SHOULD MALAWI STILL PURSUE NSANJE WORLD INLAND PORT

BY

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EXECUTIVE SUMMARY

There has been a continued debate on the US$3.9 billion Nsanje Inland Port project. Should the Malawi Government continue to budget for the development of the port further despite the fact that Mozambique have also clearly said they will not consent[1] to this project? The suggestion at the time was that the corridor would bring logistical savings estimated at US$175m in import bills or 60% savings although no papers showing the calculation of these numbers have been accessed over the years.

Malawi is a country with a lot of world trade potential because of the virgin resources it has. The rich soils, the labor, the untapped minerals and unexplored potential for organic fruits, vegetables, livestock and poultry provide a good springboard for Malawi to jump onto the world stage and change the economy of Malawi. However, one of the biggest challenges remains the cost of logistics which constantly often renders Malawi cargo uncompetitive on the world stage.

Is Nsanje World Inland Port a viable project providing lower costs and higher efficiencies to make Malawi exports more competitive on the world market? Comparatively, would Nsanje Inland Port be preferred by local traders? Is the corridor ecologically sustainable? Would the corridor be cost-saving and financially self-sustaining?

Summarily, Malawi should not pursue the Nsanje Inland Port project any further unless / until there are verifiable concrete figures to demonstrate the cost savings, but should pursue other corridors like the Sena and Mtwara Corridors.

MALAWI TRANSPORT CORRIDORS

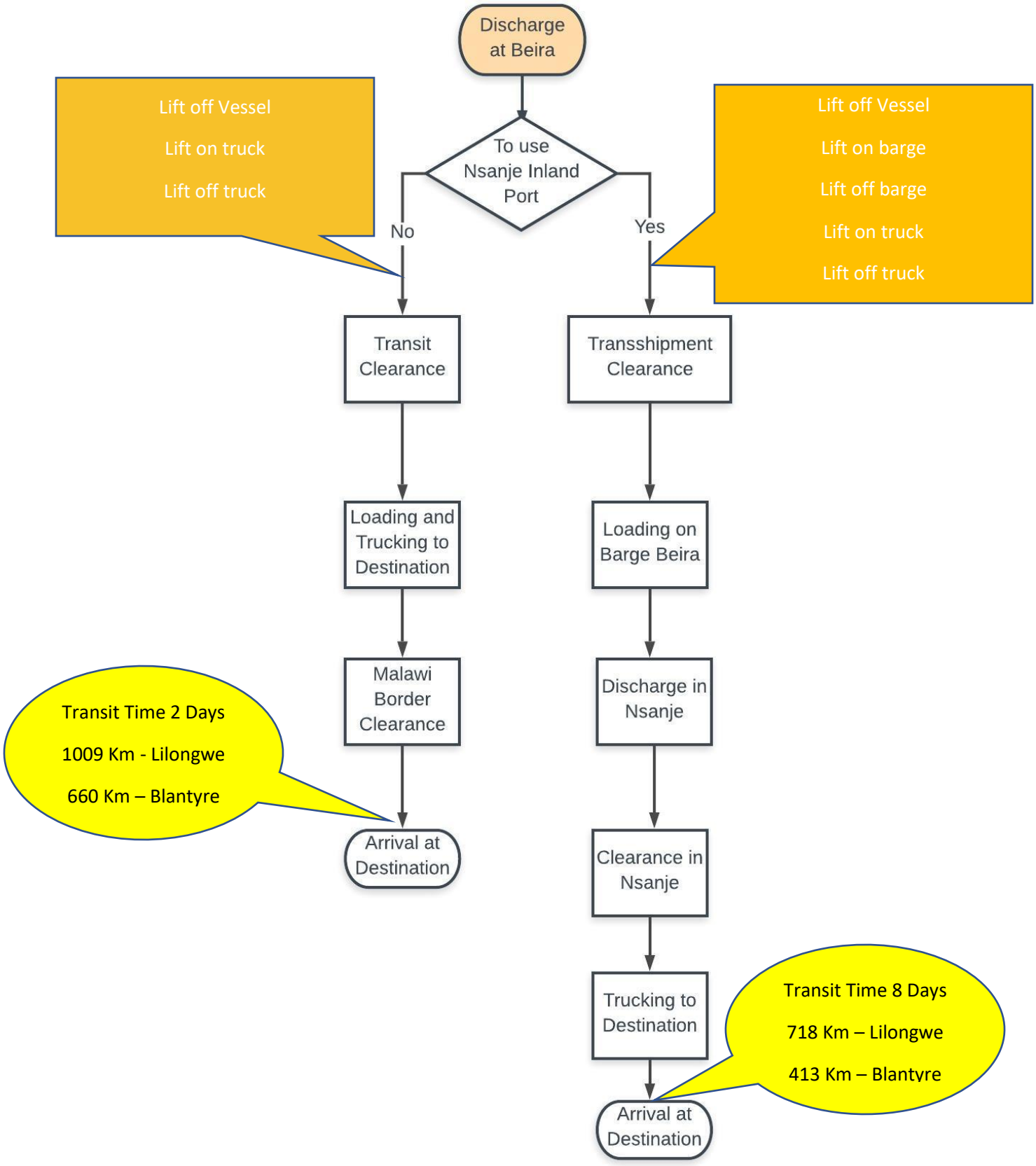
Malawi currently uses the following transport corridors for both imports and exports of the various commodities:

