Lowering cross-border livestock transportation and handling costs in West Africa

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Key points

- Regional cross-border transfer costs for cattle are three times higher than the equivalent transfer of beef from Europe to West Africa's coast.
- Transport and handling costs in cross-border trade account for 40 to 60 per cent of all marketing costs, excluding the purchase price of cattle. Similar costs in-country (i.e. within national borders) are roughly two and half times lower.
- High rental costs for trucks, due to truck shortages, high fuel taxes and bad roads, represent half of all cross-border transport and handling costs.
- Intra-regional trade in live animals attracts certain types of costs which are unlikely to be incurred if meat products are traded. For example, livestock drovers (people who drive (conduct) herds of animals to market) are paid handling fees during the two to three day trip, adding a cost of 2190 FCFA* to each head of cattle.
- Official documents costs, duties and taxes account for 28% of all cross-border marketing costs, with important country disparities. Such costs incurred on livestock exports from Burkina Faso are nearly twice as high as costs in Mali.
- Illegal road taxation at numerous checkpoints, where traders make non-receipted payments to public agents for no obvious reason, further increases cross-border transfer costs.
- The average sum of illegal road taxes plus conveyance fees (*frais de convoyage*) paid to conveyance companies (*sociétés de convoyage*), particularly in Côte d'Ivoire, amounts to 150 thousand FCFA per trip, or the equivalent cost of hiring a 30-tonne truck for a single trip from Niangoloko (Burkina Faso) to Abidjan (Côte d'Ivoire).

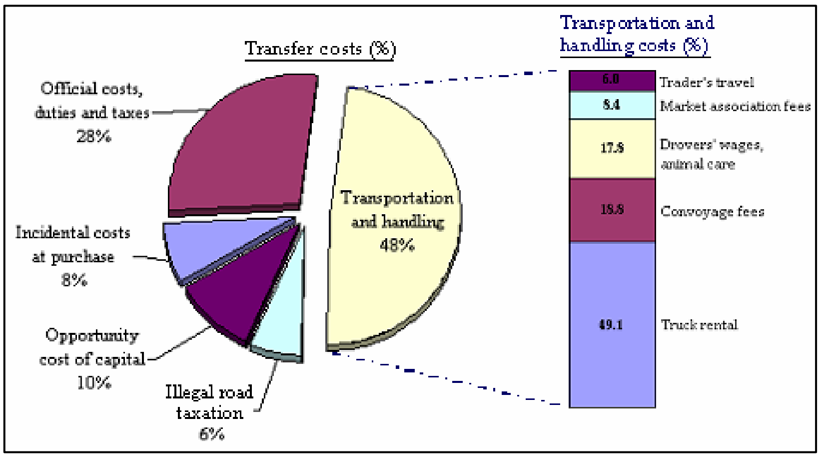
* During the write up of this brief, US$ 1 = 550 FCFA.

West Africa's intra-regional livestock trade is dominated by the flow of live animals, with trade in processed livestock products a distant second. Livestock traders primarily transport animals from the farm gate to terminal markets through a series of intermediaries. Improving the competitiveness of Sahelian livestock *vis-à-vis* imported meat in the region's main coastal markets will make it more affordable and increase its demand. In turn, this should improve the welfare of producers, consumers, and other economic operators (traders, transport vehicle owners, drovers, intermediaries) in regional livestock and meat markets. This brief analyses the costs incurred in the transfer of animals through the marketing chain and highlights areas where costs could be reduced.

Cross-border livestock transfer costs

Costs incurred by traders in the cross-border transfer of livestock include: official costs, duties and taxes, vaccination and health certificates bills and inter-state waybills; illegal road taxation at checkpoints; incidental payments made to market agents; the cost of capital; and transportation and handling expenses (Figure 1). Nearly half of all cross-border transfer costs are incurred on the latter component alone.

Figure 1. *Components of cross-border livestock marketing costs*



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Transportation and handling expenses are broken down as follows: i) truck hire, ii) convoyage fees, iii) drovers' wages (for loading and off-loading animals), iv) market association fees, and v) trader's travel expenses. Though illegal road taxation and official costs, duties and taxes are not strictly transport or handling costs, they are addressed here as they substantially affect the final transfer cost of livestock, particularly in Burkina Faso.

