sahelian herds or the stakes linked to stabilising and securing livestock rearing in a regional framework,' (*Brief* No. 14, see page 8). It is important that national policies be designed to more fully integrate regional stakes.

security and crop production. Why? For some analysts, animal products are seen as 'luxury' goods for wealthy populations that do not play a part in food security issues. Aid therefore bears some responsibility for the under-investment in livestock. In Mali, the bulk of investments (mainly due to aid) is directed to irrigation. In Niger, spending on food crisis management is the priority item. Today, more and more voices connect the problem of agricultural under-investment with a problem of 'over-dependency' on international aid. Of course, this holds for livestock in Niger, which was financed 57% by foreign aid in 2010, and Burkina Faso (48%). However, it should be noted that dependency on international aid is said to be less in the livestock sector than in agriculture in general.

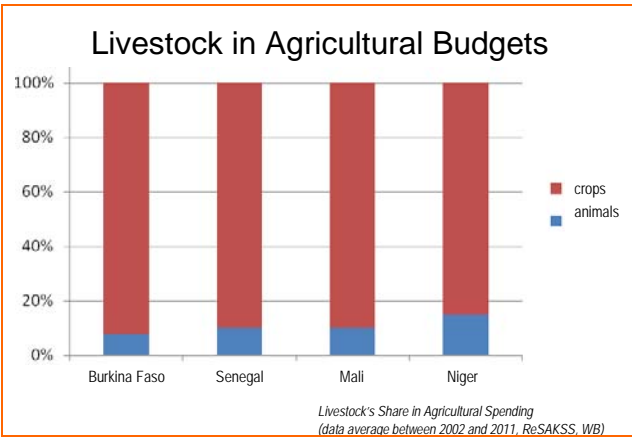
Looking at the Numbers:

Examining public spending is a way to 'make numbers talk' and verify whether discourse has turned into action. The interest to be found in this exercise is obvious, but many difficulties are involved in doing so. First, there are methodological difficulties (What do we call 'agricultural spending' or 'livestock spending'? Must the laying of a rural road be seen as agricultural spending? etc.). Second, there are difficulties linked to the reliability and accessibility of primary data (from administrations). Analysts are often dependent on the numbers sources are willing to give them. Yet, States sometimes hesitate to turn over certain pieces of financial information.

sometimes ramped up the pressures (notably land-related) that affect herders and ranchers, for example by encouraging area development schemes in pasture zones.

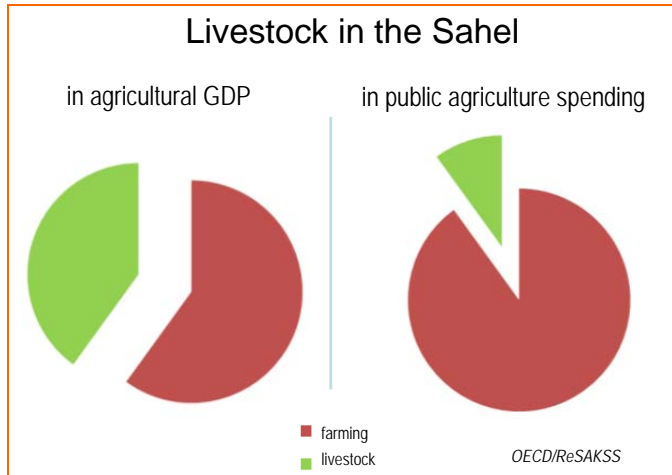
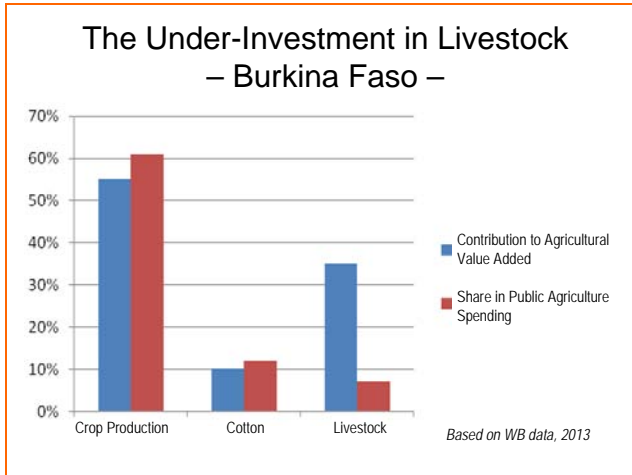
The under-investment in livestock can also be seen in comparison to government support for a leading agricultural sector such as cotton in Burkina Faso and Mali. The numbers show that cotton generates less wealth than livestock but receives more public aid. Since the veterinary service privatisation policies that largely failed, veterinary services have, for example, barely been provided by States, despite the importance of income derived from livestock. States and local governments invest very little in maintaining and renewing pastoral infrastructures such as pasture wells.

