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TIME AND COST INDICATORS BASELINE EVALUATION

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TRADE HUB AND AFRICAN PARTNERS NETWORK

TIME AND COST INDICATORS BASELINE EVALUATION

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ACRONYMS

ACTE	Africa Competitiveness and Trade Expansion Initiative
COCOBOD	Ghana Cocoa Board
ECOWAS	Economic Community of West African States
FODEL	Fonds de Développement de l'Élevage
FTF	Feed the Future
ISRT	Inter-State Road Transit
MT	Metric Ton
PMP	Performance Management Plan
TOR	Terms of Reference
TTEE	Trade & Transport Enabling Environment
T&L	Transport & Logistics
UEMOA	Economic and Monetary Union of West Africa
USD	United States Dollar

I. INTRODUCTION

I.1 BACKGROUND

USAID/West Africa’s Mission-wide goal is the advancement of social and economic well-being led by West African organizations. This goal is supported by several development objectives, including “broad-based economic growth and resilience advanced through West African partners.” The Trade Hub and African Partners’ Network Project (the “Trade Hub”) will contribute to this development objective by achieving two critical intermediate results:

- 1) Improving the capacity of West Africa’s farmers and firms in targeted regional and global value chains.
- 2) Improving the business-enabling environment by addressing transport constraints and trade barriers affecting the efficiency of the region’s corridors and borders.

The Trade Hub will work through regional private sector associations and regional governmental entities to help channel all partners’ efforts in a way that will address critical constraints to trade competitiveness, capture opportunities to expand trade, demonstrate West Africa’s productive potential to investors, and facilitate greater investment in the region. Its results will include both an increase in 1) regional trade in key agricultural commodities, a critical Feed the Future (FTF) indicator, and in 2) value-added global exports, a targeted indicator for the Africa Competitiveness and Trade Expansion (ACTE) Initiative, which ultimately aims to increase Africa’s share of world trade.

The project will build the capacity of several key groups of African partners—regional private sector associations and alliances, the Economic Community of West African States (ECOWAS), the Economic and Monetary Union of West Africa (UEMOA), a multi-donor funded Transport and Facilitation Observatory, and Global Development Alliances with private sector companies. As the Trade Hub works with associations and regional alliances, it will help them serve as leaders in promoting reforms, attracting buyers and investors, and adopting improved practices. Eventually, the Trade Hub’s partners will act independently and take on even greater leadership roles.

The Trade Hub’s major components are:

- Regional staple foods development (livestock and grains)
- Global value chain development (targeted agro-processing and manufactured consumer goods)
- Finance and investment
- Transport and the trade enabling environment
- Capacity building
- Communications
- Administration and management, including grants administration.

I.2 CONTEXT FOR THIS ASSIGNMENT

USAID and the Trade Hub have defined a series of indicators in order to monitor the impact of Trade Hub’s activities. As part of the Trade and Transport Enabling Environment component (TTEE), these indicators include:

- Time required to trade goods across borders and along corridors
- Cost to trade goods across borders and/or along corridors

The objective of this assignment is to evaluate a detailed baseline for these two indicators on the applicable value chains where the Trade Hub focuses on. The Trade Hub chose two priority corridors to evaluate this baseline:

- Tema-Ouagadougou
- Bamako-Dakar

I.3 VALUE CHAINS AND CORRIDORS CONSIDERED

Initial investigations led to define the scope of the evaluation, based on where significant volumes of goods are traded and the requirements of the TOR.

Table I below summarizes the type of trade observed by corridor:

Table 1: Trade by value chains and corridors

Value chains		Corridors		Bamako-Dakar by road	Bamako-Dakar by rail	Dakar-Bamako
		Ouagadougou-Tema	Tema-Ouagadougou			
Intra-regional trade	Cattle	Traded to Tema (Ashiaman market)	No significant trade	Applicable	Rail never used	No significant trade
	Small ruminants					
	Millet/ Sorghum	Small volumes	No significant trade	Some trade	Rail very rarely used	
	Maize	Traded to Techiman (638 km south from Ouagadougou)	Traded from Techiman	Some trade		
	Rice	No significant trade				
Global value chains	Shea nuts	Traded from Bobo-Dioulasso via / from Ouagadougou	No trade	Applicable	Applicable	No trade
	Raw cashew nuts	Traded from Bobo-Dioulasso via/ from Ouagadougou		Applicable	Applicable	
	Shea butter	Small volumes		Small volumes		
	Cashew kernels					
	Fresh mangoes	No significant trade				

 : Baseline evaluated
 : Baseline not evaluated

1.3.1 LIVESTOCK

The Trade Hub chose to differentiate between cattle and small ruminants.

The biggest volumes of trade take place from hinterland countries to coastal countries. In Burkina Faso, Ouagadougou is important enough as a market to be considered in the study. In Ghana, although Kumasi is a bigger market than Ashiaman (near Tema), the latter was chosen since it covers almost the entire original corridor defined in the TOR (Tema-Ouagadougou).

In Mali, although several markets of comparable size are dispatched throughout the country (Bamako, Segou, Sikasso, Mopti, etc.), Bamako was chosen as it corresponds to the standard corridor defined in the TOR. In Senegal, Dakar is the main destination for livestock coming from Mali. Livestock is never carried by rail.

I.3.2 CEREALS

Rice produced in West Africa is neither traded between Burkina Faso and Ghana, nor between Mali and Senegal with significant volumes.

Whilst Ouagadougou is a significant market for cereals and maize in particular, the main market on the corridor in Ghana is at Techiman, 360 km North of Accra and 638 km South of Ouagadougou. Maize is traded on both directions since harvest seasons differ, and depending on local prices, quantities of stocks, and the level of supply/demand

Millet or sorghum consumed in Ghana does not attract volumes that are significant enough to be considered.

In Senegal, local varieties of millet are preferred over millet coming from Mali. Still, some millet is exported from Mali to Senegal. Relatively small volumes of sorghum and maize are also traded from Mali to Senegal. Bamako is an important consolidation market and Dakar, as the capital city, is the main destination for cereals coming from Mali.

I.3.3 GLOBAL VALUE CHAINS

In Burkina Faso, the main production zone for both raw cashew nuts and shea nuts is the South-West of the country and the main consolidation market is Bobo-Dioulasso. However, since most of the goods go to Ouagadougou for consolidation before heading to Tema, the consultants considered the transport time and cost from Ouagadougou to Tema.

Roughly 10% of the shea nuts and raw cashew nuts that are transformed locally (into shea butter and cashew kernels respectively), this do not represent significant enough volumes to be considered.

Although fresh mangoes are produced in Burkina Faso and Mali, and exported outside the region, the main port used is Abidjan, Côte d'Ivoire. Tema and Dakar port are very rarely used. This is mainly due to the shorter distance from the production areas (South-West of Burkina Faso, South of Mali) and the lower transport costs involved by the volume of fruit exports out of Abidjan port and its maritime connectivity

In Mali, Bamako is one of the main consolidation points for cashew nuts and shea nuts that are exported via Dakar. Furthermore, Bamako is the main train station where goods carried by rail to Dakar can be loaded.

Although the railway linking Bamako and Dakar has a limited capacity and currently only accounts for 10% of the total trade, it is a relevant alternative considered by shippers, especially those dealing with significant volumes and for goods to be exported via Dakar port.

2. METHODOLOGY

2.1 PREVIOUS WORK

The consultants went through a number of documents covering the context of each value chain considered, measurements of Transport & Logistics costs and time previously and currently conducted in the region, reports on bribery and delays, and overall trade environment context in West Africa.

Past studies provided excellent reference materials and information on high potential data resources, however since the closure of the previous project in the spring of 2013 the data was considered too dated to be directly used. Current CILSS data on transport cost and bribery was used as a verification of data gathered on the field, which is fully justified because the CILSS data has been continuous and corresponds to the value chains examined in this work.

The bibliography can be found in Annex D.

2.2 INTERVIEWS AND TYPE OF DATA GATHERED

Because of the limited timeframe, the consultants targeted the most knowledgeable stakeholders: shippers, transporters, and freight forwarders. They also met with relevant national bodies, professional associations, and unions. About 60 organizations and more than 100 people were interviewed, most of them face to face. The list of people met and minutes of meetings are attached.

Data gathered during interviews which were inspired by the ACTE PMP survey form, are based on the experience of the interviewees. Most of the time, the interviewees provided a range of figures, from a minimum to a maximum, depending on various conditions like seasonality, supply/demand, economic or political context, type of product, etc. The consultants considered all these data and produced best possible estimates, i.e. removed outliers and calculated averages between minimum estimation and maximum estimation.

It is worth to note that all the data provided by each interviewee was partial, covering a specific product, corridor, part of the value chain, etc. The consultants had therefore to reconcile data from all the interviews to build a comprehensive set of data.

A list of interviewees can be found in Annex A

2.3 DATA GRANULARITY AND SCOPE

Formal as well as informal costs were considered and recorded separately. Informal costs are defined as the amounts paid without getting any receipt, i.e. bribes as well as operating costs that are not receipted.

In accordance with the ACTE PMP survey form, the consultants considered for each value chain/corridor and for both Transport & Logistics (T&L) costs and time the following categorization: departure, trucking/train, border crossing, arrival. The scope of each category is defined below. The objective is to get the right balance between detailed figures allowing specific analyses, and easy-to-reproduce measurements. The aim is to gather the same data on a regular basis in order to show the

evolution of each element of cost and time, and eventually attribute this evolution to the Trade Hub activities.

- The departure costs cover all the procedures needed to trade the goods in a foreign country (within or outside the region). The departure time is the time needed to go through the procedures once the goods are loaded on the truck or in the wagon.
- The trucking cost (or train transport cost) is the price invoiced by the transporter to the shipper. If transporter's costs include bribes, the amount of the bribes is isolated and the formal trucking cost is the price invoiced by the transporter less the bribes paid by the transporter via the driver. Sometimes, bribes on the road are paid by the shipper, either via the driver or via a trader/goods owner travelling with the goods. Trucking cost also includes specific costs incurred on the road (e.g. taxes paid at checkpoints, overload penalties at weighbridges, cost of animal feeding for livestock transport). The transport time includes the actual movement of the goods and the duration of the stops on the road, e.g. rest of the driver, animal rest for livestock, transport, and delays at checkpoints. This transport time excludes the procedures and waiting at borders (see next category).
- The border costs include all procedures and formal or informal payments made at one side or the other of the border. The border crossing time is the total time spent between the arrival and the departure of the truck. It can include waiting for procedures, waiting during IT system downtime, waiting for the office to open, etc. Only the labor time spent for procedures has been isolated.
- The arrival costs include the cost of procedures to get the goods unloaded. For export, they include the cost of moving goods inside the port. The arrival time is the duration of these procedures and for the goods to enter into the port in the case of export.

Where possible and depending on each value chain/corridor, each of this cost/time categories were further detailed. For instance time spent for transport in each country, cost of procedures paid to the relevant agency vs. commercial margin of the freight forwarder, cost to produce each document. Where possible the recipient of each payment was mentioned, as well as the unit cost (per MT/ truck/ container/ shipment...).

The data were stored in customized spreadsheets (see Annexes B & C). A standard table was designed and filled-in for each value chain, each corridor, and each type of transport where applicable (rail). The four main categories detailed above are similar for each table. Only sub-categories vary depending on the value chain/ corridor/ type of transport.

2.4 BASIC UNITS

It made sense to consultants to consider a truckload as the basic unit to measure Transport & Logistics costs and time across very different value chains. However, the conversion into cost per MT (or per head in case of livestock) can be done easily since the minimum, maximum, and average weight or number of heads of the truckload considered was systematically recorded.

Exchange rates used for calculation are: USD 1 = XOF 575 = GHS 3.4

3. CORRIDORS AND VALUE CHAINS KEY FACTS AND FINDINGS

3.1 TEMA-OUAGADOUGOU

The corridor is 1,034 km long. The main border used is Paga-Dakola. Most of the goods originated from Bobo-Dioulasso (South-West of Burkina Faso) currently goes via Ouagadougou. However, a new road from Bobo-Dioulasso to Tema via Hamile border is being built that is 300 km shorter than the route via Ouagadougou. This new road should be considered in the future.

All trucks travelling to/ from Ghana respect the ECOWAS axle load regulation, which is in force in Ghana, i.e. 11.5 MT per axle.

Because of the difference in the maize harvest season between Ghana and Burkina Faso, this corridor is used in both directions for trade of maize. The main market for maize is Techiman, 360 km North of Accra and 638km South of Ouagadougou.

Crossing borders was not reported as a big challenge. Labor time for crossing the two borders is relatively low and varies from 4 to 6 hours depending on the nature of the goods and the type of the customs declaration at entrance country. Border crossing for animals is faster than cereals: because of the risk of animal overheating and death in case of long waits, the trader or driver tends to pay higher bribes at the border to move faster. Customs declaration for local consumption is faster to proceed than for transit. Aligning the opening hours or even opening 24h would definitely fasten the time spent at borders.

ISRT (Inter-State Road Transit) scheme is currently not applied in Ghana for southbound transit cargo. It is replaced by a fixed transit fee of USD 200 per shipment (which can cover one or several trucks) and a physical Customs escort, which costs USD 130 (for two days).

Several shippers and transporters mentioned the negative impact of the recently increasing number of Police checkpoints in Ghana and complained about related bribes and delays. It is worth noting that most of the harassments are reported specifically for livestock transport, but still remain high for other goods.

For exported goods traveling from Ouagadougou, Customs request that the export declaration should be electronically lodged at Ouagarinter, the Customs main office in Ouagadougou. In reality, livestock and some cereals stakeholders prefer to manually declare their shipment at the borders where they can more easily under-declared their cargo.