Comparing domestic and cross-border transportation and handling costs

Domestically, principal transportation and handling costs include drovers' wages, market association fees, trader's travel and other minor expenses. As trekking is the predominant means of transport from farm gates to secondary (frontier/border) markets, no costs are incurred in truck hire, convoyage fees or illegal road taxation.

To enable country comparisons within the domestic segment, and between the domestic and cross-border segments, transfer costs are expressed in terms of what it would cost to transfer one tonne of beef per km (Table 1). Cost figures range from 40 FCFA for trekking itineraries from Tenkodogo to Bittou (Burkina Faso), to 88 FCFA for trips from Niéna to Sikasso (Mali). The domestic average for cattle is 54 FCFA/t per km.

Table 1. *Domestic and cross-border costs of transporting and handling live animals (cattle) expressed in terms of cost per tonne of beef per km.*

Case study	Cost/tonne/km by segments, FCFA (US $)		
	Domestic	Cross-border	Entire chain
Sikasso	88 (0.16)	153 (0.28)	146 (0.27)
Niangoloko	48 (0.09)	172 (0.31)	133 (0.24)
Bittou	40 (0.07)	83 (0.15)	79 (0.14)
All markets	54 (0.10)	129 (0.23)	166 (0.21)

Notes on Table 1 itineraries

Sikasso: *domestic is Niéna to Sikasso (100 km), Sikasso cross-border is Sikasso to Abidjan (810 km).*

Niangoloko: *domestic is Djefoula to Niangoloko (320 km), Niangoloko cross-border is Niangoloko to Abidjan (705 km).*

Bittou: *domestic is Tenkodogo to Bittou (110 km), and Bittou cross-border is Bittou*

Cross-border transfer costs vary from 83 FCFA/t per km for the Bittou to Accra route to 172 FCFA for Niangoloko to Abidjan. The cross-border average was 129 FCFA, irrespective of the market or country of origin. Such transfers, therefore, are roughly two-and–a-half-times more expensive than equivalent costs in the domestic segment. Over a mean distance of 1215 km from farm gates to terminal markets, the average transportation and handling cost is 122,133 FCFA/t (US$ 222): three times higher than the US$ 80 required for equivalent transatlantic transfers from European countries to destinations along West Africa's coast.

Why are the costs so high?

Factors constraining livestock traders include:

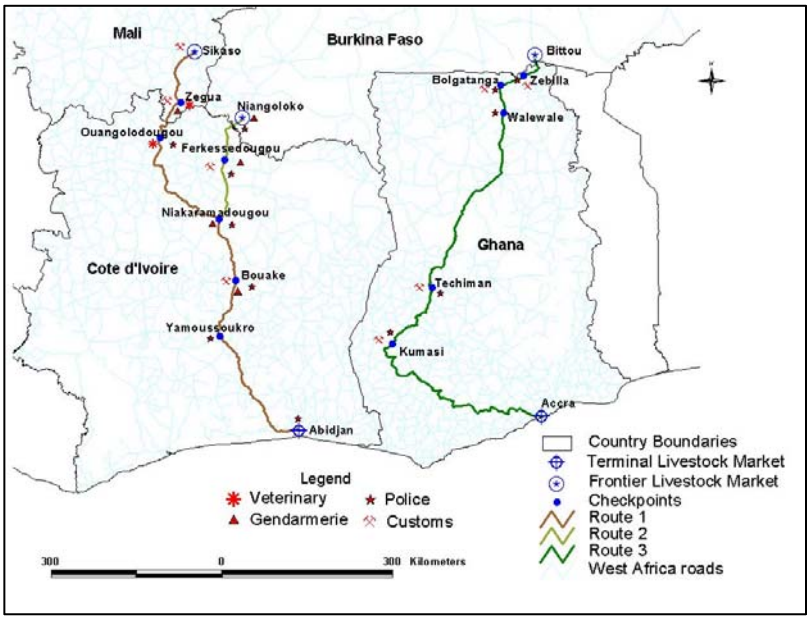
- **Official costs, duties and taxes**: These are paid by traders to obtain official documents such as export permits, vaccination and health certificates, inter-state waybills etc. In Mali, the average of such payments for cattle exports is 129,000 FCFA and twice as high (i.e. 242,625 FCFA) in Burkina Faso. Although reforms in Mali to reduce these costs have been on-going for a while (see Brief 1), official charges alone remain greater than the cost of renting a 30 t truck to transport cattle to the coast.
- **Cost and shortage of trucks**: Purchase and maintenance cost of trucks in the study countries are high due to high import duties on new trucks and spare parts. This leads to inadequate maintenance of existing trucks and difficulty in replacing them. A notable exception is Ghana where vans and trucks are not dutiable though subject to a 12.5% VAT. The availability of trucks for transporting livestock to the coast also depends on the season of the year (e.g. there is competition with cotton growers to transport cotton to the coast during the harvest season) and the availability of goods to transport back from the coast, which will facilitate an early turnaround. Trucks plying the route also require cumbersome transit arrangements which add to cost.
- **High cost of fuel**: A 30 t truck requires roughly 400 litres of diesel for a trip from Sikasso to Abidjan, costing 110,000 FCFA at 275 FCFA per litre. This expense alone represents over half (52.4%) of the cost of hiring a truck or 3,143 FCFA/head of transported cattle. The cost of fuel is high due to high fuel taxes which were about 36% during the study period. A reduction of these taxes by half would lower the cost of the trip by 19,800 FCFA, or 565 FCFA/head of cattle.
- **Illegal taxes**: Numerous checkpoints exist along the highways where non-receipted payments are systematically made to police, customs, veterinary and other officials per truckload of cattle. Along the main cross-border trading routes, the checkpoints at Ferkessedougou and Bouake, both in Côte d'Ivoire, have the most notorious reputation, harbouring up to three different agents, namely: police, customs and *gendarmerie* (Figure 2). The checkpoint in Zegua, Mali is also reputed for frequent payments made to officials. Depending on the itinerary, total non-receipted payments can range from 12,000 FCFA on the Bittou to Accra route to 71,000 FCFA from Sikasso to Abidjan, translating respectively to 1.7 and 10.5% of cross-border marketing costs for cattle in the two routes. Illegal taxes between Sikasso to

