



Would more trade facilitation lead to lower transport costs in the East African Community?

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Key findings

- Trade facilitation efforts in the East African Community (EAC) have led to faster customs clearance and speedier handling of cargo at ports and terminal depots but not to a significant reduction in transit times.
- Unnecessary en-route delays due to the existence of weighbridges, slow border-crossing times and police roadblocks cause cargo transit times to be almost twice as long as without these barriers.
- Tackling the remaining trade facilitation barriers along the corridors could result in additional cost savings of up to 23% per transported tonne.
- With the trucking industry appearing to operate in a relatively competitive environment on the Northern Corridor, these savings are likely to be passed on in the form of lower prices for consumers.

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Introduction

In recent years, the East African Community (EAC) has sought to eliminate non-tariff barriers (NTBs) through a common reporting and inter-state resolution mechanism among its members Burundi, Kenya, Rwanda, Tanzania and Uganda.^{1,2} Recent research shows that this mechanism has been particularly effective in identifying and removing those NTBs associated with customs and trade facilitation problems: more than 45% of NTBs which were identified and subsequently addressed since the monitoring mechanism's inception in 2009 belonged to this category (Calabrese and Eberhard-Ruiz, 2016). During the same period, overall time required to move goods along the main transport corridors in the East African region were almost cut by half, while transport rates charged by trucking companies along the same routes fell by a third.

Although this decline in trucking prices appears to have been largely driven by lower fuel costs and a decrease in demand for transport services, the fact that these cost savings were passed on to users suggests a competitive market structure. Additional efforts to remove NTBs related to trade facilitation along the EAC's transport corridors could thus have a large impact in the form of lower regional transport costs. This policy briefing provides an overview of the causes of the decline in transport costs across the EAC in the context of trade facilitation efforts.³

Trade facilitation along the EAC's trade corridors: what does the private sector say?

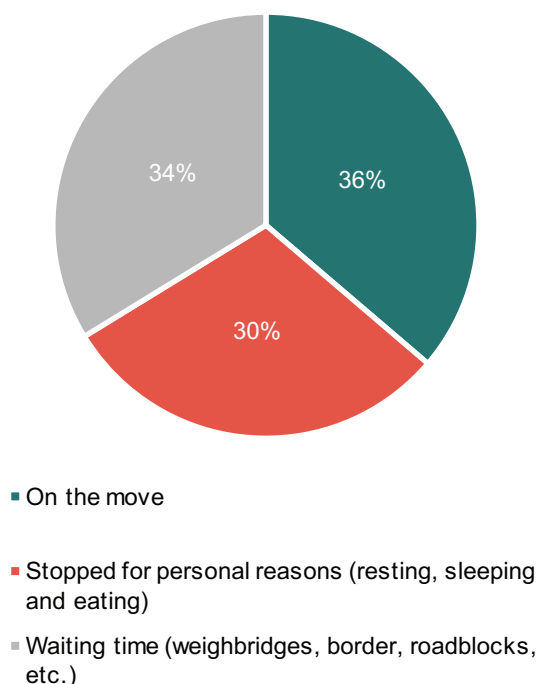
Improvements in trade facilitation along the EAC's Northern and Central Corridors, which link the region's hinterland with the ports of Dar es Salaam and Mombasa, have been at the forefront of the regional integration agenda. Customs procedures have been simplified and to a large extent harmonised between member states. A Single Customs Territory (SCT) was piloted for a range of products with the aim of speeding up the clearance of goods at their arrival in Mombasa or Dar es Salaam and reducing the need for costly anti-smuggling measures such as bond payments on transit goods. In addition, several one-stop border posts have been established in recent years to minimise border crossing times and an agreement was reached to reduce the number of weighbridges along the corridors.⁴

Data gathered through several interviews of private sector stakeholders (including freight forwarders, transporters and manufacturers) and an online survey from November 2016 to February 2017⁵ confirmed that these efforts are starting to show some results. For instance, several respondents highlighted that, in the past, a container arriving at the port of Mombasa would take 20 or more days to be delivered to Kampala, while it takes about 10 days at present. Similarly, a company moving goods within the region could now expect goods to arrive in five to seven days between Nairobi and Kampala and two to three days between Kampala and Kigali. This compares favourably to the 10 and 7 days respectively that it took to ship goods between these cities five years ago. Respondents attributed these declines in import/export times mostly to speedier customs clearance, the introduction of the SCT, and greater port efficiency.