On this corridor, livestock shippers systematically under-declared the numbers of animals and value of goods at Customs to avoid the FODEL (Breeding Development Fund) taxes in Burkina Faso, and to reduce Customs taxes in Ghana. They claim that they are doing so to compensate the increasing amount of bribes distributed along the Ghanaians roads.

In Burkina Faso, export permit may be restricted for cereals, depending on the decision of the ministry of agriculture, which allows export authorization for cereals.

At Tema port, Ghana Cocoa Board (COCOBOD) charges 1.5 GHS/80 kg bag inspection fees for all cashew nuts export, included the in-transit nuts, which is not supposed to be under its mandate.

3.2 BAMAKO-DAKAR

The main road linking Bamako and Dakar goes via Diboli-Kidira border and is 1,382 km long. It concentrates 90% of the traffic whilst the railway (1,233 km) attracts only 10% of the trade. A new road has been built recently and is open for trade since March 2015. Since it is shorter (1,092 km) and brand new, it will be a relevant alternative for shippers and transporters going forward.

As far as livestock and cereals are concerned, there are no significant volumes going from Senegal to Mali.

The trade traffic and the transport prices from Bamako to Dakar highly depend on the cotton harvest season (from November to May), which is the main export product going to Dakar port.

In terms of transport time and delays, the main issues occur on the import direction, at the border when entering Mali, and in Mali at the scanner in Kayes, where trucks can wait up to several days. The road transport on the other direction is much smoother.

Several temporary export ban occurrences have been reported for Malian cereals, due to the risk of local shortages.

In Mali, the government recently introduced an environment tax on shea nuts, with the aim of promoting local transformation into shea butter. The official tax amount is as high as 40% of the value of the goods, which is unacceptable for the shippers. As a result, the formal tax is not paid and unofficial negotiated amounts are paid to forestry services officials.

It is worth noticing that cashew nuts from Mali are mostly exported via Tema, Abidjan (lower transport costs), or Banjul (lower port costs) ports, rather than via Dakar port.

3.2.1 ISRT SCHEME

According to ECOWAS Convention A/P.4/5/82, "Inter-State Road Transit" (ISRT) is a regime that allows the transportation of goods by road from one Customs Office in a Member State to another Customs Office in another Member State through one or more Member States free of duties, taxes and restrictions while in transit. Such goods shall be accompanied with a set of customs documents and shall not be off-loaded or transferred while in transit. Under ISRT regime, in order to facilitate the collection of duties and other levies, which a Member State shall charge for goods, which pass through its territory during Inter-States Road Transit, the principal obligee shall provide acceptable security.

Although Senegal and Mali announced the application of ISRT in 2002 and again in May 2013, it did not happen so far:

- In Senegal, ISRT logbook and guarantee (security) are not mandatory. As a result, and to reduce costs, most traders prefer to proceed with a simplified declaration (called "acquit" or S110 declaration) and pay for an escort.

- In Mali, buying the ISRT logbook and paying for the guarantee (0.25% of CIF value) is mandatory but not used properly: first, the ISRT logbook and related guarantee are systematically bought at the Malian border instead of using the ones bought at departure; and second, ISRT is mandatory not only for products in transit but also for imported products.

Interesting enough, in Mali, the ISRT guarantee fee covers the customs escort in convoy, i.e. once the guarantee fee is paid to the chamber of commerce, the shipper does not have to pay for the escort, but the chamber of commerce pays the customs for the escort. However, if the trucker does not want to wait for the convoy (20 trucks) to leave the border, he can pay for an individual escort that costs 30,000 CFAF.

It is difficult to understand why for instance Senegalese government does not impose ISRT regime for goods in transit in Senegal, despite announcements made. Still, the transport sector stakeholders mention a number of constraints and blocking points hindering a proper implementation of ISRT scheme:

- Most trucks carrying bulk do not comply with ISRT convention, especially regarding sealing standards.
- ISRT scheme implies potential loss of revenues for customs (no more escort), freight forwarders (less chargeable activities at the borders), and uniformed services in general (less bribes).
- There is a lack of confidence from the chamber of commerce of the landlocked country towards the chamber of commerce of the coastal country to reimburse the outstanding balance of ISRT fees (due to the trade imbalance and because fees are paid at the departure of the goods).
- There is no systematic trucks' tracking along the corridor, neither in Mali, nor in Senegal, although GPS private systems exist in both countries.
- Customs IT systems (GAINDE for Senegal and SYDONIA ++, transitioning to SYDONIA WORLD, for Mali) are not interconnected.
- Whilst Diboli border post (Malian side of the border) is connected to SYDONIA++, although experiencing significant downtime because power generator issues, Kidira border post (Senegalese side of the border) is not connected to any IT system.

3.3 VALUE CHAINS COMPARISON

Table 2 below shows the summary of the costs and time per corridor, per type of transport, and per value chain.

The compilation and detailed transport cost categories per value chain can be seen in the attached in Annex B and C.

Table 2 : Costs and time indicators per corridor/ type of transport and per value chain

	Ouaga-Tema (road)		Tema-Ouaga (road)		Bamako-Dakar (road)		Bamako-Dakar (rail)	
	Cost (USD)	Time (days)	Cost (USD)	Time (days)	Cost (USD)	Time (days)	Cost (USD)	Time (days)
Livestock- Cattle (per head)	36	1.7	N/A	N/A	46	2.9	N/A	N/A
Livestock- small ruminants (per head)	8	1.7	N/A	N/A	11	2.9	N/A	N/A
Millet- Sorghum (per MT)	N/A	N/A	N/A	N/A	38	3.3	N/A	N/A
Maize (per MT)	48	1.5	62	1.54	44	3.3	N/A	N/A
Shea Nuts (per MT)	89	5.3	N/A	N/A	113	6.2	112	6.5
Raw Cashew Nuts (per MT)	94	5.3	N/A	N/A	115	6.2	112	6.5

Source: compilation of data collected on the field

3.4 LIVESTOCK VALUE CHAIN

Since livestock is mainly exported from hinterland countries to coastal countries, it benefits from trucks delivering imported goods from ports and returning to the coast because of the trade imbalance. As a result, these trucks are not specifically designed for livestock transport and the transport price negotiated is often very low, barely covering fuel cost. The transport price is negotiated per truck but all the bribes along the road are directly paid by the trader or his agent who is always traveling with the animals and some animal handlers.

For cattle, depending on the size of the animals and the size of the truck, a truck can carry from 26 to 45 animals at a time. The average weight per animal is 300 kg. A similar truck can carry up from 200 to 220 small ruminants. Small ruminants' average weight is 15 kg.

This type of transport does not attract any overload issue. However, traders need to have people travelling with the animals in the trailer to pick them up when they fall. Although not officially legal, this type of transport (called mixed transport) is tolerated under certain conditions but often attracts harassment and payment of bribes.

3.4.1 LIVESTOCK TRANSPORT AND LOGISTICS COST AND TIME BASELINE

Trucking is unsurprisingly the most important part of the transport and logistics cost representing 70 to 75 % of the total cost followed by the cost at borders which represents 17 to 20% of the total costs. The cost per head per 100 km is quite similar while comparing the corridors, as shown on the table below:

Table 3 : Transport costs per category per type of livestock and per corridor (in USD per truck)

	Corridor Ouagadougou -Tema (1,034 km)		Corridor Bamako - Dakar (1,382 km)	
	Cattle	Small ruminants	Cattle	Small ruminants
Departure	58	145	115	140
Trucking	1,140	1,140	1,149	1,149
Borders	309	319	327	278
Arrival	13	62	33	33
Total Cost in USD	1,519	1,666	1,624	1,600

Total Cost in USD per head	35.7	7.9	45.7	10.7
Total costs in USD per head per 100 km	3.46	0.77	3.31	0.77

Source: own compilation of data collected on the field

The average time to cross the two borders on the two corridors as shown on the table below is about the same and last an average of 2 hours and a half which is relatively low compared to the other types of goods.

Table 4 : Livestock: time baseline on Ouaga-Tema and Bamako-Dakar corridors

	Corridor Ouagadougou -Tema (1,034 km)		Corridor Bamako - Dakar (1,382 km)	
	Cattle	Small ruminants	Cattle	Small ruminants
Departure	0.00	0.00	0.04	0.04
Trucking	1.54	1.55	2.71	2.71
Borders	0.11	0.11	0.10	0.10
Arrival	0.00	0.00	0.00	0.00
Total time in days	1.66	1.67	2.85	2.85

Source: own compilation of data collected on the field

3.5 CEREALS VALUE CHAIN

Cereals traded within the region are mostly transported in bulk, in bags of variable size depending on the product and the corridor, from 50 kg bags to 120 kg bags.

Prices may vary a lot depending on the corridor, the season, and the type of product. Due to the relatively small volumes involved, this transport is mostly handled by small transporters and freight forwarders, sometimes by informal structures. As a result, a significant proportion of trucks carrying cereals are overloaded. The transport is invoiced per MT or bags and some transporters prefer to earn more by carrying more, even if they have to pay for overload penalties.

3.5.1 CEREALS TRANSPORT AND LOGISTICS COST AND TIME BASELINE

On the Ouagadougou-Tema corridor, maize route ends at Techiman, which is located 638 km South of Ouagadougou. Although, the distance involved is much lower than the one on Bamako-Dakar corridor, the transport costs are globally higher on the Tema-Ouagadougou (Techiman) corridor. It is interesting to note that the trucking cost is much lower on the southbound cargo compared to the northbound cargo, which is due to the export trade imbalance. The table below shows the Maize transport costs per corridor.

Table 5 : Maize Transport costs per category in USD per truck

	Corridor Ouagadougou -Techiman (638 km)		Corridor Bamako - Dakar (1,382 km)
	Maize (Northbound)	Maize (Southbound)	Maize
Departure	72	86	159
Trucking	1,866	1,141	1,609
Borders	142	381	361
Arrival	73	72	61
Total Cost in USD	2,153	1,681	2,189

Total Cost in USD per MT	61.5	48.0	43.8
Total costs in USD per MT per 100 km	9.64	7.53	3.17

Source: own compilation of data collected on the field

As far as time is concerned, time is linked with the length of the corridors involved, and borders crossing last about the same time on both corridors. Table 6 shows the time taken per transport category.

Table 6 : Time to reach destination for Maize value chain per corridor

	Corridor Ouagadougou -Techiman (638 km)		Corridor Bamako - Dakar (1,382 km)
	Maize (Northbound)	Maize (Southbound)	Maize
Departure	0.0	0.0	0.1
Trucking	1.0	1.0	2.5
Borders	0.6	0.6	0.7
Arrival	0.0	0.0	0.0
Total Time in days	1.6	1.6	3.3

Source: own compilation of data collected on the field

Millet and sorghum are mainly traded between Bamako and Dakar, the volume sent to Ghana is not significant enough to be considered.

While the travel time to reach Dakar from Bamako is the same, millet and sorghum are benefiting from a lower trucking cost compared to the maize trucked on the same corridor, which is mainly due to frequent overloading penalties attracted by maize: the total transport and logistics for millet/ sorghum is 11 % less expensive reaching 38 USD/MT compared to the maize (USD 44/MT) on the same corridor. Costs and time are detailed on table 7 below.

Table 7 : Millet/ Sorghum Transport and Logistics cost and time to reach Dakar from Bamako

	Total Costs (USD)	Total time (days)
Departure	129	0.1
Trucking	1,030	2.5
Borders	322	0.7
Arrival	49	0.0
Total	1,530	3.3
USD/T	38	
USD/T/100 km	2.8	

Source: own compilation of data collected on the field

3.6 CASHEW AND SHEA VALUE CHAINS

Raw cashew nuts and shea nuts are goods that are exported on a regular basis, with significant volumes, and a well-defined harvest and trading season. As a result, the value chain is relatively better organized and more professional than for intra-regional trade. For instance, international freight forwarders (Bollore, Damco) are involved in trading these goods whilst they very rarely deal with intra-regional trade.

Raw cashew nuts and shea nuts are mostly transported in bulk, in 80 kg bags. Trucks are rarely overloaded, carrying between 30 MT and 40 MT. Once arrived at the port, because of the density of the product, a truckload typically fills two 20 ft containers instead of one 40 ft container.

Freight forwarding process costs at the port are an important part of the total Transport & Logistics costs.

3.6.1 CASHEW AND SHEA: TRANSPORT AND LOGISTICS COST AND TIME BASELINE

For the cashew and shea raw nuts, the cost per MT is lower on the Ouagadougou –Tema corridor mainly because of the distance. It is interesting to note that the transport and logistics cost is higher for the raw cashew nut because of the COCOBOD¹ imposed tax at export. Shipping by rail is less expensive than using the road on the Bamako-Dakar corridor. The cost per MT/per 100 km is more or less the same, depending on corridor as well as type of transport.

¹ Ghana Cocoa Board

Table 8 : Transport and Logistics costs to reach destination for cashew and shea value chains per corridor

	Corridor Ouagadougou -Tema (1,034 km)		Corridor Bamako - Dakar (1,382 km)			
	Raw Shea nut	Raw cashew nut	Raw Shea nut -by road	Raw Shea nut -by rail	Raw Cashew Nut by road	Raw Cashew Nut by rail
Departure	66	66	186	1,043	281	1,043
Trucking	1,183	1,183	1,917	1,196	1,878	1,196
Borders	399	386	183	0	183	0
Arrival	1,464	1,657	1,681	1,681	1,684	1,684
Total in USD	3,113	3,293	3,967	3,920	4,026	3,923
Total Cost USD per MT	88.9	94.1	113.3	112.0	115.0	112.1
Total costs in USD per MT per 100 km	8.60	9.10	8.20	8.10	8.32	8.11

Source: own compilation of data collected on the field

Regarding the time spent on the road up to the port, the Ouagadougou –Tema corridor is faster mainly due to the distance of the road but also due to a faster logistics and customs processes to reach the port. See Table 9 below.