Abidjan are nearly twice as high as the government imposed fuel taxes for the same route. Abolishing them would result in significant cost reductions and minimisation of delays that lead to deteriorating cattle health and sometimes death—additional costs that are then passed on to consumers.

- **Conveyance companies** (*sociétés de convoyage*): In response to the detrimental effects of illegal road taxation, private conveyance companies emerged to provide services that were ostensibly aimed at facilitating livestock trade. Such services include assisting traders to obtain the necessary trade papers and comply with various other regulations along the trade route. For these services, they charge fees '*frais de convoyage*' to cover their costs and also pay the various levies imposed by government agencies (see Brief 4). Such fees, applied to a truckload along the Sikasso–Abidjan and Niangoloko–Abidjan routes, at the time of the survey were in the range of 85,000 and 75,500 FCFA, respectively, adding as much as 2,430 FCFA/head of cattle to cross-border shipment costs. Traders using these companies are no longer delayed at checkpoints, though they must still pay a 'token' 1,000 FCFA/truck per agency at each checkpoint. Cumulatively, the *frais de convoyage* and bribes approximate the 150,000 FCFA required to hire a 30 t truck from Niangoloko to Abidjan, adding about 4286 FCFA/head of cattle. Conveyance companies do not operate on the Bittou–Accra route and, thus, such fees are not charged on this route. Illegal road taxation contravenes the existing rules of the Economic Community of West African States (ECOWAS) that allow the free flow of goods and movement of people within the region.
- **Handling costs**: Payment to drovers, who load, feed and water the cattle *en route* and off-load them at terminal markets, averaged 76,750 FCFA/trip. Due to the trade in live animals, this expenditure adds an average of 2,193 FCFA/head of cattle to marketing costs, which probably would be avoided by trading in animal meat products.
- **Inadequate and/or deteriorating road and rail infrastructure**: Additional delays and costs also occur due to poorly developed stock routes in the domestic segment; inadequate feeder roads to link collection markets, deteriorating highways, and collapse of rail transport[1] as an alternative to cross-border trucking.

