

How Crippled Ethiopia Is: A Look into Transportation and Logistics in Ethiopia

Been to Atkilt Tera in the morning before 6:00 am? Or the early bird you are, have you been there at 5:00am? However early you get there, chances are most of the loading and unloading was done while you were still in your warm bed.

I am claiming that if we could do background operations better, life in Ethiopia could be much easier both for the public and local businesses. The movement in and around the big and the small towns at 1:00 am while everyone is enjoying the warmth of their pillows, the rush and hurry somewhere while one is quietly waiting for their delivery, or a fleet of 50 tons of items being dragged 600km away from Addis Ababa while one is waiting in line for a home ride taxi: make the invisible efforts of the background a little more easier and see how much easier life can be for everyone.

Let's talk about movement in Ethiopia.

Logistics and Transportation in Ethiopia

Well, technically speaking, transportation is the subset of logistics yet people equate those two. Logistics is all about the handling of goods and services encompassing transportation, warehousing, ports and terminals, inventory management and other related activities. In this essay, I seek to highlight transportation on its own and the rest of logistical functions as one. That's why I put the two separately.

This discussion is about the local movement of goods from suppliers to factories to consumers, and the movement of goods in and out of the country to the point of dry ports, not any further.

Let's have a hypothetical company that is located and operating in Sheger city that gets raw materials from Shire in Tigray and distributes the final product throughout the country. The movement of the raw material goes:

Under normal circumstances, a truck carrying the raw material takes the Amhara region route (1890 km). If, however, there is a security issue via that route, as it has been in the last couple of years, the truck takes the Afar route which is 350km longer than the former. Regardless of which route the truck takes, about 4 rounds of 8 hour driving is needed. Depending on whether the truck has an assistant driver onboard, the trip could be complete in 2-3 days. Along the way, the shipment has to pay a 1000-2000 birr to every town it passes by. These fees are called "yeketema gebi" or "city revenue". There might be a need to refuel the truck too.

Kela searches, bad road conditions, driver's allowance that add up for every night spent on the road, security threats that render night-time driving impossible and other factors add up to delay of the arrival time and increase the cost of moving the item.

The same story runs when distributing the finished goods items to different parts of the country.

Why and how does this matter? It matters because it adds unnecessary expenses to the final good and introduces uncertainty about arrival time from the producer's side. Readers can imagine what this does on the consumer's side. Neither businesses nor customers benefit from this truncated circus of daily operation.

How good is Ethiopian logistics in objective terms? Or is it "how bad"? Let's consult the numbers.

The major indicator of a country's logistics is the biennial logistics performance index (LPI) by the world bank. This metric has been around since 2007. It ranks countries based on 6 metrics areas which are all put on a scale of 5. The average of the scores is the LPI of the country. The 6 metrics are **customs, infrastructure, international shipments, logistics quality and competence, tracking and tracing, and timeliness**. Singapore leads the indexing with a 4.3 score while Finland, Denmark, and Germany follow. Ethiopia has not been in the indexing for the last 2 reports; the latest it has been on it is the 2016 one. Granted, it's been almost 10 years, but with the 2016 study as our base for speculation and the general analysis of the current Ethiopian fragility, uncertainty, and rusty infrastructure as our grounding factor, it is only fair to assume that Ethiopia, at the very best, remains where it was at back in 2016 if not regressed. In fact, the 10 years development plan (2021 - 2030) of Ethiopia uses the 2016 indexing as a benchmark reference. Therefore, I will take the liberty to use the 2016 report with a grain of salt as a fair indication of Ethiopia's current status.

Here is Ethiopia's logistics performance throughout the years according to the World Bank's report.

Year	Overall LPI (World rank))	Customs	infrastructure	Int'l shipment	Quality and competence	Tracking and tracing	Timeliness
2007	2.33 (104/150)	2.14	1.88	2.43	2.00	1.83	3.67
2010	2.41 (123/155)	2.13	1.77	2.76	2.14	2.89	2.65
2012	2.24 (141/155)	2.03	2.22	2.35	2.16	2.10	2.54
2014	2.59 (104/160)	2.42	2.17	2.50	2.62	2.67	3.17
2016	2.38 (126/160)	2.60	2.12	2.56	2.37	2.18	2.37
2018	N/A	-	-	-	-	-	-
2023	N/A	-	-	-	-	-	-

Table 1.0: Ethiopia's Logistics Performance Index over the years

The customs metrics measures the quality of clearance of import and export items at customs offices at the 9 dry ports that are operational in the country. A slight and considerable improvement has been shown in the efficiency of customs operations from 2007 to 2016. Yet infrastructure proves to be a bottleneck to the improved customs operations.