[1] https://clubofmozambique.com/news/mozambique-will-not-consent-to-international-maritime-traffic-in-shire-and-zambezi-rivers/

Corridor	Status	Mode of Transport	Distance[2]	Shipping Line Vessel Calls?[3]	Approximate Transit Time with Blantyre
Beira Corridor	Active	Road	1009 Km - Lilongwe 660 Km – Blantyre	Yes	2 Days
Durban Corridor	Active	Road	2482 Km – Lilongwe 2288 Km - Blantyre	Yes	5 Days
Dar es Salaam Corridor	Active	Road	1767 Km – Blantyre 1514 Km, Lilongwe	Yes	3 Days
Nacala Corridor - Rail	Active	Rail	608 Km – Lilongwe 467 Km – Blantyre	Yes	3 Days
Nacala Corridor – Road	Active	Road	1186 Km – Lilongwe 876 Km – Blantyre	Yes	2 Days
Sena Line	Line Damaged	Rail	Not in Place	Yes at Beira	
Quelimane Corridor	Active although poor road	Road	726 Km – Lilongwe 416 Km – Blantyre	Yes	1 Days
Nsanje Inland Corridor	Not in Place	Multimodal	718 Km – Lilongwe 413 Km – Blantyre (water distance 230 Km[4] + Appendix 1 Distance Table)	Yes at Beira	7 Days Beira-Nsanje 1 Day Nsanje – Blantyre / Lilongwe
Walvis Bay Corridor[5]	Active	Road	2787 Km – Lilongwe 3094 Km - Karonga	Yes	7 days
Mtwara Corridor	Not in place	Multimodal	Not in Place	Yes at Dar es Salaam	

[2] Obtained using google distance calculator
[3] Shipping Line Websites
[4] https://books.google.mw/books?id=Te-m7h_kMqsC&pg=PA74&dq=distance+-+nsanje+to+chinde&hl=en&sa=X&ved=0ahUKEwjI5PmktNXkAhW15OAKHRQgCc8Q6AEIKDAA#v=onepage&q=distance%20-%20nsanje%20to%20chinde&f=false
[5] Mainly used for Uranium exports when mining was still taking place at Kayelekera

Nsanje Inland Port Comparison with Beira Corridor


Discharge at Beira
To use Nsanje Inland Port
No
Yes
Lift off Vessel
Lift on truck
Lift off truck
Lift off Vessel
Lift on barge
Lift off barge
Lift on truck
Lift off truck
Transit Clearance
Transshipment Clearance
Loading and Trucking to Destination
Loading on Barge Beira
Malawi Border Clearance
Discharge in Nsanje
Transit Time 2 Days
1009 Km - Lilongwe
660 Km – Blantyre
Arrival at Destination
Clearance in Nsanje
Trucking to Destination
Transit Time 8 Days
718 Km – Lilongwe
413 Km – Blantyre
Arrival at Destination

Handling / Lifts of Cargo

Assuming:

- There is no extra handling in Beira and Chinde
- There is no handling at destination for both

Lift charges vary according to port through-put and returns on investment calculations. Supposing that all the listed lift charges are a standard USD70/20ft container, using Nsanje World Inland Port would cost USD350/20ft as opposed to USD210/20ft if direct using trucks from Beira, thus Nsanje Inland Port would not be saving costs but increasing costs. To note that full lift costs at bare minimum today starts from US$70/20ft. All port costs and Beira and Nsanje would still be borne by the transit cargo.