Table 9 : Time to reach the port by value chain and by corridor

	Corridor Ouagadougou -Tema (1,034 km)		Corridor Bamako - Dakar (1,382 km)			
	Raw Shea nut	Raw cashew nut	Raw Shea nut -by road	Raw Shea nut -by rail	Cashew Nut by road	Cashew Nut by rail
Departure	0.14	0.14	0.13	0.13	0.13	0.13
Trucking	2.94	2.94	3.30	4.29	3.29	4.29
Borders	0.57	0.57	0.71	0.00	0.71	0.00
Arrival	1.67	1.67	2.04	2.04	2.04	2.04
Total in days	5.32	5.32	6.17	6.46	6.17	6.46

Source: own compilation of data collected on the field

3.7 EXAMPLES OF COMPARATIVE ANALYSES

In addition to being used as a comparison baseline for future measurement, the figures gathered as part of this evaluation, can be used to compare Transport & Logistics costs and time, across corridors and across value chains. Tables and charts shown in annexes B and C give an example of such analyses.

4. FINDINGS: OPPORTUNITIES FOR COST AND TIME REDUCTION

This study confirms the relevance of all the findings of the TTEE Policy Assessment report produced in July 2014 on the two corridors studied in terms of goods traded, general issues, corridor specific issues, and recommended actions. It also recommends additional actions for each corridor as listed below.

Based on interviews conducted as part of this study, and the findings of previous studies, it appeared that transport is generally getting a bit easier and quicker, but that improvements are very slow to materialize on the field. Transport costs are stable and even increasing in some cases (e.g. shea nuts in Mali). Opportunities for costs and time reduction are still huge. Furthermore, some issues seem not to evolve at all (e.g. ISRT in Senegal, checkpoints), and some even re-appeared after some time (e.g. Goro boys in Ghana).

4.1 TEMA-OUAGADOUGOU

The consultants recommend the following actions to reduce transport time and costs:

- Reduce road harassment especially for livestock in Ghana
- Open border posts on a 24/7 basis
- Agree on common sanitary and Phyto-sanitary documents
- Remove “Goro” boys (informal middlemen) at Paga border

As proposed in the TTEE Policy Assessment report, the TTEE team could contribute to these improvements by:

- Supporting to the professionalization of the transport sector, especially for livestock
- Advocating for mutual acceptance of SPS certificates
- Advocate for complete removal (or at least timely termination) of export bans and other restrictions
- Working with ECOWAS on the harmonized implementation of community regulations

TTEE team could also:

- Approach the government of Ghana along with the Ghanaian livestock associations to adapt the livestock transportation regulation to the reality of the field by officially allowing “mixed transportation” for livestock under certain condition.
- Approach the Government of Burkina regarding the FODEL taxes issues.
- Support the training of livestock traders and transporter on regional customs and transportation regulation regarding livestock
- Reinforce the communication about bribes and harassment issues toward uniformed services,

especially in Ghana

- Approach the Government of Ghana again to address the Goro boys issue

4.2 BAMAKO-DAKAR

The consultants recommend the following actions to reduce transport time and costs:

- Decrease port costs, make Dakar port more competitive
- Reduce harassment on the road
- Revise environment tax in Mali for shea nuts
- Reduce customs escort price in Senegal
- Develop railway
 - Invest in locomotives to increase capacity
 - Renovate infrastructure to reduce transport time and improve reliability

As proposed in the TTEE Policy Assessment report, the TTEE team could contribute to these improvements by:

- Supporting to the professionalization of the transport sector, especially for livestock
- Advocating for mutual acceptance of SPS certificates and removal of requirements for certificates of origin
- Advocating for removal of VAT for Malian livestock traders
- Working with ECOWAS on the harmonized implementation of community regulations

TTEE team could also:

- Advocate for removal of the environmental tax on shea nuts export
- Work with Government of Mali and Global Shea Association to find alternative measures to increase local transformation of shea nuts
- Reinforce the communication about bribes and harassment issues toward uniformed services
- Approach Government of Senegal and evaluate the constraints hindering the implementation of ISRT

ANNEX A: LIST OF INTERVIEWEES

Country	Value Chain	Organization	Name	Phone	e-mail	position	Interview type
		<i>Shippers / Traders</i>					
Burkina Faso	multiple	CBC	Ali Traore	+226 70 20 08 98	traoreali@yahoo.fr	DG	Telephone
Burkina Faso	multiple	CBC	Zakaria Belem	+226 70 17 24 05	zakariabelem67@yahoo.fr	Bourse de fret	Telephone
Burkina Faso	cashew	Sotria-B	Aminata Koné	+226 70 23 27 96	burkinacajou@gmail.com	DG	Face to face
Burkina Faso	Livestock	Boukari Boima	Boucari BOIMA	' +226 78817923 /70133518		Comercant en gros / transporteur	Face to face
Burkina Faso	cashew	CCIAB, UNPA/BF	Eloi Nombéré	+226 702 701 66 +226 786 395 00 +226 766 86 779	nombreeloi@yahoo.fr	VP	Face to face
Burkina Faso	cashew	Commerçant a Bobo	Téra Saïbou	+ 226 70 21 53 03			Face to face
Burkina Faso	cereals, cashew, shea	Ets. Velegda	Mamounata Velegda	+226 70 20 72 50 +226 25 33 29 30	velegda@fasonet.com b.mamounata@liptinfor.bf	DG	Face to face
Burkina Faso	shea	Loders Croklaan	Jean-Arnaud Janvier	+226 20 98 22 29 / +226 76 76 43 03	Jean-Arnaud.Janvier@croklaan.com	DG	Telephone + Mail
Burkina Faso	shea	Table Filière Karité	Hien Magloire	+22670437323 +22676685898	hiendekmag@gmail.com		Face to face
Burkina Faso	Shea	International Oil & Fats (Burkina) SARL	Anthony Boakye at		aboakye702@gmail.com		Mail
Burkina Faso	Shea	International Oil & Fats (Burkina) SARL	Peter Boampong	+226 77071189	peteboampong@gmail.com		Telephone + mail
Burkina Faso	Shea	International Oil & Fats (Burkina) SARL	Adjibade Akime	+226 74049107	akimea78@yahoo.fr	Finance director	Face to face

Country	Value Chain	Organization	Name	Phone	e-mail	position	Interview type
Burkina Faso	cereals	CICB	Soumaila Sanou	+226 78 82 11 39 +226 25 34 06 34 +226 70334094	sanou_toggo@yahoo.fr; cicb@fasonet.bf	SG	Telephone
Burkina Faso	livestock	Fédération des Eleveurs et Vente de Bétail du Burkina Faso (Sylvestre COMPAORE	+226 70365905		General Secretary	Face to face
Burkina Faso	livestock	Association Negociant Filiere Betail (ANFIB) , Trader	El Hadj Momouni SONDE	+226 70279678		Treasury	Face to face
Burkina Faso	livestock	ACOMAB Member / Trader	Oumarou ILBOUDO	+226 70323101			Face to face
Burkina Faso	livestock	Exporter, Trader to Ghana based in Ouagadougou	Ousmane PASCO	+226 70833093			Face to face
Burkina Faso	livestock	Exporter, Trader to Ghana based in Ouagadougou	Hamidou Zombré	+226 71804046			Face to face
Burkina Faso	livestock	importer, trader based in Ghana	Idrissa SHOW	+233 244702724			Face to face
Burkina Faso	livestock	Exporter, Trader to Ghana based in Ouagadougou	Abd Salam PASKO	+ 226 70412903			Face to face
Burkina Faso	livestock	Exporter, Trader to Ghana based in Ouagadougou, ACOMAB member	Tiemdebero Salam				Face to face
Burkina Faso	livestock	Exporter, Trader to Ghana based in Ouagadougou, ACOMAB member	Saidou Kaboré	+226 7857159			Face to face
Burkina Faso	livestock	Exporter, Trader to Ghana based in	Diandé Yacouba	+226 76546342			Face to face

Country	Value Chain	Organization	Name	Phone	e-mail	position	Interview type
		Ouagadougou					
Burkina Faso	livestock	Exporter, Trader to Ghana based in Ouagadougou	Arouna Kafando	+226 77950065			Face to face
Burkina Faso		<i>Transporters/ Freight forwarders</i>					
Burkina Faso	multiple	OTRAF (Organisation des Transporteurs du Faso), Ouagadougou	Carlos Hien	+226 78 73 09 76 +226 70 83 82 81	hiencarlos1@yahoo.fr	Dir. Exploitation	Face to face
Burkina Faso	multiple		El Hadj Issoufou MAIGA	+226 25372568/ 70204158	maiga.issoufou@fasonet.bf Bingrawa@yahoo.fr	President	Face to face
Burkina Faso	multiple		Mamadou Kabore	+226 78 45 44 08 +226 70 25 18 00		VP	Face to face
Burkina Faso	multiple	OTRAF (Organisation des Transporteurs du Faso), Bobo dioulasso	Hamidou ZERBO	+226 70255569 / 20971419	zerbinolaze@yahoo.fr	SG in Bobo Dioulasso	Face to face
Burkina Faso	multiple	UCRB (Union des Conducteurs Routiers du Burkina)	ILBOUDO Jacques	+226 70 12 21 55	iljac2006@yahoo.fr		Telephone
Burkina Faso	multiple	STTC	Jean Hermann NIKIEMA	+226 50 38 31 66 +226 70 21 70 75 +226 78 84 19 30	herman.nikiema@sttc- burkina.com		Face to face
Burkina Faso	multiple	EST	Zoungrana Julien	+226 50 38 79 76 / 76 20 65 78 / 70 20 65 78 / 78 00 99 30	jzoungrana2006@yahoo.fr		Telephone
Burkina Faso	multiple	Sogetrab	Roger Ouedraogo	+226 70 20 51 37 / 70 20 65 78 / 50 38 79 76 / 70 25 92 54	sogetrab@fasonet.bf		Telephone

Country	Value Chain	Organization	Name	Phone	e-mail	position	Interview type
Burkina Faso		<i>Freight forwarders</i>					
Burkina Faso	cereals	Navitrans	Dieudonné Zongo	+226 70 16 15 78/ 78 87 14 22	navitransb@fasonet.bf freightcust@fasonet.bf		Face to face
Burkina Faso	multiple	Navitrans, Dakola	Alidou Souré	+226 75613933			Face to face
Burkina Faso	multiple	Damco	Yvan Ouedraogo	+ 226 25407818 / 65484949	Yvan.Ouedraogo@damco.com		Face to face
Burkina Faso	multiple	Damco	Patrice Ouoba	+226 50407818 / 65486868	patrice.ouoba@damco.com		Face to face
Burkina Faso	multiple	Bollore Africa Logistics, Ouagadougou	Roland SOW	+ 226 70210508	roland.sow@bollore.com		Face to face
Burkina Faso	multiple	Bollore Africa Logistics, Dakola	Guy Zoungrana	+226 50404012	Guy.zoungrana@bollore.com		Telephone + mail
Burkina Faso	multiple	SNTB - Bolloré Africa Logistics, Bobo Dioulasso	Ousmane Simporé	+ 226 20970226 / 70255886	ousmane.simpore@bollore.com		Face to face
Burkina Faso	multiple	Damco agent at Dakola	Dieudonné	+ 226 70421708 / 78770995	-		Face to face
Burkina Faso		<i>Other</i>					
Burkina Faso	livestock	Trade Hub Network	Seydou Sidibe	+226 78338852	Seydou_Sidibe@watradehub.com	Expert	Mail
Burkina Faso	cereals		Kokou Zotoglo	+233 261376614	Kokou_Zotoglo@watradehub.com	Expert	Skype
Burkina Faso	livestock	COFENABVI	Thomas Sawadogo	+226 70 20 52 37	cofenabvi_ao@yahoo.fr	SG	Face to face
Burkina Faso	livestock	exporter, COFENABVI member	Boukari BOiMA	+ 226 78817923 / 70133518		exporter &Transporter	Face to face
Burkina Faso	multiple	BIC at Dakola border	Dieudonné Bationo	+226 70 26 76 23 +226 74 52 88 88	batbegniasso@yahoo.fr	Expert	Telephone

Country	Value Chain	Organization	Name	Phone	e-mail	position	Interview type
Burkina Faso	multiple	DGTTM	Issiaka Sigue	+226 70 20 05 85	sigmassa@yahoo.fr	DG	Telephone
Burkina Faso	livestock, cereals	CILSS	Brahima Cisse	+226 70 25 91 93	brahima.cisse@cilss.bf	Program manager	Telephone + mail
Burkina Faso	livestock, cereals		Moussa Cisse	+226 50 37 41 25	moussa.cisse@cilss.bf	Director	Mail
		<i>Shippers / Traders</i>					
Ghana	multiple	CBC	Yaya Yedan	+233 20 816 30 16	yedanyaya@yahoo.fr	Field rep in Tema	Face to face
Ghana	multiple	Golden Exotics	Jean-Michel Blanc	+233244311663	Jm.blanc@goldenexoticslts.com		Telephone
Ghana	cereals	Ghana Grain council	Godwin Ansah	+233 302540526 +233 50781374	g.ansah@ghanagrainscouncil.org		Telephone and face to face
Ghana	cereals	Ghana Grain council	WYOMIA	+233 302540526	wyomia@ghanagrainscouncil.org		Face to face
Ghana	cereals	Techiman maize association	Omar Adam	0244 779 090		President	Telephone
Ghana	cereals	Techiman maize association	Obri yeboa	0245 605 610/0204 684 100		General Secretary	Telephone
Ghana	cereals	Premium Foods Ltd. (Kumasi)	Tom Gambrah	+233-27-754-9800	tgambrah@premiumfoodsgh.com	CEO	Telephone + mail
Ghana	cashew	African Cashew Alliance	Olivier Kabre	+233 544 337 608	okabre@africancashewalliance.com	MIS manager	Face to face
Ghana	cashew		Roger Brou	+233 544316510	rbrou@africancashewalliance.com	MD	Face to face
Ghana	cashew	ACA agent - Bole	Sylvester De Clerq	+233 242 540 357	rfoi2003@yahoo.com	field agent	Not reached
Ghana	cashew	ACA agent - Brong Ahafo	Godfried Ohene-Mensah	+233 244 831 788	godthegee@yahoo.co.uk	field agent	Not reached
Ghana	cashew	Peace corps, ACA agent - Brong Ahafo	Laura Jesse		laurajessee90@gmail.com	field agent	Not reached
Ghana	multiple	Ghana Shippers Authority	Karim	+233 242887242		field rep in Paga	Telephone