Unsuitable livestock policies according to the FAO and World Bank. Reviews of public spending in Senegal and Burkina Faso



underscore the under-investment in livestock: 'livestock is one of the most neglected agricultural sub-sectors and it is important that the livestock budget be increased in proportion to its weight in the economy and households' poverty alleviation strategies,' (RDP Burkina, 2013).

The FAO's Monitoring African Food and Agricultural Policies (MAFAP) team also takes a severe view of livestock policies in Burkina Faso and Mali: its analysis of animal product (particularly beef) prices concludes that producers were penalised throughout the 2005-2010 period, that is to say that prices did not provide the incentive to produce and sell that they should have. The MAFAP believes that efforts should more fully target the value chain and prices, and that infrastructure investments are too low (development of pastoral areas, vaccination parks, etc.).



C. Beyond Quantity: Where Does the Money Go?

'Modern' livestock promotion policies. The various policies are still for the most part focused on promoting so-called (semi-) intensive production techniques (artificial insemination, stabling, etc.). Emphasis is generally placed on animal health (via the privatisation of veterinary services) and genetic improvement. Many governments are offering incentives to develop 'modern farms' on city outskirts. We can note, however, that projects taking an interest in the downstream segments of the value chain and in processing, especially in the dairy sector, are taking on a larger role. What is more, public policies have generally sought to lessen herders' mobility, notably by building hydro-pastoral facilities such as boreholes in Senegal and organising zones and pastoral operations. The motivations behind this sedentarisation policy include: taxing a sector seen as prosperous, limiting conflicts between farmers and herders attributed to transhumant herders, putting an end to a mode of production reputed to be unable to meet demand over the long term, and limiting the real or supposed impacts of livestock on the environment. Yet, pretty much throughout the Sahel, experiments with modern farms based on rangeland utilisation, and most State ranches, have not been successes. Mobility remains a modern tactic allowing for adaptation to environmental variability, and has better yields per head than sedentary village livestock systems.

Traditional herders forsaken. To some, policies promoting 'modern' (industrial) livestock operations seem discriminatory: instead of accompanying the majority of professional herders in a modernisation and development process (pastoralists and agropastoralists alike), these policies are said to favour a minority of newcomers in the livestock sector located around cities. Indeed, many observers confirm that pastoralism is still very insufficiently integrated in actual policies.



Pastoralism in the Eyes of the Authorities (taken from the Senegal Ministry of Livestock website, 2013)