The infrastructure at Modjo and Kality dry ports is substandard: the gravel ground is not suited to optimal reach stackers' movement (machinery vehicle that lifts and stacks containers in the yard), the forklifts have a tight room of wiggle, and the yard space is limited to handle all the containers. Even if a shipment and its documents are processed quickly at the customs offices, the handling of the items drags the whole clearing operation backwards.

The same goes for the infrastructure outside of these facilities. Take the Ethiopian cross-country and highway roads, for example. One might ask, aren't many roads under construction? After all, 500+ km long roads were built by the Ethiopian Roads Authority (ERA) in the 2025 fiscal year. But don't let the numbers lead you astray. In recent years, a long stretch of roads have been rendered useless due to the large scale civil wars in the country. The destruction aside, what you might have missed is the purpose of the newly built roads. Some of these roads are built with light duty vehicles and automobiles in mind. Heavy duty vehicles, the ones that are doing the heavy hauling across the country, require roads that are wide, safety padded fences (if possible), durable and built with thick layers of gravel and binds. The aesthetic traffic lane colors and landscape integration of roads which currently seems to be the focus is largely regarded as a facility of resorts and lodges. Tourism over logistics. Inaccessible tourism over the accessibility enabler logistics.

That is the other issue with Ethiopian logistics: misalignment of priorities. In the 10 year development plan (2021-2030), Ethiopia seeks to have a 246,000km road network by 2030, a huge bump from the 2021 starting point of 144,000km. By the start of 2026, the road network coverage was 161,452km. Whether the remaining 5 years will result in the construction of the remaining 84,000km of road, only time will tell. But one thing is certain. We could have built more road infrastructure with the capital that was instead spent on making the extensive embellishment of the existing urban road facility. The alignment of infrastructural priorities is skewed. If one wants to get the country to get to the 40th rank on LPI up from 126th, as the development plan aspires, the right way to go about it is directing the limited resources we have on making the country fluid when it comes to movement.

The Logistics Performance Index (LPI) reports come with 3 recommendations for countries with scores less than 3.0. The most appropriate recommendation for Ethiopia, a 2.36 LPI country, is the first one which is about improving trade and transport related infrastructure. Middle eastern, North African, Sub-Saharan African countries are specifically mentioned in this particular recommendation. The other two recommendations are multilateral cooperation to alleviate

problems, and sustainability and carbon footprint related actions which, for now, are we-will-get-to-that agendas for a country like Ethiopia.

There are a lot of efforts that are put into providing opportunities for the youth. The problem most is the fact they're dependent on the provider. Most of the digital trainings (5 million coders initiative), entrepreneurship and financial support (Startup Ecosystem and other innovation competitions) and vocational trainings (micro enterprises), employment and career development (Dereja and Mastercard efforts), civic engagement arrangements are for the most part immeasurable in their outcomes, gimmicky in their operations, and avoidant of the major issue. They seek to tackle underdevelopment by doing the easy things that create short term excitement, while paying minimal attention to the real obstacle. Movement. What do you mean you give me 2,000,000 birr seed money along with some clean-shaven and self proclaimed business advisors and call that empowerment? Don't you know outside your minimalist, white painted office paradise, the country is like a cripple? Stop with your gimmicky empowerment stunts and address the real issue. Don't be afraid of the hot pot of logistics. If anything, that is where the money is. You just have to drop your white collar neat business ideas and do the hard things. Do logistics if you mean to solve a problem.