Country	Value Chain	Organization	Name	Phone	e-mail	position	Interview type
Ghana	livestock	Livestock Breeders and Traders Association	Issa Amartey	+233 244 699 209	mat_ss12@yahoo.com	SG	Face to face
Ghana	shea	Global Shea Alliance	Joe Funt	+233 244 334 807	jfunt@globalshea.com	Director	Face to face
Ghana	shea		Prince A. Nunoo	+233 268229991 / 0540121067	pnunoo@globalshea.com	Member coordinator	Face to face
Ghana	shea	AAK	Pär Torstensson		par.torstensson@aak.com		Mail
Ghana	shea	Olvea	Sylvain Cattin	+ 233 542409973	scattin@olvea.com	Managing Director	Telephone and mail
Ghana	shea	Red River	Wayne Tilton		tiltonw@redriverfoods.com		Not reached
Ghana		<i>Transporter</i>					
Ghana	multiple	DHL	Alfred Achiampong	+233 202224043	Alfred.Achiampong@dhl.com		Face to face
Ghana		<i>Freight forwarder</i>					
Ghana	cashew	Transit Cargo	Ahmed Suleyman	+233 244 755505	ceo@afimexcogroupe.com	CEO	Face to face
Ghana		Transit Cargo	M. Moutaru	+233 243620057		Agent in PAGA	Telephone
Ghana	multiple	0	Frank Eshun	+233 244 327736	Frank.Tony.Eshun@damco.com		Telephone + mail
Ghana		ACC Logistics	Mrs Kende	+ 233 249229857			Telephone
Ghana	cashew, shea	ACC Logistics	Wassim Omeis	+233 244 519 307	w.omeis@acc-logistics.com	Managing Partner	Face to face
Ghana		<i>Other</i>					
Ghana	mango	Trade Hub Network	Pamela Okyere	+233 266 784 277	Pamela_Okyere@watradehub.com	Expert	Face to face
Ghana	multiple		Chongo Mukupa		Chongo_Mukupa@watradehub.com	Expert	Face to face
Ghana	multiple		Kossi Dahoui	+233 262 800 795	Kossi_Dahoui@watradehub.com	Expert	Face to face
Ghana	multiple	Borderless Alliance	Justin Bayili	+233 244 340 747	jbayili@borderlesswa.com	DG	Mail
Ghana	multiple		Noel Kossonou	+233 249 266 577	nkossonou@borderlesswa.com	Expert	Face to face
Ghana	multiple		Afua Eshun	+233 244 334 589	aeshun@borderlesswa.com	Expert	Face to face

Country	Value Chain	Organization	Name	Phone	e-mail	position	Interview type
Ghana	cashew	Ghana cashew association	Winfred	+233 201 40 88 98	seiwus@yahoo.co.uk		Telephone
Ghana	cashew	MOFA	Seth Akoto	+233 244 384 493 +233 264 854 213	oakoto2012@gmail.com		Mail
Ghana	shea	Cocobod	vincent	+233243053144		head of shea section	Telephone
Ghana	multiple	GHA	Mercy Akyaa Payne	+233 244 777 258	mboakye_2@yahoo.com		Face to face
Mali		<i>Shippers / Traders</i>					
Mali		CMC	Mohamed SIDIBE	+223 66 75 54 58	mosidibe@hotmail.com	Chef Assistance aux Chargeurs	Face to face
Mali	cashew	AMEC	Abdoulaye Traore	+223 71 25 40 57	exportateursmaliens@gmail.com		face to face
Mali	cereals	Danaya Céréales Sarl	Halatou Dem	+223 65 86 95 50 +223 76 55 47 52	dem_halatou@yahoo.fr		Face to face
Mali		<i>Transporter</i>					
Mali	multiple	CMTR / Bani Transport	Youssouf Traore	+223 66 73 84 69 / 76 33 29 93	banitt@yahoo.fr	President	Face to face
Mali	multiple	CMTR	Soumaila Thiam	+223 76 46 26 82			Face to face
Mali	multiple	SYNACOR	Seydou Traore	+223 79 02 95 24	tseydou52@yahoo.fr		Face to face
Mali	multiple	transporter	Aboubacar Diarra	+223 66 75 46 66	aboudia@hotmail.fr	Directeur	Telephone
Mali	multiple	BA, Ministry of Industry & Investment Promotion	Abdoulaye Toure	+223 66 69 82 82 / 76 07 32 83	t.abdoul@yahoo.fr	Economiste	Face to face
Mali	multiple	Cheikna transport Kolo	Toumani Traore	+223 66738576	babatraore03@hotmail.fr		Telephone
Mali	multiple	Transrail	Sidi Yaya Fofana	+223 78 88 61 61	sidiyayafofana@transrailsa.com	Dir. Adj. aux Opérations	Face to face
Mali		<i>Freight forwarder</i>					

Country	Value Chain	Organization	Name	Phone	e-mail	position	Interview type
Mali	multiple	Damco	Aida Bocoum	+22376 244 343	Aida.Bocoum@damco.com		Face to face
Mali	multiple	Bollore	Khadi Gueye	+223 75 99 82 87	khadi.gueye@bollore.com	Dir. Exploitation	Face to face
Mali	multiple	Bollore	Baba Traore	+223 66 75 98 45	baba.traore@bollore.com	Resp. Logistique	Face to face
Mali	multiple	SYTRAM	Sekou Maiga	+223 66 73 85 06	sytram@orangemali.net		Face to face
Mali		<i>Other</i>					
Mali	livestock	COFENABVI	Bamoussa Coulibaly	+223 77 35 99 51 +22366730528	bamoussacoulibaly@yahoo.fr	SG	Face to face
Mali	multiple	USAID	Daniel Thomson	+223 7599 8308	dthomson@usaid.gov	Private Ent. Development Officer	Face to face
Mali	shea	APROKAM	Dionkounda Traore	667 90 700/764 161 28/97 169 332	dtraore.ci.agk@gmail.com	Coordinateur national	Face to face
Mali	shea	APROKAM	Badia Marico	+223 74 11 48 41 / 63 78 16 19		Secrétaire exécutif	Face to face
Mali	shea	Exporter	Abdoulaye Coulibaly	+223 76 31 39 17	agromalisen@hotmail.com		Face to face
Mali	shea	AMEPROC	Issa Keita	+223 66 84 70 15 / 76 31 55 23	ameprocfr@yahoo.fr	President	Face to face
Mali	multiple	CCIM	Ismaila Lah	+223 76 45 29 60 +223 66 65 65 42	ismaillah@yahoo.fr	OPA supervisor	Face to face
Mali	multiple	DGTT	Abdoul Karim Moussa MAIGA	+223 69 55 12 70 / 73 31 29 41	titimbi@yahoo.fr	Chef Organisation du Trafic	Face to face
Mali	multiple	DGTT	Abdoulaye Makan Toure	+223 62 40 13 45 / 76 08 26 40	ablisala@yahoo.fr	Chef Facilitation des Transports	Face to face
Senegal		<i>Shippers</i>					
Senegal	multiple	EMASE	Mariam Coulibaly Dolo	+221 77 564 59 68	mamedolo@yahoo.fr emse@orange.sn	Directeur	Face to face

Country	Value Chain	Organization	Name	Phone	e-mail	position	Interview type
Senegal	cashew	Exporter, ACA agent	Lamine Sene	+221 776 423 204	lamsenesud@yahoo.fr	field agent	Face to face
Senegal	cereals	CILSS meeting participant	N'Faly Kouyate	+221 77 136 48 35	nfkouyate@gmail.com	trader	Telephone
Senegal	cereals	CILSS meeting participant	Hamidou Diane	+221 77 499 50 07	dianehamidou93@gmail.com	trader	Telephone
Senegal	cereals	Free Work Services, WAGN	Aissatou Diagne Deme	+221 77 639 52 81 +221 33 842 94 17	kumbasn@gmail.com	trader	Face to face
Senegal	sesame	Free Work Services	Ass Diagne	+221 77 838 837 2		trader	Telephone
Senegal	cereals	CNC	Massamba Dioum	+221 77 76 66 876	maasjum@hotmail.fr	trader	Face to face
Senegal		<i>Transporters/ Freight forwarders</i>					
Senegal	multiple	STTM	Etienne Sarr	+221 77 638 3882	etienne@sttm.sn	Directeur	Face to face
Senegal	multiple	STTM	Seydou Sanago	+221 77 727 9052 +223 747 41 808	seydous13@yahoo.fr	transitaire	Telephone
Senegal	multiple	Syndicat des Travailleurs des Transports Routiers	Gora Khouma	+221 77 835 94 08 / 77 469 61 78	gora_khouma@yahoo.fr	SG	Face to face
Senegal	multiple	Transporter	Madiama Fall	+221 77 644 61 43	madiamatrucks@yahoo.fr	transporter	Face to face
Senegal	multiple	CMTR	Mohamed Kone	+221 77 811 2007	cmtrdiboly1@yahoo.fr	Chef d'Antenne	Face to face
Senegal	multiple	CMTR	Modibo Doumbia	+221 77 683 33 95	modibo02@yahoo.com		Face to face
Senegal	multiple	Sogetrans	Mamour Leye	+221 77 63 78 546	df.sogetrans@yahoo.fr	DGA	Face to face
Senegal	multiple	Transrail	Thomas Faye	+221 77 33 243 85	thomasfaye@transrailsa.com	Dir. Commercial	Face to face
Senegal		<i>Freight forwarder</i>					
Senegal	export	Bolloré	Fatha Mamadou Souare	+22177 429 20 92	MamadouFatha.Souare@bolloré.com	Chef Département Transit	Face to face

Country	Value Chain	Organization	Name	Phone	e-mail	position	Interview type
						Maritime International (HINTERLAND)	
Senegal	export	Bollore	Moussa Seck	+221 77 647 47 19	moussa.seck@bollore.com	field agent	Telephone
Senegal	export	Damco	Assane Diouf	+221 777406391	Assane.Diouf@damco.com		Face to face
Senegal		<i>Other</i>					
Senegal	livestock	COFENABVI	Mamadou Doudou Fall	+221 77 65 83 595	anprovbs@yahoo.fr mamadoufall.doudou@yahoo.fr	President	Face to face
Senegal	multiple	BIC at Dakar port	Col. Jean Baptiste DIOUF	+221 77 999 77 24	jeancodou@hotmail.fr	Expert	Face to face
Senegal	multiple	Douanes Sénégalaises	Lt. Col. Saliou Diouf	+221 77 33 26 442	szaledio@yahoo.fr	Chef Subdiv. Dakar Port	Face to face
Senegal	multiple	Douanes Maliennes	Ibrahim Bé Coulibaly	+221 77 450 22 88	doumali@orange.sn	Chef de la Représentation au Sénégal	Face to face
Senegal	multiple	GAINDE 2000	Assane Sarr	+221 77 45 00 742	asarr@gainde2000.sn	Dir. Operations	Face to face

ANNEX B: BAMAKO- DAKAR CORRIDOR

Shea detailed cost Bamako-Dakar by road

Corridor		Bamako-Dakar		Cost for the shipper (XOF)						Time (hours)		Average worked hours of procedure	handled by/ paid to	comments
Transport mode		Road												
Type of goods		Shea nuts		Official			Non-official							
Quantity		Unit												
min	max	MT		min	avg	max	min	avg	max	min	max			
30	40													
Departure	Export intention						-	-	-	2	4	3	Freight Forwarder	from Trade and Competition National Dept.
	Phyto-sanitary certificate						-	-	-					from Agric. Dept.
	Certificate of origin	35,000	40,000	45,000	-	-	-	-	-	from Agric. Dept.				
	Customs declaration				-	-	-	-	-					
	Freight forwarder fees				-	-	-	-	-					
	ISRT guarantee	9,000	10,500	12,000	-	-	-	-	-					
Trucking	Loading	37,500	56,250	75,000	-	-	-	-	-	1	2	1.5	Chamber of Commerce Service provider	0.5% of CIF value @60 CFA/kg 100-150 CFA / bag of 80 kg
	Bamako-Diboli Kidira-Dakar	600,000	800,000	1,000,000	120,000	140,000	160,000	68	90				Transporter (official), uniformed services (non-official)	20-25 CFA / kg excluding bribes price and time depend on season
Trader travel expenses		-	37,500	75,000	-	-	-	-	-	-	-	-	Trader	Optional. Ensures goods are not diverted
Environmental tax		-	-	-	100,000	125,000	150,000	0.1	0.2	0.1			Malian Forestry services	officially 25 CFA/kg but usually negotiated and w/o receipt
Diboli border	EMASE fees	-	-	-	10,000	10,000	10,000	2	10	2.5			EMASE	officially 500 CFA / MT but usually negotiated and w/o receipt
	Customs stamp	-	-	-	10,000	10,000	10,000						Malian Customs	some IT system downtime
Kidira border	Customs procedures	36,000	38,500	41,000	-	-	-						Customs	spend night if arrival after 2:00 pm
	Forestry tax	14,000	14,000	14,000	-	-	-	2	20	3			Senegalese Forestry services	per truck
	HAD	30,000	32,500	35,000	-	-	-						Freight Forwarder	per truck
Arrival	Customs declaration, TS	10,000	25,000	40,000	-	-	-	2	24	3			Senegalese Customs	per shipment
	IT Customs fees	9,500	9,500	9,500	-	-	-							
	Unloading	21,000	24,500	28,000	-	-	-					Service provider	700 CFA/MT	
	Lifting	73,120	73,120	73,120	-	-	-					Port terminal handler	2 x 36,560 CFA/20 ft container	
	Stevedoring	178,800	208,600	238,400	-	-	-					Port terminal handler	depends on type of goods, 5,960 CFA/MT for shea nuts	
	Port fees	9,000	9,000	9,000	-	-	-					Port	2 x 4,500 CFA/20 ft container	
	Fumigation/inspection	20,000	20,000	20,000	-	-	-					Service provider	2 x 10,000 CFA/container	
	Escort within port	10,000	10,000	10,000	-	-	-	24	48	12			Senegalese Customs	2 x 5,000 CFA/container
	B/L & registering fees	20,000	25,000	30,000	-	-	-							
	Container leasing	180,000	180,000	180,000	-	-	-					Shipping line	2 x 90,000 CFA/20 ft container	
	Container positioning	220,000	220,000	220,000	-	-	-					Shipping line	2 x 110,000 CFA/20 ft container	
	Weighing	12,000	12,000	12,000	-	-	-					Weighbridge operator	2 x 6,000 CFA/container	
	HAD	60,000	150,000	240,000	-	-	-					Freight forwarder	2 x 30,000-120,000 CFA/container	
	TOTAL		1,584,920	1,995,970	2,407,020	240,000	285,000	330,000	101	198	25			