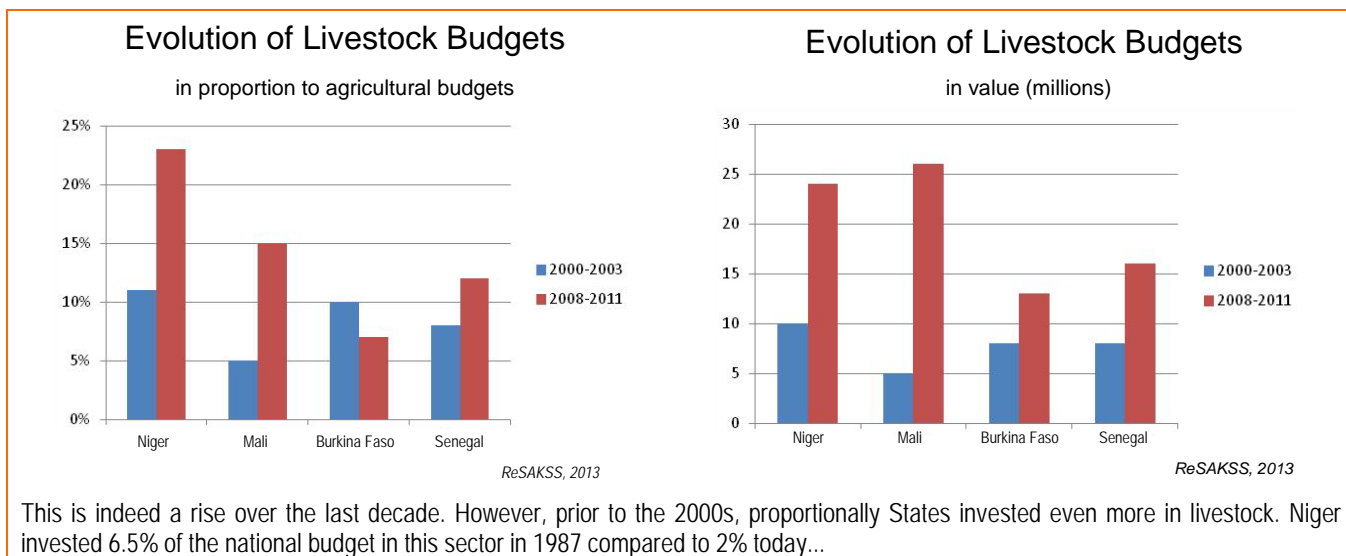
'The extensive livestock system, as the dominant livestock rearing system, is at the source of many constraints in the livestock sector, notably its low productivity, lack of competitiveness, and cattle thefts. In addition, the reduction of pastoral land, because of population growth, is a source of frequent conflicts between farmers and herders. The rationalisation of modern animal production systems, based on the permanent stabilisation or semi-stabilisation of animals, is an appropriate solution. To trigger this modernisation dynamic, the Government has decided to set up a programme to promote modern private farms and ranches, the objective of which is to increase the productivity and competitiveness of various livestock sectors.'

III. Things Are Starting to Change... Slowly

The share of spending devoted to livestock is tending to increase. Looking at values, this is true in the four countries. Looking at agricultural budget proportions, it is true in all countries except Burkina Faso. In other words, we can see an upwards trend in the share of agricultural spending devoted to livestock. The largest increase was in Mali, where it rose from 4% to 18% of agricultural spending between 2000 and 2010. The share doubled in Niger and Senegal. Although modest compared to Sahelian countries, we can also note increased support for livestock in coastal countries. In Burkina Faso's and Mali's national agricultural investment programmes (NAIPs), livestock

holds and honourable place, reaching nearly 20% of budgeted investments. It is too early to say whether these investments have been or will be made.

In the regional agricultural investment programme (RAIP), 18% of investments are devoted to livestock and mainly address the physical environment for pastoralism (pastoral water, livestock corridors, fire prevention efforts) and value chain development (dairies, slaughterhouses, markets, etc.). It is difficult to say today whether this planned funding has effectively been disbursed.



Policy Advances on the National and Regional Level in the 1990s and 2000s

- All countries now have national livestock development policy documents and Ministries entirely devoted to this sector.
- Livestock is one of the priority sectors in the countries (the only priority sector in Niger; Burkina Faso specifies 'bovines').
- ECOWAS adopted a 'Livestock Plan' in 2010 and set up a task force on pastoralism, which went through a period of 'sleep' but is now waking up, around a vast project to secure pastoralism in select crossborder zones and along transhumant routes in the six Sahelian countries (the Regional Sahel Pastoralism Support Project [PRAPS], supported by the World Bank and also involving CILSS).
- We can also cite the current or forthcoming initiatives on the resilience of agropastoral and pastoral populations (dairy, small ruminants, poultry rearing) and pastoral water (AFD and EU funding in Niger, Chad and Mauritania).
- Finally we can note growing consideration of cattle feed in emergency plans. During the regional discussions on the storage of agricultural produce, and following the advocacy by herders' organisations notably, ECOWAS included cattle feed in the products held by the Regional Reserve. A pilot project is being prepared in this framework.

However, pastoral laws are generally still insufficiently known, respected and enforced. They are also still the subject of many disagreements. In Niger, for example, the passing the Rural Code was not a smooth process: it ran into many obstacles in certain Ministries and among members of parliament. It was ultimately adopted under an exception system, following a failure in front of the democratically elected Parliament. Other bills and pastoral law application decrees are lying dormant in desk drawers because they still trigger too much disagreement. In Chad, on 1 December 2014, during the celebrations for the 24th anniversary of his taking office, President Idriss Déby announced the withdrawal of the pastoral code adopted for the second time last 11 November by the National Assembly. At the root of the controversy: a period of political tension, in which certain opposition deputies decried certain provisions considered to be too favourable to pastoralists and likely to revive

conflicts between pastoralists and farmers.