These improvements notwithstanding, stakeholders also stressed that NTBs related to trade facilitation continue to be pervasive in the region, particularly along the transport corridors. For instance, despite acknowledging that the waiting time at some weighbridges had fallen recently following the adoption of weigh-in-motion technology in 2015, respondents almost unanimously agreed that weighbridges continued to severely constrain the flow of transit cargo on the trade corridors. It was estimated that the number of weighbridges to be expected on the Northern Corridor between Mombasa and Kampala was 10 (i.e. five fixed weighbridges in Kenya, two in Uganda, and three mobile weighbridges placed randomly on the route). Moreover, most respondents criticised a lack of implementation of key political commitments, such as the agreed reduction in weighbridges and the prevalence of police roadblocks, which were widely seen as sources of corruption. Truck drivers interviewed estimated that more than a third of the overall cargo transit time on the Northern Corridor could be attributed to waiting time lost at weighbridges, borders and roadblocks (see Figure 1).

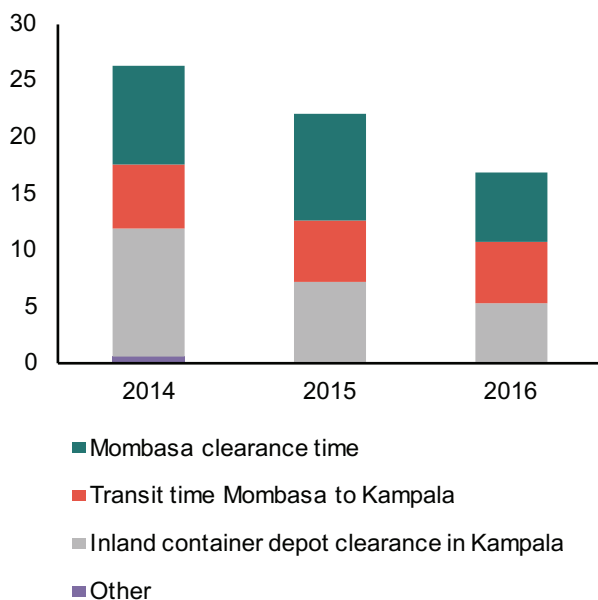
Overall the interviews thus seemed to suggest that trade facilitation efforts had been particularly successful at the custom clearance stage, although the achievements in terms of reducing cargo transit times on the major trade corridors had been less impressive. Data gathered from companies' performance monitoring systems corroborate this view. Figure 2 shows that, over the last three years, clearance times of imports with Kampala as their final destination declined strongly both at the port of Mombasa and at the inland container depot in Kampala, while en-route transit times remained stagnant at around five to six days. Future trade facilitation efforts will thus need to target lower transit times through the removal of specific barriers that persist along the trade corridors, such as the reduction in the number of weighbridges and police roadblocks, and through continued improvements in hard infrastructures, as better roads can considerably reduce transit times.

Figure 1: Distribution of cargo transit time on the Northern Corridor



Source: Interviews with truck drivers conducted by CUTS.

Figure 2: Time required to transport goods from Mombasa to Kampala along the Northern Corridor (days)



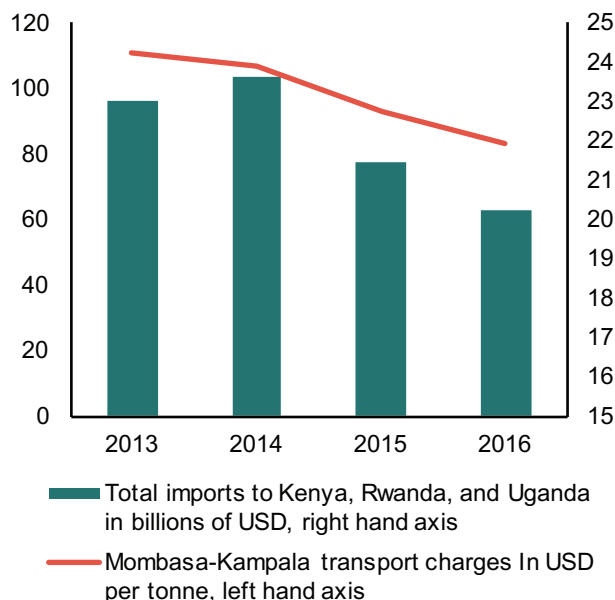
Source: Performance monitoring systems of freight forwarders.