	Official costs (XOF)	Unofficial costs (XOF)	Total Costs (XOF)	Total time (days)	Average worked hours for procedure
	Avg	Avg	Avg	Avg	Avg
Departure	106,750	-	106,750	0.1	4.5
Trucking	837,500	265,000	1,102,500	3.3	0.1
Borders	85,000	20,000	105,000	0.7	5.5
Arrival	966,720	-	966,720	2.0	15
Total (XOF)	1,995,970	285,000	2,280,970	6.2	25
XOF/T	57,028	8,143	65,171		

1 USD = 575 XOF

	Official costs (USD)	Unofficial costs (USD)	Total Costs (USD)	Total time (days)	Average worked hours for procedure
	Avg	Avg	Avg	Avg	Avg
Departure	186	-	186	0.1	5
Trucking	1,457	461	1,917	3.3	0
Borders	148	35	183	0.7	6
Arrival	1,681	-	1,681	2.0	15
Total (USD)	3,471	496	3,967	6.2	25
USD/T	99	14	113		

Shea detailed cost Bamako – Dakar by Rail

Corridor		Bamako-Dakar		Cost for the shipper (XOF)						Time (hours)		Average worked hours of procedure	handled by/ paid to	comments		
Transport mode		Rail														
Type of goods		Shea nuts														
Quantity		Unit		Official			Non-official									
min	max	MT		min	avg	max	min	avg	max	min	max					
30	40															
Departure	Export intention						-	-	-			3	Transrail	from Trade and Competition National Dept.		
	Phyto-sanitary certificate						-	-	-					from Agric. Dept.		
	Certificate of origin			430,380	460,130	489,880	-	-	-					from Agric. Dept.		
	TIF declaration						-	-	-	2	4			Global amount invoiced by Transrail: 35,000 CFA/MT including customs procedure		
	Customs procedures															
	Freight forwarding fees															
	ISRT guarantee			9,000	10,500	12,000	-	-	-					Chamber of Commerce	0.5% of CIF value @60 CFA/kg	
Loading			37,500	56,250	75,000	-	-	-		1	3	Service provider	100-150 CFA / bag of 80 kg			
	Lifting		73,120	73,120	73,120	-	-	-		1	3	Service provider	2 x 36,560 CFA/20 ft container			
Train	Bamako-Dakar		500,000	625,000	750,000	-	-	-		62	144		Transrail	Upon negotiation with Transrail, depending on season		
Trader travel expenses			50,000	62,500	75,000	-	-	-		-	-		Trader	Ensures goods are not diverted		
Arrival	Customs declaration, TS		10,000	25,000	40,000	-	-	-		2	24	3	Senegalese Customs	per shipment		
	IT Customs fees		9,500	9,500	9,500	-	-	-						Senegalese Customs	per shipment	
	Unloading		21,000	24,500	28,000	-	-	-						Service provider	700 CFA/MT	
	Lifting		73,120	73,120	73,120	-	-	-						Port terminal handler	2 x 36,560 CFA/20 ft container	
	Stevedoring		178,800	208,600	238,400	-	-	-						Port terminal handler	depends on type of goods, 5,960 CFA/MT for shea nuts	
	Port fees		9,000	9,000	9,000	-	-	-						Port	2 x 4,500 CFA/20 ft container	
	Fumigation/inspection		20,000	20,000	20,000	-	-	-						Service provider	2 x 10,000 CFA/container	
	Escort within port		10,000	10,000	10,000	-	-	-		24	48			12	Senegalese Customs	2 x 5,000 CFA/container
	B/L & registering fees		20,000	25,000	30,000	-	-	-						Shipping line	2 x 10,000-15,000 CFA/container	
	Container leasing		180,000	180,000	180,000	-	-	-						Shipping line	2 x 90,000 CFA/20 ft container	
	Container positioning		220,000	220,000	220,000	-	-	-						Shipping line	2 x 110,000 CFA/20 ft container	
	Weighing		12,000	12,000	12,000	-	-	-						Weighbridge operator	2 x 6,000 CFA/container	
	HAD		60,000	150,000	240,000	-	-	-						Freight forwarder	2 x 30,000-120,000 CFA/container	
TOTAL			1,923,420	2,254,220	2,585,020	-	-	-		92	226		22			

	Official costs (XOF)	Unofficial costs (XOF)	Total Costs (XOF)	Total time (days)	Average worked hours for procedure	1 USD = 575 XOF	Official costs (USD)	Unofficial costs (USD)	Total Costs (USD)	Total time (days)	Average worked hours for procedure	
	Avg	Avg	Avg	Avg	Avg		Avg	Avg	Avg	Avg	Avg	
Departure	600,000	-	600,000	0.1	7		Departure	1,043	-	1,043	0.1	7
Trucking	687,500	-	687,500	4.3	-		Trucking	1,196	-	1,196	4.3	-
Borders	-	-	-	-	-		Borders	-	-	-	-	-
Arrival	966,720	-	966,720	2.0	15		Arrival	1,681	-	1,681	2.0	15
Total (XOF)	2,254,220	-	2,254,220	6.5	22		Total (USD)	3,920	-	3,920	6.5	22
XOF /T	64,406	-	64,406				USD/T	112	-	112		

Cashew detailed costs and time Bamako-Dakar by road

Corridor		Bamako-Dakar		Cost for the shipper (XOF)						Time (hours)		Average worked hours of procedure	handled by/ paid to	comments
Transport mode		Road												
Type of goods		Raw cashew nuts		Official			Non-official							
Quantity		Unit												
min	max	MT		min	avg	max	min	avg	max	min	max			
30	40													
Departure	Export intention						-	-	-	2	4	3	Freight Forwarder	from Trade and Competition National Dept.
	Phyto-sanitary certificate						-	-	-					from Agric. Dept.
	Certificate of origin	35,000	40,000	45,000				-	-	-	from Agric. Dept.			
	Customs declaration							-	-	-				
	Freight forwarder fees							-	-	-				
	ISRT guarantee	56,063	65,406	74,750				-	-	-				
Trucking	Loading	37,500	56,250	75,000						1	2	1.5	Chamber of Commerce	0.5% of CIF value @650 USD/MT
Trucking	Bamako-Diboli	660,000	930,000	1,200,000	100,000	150,000	200,000	68	90				Transporter (official), uniformed services (non-official)	22-30 CFA / kg excluding bribes price and time depend on season
	Kidira-Dakar													
Diboli border	EMASE fees	-	-	-	10,000	10,000	10,000	2	10			2.5	EMASE	officially 500 CFA / MT but usually negotiated and w/o receipt
	Customs stamp	-	-	-	10,000	10,000	10,000						Malian Customs	
Kidira border	Customs procedures	36,000	38,500	41,000	-	-	-						Customs	spend night if arrival after 2:00 pm
	Forestry tax	14,000	14,000	14,000	-	-	-	2	20			3	Senegalese Forestry services	per truck
	HAD	30,000	32,500	35,000	-	-	-						Freight Forwarder	per truck
Arrival	Customs declaration, TS	10,000	25,000	40,000	-	-	-	2	24	3	Senegalese Customs	per shipment		
	IT Customs fees	9,500	9,500	9,500	-	-	-					per shipment		
	Unloading	21,000	24,500	28,000	-	-	-	Service provider	700 CFA/MT					
	Lifting	73,120	73,120	73,120	-	-	-	Port terminal handler	2 x 36,560 CFA/20 ft container					
	Stevedoring	180,000	210,000	240,000	-	-	-	Port terminal handler	depends on type of goods, estimated at 6,000 CFA/MT					
	Port fees	9,000	9,000	9,000	-	-	-	Port	2 x 4,500 CFA/20 ft container					
	Fumigation/inspection	20,000	20,000	20,000	-	-	-	Service provider	2 x 10,000 CFA/container					
	Escort within port	10,000	10,000	10,000	-	-	-	Senegalese Customs	2 x 5,000 CFA/container					
	B/L & registering fees	20,000	25,000	30,000	-	-	-	Shipping line	2 x 10,000-15,000 CFA/container					
	Container leasing	180,000	180,000	180,000	-	-	-	Shipping line	2 x 90,000 CFA/20 ft container					
	Container positioning	220,000	220,000	220,000	-	-	-	Shipping line	2 x 110,000 CFA/20 ft container					
	Weighing	12,000	12,000	12,000	-	-	-	Weighbridge operator	2 x 6,000 CFA/container					
	HAD	60,000	150,000	240,000	-	-	-	Freight forwarder	2 x 30,000-120,000 CFA/container					
	TOTAL		1,693,183	2,144,776	2,596,370	120,000	170,000	220,000	101	198	25			

	Official costs (XOF)	Unofficial costs (XOF)	Total Costs (XOF)	Total time (days)	Average worked hours for procedure
	Avg	Avg	Avg	Avg	Avg
Departure	161,656	-	161,656	0.1	4.5
Trucking	930,000	150,000	1,080,000	3.3	-
Borders	85,000	20,000	105,000	0.7	5.5
Arrival	968,120	-	968,120	2.0	15
Total (XOF)	2,144,776	170,000	2,314,776	6.2	25
XOF /T	61,279	4,857	66,136		

1 USD = 575 XOF

	Official costs (USD)	Unofficial costs (USD)	Total Costs (USD)	Total time (days)	Average worked hours for procedure
	Avg	Avg	Avg	Avg	Avg
Departure	281	-	281	0.1	5
Trucking	1,617	261	1,878	3.3	-
Borders	148	35	183	0.7	6
Arrival	1,684	-	1,684	2.0	15
Total (USD)	3,730	296	4,026	6.2	25
USD/T	107	8	115		

Cashew detailed cost and time Bamako-Dakar by rail

Corridor		Bamako-Dakar		Cost for the shipper (XOF)						Time (hours)		Average worked hours of procedure	handled by/ paid to	comments		
Transport mode		Rail														
Type of goods		Raw cashew nuts		Official			Non-official									
Quantity		Unit														
min	max	MT		min	avg	max	min	avg	max	min	max					
Departure	Export intention						-	-	-	2	4	3	Transrail	from Trade and Competition National Dept.		
	Phyto-sanitary certificate						-	-	-					from Agric. Dept.		
	Certificate of origin						-	-	-					from Agric. Dept.		
	TIF declaration	383,318	405,224	427,130				-	-					-	Global amount invoiced by Transrail: 35,000 CFA/MT including customs procedure	
	Customs procedures							-	-					-	Chamber of Commerce	0.5% of CIF value @650 USD/MT
	Freight forwarding fees							-	-					-	Service provider	100-150 CFA / bag of 80 kg
	ISRT guarantee	56,063	65,406	74,750				-	-					-	Service provider	2 x 36,560 CFA/20 ft container
Loading	37,500	56,250	75,000				-	-	-	1	3	2	Service provider	100-150 CFA / bag of 80 kg		
Lifting	73,120	73,120	73,120				-	-	-	1	3	2	Service provider	2 x 36,560 CFA/20 ft container		
Train	Bamako-Dakar	500,000	625,000	750,000				-	-	-	62	144		Transrail	Upon negotiation with Transrail, depending on season	
Trader travel expenses		50,000	62,500	75,000				-	-	-	-	-		Trader	Ensures goods are not diverted	
Arrival	Customs declaration, TS	10,000	25,000	40,000				-	-	-	2	24	3	Senegalese Customs	per shipment	
	IT Customs fees	9,500	9,500	9,500				-	-	-				Senegalese Customs	per shipment	
	Unloading	21,000	24,500	28,000				-	-	-				Service provider	700 CFA/MT	
	Lifting	73,120	73,120	73,120				-	-	-				Port terminal handler	2 x 36,560 CFA/20 ft container	
	Stevedoring	180,000	210,000	240,000				-	-	-				Port terminal handler	depends on type of goods, estimated at 6,000 CFA/MT	
	Port fees	9,000	9,000	9,000				-	-	-				Port	2 x 4,500 CFA/20 ft container	
	Fumigation/inspection	20,000	20,000	20,000				-	-	-				Service provider	2 x 10,000 CFA/container	
	Escort within port	10,000	10,000	10,000				-	-	-	24	48	12	Senegalese Customs	2 x 5,000 CFA/container	
	B/L & registering fees	20,000	25,000	30,000				-	-	-				Shipping line	2 x 10,000-15,000 CFA/container	
	Container leasing	180,000	180,000	180,000				-	-	-				Shipping line	2 x 90,000 CFA/20 ft container	
	Container positioning	220,000	220,000	220,000				-	-	-				Shipping line	2 x 110,000 CFA/20 ft container	
	Weighing	12,000	12,000	12,000				-	-	-				Weighbridge operator	2 x 6,000 CFA/container	
	HAD	60,000	150,000	240,000				-	-	-				Freight forwarder	2 x 30,000-120,000 CFA/container	
TOTAL		1,924,620	2,255,620	2,586,620						92	226	22				