Ministries of Livestock are attempting to develop advocacy for the sector. The Conference of Ministers in charge of animal resources within the African Union has on several occasions denounced the under-investment in livestock and demanded a financial commitment from States amounting to 30% of agricultural spending. It has also taken a stance in favour of setting up a specific system to track public spending in the livestock sector. Several livestock administrations in Sahelian countries are reflecting on elaborating arguments to convince governments to up their efforts in this sector. Burkina Faso produced a detailed set of arguments in favour of the sector with the UNDP in 2011. Burkina Faso has also benefited from World Bank (RDP) work towards advocacy for greater financing of livestock.

Legislative advances in favour of pastoralists. Mauritania, Mali, Niger and Burkina Faso have passed laws securing pastoralism over the course of the past ten years. In Chad and Senegal, pastoral laws are being drafted. Pastoralists' rights are increasingly being recognised (rights over land, rights to mobility, etc.)—at least in theory. After decades of marginalisation and livestock policies that encouraged the sedentarisation of pastoralists, this is real progress.

Passage of Pastoral Laws in West Africa



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- countries having passed pastoral laws
- 1995 year the pastoral legislation was passed
- countries preparing pastoral laws

In Nigeria, pastoral laws exist in the North of the country. These pastoral laws aim to contain herders in areas reserved for livestock rearing (11 States), thus limiting the movement of animals between States

RBM, 2014

Why So Little Support? Strongly Rooted Biases...

The reasons for this paradox between a livestock sector with considerable stakes and (relatively) weak public support are many. One of them comes from the stigmatisation of pastoralists. For a long time in Sahelian countries, the elites in power have been wary of herders, in particular transhumant herders. During colonisation, they were already seen as uncontrollable populations because mobile, undisciplined and privileged.

Indeed, even today, for many decision makers, herders are seen as affluent populations, whose ownership of herds places out of reach of hunger. In so doing, they ignore the unique vulnerability of herders to climate hazards and the growing gap between a population of small, precarious herders alongside large 'affluent' herders; in Sahelian regions, '15% of households own on their own 47% of cultivated land, 54% of small ruminant herds, and 70% of large livestock herds,' according to the expert Seidou Bakari (2013).

'Livestock is for the Fula!' Equating a pastoral or agropastoral mode of production with an often stigmatised ethnicity is also common coin. To do so is to misunderstand the reality of the herding milieu: while herdsman often belong to the Fula community, livestock ownership, including that of transhumant cattle, is much less identifiable and involves nearly all ethnic groups.

Many stakeholders also confuse livestock rearing with transhumance. It is true that pastoralism is still the dominant mode of livestock production. But it is evolving considerably and rapidly. More and more pastoralists are becoming agropastoralists. More and more crop farmers are becoming crop and livestock farmers. The barriers to transhumance are multiplying and forcing it to change as well.

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This Brief is based mainly on the results of the study conducted by APESS in four countries in the Sahel in 2014, and on the bibliographical references cited in the various documents relating to this study and listed below:

R1. Eléments de bilan du soutien public à l'élevage au Mali depuis Maputo, APESS, 2014
<http://www.apess.org/documents/dix-ans%20apres-maputo-note-apess-mali-mise-en-page230814.pdf>

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R2. Eléments de bilan du soutien public à l'élevage au Burkina Faso depuis Maputo, APESS, 2014
<http://www.apess.org/documents/dix-ans-apres-maputo-note-apess-burkinamise-en-page230814.pdf>

R3. Eléments de bilan du soutien public à l'élevage au Niger depuis Maputo, APESS, 2014
<http://www.apess.org/documents/dix-ans-apres-maputo-note-apess-niger-mise-en-page230814.pdf>

R4. Eléments de bilan du soutien public à l'élevage au Sénégal depuis Maputo, APESS, 2014
<http://www.apess.org/documents/dix-ans-apres-maputo-note-apess-senegal-mise-en-page230814.pdf>

R5. Le financement public dans l'élevage au Sahel depuis 10 ans : un double sous investissement, APESS, 2014
<http://www.apess.org/documents/synthese-etudes-bilan-maputo-apess.pdf>

R6. Brief No. 14: Taking a Regional Approach to Agricultural and Food Challenges in West Africa?
http://inter-reseaux.org/IMG/pdf/Bulletin_de_synthese_No14_ENG.pdf

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