Transport competitiveness: a key determinant to benefit from improved trade facilitation

The extent to which continued trade facilitation efforts can be expected to result in lower transport costs depends crucially on the existence of a competitive market structure in the EAC transport industry. Combining the information from qualitative interviews with other sources of data,⁶ it is possible to estimate the evolution of annual revenue, operating cost and profit margins for running a single cargo truck in recent years and hence to shed light on the competitive nature of the EAC's transport sector.

Freight forwarders and manufacturing firms interviewed stressed that overall charges to import a container into Kampala through the port of Mombasa had declined significantly over the past five years, from \$4,000–\$4,500 to \$3,000–\$3,500 including clearance, port and transport charges (excluding sea freight charges). This reduction was by and large attributed to a decline in the cost of inland transport on the Northern Corridor. Data from the Northern Corridor Transport Observatory confirms that the price charged by trucking companies to ship a container from Mombasa to Kampala declined by more than 30% between 2013 and 2016, as illustrated in Figure 3.^{7,8} Yet rather than a reduction in transit times, which would allow the existing transport capacity to be used more cost-efficiently, lower prices were a reflection of lower fuel prices.

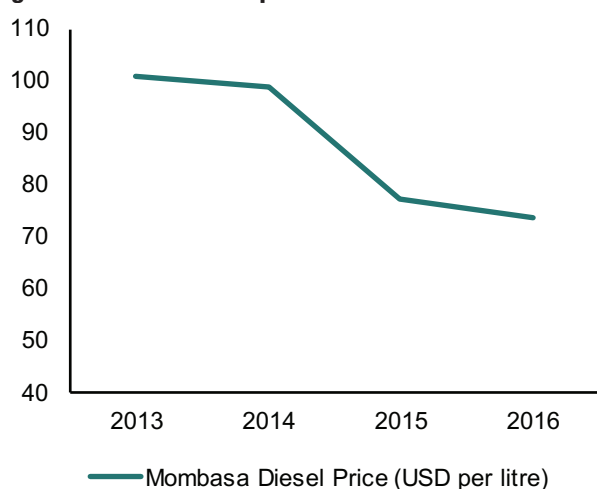
Figure 3: Imports and transport charges



Source: Interviews with truck drivers conducted by CUTS, Northern Corridor Transport Observatory and respective Central Banks of each country

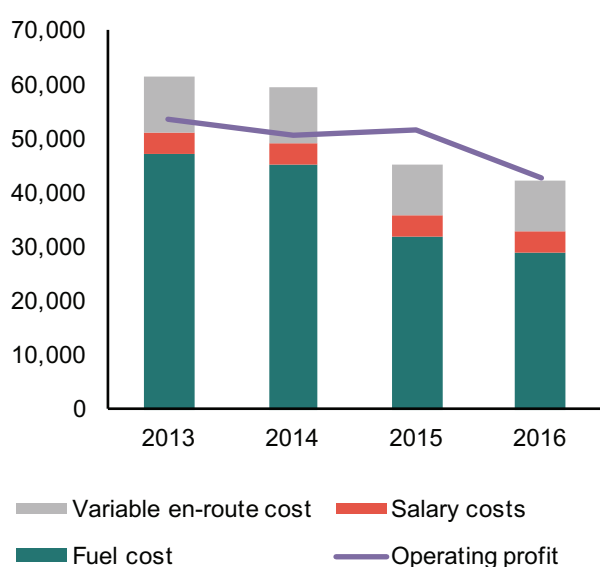
Between 2013 and 2016, total operating costs of a truck fell by 26% (in nominal dollars), as shown in Figure 5. Yet this did not lead to an increase in truck owners' profits with the annual pre-tax operating profit of a new truck remaining relatively constant at around \$51,000 to \$54,000 between 2013 and 2015, and even declining in 2016 to about \$42,000. This decline in 2016 reflects a reduction in demand for transport services due to lower imports into Uganda. According to these estimations, the cargo transport industry in the EAC therefore seems to operate in a relatively competitive environment with cost savings being passed on entirely to clients of transport companies.⁹

Figure 4: Mombasa fuel prices



Source: Energy Regulatory Commission of Kenya

Figure 5: Annual cost and operating profits in the trucking industry of the Northern Corridor (\$)



Source: Authors' own calculations based on interview data and secondary sources.

