



TNRF Member Viewpoints

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Does Tanga need a new harbour at Mwambani Bay? A Brief Technical Assessment of Tanga Port operations

A new harbour has been proposed in the Mwambani Bay and is likely to cost a minimum of 400 million US\$ (11th March 2007, East African Standard), not to mention the huge environmental costs caused by massive dredging and landfills and associated infrastructure, that have not even been estimated yet. Last but not least, the new harbour will probably wipe out the local Coelacanth population that could become a major tourist attraction in the area.

This technical brief has been produced by a group of experts and representatives of the shipping industry using Tanga Port at present. It focuses on technical, capacity and basic economic factors affecting the industry in the port. Environmental considerations and impacts of turning a large part of the so far undeveloped Mwambani Bay south of Tanga into a deep-sea port (with a minimum investment estimated at 400 million US\$) are not discussed here, and would require separate expertise. For example, it has been noted that Mwambani Bay is also earmarked as part of a marine protected area for the Coelacanths that have recently been discovered in the vicinity, which would be incompatible with any port development.



The Tanga Port – an under-utilized capacity and potential

The Tanga Port is reported to be able to handle 500.000 MT per year. However, as detailed below, with some relatively minor investments in infrastructure and maintenance and improved operational management, the **Tanga Port could easily double its capacity to 1.000.000 MT per year.**

Furthermore, with an investment of only US\$ 8-10 Million Tanga Port could, in its present location, be developed to handle a much higher cargo volume and even compete with the ports of Dar es Salaam and Mombasa.

From a technical and operational point of view, the Tanga Port is **at present heavily under-utilised**, mainly due to:

1. **Low volume** of available export cargoes.
2. **Poor infrastructural linkage** of the port with the hinterland (especially railway)
3. **Lack of equipment and poor maintenance.** Investment in equipment is required immediately, together with the respective service and maintenance contracts. In particular:
 - Add dry storage capacity (for weather sensitive bulk goods)
 - Involve private companies more for better efficiency;
 - Dredge the port (berth nr 1 + 2 + channel) minimum once per annum
 - Invest in additional cranes (1), grabs (3) and barges (4);
 - Generators are needed to power the port to operate 24 hours/7 days a week;
 - Time frame for investment must be agreed beforehand and kept!
4. **Red tape and overstaffing.**

These points are discussed in more detail below.

Under the magnifying glass

1. Low volume of available exports cargoes.

This trend has been observed for decades already, as a result of the collapse of traditional export commodities, mainly sisal, tea and coffee, after the nationalization and poor management of plantations, in particular of the sisal industry, poor infrastructure links between the various plantations and the port, as well as the corruption that still limits economic growth (see also point 4 below).

However, there are now promising plans of regional and local companies to use Tanga Port for import and exports amounting to 1.500.000 MT / annum within 18 months, which would urgently require the investments and improvements in operational management outlined here.

2. Poor infrastructural linkage to the hinterland.

Apart from some roads and a poor rail-line, the infrastructure from Tanga to the hinterland is clearly insufficient to attract investments in export commodity production.

At present, with the expanding copper mining industry in Bulyanhuru and beyond, the main artery for transport is the rail-line from Isaka ICD to Tanga. Logistically the positioning of

empty containers into the mining area is an expensive exercise, which can only be partly eliminated by combining cargo flows to and from the mines. The imbalance costs can be brought to an acceptable level by importing empty containers into Tanga, making them available for stuffing with cement at Tanga Cement bound for the mines and transporting them to Isaka for de-stuffing and cleaning prior to empty positioning into the mines for loading with copper ore.

However, any increase of export commodity cargo from inland rural areas, such as sisal from the Tanga area, coffee from Moshi and Arusha area and tea from the Kilimanjaro area, will require better roads and revamping of the existing infrastructure.

For imports, the **axle load restrictions** and the inability to verify this within the port area, the re-verifications at various random inland checkpoints, the random police checkpoints and the unnecessary “penalties” surrounding these phenomena, are also a major bottleneck. The TANROADS road weight bridge should be eliminated, as it merely duplicates the port weight bridge with no added justification.

In summary, new roads leading directly to the various growing estates, improved rail lines and a more acceptable level of governmental interference would make a massive difference.

2. Lack of equipment and poor maintenance.

The Port equipment is in a poor state due to lack of the required management skills, lack of spare parts (which are purchased, but disappear or never arrive), bribery, theft, lack of business focus or interest and **non-existing preventive maintenance**.

- The **barges**, which are essential for a smooth and constant cargo flow, are insufficient in numbers. Officially there are 10 barges, however only 3 are operational. As a road port, where vessels work at anchor in the port, Tanga needs at least 6 – 8 suitable barges with a minimum carrying capacity of 12 TEU, and 4 barges of minimum 36 TEU. At least three 3000mtn barges are required for bulk goods as well. The present complement of 3 barges is just sufficient to serve one working vessel only, and provided the cranes and container handling equipment work properly.
- There are also no proper **tugboats** that can handle weight. The only good tugboat was sent to Dar Port, and there is only one operational now, which can break down any time.
- Additional container handling **cranes** need to be procured and maintained. The broken down Italian crane needs to be repaired.
- The arrangement of the hard standing and **container stacking areas** and **warehouse utilisation** can easily be improved as well.