[1]*Not studied but there is evidence of decline in rail transportation*

Figure 2. *Checkpoints and types of officials manning them along the principal livestock trade itineraries.*



Strategies to lower livestock costs

The huge difference between domestic and cross-border transportation and handling costs points to two broad strategies:

i. Domestically, trekking is cost effective over short distances and where there are clearly marked stock routes—routes specifically created to facilitate movement of animals along cultivated areas to prevent damage to crops and property and to provide easy access to water. Therefore, efforts should be made to maintain costs at current levels where they are low. A legal framework should be developed (nationally, then regionally) for the protection of livestock routes against encroachment and provision of watering and resting points with feed along such routes (see Brief 2).

ii. Policies to lower fees and expenditures, particularly in cross-border segments should be pursued. These include:
    - Increase truck access and availability through: a) reduction of customs duties on new trucks and spare parts; b) reduction of fuel taxes; c) introduction of dual purpose trucks for both livestock and ordinary goods to reduce waiting time at peak seasons of truck demand and d) assisting market associations, through provision of credit and other incentives, to purchase trucks (and railway wagons) for use by their members.
    - Eliminate illegal taxation through strict implementation of ECOWAS regulations to ensure free movement of people and goods and use societal pressure and advocacy to eliminate such practices. Governments in the study countries have a responsibility to pay remunerative salaries, where that is not already the case, to police, customs, *gendarmerie* and other agencies as an incentive to curb corruption.
    - Reduce official costs, duties and taxes
    - Encourage private sector led, value-added processing so as to change the current status of regional livestock trade from one based on live animals to one increasingly based on meat and other livestock products. At the same time, human and institutional capacity building to meet international sanitary and phytosanitary standards should be pursued to improve access to global meat markets.

This series of four briefs (available in English and French) summarizes the key findings of the policy research component of a CFC funded project "Improvement of Livestock Marketing and Regional Trade". The objective of the policy research component was to analyse the economic, institutional and policy constraints to livestock marketing and trade in order to provide a basis for new policy interventions to improve market efficiency and intra-regional livestock trade. The study involved six countries namely: Burkina Faso, Mali and Niger as examples of livestock exporting countries and Côte d'Ivoire, Ghana and Nigeria as net importers of livestock.

Winners and losers

Eliminating illegal checkpoints, conveyance companies, and reducing fuel taxes by 50% will lower shipment costs by 5,374 FCFA, 1,899 FCFA and 5,004 FCFA per head of cattle in the Sikasso–Abidjan, Bittou–Accra, and Niangoloko–Abidjan routes, respectively. These savings will help increase the competitiveness of Sahelian beef along the coast and translate into economic benefits for producers, traders and consumers in the region. Livestock market associations are also potential winners if they be able to acquire trucks and run them successfully for their members.

Initial losers may include low-income consumers in the Sahelian countries as the increased movement of livestock to the coast will result in an increase in the price of beef locally. Governments will lose income from fuel taxes. Officials involved in illegal road taxation at checkpoints will resist the change (as losers), while conveyance companies that will go out of business will actively fight the change. In the long-term, drovers will lose cross-border employment once value-added meat processing is firmly established, eliminating the need for handling charges during transportation.

Conclusions

The competitiveness of Sahelian livestock exports to coastal countries in West Africa is significantly constrained by high transport and handling costs. There are opportunities to lower costs and enhance competitive advantage through reduction of import duties and other official taxes and elimination of illegal taxation and non-competitive practices.

Although governments may lose revenues by reducing taxes and import duties, there will be potential welfare gains for producers, traders and transporters through increased commerce, and consumers through improved supply and lower prices. Furthermore, appropriate policies to promote vertical integration and value-added processing will move intra-regional livestock trade away from a dependence on live animals and will be a step towards improving access of regional producers to international meat markets, with additional welfare benefits.

References

Williams, T.O., Okike, I., Baltenweck, I. and Delgado, C. 2004. *Marketing livestock in West Africa: Opportunities and constraints*. ILRI/CFC/CILSS—West Africa Livestock Marketing: Brief 1. 4 pp.

Okike, I., Williams, T.O., Spycher, B., Staal, S. and Baltenweck, I. 2004. *Livestock marketing channels, flows and prices in West Africa.* ILRI/CFC/CILSS—West Africa Livestock Marketing: Brief 2. 4 pp.

Okike, I., Williams, T.O. and Baltenweck, I. 2004. *Promoting livestock marketing and intra-regional trade in West Africa.* ILRI/CFC/CILSS—West Africa Livestock Marketing: Brief 4. 4 pp.

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