	Official costs (XOF)	Unofficial costs (XOF)	Total Costs (XOF)	Total time (days)	Average worked hours for procedure	1 USD = 575 XOF	Official costs (USD)	Unofficial costs (USD)	Total Costs (USD)	Total time (days)	Average worked hours for procedure
	Avg	Avg	Avg	Avg	Avg		Avg	Avg	Avg	Avg	Avg
Departure	600,000	-	600,000	0.1	7	Departure	1,043	-	1,043	0.1	7
Trucking	687,500	-	687,500	4.3	-	Trucking	1,196	-	1,196	4.3	-
Borders	-	-	-	-	-	Borders	-	-	-	-	-
Arrival	968,120	-	968,120	2.0	15	Arrival	1,684	-	1,684	2.0	15
Total (XOF)	2,255,620	-	2,255,620	6.5	22	Total (USD)	3,923	-	3,923	6.5	22
XOF /T	64,446	-	64,446			USD/T	112	-	112		

Maize detailed costs and time Bamako-Dakar by road

Corridor		Bamako-Dakar		Cost for the shipper (XOF)						Total time (hours)		Average worked hours of procedure	handled by/ paid to	comments
Transport mode		Road												
Type of goods		Maize		Official			Non-official							
Quantity		Unit												
min	max	MT		min	avg	max	min	avg	max	min	max			
40	60													
Departure	Export intention		-		-		-	-		N/A				
	Certificate of origin		-		-		-	-		N/A				
	Phytosanitary certificate		-		-		-	-		N/A				
	Customs declaration	10,000	10,000	10,000	-	-	-	-	-	2	4	3	Customs	
	Loading	50,000	81,250	112,500	-	-	-	-	-	3	4	3.5	Service provider	100-150 CFA / bag of 80 kg
Trucking	Bamako-Diboli Kidira-Dakar	330,000	575,000	820,000	150,000	175,000	200,000			48	72	Transporter	12-17 CFA/kg including bribes	
Overload penalties		-	175,000	350,000	-	-	-							
Diboli border	visa/ stamp	20,000	57,500	95,000	-	-	-			0.5	10	0.8	Police, Customs, Gendarmerie	procedures last less than 1 hour some IT system downtime
Kidira border	VAT		-		-	-	-							
	Customs declaration	90,000	112,500	135,000	-	-	-			2	19	2.5	Customs	spend night if arrival after 2:00 pm 2,250 CFA/MT
	TS		-		-	-	-							
	HAD	30,000	37,500	45,000	-	-	-						Freight forwarder	procedures last less than 3 hours
Arrival	Unloading/ market fees	28,000	35,000	42,000	-	-	-			2	3	2.5	Service provider	700 CFA/MT
TOTAL		558,000	1,083,750	1,609,500	150,000	175,000	200,000			58	112	12		

	Official costs (XOF)	Unofficial costs (XOF)	Total Costs (XOF)	Total time (days)	Average worked hours for procedure
	Avg	Avg	Avg	Avg	Avg
Departure	91,250	-	91,250	0.1	6.5
Trucking	750,000	175,000	925,000	2.5	-
Borders	207,500	-	207,500	0.7	3.3
Arrival	35,000	-	35,000	-	2.5
Total (XOF)	1,083,750	175,000	1,258,750	3.3	12
XOF/T	21,675	3,500	25,175		

	Official costs (USD)	Unofficial costs (USD)	Total Costs (USD)	Total time (days)	Average worked hours for procedure
	Avg	Avg	Avg	Avg	Avg
Departure	159	-	159	0.1	7
Trucking	1,304	304	1,609	2.5	-
Borders	361	-	361	0.7	3
Arrival	61	-	61	-	3
Total (USD)	1,885	304	2,189	3.3	12
USD/T	38	6	44		

Millet –Sorghum Bamako-Dakar by road

Corridor		Bamako-Dakar		Cost for the shipper (XOF)						Time (hours)		Average worked hours of procedure	handled by/ paid to	comments	
Transport mode		Road													
Type of goods		Millet-Sorghum		Official			Non-official								
Quantity		Unit		min	avg	max	min	avg	max	min	max				
	35	max	45												
			MT												
Departure	Export intention			-		-	-	-	-	N/A					
	Certificate of origin			-		-	-	-	-	N/A					
	Phytosanitary certificate			-		-	-	-	-	N/A					
	Customs declaration			10,000	10,000	10,000	-	-	-	-	2	4	3	Customs	
	Loading			43,750	64,063	84,375	-	-	-	-	3	4	3.5	Service provider	100-150 CFA / bag of 80 kg
Trucking	Bamako-Diboli Kidira-Dakar			345,000	455,000	565,000	75,000	137,500	200,000	48	72		Transporter	12-17 CFA/kg including bribes	
Diboli border	visa/ stamp			20,000	57,500	95,000	-	-	-	0.5	10	0.8	Police, Customs, Gendarmerie	procedures last less than 1 hour some IT system downtime	
Kidira border	VAT			-		-	-	-	-						
	Customs declaration			78,750	90,000	101,250	-	-	-	-					
	TS			-		-	-	-	-	2	19	2.5	Customs	spend night if arrival after 2:00 pm 2,250 CFA/MT	
	HAD			30,000	37,500	45,000	-	-	-	-				Freight forwarder	procedures last less than 3 hours
Arrival	Unloading/ market fees			24,500	28,000	31,500	-	-	-	2	3	2.5	Service provider	700 CFA/MT	
	TOTAL			552,000	742,063	932,125	75,000	137,500	200,000	58	112	12			

	Official costs (XOF)	Unofficial costs (XOF)	Total Costs (XOF)	Total time (days)	Average worked hours for procedure	1 USD = 575 XOF	Official costs (USD)	Unofficial costs (USD)	Total Costs (USD)	Total time (days)	Average worked hours for procedure
	Avg	Avg	Avg	Avg	Avg		Avg	Avg	Avg	Avg	Avg
Departure	74,063	-	74,063	0.1	6.5		129	-	129	0.1	7
Trucking	455,000	137,500	592,500	2.5	-		791	239	1,030	2.5	-
Borders	185,000	-	185,000	0.7	3.3		322	-	322	0.7	3
Arrival	28,000	-	28,000	-	2.5		49	-	49	-	3
Total (XOF)	742,063	137,500	879,563	3.3	12		1,291	239	1,530	3.3	12
XOF/T	18,552	3,438	21,989				USD/T	32	6	38	

Cattle detailed costs and time Bamako-Dakar corridor

Corridor		Bamako-Dakar		Cost for the shipper (XOF)						Time (hours)		Average worked hours of procedure	handled by/ paid to	comments
Transport mode		Road												
Type of goods		Cattle		Official			Non-official							
Quantity		Unit												
min	max			min	avg	max	min	avg	max	min	max			
26	45	heads		min	avg	max	min	avg	max	min	max			
Departure	Export intention	-	-	-	-	-	-	-	-	N/A		National Dept. of Trade	once per month in average	
	Vaccination certificate	2,600	4,450	6,300	-	-	-	-	-	N/A		National Dept. of Veterinary services	100-140 CFA/head	
	Sanitary certificate	-	-	-	2,000	4,000	6,000	-	-	-	N/A	National Dept. of Veterinary services	should be free	
	Loading	5,000	7,500	10,000	-	-	-	-	-	1	2	1.5	Local agents	
	Customs declaration	50,000	50,000	50,000	-	-	-	-	-	1	1	1	Freight forwarder	
Trucking	Kayes-Dakar	200,000	500,000	800,000	75,000	137,500	200,000	-	-	16	20		Transporter	depends on season official cost includes 20,000 CFA bribes paid by the driver
Rest in Kayes	Feeding and water	4,000	23,250	42,500	-	-	-	-	-	18	40		Locals/ sheperds	depending on season and health of animals
Diboli border	visa/ stamp	-	-	-	-	-	-	-	-	0.5	1	0.8	Customs	
Kidira border	Vetenerary inspection	2,000	2,250	2,500	-	-	-	-	-	-	-		Veterinary services	
	VAT	104,104	173,552	243,000	-	-	-	-	-	0.5	3	1.8	Customs	4,004-5,400 CFA/head
	Patent leasing	10,000	12,500	15,000	-	-	-	-	-	-	-		Senegalese importer	
Arrival	Unloading/ market fees	3,000	19,000	35,000	-	-	-	-	-	1	1	1	Local agents	
	Feeding and water	20,000	150,000	280,000	-	-	-	-	-	24	168		Local providers	20,000-40,000 CFA per day, excluded from TOTAL
TOTAL		380,704	792,502	1,204,300	77,000	141,500	206,000	54	88	6				

	Official costs (XOF)	Unofficial costs (XOF)	Total Costs (XOF)	Total time (days)	Average worked hours for procedure
	Avg	Avg	Avg	Avg	Avg
Departure	61,950	4,000	65,950	0.04	2.5
Trucking	523,250	137,500	660,750	2.7	-
Borders	188,302	-	188,302	0.1	2.5
Arrival	19,000	-	19,000	-	1
Total (XOF)	792,502	141,500	934,002	2.9	6
XOF /T	74,413	13,286	87,700		

	Official costs (USD)	Unofficial costs (USD)	Total Costs (USD)	Total time (days)	Average worked hours for procedure
	Avg	Avg	Avg	Avg	Avg
Departure	108	7	115	0.04	2.5
Trucking	910	239	1,149	2.7	-
Borders	327	-	327	0.1	2.5
Arrival	33	-	33	-	1
Total (USD)	1,378	246	1,624	2.9	6
USD/T	129	23	153		
USD/head	39	7	46		

Small ruminants detailed costs and time Bamako-Dakar corridor

Corridor		Bamako-Dakar		Cost for the shipper (XOF)					Time (hours)		Average worked hours of procedure	handled by/ paid to	comments
Transport mode	Road												
Type of goods	Small ruminants												
Quantity	Unit	Official			Non-official								
min	max	min	avg	max	min	avg	max	min	max				
100	200												
Departure	Export intention	-	-	-	-	-	-	N/A		National Dept. of Trade	once per month in average		
	Vaccination certificate	10,000	19,000	28,000	-	-	-	N/A		National Dept. of Veterinary services	100-140 CFA/head		
	Sanitary certificate	-	-	-	2,000	4,000	6,000	N/A		National Dept. of Veterinary services	should be free		
	Loading	5,000	7,500	10,000	-	-	-	1	2	1.5	Local agents		
	Customs declaration	50,000	50,000	50,000	-	-	-	1	1	1	Freight forwarder		
Trucking	Bamako-Kayes	200,000	500,000	800,000	75,000	137,500	200,000	16	20		Transporter	depends on season	
	Kayes-Dakar							16	20			official cost includes 20,000 CFA bribes paid by the driver	
Rest in Kayes	Feeding and water	4,000	23,250	42,500	-	-	-	18	40		Locals/ sheperds	depending on season and health of animals	
Diboli border	visa/ stamp	-	-	-	-	-	-	0.5	1	0.8	Customs		
Kidira border	Veterinary inspection	2,000	2,250	2,500	-	-	-				Veterinary services		
	VAT	50,500	145,250	240,000	-	-	-	0.5	3	1.8	Customs	505-1,200 CFA/head	
	Patent leasing	10,000	12,500	15,000	-	-	-				Senegalese importer		
Arrival	Unloading/ market fees	3,000	19,000	35,000	-	-	-	1	1	1	Local agents		
	Feeding and water	20,000	150,000	280,000	-	-	-	24	168		Local providers	20,000-40,000 CFA per day, excluded from TOTAL	
TOTAL		334,500	778,750	1,223,000	77,000	141,500	206,000	54	88	6			

	Official costs (XOF)	Unofficial costs (XOF)	Total Costs (XOF)	Total time (days)	Average worked hours for procedure
	Avg	Avg	Avg	Avg	Avg
Departure	76,500	4,000	80,500	0.04	2.5
Trucking	523,250	137,500	660,750	2.7	-
Borders	160,000	-	160,000	0.1	2.5
Arrival	19,000	-	19,000	-	1
Total (XOF)	778,750	141,500	920,250	2.9	6
XOF/T	103,833	18,867	122,700		

	Official costs (USD)	Unofficial costs (USD)	Total Costs (USD)	Total time (days)	Average worked hours for procedure
	Avg	Avg	Avg	Avg	Avg
Departure	133	7	140	0.04	2.5
Trucking	910	239	1,149	2.7	-
Borders	278	-	278	0.1	2.5
Arrival	33	-	33	-	1
Total (USD)	1,354	246	1,600	2.9	6
USD/T	602	109	711		
USD/head	9	2	11		