Note: Figures based on operating a single new semi-trailer truck with a driver and an assistant on the Mombasa–Kampala route at maximum capacity (27 tonnes per trip).

The reduction in the demand for transport services on the Northern Corridor was also confirmed in truck owner interviews. Several truck owners stressed that profit margins had recently come under pressure with some companies having to sell part of their trucking fleet to companies based in Dar es Salaam. However, this shift in capacity between corridors does not appear to stem from increased competitiveness along the Central Corridor. Data from the Central Corridor Transport Observatory show that the current per kilometre trucking price is more than 50% higher between Dar es Salaam and Kampala than between Mombasa and Kampala. Unsurprisingly, all cargo owners interviewed in Kampala expressed a strong preference for using the Northern Corridor when importing goods.

Assessing the potential impact of improved trade facilitation on transport cost

Transport times on the EAC corridors are still very high. In 2016 it took a semi-trailer truck about 5.6 days on average to cover the 1,200 km distance between Mombasa and Kampala. The same distance would take around two days in Europe assuming travel speeds of 60 to 80km/hour. Based on interviews conducted for this study,¹⁰ it was estimated that the overall transit times between Mombasa and Kampala would increase by 7.1 hours due to weighbridges, 20.7 hours due to delays at the border between Kenya and Uganda, and 36.7 hours due to police roadblocks and other unforeseen circumstances. This implies that of the 5.6 days that trucks currently spend in transit, 2.6 days are lost due to trade facilitation barriers.

The pecuniary costs related to this journey are also high. A truck driver currently receives an allowance of about \$250 for a trip between Mombasa and Kampala to pay for expenses. Moreover, interviews with truck drivers revealed that almost 20% of this allowance is required to pay for extraordinary fines and bribes. Reducing these high levels of transit times and transit costs could thus result in significant price decreases in the final cost of transport, particularly as recent cost savings in the trucking industry were almost entirely passed on to clients in the form of lower trucking prices.

In order to estimate the potential cost saving impact of a reduction in transit times and other transit costs, three scenarios were considered. Scenario 1 stipulated a reduction in outbound transit times from the current 138 hours to 96 hours and one-third lower payments for bribes and fines. Scenario 2 was more ambitious and considered a further reduction in outbound transit times to three days and a halving of expenses for bribes and fines. Scenario 3 assumed a maximum reduction in transit times (outbound and return) to 58 hours¹¹ as well as the elimination of all expenses for bribes and fines. These reductions could be achieved by implementing a number of changes including more anti-corruption efforts, deeper policy reforms, and

increased political awareness of all actors. Moreover, investments all over the corridor to increase speeds could account for them.

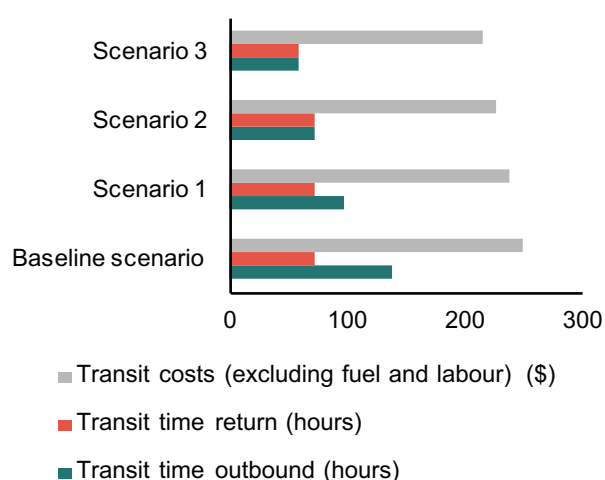
The potential cost savings implications of each scenario relative to the baseline case is summarised in Table 1. The last row provides the maximum potential reduction in transport costs assuming a competitive transport sector. This is calculated by estimating the price differential between the baseline price and the price that would result in the same return on investment for the owner of a semi-trailer as in the baseline scenario but with lower transit times and costs. Scenario 3 implies that the elimination of all NTBs encountered en route from Mombasa to Kampala could lead to a reduction of 23% in the overall transport price per tonne. The findings are summarised in Figure 6.