Transit Times

Calculated basis the following assumptions:

- Transit from Discharge of vessel at Beira and assuming cargo is pre-cleared and there is 0 dwell days in port with regards to transit documentation and procedures. Current transit via Beira is 2 days against estimated 8 days.
- Using Nsanje Inland Port would entail “barge” / Ships planning and operations to discharge and load cargo, this would entail a cost for the corridor
- The Nsanje Inland Port would suffer further operational dwell time (approximately 4-5 operational days) as it awaits full discharge of main vessel and loading exports at Beira before a berth is available for the barge for loading out Malawi cargo for discharge at Nsanje World Inland Port, that is:
    - 3 days operation (discharge and loading) and departure of main vessel
    - 1-2 days operation of barge
- Speed of barge of 60 teu size, allowing a draught of 3 metres, speeds are around 15-18Km/h and the water distance given is 230 Km from Nsanje to

Chinde + few Km to Beira which should take navigation of approximately 1 day with daylight pilotage[6].

- There is the assumption that the barge and dredger can pass each other on the channel.
- The transit time of 8 days would estimate per barge 23 trips per annum with a round trip of 16 days (without consideration of dwell time in Nsanje).

Dredging Consequences and Costs

It is no secret that the Shire River is suffering from heavy siltation[7] and that this would affect navigation on the river. The draft on the river is in many areas below 5m thus requiring a very small barge to navigate.

Dredging involves sucking the silt from the channel and then dumping the dredged silt in a lawful area for dumping. Dumping along the channel would not resolve the draft or siltation problem, thus the full 230 Km would need to be regularly dredged. Beira had a channel length of only 27 Km with a channel width of 135-250m and the cost of dredging annually US$1.5 million. The cost of dredging, to be sustainably covered, must be borne by navigators of the channel.

The challenges with the Shire River:

1) The draft of the river vis a vis the dredger itself. There would be need for a dredger with a very low draft, which entails low capacity and lower speed, thus longer time in dredging.
2) The length of the channel to be dredged from Nsanje to Chinde given as length of 230 Km, width / volume not included in extrapolated calculations
3) International Shipping on this channel would affect the Eco-System which has been one of Mozambique's arguments against consent of this project[8].
4) After dredging the silt would need to be dumped, but naturally not in the channel, which presupposes that the dumping of the silt would have to be in the Indian Ocean at a distance in the Ocean allowable by International Maritime Law.

[6] https://www.dst-org.de/wp-content/uploads/2017/03/Overview-Vessel-Types-on-the-Danube.pdf
[7] https://africageographic.com/blog/the-shire-river-giving-life-to-malawi/
[8] https://clubofmozambique.com/news/mozambique-will-not-consent-to-international-maritime-traffic-in-shire-and-zambezi-rivers/

Any corridor costs would need to be absorbed by these 23 round-trips, thus for example if dredging costs were USD12.8 million (extrapolating from US$1.5 million[9] per annum for 27 Km whereas our channel from Nsanje is 230 Km without due consideration of the width and volume to be dredged in the different seasons of the year) with 23 round-trips and 60 teus per voyage would give you an average US$4630/20ft cost from dredging alone before any other input costs, e.g. handling which was already estimated earlier. The absorbed dredging cost ***alone*** exceeds the current average road freight from Beira by over US$1000/20ft.

No Round-Trips to Nsanje

At present there is no trade through Nsanje, no infrastructure attracting exporters to use the corridor thus any truck that would be deployed to carry imports from Nsanje would have an empty transport leg of 183Km (Blantyre) and 488Km (Lilongwe) which would need to be absorbed by the cargo.

CONCLUSION

We should not pursue Nsanje Inland Port Project further until we have verifiable workings to demonstrate cost savings and improved efficiency that this corridor should provide.

We should rather look at rehabilitation and negotiations on the Sena Line and also developing exports and imports from northern Malawi through the Dar es Salaam and Mtwara Corridors.

[9] Basic design study report on the project for reinforcement of the dredging capabilities for Beira port in the republic of Mozambique, December 2004, JICA, page 52