A new dimension to the Logistics Performance Index

An interesting study by the University of Development Studies (UDS) in Ghana gives the LPI a different dimension that is worth inspecting. They researchers wanted to know how **trade openness (TO)**, **technological innovation (INN)**, **industrialization (IND)**, **political stability (POLS)**, and **economic growth (EG)** influence a country's logistics performance index. They used LPI reports up until 2020 and then interpolated the 5 new variables in the following empirical model.

$$LPI_{it} = \alpha_0 + \beta_1 TO_{it} + \beta_2 INN_{it} + \beta_3 IND_{it} + \beta_4 POLS_{it} + \beta_5 EG_{it} + \varepsilon_{it} \dots$$

* LPI_{it} is the logistics performance of country i at time t .

* α is a constant term and ε is an error accounting variable.

*The betta next to the new variables signifies the relationship between LPI and each variable in question. The study basically seeks to find the value of each betta.

After applying different statistical techniques, the researchers found the following constants.

Constant (α): 3.4068

Trade Openness (β_1): -0.0079

Technological Innovation (β_2): 0.0002

Industrialization (β_3): -0.0227

Political Stability (β_4): -0.2366

Economic Growth (β_5): -0.0338

Estimated LPI = 3.4068 + (-0.0079 * TO) + (0.0002 * INN) + (-0.0227 * IND) + (-0.2366 * POLS) + (-0.0338 * EG)

Those variables with negative betta value, according to the conclusion of the research, have an inverse relationship with the logistics performance of a country.

I bring this case up to show one important thing. Other things remaining constant, trade openness has a negative relationship with the logistics performance of a country. As the trade openness of a country increases, the logistics performance of it goes down.

If the infrastructure of a country, regardless of where it is, stays the same, opening up the country's economy and freely trading with neighbours with minimal or nonexistent tariffs and other barriers has a negative impact on the logistics performance of the country. The other variables have their own interesting relationships with logistics performances, but I would like to stress the trade openness dimension.

After the Ethio-Eritrea reconciliation in 2018, there was a huge influx of goods from Eritrea to Ethiopia, mainly household utilities and electronic devices. There was some rushed and shallow 'economic analysis' that meant to point out the positive economic feedback that resulted from change of the status quo. This, I am afraid to say, is not backed by the number from those Ghanaian researchers.

If we go by the book, that movement of goods was not sustainable even if the political reconciliation stood on firm principles, which it didn't. This is because the infrastructure of the area didn't show any development except for some planned constructions which didn't materialise. Had the peaceful climate of the states lingered for longer, the movement of the goods would have put a stain on the logistics performance of both countries. To make economic integrations sustainable, infrastructure comes first. Otherwise, trade openness would have an unintended negative effect.

Infrastructure precedes free trade.

The African Continental Free Trade Area (AfCFTA) framework which calls for the removal of 90% of continental trade barriers follows the same principle. If it's not taken with care and with milestones, the introduction of free and open movement of goods across the continent might stifle the existing, however weak, level of logistics services. It requires a significant overhaul of the logistics capacity of a country. The customs operation, the roads, the logistics professionals, the governmental bureaucracy will have to handle additional shipments in addition to the existing ones. For every unit of increase in trade openness, the logistics performance of a country decreases by 0.0079 points on average.

Don't you think it would be hypocritical to allow free movement of goods across Kenya, Uganda, and Ethiopia and yet charge trucks a fee for passing by Debre Markos? With the implementation of the free trade area, it's not only the infrastructure that would be stained, our national level of economic consciousness will be challenged too. There is non-logistics work that needs to take place..

Is it all doom and gloom for Ethiopian logistics? No. There are efforts to expedite the shipping process. The multimodal shipping mechanism that The Ethiopian Shipping and Logistics Services Enterprise introduced helps to decrease the delay of shipments. A multimodal transportation system is one that has at least 2 modes of transportation carried out by one shipping agent. Instead of handling seaway shipping by one agent and the truck shipping by another agent, multimodal shipment enables companies to cut the time it takes to arrange contracts with multiple agents and finishes the whole trip with one contract to the doorstep of the company. Even if this is primarily a foreign trade instrument, local enterprises can benefit from it indirectly through reliable and undelayed shipments and possibly price reduction on raw materials.

In a country where getting a grocery item delivered to your home in less than 24 hours is troubling, no other form of investment should get a priority than enabling movement. Businesses should be more on real problems and governmental attention should be aligned with long-term strategic goals.

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