4. Red tape.

Several factors restricting the increase of cargo flow have been mentioned above, particularly the inefficient Customs and Police clearance procedures. However, there is another serious bottleneck in the required documentation that needs urgent solution in the shortest possible time. Bureaucracy strangulates the operational process, delaying it to three times the acceptable maximum, thus creating unnecessary additional costs. THA can improve efficiency dramatically by taking the following measures:

- **Reducing the number of copies** of documentation required by the various governmental or parastatal bodies, which merely use it for recording or storage purposes;
- **Introducing a modular EDI driven data interchange system**, which will also improve the security and confidentiality of the data provided on cargo details. **Digital media standards** are required nowadays for any documentation, which will automatically provide improved statistics, and thus transparency, allowing for negative trends to be noticed and eliminated at a much earlier stage.
- **Reducing handling costs**, which are much higher in Tanzania than in many other countries, making Tanzanian products unnecessarily expensive. In a competitive world, lower handling charges may even result in higher income for THA due to increased cargo flows.
- **Cutting overstaffing and improving professionalism.** The number of employees should be reduced by 75%, while the remaining employees should undergo regular professional training based on efficiency. Payment should depend on operational success.

Is a new deep-water port at Mwambani Bay needed?

In summary, it is clear that moderate investment in equipment and maintenance as well as improved operational and commercial management outlined above would within a short period facilitate a much faster turn around of cargoes and containers being imported and exported, and thus increase the capacity of the present port facilities in Tanga Bay by at least 100%. Further investment of 8-10 million US\$ could add to this capacity to levels far above even optimistic projections of cargo flows.

However, the proposed new harbour at Mwambani Bay has been justified not only by the present limited capacity (that can be easily increased) of the present Port, but also by the fact that vessels above 10.000 MT –15.000 MT cannot berth at Tanga Port quay that has a maximum depth of 6.60m.

However, it has to be stated that, though ever-larger container vessels are built and operated in the race for cutting transport costs around the world, it is a common fallacy to assume that a deep-sea harbour at Mwambani Bay would be able to attract larger vessels and thus more business to the region.

In fact, vessel capacity is rather governed by total cargo flows of regional ports, not by the depth of a particular port.

The shipping industry and large-volume container shipping in particular, follow the global and regional economic growth centres. As a result of growth limitations in the region, the present trends are that all East African seaports are rather used as mere feeder ports, which are linked to major hubs along the E-W or N-S shipping arteries, mainly Colombo, Salalah or Aden, Singapore, Dubai and Jeddah, eventually Maputo, Port Louis, and Durban.

Smaller vessels will continue to use the increased capacity of Tanga Port, and direct shipping links will remain, to serve even massive volume growth. Furthermore, the proximity of the larger ports Mombasa and Dar-es-Salaam that are used as feeder ports by the shipping

industry, eliminate all technical and economic justifications for a new harbour as suggested for Mwambani Bay.

Would an Economic Processing Zone in Tanga make a difference?

When the new Mwambani Deep-sea port was mentioned first in the press in 2003, it was presented as a requirement for the import-export needs of the suggested Economic Processing Zone (EPZ) planned for Ras Nyamaku at the northern end of the bay.

EPZ's have been successful in certain locations worldwide, but are extremely demanding in terms of geographical position, infrastructural needs, in particular energy, water and sanitation, low-cost skilled and motivated labour force, governance and management capacity. EPZs operate at the cutting edge of cost efficiency, and investors can only be attracted and succeed with all these factors being in place beforehand!

Successful EPZ's like in Dubai and Singapore all offer top-level technical infrastructure and management, highly skilled, relatively low-cost labour force (in Maputo coming even from South Africa) and adequate facilities to cater for the multiple needs of the EPZ industries. One apparent exception, the Maputo EPZ only succeeds as an extension of the eastern South African economy and is completely different in scope compared to other successful EPZ's. Non-starter EPZ's like Zanzibar and to a lesser extent Nairobi do not offer these conditions. Even the relatively high-tech EPZ facility at Port Louis, Mauritius, is struggling to justify its existence.

The majority of the successful EPZ's are furthermore located close to major shipping arteries or very large seaports, called by a large variety of shipping lines that offer world wide shipping connections.

In all fairness, none of the above-mentioned requirements are given in Tanga or even throughout Eastern Africa. It has to be concluded that the promotion of EPZ's are politically motivated and must be regarded as White Elephants. The economic scope is lacking, there is no adequate technical infrastructure, no linking to direct worldwide connections are or will be available for a long time to come, while professionally run business investors certainly will consider the economical and political risks as quite prohibitive.

In essence, our professional conclusion and advice is:

- Stick to what is available now, the Tanga Port, build on it and run it professionally.
- Improve the surrounding infrastructure to enable additional export growth.
- Develop a modular Community Based System, able to cater for official EDI.
- Eliminate unnecessary red tape.
- Promote Tanga as the gateway to and from the "rich" hinterland.
- Educate local people to enable them to see and grab opportunities.

The development potential is abundant in the whole area, and can be served efficiently by Tanga Port in its present location, with the urgently required improvements outlined above.