ANNEX C: OUAGADOUGOU – TEMA CORRIDOR

Cashew detailed costs and time Ouagadougou-Tema Corridor

Corridor		Ouagadougou- Tema		Cost for the shipper (XOF)						Total Time (hours)		Average worked hours for procedure	handled by/ paid to	comments
Transport mode		Road												
Type of goods		cashew												
Quantity		Unit : Metric ton		Official			Non-official							
min	max			min	avg	max	min	avg	max	min	max			
		35												
Departure	Loading	-	-	-	-	-	-	-	-		N/A			
	Export authorization	600	600	600	-	-	-	-	-		N/A			
	Phyto-Sanitary certificate	7,000	7,000	7,000	-	-	-	-	-		N/A			
	Customs declaration	5,000	5,000	5,000	10,000	10,000	10,000			2	4.8	3.4	Custom	
	Forwarding agent fees	10,000	15,625	21,250	-	-	-						Forwarding agent	
Trucking	Ouagadougou- Dakola	535,632.35	628,154	720,676.47	15,000	22,500	30,000			69	72.0		Transporter	
	Dakola/Paga-Tema	-	-	-	25,368	29,596	33,824							
Dakola Border	Documentation	-	-	-	-	-	-	-	-					
	Customs clearance	9,028	9,028	9,028	6,000	6,000	6,000			0.50		1.3	Custom	
	Forwarding agent fees	2,000	4,500	7,000	-	-	-						Forwarding agent	
Paga Border	Documentation	-	-	-	-	-	-	-	-		24.0			
	Customs clearance / Transit fees	115,000	115,000	115,000	-	-	-			3.0		5.5	Custom	
	Escort fees USD 65*2	77,625	77,625	77,625	-	-	-						Custom	
	Forwarding agent fees	10,000	10,000	10,000	-	-	-						Forwarding agent	
Arrival (2x 20')	SGS weighing	25,368	25,368	25,368	-	-	-			8	72.0	16.0	SGS	per truck
	Off loading of the arrival truck	50,735	50,735	50,735	-	-	-						Labors	
	Container stuffing	50,735	50,735	50,735	-	-	-						Labors	
	Fumigation	101,471	101,471	101,471	-	-	-						Specialised company	
	Customs process	-	-	-	6,765	6,765	6,765						Forwarding agent	
	Cocobod (Cashew) Ghs1.5	110,983	110,983	110,983	-	-	-						Cocobod , only Cashew	Ghs1.5 per Bag of 80kgs (438 bags)
	Transport for container positioning and back	270,588	270,588	270,588	-	-	-						Transporter	
	Forwarding agent fees	109,926	109,926	109,926	-	-	-						Forwarding agent	
	PortTerminal Handling charges	60,882	60,882	60,882	-	-	-						Port Terminal	
	Shipping line container handling	35,853	35,853	35,853	-	-	-						shipping line	
	Shipping line container trucking	44,816	44,816	44,816	-	-	-						shipping line	
	Shipping line administrative charge & BL fees	84,559	84,559	84,559	-	-	-						shipping line	
	TOTAL	1,717,803	1,818,450	1,919,097	63,132	74,860	86,588	83	173	26				
								Days	Days					
	Total supported by shipper	1,717,803	1,818,450	1,919,097	22,765	22,765	22,765	3.4	7.2					
	Per ton (XOF)	49,080	51,956	54,831	650	650	650							
	per 20' container (17.5)	858,901	909,225	959,548	11,382	11,382	11,382							
	Per ton USD	85	90	95	1	1	1							
	per 20' container (17.5)	1,494	1,581	1,669	20	20	20							

	Official costs (XOF)	Unofficial costs (XOF)	Total Costs (XOF)	Total time (Days)	worked hours for
	Avg	Avg	Avg	Avg	Avg
Departure	28,225	10,000	38,225	0.1	3.4
Trucking	628,154	52,096	680,250	2.9	
Borders	216,153	6,000	222,153	0.6	6.8
Arrival	945,917	6,765	952,682	1.7	16.0
Total (XOF)	1,818,450	74,860	1,893,310	5.3	26.2
XOF/T	51,956	2,139	54,095		

	Official costs (USD)	Unofficial costs (USD)	Total Costs (USD)	Total time (days)	Average worked hours for procedure
	Avg	Avg	Avg	Avg	Avg
Departure	49	17	66	0.1	3.4
Trucking	1,092	91	1,183	2.9	0.0
Borders	376	10	386	0.6	6.8
Arrival	1,645	12	1,657	1.7	16.0
Total (USD)	3,163	130	3,293	5.3	26.2
USD/T	90	4	94		

Raw shea nuts detailed costs and time Ouagadougou-Tema Corridor

Corridor		Ouagadougou- Tema		Cost for the shipper (XOF)						Total time (hours)		Average worked hours for procedure	handled by/ paid to	comments	
Transport mode		Road													
Type of goods		shea nuts													
Quantity		Unit		Official			Non-official								
min	max	35		min	avg	max	min	avg	max	min	max				
Departure	Loading	-	-	-	-	-	-	-	-	-	-	N/A			
	Export authorization	600	600	600	-	-	-	-	-	-	-	N/A			
	Phyto-Sanitary certificate	7,000	7,000	7,000	-	-	-	-	-	-	-	N/A			
	Customs declaration	5,000	5,000	5,000	10,000	10,000	10,000	-	-	-	-	2	4.75	3.4	Custom
	Forwarding agent fees	10,000	15,625	21,250	-	-	-	-	-	-	-	-	-	-	Forwarding agent
Trucking	Ouagadougou- Dakola	535,632.35	628,154	720,676.47	15,000	22,500	30,000	-	-	-	-	-	-	-	
	Dakola/Paga-Tema	-	-	-	25,368	29,596	33,824	-	-	-	69	72.00	-	-	Transporter
Dakola Border	Documentation	-	-	-	-	-	-	-	-	-	-	-	-	-	
	Customs clearance	9,028	9,028	9,028	6,000	6,000	6,000	-	-	-	0.50	-	1.3	-	Custom
	Forwarding agent fees	2,000	4,500	7,000	-	-	-	-	-	-	-	-	-	-	Forwarding agent
Paga Border	Documentation	-	-	-	-	-	-	-	-	-	-	-	-	-	
	Customs clearance / Transit fee	115,000	115,000	115,000	5,000	7,500	10,000	-	-	-	3.0	24.0	5.5	-	Custom
	Escort fees USD 65*2	77,625	77,625	77,625	-	-	-	-	-	-	-	-	-	-	Custom
	Forwarding agent fees	10,000	10,000	10,000	-	-	-	-	-	-	-	-	-	-	Forwarding agent
Arrival (2x 20')	SGS weighing	25,368	25,368	25,368	-	-	-	-	-	-	-	-	-	-	SGS
	Off loading of the arrival truck	50,735	50,735	50,735	-	-	-	-	-	-	-	-	-	-	Labors
	Container stuffing	50,735	50,735	50,735	-	-	-	-	-	-	-	-	-	-	Labors
	Fumigation	101,471	101,471	101,471	-	-	-	-	-	-	-	-	-	-	Specialised company
	Customs process	-	-	-	6,765	6,765	6,765	-	-	-	-	-	-	-	Forwarding agent
	Transport for container positioning and back	270,588	270,588	270,588	-	-	-	-	-	-	8	72.0	16.0	-	Transporter
	Forwarding agent fees	109,926	109,926	109,926	-	-	-	-	-	-	-	-	-	-	Forwarding agent
	Port Terminal Handling charges	60,882	60,882	60,882	-	-	-	-	-	-	-	-	-	-	Port Terminal
	Shipping line container handling	35,853	35,853	35,853	-	-	-	-	-	-	-	-	-	-	shipping line
	Shipping line container trucking	44,816	44,816	44,816	-	-	-	-	-	-	-	-	-	-	shipping line
	Shipping line administrative charge & BL fees	84,559	84,559	84,559	-	-	-	-	-	-	-	-	-	-	shipping line
	TOTAL	1,606,819	1,707,466	1,808,113	68,132	82,360	96,588	83	173	26.1					
	Total supported by shipper		1,606,819	1,707,466	1,808,113	27,765	30,265	32,765	3.4	7.2	1.1				
Per ton (XOF)	45,909	48,785	51,660	793	865	936									
per 20' container (17.5)	803,410	853,733	904,057	13,882	15,132	16,382									
Per ton USD	80	85	90	1	2	2									
per 20' container (17.5)	1,397	1,485	1,572	24	26	28									

	Official costs (XOF)	Unofficial costs (XOF)	Total Costs (XOF)	Total time (Days)	Average worked hours for procedure
	Avg	Avg	Avg	Avg	Avg
Departure	28,225	10,000	38,225	0.1	3.4
Trucking	628,154	52,096	680,250	2.9	
Borders	216,153	13,500	229,653	0.6	6.8
Arrival	834,934	6,765	841,699	1.7	16.0
Total (XOF)	1,707,466	82,360	1,789,827	5.3	26.1
XOF/T	48,785	2,353	51,138		

	Official costs (USD)	Unofficial costs (USD)	Total Costs (USD)	Total time (Days)	Average worked hours for procedure
	Avg	Avg	Avg	Avg	Avg
Departure	49	17	66	0.1	3.4
Trucking	1,092	91	1,183	2.9	0.0
Borders	376	23	399	0.6	6.8
Arrival	1,452	12	1,464	1.7	16.0
Total (USD)	2,970	143	3,113	5.3	26.1
USD/T	85	4	89		

Maize detailed costs and time Ouagadougou-Tema Corridor (Ouagadougou – Techiman)

Corridor	Ouagadougou- Tema	Cost for the shipper (XOF)						Total Time (hours)		Average worked hours for procedure	handled by/ paid to	comments
		Official			Non-official			min	max			
Transport mode	Road	Value	Unit : Metric Ton	min	avg	max	min	avg	max	min	max	
		2,400,000 XOF										
		350 100kg Bag	35									
Departure	Loading	42,000	42,000	42,000	-	-	-	N/A				
	Export authorization	600	600	600	-	-	-	N/A			Guichet unique XOF 600/ paper	
	Phyto-Sanitary certificate	7,000	7,000	7,000	-	-	-	N/A			Ministry of agriculture XOF 200 / Ton	
	Customs declaration	-	-	-	-	-	-	-	-		Local agents	
	Forwarding agent fees	-	-	-	-	-	-	-	-		Freight forwarder	
Trucking	Ouagadougou- Dakola	495,000	618,750	742,500	10,000	12,500	15,000	21	25		Transporter bribes paid by the transporter . Bribes deducted on the transport cost	
	Dakola/Paga-Tema				20,000	25,000	30,000					
Dakola Border	Customs declaration	27,558	27,558	27,558	8,000	8,000	8,000	1.00		2.5		
	Forwarding agent fees	7,000	11,000	15,000								
Paga Border	Phyto-Sanitary certificate	10,993	10,993	10,993	-	-	-				Ministry of food and agriculture Regional agricultural office / standard board	
	Import permit	25,368	25,368	25,368								
	Distric town assembly	3,382	3,382	3,382								
	Customs taxes	108,000	108,000	108,000	10,000	12,500	15,000	2.0		3	forwarding agent pays to customs	
	Forwarding agent fees	10,000	12,500	15,000							about 5.3% of the value	
Arrival	Offloading	41,434	41,434	41,434		-						
TOTAL in XOF		778,334	908,584	1,038,834	48,000	58,000	68,000	24	48	5.5		
	XOF/T	22,238	25,960	29,681	1,371	1,657	1,943	1	2			
	Total in USD	1,354	1,580	1,807	83	101	118					
	USD / Ton	635	742	848	39	47	56					

	Official costs (XOF)	Unofficial costs (XOF)	Total Costs (XOF)	Total time (days)	Average worked hours for procedure		Official costs (USD)	Unofficial costs (USD)	Total Costs (USD)	Total time (days)	Average worked hours for procedure
	Avg	Avg	Avg	Avg	Avg		Avg	Avg	Avg	Avg	Avg
Departure	49,600	0	49,600	0.0		Departure	86	0	86		
Trucking	618,750	37,500	656,250	1.0		Trucking	1,076	65	1,141	1.0	0
Borders	198,801	20,500	219,301	0.6	5.5	Borders	346	36	381	0.6	5.5
Arrival	41,434	0	41,434	0.0		Arrival	72	0	72		
Total (XOF)	908,584	58,000	966,584	1.5	5.5	Total (USD)	1,580	101	1,681	1.5	5.5
XOF/T	25,960	1,657	27,617			USD/T	45	3	48		

Maize detailed costs and time Tema- Ouagadougou Corridor (Techiman-Ouagadougou)

Corridor	Techiman- Ouagadougou	Cost for the shipper (XOF)						Total Time (hours)		Average worked hours for procedure	handled by/ paid to	comments		
Transport mode	Road													
Type of goods	Maiz													
Value	Unit : Metric Ton	Official			Non-official									
2,400,000 XOF	350.100kg	35	min	avg	max	min	avg	max	min	max				
Departure	Loading		41,434	41,434	41,434	-	-	-				0.5 GHS / bag		
	Phyto-Sanitary certificate		80	80	80									
Trucking	Techiman-Paga		942,500	1,048,162	1,153,823.53	5,000	7,500	10,000	21	25				
	Paga/Dakola-Ouagadougou					15,000	17,500	20,000						
Paga Border	Customs declaration			-	-				1	23	1.5			
	Forwarding agent fees		10,000	10,000	10,000									
Dakola Border	Phyto-Sanitary certificate		7,000	7,000	7,000	-	-	-	2	3				
	Customs declaration			-	-									
	Customs taxes		29,000	29,000	29,000	15,000	15,000	15,000					about 1% of the FOB value	
	Forwarding agent fees		8,000	8,000	8,000	10,000	12,500	15,000						
Arrival	Offloading		42,000	42,000	42,000		-					100 fcfa / bag		
TOTAL in XOF			1,080,014	1,185,676	1,291,337	45,000	52,500	60,000	24	48	5			
	XOF/T		30,858	33,876	36,895	1,286	1,500	1,714	1.0	2				