Table 1: Potential cost saving impact of a reduction in transit times and transit costs

	Baseline scenario	Scenario 1	Scenario 2	Scenario 3
Transit time outbound (hours)	138	96	72	58
Transit time return (hours)	72	72	72	58
Transit costs per tonne (excluding fuel and labour) (\$)	249	238	227	215
Maximum possible reduction in transport costs per tonne (relative to baseline scenario)		-9.6%	-15.8%	-22.7%

Note: the baseline scenario is based on data collected during interviews, and refers to 2016 data (see endnote ii).

Figure 6: Potential cost-saving impact of a reduction in transit times and transit costs



Conclusions

Improvements in trade facilitation have taken centre stage in the EAC's regional economic integration agenda. Yet, to date most efforts have not been felt equally along the logistics chain. While there are evident improvements in the speed of customs clearance and the handling of cargo at ports and terminal depots, the transportation of goods along the EAC's main corridors is still very costly. Delays on account of the excessive number of weighbridges, lengthy queues at border posts, and numerous police road blocks cause the trip between Mombasa and Kampala to be twice as long as without these barriers. In addition, truckers face significant pecuniary costs of up to \$250 on each trip, a fifth of which is directly associated with paying bribes and extra-official fines.

Completely eliminating all of these cost factors is unfeasible. A limited number of weighbridges, for instance, will have to remain to ensure that trucks comply with axle load regulations and that precious road infrastructure is preserved. Yet this research shows that an increased effort to address the remaining trade facilitation issues along the EAC's main corridors could have a large impact on reducing overall transport costs. The fact that the trucking industry is operating in a relatively competitive environment makes the case for more trade facilitation and improvements in infrastructure on the corridors even stronger, as any cost reduction would be expected to be passed on in the form of lower prices for trucking services. Using recently collected data from EAC transporters, it is estimated that transport price per tonne could fall by as much as 23% from its current levels, if transit time and transit cost are reduced to a minimum.

References

- Calabrese, L. and Eberhard-Ruiz, A. (2016) *What types of non-tariff barriers affect the East African Community?*, London: Overseas Development Institute.
- Teravaninthorn, S. and Raballand, G. (2016) *Transport Prices and Costs in Africa: A Review of the International Corridors. Directions in Development; Infrastructure*. Washington, DC: World Bank.

Endnotes

- 1 In order to make the data collection and analysis more efficient, the project focused exclusively on the transport and logistics NTBs reported in the EAC's regional monitoring system. Moreover, the project also sought to identify additional NTBs belonging to the similar category.
- 2 In 2016 South Sudan became the sixth member of the EAC. However, the NTB monitoring systems have not yet been formally rolled out in South Sudan.
- 3 In the context of this brief, we adopt a narrow definition of trade facilitation focused on the actions taken to speed and simplify the clearance of goods at ports and borders and in other instances affecting the transit of goods through the region.
- 4 Weighbridges are placed to minimise the wear and tear of roads as a consequence of overloaded trucks. Consequently, their elimination may not be possible or advisable. We assume their elimination just to gauge the impact they have as it is impossible to determine an optimal number.
- 5 In November 2016, 11 interviews were conducted in Kampala, Uganda with transporters, freight forwarders and manufacturers. In February 2017, 10 interviews were conducted in Mombasa, Kenya with transport companies' managers and drivers. An online survey was also circulated to the private sector (transporters, freight forwarders, manufacturers) and received 54 responses from Kenya, Rwanda, Tanzania and Uganda.
- 6 The majority of these are official sources such as respective central banks, energy regulatory commissions and the Northern Corridor Transit and Transport Coordination Authority.
- 7 Prices assume a container of a maximum allowable weight of 27t under the EAC's axle weight regulations.
- 8 The Northern Corridor Transport Observatory is an online platform which monitors improvements along the Northern Corridor (<http://top.ttcanc.org>).
- 9 A recently published World Bank study which compares trucking industries across sub-Saharan Africa also finds that trucking services on the Northern Corridor are supplied relatively competitively (Teravaninthorn and Raballand, 2016).
- 10 See note (ii) above.
- 11 This was calculated on the basis of a 12-hour working day with an average trucking speed of 40km/h with minimum en-route stops and no delays at the border.



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