	Official costs (XOF)	Unofficial costs (XOF)	Total Costs (XOF)	Total time (days)	Average worked hours for procedure
	Avg	Avg	Avg	Avg	Avg
Departure	41,514	0	41,514		
Trucking	1,048,162	25,000	1,073,162	1.0	
Borders	54,000	27,500	81,500	0.6	4.5
Arrival	42,000	0	42,000		
Total (XOF)	1,185,676	52,500	1,238,176	1.5	4.5
XOF/T	33,876	1,500	35,376		

	Official costs (USD)	Unofficial costs (USD)	Total Costs (USD)	Total time (days)	Average worked hours for procedure
	Avg	Avg	Avg	Avg	Avg
Departure	72	0	72		
Trucking	1,823	43	1,866	1.0	0
Borders	94	48	142	0.6	4.5
Arrival	73	0	73		
Total (USD)	2,062	91	2,153	1.5	4.5
USD/T	59	3	62		

Cattle detailed costs and time Ouagadougou-Tema

Corridor		Ouagadougou- Tema		Cost for the shipper (XOF)					Total Time (hours)			Average worked hours for procedure	handled by/ paid to	comments			
Transport mode		Road															
Type of goods		cattle head															
Quantity		Unit		Official			Non-official										
min	max			min	avg	max	min	avg	max	min	avg	max					
40	45		head														
Departure	Loading			20,000	20,000	20,000	-	-	-		N/A			specialized middle man at Market			
	Export authorization			600	600	600	-	-	-		N/A			Guichet Unique			
	Vet certificate			12,000	12,750	13,500	-	-	-		N/A			Ministry of agriculture			
	Customs declaration													Customs			
	Forwarding agent fees						-	-	-					Forwarder			
Trucking	Ouagadougou- Dakola						20,000	22,500	25,000								
	Dakola/Paga-Tema			389,338	514,430	639,522	84,559	118,382	152,206	34	37	40		Transporter	depends on season		
Dakola Border	FODEL Taxes			60,000	60,000	60,000	-	-	-							XOF 3000 / head but pays half of the price and bribes customs	
	Customs			16,558	16,558	16,558	38,000	38,000	38,000	0.5	2.25		1.3	Customs / Ministry of agriculture			
	Forwarding agent fees			2,000	3,000	4,000								IT tax plus DDU			
Paga Border	Vetenerary inspection			6,765	6,765	6,765	-	-	-							Ghs 2 / head declared (20 instead of 40)	
	distric assembly permit			1,691	1,691	1,691								disctric	GHS 0.5/ head declared (20 instead of 40)		
	Import permit			6,765	6,765	6,765				1.0	0.5		3.0	ministry of food and agric	2 GHS / head declared (20 instead of 40)		
	Customs Taxes			35,007	35,007	35,007								Customs Taxes : i.e.	vat and other taxes		
	Forwarding agent fees			10,000	10,000	10,000								Senegalese importer			
Arrival	Unloading/ market fees			6,765	7,188	7,610								Achiaman distric	GHS 1 / head		
TOTAL in XOF				567,489	694,753	822,018	142,559	178,882	215,206	36	40	44	4.3				
TOTAL in USD				987	1,208	1,430	248	311	374								

	Official costs (XOF)	Unofficial costs (XOF)	Total Costs (XOF)	Total time (Days)	hours for procedure		Official costs (USD)	Unofficial costs (USD)	Total Costs (USD)	Total time (Days)	Average worked hours for procedure
	Avg	Avg	Avg	Avg	Avg		Avg	Avg	Avg	Avg	Avg
	Departure	33,350		33,350				Departure	58		58
Trucking	514,430	140,882	655,312	1.5	1.3	Trucking	895	245	1,140	1.5	1
Borders	139,786	38,000	177,786	0.1	3.0	Borders	243	66	309	0.1	3.0
Arrival	7,188		7,188			Arrival	13		13		
Total (XOF)	694,753	178,882	873,636	1.7	4.3	Total (USD)	1,208	311	1,519	1.7	4.3
XOF /head	16,347	4,209	20,556			USD/head	28	7	36		

Small ruminant detailed costs and time Ouagadougou-Tema

Corridor		Ouagadougou- Tema		Cost for the shipper (XOF)						Time (hours)			Average worked hours for procedure	handled by/ paid to	comments	
Transport mode		Road														
Type of goods		cattle head														
Quantity		Unit		Official			Non-official									
min	max	head		min	avg	max	min	avg	max	min	avg	max				
	200		220													
Departure	Loading	20,000	20,000	20,000	-	-	-	-	-	-	N/A			specialized middle man at Market		
	Export authorization	600	600	600	-	-	-	-	-	-	N/A			Guichet Unique		
	Vet certificate	60,000	63,000	66,000	-	-	-	-	-	-	N/A			Ministry of agriculture		
	Customs declaration													Customs		
	Forwarding agent fees				-	-	-	-	-	-				Forwarder		
Trucking	Ouagadougou- Dakola	389,338	514,430	639,522	20,000	22,500	25,000			34.5	37.3	40.0		Transporter	depends on season	
	Dakola/Paga-Tema				84,559	118,382	152,206									
Dakola Border	FODEL Taxes	25,000	25,000	25,000	-	-	-			0.5	2.3		1.3	Customs / Ministry of agriculture	XOF 250 / head but pays half of the price and bribes customs	
	Customs	16,558	16,558	16,558	18,000	18,000	18,000							IT tax plus DDU		
	Forwarding agent fees	2,000	3,000	4,000												
Paga Border	Vetenerary inspection	33,824	33,824	33,824	-	-	-					4.0		Veterinary services	Ghs 2 / head declared (20 instead of 40)	
	distric assembly permit	8,456	8,456	8,456										disctric	GHS 0.5/ head declared (20 instead of 40)	
	Import permit	33,824	33,824	33,824						1.0	0.5		3.00	ministry of food and agric	2 GHS / head declared (20 instead of 40)	
	Customs Taxes	35,007	35,007	35,007										Customs Taxes : i.e. custom code tax : 05/07/32/33/48/56/72/78	vat and other ecowas taxes	
	Forwarding agent fees	10,000	10,000	10,000												
Arrival	Unloading/ market fees	33,824	35,515	37,206										Achiaman distric	GHS 1 / head	
TOTAL		668,430	799,213	929,996	122,559	158,882	195,206			36	40	44	4.25			

	Official costs (XOF)	Unofficial costs (XOF)	Total Costs (XOF)	Total time (days)	hours for procedure		Official costs (USD)	Unofficial costs (USD)	Total Costs (USD)	Total time (days)	Average worked hours for procedure
Small rumin	Avg	Avg	Avg	Avg	Avg						
Departure	83,600	0	83,600			small rumin	145	0	145		
Trucking	514,430	140,882	655,312	1.6	1.3	Departure	895	245	1,140	1.6	1.3
Borders	165,668	18,000	183,668	0.1	3.0	Trucking	288	31	319	0.1	3.0
Arrival	35,515		35,515			Borders	62	0	62		
Total (XOF)	799,213	158,882	958,095	1.7	4	Arrival	1,390	276	1,666	1.7	4
XOF/head	3,806	757	4,562	0		Total (USD)	7	1	8		
						USD/head					

ANNEX D: BIBLIOGRAPHY

Name of document	Authors	Organization	Release date	Particular interest	Type of document	Category
CILSS report on road harassment- July 2014	Brahima Cissé	CILSS	August 2014	Transport cost for livestock and cereals, detailed bribes and delays	Regular report	General reports
CILSS report on road harassment- September 2014	Brahima Cissé	CILSS	November 2014	Transport cost for livestock and cereals, detailed bribes and delays	Regular report	General reports
CILSS report on trade flows - October 2014	Brahima Cissé	CILSS	November 2014	Trade flows of livestock and cereals	Regular report	General reports
CILSS report on trade flows - November 2014	Brahima Cissé	CILSS	December 2014	Trade flows of livestock and cereals	Regular report	General reports
CILSS report on trade flows - December 2014	Brahima Cissé	CILSS	January 2015	Trade flows of livestock and cereals	Regular report	General reports
Assessment of Regional Trade (report)	H.P. Josserand	ATP	January 2013	Trade flows of livestock and cereals, maps (p.3-12)	Study report	General reports
Assessment of Regional Trade (presentation)	H.P. Josserand	ATP	January 2013	Trade flows of livestock and cereals, maps	Presentation	General reports
Price Raising Impact of Non-Tariff Barriers	O. Cadot & J. Gourdon	World Bank	March 2012	Various types of non-tariff barriers	Policy Note	General reports
Trade and Transport Enabling Environment	M. Eilittä	THN	July 2014	Trade flows per corridor (p.19)	Study report	General reports

Name of document	Authors	Organization	Release date	Particular interest	Type of document	Category
Policy Assessment						
Trucking to WA's landlocked countries	S. Zerelli & A. Cook	WATH	September 2010	Trucking market structure, usual practices	Study report	General reports
Regional Agricultural Transport and Trade Policy	D.W. Bromley et al.	WATH	March 2011	Isoprice maps (p.23, 30, 31), Transport cost drivers (p.59-77)	Study report	General reports
The Cost of Being Landlocked	G. Raballand et al.	World Bank	April 2010	Transport cost drivers (p.10)	Study report	General reports
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Dakar-Bamako Corridor Cost of Transport Analysis	Booz Allen Hamilton	PCE	September 2010	Detailed costs for cotton export by road and rail along Bamako-Dakar	Study report	General reports
Trade Data Study, Cote d'Ivoire and Guinea	E. Keturakis	ATP	December 2012	Cost per km in Côte d'Ivoire (p.22)	Study report	General reports
Trade Data Study, Central Basin of West Africa	E. Masters	ATP	December 2012	Value chains specificities (p.19-29), trade flows on each corridor (48-53,72,73)	Study report	General reports
Backhaul for the Livestock Value Corridor	Abt Associates	ATP	April 2013	Transport costs along Fada N'Gourma-Tema (p.8-10), survey	Study report	General reports

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				forms (annex B)		
Logistics Cost Study of Transport Corridors in Central and West Africa	Nathan Associates	SSATP	September 2013	Regional trade flows in Mali and Burkina (p.21-23), detailed costs on Abidjan corridors (p.44-66), performance data for Tema (p.143)	Study report	General reports
Comments on the questionnaire on Moving Goods across Borders	THN	THN	October 2014	Cost and time breakdown structure	Note	General reports
ECOWAS Gap Analysis	L. Brock et al.	WATH	December 2009	Non-tariff barriers per country, export documentation requirements and associated costs per country (p.23-29)	Study report	General reports
AGOA at 14	E. Gresser	Progressive Economy	January 2014	Cost per exported container (p.7)	Article	General reports
Trade Misinvoicing	Global Financial Integrity	DANIDA	May 2014	Misinvoiced trade evolution in Ghana (p.11-17)	Study report	General reports
24th OPA report	WATH	UEMOA/WATH	June 2013	Detailed bribes and delays along both corridors	Regular report	General reports

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Transport and Logistics on Tema-Ouaga-Bamako corridor	WATH	WATH	May 2013	Detailed costs along Tema-Ouagadougou	Study report	General reports
Impact of Expedited Trade	P. White	WATH	June 2011	Cost of Non-ETLS on transport charges and delivery delays (p.7)	Study report	General reports
Transport Prices and Costs in Africa	Teravaninthorn & Raballand	World Bank	July 2008	Transporters' cost structure	Study report	General reports
Cashew Industry Highlights	Red River Foods, Inc.	Red River Foods, Inc.	June 2010	Cashew value chain structure	Study report	Global Value Chains
Cashew Transport and Logistics Costs	C. Annequin	WATH	September 2009	Value chain and detailed cost data in Burkina Faso, Ghana, and Côte d'Ivoire	Presentation	Global Value Chains
Shea Value Chain	WATH	WATH	July 2009	Shea value chain structure	Flowchart	Global Value Chains
Procédures administratives et de transit portuaire	UEMOA	UEMOA	2002	Procedures in Dakar (p.6-13), handling costs (p.20)	Directive	Global Value Chains
FY12 Maize Value Chain Development Plan	M. Sanfo	ATP	May 2012	Maize value chain structure and challenges	Development plan	Cereals
Techiman Maize market	Will & Plewa	GIZ	February 2013	Maize value chain challenges	Article	Cereals

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Transport and Logistics Costs Study for Rice	Abt Associates	E-ATP	June 2011	Example of cost structure (p.36,37), survey forms (annex C)	Study report	Cereals
Transport Cost Assessment for the Millet/Sorghum Value Chain	L.J. Busch	E-ATP	July 2012	Millet/Sorghum value chain challenges	Study report	Cereals
Increasing Livestock Trade in the Mali– Côte d’Ivoire corridor	J. Holtzman et al.	THN	February 2015	Livestock value chain challenges, trade flows in Mali, Senegal, Ghana, Burkina Faso (annex D)	Study report	Livestock
FY12 Livestock Value Chain Development Plan	Abt Associates	ATP	May 2012	Livestock value chain structure (p.4) and challenges	Study report	Livestock
Livestock Transport and Logistics Assessment	S. Zerelli et al.	ATP	February 2011	Detailed costs from Burkina Faso to Nigeria (p.18-24), survey forms (annex 2)	Study report	Livestock
Acteurs et rentabilité du secteur bétail	THN	THN	February 2015	Main stakeholders and cost breakdown on Ouaga-Kumasi	Note	Livestock
Évaluation de la Chaîne de Valeurs Bétail/Viande	Coulibaly & Sidibe	ATP	September 2008	Livestock value chain (p.14,16,17), cost structure (p.18-23)	Study report	Livestock